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Fiscal rules and compliance expectations – Evidence for the German debt brake

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ABSTRACT

Fiscal rules have become popular to limit deficits and high debt burdens in many countries. A growing literature examines their impact based on aggregate fiscal performance. So far, no evidence exists on how fiscal rules influence deficit expectations of fiscal policy makers. In the context of the German debt brake, we study this expectation dimension. In a first step, we introduce a dynamic model in an environment characterized by lagged implementation of a new rule, which in turn characterizes the setup of the German debt brake and raises credibility issues. In a second step, we analyze a unique survey of members of all 16 German state parliaments and show that the debt brake's credibility is far from perfect. The heterogeneity of compliance expectations in the survey corresponds to our theoretical predictions regarding states' initial fiscal conditions, specific state fiscal rules, and bailout perceptions. In addition, there is a robust asymmetry in compliance expectations between insiders and outsiders (both for in-state vs. out-of-state politicians and the incumbent government vs. opposition dimension), which we attribute to overconfidence rather than noisy information.

1. Introduction

Constitutional fiscal rules have been used for decades in federal countries such as Switzerland and the US states to limit deficits and debts of sub-national jurisdictions (for a survey of current fiscal rules see IMF, 2012). On the national level, the euro area debt crisis has triggered a wave of new statutory and constitutional budget constraints. For example, the Fiscal Compact, accepted by 25 EU member states in 2012, has been another milestone for the spread of numerical fiscal constraints where the signatory countries commit to the introduction of national debt brakes (see, European Council, 2011).

A key argument in favor of numerical fiscal rules is that they can contribute to credible fiscal strategies, boost borrower reputation and anchor long-run expectations about future government public finances and, ultimately, solvency (IMF, 2009). Hence, expectation effects of fiscal rules are a natural yardstick to assess a rule's potential effectiveness in the future. A credible rule affects expectations of very different players both in the private sector (e.g. investors in government bond market) and the public sector (e.g. political decision makers). While a limited literature exists covering private investors' expectation effects and the impact of rules on government bond risk premia (e.g. Heinemann et al., 2014b and Iara and Wolff, 2014), analyses on politicians' expectations are completely missing.

We contribute to filling this gap, and to the best of our knowledge, we are the first to examine expectation effects of a fiscal rule for fiscal policy makers themselves. These effects are of direct importance as actual budgetary decisions are more likely to be affected if a rule enjoys credibility with actual policy makers. Expectations of politicians who are constrained by a rule form a key intermediary step between fiscal rules on the one hand and fiscal outcomes on the other hand. Politicians for whom the fiscal rule credibly shuts down any future deficit financing have to adjust their fiscal policies accordingly.

We analyze the extent to which a deficit rule induces compliance expectations of politicians who are to be constrained by a numerical fiscal target. In addition, we analyze the interaction between a rule's credibility in the eyes of policy makers and the incentive to make fiscal adjustments, where interactions are driven by initial conditions, fiscal shocks, as well as personal and institutional determinants. We thereby contribute to the understanding of the distinction between fiscal rule compliance on the one hand and induced fiscal outcomes on the other hand. This distinction has recently been highlighted in empirical research by Cordes et al. (2015).

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Existing studies on the link between fiscal rules and fiscal decisions are only applicable on a concurrent basis (through the use of real time data, see Beetsma and Giuliodori, 2010) or ex post (i.e. after years of experience with an existing rule; see references below). Our survey method, by contrast, can be employed ex ante and gives an early indication of the rule's potential effectiveness in the future before data on actual fiscal outcomes become available. Finally, our approach opens the black box of aggregating heterogeneous preferences and expectations of policy makers into fiscal decisions. We study the role of individual characteristics in this aggregation process, such as political ideology, education, and political experience.

To this end, we make use of the specific institutional context of the German debt brake, a fiscal rule which was put into the constitution in 2009 and which restricts the budget deficit of federal and state governments. We explore expectations for the members of all 16 German state parliaments. This setting offers favorable conditions to study the link between state politicians' compliance expectations on the one hand and diverse initial fiscal conditions on the other hand. Moreover, the German debt brake offers a rich dynamic setting which is characterized by lagged implementation: The rule's binding constraints are phased in over a longer period (for the state level by the year 2020, for the federal government already in 2016). Lagged implementation creates a dynamic decision problem for state parliamentarians who have to decide on the extent and timing of consolidation efforts given substantial fiscal uncertainties over the transition phase.

Our analysis of expectation formation comprises a theoretical and an empirical dimension. Our theoretical model captures the key features of the lagged implementation of a deficit rule and guides the empirical analysis. Decisions on deficits are dynamic by nature and imply a trade-off between instant and future political costs from fiscal consolidation. A fiscal shock occurring over the transition phase accounts for the fiscal uncertainties which characterize a long transition period.

In the model, we analyze the impact of several, policy relevant factors. We show that compliance is more likely i) the lower is the initial deficit, ii) the lower are bailout expectations, iii) the tighter is a fiscal rule in the near future (e.g. through additional state-specific constraints), and iv) the higher is the first round deficit reduction. Furthermore, the model predicts that insiders (defined to be members of parties of the incumbent government or in-state parliamentarians) have more optimistic compliance expectations than outsiders (opposition members, out-of-state politicians) if the overall compliance expectation is low. Within the model we analyze two possible explanations, which lead to different testable implications: asymmetric information between insiders and outsiders on the distribution of the fiscal shock, and overconfidence on the side of insiders.

In our empirical analysis, we test the model predictions on the drivers of compliance expectations based on a unique survey of members of all 16 German state parliaments. In the survey we elicited responses for the politicians' expectations on the own state complying with the debt brake by the year 2020, on other states' compliance, and on the likelihood of sanctions or bailout if a state were to violate the new rule in 2020. Since the survey was non-anonymous, individual characteristics (such as education, party membership, etc.) and state characteristics (such as future need for fiscal consolidation) can be used to systematically study the determinants of compliance expectations. We obtained answers from 639 politicians who provided their compliance expectations for 16 states, which leads to more than 10,000 observations.

The survey not only shows that the German debt brake's credibility among policy makers is far from perfect. It also reveals that the heterogeneity of compliance expectations closely corresponds to our theoretical predictions: states' initial fiscal conditions, specific state fiscal rules and bailout perceptions matter. In addition, there is a robust asymmetry in compliance expectations between insiders and outsiders (both for in-state vs. out-of-state politicians and the government vs. opposition dimension), when the overall compliance expectation for a state is low. In that case, insiders tend to be significantly more optimistic than outsiders regarding the likelihood of their state's compliance. Based on the guidance of our theoretical model we diagnose overconfidence of insiders (and not noisy information) as driving this asymmetry. Overall, our analysis demonstrates that the credibility of a new national fiscal rule can be strengthened through no-bailout rules, sustainable initial fiscal conditions, and complementary sub-national rules.

Our specific credibility analysis is forward-looking and hence different from the extensive literature which examines the impact of numerical fiscal rules based on aggregate past fiscal performance. The standard approach is the estimation of cross-section or panel models for the selected jurisdictions and their fiscal performance (see e.g. for the US Poterba, 1996; for Europe Debrun et al., 2008; for OECD countries Dahan and Strawczynski, 2010; and for Swiss cantons Krogstrup and Wälti, 2008; for a comprehensive meta-analysis on that literature see Heinemann et al., 2016). Our theoretical contribution corresponds to a few recent papers which analyze theoretically the role of fiscal rules in a political economy framework, such as Azzimonti et al. (2016). Janeba (2012) considers the role of delay in making a German type debt brake binding when the fiscal rule itself is credible. The incentives of bailouts in a federal context are considered by Goodspeed (2002). Our survey approach and its empirical implementation benefit from prior surveys of politicians that have been used in recent research by two of the present authors. Heinemann and Janeba (2011) use a survey of members of Germany's national parliament to study ideological bias in tax policy. Janeba and Osterloh (2013) use a survey of mayors in Germany to empirically motivate the spatial structure of local tax competition in a theoretical tax competition model.

The rest of the paper is organized as follows. Section 2 sets up the theoretical model and derives comparative statics for the likelihood of compliance with the debt brake. Section 3 describes our original survey and provides background information on Germany's political and fiscal system and the debt brake. Our empirical findings are presented and discussed in Section 4. Finally, Section 5 concludes.

2. A model of fiscal rule compliance

We model the dynamic fiscal decision of an incumbent government to reduce its deficit in order to meet the target of a fiscal rule becoming effective only in the future. Deficit shocks make compliance non-trivial and uncertain. Specifically, we assume that the economy lasts for three periods, $t = 0, 1, 2$, where period 0 is the past, period 1 is the near future when a fiscal shock occurs, and period 2 is the distant future when the fiscal rule becomes binding (i.e. 2020 in the context of the German debt brake). There are two key budgetary decisions to be taken at the beginning of periods 1 and 2. The admittedly simple structure is sufficient to capture the uncertainty about compliance with the debt brake and allows us to derive hypotheses for our empirical analysis.

The main variable of interest is the government deficit d_t. The initial deficit $d_0 > 0$ is exogenous from the viewpoint of the incumbent government in period 1. The fiscal rule requires the government to run (at least) a balanced budget in period 2. If this target is met, that is, $d_2 \le 0$, the government obtains (gross) payoff u, which excludes the cost of fiscal adjustment. Otherwise the government is non-compliant and obtains payoff bu, where b is an endogenous variable that reflects the degree of non-compliance and is discussed in more detail below. The difference between u and bu comprises, inter alia, a reputation effect. Policy makers across party lines have high regard for the debt brake, which may reflect the importance of the rule of law in Germany.[1] Violating the constitution is likely to be costly for a state government in terms of reputation and possible consequences.[2] The term bu may also capture

[1] In line with this assumption is the fact that German states typically advertise publicly their efforts on the way to complying with the debt brake.

[2] One might wonder why states agreed to the debt brake in the first place. Two reasons seem to be relevant: First, policymakers who agreed to the debt brake in 2009 are not necessarily in power when the balanced budget requirement becomes binding in 2020. Second, five economically and fiscally weaker states obtain annual transfers until 2019 which made agreement more attractive. See section 3.1 for more details.