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A Golden Rule for Social Investments: How to Do It

Fiscal rules can be defined as constraints on a government budgetary policy that impose numerical limits on public finance aggregates (e.g. deficit, public spending and public debt). In the context of the Economic and Monetary Union (EMU), fiscal rules were justified by the risk of negative spillover effects arising from fiscal policy shocks in one country on other member states and on the euro area as a whole.

The current EU fiscal framework originates from the Maastricht Treaty, which came into force in 1993 and specifies the criteria to join the EMU; and the fiscal rules applied to euro area members are specified in the Stability and Growth Pact (SGP), agreed upon in 1997. The Pact was reformed in 2005 (to deal with the diverse economic realities of the 25 EU members), 2011 ("six-pack"), 2012 (Fiscal Compact) and 2013 ("two-pack"). From 2015, new flexibility clauses were introduced to justify the temporary deviation from the medium-term budgetary objectives (MTOs) or the path towards them. These include: the *cyclical conditions clause*, which takes into account cyclical fluctuations of the economy in order to modulate the fiscal effort; the *investment clause*, which stipulates that member states' expenditures on EU-linked investments shall not be counted in deficit calculation; and the *structural reform clause*, which excludes the costs of structural reforms – if they are "major" and "fully implemented" – from deficit calculations. Finally, the European Commission (2016) Communication *Towards a Positive Fiscal Stance for the Euro Area* set out the case for a more expansionary euro area fiscal policy to support aggregate demand.[1]

The sequence of reforms consistently went in the direction of relaxing the original, numerical fiscal rules, offering opportunities for fiscal leeway to member states. As a result, EU rules have become very complex and over time, increasing complexity has gone hand in hand with increasing criticism. Already before the outbreak of the COVID-19 pandemic, virtually no one was satisfied with EU fiscal rules. Countries with typically larger deficits and higher debt found the discipline of the rules too constraining to promote economic growth that would improve public finances. More fiscally conservative countries saw the growing debt in fellow member states as evidence that rules have not been constraining enough. The Commission often found itself in the position of applying a somewhat discretionary judgement, without having the political legitimacy to do so. Criticisms revolved around three dimensions. The first is the design. The structural budget balance depends on the output gap, a non-observable variable, and it is often subject to significant *ex post* revisions that can even exceed the baseline fiscal adjustment required by the EU fiscal rule (Darvas et al., 2018). In the case of persistent shocks, overly pessimistic estimates of potential output, driven by cyclical conditions, can impact real-time fiscal policy decision-making. When considering real-time information, this can lead to a pro-cyclical stance, both in good and bad times (Eyraud et al., 2017; Barnes and Casey, 2019).

Second, limited enforcement of the rules has led to loss of credibility. The lack of a proper enforcement mechanism has resulted in non-compliance with the rules becoming a norm. As an example, although 24 countries were subject to an excessive deficit procedure after 2008, no sanction was ever given.

Finally, the political sustainability and acceptability of the overall fiscal framework is problematic. EU fiscal rules have become undoubtedly overly complex, up to the point of hindering the internalisation by policymakers and their acceptance by the broader public. Wieser (2018) points out that the current rules-based system has become nearly unmanageable due to its complexity and the constant addition of exceptions. Odd as it may seem, the complexity and additions have largely been the (perverse) result of the intention to codify any exceptional situation of a member state and allow for a relaxation of the rules, which in that context were difficult to accept, or sometimes even defied, by the national government (see Figure 1).

In 2019, against such broad discontent, the Commission launched the Economic Governance Review. The process was then suspended due to the outbreak of the pandemic,

1 Beyond these legislative acts, the Commission regularly updates and extends a detailed Code of Conduct and a detailed Vade Mecum on the SGP, which provide further specification on the implementation of the fiscal rules.

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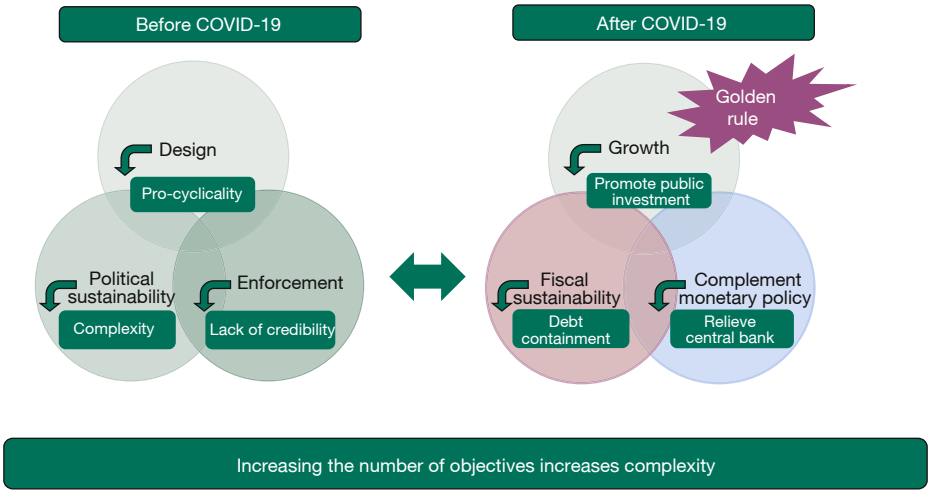
Figure 1
Policy debate on EU fiscal rules



Source: Authors' elaboration.

and relaunched in 2021, to address the new challenges to the economic governance framework posed by the COVID-19 crisis in addition to previously identified weaknesses of the EU fiscal rules.

The COVID-19 pandemic, however, pushed the debate on somewhat different objectives or limits of the EU rules. Many proposals for reform of the fiscal framework put forward since the outbreak of the pandemic highlight a central role of a debt anchor, and an expenditure cap or benchmark as opposed to the structural budget balance.[2] They often also highlight the need for fiscal policy to complement monetary policy and contribute to restoring independent monetary policy. But above all, the centre of attention on how to ensure long-term fiscal sustainability seems to have shifted from controlling the budget balance to fostering growth, in particular by stimulating and supporting public investment. The latter argument is being widely used in relation to the challenges posed by the digital and green transition, and made more evident by the pandemic. While the stress on the "G" of the SGP (instead of the "S") and the attempt to reconcile EU fiscal rules with public investment sound sensible, the latter raises important questions both at the conceptual and operational level.

The debate on public investment and EU fiscal rules

Public investments have often been considered the main victim of the fiscal consolidation efforts after the euro area debt crisis started in 2010 (Barbiero and Darvas, 2014; EFB, 2019). Still in 2019, net public investment (gross fixed capital formation minus the depreciation of capital stock) was negative in Spain, Italy, Portugal, Greece and Cyprus, while it was only mildly positive in core member states (Germany, France, Belgium, the Netherlands) and relatively high in central and eastern member states (though significantly lower compared to the UK and the US). In the literature, however, the causality link between fiscal rules and the cuts on public investment after the Great Recession remains an open question. Public investment has been a declining trend for decades, and market pressures (raising spreads on sovereign bonds) on public finances, more than rules, may have induced policymakers to cut investment, instead of other expenditure items. Furthermore, as observed by Gros and Jahn (2020), for most EU countries, there is not a close relationship between the deficits and net investment of the government; this is to say that when public expenditure increases, it is not necessarily due to investment. Even though a causality between fiscal rules and the pro-cyclical behaviour of public investments cannot be traced, declining trends in public investments are widely acknowledged to have slowed down the post-Great Recession recovery. Public investment has indeed been found to have a greater impact on economic growth than most other types of public spending, especially in weak economic conditions (Morozumi and Veiga, 2016; Afonso and Furceri, 2010; Chu et al., 2018).

Overall, until recently, arguments against the idea of giving public investment special treatment in the SGP were quite strong. First, the possibility of "safeguarding" public investment already exists to some extent in the SGP through the flexibility provisions. In practice, as observed by Darvas and Anderson (2020), the SGP's investment clause proved

2 See European Fiscal Board (2021) among others.

to be an unsuccessful measure. Only Italy and Finland applied for the flexibility, and the extra room for manoeuvre for fiscal policy was miniscule. Second, as observed by the European Fiscal Board (EFB, 2019), investment-friendly rules can lead to excessive borrowing and weaken the link between fiscal targets and debt dynamics, with risks for the sustainability of the latter. Third, Servén (2007) observes that creative accounting and the reclassification of unproductive expenditures as investments to circumvent rules could challenge monitoring and enforcement. Finally, Schwartz et al. (2020) observe that the success of public investments – even when not undermining fiscal discipline and debt sustainability – depends on public spending efficiency, which significantly varies across member states.

Despite the limitations and the different views, the introduction of a *golden rule* in the EU fiscal framework, i.e. a rule that excludes a specific measure (or class) of capital expenditure from the computation of certain fiscal requirements (be it the expenditure benchmark or the budget deficit) has returned to the debate. The common argument for all golden rule proposals is that the government should be allowed to incur debt if it creates new capital, and hence is of value for future generations. Different variants of the golden rule have been put forth. According to Feigl and Truger (2015), the golden rule should apply to net public investments (as defined in the national accounts), excluding them from the fiscal targets. In so doing, governments whose public capital stock is diminishing would be incentivised to increase their productive spending. Bogaert (2016) further proposes modifying the formula of the MTOs to factor in net public investment. Similarly, the EFB (2020) proposes a golden rule according to which some investments deemed to be in the interest of Europe should generally be exempted from the computation of the deficit. Giavazzi et al. (2021) also propose a golden rule to incentivise two categories of public spending, namely public investment that is beneficial for the long-run growth prospects of the country and expenditures that contribute to European public goods that benefit future generations.

In summary, there are broad arguments in favour and against golden rules. The following section focuses on a specific category of public investment, i.e. social investment, and illustrates the conceptual and measurement challenge of such a rule. While we do not draw policy recommendations on how to operationalise such a rule, the conceptual framework identifies a number of challenges that should be addressed *ex ante*.

A social golden rule: How to conceptualise it?

The idea of a golden rule has recently been relaunched in the framework of the debate on the European Green Deal. Among others, Darvas and Wolff (2021) propose introducing a qualified treatment for green investments through a new golden rule that excludes net green public investment from the deficit and debt calculations under the EU's fiscal rule. Together with the green investment, the idea of a golden rule has sometimes been extended to the treatment of social expenditure. Contrary to green investments, estimates of social investments are traditionally counted as current expenditure and not investments in *stricto sensu*. This notwithstanding, the idea of an exemption or amortisation of social spending under the existing fiscal rules has long gained policy attention (Zuleeg and Schneider, 2015; Hemerijck et al., 2020).[3] Yet, current proposals are either unclear or incoherent in the identification of which social expenditure to consider for special treatment. Such difficulty is related in part to the lack of a coherent framework that links public spending effort (input) and specific social impacts (outcomes). To justify the introduction of a golden rule, the existing literature has focused on two different questions: How to measure (i.e. how to spend) the economic efficiency of public social expenditure and its impact on GDP growth; and how to quantify the effectiveness of social spending (i.e. why to spend, to achieve what objective) by focussing on individuals' welfare improvements and economic returns on social programmes. These questions have resulted in two separate strands of literature.

The first has widely focused on the functional composition of public spending and its potential impact on GDP growth. Scholars find that public spending on education and healthcare are both associated with a positive impact on GDP growth (Gemmell et al., 2015; Dissou et al., 2016). In this respect, endogenous growth theory (Lucas, 1988) largely finds that education is an investment in human capital, and empirical research suggests that the private as well as social rate of return of education can be assumed to be very high (Psacharopoulos and Patrinos, 2004). By contrast, evidence is less clear with respect to traditional social protection schemes and notably pensions. For instance, Docquier and Paddison (2003) find a growth-impairing impact for pension payments, which would discourage physi-

3 The "golden rule" approach to fiscal policy we refer to here is different from the approach that is associated with Watt's (2012) "golden rule", the main focus of which is the external account rather than the level of debt and deficit per se. Watt's (2012) starting point is the substantial current account imbalances within the EMU. He argues that the rate of nominal wage growth should be lower than indicated by this formula in deficit countries and higher in surplus countries to bring countries back into equilibrium. The "golden rule" of a monetary union would then be: nominal wage growth in each country equals medium term national productivity growth, plus the target inflation rate of the central bank, plus/minus a competitiveness correction in surplus/deficit countries. Watt also points out that it would be sensible to apply a floor to this rule in order to avoid negative nominal wage growth (i.e. pay cuts) in deficit countries and the risk of cumulative deflation (as opposed to relative disinflation).

Table 1
Expenditure of the educational institutions by category in selected member states, 2018

	Value (million euros)				Share of capital and current expenditure (%)			
	Capital expenditure	Current expenditure	Of which		Capital expenditure	Current expenditure	Of which	
			Personnel pay	Other current expenditure			Personnel pay	Other current expenditure
Belgium	1,302.8	27,908.0	24,087.0	3,821.10	4	96	86	14
Denmark	1,120.4	16,537.5	13,392.6	3,144.90	6	94	81	19
Germany	12,506	150,404.9	117,243.8	33,161.00	8	92	78	22
Spain	2,930.2	54,768.0	42,877.1	11,890.80	5	95	78	22
France	10,914.0	128,805.1	104,074.5	24,730.60	8	92	81	19
Italy	2,308.8	77,339.3	55,481.0	21,858.30	3	97	72	28
Netherlands	4,177.0	38,035.8	29,797.3	8,238.50	10	90	78	22
Poland	2,508.5	23,668.6	17,669.2	5,999.40	10	90	75	25
Portugal	623.4	9,698.0	7,750.2	1,947.90	6	94	80	20
Finland	1,118.8	12,792.1	7,752.6	5,039.50	8	92	61	39
Sweden	1,392.2	30,621.1	20,922.8	9,698.30	4	96	68	32

Note: Personnel pay includes compensation of teachers and of other pedagogical, administrative and professional support personnel.

Source: Own elaboration based on Eurostat (EDUC_UOE_FINI01).

cal capital accumulation. Similarly, Barbiero and Cournede (2013), who investigate the long-term effects of several expenditure items, find that social protection expenditure has no significant impact on GDP growth. Based on these findings, scholars tend to distinguish between productive social expenditure, including education and healthcare, and non-productive social expenditure, mostly encompassing traditional social protection policies.

The second strand of literature has instead focused on the link between social outputs (e.g. participation in education and training) and individual returns in terms of higher employability, increased productivity and poverty reduction. A vast literature has provided empirical evidence of the major social benefits of education (from early childhood to university) and training. In its seminal work, Heckman (2006) shows how participation in early childhood education and care fosters cognitive skills along with attentiveness, motivation, self-control and sociability that then turn into better educational outcomes and higher employability. Similarly, higher educational attainment, especially tertiary education, and participation in vocational training and adult learning are associated with the positive effect on labour force participation and productivity (European Commission, 2014, 2018). Access to education and training for children and young people – especially from low-income households – helps to break the negative link between high income inequality and earnings mobility. Similarly, adult learning participation is associated with up to 10% higher wages (OECD, 2019) and may avoid the costs of unemployment, inactivity or health issues, which tend to be lower for higher educated citizens (Cedefop, 2017).

Based on these findings, various scholars have argued in favour of a qualified treatment for educational investments in the SGP. However, it currently appears difficult to implement this in a convincing way. The reasons are manifold.

First, as observed by Vesper (2007), for such a rule to be operational, an exact definition of the relevant education expenditure should be given. This is not straightforward. The literature on public spending efficiency uses expenditure on education at the aggregate level. Table 1 shows the breakdown of the public educational expenditure, which is traditionally associated with positive economic returns on GDP growth. Such variables include both current expenditures (teachers' and non-teaching staff salaries, contracted and purchased services and other resources such as fuel, electricity, telecommunications and travel expenses) and expenditures that can be treated as contributing to capital formation, such as infrastructure and R&D activities. An operationalisation of a golden rule for education expenditure should consider which definition of expenditure is to be considered investment.

Second, to be consistent with the golden rule, net education investment would have to be measured, in a way to deduce depreciation. How to operationalise it, however,

Box 1
An outcome-based approach to measure human capital investment

Gros and Jahn (2020) propose one simple measure of human capital, namely the proportion of the (working age) population that has reached a certain level of formal qualification. A crude indicator of human capital formation could thus be constructed along the following lines: For each major ISCET (International Society of Certified Electronics Technicians) classification, a certain number of years of schooling is assumed to be needed to reach that level (nine years for below secondary, 12 for secondary and 16 for completed tertiary education). For each country, the authors take the number of persons (of working age) with these three levels of formal qualification (0-2 = less than secondary, 3-4 = secondary, 5-8 = tertiary completed) and multiply the number of persons with the number of years needed to reach that level. The result is a crude indicator of the years of schooling embodied in the overall working age population.

This indicator considers the "depreciation" of human capital through exit from the work force mentioned above. They do not consider complicating factors, such as the depreciation of human capital due to technological changes, which might make certain skills redundant. This more continuous "depreciation" might be offset by adult learning, but the output of expenditure on up and reskilling is even more difficult to measure. After constructing the indicator, the authors follow the evolution of this overall indicator of human capital over time in four EU countries (Italy, Spain, France and Germany).

The results suggest two broad trends:

1. Considering the entire period since the start of EMU, Germany has had the lowest increase in human capital, but it was also the country that started with the highest level. Spain is the country with the highest percentage increase, recording an increase of its human capital stock by 40 % over the last 20 years.

2. If one considers only the last five years, the picture has changed considerably. Overall, the accumulation of human capital has slowed down considerably, and one observes important differences in the evolution across countries. Since 2014, Germany has produced the highest increase in human capital, and Italy is showing a decline because the increase in the number with tertiary education was more than offset by the overall decline in the working age population. Spain and France continue to make progress, but at a much slower pace than before.

is not straightforward. Ewerhart (2002, 2003) is one of the first scholars who tried to conceptualise net investment in education by using demographic development in Germany to quantify depreciation of human capital investment. He shows that net investment in education, determined as the difference between gross investment in education and the depreciation on educational assets, accounts for only about 5% of gross investment in education in West Germany. The remaining 95% is required as a reinvestment to cover the demographically high replacement demand. By contrast, Will (2011) reaches completely different conclusions. Indeed, he starts from the assumption that staff expenditure for teaching personnel can be considered an investment from an economic point of view since it can increase the human capital. With a depreciation rate of 10%, he concludes that "knowledge from public education lasts at least ten years and 90% of yearly spending for non-administrative staff can be seen as net investment" (Will, 2011, 6). Against the difficulty to measure to what extent expenditure on laboratories, school or university buildings, or even teacher salaries contributes effectively to human capital formation, Gros and Jahn (2020) propose a different approach to measuring human capital formation by focussing on the outcome, and not the monetary input employed for this purpose (see Box 1 for more details).

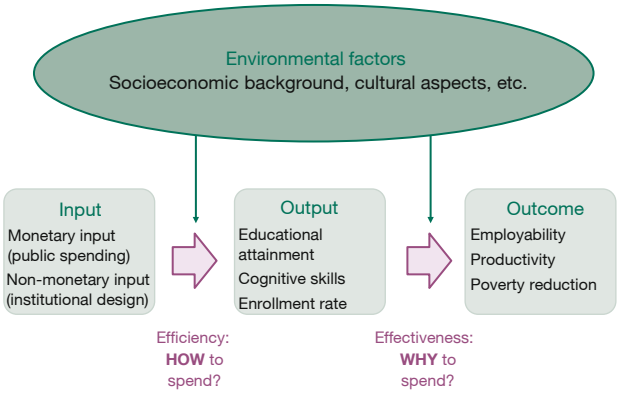
Third, the current approach to public spending efficiency starts from the (implicit) assumption that the definition of efficiency is limited to resources spent on education. In so doing, however, it seems to overlook the fact that, especially when analysing public spending on social policies, one is dealing with multiple monetary and non-monetary inputs (see Gimenez et al., 2017 for an overview). The latter include a range of institutional variables (i.e. structural characteristics of the educational system, such as instructional hours per year, teachers-students ratio, etc.) which are proved to affect educational outputs (e.g. PISA scores) and consequently economic and social outcomes (see for instance Afonso and St. Aubyn, 2006; Agasisti, 2014; Dutu and Sicari, 2016). As well documented by the literature, institutional variables (measuring both the quality and the design) significantly affect the availability, accessibil-

ity, affordability as well as the quality of the social service provisions, thus impacting on both the social outputs and welfare outcomes. As an example, the literature has widely investigated the factors affecting the affordability and thus the accessibility to early childhood education and care (ECEC) services. What emerges is that a supply-led system, where the state directly funds the providers, opens space for parents across socioeconomic groups to access childcare via direct funding (Javornik, 2014; Leitner, 2003). By contrast, a demand-priming approach, where parents receive financial help directly, and operating rules are set by providers to maximise profitability, creates childcare capability gaps by increasing the costs for parents (Brennan et al., 2012). This increases costs for parents, with a negative effect especially for low-income parents (Capizzano and Adams, 2004) and single mothers (Hank and Kreyenfeld, 2000) with limited earning prospects. And it ultimately results in a low efficiency public expenditure.

Fourth, as observed by Feigl and Truger (2015) and Truger (2015), in economic terms, a golden rule should encompass all those government expenditures that yield benefits (i.e. desired outcomes) in future periods. Such benefits have traditionally been associated with substantial payoff in terms of higher GDP growth or lower future costs. Yet when it comes to social spending, GDP growth seems to be only one of the desired outcomes. In reality, employment rate increase, and poverty and inequality reduction are equally important outcomes. In this respect, very few studies have systematically analysed the social returns of public social spending, and findings are somewhat contradictory. Hemerijck et al. (2016), for instance, focus on the quantitative macro and micro impact of ECEC and active labour market policies on employment and poverty. With respect to the former, the authors fail to find a correlation between ECEC spending and increased employment rates, while the correlation with poverty rates is surprisingly positive. In particular, the quantitative analysis shows that ECEC spending can produce modest but adverse Matthew effects, with the middle class disproportionately profiting from this social investment. Bakker and Van Vliet (2019), who focus on social investment and the impact on employment, confirm that no statistically significant coefficient estimates for early childhood policies are obtained. Similarly, for effort on education, they generally fail to obtain statistically significant effects.

Canton et al. (2018) refer to effectiveness as the relationship between educational output and higher-level outcomes (such as productivity, economic growth or welfare). Building on such an analytical framework and as illustrated in Figure 2, they find a significant variation across countries in terms of efficiency of public spending in achieving educational outputs, measured by PISA scores and attainment.

Figure 2
Framework for analysing the efficiency of public spending on education



Source: Adapted from Canton et al. (2018).

They conclude that reinforcing human capital formation in the EU is not necessarily about spending more public money on education, but rather spending it more efficiently.

To sum up, based on the current empirical evidence, making a golden rule for social investment operational is all but straightforward. Even narrowing the selection of social policies to public expenditure on education (including early childhood education and care), one cannot fully justify a qualified treatment under the SGP. Part of the problem is certainly related to an upstream issue, namely the lack of a coherent framework to analyse the efficiency and effectiveness of public spending on education.

Conclusions

This contribution presents an overview of the evolution of the policy debate about the reform of EU fiscal rules and the recent shift towards the idea of a golden rule. We look more in depth at the idea of a social golden rule and highlight conceptual and methodological (measurement) challenges that such an idea entails. This is not a judgement on the merit of a social golden rule, but an attempt to critically identify issues that need to be addressed in order to make such a proposal credible and operational.

Based on the review of different streams of literature, which are not typically connected, the key finding is that a sensible assessment of social expenditure items to qualify for special treatment in the SGP should revolve around both economic and social outcome indicators. This is to say that the value of a social investment for future generations should not necessarily be measured (or at least not only)

by GDP growth but by higher employability and higher productivity of individuals as well as lower poverty rates. This is a substantial deviation from the traditional macroeconomic literature, which takes an aggregate view and considers education expenditure to be a human capital investment, which in turn is expected to increase future potential GDP growth.

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