

3 The Golden Rule for public investment: towards an operationalization

3.1 Introduction: the pay-as-you-use-principle and intergenerational equity

The Golden rule has been a widely accepted traditional public finance concept for the handling of government deficits for decades (see Musgrave 1939 and 1959: 556-575). It strives for an intertemporal realization of the pay-as-you-use principle in the case that present government spending provides future benefits. It allows financing such spending (=net public investment) by government deficits thus promoting intergenerational equity. Net public investment increases the public and/or social capital stock and provides benefits for future generations. Therefore, it is justified that future generations contribute to financing those investments via the debt service. Future generations inherit the burden of public debt, but in exchange they receive a corresponding public and/or social capital stock. Failure to allow for debt financing of future generations' benefits will lead to a disproportionate burden for the present generation through higher taxes or lower spending creating incentives for the underprovision of public investment to the detriment of future generations. This general incentive problem may become exacerbated in times of fiscal consolidation when cutting public investment may seem the politically easiest way of reducing the budget deficit. As demonstrated in section 2, the recent experience with austerity policies shows that this danger is real and has, in fact, materialized in the most striking manner. Independently of the current crisis, there is evidence that fiscal contractions were a key factor responsible for the decline in public investment in earlier decades (Välilä et al. 2005; Turrini 2004: 9-26).

Although the general idea behind the Golden Rule is most plausible and easy to understand its operationalization is difficult. The most difficult problem is to find a workable and economically sensible definition of the term 'public investment' that allows for government deficits. Theoretically, any government action that creates benefits – in the widest sense – for more than one period may qualify for this.² However, the literature usually focusses on concrete future material economic benefits in terms of higher productivity and growth. The question for an individual potential investment project then becomes whether it creates enough public and/or social capital so that its returns are higher than or at least equal to its costs in terms of interest payments and possibly additional costs. Ideally, if the returns are high enough debt sustainability would automati-

² See Buiter (2001) for the many difficult questions that may arise in this context.

cally be satisfied as the additional growth would decrease or at least stabilize the debt to GDP ratio (IMF 2014: 110). The optimal approach of defining public investment that qualifies for deficit finance would then be to include all public spending projects that create sufficient returns in terms of higher future productivity and growth. Obviously, such a classification process would be extremely costly and unfeasible in practice. Therefore, the central question on a macroeconomic level is, whether general categories of public spending can be identified that are usually associated with sufficiently higher growth and productivity. Of course, such a pragmatic approach necessarily risks including types of public spending that should not be qualified as investment as well as excluding types of public spending that should correctly be classified as investment.

However, despite the difficult questions from a theoretical point of view that strives for optimality, the concept of the Golden Rule has many advocates in academia starting with Richard A. Musgrave (1939 and 1959), one of the founding fathers of modern public finance.³ In the context of the fiscal policy debate in the EU many economists have criticized the EU fiscal framework of the SGP for its lack of a Golden Rule of public investment and correspondingly proposed to introduce such a rule into the framework (e.g. Fitoussi and Creel 2002: 63-65; Blanchard and Giavazzi 2004; Barbiero and Darvas 2014; Dervis and Saraceno 2014). And, last but not least, as mentioned in the introduction, the German council of economic experts had delivered a proposal that was to become more or less the blueprint for the German debt brake, which explicitly expressed the need to include the Golden Rule as important element of the fiscal rule (SVR 2007 and 2006: 308-311).

The critical question for the justification of the Golden Investment Rule then is whether public investment is productive, i.e. whether it increases productivity and growth. The natural starting point for the analysis is the debate about the growth effects of traditional public investment, i.e. mainly traditional infrastructure investment as classified in the national accounts, as it has received the most attention in the literature. In this section first the long-run supply as well as short-run demand effects of this classical type of public investment will be discussed (sections 3.2 and 3.3). After considering other types of government expenditure as potential candidates for the classification as public investment an economically rational and workable definition of public investment will be sketched (section 3.4). After dealing with some technical details of implementation

³ It should be mentioned that the Golden Rule is difficult to justify from a traditionally Keynesian or post-Keynesian functional finance view: Although it would be seen as a major step forward if compared to balanced budget or similar approaches to budget deficits, investment expenditure as an upper limit to government deficits would usually be considered as an arbitrary and probably too tight constraint for fiscal policy. See e.g. Sawyer (2010) as well as Mathieu and Sterdyniak (2012).

(section 3.5), finally a pragmatic proposal for a European Golden Investment Rule will be presented (section 3.6).

3.2 (Traditional) public investment and economic performance in the long run

The central question of the long-run growth effects of public investment has received much attention in the literature (for an overview see Romp and de Haan 2005; Ragnitz et al. 2013: 49-81; Melo et al. 2013; Bom and Ligthart 2011 and forthcoming). From a theoretical point of view it is most plausible that public investment, especially if it focuses on “core” infrastructure like transport facilities (roads, railways, ports, airports), communication systems as well as power generation and other utilities should be productive and growth enhancing. The public infrastructure stock in this sense is simply indispensable for most productive processes: Without water and energy supply, without transport capacities most production processes would simply be unthinkable. It is, therefore, plausible to think of public infrastructure as an input factor that is complementary to private capital and labour inducing additional private investment and labour supply.

However, at least two qualifications should be made. First, for additional public infrastructure to be productive it should not be abundant. Although the quantity and quality of infrastructure is difficult to measure, on the basis of the World Economic Forum’s Competitiveness report the IMF (2014: 79-81) concludes that the overall quality of infrastructure and that of roads has clearly (slightly) decreased from 2006 to 2012 in Germany (France) and that it is lagging behind in Italy. This is at least a hint that there is room for improvement. It is also a hint that net public investment must not necessarily be into completely new infrastructure projects, but that maintenance investment may also have an important role to play (see Rioja 2013). Second, although positive growth effects from core infrastructure investment are most plausible from a theoretical point of view, not all of public investment as defined in the national accounts is into core infrastructure. In fact, a substantial part of public investment is investment into equipment as well as public buildings, e.g. for administration, education and hospitals. For such investment a direct positive contribution to private production processes may be more difficult to establish. However, for those countries for which data on both the public capital stock as a whole as well as specifically on public infrastructure is available, the correlation between the two is strong, so that overall public investment may serve as a proxy for infrastructure investment (IMF 2014: 80).