Political Institutions and Fiscal Policies

A Note on Budget Rules and Fiscal Federalism

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Introduction

Budget rules have become a widespread tool for pursuing sound fiscal policy. This particularly holds for federations as the incentives to overspend and borrow excessively are particularly pronounced if the costs of public spending can be shifted to other jurisdictions by exploiting a common pool of revenues and attracting bailout transfers. Sub-national governments might be inclined to spend less and collect taxes more eagerly if their fiscal responsibility is strengthened. Sub-national tax autonomy, a credible no-bailout clause and numeric rules restricting sub-national finances seem useful to achieve this end.

However, politicians might be tempted to relax this discipline by window-dressing and creative accounting. These measures may come in various guises of fiscal gimmickry such as the reclassification of expenditure, the accumulation of arrears, off-budget activities and shifts in fiscal responsibilities. As a result, the targeted headline indicators are temporarily embellished without actually improving the underlying fiscal position to a similar extent. While a fiscal framework that supports sub-national fiscal responsibility provides incentives to truly comply with the constraints, desirable budget rules should be equipped with features as exemplified below. Against this background we analyse the design and effectiveness of current sub-national budget rules in the United States, Switzerland and Germany.

- **Numeric limits and flexibility.** The annual budget balance should be constrained by a numeric limit that needs to be respected during budget formation, execution and closure. To grant budget flexibility, temporary deviations from the threshold should be allowed for cyclical deficits and unforeseen extraordinary situations.
- **Definitions and redemption.** To prevent a permanent use of temporary exceptions, it seems important to precisely outline a method for the calculation of the cyclical deficit component that is replicable for a professional public. Similarly, extraordinary situations should be narrowly defined and only apply if approved by a supermajority in parliament. Any deficits shall be amortized within a reasonable period of time.
- **Legal foundation.** To eliminate the easiest way of circumvention, the rule should be anchored in the constitution or a similar piece of legislation. A constitutional law may only be amended by a supermajority and cannot be overridden by laws that have been passed later (lex posterior) or that govern a more specific matter (lex specialis).
- **Coverage.** To tackle incentives to conceal the fiscal burden, the rule should cover all off-budget funds, special funds, publicly-owned entities and apply to all public accounts.
- **Correction mechanism.** A violation of the rule should trigger an automatic correction mechanism that specifies the required annual adjustment.
- **Incentives for compliance**. An independent council should monitor the budget rule and correction mechanism and examine the cyclical adjustments, budget forecasts and circumstances that trigger, prolong or end extraordinary situations. The reports must be effectively communicated in public. A non-compliance with the council's recommendations should require a supermajority in parliament.

The United States

The federal framework of the US is characterized by a strong tradition of fiscal autonomy at the sub-federal level. All 50 states have their own tax systems and authority and are relatively free to tax citizens and activities within their border. Unlike most other federal states, the US has no fiscal equalization scheme in place that is designed to reduce fiscal disparities among sub-federal jurisdictions. The fiscal responsibility of the sub-national level is enhanced by the no-bailout

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stance of the federal government, which can be traced back to the default of eight US states and one territory in the post-1837 recession. While the no-bailout position has also been adopted by US states regarding their municipalities and is shaped by Chapter 9 of the US bankruptcy code, it is not legally implemented for the states (Inman 2003).

State balanced budget rules

Due to the federal bailout denial, the bond market differentiated refinancing conditions according to the solvency of the US states such that creditors looked for signals of fiscal discipline. In the 1840s the first states adopted constitutional debt limitations (Wallis 2005). A recent survey by the National Association of State Budget Officers (NASBO 2008) reveals that all 50 US states with the exception of Indiana and Vermont operate under some kind of constitutional or statutory balanced budget requirement. In 48 states a law stipulates at least one of the following requirements: (1) the governor must submit a balanced budget, (2) the legislature must pass a balanced budget, (3) the governor must sign a balanced budget, and (4) deficits may not be carried over into the next fiscal year or biennium. Only the latter can be classified as a numeric budget constraint since the other requirements tend to be procedural rules that need to be observed at certain points during the budget process, but not at the end of the fiscal year.

In general the provisions are sparsely worded, leave room for interpretation, and vary substantially among the states. Even though some states have anchored the requirements into their constitution and obliged courts to monitor the rule, other desirable features seem to be missing for the most part. Importantly, most restrictions only apply to a fraction of the state budget (for example, general fund), leaving other funds for deficit financing. In addition, some states are allowed to borrow to balance their budget. In order to achieve a balanced budget in times of economic crisis or emergencies, almost all states have some kind of rainy day and emergency fund. General fund surpluses are mostly transferred into the rainy day fund. A supermajority vote in the legislature is only required to withdraw money from these funds in a few states. A heap of further loopholes and ways to circumvent the state debt and deficit restrictions were recently summarized by Heun (2014). Besides budget rules, many states limit the amount of (guaranteed) debt and some states require tax increases to be approved by a supermajority in the legislature.

The Advisory Commission on Intergovernmental Relations (ACIR 1987) presents a detailed documentation of state debt and budget restrictions and a stringency index that is based on the types of balanced budget provisions, its legal foundations and a subjective assessment of its importance. The maximum index score is assigned to constitutional prohibitions to carryover a deficit. In compliance with the empirical findings of the ACIR (1987), the majority of subsequent studies provides evidence that debt and deficit restrictions tend to support fiscal discipline (Table 1). Exceptions are Calcagno and Escaleras (2007) and Hou and Smith (2009) who present the opposite effect of the (statutory) requirement to submit a balanced budget.

Most studies suggest that budget deficits are particularly reduced if strong fiscal rules (that is, no-carryover provisions) are implemented (ACIR 1987; Eichengreen 1994; Alesina and Bayoumi 1996; Hou and Smith 2009, 2010). Bohn and Inman (1996) and Primo (2006) find evidence that an external enforcement of no-carryover rules through elected state courts (instead of appointed courts) tend to decrease fiscal deficits. However, Briffault (1996) questions the existence of a threat from court enforcement. According to Kiewiet and Szakaly (1996) debt limits are particularly effective if a deviation has to be approved by referenda. In addition, Hou and Smith (2010) provide recent evidence that budget rules tend to have a more significant impact the more narrowly defined the analysed budget balance is. If narrowly defined balances are considered, budget constraints also seem to matter for fiscal sustainability (Mahdavi and Westerlund 2011). Among others, Bohn and Inman (1996) conclude that the deficit is primarily reduced by means of spending cuts. In a related strand of literature, anecdotal and empirical evidence suggests that state governments have widely taken advantage of the loopholes in the fiscal rules and circumvented them by means of fiscal gimmickry (Ratchford 1941; Heins 1963; Bennett and DiLorenzo 1983; von Hagen 1991, 1992; Bunch 1991; GAO 1993; Briffault 1996; Costello, Petacchi and Weber 2012).[2]

[2] The literature on fiscal rules at least partly originated from the analyses of Proposition 13's impact on fiscal policies. This paper focuses on the effects of debt and deficit restrictions. Other related strands of literature focus on the effects of state budget rules on anti-cyclical fiscal policy and business cycles (for example, Alt and Lowry 1994; Eichengreen and Bayoumi 1994; Poterba 1994; Bayoumi and Eichengreen 1995; Levinson 1998, 2007; Sørensen, Wu and Yosha 2001; Primo 2006; Krol and Svorny 2007), on state bond yields (for example, Bayoumi, Goldstein and Woglom 1995; Poterba and Rueben 1999; Lowry and Alt 2001) and on the fiscal impact of state tax and expenditure rules and line-item veto authority (for example, Bails 1982, 1990; Abrams and Dougan 1986; Holtz-Eakin 1988; Joyce and Mullins 1991; Elder 1992; Shadbegian 1996; St. Clair 2012). Early papers on these issues are surveyed by, for example, Poterba (1995), Krol (1997), Kirchgässner, Feld and Savioz (1999), Kirchgässner (2002) or Schaltegger (2002).

Table 1

Empirical studies on the effect of debt and deficit restrictions on fiscal discipline in US states

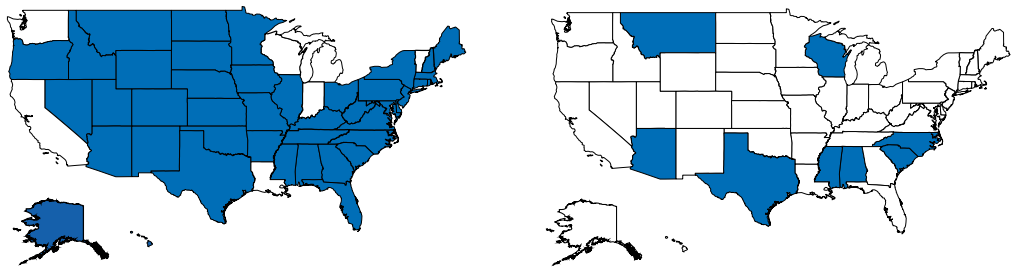
Study	States; period	Dependent variable (selection)	Fiscal rule (selection)	Support fiscal discipline*
Mahdavi and Westerlund (2011)	47 1961-2006	- Four measures of budget balance (ranging from broad to narrow) of state and local level	Stringency index of BBR (ACIR 1987) Budget rules (Hou and Smith 2006)	YES
Hou and Smith (2010)	50 1950-2004	- Six measures of budget balance (ranging from broad to narrow)	Six balanced budget requirements (Hou and Smith 2006)	YES
Hou and Smith (2009)	1979-1981 1985-2004	- Probability of reported budget surplus - Probability of general fund surplus	Four balanced budget requirements	YES for strong rules NO for weak rules
Calcagno and Escaleras (2007)	37 1971-2000	- Deficit to income ratio	Requirement for governor to submit a balanced budget	NO
Primo (2006)	47 1969-2000	- Direct state and local expenditures	No-carryover rule (ACIR 1987; Bohn and Inman 1996)	YES
Rose (2006)	43 1974-1999	- State general fund surplus, tax revenue, expenditure	No-carryover rules (ACIR 1987 and others)	YES
Chaney, Copley and Stone (2002)	48 1994-1995	- Per capita excess (deficit) of pension plan net assets available for pension benefits over pension benefit obligation	Balanced budget requirements (GAO 1993)	YES**
Penner and Weisner (2001)	N/A N/A	- Public welfare expenditures to total general expenditures - Public welfare expenditures per capita	No-carryover rules (NASBO 1999 and other)	YES
Alesina and Bayoumi (1996)	48 1990	- Average primary budget surplus to state GDP ratio (1988-1990) - Average state budget surplus to state GDP ratio (1988-1990)	Stringency index of BBR (ACIR 1987)	YES
Bohn and Inman (1996)	47 1970-1991	- State general fund deficit per capita	Stringency index of BBR (ACIR 1987) Four balanced budget requirements	YES
Kiewiet and Szakaly (1996)	49 1961-1990	- (Non-)guaranteed state debt per capita - Total state (and local) debt per capita	Five requirements on bond issuance	YES
Clingermayer and Wood (1995)	48 1961-1989	- Annual change in long-term state debt	Constitutional debt limits	No significant effect
Eichengreen (1994)	N/A 1985-1989	- General fund balance	Stringency index of BBR (ACIR 1987) Two balanced budget requirements	YES
von Hagen (1992)	N/A 1985	- State debt per capita and in relation to income - State debt growth (1976-1985)	Debt limitations Stringency of BBR (ACIR 1987)	Ambiguous
Nice (1991)	N/A 1982	- State (and local) debt per capita - (Non-)guaranteed state debt per capita	Constitutional debt limits Balanced budget requirements	YES (debt limits) No significant effect (BBR)
von Hagen (1991)	50 1985	- State debt and state debt growth (1975-1985) - Ratio of non-guaranteed to guaranteed state debt	Stringency index of BBR (ACIR 1987)	No significant effect
ACIR (1987)	50 1984	- General fund state deficit, tax revenues and long-term debt - (Non-)guaranteed state debt	Stringency index of BBR (ACIR 1987) Constitutional debt limits	YES
Abrams and Dougan (1986)	50 1980	- State and local spending per capita - State spending per capita	Balanced budget requirements (ACIR 1987)	No significant effect

* "YES" ("NO") indicates that the empirical results suggest that fiscal rules significantly support fiscal discipline (indiscipline).
** "BBR" reduces pension funding level significantly. "BBR" stands for Balanced Budget Requirements. "ACIR" stands for Advisory Commission on Intergovernmental Relations. Studies listed above may focus on further issues.

Source: The authors.

Figure 1

US States with no-carryover rule (blue)



Survey-based results (NASBO 2008) | Reading on the books (Hou and Smith 2006)

Source: Own illustration. The islands located in the south-west of the maps indicate Alaska and Hawaii, respectively.

Although the ACIR findings are widely used,[3] the data might not be accurate. For instance, the frequently employed no-carryover provision is supposed to be implemented in 36 states according to the ACIR (1987), in 39 states according to the United States General Accounting Office (GAO 1993), in 43 states according to the NASBO (2008) and in only 11 states according to Hou and Smith (2006). The records of the two latter studies vary substantially, although the data was collected almost at the same time (Figure 1). Thus, the variation in the data is not only due to the different points in time covered by the reports, but also to differences in personal interpretation, perception and knowledge of state laws, practices and court decisions. These confounding factors are likely to be more pronounced in the survey-based reports (ACIR 1987, GAO 1993, NASBO 2008) than in data collected from legal and other texts (Hou and Smith 2006). Although the issue has recently gained attention (Hou and Smith 2006, 2010; Krol and Svorny 2007; Levinson 2007; National Conference of State Legislatures 2010; Mahdavi and Westerlund 2011), the data variation does not distort the overall findings (Table 1).

While the data variation suggests that there might be some institutional variation across time, empirical research often implicitly assumes that budget rules remain unchanged. For instance, Rose (2006), Primo (2006) and Mahdavi and Westerlund (2011) employ the no-carryover rule according to data collected in 1984 by the ACIR (1987) while analysing periods from 1974–2000, 1969–2000 and 1961–2006, respectively.

[3] ACIR data have also been used in related strands of literature, for example, Pogue (1970), McEachern (1978), Bayoumi and Eichengreen (1995), Bohn and Inman (1996), Sørensen et al. (2001), Fatás and Mihov (2006).

Switzerland

The Swiss federal government, the 26 cantons and the 2,353 municipalities enjoy substantial fiscal autonomy and responsibility. Each level of government has the capacity to incur debt, the right to tax and can decide on its expenditure relatively independently. While disparities among cantons and municipalities are reduced by means of fiscal equalization, its redistributive impact is limited. Sub-national fiscal responsibility was consolidated by the no-bailout decision of the Swiss Supreme Court in 2003 regarding the municipality of Leukerbad. The federal fiscal framework is supplemented by direct democracy and fiscal constraints.

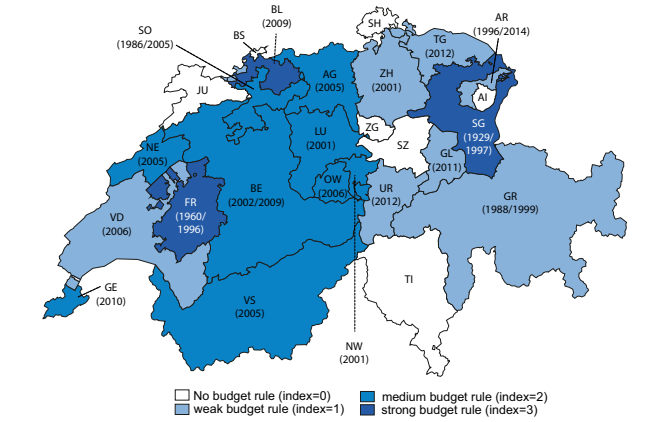
Cantonal balanced budget rules

To secure financial transparency and stability the Conference of the Cantonal Ministers of Finance agreed in 1981 on a role model law for cantonal budgeting that requires a balanced budget in the medium term (article 4). At the end of 2012 all cantons apart from Appenzell Inner Rhodes, Basel-City and Jura had implemented some kind of budget rule in their constitution or budget law. The 23 cantonal budget rules vary substantially with respect to their point of introduction, design and

stringency. While some cantonal laws stipulate numeric annual deficit thresholds and automatic expenditure and tax adjustments, other cantons only require a balanced budget in the medium term or set loosely defined escape clauses (Conference of the Cantonal Ministers of Finance 2012). Contrary to the US states, no cantonal court has the duty to supervise the budget rules. The enforcement in Switzerland may take place through sanction mechanisms and direct democracy instead (Schaltegger 2002).

Figure 2

Cantonal budget rules: stringency and year of introduction



Source: Own illustration based on data from Feld et al. (2013) and Conference of the Cantonal Ministers of Finance (2012).

The dates indicate the year the budget rule became effective. Major revisions are specified by a second date. The cantonal fiscal rules are classified slightly differently by other studies. Abbreviations: AG Aargau, AI Appenzell Inner-Rhodes, AR Appenzell Outer-Rhodes, BE Bern, BL Basel-County, BS Basel-City, FR Fribourg, GE Geneva, GL Glarus, GR Grisons, JU Jura, LU Lucerne, NE Neuchâtel, NW Nidwalden, OW Obwalden, SZ Schwyz, SG St. Gall, SH Schaffhausen, SO Solothurn, TG Thurgau, TI Ticino, UR Uri, VD Vaud, VS Valais, ZG Zug and ZH Zurich.

The rigid budget rule adopted in St. Gall is often referred to as a role model. Its constitution stipulates that the current budget has to be balanced (article 82). According to the State Administration Law *(Staatsverwaltungsgesetz)*, the constraint is assumed to be satisfied if the budget proposal reports a deficit below three percent of the simple tax revenue. Otherwise the tax rate (tax foot) has to be adjusted. Tax cuts are prohibited as long as the non-restricted equity is below 20 percent of the simple tax revenue. A deficit at the end of the year has to be debited in the budget proposal after the subsequent year unless non-restricted equity is available. The current budget also includes public investments below CHF five million and depreciations of investment projects above that threshold. Unlike St. Gall, Ticino has rather weak budget constraints that merely require the current budget to be balanced in the medium term.[4]

The large variation in cantonal fiscal regulations is exploited by Feld and Kirchgässner (2001, 2008) and Feld et al. (2013) in order to construct a stringency index. They assign an index value between zero and three according to the number of fulfilled requirements, which are: a strong link between budget planning and execution, a numeric deficit threshold and an automatic tax adjustment. Despite the prevalence of cantonal fiscal rules, all three requirements are only met by St. Gall and Fribourg, which have already been constrained since 1929 and 1960, respectively, and since 2008 by Basel-County. The budget rule of Ticino, among others, does not satisfy any requirement, thus an index value of zero is assigned (Figure 2).

All empirical investigations to date suggest that cantonal budget rules support fiscal discipline (Table 2). In an initial study Feld and Kirchgässner (2001) find a significant negative impact of their stringency index on public debt and deficits during the years 1986-97. This index is also employed by Schaltegger (2002) who draws a similar conclusion for an extended period (1980-98). In compliance with the previous results, Feld and Kirchgässner (2008) provide evidence that strong budget rules significantly reduce both cantonal deficits and cantonal and local deficits together. Since the coefficient of the stringency index is almost similar in both deficit equations, the authors conclude that the constraints have not led to a shift in cantonal deficits to the local level. While Feld, Kirchgässner and Schaltegger (2010) study cantonal revenues as dependent variables, their fiscal rule dummy remains insignificant in all equations. Krogstrup and Wälti (2008) examine whether previous findings are driven by voter preferences. By using data from the period 1955–99 they conclude that fiscal rules continue to significantly improve cantonal deficits. A somewhat different approach is pursued by Luechinger and Schaltegger (2013). Their results suggest that fiscal rules exhibit a significant negative impact on the probability of projected and realized cantonal deficits. In a related strand of literature Feld et al. (2013) investigate the main

[4] A detailed description of cantonal budget regulations is provided by Stauffer (2001) and a more recent overview by the Conference of the Cantonal Ministers of Finance (2012).

Table 2

Empirical studies on the effect of cantonal budget rules on fiscal discipline in Switzerland

Study	Cantons, period	Dependent variable (selection)	Fiscal rule	Support fiscal discipline*
Luechinger and Schaltegger (2013)	26 1984-2005	Probability of projected and realized cantonal deficit	Budget rule dummy and stringency index (Feld and Kirchgässner 2008)	YES
Feld, Kirchgässner and Schaltegger (2010)	26 1980-1998	State and local revenues Various revenue categories	Budget rule dummy	No significant effect
Krogstrup and Wälti (2008)	25 1955-1999	Cantonal budget balance	Budget rule dummy	YES
Feld and Kirchgässner (2008)	26 1980-1998	Cantonal deficit, cantonal and local deficits together, cantonal debt	Stringency index (Feld and Kirchgässner 2001)	YES
Schaltegger (2002)	26 1980-1998	Cantonal expenditure, revenue, debt and deficit	Stringency index (Feld and Kirchgässner 2001)	YES
Feld and Kirchgässner (2001)	26 1986-1997	Cantonal expenditure, revenue, debt and deficit	Stringency index	YES

* "YES" indicates that the empirical results suggest that fiscal rules significantly support fiscal discipline. Studies listed above may focus on further issues.

Source: The authors.

drivers of cantonal yield spreads. Their results indicate that stricter budget rules and the no-bailout regime established after the Leukerbad court decision in 2003 are both associated with lower cantonal yield spreads.

Germany

The current fiscal constitution of Germany is characterized by almost no individual tax autonomy for the states and and their 11,161 municipalities, strong and complex horizontal and vertical fiscal equalization schemes and an implicit bailout guarantee. The latter was approved by the German Constitutional Court in 1992 and 2006 under the condition that a state is not capable of reducing excessive indebtedness on its own. While a reform of the fiscal equalization system is required by 2020, the current design implies a marginal tax rate on revenue of close to 100 percent in most states (Feld and Schnellenbach 2013). Compared to the US and Switzerland, the German fiscal framework seems to induce particularly strong incentives for unsound sub-national finances.

State balanced budget rules

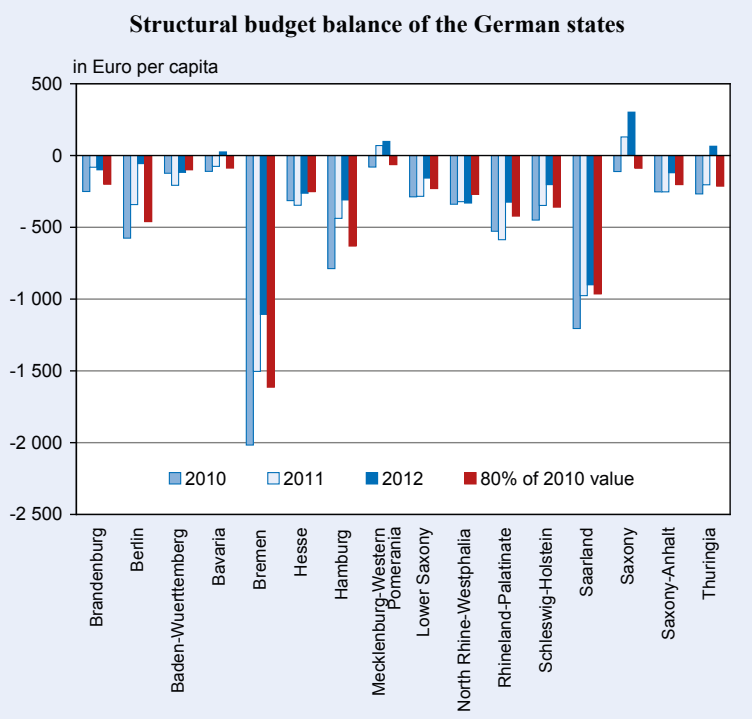
German states have been constrained by some kind of balanced budget rule for a long time. Since a softening of the federal budget rule in 1969, most state laws allow for deviations from a balanced budget in case of spending on public investment, extraordinary needs and disturbances of the general macroeconomic equilibrium. The escape clauses have been used widely since their terms are not clearly defined and public special funds are not included. In line with this observation, a recent study reveals that only Bavaria, Hesse, Saxony and probably Baden-Wuerttemberg pursued a sustainable fiscal policy between 1950 and 2011 (Burret, Feld and Köhler 2013).

The deterioration of public finances and the persistent shortcomings of the budget rules led to the adoption of a new budget rule in the German Basic Law (*Grundgesetz*) in 2009 (Article 109 and 115). The design of the so-called debt brake is based on the Swiss debt brake. Besides provisions for the federal government, the rule requires the state budgets to be at least structurally balanced from 2020 onwards. Cyclical deficits are only allowed if the state enshrines the rule into its own legal framework and treats cyclical

influences symmetrically. The states may implement escape clauses for natural disasters or extraordinary situations that are beyond the government's control and significantly affect government finances. So far a new budget rule has been incorporated into the constitution of six states and into the Budget Laws of another four states. Nevertheless, most of these provisions are still in conflict with the German Basic Law. While states' budgetary autonomy impedes a federal enforcement, a newly established independent fiscal council (Beirat beim Stabilitätsrat) has the duty to supervise compliance and unveil unsustainable developments. In order to achieve a structural budget balance by 2020 five highly indebted states receive consolidation payments totalling EUR 800 million per year. To be eligible Berlin, Bremen, Saarland, Saxony-Anhalt and Schleswig-Holstein have to reduce their structural deficit of 2010 by ten percent each year.

Despite some loopholes, the wording of the German Basic Law appears well defined and rigid. While most state budget rules do not become fully effective before 2020, the transition period has already been successful. Descriptive statistics reveal considerable consolidation progress in all states on average. In 2012 Bavaria, Mecklenburg-Western Pomerania, Saxony and Thuringia have already achieved structural budget balances, while Brandenburg, Saxony-Anhalt and Berlin have come close to striking a structural balance (Figure 3). Only Baden-Wuerttemberg, Hesse and North Rhine-Westphalia have not managed to reduce their structural deficits by a tenth each year since 2010. The situation in Saarland and Bremen seems particularly worrisome since their consolidation requirements are still substantial. The two states risk a reversal of their annual consolidation receipts of EUR 260 million (Saarland) and 300 million (Bremen) if they violate their adjustment path. However, Bremen has already reduced its structural deficit significantly.

Figure 3



The structural deficit is calculated according to the method laid down in the Administrative Agreements (Verwaltungsvereinbarungen) for the states receiving consolidation assistance.

Source: Own illustration based on data from Institut der deutschen Wirtschaft Köln (2013a, 2013b).

Conclusion

In all three mature federal states most sub-national governments are constrained by self-imposed budget rules. While the rigidity of fiscal rules varies crucially across the US states and Swiss cantons, almost all German states are currently operating under weak budgetary restrictions that have not proved very effective. However, from 2020 onwards German Basic Law sets stronger requirements for new state budget rules. By then the variety of sub-national fiscal rules is likely to be far smaller in Germany than in the US or Switzerland.

Empirical evidence on the Swiss cantons and US states suggests that strong budget rules exert a disciplinary influence on sub-national fiscal policies. The results are particularly robust and conclusive in the case of Switzerland, which is consistent with the observation that Swiss cantons have more stringent budget rules than the US states. The success of the cantonal constraints provides initial indications of the prospective effectiveness of the new fiscal rule in Germany for which Switzerland served as a role model. However, an

extrapolation of the Swiss results to Germany might be misleading because the rules are integrated into a more decentralized fiscal framework than in Germany. Until the new state rule becomes legally binding, progress depends crucially on the willingness of the German states to consolidate. The reluctance of several states puts the credibility of the German debt brake at risk.

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