

Debt containment rules in the era of true and fair accounting: Fiscal leeway between hammer and anvil

Pascal Horni, Nadia Yerly, Gabriel Trinkler

*Institute of Public Management, Center for Public Sector Financial Management
Zurich University of Applied Sciences (ZHAW)*

Deviations from modern public sector accounting principles and standards are potentially politically motivated. To avoid jeopardizing adherence to the institutionalized self-constraining debt brake mechanisms, financial flexibility is aimed to be preserved in the institutional framework governing public finances. This paper elaborates and discusses potential tensions between debt containment rules and the application of true and fair accounting at the example of three Swiss cantons by building on case-based empirical evidence, which was gained out of semi-structured interviews.

Keywords: Fiscal Rules, Accounting, IPSAS, Political Economy

1 Introduction

Over the last decades, fiscal deficits and public debt among OECD countries increased drastically. In this context, instruments fostering fiscal discipline have been promoted to restore the financial situation and to ensure sustainability in public spending policy in order to preserve future service delivery capacity (IMF, 2009). The theoretical fundamentals justifying fiscal discipline have been originally developed by public choice scholars such as Buchanan (1958, 1964, 1991) with his well-known golden rule of public finance or Tollison and Wagner (1987), who advocated fiscal/budget rules in order to contain government size. While most literature focuses on fiscal performance in the presence of fiscal rules (Yerly, 2013; Alesina, Hausmann, Hommes & Stein, 1999) or the analysis of different design options (Yerly, 2013; Hallerberg, Strauch & von Hagen, 2007), only few authors consider the accounting dimension and technical aspects despite the fact that fiscal rules (i.e. debt brakes) usually build on accrual accounting information (Bergmann, 2012). Yet, this connection was subject of research concerned with the rise of creative accounting and fiscal gimmickry in the presence of fiscal rules (Von Hagen & Wolff, 2006; Koen & van den Noord, 2005; Milesi-Ferretti, 2003), which was inspired by political economy literature advocating that politicians and public decision makers have a strong incentive to embellish budget outcomes (Alesina & Perotti, 1995). Following this avenue of research, this paper serves the illumination of the connection between debt brake mechanisms and the adoption of modern public sector accounting standards and principles in the interface of political economy in the Swiss context. Therefore, the first part of this paper is dedicated to the derivation of a literature based conceptual framework taking an integrated view (Chapters 2 & 3), on which basis in the second part, three cases

from Switzerland will be examined and discussed from a technical accounting perspective (Chapters 4 & 5).

2 Foundations and theoretical background

Emergence of fiscal rules and debt brakes is strongly coined by the Public Choice view, following which debt finance induces fiscal illusion, because usually government imperfectly discounts the future tax obligations resulting from the debt financing (Buchanan, 1997: 121). Nevertheless, based on the economic argument of intergenerational equity stipulated by Musgrave (1959, 1963), the cost related to capital investment can be shared among the different generations of users. In that case, government is allowed to borrow, but solely to finance capital investment so that the debt has a counter-part in the government's assets and its reimbursement follows the so-called pay-as-you-use principle. The principle derives from the consideration that assets create not only a benefit for the current generation, but also for the succeeding ones. Therefore, it is argued to be legitimate to charge future generations their respective part for using and benefiting from the assets.

Fiscal rules or debt brakes have a long history in Switzerland and the pioneering canton of St. Gallen introduced its debt containment mechanism already in 1929 as part of its fiscal law. Over the past three decades the majority of the Swiss cantons have reformed their fiscal legislations and introduced or revised the underlying debt brake mechanisms (Yerly, 2013). Thereby the cantons are autonomous and individually elaborate their respective legislation to govern public spending. The cantons have a high degree of autonomy regarding the introduction of fiscal rules, as well as regarding the implementation of accounting practices. However, the cantonal fiscal discipline regimes are framed by horizontal organization and the Conference of Cantonal Finance Directors (CCFD) issued recommendations with regard to fiscal discipline and accounting. In its handbook, published in 2008, the CCFD stipulated new accounting practices (Harmonized Accounting Modell 2 (HAM2)) as well as guidance for the elaboration of fiscal laws (CCFD, 2017). In particular, the HAM2 contains modern public sector accounting standards, which emerged subsequently to the stronger demand for accurate financial information for accountability and decision-making purpose as part of the New Public Management reform wave and the efforts undertaken to align public sector accounting with private sector practice (Fuchs, Bergmann & Brusca, 2017). Alignment of public sector accounting to private sector standards is also promoted by the International Public Sector Accounting Standards (IPSAS) (IPSASB, 2016). While few cantons (e.g. Zurich, Lucerne and Geneva) already implemented IPSAS, the majority adopted or will adopt HAM2, which itself is based on IPSAS and could therefore be seen as a lean version of IPSAS (Fuchs, Bergmann & Brusca, 2017). However, this Swiss tailor-made adoption of IPSAS is not as strict as the standard it originates from, since it only has the

characteristic of a recommendation and thus leaves a lot of room for choices in the application.

Following the argument advocated in political economy literature that politicians and public decision makers are driven by the axioms of maximization of votes and competition for control (Downs, 1957), flexibility in the application of accounting standards and principles as set out in the HAM2 or in the IPSAS is prone to be used opportunistically in the presence of fiscal rules. According to Ingram's (1984) notion, government accounting practices develop under the influence of politicians and hence are subject of electoral considerations. Since government accounting and reporting traditionally serves the purpose of accountability and addresses citizens and voters, the financial position has a signaling effect and serves as a proxy for political management capabilities, which affects, according to Brusca & Montesinos' (2006) analysis, the outcome of local elections in Spain. Reischmann (2016) demonstrated in his panel data analysis that following the election cycle, governments applied measures of creative accounting to gloss over deficit figures by using so-called stock-flow adjustments, which are measured by using "the difference between budget deficits and the change in public debt" as suggested by Milesi-Feretti (2003). The paper of Von Hagen & Wolff (2006) applies the same method to measure creative accounting and provides evidence that the implementation of fiscal rules in the European Union (excessive deficit procedure and the stability and growth pact) have induced measures of creative accounting to improve deficit figures. While there exist a number of other studies dealing with creative measures to sugarcoat government finances and creating fiscal illusion (i.e. Irwin, 2012 or Koen & van den Noord, 2005), this paper focuses on the impact of deviations explicitly made from modern public sector accounting principles and standards associated with IPSAS or HAM2 implementation on the debt brake's biting.

3 Conceptual framework

Since in Switzerland the cantons self-elaborate their fiscal rules and have some flexibility with regard to the adoption and application of public sector accounting standards and principles, the design of the institutional framework governing public finances has several potential outcomes. The illustration beneath summarizes these possible outcomes, which will be further elaborated in the subsequent paragraphs and on which basis a hypothesis for the empirical part of this paper (Chapter 5) will be derived.

		Institutional design of debt brake mechanisms	
		Less strict	Strict
Adoption and adherence to accounting standards and principles	Major deviations and less strict accounting framework	Loosely governed, less true and fair public finances	Strictly governed, less true and fair public finances
	Minor deviations and strict accounting framework	Loosely governed true and fair public finances	Tight, True and Fair public finances

Figure 1: Outcome matrix of the institutional framework governing public finances (Source: the authors)

A rigid institutional framework consisting of strict fiscal rules and an accounting framework being fully compliant with modern public sector accounting principles and standards

(i.e. HRM2 / IPSAS) fostering a true and fair view is expected to be seen not that often in practice, as this combination does not leave any room for politically motivated adjustments. However, in order to reach an annual result compliant to the rules set out as part of the debt brake mechanism and to avoid constraining public spending policy to the extent of austerity, preservation of leeway for fiscal manoeuvres apart from gimmickry is likely to be favoured from a political economy perspective. Therefore the combination of a strict debt brake mechanism and an accounting policy not giving rise to any room of interpretation and choice is deemed as the least preferred institutional design option, which could be described as a tight corset and will be referred to as “tight, true and fair” in the subsequent paragraphs of this paper.

Some guideline for the design of the institutional framework is provided in the exemplary fiscal law contained in the HAM2. It proposes stipulations with regard to both – the implementation of a debt brake and accounting and reporting policies (CCFD, 2017). Debt brake mechanisms, as implemented in most Swiss cantons in form of a balanced budget rule, could range from less strict to strict depending on the architecture chosen (Yerly, 2013). While there exists a fine-tuned index to measure strictness of fiscal rules (see Yerly, 2013), such a method for the measurement of the accounting and reporting dimension of the institutional framework does not exist yet.

Even the strictest debt brake, which is institutionalized in Switzerland in the canton of St. Gallen according to the scale developed by Yerly (2013), has a clause to loosen the tight corset. In the canton of St. Gallen it is possible to cover yearly expenses by earmarking funds from available equity in the budget process, which basically implies that a deficit can be budgeted as

long as sufficient equity is available (StVG § 61) (Canton St. Gallen, 1994). In consequence, a budget with a deficit could still be implemented without compromising compliance with the debt brake. Hence, the debt brake of the canton of St. Gallen comes strictly into force, when the freely available equity is insufficient and a deficit could no longer be absorbed. Therefore, the freely available equity serves as a rainy day fund, which however could be misused by politicians to present a debt brake compliant budget without constraining public spending too much and thus leaving potential activation of the debt brake to future generations. In the absence of such a clause, when equity cannot be accessed in the budgeting process and used to cover expenses, a debt brake is armed ultimately without any extra criteria. The example of the canton of St. Gallen makes the broader scope of fiscal rules apparent and emphasises the need for an elaboration from a micro-level perspective considering the accounting dimension. In particular, this paper aims to analyse potential tensions between true and fair accounting and debt containment rules and to elaborate whether in practice the institutional design outcome option “tight, true and fair” is considered as a feasible option, or whether it is repelled.

4 Research Method

To investigate whether “tight, true and fair” is not chosen in practice, as hypothetically formulated previously, the last part of this paper is dedicated to a contextual discussion in which three cantonal examples will be illuminated with regard to deviations made from accounting standards and principles. It is therefore a preliminary attempt to assess the vertical axis of the institutional framework’s outcome matrix (see figure 1), following a qualitative research approach. In analysing this topic, empirical evidence gained out of semi-structured interviews with director level staff from cantonal finance administrations, as well as relevant policy documents will be considered. The semi-structured interviews were conducted by following a prepared set of questions, which served as a guideline during the course of the interview. However, the sequence and the conversation in general were kept open and followed an explorative approach. The applied form of explorative questioning allowed to respond immediately to the answers given and to deepen certain issues. A transcript of each interview was created and sent to the interviewee for confirmation purpose and in order to provide the opportunity to correct or complement statements to avoid misinterpretation. Based on the interview transcripts and policy documents, three possible areas of tension between deviations from accounting standards and the institutionalized debt brakes could be identified.

5 True and Fair Accounting and Fiscal Leeway at the example of three Swiss Cantons

Similar to a previous publication of the authors (Yerly, Trinkler & Horni, 2017), this chapter serves the contextual discussion and comparative analysis of the insights gained out of the three semi-structured interviews carried out with

director level staff of the finance administrations of the cantons of Lucerne, St. Gallen and Zurich.¹ The insights are discussed and compared on a clustered basis, following the main areas of existing tensions between modern government accounting and fiscal rules, which were identified as part of the explorative analysis building on the interview transcripts, cantonal policy documents and existing literature.

5.1 Consolidation Scope

According to IPSAS, the scope of consolidation of public sector financial statements is determined by the criteria of control, which is given under the circumstances that the involvement of a public sector entity in another entity is beneficial financially or non-financially and is accompanied by the ability to execute power given by existing rights to direct relevant activities of that entity (IPSASB, 2016). This is in particular the case if the public sector has ownership interest of more than 50 percent. In consideration of that, the cantons would be obliged to consolidate all state owned enterprises (SOE), regardless of whether the activities of the controlled entity are dissimilar (IPSAS 35.8). Notwithstanding, the cantons do deviate to the prescriptions outset by IPSAS in practice. None of the three cantons being subject of this contextual discussion for instance consolidates its cantonal bank², thus defining the consolidation scope more narrowly. In the canton of Zurich, consolidation scope is regulated by law (CRG § 54) (Canton Zurich, 2006) and the consolidation of an entity depends on the condition whether material government funding is provided for the operations of that entity, whereby materiality is defined as a threshold of CHF 20 million (RLV § 28) (Canton Zurich, 2007). With this legislation the canton of Zurich explicitly excludes government business enterprises (GBE)³ from consolidation, even when they are subject of control and owned by the government. While according to the law (FLG § 42) (Canton Lucerne, 2010), consolidation in the canton of Lucerne follows the principle of control as defined in IPSAS, exceptions can be made if transparency, clarity or information value of the consolidated financial statements would be constrained. In consideration of those criteria, the canton of Lucerne decided not to consolidate its cantonal bank, as a completely distorted picture would result. Such a decision is within the jurisdiction of the legislative and the consolidation scope is therefore deemed as more loosely defined compared to the canton of Zurich and could be changed more easily. Since the can-

¹ Interviews were conducted with Hansjörg Kaufmann (Canton Lucerne), Flavio Büsser (Canton St. Gallen) and Basilius Scheidegger (Canton Zurich).

² Cantonal Banks are majority owned by the cantons and run an ordinary banking business. They differ to other commercial banks with regard to their foundation, which was driven by regional-economic considerations in times of a credit squeeze during industrialization in the 19th century

³ As defined in IPSAS 1 main characteristic of GBE's is that in the normal course of its business, goods and services to other entities (or individuals) are sold at a profit or full cost recovery and therefore GBE's are not reliant on continuing government funding.

tonal fiscal rules build on accounting information, their scope depends on the composition of the public sector financial statement and hence is coined by the consolidation scope defined in the accounting policy. In view of the debt brake, determination of consolidation scope could be used as an opportunistic gimmick to exclude entities adversely impacting compliance to it. According to Irwin (2012), not counting government entities and their liabilities is a common way to reduce the reported debt figure in the Euro zone. With regard to the exemptions made in the three analysed cantons and their deviation from IPSAS 35, it becomes evident that they are clearly not politically motivated to out-scope liabilities in order to undergo the institutionalized debt brakes. Moreover, these deviations are attributable to greater clarity and ease of understanding of the financial statements and for practicability issues. Nevertheless, this does underpin how deviations to accounting standards and principles could undermine the existing fiscal rules and evade the institutional design option of tight true and fair public finances.

5.2 Recognition of Assets

Recognition of assets and in particular determination of the capitalisation limit was identified as another area of diverging accounting practices, which could possibly affect the triggering of debt brakes. Following the basic principles of accounting, assets acquired in the accounting period below the defined capitalisation threshold are recognized as expense and are therefore reported in the income statement. As in all three cantons being subject of this research, the implemented debt brakes explicitly (Canton Lucerne, 2010; Canton Zurich, 2006) or implicitly (Canton St. Gallen, 1994)⁴ target the income statement or specific line items of it and aim to have an equilibrium of income and expense over a defined time period, recognition practice of fixed and immaterial assets impacts the debt brake's biting. With regard to recognition practice, the three cantons have defined different capitalisation thresholds, as the figure below illustrates.

⁴ Subject of equilibrium of the canton St. Gallen's debt brake is the budgeted income statement, which shall not contain a surplus in expenses larger than three percent of the simple tax income (StVG § 61). Any surplus of expenses resulting from budget execution has to be covered either through freely available equity or carried forward to the next period (StVG § 64).

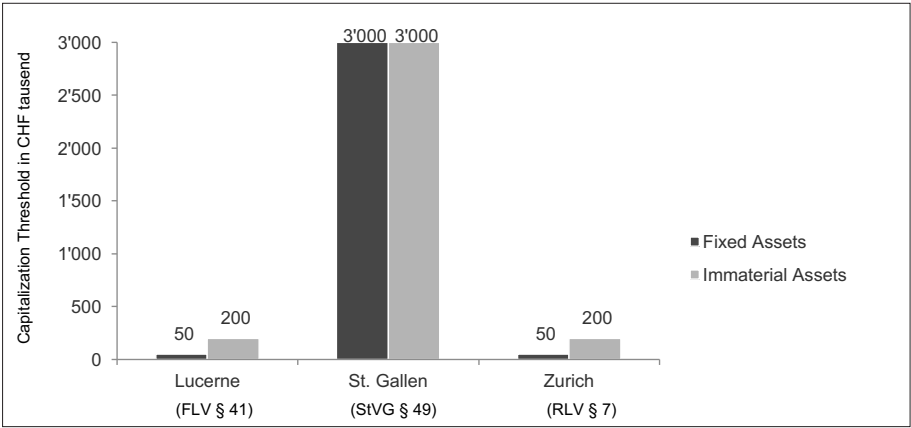


Figure 2: Capitalisation Thresholds of the cantons according to their legislation
Source: the authors

If the capitalisation threshold is high, as in the canton of St. Gallen, any acquisition of fixed or immaterial assets below the threshold reflects an increase in expenses in the current accounting period, despite the fact that useful life of that asset is longer and hence costs for acquisition should be spread over the period of useful life following the accrual accounting rationale. What the applied accounting practice in the canton of St. Gallen with its CHF 3 million capitalisation threshold reflects, is basically just a contemporaneous activation and one-off depreciation. This practice might be against the criteria of intergenerational fairness, which is at the heart of the rationale of fiscal rules (Yerly, 2013), and does not comply with the True and Fair view principle, but does bottom-line not necessarily ease adherence to the debt brake – if not vice versa. While capitalised acquisitions and their respective accompanying expenses in form of depreciation in forthcoming fiscal years are spread over time and the period, in which fiscal equilibrium has to be reached according to the debt brake, non-capitalisation charges the income statement immediately leading to more volatile expenses, which needs to be considered in fiscal planning. Meanwhile, the canton of St. Gallen's recognition practice is not ultimately driven by considerations aiming to preserve financial flexibility in presence of the debt brake and can be deemed as defensive.

5.3 Recognition of Changes in Fair Value

The third area identified as part of this explorative research, which could be an obstacle towards tight, true and fair public finances and could serve as an adjusting screw to prevent fiscal policy being corseted too tightly by the established institutional framework, is the treatment of changes in fair value. Impairment gains and losses are recognized in the income statement and hence impact achievement of fiscal equilibrium. The canton Lucerne does, unlike prescribed by IPSAS 16.44 (Investment Property), not reflect changes in fair value of assets held for investment purpose in its income statement and

rather recognizes it in equity in a revaluation account. In consideration that revaluation gains are not realised, this practice is prudent. However, non-recognition of revaluation losses means that once the loss is realised, there is a one-off deficit leading to additional expenses in one fiscal year, which could turn the scales and trigger the debt brake. As only the operative result is subject of the canton of Lucerne's debt brake and realisation of revaluation gains and losses from assets held for investment purpose are likely to be deemed as an extraordinary result, the applied accounting practice does not pose an inconsistency in the interplay with the debt brake. However, the exclusion of extraordinary results from the debt brake's sphere could be highly advantageous from a fiscal-policy perspective and prevent the debt brake's biting.

The recommendations of the CCFD entailed in the HAM2 regarding the treatment of changes in fair value of assets held for investment purpose, which could potentially be sold without constraining fulfilment of public services, stipulate the recognition of revaluation gains and losses in surplus or deficit, like the IPSAS. They further explicitly state that changes in fair value have to be deemed to the extraordinary result in the income statement (CCFD, 2017). In that view, it is crucial to know whether the debt brake targets the operating result or the extraordinary one.

6 Conclusion

All the previously mentioned examples reveal that deviations from accounting standards and principles affect the debt brake. A discussion on fiscal rules is therefore deemed to be of minor use if the accounting dimension is not included. Legislation with regard to accounting and preparation of financial statements is therefore recommended to be considered in the (re-)engineering process of debt brake mechanisms.

Prudence and feasibility seem to be the superficial motives for deviations to modern accounting principles and standards, rather than the maintenance of financial flexibility to hedge against the threat of austerity measures that could be a consequence of the violation of the debt brake. Nevertheless, it cannot be excluded that political economy considerations did not influence the establishment of the current institutional framework containing clauses and room for manoeuvres to different extent, but influencing the timing of the triggering of the debt brake. The assumption derived from political economy literature and the conceptual argument put forward as part of this paper, that tight, true and fair public finances are the least preferred outcome option of the institutional framework's design, is therefore recommended to be subject of further research. In particular does this article underpin the connection of accounting standard application and fiscal rules and shows the need for a holistic view and more integrated research including technical accounting aspects.

Zusammenfassung

Abweichungen gegenüber den heutigen Rechnungslegungsstandards und -Prinzipien des öffentlichen Gemeinwesens sind potentiell politisch motiviert. Um die Einhaltung der selbst auferlegten Schuldenbremsen nicht zu gefährden, ist man versucht finanzpolitischen Spielraum zu bewahren und den institutionellen Rahmen zur Steuerung öffentlicher Finanzen entsprechend zu gestalten und auszurichten. Dieser Beitrag untersucht und diskutiert mögliche Spannungsfelder zwischen Schuldenbremse-Regelungen und der Anwendung von modernen Rechnungslegungsnormen am Beispiel von drei Kantonen.

Schlagworte: Schuldenbremsen, Rechnungslegung, IPSAS, Politische Ökonomie

Résumé

Le fait de contrevenir aux principes et aux normes comptables actuelles du secteur public, est potentiellement motivé politiquement. Pour éviter d'enfreindre les règles institutionnelles de frein à l'endettement, il peut être préférable de garder une flexibilité financière dans la gestion publique à l'intérieur d'un cadre institutionnel donné. Ce papier élabore et discute les tensions potentielles entre les règles contraignant les finances et l'application du principe «true and fair» en comptabilité publique. Basée sur les cas de trois cantons Suisses, l'analyse empirique a été menée en suivant la méthode dite «semi-structurée» (qualitative).

Mots-clés: frein à l'endettement, tenue des comptes publics, IPSAS, économie politique

Literature

- Alesina, A., & Perotti, R. (1995). The Political Economy of Budget Deficits. *IMF Staff Papers*, 42, 1–31.
- Alesina, A., Hausmann, R., Hommes, R., & Stein, E. (1999). Budget institutions and fiscal performance in Latin America. *Journal of Development Economics*, 59(2), 253–273.
- Bergmann, A. (2012). The influence of the nature of government accounting and reporting in decision-making: evidence from Switzerland. *Public Money & Management*, 32:1, 15–20.
- Brusca, I., & Montesinos, V. (2006). Are Citizens Significant Users of Government Financial Information? *Public Money & Management*, 26(4), 205–209.
- Buchanan, J. M. (1958). *Public Principles of Public Debt: A Defense and Restatement*. Homewood, Illinois: Richard D. Irwin.
- Buchanan, J. M. (1964). Public debt, cost theory, and the fiscal illusion. In: J. M. Ferguson (Ed.): *Public Debt and Future Generations*. Chapel Hill: University of North Carolina Press.
- Buchanan, J. M. (1991). *Constitutional Economics*. Oxford, Cambridge Massachusetts: Basil Blackwell.
- Buchanan, J. M. (1997). The balanced budget amendment: Clarifying the arguments. *Public Choice*, 90, 117–138.
- Canton Lucerne (2010). Gesetz über die Steuerung der Finanzen und Leistungen (FLG) vom 13. September 2010 (Stand 1. August 2013), SRL 600.
- Canton Lucerne (2016). Verordnung zum Gesetz über die Steuerung der Finanzen und Leistungen (FLV) vom 17. Dezember 2010 (Stand 1. Januar 2016), SRL 600a.
- Canton St. Gallen (1994). Staatsverwaltungsgesetz (StVG) vom 16. Juni 1994 (Stand 1. Juni 2016). sGS 140.1.
- Canton St. Gallen (1996). Finanzhaushaltsverordnung vom 17. Dezember 1996 (Stand 30. Oktober 2007). 831.1.
- Canton Zurich (2006). Gesetz über Controlling und Rechnungslegung (CRG) vom 9. Januar 2006. LS 611.
- Canton Zurich (2007). Rechnungslegungsverordnung (RLV) vom 29. August 2007. LS 611.1.
- Conference of the Cantonal Finance Directors [CCFD] (2017). *Handbuch Harmonisiertes Rechnungslegungsmodell für die Kantone und Gemeinden HRM2*. Bern: FDK-CDF. URL: http://www.srs-csccp.ch/sites/default/files/pages/2017-06-02_handbuch_hrm2_-_2._auflage_5.pdf
- Downs, A. (1957). An economic theory of political action in a democracy. *Journal of Political Economy*, 65(2), 135–150.
- Fuchs, S., Bergmann, A., & Brusca, I. (2017). Using Financial Reporting for Decision Making as a Measure Towards Resilient Government Finances: The Case of Switzerland. *Lex localis - Journal of Local Self-Government*, 15(1), 133–153.
- Hallerberg, M., Strauch, R., & von Hagen, J. (2007). The design of fiscal rules and forms of governance in European Union countries. *European Journal of Political Economy*, 23(2), 338–359.
- Ingram, R. W. (1984). Economic Incentives and the Choice of State Government Accounting Practices. *Journal of Accounting Research*, 22(1), 126–144.

International Monetary Fund [IMF] (2009). Fiscal rules – Anchoring expectations for sustainable public finances. Washington, D.C.: International Monetary Fund, Fiscal Affairs Department.

International Public Sector Accounting Standards Board [IPSASB] (2016). Handbook of International Public Sector Accounting Pronouncements. New York: International Federation of Accountants [IFAC].

Irwin, T. C. (2012). Accounting Devices and Fiscal Illusions. Washington, D.C.: International Monetary Fund, Fiscal Affairs Department.

Koen, V., & van den Noord, P. (2005). Fiscal Gimmickry in Europe: One-Off Measures and Creative Accounting, OECD Economics Department Working Papers, No. 417. Paris: OECD Publishing.

Milesi-Ferretti, G. M. (2003). Good, bad or ugly? On the effects of fiscal rules with creative accounting. *Journal of Public Economics*, 88, 377–394.

Musgrave, R. A. (1959). *The theory of public finance: A study in public economy*. New York: McGraw-Hill.

Musgrave, R. A. (1963). Estimating the distribution of the tax burden. *Review of Income and Wealth*, 10, 186–219.

Reischmann, M. (2016). Creative accounting and electoral motives: Evidence from OECD countries. *Journal of Comparative Economics*, 44, 243–257.

Tollison, R. D., & Wagner, R. E. (1987). Balanced budget and beyond. In J. M. Buchanan, C. K. Rowley, R. D. Tollison (Eds.): *Deficits*, 374–390. Oxford, New York: Basil Blackwell.

Von Hagen, J., & Wolff, G. B. (2006). What do deficits tell us about debt? Empirical evidence on creative accounting with fiscal rules in the EU. *Journal of Banking & Finance*, 30(12), 3259–3279.

Yerly, N. (2013). *The political economy of budget rules in the twenty-six Swiss Cantons: institutional analysis, preferences and performances*, PhD-Thesis presented to the Faculty of Economics and Social Sciences, University of Fribourg.

Yerly, N., Trinkler, G., & Horni, P. (2017). Rechnungslegungsnormen und Schuldenbremsen in den Schweizer Kantonen: Komplementär oder konkurrierend? *Expert Focus*, 8, 59–63.