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Why 3 and 60 per cent? The rationale of the reference values for fiscal deficits and debt in the European Economic and Monetary Union

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The origins of the reference values for budget deficits and public debt (3 and 60 per cent of GDP) in the euro area are explored. Both numbers came into the Maastricht Treaty by coincidence. Later attempts to legitimise them are traced and found unconvincing. In particular the debt cap is scrutinised, often considered as a precondition for debt sustainability. Since the first overhaul of the Stability and Growth Pact in 2005, reference values for structural deficits became the focus of fiscal policy, but derived from the 60 per cent debt cap. With the so-called Fiscal Compact from 2012, caps for structural deficits were added to the semi-primary law of the European Union. It is argued that the reference values for deficits and debt are not consistent. If the Domar equation is observed, the changing relationship between interest rates on public debt and output growth should be included in the fiscal policy framework. Therefore 'eternal' reference values for deficits and debt should be removed from the primary law by Treaty amendments.

Keywords: *fiscal policy, Stability and Growth Pact, public debt, fiscal deficit, monetary union, debt sustainability*

JEL codes: *E43, E62, H62, H6*

1 INTRODUCTION

In the Protocol No 12 of the Maastricht Treaty of 1992, 3 per cent of GDP was prescribed as the upper limit of fiscal deficits of member states (MSs) of the European Economic and Monetary Union (EEMU), and 60 per cent as the cap for gross public debt (so-called 'reference values'). However, with the first revision of the European Union (EU) Stability and Growth Pact (SGP) in the year 2005, the focus of the fiscal rules was laid on structural deficits with country-specific proposals by the European Commission (EC) and agreed with MSs, the so-called 'medium-term budgetary objectives' (MTOs). These are binding medium-term goals for cyclically adjusted budgetary balances. Yet the uniform reference values from Maastricht remained unchanged. A closer look shows that the reference value for the debt ratio gained much more importance than before. The country-specific MTO depends crucially on the debt-to-GDP ratio of the specific country. In the Fiscal Compact, an additional jurisdiction from 2012 (Treaty on Stability, Coordination and Governance in the Economic and Monetary Union, TSCG), MSs with a debt ratio at or

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below 60 per cent were allowed to run a structural deficit up to 0.5 per cent and of 1.0 per cent if the debt ratio was ‘significantly’ below 60 per cent. For countries with a debt ratio above 60 per cent, MTOs are fixed country-specifically at zero or above. This implies sizable primary structural surpluses (government expenditures without interest payments on debt minus current revenues) over a longer period geared to reduce the debt ratio toward 60 per cent. This raises the question of how the rationale of the four limits – that is, both reference values in Protocol 12 of the Treaty for caps of headline deficit and gross debt as shares of GDP and for the caps on structural balances differentiated for high- and low-debt countries – is legitimised. Eventually the norms for the MTOs rely on the Maastricht reference values. They are the basis for a complex fiscal policy rulebook in the EEMU, monitored and enacted by the Commission and summarised annually in the ‘Vade Mecum on the Stability and Growth Pact’ (cf. EC 2019).

In what follows we show the emergence of the reference values in the making of the monetary union, including the search for the initial reasoning; then we discuss their later legitimisation in the key EU documents and in the academic literature. Afterwards we unfold our criticism against the backdrop of the public-debt performance in the EEMU and elaborate an alternative.

2 HOW THE NUMBERS ENTERED THE MAASTRICHT TREATY

In the final report of the Delors Commission in 1989 (Committee for the Study of Economic and Monetary Union 1989), which delivered the blueprint of the Maastricht Treaty, there is no 3 and no 60. No mention of a debt limit, but there are limits of budget deficits. Karl-Otto Pöhl, one of the most influential members of the Delors Commission, then President of the Deutsche Bundesbank, mentioned once, as the first to quantify the deficit cap, that it would be desirable if the deficits in Europe fell below 3 per cent (James 2012: 251). Later it was investigated by journalists from the German newspaper *FAZ*, that in the year 1981 a young, low-ranked official in the French Ministry of Finance had been commissioned by the finance minister Laurent Fabius to look for a number of a budget deficit limit usable for tactical reasons in budget negotiations with the ministries to contain their demands; the official pulled the number 3 out of his hat (*FAZ* 2006). In this context, the cap probably indicated a permanent deficit of this magnitude, not a maximum cyclical deficit in recessions. In a certain phase of discussions, the German Maastricht negotiators had mentioned that the then German constitution allowed fiscal deficits up to the amount of public investment (the ‘Golden Rule’) which used to be around 3 per cent of GDP (Article 115 in the German Basic Law until 2009), in addition to a cyclical component (Dyson/Featherstone 1999: 411). In a statement of the German Bundesbank in October 1990 on the design of the monetary union, the authors hinted many times about fiscal discipline of MSs, but the remarks referred only to deficits, not to the debt ratio (Deutsche Bundesbank 1990; Schlesinger 1991).

Hans Tietmeyer, the most influential German negotiator in the years 1990–1991 and also later during the crafting of the SGP in 1998, along with the politicians Hans Waigel and Horst Köhler from the Ministry of Finance, reported in a book on the making of the euro that at the time it was clear that some cyclical fiscal space for automatic stabilisers was necessary but that the normal or structural balance should be close to zero (Tietmeyer 2005: 16–17, 232–234 and 236). German authorities proposed a draft Treaty in February 1991. It included the 3 per cent deficit, with the ‘Golden Rule’ reasoning, and the 60 per cent debt cap, without reasoning. Tietmeyer preferred a cap of only 1.5 per cent, but could not assert himself. Both numbers, 3 and 60, were apparently not controversial,

but placing them in the Treaty or in secondary law as well as with judgemental discretion or the exact numbers was highly controversial (Dyson/Featherstone 1999: 412 and 431–432; Schönfelder/Thiel 1996: 122–123). In September 1991 the Economic and Financial Affairs Council (ECOFIN) ministers agreed on the 60 per cent cap. It seems that reasoning was less important than the sheer numbers.

There is a long-standing consensus that cyclical deficits can dampen cyclical fluctuations and that they should be accepted as automatic stabilisers. For this reason a margin of around 3 percentage points (p.p.) is needed if the nominal GDP plummets from peak to trough by around 6 p.p., following recent estimations (Price et al. 2015). In severe recessions it might be even more. With a balanced budget in the long run and a cyclical deficit of maximum 3 per cent with a surplus in ‘good times’, the long-run debt ratio would trend towards zero. Only a few economists would follow the erstwhile Nobel Laureate James Buchanan who fought for balanced budget legislation with a trend to zero public debt as the optimum (cf. Tempelman 2007) which would amount to a ban on government debt.

The debt ratio in 1990 in the 12 MSs of the European Community, the predecessor of the EU, was around 60 per cent. This was seen as a ceiling, as Tietmeyer reported. There was no further reasoning except that there was a consensus that the debt ratio should not grow beyond this level after trends of rising debt ratios in the past. Tietmeyer alluded to some inner rationale of the 3 and 60 per cent figures if one would assume a nominal GDP trend of 5 per cent (3 per cent real growth, 2 per cent inflation). The debt ratio would remain constant with an average deficit of 3 per cent. This would of course imply an *average* deficit of 3 per cent, not a cap. As Tietmeyer wrote, there would only be a ‘rough connection’ between 3 and 60 (in which other negotiators believed, mentioned several times during the negotiations). The decisive point for the German negotiators was that a *measurable* indicator – hence an enforceable and sanctionable one – exists, not a ‘precise scientific reasoning’ (Tietmeyer 2005: 164). Jacques Delors didn’t like to have any detailed numbers in the Treaty, either for deficits or for debt (James 2012: 252–253). There is no doubt that the Germans pushed for both numbers and after a longer tug of war they held sway. The notion of a cyclically balanced budget was the prevailing neo- or ordoliberal German position, which implicitly means minimising the debt ratio in the long run. Eventually the numbers did not enter the Treaty, but a protocol which was part of the Treaty. The most forceful negotiator at the final phase end of 1991 was Tietmeyer, a self-confessed ordoliberal. He – and also Waigel – wanted to have unambiguous and easily measurable numbers, fixed in the Treaty and amendable only unanimously. No doubt, the ulterior motive was a kind of veto option for Germany. The reasons for the debt cap of 3 per cent were seemingly kept in abeyance; some thought of an *average* deficit of 3 per cent, in line with the 60 per cent cap and trend growth, others believed in debt-financed public investment up to this margin, and the Germans fought for a cap for cyclical deficits plus a close-to-balance normal budget balance. Yet the first two reasons were probably smokescreens hiding the true intentions of the German side which came unambiguously to the fore at the latest when the SGP was signed in 1997 (BMF 2020).

3 and 60 is not a compatible pair of numbers. The limit for new debt, that is, deficits, and the limit for the stock of debt relative to GDP do not match unless one opts for a trend towards zero debt. If this is excluded, a floor for debt would be needed, too. If the 60 per cent cap were maintained continuously, average deficits of around 3 per cent must be permitted, with caps at higher levels to allow for cyclical leeway.

Summarising our findings so far, it can be concluded that the reference values were chosen more or less arbitrarily, or at least not grounded on well-thought-out economic criteria. From an economic point of view, they are somehow amateurish. Tietmeyer himself did not

care much about this, he battled for a shift from demand management (called ‘global steering’ by the former German minister of the economy Karl Schiller with a Keynesian background) to supply-side economics, as he noted expressly (Tietmeyer 2005: 151). The reasoning for the reference values is appallingly poor. It is also amazing that for 28 years there had hardly been any attempts to question the criteria and the numbers chosen (cf. Priewe 2020 for a more extensive analysis). Only early on, before launching the euro, were some sharp criticisms raised from different streams of economic theory (for instance Godley 1992; Buiter et al. 1993; Pasinetti 1998), apart from those who raised more fundamental doubts about the euro project.

Paul de Grauwe, a strong supporter of the common currency, writes in the 11th edition of his textbook on the EEMU regarding the 60 per cent margin: ‘The rule is quite arbitrary ...’ (de Grauwe 2016: 146f). He refers to two reasons: first, if the debt ratio should be stabilised at or below 60 per cent, why 60 per cent? Second, if growth tends to be different in the MSs, debt ratios and fiscal deficits would have to be different, hence why should there be uniform debt/deficit ceilings? Niels Thygesen, the chairperson of the European Fiscal Board (EFB) wrote recently in a paper commissioned by the former President of the EU Commission, Claude Juncker: ‘The 60% of GDP debt reference value requires more discussion. This norm is, indeed, to a large extent arbitrary, although not obviously unreasonable in the light of both economic analysis and documented experience’ (EFB 2019: 92). Thygesen was a member of the Delors Commission and one of the fathers of the euro. The EFB report complains that the debt criterion has become almost irrelevant for countries with debt below 60 per cent while the seven MSs with high debt have hardly a chance of reaching 60 per cent. It is proposed to differentiate the debt reference values in a country-specific manner (also the speed of attaining goals considered as satisfactory), including commitments of low-debt countries for more public investment in the framework of medium-term expenditure rules. The reference value in the Treaty should be changed and replaced by more flexible medium-term goals, which also address the specific current-account imbalance of MSs (ibid.: 92–93).

3 ATTEMPTS TO LEGITIMISE THE 60 PER CENT RULE¹

As mentioned at the beginning, the initial SGP from 1997 concretised the fiscal policy goals of the Maastricht Treaty, clarifying that the 3 per cent deficit had to be understood as an upper limit that must not be exceeded, except under extreme circumstances. The first reform of the SGP in 2005 came after Germany and France breached this margin in the aftermath of the dot-com crisis with a long spell of stagnation of GDP growth, especially in Germany. The focus was now set – additionally – on structural deficits with goals summarised in the country-specific MTOs prescribed by the EU Commission. The SGP is secondary law. The second wave of hardening the SGP came after the global financial crisis, in 2012, when the fiscal rules and targets for structural deficits were enshrined in the Fiscal Compact (TSCG); this intergovernmental Treaty is equivalent to primary EU law as it can only be changed unanimously. Thus, the SGP was backed now by semi-primary law. Moreover, signatory states were obliged to change their national constitutional law accordingly. The blueprint for these changes was the German constitutional ‘debt brake’ from 2009 and the shock of rising public debt during the financial crisis and the subsequent euro crisis, the latter interpreted mainly as a crisis of fiscal profligacy. The key point of the changes was the commitment in the Fiscal Compact to balanced

1. This section is based on Priewe (2020: 16–56).

structural budgets, considered as being fulfilled with a structural deficit of not more than 0.5 and 1.0 per cent and the prescription of debt-reduction trajectories for countries with debt above 60 per cent, which requires structural surpluses. The speed of reduction should be 1/20th of the actual debt ratio in excess of the 60 per cent limit ('as a benchmark'). The reference values of 3 and 60 per cent for the headline deficit and gross debt in Protocol 12 of the Treaty on the Functioning of the European Union (TFEU) remained of course unchanged. In contrast to the original Maastricht Treaty, the 60 per cent debt cap became the most important fiscal policy goal as deficits were to be aligned to this end. The overarching philosophy was that MSs were too lax in 'good times', that is, in years with a positive output gap, so that the debt ratios tended to rise, apart from the notion that high-debt countries were too prodigal to reduce their legacy debt by running primary surpluses. Since this set of rules implies a contractionary bias for the euro area which contributed to the double-dip euro crisis 2012–2014, several country-specific temporary exemptions were allowed which made the rules even more opaque.

Due to the crucial importance of the 60 per cent debt limit, which came into the Maastricht Treaty by coincidence, we focus here on the reasoning for this debt ratio. There are four main strands for general limitations of public debt in advanced countries indebted in own currency, discussed in sub-section 3.1: the reasoning of the European Commission using the term 'debt sustainability', intertemporal budget constraints, critical values for tax rates necessary for debt service, and empirical estimations of critical debt thresholds. Another line of reasoning is built on the specifics of a monetary union without a common state, hence with many nation states. This will be discussed in sub-section 3.2.

3.1 Reasoning for general limitations of public debt in countries with stand-alone currencies

'Debt sustainability': In various publications the EU Commission attempted to justify the 60 per cent rule with 'fiscal sustainability' (EC 2016: 22; EC 2019). This term is simply used as a synonym for the 'solvency' of the public sector (inverted commas given by the Commission), analogous to companies, but mediated through capital markets as a quasi-referee. For this purpose, three sustainability indicators were created, S0, S1 and S2. S0 bundles 25 short-term early warning indicators, 12 fiscal indicators and 13 indicators for the financial system as a whole. Government debt is just one of the 25 indicators. A high value of the indicator would signal fiscal and/or financial stress, as a broad early-warning signal, but certainly not necessarily government insolvency. S1 is said to be a medium-term indicator of fiscal sustainability. It calculates the structural primary balance of the MS for the next five years, which is necessary to reach the debt ratio of 60 per cent by 2030. The number 60 is assumed as a norm, however is not justified with economic reasoning. Indicator S2 has an infinite time horizon and calculates the growth of government debt on the assumption that the given debt burden is stabilised. For S1 and S2, future burdens for reasons of old-age provision are treated as implicit national debts on the premise that no policy changes take place. Indicator S1 is shown as the most important one, related to the reference value of the Treaty. The results of the calculations would change drastically if policy changes regarding old-age provision were included and different variants of interest rates and growth were taken into account. S2 is just an addendum considered inferior to S1 since permanently holding high debt above 60 per cent requires a higher share of the interest burden, relative to GDP. That running significant primary surpluses over a longer period might be self-defeating due to a growth-depressing, long-standing contractionary fiscal stance is not taken into consideration.

Intertemporal budget constraints: This concept is often used to justify fiscal sustainability. The constraint means that the net present value of payments to the creditors is a finite number which must be equal to or exceed the value of the debt in the present period. This implies that interest cannot be financed by borrowing, which would undermine macroeconomic stability by Ponzi financing. This means that the expected nominal interest rate on government debt (r) is on average above the expected nominal GDP growth rate (g). Consequently, a permanent primary surplus is necessary in order to maintain the debt ratio no matter what the size of the ratio is, as long as $g < r$. This is based on the rationale of the Domar equation (Domar 1944).² However, a derivation of a critical value of 60 per cent – or less or more – is not possible in this concept. Blanchard et al. (1990) had similarly reasoned that under the condition $r > g$ a primary budget surplus will be necessary sooner or later. They excluded the constellation $r < g$ as irrelevant and considered it a ‘theoretical curiosity’ within the framework of traditional neoclassical growth theories, including theories of capital.

Limits to tax increases: Since tax increases or spending cuts are only possible to a limited extent and political resistance increases with an increasing tax rate, the debt ratio can only increase to a limited extent, but not rise permanently (Blanchard et al. 1990). The authors insisted that there is no specific magical threshold. Later, Ostry et al. (2010), authors from the IMF, had detected suspected critical values in a theoretical model similar to Blanchard et al. (1990). They tested the model empirically with data from many countries, based on the calculation of fiscal reaction functions in case of rising public debt and assumptions on the behaviour of financial investors; but the range of critical values which they found was wide, in some cases well over 60 per cent. The rating agency Moody’s immediately adopted the model (Moody’s Analytics 2011), in contrast to the IMF’s official guideline, which rejects generic limits on government debt in favour of country-specific debt-sustainability analyses (IMF 2011).

Empirical studies on debt thresholds: Furthermore, the common, even popular belief that public debt has some limits beyond which governments run into deep problems, be it inflation, higher taxes, lower growth or outright debt default, can make debt limits appealing to large proportions of citizens. The assertion of Reinhart/Rogoff (2010) that there is a threshold at 90 per cent of GDP reflects and serves such beliefs, which can be exploited by politicians, irrespective of the empirical quality of the analysis (Reinhart et al. 2012; Panizza/Presbitero 2013; 2014; Pescatori et al. 2014). The conventional view on rising debt leading to lower growth in the long run, even if the short-run effect of expansionary fiscal policy is positive, is not corroborated by evidence (cf. Chowdhuri/Islam 2010). There is indeed evidence on a correlation of low growth and high debt, but the causality is not proven. This implies that expansionary fiscal policy can be effective in the short run and neutral or even positive in the long run. By contrast, long-run primary surpluses can have negative effects on growth (Eichengreen/Panizza 2014).

There are a number of other concepts which legitimise the 3 and 60 per cent rules, but connect the reasoning to a monetary union – these are considered different from countries with a stand-alone currency.

2. The change of the debt-to-GDP ratio (b) against the previous year rises with the difference of the interest rate on debt (r) and the growth rate of GDP (g), weighted with the debt ratio of the previous year, and falls with the primary balance (p): $b_t - b_{t-1} = \frac{r-g}{1+g} b_{t-1} - p_t$. For a detailed analysis, see Priewe (2020: 21f).

3.2 Specific debt caps needed in a monetary union?

Often-held political-economy views argue that in a currency union with different nation states, that is, without central government, ‘fiscal discipline’, regarding both deficits and debt, needs to be institutionalised, rule-based and enforceable with sanctions to avoid moral hazard, free-riding of MSs and contagion (see for example Wyplosz 2012; Berger et al. 2018). These views comprise three issues, namely fiscal inflation, fiscal dominance over monetary policy, and moral hazard with asserted reckless-debt accumulation in some countries causing risks of bail-out for others, eventually leading to a federal or transfer union.

Inflation by excessive budget deficits: It is feared that excessive deficits might cause demand-pull inflation above target inflation in individual MSs without a national central bank as the traditional guardian against inflation. Relying on full competition on the common goods markets does not alleviate the problem since different inflation rates could coexist among MSs mainly due to markets for non-tradables. National inflation could spill over to other MSs, increase overall inflation and harm all, due to tighter monetary policy of the European Central Bank (ECB). This risk could be contained by control of fiscal deficits enforced by fiscal rules. Perhaps the architects of the Treaty believed that the 3 per cent rule for deficits is a sufficient safeguard, but this is obviously false since inflation is more likely in cyclical booms with fairly low deficits so that then tighter margins, perhaps even surpluses, would be required, but not a fixed number. The lenience against national inflation hampers the effectiveness of the common monetary policy. However, appropriate policies in this regard do not require debt targets.

But how about the relationship between high debt and inflation? The writing on the wall is the German hyperinflation after World War I which wiped out the sovereign debt from war-financing. An independent central bank would and could prevent this. Unexpected (‘surprise’) inflation in one or several MSs of the EEMU could in principle reduce the real value of debt, but again, control of fiscal balances would suffice, given an independent central bank. Prior to the global financial crisis of 2008, some peripheral MSs tolerated above-target inflation, but this came alongside accumulating debt. This way, inflation did not reduce debt but increased it. In economic history, high debt and deflationary risks had been more relevant than high debt with high or hyperinflation (if debt in foreign currency is excluded); Japan is more typical nowadays among advanced countries than Germany 1919–1923 or Zimbabwe.

Risk of fiscal dominance: Fiscal dominance would undermine monetary policy and the independence of the *de jure* independent central bank. Thus, high debt levels have to be prevented as a measure to preserve the effectiveness and the *de facto* independence of the central bank (BIS 2012). Monetary dominance will maintain the power for protecting price stability. Such a problem would exist if inflationary risks loomed due to rising debt. Since the financial crisis this has not been the case. Especially under the threat of deflation and low growth the power of monetary policy ceases, except if it takes over fiscal functions by low or negative real interest rates; this reduces interest payments in budgets and increases primary spending, rendering fiscal policy expansionary or less contractionary.

Yet the argument in favour of monetary dominance has a different point: centralised monetary policy for a group of heterogeneous countries with markedly different debt levels poses problems for the transmission mechanisms of monetary policy. Spreads between long-term interest rates due to country-specific risk premiums on sovereign bonds likely arise. The loss of a lender of last resort willing to prevent too-high spreads undermines the effectiveness of monetary policy; excessive interest-rate spikes on specific sovereign bonds can cause liquidity crunches and ‘sudden stop’ problems with capital

outflows which can immediately trigger liquidity crises and subsequent debt default (or ‘insolvency’). Here is a crucial point of vulnerability of a currency union which cannot occur in a stand-alone currency state. Avoiding such vulnerabilities requires either low and similar debt ratios among MSs, including mechanisms of debt restructuring (including euro-bond options for splitting debt in safe mutualised assets and national debt), or monetary policy is mandated to contain interest-rate spreads and protects solvency of government bonds of all members alike (cf. Sims 1999, or the Outright Monetary Transaction (OMT) facility of the ECB). The first option seems virtually impossible for MSs with a huge amount of legacy debt on the one hand, and private sectors with conspicuously different private-sector dynamics on the other. So, the second option becomes the only game in town. This is what the ECB attempted to do, despite many legal restrictions, belated by asset purchases in the period 2015–2019. However, the usage of the OMT programme for purchasing sovereign bonds of one or several critical MSs is considered too close to ‘monetary financing’ of public debt and thus prohibited. The only way out would then be shifting critical MSs under the ‘rescue umbrella’ of the European Stability Mechanism (ESM) for *de facto* bail-out under conditionality which would sacrifice national policy autonomy to a large extent, apart from other problems.

Fear of moral hazard: Debt-stricken countries with alleged fiscal ‘indiscipline’ and the eventual risk of an unavoidable bail-out by the neighbouring MS is – in our opinion – at the centre of the rejection of all steps towards what is epitomised as a ‘transfer union’ and a federal EU statehood including the ‘mutualisation of debt’ (cf. Sinn 2015: ch. 8). Through this lens, avoiding such risks requires low debt ratios and some model countries serving as best-practice showcases and stability anchors for the entire union, demanding followership from the others. It is of course a hidden hegemonic concept. This is the deeply rooted view of German governments over recent decades, regardless of their political colour. A vague understanding of ‘sound finance’ is driven partly by pathological sentiments, almost traumas, not rooted in serious and sober economic analysis; partly by an economic conception of the EEMU with an ‘ordoliberal’ design; and partly by the suspected majority of voters who fear being increasingly net-payers or losing privileges in a supranational union.

Such an ‘ordoliberal design’ is a monetary union with (i) a clear division of a centralised supranational monetary authority (with independence and strict prohibition of monetary financing of MSs) and purely national fiscal policy; (ii) a no-bail-out clause; and (iii) fiscal rules for both deficits and debt. Full national budgetary autonomy remains sacrosanct, within the constraints of the agreed rules. Since the EU and EEMU do not have the monopoly on the use of force (which is still national) and enforcement of EU rules is limited, (iv) capital markets are required to fill the void. They serve as substitutes for the missing EU or EEMU government, apart from a small common budget and inter-governmental coordination. Since the financial markets and the rating agencies do look at the size of sovereign debt, among other indicators, their criteria for evaluation could be anticipated in the fiscal rules; therefore, a debt criterion seems indispensable. It is worth mentioning that this view is less rooted in economic reasoning, but to some extent emanates from the legacy of juridical norms in national constitutional law. It is a normative design, immune against lack of economic justification (cf. Brunnermeier et al. 2016: 59–67), adding common banking supervision, assigning the European Investment Bank with semi-fiscal tasks and establishing the ESM corroborate rather than changing the core setting.

All measures that trespass these red lines, even by small degrees, are considered tipping points to a regime change. Such attitudes hinder the search for reasonable compromises and prudent concepts of reforms of the EEMU towards a limited degree of fiscal

federalism with a higher level of European statehood. The main deficiencies of this concept come to the fore when the monetary union is hit by *symmetric* shocks (contrasting the view of optimum currency area theories), no matter whether they have asymmetric consequences, and when such shocks cannot be countered with the means of monetary policy. The New Consensus macroeconomic model which assigns the stabilisation function almost exclusively to the central bank, apart from automatic fiscal stabilisers at the national level, fits nicely with ordoliberal beliefs but reaches its limits before long. Both the global financial crisis of 2008–2009 and the coronavirus crisis of 2020 are cases in point.

Our critique of the deficit–debt rules in the EEMU is buttressed by a widespread consensus in the economics profession on the limits of public debt, despite many differences. Representative of this consensus is perhaps a recent paper by a group of 11 German and Swiss economists (Holtfrerich et al. 2015) from different strands of economic theory, including the Austrian School, public choice, standard Keynesians, and economic history. The consensus includes, among other things, and despite dissent on several other issues, the following propositions:

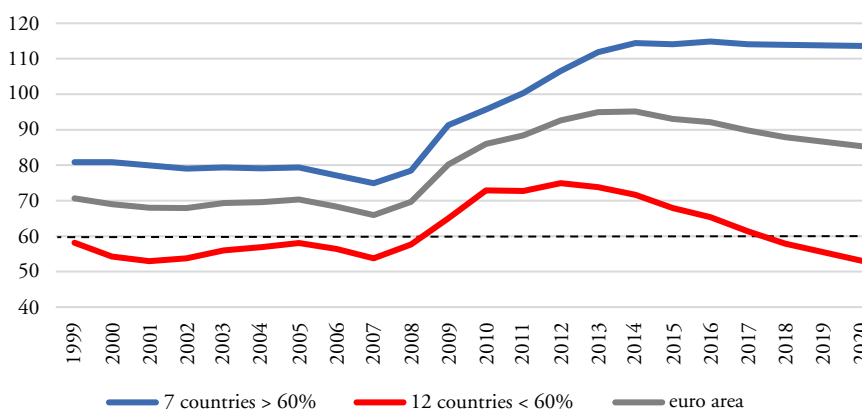
- there is no threshold of public debt beyond which growth rates attenuate;
- there is also no clear critical limit (unless countries have debt in foreign currency) beyond which sovereign default ('insolvency') is likely to occur;
- a permanent increase of the debt ratio is considered unsustainable;
- public debt must be evaluated through a macroeconomic lens, in contrast to household debt;
- there is little evidence for the Ricardian equivalence theorem;
- a major driver for waves of debt increase are financial crises as well as other episodes of low growth, while there is little evidence that welfare states cause increasing debt levels;
- risks of inflation due to fiscal dominance and thus reducing debt by an 'inflation tax' are unlikely in a monetary union with an independent central bank;
- high debt levels can trigger self-fulfilling shifts in expectations of increased risk premia, especially in a monetary union;
- the change in the debt level depends, following the Domar equation, on the difference between r and g and the primary budget balance; both $r > g$ and $g > r$ regimes are seen in economic history.

The last point is in line with Blanchard (2019): he admitted – with a theoretical somersault versus Blanchard et al. (1990) – that growth rates exceeding interest rates is no longer a theoretical curiozum, as the performance of the US since 1950 demonstrates. This would leave large fiscal space and blurs any notion of a firm debt ratio limit. This may be one of the reasons why there is no advanced country that has constitutional debt caps besides MSs of the EEMU (IMF 2017).

Now we jump into the debt performance of MSs in the EEMU, which reveals the calamities of the existing fiscal rules.

4 DEBT LEVELS IN THE EURO AREA

Figure 1 shows the debt levels in two groups of countries, those with a debt level above 60 per cent and those below, in relation to 2019. More than half of GDP in the euro area is generated in countries with high levels of debt, around 70 per cent of total government debt in the euro area. In 2019, the debt ratio was 113 per cent of this group's GDP, as opposed to 55 per cent in the group of 12 countries with lower debt. The drop in the



Source: AMECO.

Figure 1 Gross public debt, percentage of GDP, in the euro area 1999–2020 (weighted with GDP shares)

average rate was only caused by the latter group, and there has been little change in the seven heavily indebted countries since the peak in 2014. Due to the sharp decline in debt ratios in the 12 less indebted countries, the eurozone is increasingly polarising into two groups.

Is it possible and sensible that the seven heavily indebted countries will reach the Maastricht raison of 60 per cent in the foreseeable future? The TSCG requires them to reduce about 1/20th of the difference to 60 each year, mentioned above. It would be 3.5 p.p. per year for Italy and 2.0 p.p. for France. This requires high primary surpluses. Even if 20 years of hard savings were made, much like Greece was forced to do, it is unlikely to work (Eichengreen/Panizza 2014). If growth is slowed down as a result, the debt level could even increase further ('debt paradox' or 'self-defeating austerity', cf. Fatàs/Summers 2015). The prevailing opinion about the fiscal stance ignores the prevalence of persistent contractionary effects and pays heed only to the effect of a *change* of the primary balance classified as contractionary. However, if the private sector grows vigorously, resulting in higher tax revenues without having to cut spending or raising tax rates, a primary surplus can occur. In other words, in this specific case the primary surplus is contractionary but neutralised or more than offset by private growth dynamics.

How about the countries with debt below 60 per cent of GDP in the EEMU? With 3 per cent GDP growth and 1.0 per cent permanent (or structural) deficit, their debt levels would trend to 33 per cent. Nobody holds that this level is 'optimal'. The German debt break, instituted in 2009, with a constitutional structural deficit cap of only 0.35 per cent of GDP, would lead to a debt level of 11.7 per cent of GDP if growth is 3 per cent per year. Reasoning for this debt level has never been provided.

Assuming that sooner or later the entire group of MSs with lower debts will use the permitted structural deficit of 1 per cent of GDP, but at the same time a counter-cyclical buffer of 3 percentage points is necessary (Price et al. 2015), then the reference value from Protocol No 12 would have to be increased to 4 per cent, unless limited cyclical flexibility were accepted. In any case, the 3 per cent buffer is smaller than in other countries, since

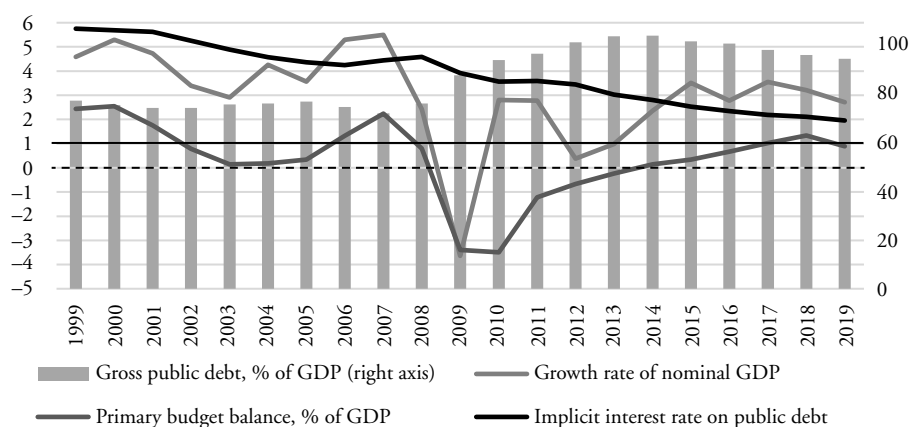
only automatic stabilisers are used, apart from very severe crises, because the Commission classifies discretionary measures as structural ('one-off measures', EC 2019: 9, box 1.3, principle IV). The paradox remains that only with a structural deficit of zero is the economic buffer of 3 per cent sufficient and the 3% limit maintainable – but with a long-term debt ratio of zero this would amount to a complete ban on structural government borrowing.

Since limits for the structural budget balance (MTOs) had been added as the most important operational benchmark in 2005 and tightened by the TSCG of 2011, the calculation of potential growth and output gaps is of pivotal importance. The critics demonstrate that the estimation methods tend to systematically underestimate negative output gaps and overestimate positive gaps. Advocates of the status quo method admit the problem but assess it as minor. For the two diverging views, compare for example Heimberger et al. (2019) and Buti et al. (2019).

The bottom line is that the high-debt countries have few chances to lower their debt and are at risk of self-defeating austerity measures, while the low-debt countries tend to reach very low debt levels which likely hamper public investment and growth. The structure of the EEMU polarises. If the coronavirus crisis increases the debt-to-GDP-levels by some 20 or so percentage points, the high-debt countries could get trapped in persistently heavy austerity unless the debt targets are changed.

5 THE INTEREST–GROWTH RELATION

From 1999 until 2014 implicit (that is, average nominal) interest rates on sovereign debt were trending 0.8 p.p. higher than growth rates in the EEMU as a whole, except in two boom years. Seven MSs enjoyed on average negative $r-g$ differentials. Since 2015, growth has exceeded interest rates. The average differential during 1999–2019 was 0.9 p.p. For the four large euro area economies, comparable data for the period 1978–1998 are available, using long-term interest rates instead of implicit ones. Germany experienced a slightly more favourable differential before the advent of the euro, while France, Italy and Spain have improved a lot since interest rates shrank more than nominal growth rates after the inception of the euro (AMECO data). Across MSs, the differentials differ significantly for the same period. The Commission, like others, such as authors from the ECB (cf. Checherita-Westphal 2019), accepted the $r > g$ regime as if it were a natural law, with both variables fixed by invisible hands on the markets. By contrast, in the United States, $r < g$ has been in effect during the vast majority of years since 1950 (Blanchard 2019; Priewe 2020: 51). On the one hand, higher economic growth due to more active fiscal policy and stronger population growth contributed to the more favourable situation in the US. On the other hand, the implicit interest rate on government debt was lower in the historical trend for various reasons, in particular if taxing of interest on debt is accounted for. Moreover, the European government bond market is fragmented, with country ratings ranging from 'junk' to triple-A, on average A+ (that is, five notches less), compared to the US rated AA+ since 2011, until then always AAA (Standard & Poor's, March 2020); there is a considerable range of interest rates on long-term sovereign debt, reflecting risk premiums, in the euro area. This itself suggests – though without robust proof – that the Maastricht Treaty, the TSCG and the SGP contributed to the unfavourable situation in the eurozone, compared to the US, with unnecessary restrictions that dampen growth and add a risk premium to interest rates. The comparison of the US with the euro area is telling in the period 1999–2018: the US had an $r-g$ differential of -0.6 , the euro area 0.8 p.p.; average nominal growth was 1.4 p.p. higher in the US, and the average primary balance was -1.7 per cent in the



Source: AMECO.

Figure 2 Euro area: gross public debt, primary budget balance, implicit interest rate on debt and nominal growth rate

US and 0.4 per cent in the euro area (Priewe 2020: 56). Even small improvements in the interest–growth differential would have significant positive effects. MS government bonds are not protected against sudden-stop risks or the emergence of multiple (good or bad) equilibria due to the lack of a backstop, like an emergency insurance, by the ECB or the ESM. In most other OECD countries, the central bank would not allow general government debt to default or high spreads to rise further. The special situation in the eurozone can lead to a risk premium on the interest rate of critical countries, which increases the ‘re-denomination risk’, that is, reflects the risk of an exit with subsequently expected devaluation in its own currency.

The relationship between interest rates and growth rates has changed since the financial crisis. The implicit interest rate on government bonds has fallen below the growth rate of GDP in the euro area since 2015, in Germany since 2012, and in Germany more than elsewhere. It will continue to fall because it will take a long time for earlier high-yield bonds to expire and then be replaced by low-yield ones. Even if the ECB raised policy rates immediately and stopped purchasing bonds, it would take a long time, perhaps more than ten years, before the relevant risk of interest-rate change fully affected the implicit interest rate. The average implicit interest rate in the euro area was 2.2 per cent in 2019, and the rate is still falling. The growth rate was a percentage point higher (see Figure 2). If this constellation persisted with corresponding expectations on the r – g differential, the financial budget constraint would become soft and allow a negative primary balance with a constant debt ratio or a falling debt ratio with a zero primary balance.

6 CONCLUSIONS

That 60 per cent of the debt level is a magical limit beyond which the ‘solvency’ of the MSs is threatened is a myth – with negative consequences. It calls for rapid steps to reduce debt in countries with significantly higher debts and sometimes enforces fiscal austerity for decades in countries with high levels of debt. It is misleading because it distracts from the

real problems of high debts, namely enabling more growth and lower interest rates without inflation above or below the target. Surprisingly, the level of debt has become the main objective of fiscal policy, although it initially played a minor role in the monetary union. Since the end of World War II, no industrialised country has become insolvent as far as the central government is concerned. The only exceptions were Iceland in 2005, though this was risky foreign currency debt, and Greece, which was the victim of a poorly designed monetary union not prepared to deal with heavy asymmetric shocks in MSs, either via the ECB or via fiscal policies.

If one takes into account the lower interest-rate burden in the general government of the eurozone, the lower implicit interest rates and the low interest rates for new long-term bonds in recent years, then despite a debt level of 86 per cent in the eurozone (2019), the interest-rate burden is 41 per cent lower than in 2007 with a lower debt ratio of 70.7 per cent at the time. Countries with debt levels well over 60 per cent will be able to bear the debt burden much better in 2020 than with less debt before the financial crisis. The debt criterion, no matter what the quantitative debt limit is, is not a sufficient criterion for decisions on sustainable debt. A more complex set of criteria is required, including the r and g relationship and the interest-rate-burden ratio. The '3 and 60' double rule of the EU massively narrows the scope for fiscal policy.

Coping with the costs of the coronavirus crisis will be easier if a favourable r - g constellation can be continued during the recovery period. Assuming a nominal interest rate on long-term government bonds of 1–2 per cent would increase the interest payment share in GDP by not more than 0.25 to 0.5 per cent of GDP if the debt ratio rose by 25 percentage points. The rise would even be less if the implicit interest continued to fall. Monetary policy is needed to accommodate elevated debt levels, especially for the countries with the highest debt levels, by quantitative easing measures to control long-term rates, if necessary with country-specific purchases like the OMT programme or similar. If common euro bonds were used with joint and several liability of all MSs, such country-specific monetary flank-protection would be unnecessary.

For the reforms of the fiscal policy rules, the 60 per cent debt margin should be dismissed in Protocol No 12 of the TFEU, perhaps also the deficit margin. The EU Council can change the Protocol in the case of unanimity of all members, as underlined by the European Fiscal Board (EFB 2019: 92–93). MSs should be obliged to use fiscal policy (and other policies) to support the target inflation, symmetrically against national inflation and deflation, and to contribute to shrinking current-account imbalances. According to national accounting, the sum of the budget balance, the private-sector net expenditure and the external balance is by definition zero. If the private-sector balance tends more or less to zero or to positive territory, chronic (that is, structural) budget balances match external balances. The latter depends also on other variables, such as the real exchange rate and growth relative to the rest of the world. Nevertheless, the current account is strongly influenced by the budget balance. Hence the target structural budget balance should take account of external imbalances (cf. Weizsäcker/Krämer 2019); excessive imbalances, however defined, should be sanctioned in a monetary union, absent national exchange rates. There is a broad consensus in the EU that excessive external deficits should be prevented, while excessive external surpluses are privileged in the EU 'Macroeconomic Imbalances Procedure' (cf. Priewe 2020: 70–71).

Regarding debt, caps could be abandoned in full, or, alternatively, medium-term debt caps could be prescribed by the Commission according to medium-term forecasts on growth and interest-rate trends in the fiscal policy framework. Reference values would be shifted from primary to secondary EU law. New debt caps with new but still eternal numbers in the Treaty are not advisable. High-debt countries should be given the options to carry their debt burden, flanked by the ECB, or to reduce it with national policies,

avoiding restructuring or bail-outs. Thus, all sovereign bonds of MSs would be transformed into safe assets, even if their rating differed somewhat. Market access would be guaranteed by the ECB. This is the same implicit or explicit guarantee as in stand-alone-currency countries. The difference is, however, that the latter can devalue their currencies to spur growth and improve g relative to r , if normal exchange-rate responses are assumed. The loss of a national central bank that MSs suffer in a monetary union would have to be neutralised by a specific monetary policy without comprehensive conditionality. In general, both monetary and fiscal policies could be activated so that a more favourable r – g difference can be achieved. This is even more likely if catch-up growth in less advanced MSs could materialise and if the euro could become a truly global currency with a common bonds market (Priewe 2020: 64–65).

In a scenario with European bonds, based on mutualised liability (either joint or severally, that is, proportionally), issued by a newly established EU Treasury, based on an extended EU budget with taxation authority, the fiscal policy space of MSs should be limited. The extent of inter-governmental redistribution could be constrained constitutionally. These ideas would probably be much in line with Jacques Delors's vision of a monetary union expressed in the early debates in the Delors Committee more than 30 years ago.

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