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Debt Rule Federalism: The Case of Germany

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Nontechnical Summary

In 2009, Germany has introduced a new debt brake which aims at constraining the buildup of new public debt for both the federal and the state level. While the new rule is enshrined in the federal constitution, the Grundgesetz, the sixteen states have leeway on how to mirror these national rules in their state constitutions and budgetary state laws.

It is the objective of this contribution to shed light on this issue and to ask to which extent German states' debt rules differ. Germany is without doubt an important example of debt rule federalism since the German debt brake has had a strong impact on the design of the rules agreed upon in the European Fiscal Compact. In our analysis we go beyond a mere qualitative description of institutional differences and develop a quantitative indicator which expresses the strictness of the debt rules. The indicator's construction follows approaches developed in the current literature to compare the strictness of fiscal rules across countries.

Our results point towards a considerable heterogeneity of budgetary rules across German states in spite of the existence of the overall federal constitutional rule. For example, states differ with respect to the legal basis of their debt rules, the rule's precision, the chosen flexibility provisions and its comprehensiveness. Furthermore, only in the poorest states the rules' credibility gains from effective sanction provisions as these states risk the loss of transfers if they do not adhere to the rules. This partially explains that, according to our indicator, the strongest rules are currently to be found in financially weak states (Schleswig-Holstein, Saxony-Anhalt and Saarland). However, this advantage will partially expire in the year 2020 when the financial consolidation support and with it the specific threat of sanctions end.

From 2020 on, according to the current state of legislation Rhineland-Palatinate (index value of 0.78) has the strongest rule, followed by Saxony (0.67), Schleswig-Holstein (0.67) and Hesse (0.66). Rhineland-Palatinate, Schleswig-Holstein and Hesse implemented the rule in their state constitutions. What makes Rhineland-Palatinate outstanding is that its rule also covers special funds and public enterprises. This raises the index scores significantly.

Some of the highly indebted states miss the chance of using their own legislation to make their fiscal regime more credible. This observation is in line with well-known disincentives of German federalism. Germany's federal jurisdictions form a full bail-out-community. In this sense, the German experience with in several cases poor ambitions for state fiscal rules is another example of bad incentives in federal systems based on mutual bailout promises.

Das Wichtigste in Kürze

Deutschland hat im Jahr 2009 eine neue Schuldenbremse eingeführt. Diese zielt darauf ab, neue Schulden für den Bund und die Länder zu begrenzen. Obwohl die neue Schuldenregel in der deutschen Verfassung, dem Grundgesetz, festgeschrieben ist, verfügen die sechzehn Bundesländer über Freiheitsgrade in der Umsetzung der nationalen Regeln in ihren eigenen Landesverfassungen und Landeshaushaltsordnungen.

Ziel dieses Beitrags ist es, zu klären, in welchem Ausmaß sich die Schuldenregeln der deutschen Bundesländer unterscheiden. Deutschland ist zweifellos ein besonders wichtiges Beispiel für Schuldenregel-Föderalismus, weil die deutsche Schuldenbremse einen starken Einfluss auf die Vorschriften des europäischen Fiskalvertrags hatte. In unserer Analyse gehen wir über eine reine qualitative Beschreibung der institutionellen Unterschiede hinaus und entwickeln einen quantitativen Indikator zur Messung der Stärke einer Schuldenregel. Die Indikatorkonstruktion folgt dabei Ansätzen, die in der existierenden Literatur zum Vergleich der Härte von Budgetregeln zwischen Staaten entwickelt worden sind.

Unsere Ergebnisse deuten auf eine erhebliche Heterogenität der Budgetregeln für die deutschen Bundesländer trotz der föderalen Verfassungsregel hin. Die Bundesländer unterscheiden sich beispielsweise im Hinblick auf die Rechtsgrundlage, die Präzision, die Flexibilitätsklauseln und die Vollständigkeit ihrer Schuldenregeln. Außerdem profitiert die Glaubwürdigkeit der Regeln nur in den ärmsten Staaten von effektiven Sanktionen, weil diese Staaten den Verlust von Transfers riskieren, wenn sie die Regeln missachten. Dies erklärt zum Teil, warum gegenwärtig die schärfsten Regeln in finanziell schwachen Bundesländern (Schleswig-Holstein, Sachsen-Anhalt und Saarland) zu fin-

den sind. Allerdings wird dieser Vorteil im Jahr 2020 teilweise verloren gehen, wenn die Konsolidierungshilfen und damit die konkreten Sanktionsdrohungen auslaufen.

Ab 2020 wird nach der heutigen Rechtslage Rheinland-Pfalz (Indexwert 0,78) über die strengste Regel verfügen, gefolgt von Sachsen (0,67), Schleswig-Holstein (0,67) und Hessen (0,66). Rheinland-Pfalz, Schleswig-Holstein und Hessen haben die Regeln in ihren Verfassungen verankert. Die Regel von Rheinland-Pfalz sticht dadurch heraus, dass sie auch Sonderfonds und öffentliche Unternehmen abdeckt. Dies erhöht den Indexwert erheblich.

Einige der stark verschuldeten Staaten vergeuden die Chance, durch eigene Gesetzgebung ihr Fiskalregime glaubwürdiger zu gestalten. Diese Beobachtung steht im Einklang mit den bekannten Fehlanreizen des deutschen Föderalismus. Deutschlands föderale Jurisdiktionen bilden eine vollständige Haftungsgemeinschaft. In diesem Sinn bietet Deutschlands Erfahrung mit wenig ambitionierten Fiskalregeln in einigen Bundesländern einen weiteren Beleg für die falschen Anreize in föderalen Systemen, die auf wechselseitigen Haftungszusagen gründen.

Debt Rule Federalism: The Case of Germany

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Abstract

In 2009, Germany introduced a new debt rule in its federal constitution (Grundgesetz). The so-called 'debt brake' prescribes a balanced budget for both the federal level and the states. However, the states have leeway regarding transposition and specification of the national requirements into their own state constitutions and budgetary laws. This analysis presents a comprehensive comparison of the 16 state provisions. We develop an indicator which quantifies the stringency of state rules (Strength of Fiscal Rule Indicator). Two results emerge: First, despite the common constitutional rule at the federal level, the analysis reveals a considerable heterogeneity across German states. Second, several highly indebted states miss the chance to make their fiscal regime more credible. This finding corresponds to the disincentives of the German federation. Due to bailout-guarantees enshrined in German federalism, German states do not have incentives to impress bond markets through particularly strict budgetary rules.

JEL Classification: H63, H74, H77

Keywords: Fiscal rules, debt brake, Germany, fiscal federalism

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¹ The opinions expressed in this document are the sole responsibility of the author and do not necessarily represent the official position of the Federal Ministry of Finance.

1. Introduction

Federal structures provide the potential that sub-national jurisdictions follow individual policies which, compared to a unitary government, can better be tailored according to heterogeneous voter preferences. This chance, however, may imply a risk when it comes to the need of credible and consistent country-wide constitutional rules. If a country tries to enhance its fiscal credibility through new budgetary rules, a transposition leeway of sub-national jurisdictions could weaken these rules' effectiveness and credibility. This risk can be assumed to be particularly present in countries with a high degree of constitutional autonomy of sub-national jurisdictions. This problem has been present in Europe since the establishment of the Euro and the Stability and Growth Pact. Rules which were designed to commit EU member countries suffered from a deficient transposition in the federal context of member countries. In the current European debt crisis, governments are struggling to strengthen or regain market confidence through more credible fiscal rules such as agreed upon in the Fiscal Compact. But, here again, federal structures may complicate the establishment of consistent and credible fiscal institutions.

Germany is a federal country for which these considerations are relevant, too, and is thus a promising case study. In 2009, Germany has introduced a new debt brake which aims at constraining the build-up of new public debt for both the federal and the state level. While the new rule is enshrined in the federal constitution, the Grundgesetz, the sixteen states have leeway on how to mirror these national rules in their state constitutions and budgetary state laws. Although the Grundgesetz' debt brake is immediately binding for the states as well, the individual state transposition could create quite a diverse set of effective fiscal rules across German states.

It is the objective of this contribution to shed light on this issue and to ask to which extent German states' debt rules differ. Germany is without doubt a particularly interesting and important example of debt rule federalism since the German debt brake has had a strong impact on the design of the rules agreed upon in the Fiscal Compact. In our analysis we go beyond a mere qualitative description of institutional differences and develop a quantitative indicator which expresses the strictness of the debt rules. The indicator's construction follows approaches developed in the current literature to compare the strictness of fiscal rules across countries.

Our results point towards a considerable heterogeneity of budgetary rules across German states in spite of the existence of the overall federal constitutional rule. For example, states differ with respect to the legal basis of their debt rules, the rule's precision, the chosen flexibility provisions and its comprehensiveness. Furthermore, only in the poorest states the rules' credibility gains from effective sanction provisions as these states risk transfers if they do not adhere to the rules. This partially explains that, according to our indicator, the strongest rules are to be found in financially weak states (Schleswig-Holstein, Saxony-Anhalt and Saarland). However, this advantage will expire in the year 2020 when the financial consolidation support ends. A possible reason for the lack of ambition in some states would point to the disincentives of German federalism: Due to bailout-guarantees enshrined in German federalism, German states do not have incentives to impress bond markets through particularly strict budgetary rules.

The remainder of this paper is organised as follows: In section 2, we describe the new German constitutional debt brake. Section 3 summarizes the fiscal rules literature and derives the construction of our Strength of a Fiscal Rule Indicator. Section 4 presents the individual analyses for the German states and the indicator's quantification. Section 5 summarizes the results and draws some conclusions.

2. The German debt brake

In 2009 Bundestag and Bundesrat decided to implement a stricter budget rule in the federal constitution (Grundgesetz, GG). It includes constraints on the level of the structural deficit for both the federal government (deficit must not exceed 0.35% of the GDP, binding from 2016 onwards) and the states (deficit must be zero or in surplus from 2020 onwards, Art. 143d (1) GG). Since in principle the rule prohibits new net borrowing it is called "debt brake".

The so called "Stability Council" monitors compliance with the budget rules and with the regulations according to the Consolidation Assistance Act (Konsolidierungshilfengesetz, KonsHilfG, based on Art. 109a GG). The Council comprises the finance ministers of each state, the federal ministers of finance and of economic affairs. Every state and the federal government have one vote each; the federal ministers share

one vote. However, the federal government has a veto: decisions require a two-thirds majority of the states and the vote of the federal government. Decisions can concern the definition of common measures and benchmarks or the official identification of a rule violation by a member. In the latter case, the Council member representing the violator – a state or the federal government – has no voting right. In case of an identified violation, the Council sets up a stability programme together with the respective government and monitors its enforcement.

However, the Stability Council does not dispose of means to sanction misbehaviour, only for those states that receive temporary financial assistance. These states are considered not to be able to achieve a balanced budget in 2020 on their own, these are: Berlin, Bremen, Saarland, Saxony-Anhalt and Schleswig-Holstein (Art. 143d (2) GG). In return, the states agreed to reduce their structural deficit along yearly decreasing limits (§ 2 (1) KonsHilfG). If a state does not comply with these limits, financial support is cut off (§ 1 (3) sentence 3 KonsHilfG). Each, the federal government and all states – including those receiving financial support – pay half of the total yearly amount of 800 Mio. Euro (Art. 143d (3) GG).

The German debt brake has been discussed controversially among scholars of economics and law. On the one hand the rule is regarded as a step forwards: compared to its predecessor the new rule is considered to be "balanced and effective" (Feld, 2010, p. 241). Up to the 2009 reform the German constitution prescribed a 'golden rule' with net borrowing limited to the level of gross public investment.² Its effectiveness was massively impaired by the existence of a very general escape clause: declaring a 'macroe-conomic disequilibrium' was sufficient to legitimate a violation of the general principle. Since any significant level of unemployment, trade balance, inflation or poor growth was sufficient for such an assessment the old rule has not been an effective constraint. Between 1991 and 2005 the federal level missed the golden rule in seven and the states in 68 cases (Feld, 2010, p. 232). With this reference point, the new debt brake is clearly

¹ The calculation of the structural deficit is defined in Consolidation Assistance Act (§ 2 (1) KonsHilfG) and the respective Administrative Agreements (the Verwaltungsvereinbarung (VV) KonsHilfG). The KonsHilfG defines the organisation of the financial supports. Each federal state agrees to an individual administrative agreement with the federal ministry of finance (VV KonsHilfG). These agreements define in detail the calculation of the structural deficit, the process of support and possible sanctions following non-compliance.

² Some state budget rules still mirror this golden rule. In this context, the Budgetary Principles Act (Haushaltsgrundsätzegesetz, HGrG) determines the term 'investments' (HGrG Art. 20 (3) 2 sentence 2) and is still important for many budget rules in the states and for the federal government until 2015, too. The term 'investment' term is notoriously imprecise and has been interpreted extensively.

more precise with respect to the deficit ceiling (i.a. no need to define the term 'investment'), the exception clauses and its surveillance.

In spite of the progress made, compared to the pre-2009 situation also the new rule is far away from a perfect solution (Feld, 2010; Sturm, 2011): A shortcoming which is also admitted by principle defendants of the new rule is the missing availability of effective sanctions by the Stability Council. Any significant reform on this field would have required increasing tax autonomy of German states which could safeguard the ability to pay fines. Since an increase in revenue autonomy was not acceptable for numerous German states this precluded the establishment of effective monetary sanctions (beyond the implicit sanctioning of the consolidation assistance as mentioned). Apart from that, the Stability Council's composition does not guarantee a really neutral and unbiased analysis since neutral representatives with voting rights (e.g. from the German Bundesbank) are missing. Furthermore, the ceilings for the budgeted deficits only refer to the central level and the state level and do not take account of deficits of the social security systems or the municipal level. Payments to both are part of the state budgets, but independent borrowing by them is not. This offers leeway for 'fiscal cosmetics'. Whereas the long transitory period between 2009 and 2020 serves as a legitimate strategy of a lagged reform implementation which is to overcome political-economic resistance problems of time inconsistency could arise as a consequence of the long transitory phase, too (Heinemann, 2010). The resistance against the new constraints is likely to grow until in 2020 the brake enters into force.

Already this list of shortcomings clarifies that the new debt brake is not perfect so that states could, in principle, embark on a more stringent rule for their own budgetary constitution. Although the rules and procedures of the federal constitution bind the states, a state has scope for deciding on several details of implementation. At least the following degrees of freedom exist for the state level:

Method of structural adjustment: The constitution states that the annual public budget of the states must be balanced without new borrowing "in principle" (Art. 109 (3) sentence 1 and 5 GG). The term "budget" is understood as the accounting balance

("Finanzierungssaldo"³; Bundesbank, 2011: 16; Thye, 2010: 25-26). To implement this strict rule the constitution allows the states to define provisions to adjust the budgetary balance for business cycle developments in a "symmetric" way (Art. 109 (3) sentence 2 GG). In an economic downturn, the state is allowed to borrow but must repay the extra debt in an economic upswing. The federal government has already decided on the method to calculate the budgetary structural adjustment it wants to use. This federal method is based on the one used by the European Commission (Art. 109 (2) GG; § 5 (4) Law on GG Art. 115). Although, the states can choose their method independently, constraints exist for those five states that get financial support. These states had to agree to use the same procedure of structural adjustment as the federal government.

- Definition of extraordinary events: Moreover, the states can decide to allow borrowing in case of natural catastrophes or extraordinary emergencies that originate outside the scope of control of the state and that affect the state's budget considerably. In case of these events, the parliament must decide on a redemption plan organising the repayment of the extra debt in an adequate period of time (Art. 109 (3) sentence 3 GG).
- Comprehensiveness of budget definition: The states also have leeway in the precise definition of some of the crucial budgetary terms in the constitutional rule: The state's core budget just needs to consider payments to and income from special assets or state owned enterprises (§ 18 Law on Budget Principles, HGrG). However, a state can decide to include in its budget also the budgets thus new net borrowing of special assets and state owned enterprises as well as those of the municipalities. Thus, there is an important dimension where state rules can make a substantive difference. Since the federal government does not consider 'financial transactions' such as buying or selling liabilities or shares of enterprises for the calculation of its balance (Art. 115 (2) sentence 5 GG; § 3 Law on GG Art. 115), a state could refer to this modification and claim it for itself, too.

If the states do not change their budget rules, the federal constitution's strict prohibition of no new net borrowing directly applies to the states (Art. 31 GG). However, the states

³ According to the HGrG the accounting balance considers all incomes and expenditures (including interest rate payments) except for those related to credit market borrowing, reserves, cash surpluses or deficits and income from coin sells (§ 10 (4) No 2).

are free to mirror the national rule in their constitutions or simple laws. Of course, they would also be able to go beyond the provisions of the Grundgesetz and to impose even stricter or more precise fiscal rules. Equally they could shorten the transitory period towards a balanced budget. It is also worth mentioning that further room for state individualism exists with respect to the chosen democratic procedures for the establishment of a state rule. States could organise a referendum on a new state rule which might boost its democratic legitimacy and, hence, its political power (see below for Hesse section 4.7).

Summing up, although the federal constitution's debt brake defines important new constraint for the state level there is sub-national leeway. This corresponds to the autonomy of states under German federalism. Hence, it is of research interest to analyse and measure sub-national heterogeneity in fiscal rules.

3. Quantifying the strength and credibility of fiscal rules

A budget rule aims at constraining a state's budget in order to achieve and to maintain a sustainable budgetary stance. Moreover, a convincing budget rule can function as a signal of credibility to borrowers and bond markets (International Monetary Fund, 2009: 5) and may then contribute to limit interest rate spreads. Indeed, there is evidence on the empirical relevance of this channel: lara and Wolff (2011) study the impact of fiscal rules on risk premia for the initial eleven Euro area countries for the years 1999 to 2009 in a panel estimation. The authors make use of the European Commission's Fiscal Rule Index (FRI, see below). They do not find a significant overall effect of fiscal rules on risk spreads, but they do find a significant impact if they interact the FRI with the general risk aversion of the financial markets. Thus, fiscal rules only have a negative effect on bond spreads in a market environment where risk sensitivity is high. Heinemann, Kalb and Osterloh (2011) extend the approach from lara and Wolff by including proxies for a country's stability culture. Thus, they test whether fiscal rules simply reflect a country's risk preferences or whether they have a genuine impact. Their results point to the latter and to a particular potential of fiscal rules in countries with a historically low stability culture (measured e.g. on the basis of past inflation performance).

Indexes which quantify the strength of a budget rule try to capture this credibility potential of a rule. Assessing this potential reveals whether and to what extent fiscal jurisdictions constrain their budget policies effectively. Indexes may vary with regard to the categories chosen to analyse rules, what they measure and how precise, the weighting procedure, and how information on the categories is acquired.

In order to compare the stringency of national rules across countries, two indexes have been developed by the European Union (EU; Directorate-General for Economic and Financial Affairs, 2006: 157ff.) and the International Monetary Fund (IMF; International Monetary Fund, 2009). The EU's Fiscal Rule Index is built on two sub-indexes: the Fiscal Rule Coverage Index and the Index of Strength of Fiscal Rules. The first reflects the share of government expenditures covered by a rule. The second assesses the strength of this rule using five criteria (Directorate-General for Economic and Financial Affairs, 2006: 163f.): (1) the legal base of restrictions for changing the rule, (2) the degree of political independence of the body that is in charge of the monitoring and (3) the enforcement of the rule, (4) enforcement mechanisms, and (5) the media coverage of the rule. These criteria are weighted randomly using a complex procedure to define a range where the index value would most probably lay in. In order to calculate the Fiscal Rule Index the share of a rule indicated by the Fiscal Coverage Index is multiplied by the Strength of Fiscal Rule Index. The coding for the EU Fiscal Rule Index is based on a survey of government experts in the EU member countries.

The IMF index is based on seven scores: (1) enforcement, (2) coverage, (3) legal basis, (4) supranational rules, (5) monitoring and enforcement procedures, (6) flexibility, and (7) the average number of rules (International Monetary Fund, 2009: 8). The weighting is done using a principal component analysis.

These indexes serve as a starting point for our quantification of fiscal rules in the German federal states. However, neither the EU nor the IMF quantification procedure is applicable to the sub-national level in Germany without further qualification. The common national environment of German states precludes any variance for some of the sub-indexes. This holds, for example for media attention in the case of the EU index, or for monitoring and enforcement in the case of both the IMF and EU index. Furthermore, these existing indexes have some conceptual and methodological imperfections: con-

ceptually, the EU index considers the qualitative type of a rule, but not its numerical ambition, for example, budget balance rules limiting the deficit to 3% or to 10% of GDP are equally 'good'. Methodologically, the self-assessment of civil servants in responsible ministries is an obvious source of a distortion towards a too favorable assessment.

However, several criteria and elements of both indexes are helpful. We use them and create new ones to set up a specialised index to quantify the credibility of fiscal rules in the German federal states. Table 1 gives an overview of the index composition.

Our index is based on a two-dimensional approach. First, we differentiate between four 'parts' of a rule and, second, between five 'categories'. For the first dimension, we use the distinction made by Schaltegger and Frey (2004) between *four parts of a rule*:

- (1) the basic rule describes the aim of a budget rule, e.g. a balanced budget;
- (2) regulations describe details of this rule, how it should operate and to which parts of the budget it has to be applied;
- (3) relaxations describe conditions under which a state can deviate from the rule;
- (4) sanctions determine enforcement mechanisms to guarantee the implementation of the rule and to punish non-compliance.

With respect to the second dimension, we use *five categories* to describe the formal nature and the content of a rule. The aim is to mirror the credibility of a rule. The higher the credibility the higher the scores assigned. Four categories assess formal characteristics and one category tries to capture the precision and stringency of the rule's content.

Table 1: Fiscal Rule Index for the German Federal States.

Enforcement mechanisms	Short description of budget rule(s) in place 4: constitution 3: legal act 2: coalition agreement 1: political commitment by responsible authority (e.g. minister of finance) 4: automatic correction & sanction mechanisms	Basic rule	Regula- tions	Relaxa- tions	Sanc- tions		/	16	0,00
Legal base Enforcement	rule(s) in place 4: constitution 3: legal act 2: coalition agreement 1: political commitment by responsible authority (e.g. minister of finance) 4: automatic correction & sanction mechanisms						/	16	0.00
Enforcement	3: legal act 2: coalition agreement 1: political commitment by responsible authority (e.g. minister of finance) 4: automatic correction & sanction mechanisms						/	16	0.00
	sanction mechanisms								-130
	3: obligation to take corrective measures, definitive sanctions2: obligation to take corrective measures or possible sanctions1: no special actions						/	4	0,00
Coverage	1 point per unity, max. 4						/	4	0,00
Official budget: - shareholdings - debt claims by public authorities - granted loans							/	1	0,00
- reserves Public enterprises		_	-			+	,	1	0,00
Special funds Financial support for local authorities		-		-			/ /	1	0,00
Flexibility	1 point per unit, max. 4						/	4	0,00
Business cycle Economic shocks Other emergencies Compensational mechanism		-					/ / /	1 1 1 1	0,00 0,00 0,00 0,00
Content							/	20	0,00
Clear definitions Strict aim	2: all terms 1: most of the terms 0: few or no terms 2: sufficiently strict legal	-					/	6	0,00
ou lot all l	provisions to realise the rule's aim 1: quite strict provisions 0: insufficient provisions 2: stricter constraints than the federal rule								0,00
	Business cycle Economic shocks Other emergencies Compensational mechanism Content Clear definitions	Business cycle Economic shocks Other emergencies Compensational mechanism Content Clear definitions 2: all terms 1: most of the terms 0: few or no terms 2: sufficiently strict legal provisions to realise the rule's aim 1: quite strict provisions 0: insufficient provisions 2: stricter constraints than the federal rule	Business cycle Economic shocks Other emergencies Compensational mechanism Content Clear definitions 2: all terms 1: most of the terms 0: few or no terms 2: sufficiently strict legal provisions to realise the rule's aim 1: quite strict provisions 0: insufficient provisions 2: stricter constraints than the federal rule	Business cycle Economic shocks Other emergencies Compensational mechanism Content Clear definitions 2: all terms 1: most of the terms 0: few or no terms 2: sufficiently strict legal provisions to realise the rule's aim 1: quite strict provisions 0: insufficient provisions 2: stricter constraints than the federal rule	Business cycle Economic shocks Other emergencies Compensational mechanism Content Clear definitions 2: all terms 1: most of the terms 0: few or no terms 2: sufficiently strict legal provisions to realise the rule's aim 1: quite strict provisions 0: insufficient provisions 0: insufficient provisions 2: stricter constraints than the federal rule	Business cycle Economic shocks Other emergencies Compensational mechanism Content Clear definitions 2: all terms 1: most of the terms 0: few or no terms 2: sufficiently strict legal provisions to realise the rule's aim 1: quite strict provisions 0: insufficient provisions 0: insufficient provisions 2: stricter constraints than	Business cycle Economic shocks Other emergencies Compensational mechanism Content Clear definitions 2: all terms 1: most of the terms 0: few or no terms 2: sufficiently strict legal provisions to realise the rule's aim 1: quite strict provisions 0: insufficient provisions 0: insufficient provisions 2: stricter constraints than the federal rule	Business cycle Economic shocks Other emergencies Compensational mechanism Clear definitions 2: all terms 1: most of the terms 0: few or no terms 2: sufficiently strict legal provisions to realise the rule's aim 1: quite strict provisions 0: insufficient provisions 0: insufficient provisions 2: stricter constraints than the federal rule	Business cycle Economic shocks Other emergencies Compensational mechanism Content Clear definitions 2: all terms 1: most of the terms 0: few or no terms 2: sufficiently strict legal provisions to realise the rule's aim 1: quite strict provisions 0: insufficient provisions 0: insufficient provisions 1: strict rule 2: stricter constraints than / 1

Shaded area: Fields not applicable.

 Sum
 / 48

 Index score
 0,00

Categories A and B are adapted from the EU Fiscal Rule Index:

- (A) Category A, 'Legal base', assesses the legal background of a rule. The rating ranges from 1 to 4 where 4 is assigned for the strongest legal base. This is the one that can be changed the least easily.
- (B) Category B, 'Enforcement mechanisms', indicates whether there are provisions guaranteeing enforcement and punishment in case of non-compliance. The rating ranges from 1 to 4 where 4 is assigned for mechanisms with the least political influence possible since political decisions are likely to bias initial objectives according to current situations.⁴

Category C is based on the underlying idea of the EU Fiscal Rule Coverage Index. This index tries to assess the part of government expenditures that are covered by a budget rule. The more complete the coverage of expenditures the less opportunities exist to circumvent the rule by shifting expenditures from a covered to a non-covered part. In the adoption of this category, however, we do not follow the EU index' example which uses the share of total expenditure covered. This share might be vulnerable to strong changes over time. The problem is that the expenditure share may rather quantify the effects of a rule rather than its content. For example, expenditures for establishing a special fund in one year might decrease the ratio of coverage but the score will increase in the next year although the rule did not get 'better'. Therefore, we set up another measure to assess the degree of coverage which is a count variable adding up the types of public expenditure covered by the rule:

(C) Category C, 'Coverage', is calculated as a count variable which adds 1 point for each of the following kinds of total government budget which is covered by the fiscal rule under scrutiny: the official state budget (as decided by the parliament), state owned enterprises, special funds and financial support for local authorities. Thus, the rating ranges from 1 (only official state budget covered) to 4 (total government expenditures covered).

Category D is inspired by the IMF index score for flexibility. To be credible a rule needs to be flexible to a certain degree. Otherwise one would expect the government to break or the legislative to change the rule as soon as compliance is not possible anymore.

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⁴ In contrast to this category used in the EU-Index, we do not assign an additional point for an escape clause, since we examine this in a special category.

(D) Category D, 'Flexibility', considers three cases of flexibility: first; a continuous cyclical adjustment; second, provisions for exceptional economic shocks; and third, other emergencies like natural catastrophes, that lay outside of the scope of the government's control. Finally, compensational mechanisms, for example through a redemption plan, are an important precaution to limit the dangers of flexibility provisions and to commit the budgetary authorities to correct the exceptional build-up of public debt. 1 point is assigned for each of the three flexibility cases and for the existence of a well-defined compensational mechanism.

Categories A to D do not yet evaluate a fiscal rule's precise contents. In order to examine its content, its precision and its stringency we construct category E, 'Content'.

(E) Category E, 'Content', consists of three parts. The first, 'clear definitions', examines whether key terms of the rule are clearly defined by law. Vague formulations must then be defined within the day-to-day budgetary decision making or the judiciary and therefore let a large scope for interpretations and, hence, are more vulnerable to manipulations. If more than one third of the key terms are clearly defined, 1 point is assigned. If there are less, 0 points and if there are more than two-thirds, 2 points are assigned.

The second part, 'strict aim', examines whether regulations, relaxations and sanctions of a budget rule are sufficiently strict to meet the aim laid down in the basic rule. Here, we qualitatively judge the content of a rule. If, for example, the flexibility clauses – although existent and clearly defined – allow deviations too often, it is hardly possible that the basic rule is followed regularly. 5 The rating ranges between 0 – no strict regulations – and 2 – regulations that are strict enough.

The third part, 'strict rule', tries to judge the ambition of the rule. Taking the provisions of the federal debt brake as a reference point, the score ranges from 0 to 2. A rule that is as strict as the federal rule gets 1 point. A rule that is even stricter gets 2, a rule that is less strict 0 points. This measure takes into account that states could want to implement a stricter rule. Hereby, we can ac-

Category D only assesses whether there are flexibility clauses. We consider them as a necessary part of a budget rule because they guaranty a certain stability of the budget rule. If there were no flexibility clauses the budget rule would be probably changed during an economic shock. However, the flexibility clauses should not allow too much flexibility; the budget rule must be applied in 'normal times' to remain credible. Thus our indicator covers the full trade-off of flexibility: on the one hand a rigid rule is not credible, on the other hand flexibility must not lead to arbitrariness.

count for the quality of a rule without falling to normative judgements of 'good' or 'bad'. The points assigned to each of the three parts sum up to the rating of category E.

In order to follow the construction of the index' score precisely, we first examine each of the four parts of a rule separately. All points of a category sum up across all parts and are translated into a percentage value. The mean of the percentage values of all categories form the index score.

We would like to stress that this quantification approach can be applied to a state rule independently from its specific type, i.e. whether the rule refers to the budget balance, the stock of debt or the level of expenditure. In any case where a state has installed a combination of these different types we assess their joint operation since these rules interact and complement each other.

Overall, the index is supposed to cover the dimensions which affect the credibility of fiscal rules. Of course, this index suffers from the usual caveats of index construction: the weighting is somehow arbitrary and while some index points can be assigned quite objectively, for others the assessment implies some subjectivity.

4. The German states' fiscal rules: description and quantification

The following chapter describes the states' budget rules in detail and quantifies the index value for each of them applying the above defined method.⁷ All states base their budget laws on their constitution and State Budget Regulations (Landeshaushaltsordnung, LHO). The constitution is more difficult to change than the LHO which can be changed by simple majority. All states do not have specific sanctions for the budget rule. A parliamentary minority can take the budget plan – as every other bill – to the Constitutional Court, but this is no 'automatic' mechanism forcing the parliament to comply with the rules. Only states that receive financial support according to the KonsHilfG face the sanction of a cut off of the aid in case of non-compliance. This

The indexes of the EU (Directorate-General for Economic and Financial Affairs, 2006: 151) and the IMF (International Monetary Fund, 2009: 5f.) differentiate between:

⁻ a budget balance rule which determines a limit to the budget balance;

⁻ a debt rule which targets the stock of debt that has been accumulated up until a certain date;

⁻ an expenditure rule which limits the amount of expenditures or the growth of expenditures, and

⁻ a revenue rule which limits either the whole revenue magnitude or certain parts of it, e.g. tax income.

Revenue rules currently do not play a role in German states.

An exemplary detailed construction sheet for Baden-Württemberg can be found in the Appendix, the full set of state sheets is available as web appendix: www.zew.de/debtrulesDP012-067

is an automatic mechanism but covers only a very small part of the budget. Furtherthe states need to comply with the Budget **Principles** more. Act (Haushaltsgrundsätzegesetz, HGrG). This act prescribes how the budget needs to be designed and specifies the calculation of the term 'budget'. However, the states are free to implement stricter rules. We do not consider declarations of intent in the midterm financial plans or similar documents since they are too easy to change and would therefore bias the index score. 8

4.1 Baden-Württemberg (BW)

Baden-Württemberg voted for the federal debt brake in the Bundesrat. Already in 2007, Baden-Württemberg got a stricter budget rule. It was implemented in the LHO (Art. 18), whereas the constitution remained unchanged up until now.⁹

Baden-Württemberg uses a combination of a balanced budget and a debt rule. "In principle" the budget must be balanced without borrowing (LHO Article 18 (1) sentence 1). The credit market debt stock must not exceed the nominal debt level determined 31 December 2007 (41.7 billion €, Rechnungshof Baden-Württemberg, 2010: 3). The revenue rule allows running deficits to respond to "demands of the macroe-conomic equilibrium" or similar severe situations (LHO Art. 18 (2) sentence 1). The amount of borrowing must not exceed the sum of expenditures for investments (LHO Art. 18 (2) sentence 1). Borrowing above that limit is allowed in case of a "disturbance of the macroeconomic equilibrium" (LHO Art. 18 (2) sentence 2). The parliament must clarify that this case exists or soon will and that borrowing will help to repel it (LHO Art. 18 (2) sentence 2). Baden-Württemberg is allowed to exceed the debt limit if the tax income decreases by 1% compared to the preceding year and in case of natural catastrophes or similar severe emergencies (LHO Art. 18 (3)). If these exceptions come into use, the parliament must decide a redemption plan for at most seven years to pay the extra debt back (LHO Art. 18 (4)).

Although the restrictions seem strict, some legal terms are not specified sufficiently. The interpretation of a 'disturbance of the macroeconomic equilibrium' is up to the parliament's simple majority and therefore vulnerable to manipulations. The same holds for the term 'investments' (vague definition in LHO Art. 13 (3) No 2 sentence 2,

See also German Council of Economic Experts (2011) for a survey of state transposition of the federal debt rule.

⁹ At least two-thirds of the members of the parliament must be present and decide with a two-thirds-majority (that must include at least half of the parliament's members). Also, the parliament can demand a referendum with a simple majority. Half of the people eligible to vote need to approve the bill (Constitution Art. 64 (2)).

same as in HGrG). Accepting deviations from the rules in case of a 1% tax income reduction seems like a reaction to business cycle developments, since 1% is not much. The rules do not apply to state owned enterprises, special funds (constitution Art. 79, LHO Art. 26 (2)) or recipients of grants (LHO Art. 28 (3)). Nonetheless, the budget rule is stricter than the one proposed by the Grundgesetz. The numerically determined debt stock will decrease in real terms because of inflation. The use of exception clauses must be followed by a complete redemption. Both elements seem to guarantee stable budgets and provide credibility. However, there are no strict enforcement mechanisms. Baden-Württemberg has an index score of 0.65.

4.2 Bavaria (BY)

Bavaria voted for the federal debt brake in the Bundesrat. In 2006, the State Budget Regulations (BayHO, simple law), but not the constitution 10, got changed. Bavaria uses a budget balance rule. Borrowing is allowed in case of "extraordinary demands" (constitution Art. 84). The BayHo clarifies that the budget plan must be balanced "regularly" without borrowing (BayHO Art. 18 (1)). Borrowing is allowed to respond to "demands of the macroeconomic equilibrium" or similar severe situations. The maximal amount must not exceed the sum of expenditures for investments. Higher borrowing is possible in case of a "disturbance of the macroeconomic equilibrium" (Bay-HO Art. 19 (2)).

The terms describing exceptions to BayHO Art. 18 (1) correspond to "extraordinary demands" as determined by the constitution. However, no clear definition is given so that the exception is vulnerable to manipulations, because their interpretation is up to the parliament's simple majority. The main aim is to set up balanced budgets, but only on a 'regular' basis. This term does not say anything about the time span of exceptions to this rule nor redemption arrangements. Also, the definition of "investments" (LHO Art. 13 (3) No 2 sentence 2, same as in HGrG) is not specified. The rule does not consider state owned enterprises, special funds or recipients of grants (LHO Art. 26). Nonetheless, the rule corresponds to the one the Grundgesetz specifies for the Bundesländer, but it suffers from imprecise definitions. The index score is 0.50.

¹⁰ The constitution can be changed by a two-thirds majority of all members of the parliament (constitution Art. 75 (2)). The bill must be approved in a referendum by a simple majority of all participants, which must be equivalent to at least a fourth of all people eligible to vote (constitution Art. 79 (1)).

4.3 Berlin (BE)

Berlin abstained from the vote for the federal debt brake in the Bundesrat. The reasons are quite similar to those expressed to keep the current legal provisions in Berlin as they are.¹¹ The government does not approve prohibiting borrowing – although it is up to the Bundesländer to define exception clauses – because there might be situations where borrowing could be necessary. Also, Berlin considers the financial support given to some states as too small (Berliner Abgeordnetenhaus, 2009). Berlin did not change its budget rule, yet. It is close to the former federal budget rule.

Berlin has a budget balance rule. Borrowing is only allowed if other financial means are not "available" (constitution Art. 87 (2)). The amount of borrowing must not exceed the amount of expenditures for investments. Higher borrowing is allowed to respond to a "disturbance of the macroeconomic equilibrium" (constitution Art. 87 (2)). The parliament must determine that the disturbance exists and that borrowing will help to repel it (LHO Art. 18 (1)). Since Berlin is a recipient of financial support according to KonsHilfG, it is forced to decrease its deficit to zero at least in 2020 (VV KonsHilfG). If Berlin does not comply with these limits and if there is no "exceptional situation" approved by the Stability Council, financial support is cut off (VV KonsHilfG Art. 6). Furthermore, the coalition agreed to reduce expenditures yearly by 0.3% (compared to the previous year, Finanzsenat Berlin, 2011). This expenditure rule is defined in a coalition agreement and implemented in the budget plan law.

Berlin's budget rule is hardly credible. Borrowing is allowed as long as other financial means are not available. Thus, no reasons must be given to take loans. The limit is not clear, too, since 'investments' are not specifically defined (LHO Art. 13 (3) No 2 sentence 2, same as in HGrG). Also, the term 'macroeconomic equilibrium' and its disturbance are not specified. The rule does not consider special funds, state owned enterprises and recipients of grants (LHO Art. 26). The VV KonsHilfG is much more explicit and helps Berlin to gain credibility: if the government does not follow definite numerical deficit limits, the support is cut off. Thanks to the provisions in VV KonsHilfG Berlin gets an index score of 0.66. However, the financial support ends in 2019 and then the index score will – if nothing changes – fall back to 0.46 in 2020.

¹¹ Two-thirds of all parliament's members can change the constitution (constitution Art. 100). Otherwise, the people of Berlin – at least 20.000 of those eligible to vote – could set up a petition for a referendum that must be approved by 7% of those eligible to vote. Then, the referendum is approved if two-thirds of the participants and at least half of those that are eligible to vote voted for it (constitution Art. 63).

4.4 Brandenburg (BB)

Brandenburg approved the federal debt brake in the Bundesrat, although it does not have similar legal provisions, yet.¹² The budget rule in Brandenburg still resembles the former federal rule. Borrowing is allowed up to the amount of expenditures for investments (constitution Art. 103 (1) sentence 2). Hereby, the budget must consider "demands of the macroeconomic equilibrium" and the "protection of natural living conditions of present and future generations" (constitution Art. 101 (1)). Higher borrowing is allowed to respond to a "disturbance of the macroeconomic equilibrium" (constitution Art. 103 (1) sentence 3). Then, the parliament must determine that this disturbance exists and that borrowing will help to repel it (LHO Art. 18 (1)).

As it is the case for all other Bundesländer having this kind of a budget rule, key terms ("investments", "macroeconomic equilibrium", its "demands" and "disturbance") are not clearly determined. However, Brandenburg defines the term "investments" more precise as expenditures that "maintain, extend or improve means of production of the whole economy" (VV-HS 3.2.1.1, LHO Art. 13 (3) No 2 sentence 2). The rule does not consider special funds, state owned enterprises or recipients of grants (constitution Art. 101 (2), LHO Art. 26). The index score is 0.53.

4.5 Bremen (HB)

Bremen voted for the federal debt brake in the Bundesrat, although it does not have a similar budget rule, yet. ¹³ The current rule is close to the former federal budget rule. It is complemented by a budget balance rule according to VV KonsHilfG. Borrowing is allowed up to the amount of expenditures for investments (constitution Art. 131a sentence 2). Higher borrowing is possible in case of a "disturbance of the macroeconomic equilibrium" (constitution Art. 131a sentence 2). As it is the case in most states having this type of rule, the terms "investments" (vague definition in LHO Art. 13 (3) No 2 sentence 2, same as in HGrG), "macroeconomic equilibrium" and its "disturbance" are not defined clearly. They let a lot of scope for interpretation. Also, the rule does not consider borrowing by special funds, state owned enterprises and recipients of grants (LHO Art. 26). According to KonsHilfG, Bremen has to comply with decreas-

¹² Two-thirds of the parliament's members can change the constitution (constitution Art. 79). Also, the bill could be approved in a referendum. Two-thirds of all participants and at least half of those eligible to vote must vote for it (constitution Art. 78).

¹³ The constitution can be changed by a two-thirds majority of the parliament's members (constitution Art. 125 (3)). Also, the majority of the parliament's members could request a referendum (constitution Art. 70 (1)). More than half of those people eligible to vote must vote in favour of the bill to approve it (constitution Art. 72 (2)).

ing structural deficit limits (VV KonsHilfG Art. 4). If it does not and if there is no "exceptional situation" approved by the Stability Council, financial support is cut off (VV KonsHilfG Art. 6). The current index score is 0.65, but will fall back to 0.45 in 2020.

4.6 Hamburg (HH)

Hamburg voted for the federal debt brake in the Bundesrat. In 2007, Hamburg got a stricter debt rule by simple law (LHO) – the constitution remained unchanged¹⁴ – but the parliament cancelled the rule that would have been binding from 2013 on in 2012.¹⁵ A new rule is not decided, yet. The current rule is close to the former federal rule and allows borrowing up to the amount of expenditures for investments (constitution Art. 72 (1), LHO art. 18 (1)). Exceptions can be made in case of "extraordinary demands" (constitution Art. 72 (1)). The LHO specifies this term by allowing exceptions in case the "macroeconomic equilibrium" is disturbed (LHO Art. 18 (1)).

The rule is not that strict. The use of exceptions must hardly be justified and the rule relies on unspecified terms like "investments" (LHO Art. 13 (3) No 2 sentence 2; same as in HGrG), "macroeconomic equilibrium", its "demands" and "disturbance". The rule does not apply to special funds, state owned enterprises and recipients of grants (LHO Art. 26). The rule's index score is 0.44.

4.7 Hesse (HE)

Hesse voted in favour of the federal debt brake in the Bundesrat. In 2011, a corresponding constitutional amendment for Hesse has been decided by a referendum.¹⁶ The new rule first applies in 2020 (constitution Art. 161). The LHO is valid until the end of 2012, a new version has not been decided, yet. The current rule is close to the former federal rule and allows borrowing up until the amount of expenditures for investments¹⁷ and beyond that in case of "extraordinary demands" (constitution Art. 141). The index score for this rule is 0.50.

¹⁴ The constitution can be changed by a three-fourths majority of the parliament's members and a two-thirds majority of the participants in a referendum (constitution Art. 51 (2)). The parliament has to approve the bill two times (with the named majorities) with a period of 13 days between both decisions (constitution Art. 51 (2)). Also, the people of Hamburg can initiate a petition for a referendum with 10.000 signatures of those that are eligible to vote. If the parliament does not approve the bill within four months, it must conduct a petition for a referendum. At least a twentieths of the people eligible to vote must approve the petition. In the referendum two-thirds of the people that participate in the vote and two-thirds of the votes represented in the current parliament must approve the bill (constitution Art. 50).

¹⁵ HmbGVBl. Nr. 23, 08/06/2012, p. 204.

^{16 70%} of all participants approved the bill (Hessisches Statistisches Landesamt, 2011). To change the constitution, the parliament must approve the bill by simple majority and half of the voters in a referendum must vote for it (constitution Art. 123 sentence 2).

¹⁷ The constitution uses the term "advertising ends" (constitution Art. 141), what means quite the same as 'investments'.

The new rule prescribes a balanced budget without borrowing "in principle" (constitution Art. 141 (1)). Exceptions are allowed to account for business cycle fluctuations in a "symmetric" way (constitution Art. 141 (3)). This term implies that borrowings must be balanced by surpluses across the business cycle. In case of natural catastrophes or extraordinary emergencies – situations which reasons must lay outside the scope of control of the state – borrowing above these limits is allowed (constitution Art. 141 (4) sentence 1). The parliament must decide a redemption plan at the same time (constitution Art. 141 (4) sentences 2). The loans must be paid back in an "appropriate" period of time (constitution Art. 141 (4) sentences 3).

The provisions of the old rule are vulnerable to manipulation, because key terms are not specified ("investments" (LHO Art. 13 (3) No 2 sentence 2, same as in HGrG) and "extraordinary demands"). The new rule is more precise. The basic rule as well as its exception clauses are mainly specified. Although the time span of the redemption plan may be vulnerable to manipulation, the term "appropriate" can be used for an appeal. This would not be the case if no time condition at all would have been prescribed. However, the rule does not consider special funds, state owned enterprises and recipients of grants (LHO Art. 26). The index of this rule is 0.66.

4.8 Lower Saxony (NI)

Lower Saxony voted in favour of the federal debt brake in the Bundesrat. However, it does not have a similar rule, yet. ¹⁸ The current rule is close to the former federal rule. Borrowing is allowed up until the amount of expenditures for investments and debt conversion (constitution Art. 71 sentence 2). Exceptions are possible to respond to a "disturbance of the macroeconomic equilibrium" or to an "immediate threat to the natural living conditions" (constitution Art. 71 sentence 3). The parliament must define a situation as exceptional and make clear that borrowing will help to repel it (LHO Art. 18 (1)). The budget rule is hardly credible, because key terms ("investments" (LHO Art. 13 (3) No 2 sentence 2, same as in HGrG), "disturbance of the macroeconomic equilibrium" and "immediate threat to the natural living conditions") are not specified. The rule does not consider special funds, state owned enterprises and recipients of grants (LHO Art. 26). The index score is 0.51.

¹⁸ A two-thirds majority of the parliament's members can change the constitution (constitution Art. 46 (3)). The people of Lower Saxony can change it by collecting signatures at least of a tenth of those people eligible to vote for a petition for a referendum (constitution Art. 48). If the parliament does not approve that bill within six months, a referendum is held. At least half of the people eligible to vote must vote for it (constitution Art. 49).

4.9 Mecklenburg-West Pomerania (MV)

Mecklenburg-West Pomerania abstained from the vote on the federal debt brake in the Bundesrat. The government of SPD and CDU has doubts about a prohibition of borrowing for the states in the federal constitution. Also, they argue that states would rather follow constrains that they decided themselves than externally prescribed ones. Financial support payments would initiate wrong incentives because their calculation just considers the debt stock and not the efforts a state has made so far to reduce it, the economic situation and the financial strength of the state. Furthermore, the distribution of financial policy competencies between the federal level and the states is not settled, yet (Bundesrat, 2009: 244). The parliament of Mecklenburg-West Pomerania implemented a new budget rule in the constitution in 2011. It will first apply in 2020 (constitution Art. 79a). The LHO is not renewed, yet.

The current rule resembles the former federal debt rule: borrowing is allowed up to the amount of expenditures for investments and beyond that in case of a "disturbance of the macroeconomic equilibrium" or an immediate threat to the "economic and labour market development". The parliament has to justify the use of exceptions by defining the situation as exceptional and clarifying that borrowing will be helpful (constitution Art. 65 (2)). This rule's index score is 0.46.

According to the new rule (constitution Art. 65 (2)) the budget must be balanced without borrowing "in principle". Exceptions are possible to respond to business cycle fluctuations in a "symmetric" way. These situations must be compared to
several similar situations years ago. Exceptions can also be made to respond to natural catastrophes or exceptional emergencies that lay outside the scope of control of
the state and affect the budget considerably. In both cases, the parliament must simultaneously set-up a redemption plan that regulates paying back the debt in an "appropriate" period of time.

The current rule is vulnerable to exploitations. Key terms ("investments" (LHO Art. 13 (3) No 2 sentence 2, same as in HGrG), "disturbance of the macroeconomic equilibrium" and a threat to the "economic and labour market development") are not specified. The rule does not consider special funds, state owned enterprises or recipients of grants (LHO Art. 26). The new rule does not consider them, too, but is stricter

¹⁹ The constitution can be changed by two-thirds of the parliament's members (constitution Art. 56 (2)). Otherwise 120.000 people can sign a petition for a referendum. If the parliament does not approve the bill within six months, a referendum is held. It is successful, if two-thirds of the participants and at least half of the people eligible to vote vote for it (constitution Art. 60).

regarding the use of exception clauses and prescribes a redemption plan. Although the term 'appropriate' does not define a concrete period of time, the term helps to appeal the budget. The new LHO should define the term 'business cycle' and how the adaption can be made 'symmetrically'. The new rule is more credible than the old one. Its index score is 0.65.

4.10 North Rhine-Westphalia (NW)

North Rhine-Westphalia voted in favour of the federal debt brake in the Bundesrat. However, its budget rule is similar to the former federal rule.²⁰ Borrowing is allowed to respond to "demands of the macroeconomic equilibrium". On a "regular basis" borrowing must not exceed the amount of expenditures for investments (constitution Art. 83 sentence 2). Higher borrowing is possible to respond to a "disturbance of the macroeconomic equilibrium" (LHO Art. 18 (1)). In this case the parliament must define that the disturbance exists and that borrowing will help to repel it (LHO Art. 18 (1)). The rule is not strict, since key terms ("investments" (LHO Art. 13 (3) No 2 sentence 2, same as in HGrG), "demands" and "disturbance of the macroeconomic equilibrium") are not specified. Also, the rule does not consider special funds, state owned enterprises and recipients of grants (LHO Art. 26). The index score is 0.45.

4.11 Rhineland-Palatinate (RP)

Rhineland-Palatinate voted in favour of the federal debt brake in the Bundesrat. In 2010, the parliament decided to implement a similar rule in its constitution.²¹ The rule first applies in 2020. The current rule is similar to the former federal rule: borrowing is allowed up until the amount of expenditures for investments. Exceptions can be made in order to respond to a "disturbance of the macroeconomic equilibrium" (constitution Art. 117 sentence 2). The parliament must declare a situation as exceptional and give reasons that borrowing would help to repel it (LHO Art. 18 (1)).

The new budget balance rule prescribes that the budget plan must be balanced without borrowing (constitution Art. 117 (1)). Exceptions are allowed in order to balance income differences caused by business cycle fluctuations (constitution Art.

²⁰ The constitution can be changed by a two-thirds majority of the parliament's members (constitution Art. 69 (2)). The parliament can also decide a referendum. It is successful if at least half of the people eligible to vote participate in the vote and two-thirds of them vote for it (constitution Art. 69 (3)).

²¹ The constitution can be changed by two-thirds of the parliament's members or during a referendum that must be approved by at least half of the people eligible to vote.

117 (1) sentence 2 No 1), in case of natural catastrophes or similar severe emergencies and to adapt – at most within four years – to changes of budget affecting laws (constitution Art. 117 (1) sentence 2 No 2). The parliament must declare a situation as exceptional (constitution Art. 117 (1) sentence 3) and simultaneously decide about a redemption plan (constitution Art. 117 (1) sentence 4). The budget rule considers liabilities of state owned enterprises, special funds and recipients of grants (constitution Art. 117 (3)). This is unique among German federal states.

Whereas the current rule is vulnerable to manipulation since key terms ("investments" (LHO Art. 13 (3) No 2 sentence 2, same as in HGrG) and "disturbance of the macroeconomic equilibrium") are not specified, the new rule hardly is, because it is very strict. The term 'business cycle' and the way the budget has to adapt to it are specified and will be defined in a new LHO. The new rule clearly defines exception clauses and prescribes a detailed redemption plan – although without a time limit. Contrarily to the new rule, the old one does not consider special funds, state owned enterprises and recipients of grants (LHO Art. 26). However, it is not clear, what budget the new rule targets (the overall budget or the one defined in the current LHO Art. 13 (4) No 2 which is the same as in HGrG). The parliament did not change the LHO according to the new rule, yet. The index score of the old rule is 0.46 whereas the new rule has the highest score among all federal states with 0.78.

4.12 Saarland (SL)

Saarland voted for the federal debt brake in the Bundesrat. However, Saarland still does not have a similar budget rule.²² Since it gets financial support according to KonsHilfG it must follow strict deficit limits. The current rule is similar to the former federal rule: borrowing is allowed up to the amount of expenditures for investments (constitution Art. 108 (2)). Exceptions are possible to respond to a "disturbance of the macroeconomic equilibrium" or in case of "extraordinary demands" (Art. 108 (2)). The parliament must define a situation as exceptional and make clear that borrowing will help to repel it (Art. 18 (1)). If the parliament borrows to respond to "extraordinary demands", it needs to define a redemption plan (LHO Art. 18 (1) sentence 3). Furthermore, Saarland must reduce its deficit along numerical limits to zero until 2020 (VV KonsHilfG Art. 4). The concrete calculation of this deficit is determined in VV

²² Two-thirds of the parliament's members can change the constitution (constitution Art. 101 (1)). The constitution cannot be changed by a referendum (constitution Art. 100 (4)).

KonsHilfG (VV KonsHilfG Art. 2 (1)). If Saarland does not comply with these limits and if there is no "exceptional situation" approved by the Stability Council, financial support is cut off (VV KonsHilfG Art. 6).

Thanks to the provisions of VV KonsHilfG, Saarland's budget rule gained credibility: key terms are defined, a third body monitors the enforcement and sanctions are possible. However, key terms of Saarland's original rule ("investments" (LHO Art. 13 (3) No 2 sentence 2, same as in HGrG, but specified for constructions in Annex 7 to VV No 15.2 for LHO Art. 44), "disturbance of the macroeconomic equilibrium" and "extraordinary demands") are not specified. Also, the time span the redemption plan must cover is not defined. The rule does not consider special funds, state owned enterprises or recipients of grants (LHO Art. 26). The current index score is 0.71, but will – if nothing changes – fall back to 0.57 in 2020 when financial support ends.

4.13 Saxony (SN)

Saxony voted for the federal debt brake in the Bundesrat. Already in 2008, Saxony implemented a stricter budget rule in the LHO – the constitution remained unchanged.²³ Like Baden-Württemberg Saxony uses a combination of a balance budget and a debt rule. The budget must be balanced without borrowing and the debt stock must not exceed the one in 2008 (Art. 18 (1)). Borrowing up until the debt limit is allowed for expenditures for investments and beyond only in case of a "disturbance of the macroeconomic equilibrium" (LHO Art. 18 (2)). In the latter case, the parliament must determine the disturbance and justify that borrowing will help to repel it (LHO Art. 18 (2)). Borrowing above the debt limit is only allowed if tax income decreases by 3% compared to the preceding year or in case of natural catastrophes or similar severe situations with supra-regional impact (LHO Art. 18 (3)). In any case, the parliament must set-up a redemption plan that prescribes repayment within at most five years (LHO Art. 18 (4)).

Saxony's rule is strict, even though it is just implemented in the LHO. Although some key terms ("investments" (LHO Art. 13 (3) No 2 sentence 2, same as in HGrG), "disturbance of the macroeconomic equilibrium"; "natural catastrophes" and "similar severe situations" are quite well defined, they must be supra-regional) are not speci-

²³ A two-thirds majority of the parliament's members can change the constitution (constitution Art. 74 (2)). Also, the parliament can decide with a simple majority to conduct a referendum. The people of Saxony can demand a referendum, too, if they get at least 450.000 signatures of those people that are eligible to vote (constitution Art. 72 (2)). At least a simple majority of those people eligible to vote need to approve the bill (constitution Art. 74 (3)).

fied, the balanced budget and debt limits will decrease the probability of exploitations. The parliament has to justify its decisions and these can easily be appealed at the Constitutional Court. However, the rule does not consider special funds, state owned enterprises and recipients of grants (LHO Art. 26). The index score is 0.67.

4.14 Saxony-Anhalt (ST)

Saxony-Anhalt voted in favour of the federal debt brake in the Bundesrat. In 2010, the parliament changed the LHO to implement a stricter budget rule – the constitution remained unchanged.²⁴ Since Saxony-Anhalt receives financial support according to KonsHilfG, it must follow strict deficit limits. The budget plan must be balanced without borrowing (Art. 18 (1)). Exceptions are possible in order to adapt to serious business cycle fluctuations, natural catastrophes or extraordinary emergencies that elude the scope of the state's control (Art. 18 (2)). Simultaneously, the parliament must approve a redemption plan that prescribes the repayment in an "appropriate" scope of time (Art. 18 (3)). Additionally, the debt stock must decrease regularly (Art. 18 (4)). Furthermore, Saxony-Anhalt must reduce its deficit along numerical limits onto zero until 2020 (VV KonsHilfG Art. 4). The concrete calculation of this deficit is determined in VV KonsHilfG (VV KonsHilfG Art. 2 (1)). If Saxony-Anhalt does not comply with these limits and if there is no "exceptional situation" approved by the Stability Council, financial support is cut off (VV KonsHilfG Art. 6).

All rules taken together constrain the financial scope of the parliament considerably. The VV KonsHilfG specifies the terms 'balanced budget' and 'business cycle developments'. The requirement to decrease the debt burden continuously limits possible exploitations and is exceptional among the states. However, the time span of a redemption plan is not defined and the rule does not consider special funds, state owned enterprises or recipients of grants (LHO Art. 26). The index score is 0.77 but will fall back to 0.65 in 2020 when financial support has ended.

4.15 Schleswig-Holstein (SH)

Schleswig-Holstein abstained from the vote on the federal debt brake in the Bundesrat. The government had doubts whether the rule was in line with the federal constitu-

²⁴ A two-thirds majority of the parliament's members can change the constitution (constitution Art. 78 (2)). The people of Saxony-Anhalt can demand a referendum with an eleventh of all people eligible to vote (constitution Art. 81 (1)). In the referendum, two-thirds of the voters and at least half of those eligible to vote need to approve the bill (constitution Art. 81 (5)).

tion (GG Art. 109 (1) and Art. 20 (1)), because it would strongly interfere with the states' financial competencies. Also, there is no solution found yet to cope with the accumulated debt stocks of the states. Prohibiting borrowing without settling this problem did not seem reasonable to the government. However, the coalition campaigned for strict budget rules that must be implemented in the states's constitutions. In 2010, Schleswig-Holstein's parliament decided to implement a stricter rule in the constitution which would be binding from 2020 on. In 2012 the parliament decided a respective implementation law. Moreover, Schleswig-Holstein receives financial support according to KonsHilfG and therefore must comply with decreasing deficit limits until 2020 (VV KonsHilfG).

The current rule is a budget balance rule. "In principle" the budget must be balanced without borrowing (constitution Art. 53 (1)). Borrowing is possible in order to respond to business cycle fluctuations in a "symmetric" way (constitution Art. 53 (2), detailed prescriptions in the implementation law § 1). In case of natural catastrophes or extraordinary emergencies that lay outside the scope of the state's control and that affect the budget considerably, borrowing is possible if two-thirds of the parliament's members agree. Simultaneously, they must determine a redemption plan that prescribes the repayment of the debt within an "appropriate" scope of time (constitution Art. 53 (3)). Deviations from the planned and the implemented budget will be noted on a "control account" (implementation law § 8). If the accounting balance exceeds a specific threshold it must be reduced, but with respect to the business cycle. Thereby, Schleswig-Holstein is the first state that mirrors the federal level's control account. Transitional provisions between 2011 and 2019 allow borrowing up to yearly decreasing limits²⁸ (constitution Art. 59a (1)). These regulations go in line with VV KonsHilfG (Art. 2 (1) and (4)). If Schleswig-Holstein does not comply with these limits and if there is no "exceptional situation" approved by the Stability Council, financial support is cut off (VV KonsHilfG Art. 6).

The budget rule is strict: all regulations are implemented in the constitution, most of the key terms are defined ("In principle" considers the named exceptions, "budget" means the structural balance as defined in VV KonsHilfG, "natural catastro-

²⁵ Schleswig-Holstein brought this issue to the Federal Constitutional Court in 2010, but it was rejected because of formal reasons.

²⁶ Two-thirds of the parliament's members must approve a constitutional amendment. Also, 5% of the people eligible to vote can demand a referendum. Two-thirds of the voters must approve the bill, at least half of those eligible to vote (constitution Art. 42).

²⁷ Gesetz zur Ausführung von Artikel 53 der Verfassung des Landes Schleswig-Holstein, 29/03/2012.

²⁸ The limits target the structural deficit from 2010 on. The limit for one year decreases by 10% compared to the preceding year.

phes" and "extraordinary emergencies" must be defined by two-thirds of the parliament's members) and there are very strict deficit limits. However, it is not specified how a "symmetric" adaption to business cycle developments would work. The rule does not consider special funds, state owned enterprises (constitution Art. 50 (1)) and recipients of grants (LHO Art. 26). The index score is 0.78. Although it will fall back to 0.67 in 2020 when financial support has ended, it is still among the highest.

4.16 Thuringia (TH)

Thuringia voted for the federal debt brake in the Bundesrat. In 2009, the parliament decided to implement a stricter debt rule in the LHO – the constitution remained unchanged.²⁹ The LHO prescribes a budget balance rule. The budget must be balanced without borrowing (LHO Art. 18 (1)). If the total income is less than the average of the last three years, borrowing is allowed up to the amount of income the budget plan had foreseen. Higher borrowing is allowed in case of natural catastrophes or extraordinary emergencies (LHO Art. 18 (2)). Simultaneously, the parliament must decide a redemption plan that prescribes the repayment within five years (LHO Art. 18 (3)). Additionally, expenditures for the personnel must not exceed 40% of the total expenditures (constitution Art. 98 (3)). The rule is strict: borrowing is constrained and redemption is mandatory. However, the rule does not consider special funds, state owned enterprises and recipients of grants (LHO Art. 26). The index score is 0.66.

5. Comparison

There is a significant variance of the strength of budget rules among the German federal states according to our index quantification. The index scores range between 0.44 and 0.78. The table below displays all index scores.

Currently, Schleswig-Holstein (0.78) has the strongest rule, followed by Saxony-Anhalt (0.77) and Saarland (0.71). All three states receive financial support. Also, Berlin (0.66) and Bremen (0.65), the two other recipients of support, range in the upper half. In contrast, from 2020 on, when the support is cut off, they score mostly in the lower half – except for Schleswig-Holstein (0.67) and Saxony-Anhalt (0.65) which

²⁹ The constitution can be changed by two-thirds of the parliament's members (constitution Art. 83 (2)). Also, an eighth of the people eligible to vote can demand a referendum (constitution Art. 82 (5) sentence 2). In the referendum, a simple majority of the voters and at least 40% of those eligible to vote must approve the bill.

already implemented a stricter budget rule. The temporary relative strength of these states is explained by the fact that they face monetary sanctions in the period up to 2020. The sanction threat results from the conditionality of the financial consolidation support and ends with these payments in 2019.

Table 2: Index scores of the German federal states.

Federal State	Current Rule	KonsHilfG - recipient
SH	0.78	*
ST	0.77	*
SL	0.71	*
SN	0.67	
BE	0.66	*
тн	0.66	
BW	0.65	
НВ	0.65	*
вв	0.53	
NI	0.51	
BY	0.50	
HE	0.50	
MV	0.46	
RP	0.46	
NW	0.45	
нн	0.44	
Average	0.59	

Federal State	Future Rule ¹	KonsHilfG - recipient
RP	0.78	
SN	0.67	
SH	0.67	*
HE	0.66	
TH	0.66	
BW	0.65	
MV	0.65	
ST	0.65	*
SL	0.57	*
ВВ	0.53	
NI	0.51	
BY	0.50	
BE	0.46	*
НВ	0.45	*
NW	0.45	
НН	0.44	
Average	0.59	

¹ BE, HB, HE, MV, RP, SL, ST, SH: 2020.

A green marking indicates that a new rule, according to the federal debt brake, has been implemented in the state's constitution, a yellow marking that only the LHO changed, and no marking shows that a new rule has not been implemented, yet.

At present, Hamburg (0.44) has the weakest rule of all states, closely followed by North Rhine-Westphalia (0.45), Rhineland-Palatinate (0.46), Mecklenburg-West Pomerania (0.46), Hesse (0.50), Bavaria (0.50), Lower Saxony (0.51) and Brandenburg (0.53). Until now, all these states have a rule similar to the former federal rule. They differ only because of more or less specified key terms defining the rule.

From 2020 on, Rhineland-Palatinate (0.78) has the strongest rule, followed by Saxony (0.67), Schleswig-Holstein (0.67) and Hesse (0.66). Rhineland-Palatinate, Schleswig-Holstein and Hesse implemented the rule in their state constitutions. What makes Rhineland-Palatinate outstanding is that its rule also covers special funds and public enterprises. This raises the index scores significantly.

States with financial support currently score well but fall back in 2020. The temporary improvement of their rules' credibility is mainly a result of consolidation transfers' conditionality. All states that changed their constitution range in the upper half once the constitutional change has become effective. Many states implemented a new rule by simple law; they could improve their index score significantly by introducing it into the constitution. Hamburg impressively showed the shortcomings of simple law: they abolished a new budget rule written down in the LHO and foreseen for 2013 in 2012. They could not have done this without the opposition's support if the rule has been implemented in the constitution. Another rather simple way to improve the index score is to take account of all flexibility cases and to define key terms precisely. Extending the coverage of the rule may be politically courageous but beneficial for the rule's credibility – as Rhineland-Palatinate demonstrates.

Interestingly, credible future rules are by no means confined to wealthy states. A number of poorer states which are recipients in Germany's fiscal equalization system have opted for strict rules to improve their budgetary credibility. And contrary, some of the wealthier states are among those with the less ambitious rules.

6. Conclusions

This German case study confirms the expectation that national debt rules may not be able to guarantee a homogeneous set of effective fiscal rules across sub-national jurisdictions. In federal countries like Germany the states have constitutional and fiscal autonomy and make use of it also with respect to the definition and specification of a debt brake – the difference between the state with the lowest (Hamburg) and the one with the highest index score (Rhineland-Palatinate) is 0.34 for the future rule.

The detailed analysis reveals striking details: Some states that are heavily indebted or receive financial support do not show much ambition so far. Among the five states that receive consolidation aid payments, only Saxony-Anhalt and Schleswig-Holstein implemented a stronger rule to meet the federal debt brake requirements. The three other countries' rules benefit from a temporary sanction threat. However, this rule strengthening element is temporary and exposed from outside because it is an implication of the federal debt brake.

Thus, some of the highly indebted states miss the chance of using their own legislation to make their fiscal regime more credible. This observation is in line with well-known disincentives of German federalism. Germany's federal jurisdictions form a full bail-out-community. On constitutional grounds, states can be certain that they will be bailed out in case of insolvency. As a consequence, states' bond yields do not differ to any significant extent and there are no incentives to regain capital reputation through better rules. Any such signal does not pay off in terms of financing costs but it may produce political costs. In this sense, the German experience is another example of the general disincentives related to federal institutions based on mutual bailout promises. In the light of the upcoming discussions regarding German fiscal federal institutions, these results should be kept in mind.

Finally, our results are of relevance for all attempts to improve fiscal governance in the euro area through new prescriptions like the Fiscal Compact or the reformed Stability and Growth Pact. A particular attention in the implementation of all these new rules has to be given to the federal dimension. Germany is a clear example, where a seemingly unequivocal country-wide deficit rule does not necessarily create a level budgetary playing field across all sub-national jurisdictions, although judicial ties are a lot stronger than they are at the supranational, European level.

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Appendix

Exemplary Index score calculation for Baden-Württemberg (The full set of state sheets is available as web appendix: www.zew.de/debtrulesDP012-067)

Categories		Part of Rule						Std.
		Basic rule	Regulations	Relaxations	Sanctions			Points
A	Legal base	BBR: constitution Art. 79 (1) sentence 2, LHO Art. 18 (1); DR: LHO Art. 18 (1)	BBR: constitution Art. 79, LHO Art. 18 (1) and Art. 26; DR: LHO Art. 18 (1)	BBR: constitution Art. 84 sentence 2, LHO Art. 18 (2); DR: LHO Art. 18 (2) and (3)	Constitution Art. 68 (2) No 2; Stability Council: Federal con- stitution Art. 109a sentence 1 No 2, StabiRatG	13	/ 16	0,81
В	Enforcement me- chanisms				There are no specific sanctions (valid for every bill), the Stability Council only monitors the enforcement but cannot sanction defections or impose corrective measures	1	/ 4	0,25
С	Coverage		1,75			1,75	/ 4	0,44
	Official budget: - shareholdings - debt claims by public authorities		0,75 1 1			0,75	/ 1	0,75
	- granted loans		1					
	- reserves		0					
	Public enterprises		0				/ 1	0,00
	Special funds Financial support for local authorities		0				/ 1	0,00
D	Flexibility		1	3		4	/ 4	1,00
	Business cycle		1			1	/ 1	1,00
	Economic shocks			1		1	/ 1	1,00
	Other emergencies Compensational mechanism			1 1		•	/ 1	1,00 1,00

Ε	Content	2	5	5	3	15	/:	20	0,75
	Clear definitions		Borrowing: 2 (speficied in HGrG)	Disturbance of the macroeco- nomic equilibrium: 1 (not spec- ified, but the disturbance and that borrowing will help to repel it must be defined by law)	Legal provisions are clearly defined				
			In principle: 0 (referring to business cycle fluctuations: "demands of the macroeco- nomic equilibrium", also "simi- lar severe situations")	Natural catastrophe: 2 (not specified in detail but general understanding, use must be justified)					
			Investments: 1 (vague definition in LHO Art. 13 (3) No 2 sentence 2)	Similar severe emergencies: 1 (not specified, but use must be justified)					
			Debt stock in 2007: 2 (definititve numerical value)	Redemption plan: 2 (clear definition of time span and amount of debt that must be payed back)					
			Permanently: 2 (referring to "tax income decrease", but time span not specified)						
			Redemption plan: 2 (clear definition of time span and amount of debt that must be payed back)						
			2	2	2	6	/ (1,00
	Strict aim		1	1	0	2		_	0,33
	Strict rule	2	2	2	1		/ 8		0,88
					Sum	34,75	/ 4	48	0.45
					Index score				0,65