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Fiscal Consolidation Across
Government Levels - Part 2.
Fiscal Rules for Sub-central
Governments, Update
of the Institutional Indicator

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**FISCAL CONSOLIDATION ACROSS GOVERNMENT LEVELS
PART 2: FISCAL RULES FOR SUB-CENTRAL GOVERNMENTS,
UPDATE OF THE INSTITUTIONAL INDICATOR**

ECONOMICS DEPARTMENT WORKING PAPERS No. 1071

by Kaja Fredriksen

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ABSTRACT / RÉSUMÉ

**Fiscal consolidation across government levels
Part 2: Fiscal rules for sub-central governments, update of the institutional indicator**

Fiscal rules that constrain sub-central government (SCG) budgeting are very common across the OECD, but there are substantial cross-country differences in their implementation and impact. This paper presents the 2011 update of the fiscal rules database established in 2005. As in 2005, budget balance objectives are the most common form of rule along with borrowing constraints, while limits on SCG expenditure are rare. Because of trade-offs between objectives that fiscal rules must cater to, cross-country variation in the value of the composite indicator is low. There is, however, much more variation in country scores for the individual objectives of fiscal rules. Despite the increased focus on sustainability in public finances over recent years, indicator values have changed little since 2005 except for a few countries. This suggests that the sub-central fiscal rules framework was in place well before the recent crisis struck.

JEL classification: H11; H61; H74; H77

Keywords: fiscal rules; fiscal federalism; budget systems

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**Assainissement budgétaire aux différents niveaux d'administration
Partie 2: Les règles budgétaires s'appliquant aux collectivités territoriales :
mise à jour de l'indicateur institutionnel**

Les règles budgétaires encadrant l'établissement des budgets des administrations infranationales sont très courantes dans la zone de l'OCDE, mais leur mise en œuvre et leur impact diffèrent grandement selon les pays. Le présent rapport expose la mise à jour 2012 de la base de données sur les règles budgétaires établie en 2005. En 2005, les règles les plus couramment utilisées sont les obligations d'équilibre budgétaire et la limitation des emprunts, tandis que la limitation des dépenses des collectivités locales est rare. En raison d'arbitrages entre les différents objectifs des règles budgétaires, la valeur de l'indicateur composite varie peu d'un pays à l'autre. Les écarts sont toutefois beaucoup plus marqués dans les notes nationales attribuées aux différents objectifs des règles budgétaires. Malgré l'importance accrue accordée, ces dernières années, à la viabilité des finances publiques, les valeurs de l'indicateur ne varient guère depuis 2005, excepté pour un petit nombre de pays. Cela donne à penser que le cadre de règles budgétaires applicable aux collectivités territoriales était en place bien avant la récente crise.

Classification JEL ; H11 ; H61 ; H74 ; H77

Mots clés : règles budgétaires ; fédéralisme budgétaire ; systèmes budgétaires

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**FISCAL CONSOLIDATION ACROSS GOVERNMENT LEVELS
PART 2: FISCAL RULES FOR SUB-CENTRAL GOVERNMENTS, UPDATE OF THE
INSTITUTIONAL INDICATOR**

by

Kaja Fredriksen¹

1. Introduction

1. The potential role of rules and institutions in fostering fiscal sustainability has received increased attention in recent years. The economic and financial crisis led to larger deficits stemming from the automatic stabilisers and stimulus programmes that came on top of a structural upward trend in public spending. While local government deficits and debt have risen less than at the central level, local finances were also affected by the crisis. Moreover, regardless of the government level at which the current problems are located, local governments are likely to share in the effort of general government fiscal consolidation. Institutional mechanisms such as fiscal rules and budgeting procedures can act against incentives to engage in inappropriate budgetary behaviour and thus underpin consolidation efforts.

2. Fiscal rules that constrain sub-central government (SCG) budgeting are very common across the OECD. However, the rules differ as does their implementation. In order to map out the state of SCG fiscal rules, the OECD constructed a sub-central fiscal rules indicator in 2005, based on a questionnaire collecting information about budget balance rules, expenditure limits, tax limits and borrowing constraints (Sutherland, *et al.*, 2006). The final indicator value depends on how the rules are imposed, the surrounding system of checks, balances and sanctions as well as any escape clauses. Because policymakers pursue a variety of sometimes conflicting objectives, the SCG rule framework is assessed according to four dimensions: Achieving debt and deficit sustainability, constraining expenditure growth, assuring allocative efficiency and dealing with shocks. To up-date the SCG fiscal rules indicator, a similar questionnaire was sent out in 2011. This paper presents the results.

3. The main insights from the 2011 update are:

- SCG rules are common. All lower-level governments in the sample are subject to some form of budgeting constraint. However, the exact rules and how they are set up and implemented vary across countries.

1. The author was seconded from the Norwegian Ministry of Finance to the OECD Economics Department during the time of writing this paper. The paper benefited from comments and suggestions by Hansjörg Blöchliger, Jorgen Elmeskov, Peter Hoeller and Jean-Luc Schneider, various delegates of the Fiscal Federalism Network and the participants of an OECD seminar to whom this paper was presented. Special thanks go to Douglas Sutherland, to Deborah Bloch and Chantal Nicq for statistical help, and to Susan Gascard and Celia Rutkoski for excellent editorial support.

- The most common fiscal rule is the budget balance requirement. In most cases, it is an annual objective and the possibility to carry over deficits to be off-set in subsequent budgeting years – cyclically-adjusted deficit rule – is rare. Cyclically-adjusted deficit rules could, however, reconcile long-term sustainability with short-term flexibility, under the condition that they are credible.
- Most SCGs also face constraints on their ability to borrow. These constraints often discriminate between current and capital spending (so-called golden rule) which creates distortions.
- Limits on SCG spending are rare which must be seen in connection with the politically sensitive nature of local spending since SCGs are often in charge of providing education and health care services.
- Taxation limits are more common than expenditure limits, although the OECD tax autonomy indicator shows that many SCGs still have substantial discretionary power over tax rates, though seldom over the tax base.
- In many countries, monitoring and reporting of sub-central fiscal performance is poor and sanctions are not always credible or effective.
- Scores on the overall composite indicator do not vary much across countries reflecting the trade-offs between the multiple objectives of fiscal rules. On average, the current fiscal rules appear to be more tuned towards the objective of allocative efficiency. The cross-country variation is, however, large for the four sub-indicators.
- The OECD-wide average fiscal rule indicator has changed little between 2005 and 2011. Despite some changes at the individual country level, the fiscal rules framework appears to have been in place well before the crisis struck.

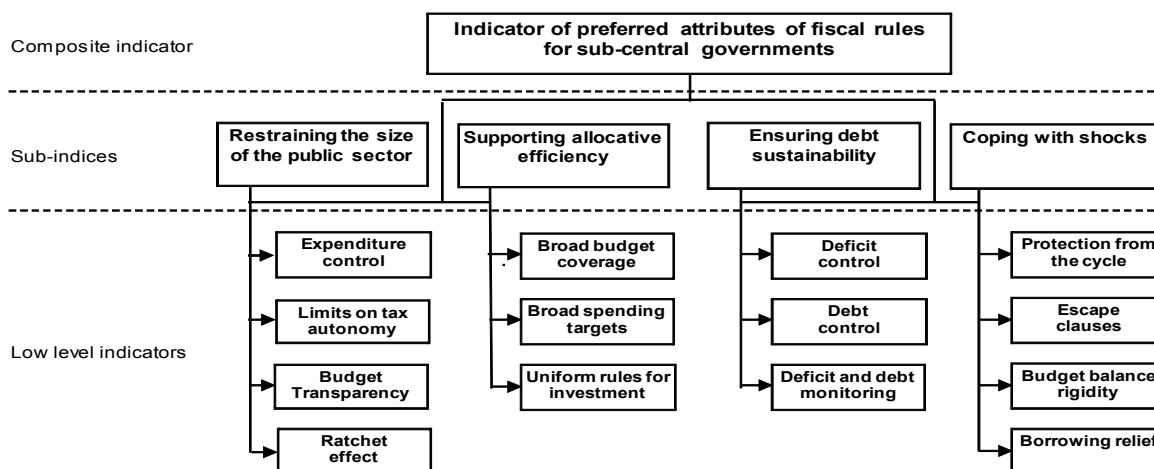
4. The paper is organised as follows. Section 2 gives a brief overview of the theoretical reasoning behind the construction of the indicator. A detailed explanation of the aggregation method is found in Sutherland *et al.* (2006). Section 3 presents the results for the 2011 update both regarding the state of SCG fiscal rules today and how they have evolved since 2005.

2. Constructing the indicator

5. The SCG fiscal rules indicator is based on answers to a questionnaire distributed to all OECD member countries in 2005 and 2011. The questions cover both the use and implementation of rules that constrain SCG deficit financing, limit expenditure growth and tax autonomy as well as constrain SCGs' rights to borrow. For the 2011 update the questionnaire has been kept almost identical so that the results are comparable over time. Two small changes have nevertheless been made in order to distinguish obligations to *off-set* breaches to a rule from obligations to *return* to the rule and to account for the possibility of SCG self-sanctioning. 23 countries – of which nine are federal countries – have provided information for altogether 32 SCGs compared to 23 in 2005.

6. Following the same procedure as before, 14 lower-level indicators are constructed from the answers to the questionnaire which are subsequently aggregated into four objectives important for policy-makers: a) controlling the size of the public sector by limiting expenditure growth, b) ensuring allocative efficiency, c) achieving deficit and debt sustainability and d) ensuring that local governments can deal with shocks (Figure 1). All outcomes are scaled on the interval 0 to 10, with a higher score associated with a more desirable outcome. Annex 1 provides detailed information about the aggregation.

Figure 1. The four indicator dimensions



2.1. Controlling expenditure growth

7. Cross-country differences in the size of the public sector reflect in part societal choices regarding the appropriate level of public spending which is a matter beyond the scope of this paper. However, higher spending levels may also partly stem from other factors that do not lead to improved welfare. Inefficiencies in the production of local public goods and services as well as central-local coordination problems can lead to a wasteful use of resources. Furthermore, studies in the political economy literature have been concerned with the so-called “Leviathan-effect” whereby politicians’ desire to be re-elected will cause the state to constantly expand in size. An example of this is a ratchet effect that occurs if local politicians respond to a smaller tax base in an economic downturn by increasing tax rates that are not reduced when the outlook improves which leads to ever more spending. This assumes that in a downturn governments adjust on the revenue-side. If spending is cut rather than taxes increased one would instead see a declining public sector.

8. Fiscal rules capping SCG spending and limiting their tax autonomy restrict SCG expenditure growth. They will be more effective when strong monitoring, reporting and sanction procedures are in place. If monitoring responsibilities are left with SCGs, the risk of non-compliance is likely to be higher than when it is performed by a higher-level government or by an independent agency. As well, incentives to respect the rules should increase with more widespread reporting of SCG performance and also using a common reporting standard and independent audit. Finally, mandatory sanctions, as opposed to none, or discretionary sanctions, make expenditure limits and tax limits more painful to breach. As for the ratchet-effect, it is assumed to be stronger if the fiscal rule obliges SCGs to balance their budgets immediately.

2.2. Allocative efficiency

9. One of the most important arguments in favour of fiscal decentralisation is that it increases allocative efficiency because of competition among local service providers (Tiebout, 1956) and because local governments are thought to have an informational advantage with regards to citizens’ preferences (Oates, 1972). However, this can only be exploited when SCGs have the authority to decide how and where to spend public resources and on which bases and at which rates to levy taxes. Allocative efficiency is therefore greater with looser fiscal rules that have broad coverage meaning that they do not discriminate between different spending categories and tax bases. Also, multi-annual targets and allowing deficits to be carried over to subsequent years distort local decisions less than annual targets.

2.3. Deficit and debt sustainability

10. Even though SCG deficit and debt-to-GDP ratios are relatively small in most countries and have not increased as much as central government deficits and debt, there are several good reasons to monitor local debt sustainability:

- A debt increase at any level of government may affect interest rates and hence the budget balance of SCGs. The problem is aggravated if financial problems – even if limited to a few SCGs – increase the financial market risk premium for all.
- SCG debt is more difficult to reduce since the room for SCGs to raise additional revenue tends to be quite limited. Moreover, some SCG spending is politically sensitive and difficult to reduce.
- The numbers for SCG debt levels reported in the National Accounts are often lower bounds as many SCGs own public enterprises or banks whose loans are not included in official statistics. Unfunded public pension schemes are a contingent liability in countries where pensions are provided at the SCG level.
- Where SCG debt is explicitly or implicitly guaranteed by the central government, SCGs have an additional incentive to conduct unsustainable fiscal policy, which must be taken into account.

11. Currently, there are additional reasons to consider a strengthening of local finances in many OECD countries. The need to consolidate general government finances is strong in many countries and local governments can alleviate the burden placed on the central government. Also, underlying structural factors will put pressure on public finances in coming decades. Population ageing will not only reduce the population of working age and hence the tax base, but also increase spending notably on health care which is often provided by local governments.

12. Both budget balance objectives and borrowing constraints are likely to foster fiscal sustainability. The effect should be stronger with good monitoring, reporting and sanction procedures in place. In addition to the central government, financial markets can also contribute to monitoring, especially if no bail-out clauses for SCGs in financial trouble exist. Escape clauses² are harmful for deficit and debt control and so are certain mechanisms to enable SCGs to deal with the cycle.³ Finally, prohibiting SCGs from owning banks or enterprises, which incur liabilities, is likely to improve sustainability.

2.4. Capacity to deal with shocks

13. Allowing SCGs to adjust their spending and revenues according to the economic cycle reduces the risk of pro-cyclical policies. Rigid fiscal rules may compromise this. For instance, Jonas (2012) notes that in the case of the United States, where States have rather strict self-imposed SCG fiscal rules, evidence suggests that the policy response at the SCG level exacerbated the decline in demand during the great recession. Rodden and Wibbels (2010) confirm this finding for a number of other federations. The extreme example is when an annual balanced budget rule that allows no deficit carry-over is combined with a ban on SCG borrowing. On the contrary, exemptions to fiscal rules and special provisions such as additional

2. These are exemptions in the case of special circumstances such as a pre-determined fall in revenue, deterioration of local economic conditions and a natural or other disaster.

3. These include off-budget funds, expenditure cuts and revenues from higher-level governments that protect SCGs from projected cyclical fluctuations of revenue sources or expenditure.

central government transfers during downturns and “rainy-day” funds increase capacity of SCGs to deal with the economic cycle.

2.5. Trade-offs

14. There can be a trade-off between the objective to control SCG budgets to avoid fiscal excesses with the objectives *i*) to take advantage of local government’s informational advantage and competition between SCGs and *ii*) to avoid pro-cyclical policies. While expenditure control and debt sustainability are better served through strict fiscal rules, looser and flexible rules improve allocative efficiency and SCGs’ capacity to deal with the economic cycle. There are nevertheless ways of designing fiscal frameworks that minimise such trade-offs:

- Targeting structural rather than actual spending and balances. This is often done in fiscal frameworks at the national level, but it is not an easy task to identify the cyclical component in total revenues and expenditure.
- Restricting the overall budget balance and/or capping total expenditure and revenues while letting local politicians freely allocate between spending categories and taxes.
- Treating current and capital spending identically in the rules for SCG borrowing. A so-called “golden rule” favouring public investment constitutes a distortion that might not be necessary since lower-level governments already tend to direct a higher share of funds towards capital spending (Fredriksen, 2013).
- Allowing deficits to overshoot a deficit limit, but obliging SCGs to offset any breach of a deficit rule within a given number of years.
- Encouraging the use of rainy-day funds (Jonas, 2012).
- Allowing SCGs' relations with private companies and banks is not a desirable way of achieving flexibility and threatens fiscal sustainability. Off-budget liabilities should be rare, and they should be as transparent as possible.
- By explicitly committing to not bailing out SCGs, the central government encourages financial market monitoring of SCG finances, which also contributes to better deficit and debt control without reducing the capacity of SCGs to cope with shocks.

2.6. The role of the institutional environment

15. A limitation of the OECD's SCG fiscal rules indicator is its failure to completely account for the wider institutional environment within which SCGs operate. Institutional factors such as the degree of vertical imbalances, types of expenditure assigned to the local level, and the legal responsibilities and constitutional rights of SCGs matter for fiscal outcomes and therefore how fiscal rules should be designed. While some of these elements are included in the indicator, most are not.

- *SCG revenue composition*: If vertical imbalances are large, *i.e.* a large part of SCG expenditure are financed by central government transfers, a common pool problem will arise as each SCG attempts to secure as much funding as possible from the general budget. If the budget constraint is soft, sustainability will be undermined. On the contrary, if vertical imbalances are small so that most of SCG expenditure are financed by their own tax revenues, SCGs have an incentive to think twice before increasing expenditure, reducing the need for stringent fiscal rules.
- *Credibility of no-bailout clauses and financial market oversight*: The legal responsibility of SCGs in financial trouble might influence their adherence to fiscal rules. This is taken into account in

the calculation of the OECD indicator. Credible no-bail out clauses encourages financial market monitoring of SCG performance. SCGs with sound public finances will be rewarded through lower borrowing costs, whereas unfunded increases in spending are “punished” through higher borrowing costs. If SCGs cannot declare bankruptcy, it becomes even more important that the central government monitors and sanctions non-compliance with SCG fiscal rules.

- *Spending composition:* Allowing SCGs to declare bankruptcy may be more difficult when the spending responsibilities of local governments are politically sensitive. This concerns, for instance, the provision of health and education services as well as social protection. The type of expenditure assignment may also influence central governments’ intervention in allocation decisions. Moreover, when politically sensitive expenditure are assigned to the local level, the central government may be more inclined to monitor SCGs, which prevents taking advantage of efficiency gains from decentralisation. In such cases, because allocative efficiency has already been reduced, it becomes even more important that fiscal rules ensure sustainability without creating distortions.
- *Constitutional rights:* Allowing SCGs constitutional rights can strengthen their incentives to adhere to pre-established rules and they will therefore affect the binding nature of the fiscal rules. Local governments rarely have much constitutional rights and responsibilities and subsequently are less likely to adhere to rules by themselves. The constitutional rights of state governments in federal countries are generally much stronger. This is accounted for in the calculation of the OECD indicator because fiscal rules that are imposed from above are considered to be the most binding in the case of local governments whereas self-imposed rules are the most binding in the case of state governments.
- *The political system:* Widespread use of local referenda encourages the monitoring of SCG policy by citizens and can therefore alleviate the need for strict SCG monitoring. On the other hand, potential co-ordination problems between levels of government are likely to spark expenditure drift and therefore increase the need for limits on SCG spending and taxes.

3. Results from the 2011 indicator update

3.1. Types of fiscal rules

16. There are four types of fiscal rules: budget balance rules,⁴ expenditure limits, tax limits, and borrowing constraints. Some form of fiscal rule is in place in all of the 32 SCGs in the sample (Table 1). Budget balance requirements are the most common (in 26 cases SCGs face such a rule) as well as rules constraining SCG borrowing (in 23 cases). Half of the SCGs are limited in their ability to raise revenues through taxes, whereas there are only five examples of expenditure limits. An important difference between capping spending and capping the budget deficit is that the former also places a limit on the size of the local public sector. Spending limits may also be more difficult to adhere to at the local level given the politically sensitive nature of much of SCG spending (Sutherland *et al.*, 2006).⁵

4. A rule that targets the budget balance can or cannot allow for deficits to occur; in the case of local governments, the budget balance rule is most often a balanced budget rule.

5. See Sutherland *et al.* (2012) for a more general discussion of advantages and disadvantages of the different kinds of fiscal rules.

Table 1. SCG fiscal rule practices

Sub-central government	Budget balance rule	Expenditure limit	Taxation limit	Borrowing constraint
Australia state	X	X	X	X
Australia local			X	X
Austria state	X			
Austria local	X			
Belgium state	X		X	
Belgium local	X		X	X
Canada state	X			
Canada local	X		X	X
Chile			X	X
Czech Republic	X		X	
Denmark	X	X	X	X
Estonia	X			X
Finland	X		X	
Germany state	X			X
Germany local	X			X
Ireland	X			X
Italy state		X	X	X
Italy local	X		X	X
Korea	X			X
Mexico state				X
Mexico local				X
New Zealand	X		X	X
Norway	X		X	X
Poland	X			X
Slovak Republic	X			X
Slovenia	X		X	X
Spain state	X			X
Spain local	X	X		X
Sweden	X			
Switzerland state	X		X	
Switzerland local	X		X	
Turkey		X		X

Source: OECD Secretariat calculations based on Network questionnaire responses.

17. Most countries apply a combination of rules. The average number of rules for one country in the sample is 2.2. Denmark is an extreme example where all four types of rules are in place. The fact that countries usually have more than one rule is not surprising given the various objectives to which fiscal rules cater. Multiple fiscal rules appear to be a response to the trade-offs inherent in fiscal frameworks. Furthermore, since fiscal challenges evolve over time a single fiscal rule is unlikely to be optimal at all times. Studies on fiscal rules at the national level also tend to find that countries that combine several rules are likely to be financially more sustainable (Sutherland *et al.*, 2012).

18. There are different ways of specifying each rule. Budget balance objectives are generally set annually for approved budgets and cover both the current and capital budget either separately or in conjunction. In around half of the countries deficits are not allowed. A few countries only require their SCGs to off-set deficits in following years. Among the few mandatory expenditure limits in place, there are examples both of limits on overall expenditure as well as limits on individual expenditure lines only.

They are for the most part indexed to tax revenues or GDP. As for limits on SCG taxation powers, the OECD tax autonomy indicator shows that tax autonomy is relatively high, despite many restrictions to set the tax base and tax rates. SCG discretion over tax rates is more common than discretion over reliefs. Finally, among the borrowing constraints, the most common approach is to limit the debt level though quite a few countries have also chosen to limit new borrowing. Borrowing for current and capital spending are frequently treated differently and the most frequently used approach is to constrain capital borrowing for specific investment projects. Quite a few countries also have borrowing constraints on current spending and generally they do not discriminate between spending categories.

19. Monitoring and reporting of compliance requirements are in many cases quite poor. This is also the case of sanctions for non-compliance. While fiscal rules tend to be mostly imposed by a higher level government or self-imposed in the case of mid-level governments, the scope for central government action in case rules are breached is generally limited. SCGs are seldom obliged to off-set any breaches to the fiscal rule and the most common sanction they face from above are recommendations to take corrective action. SCGs themselves, however, quite often take action in case of non-respect of the rule and this includes both off-setting the breach, making sure the rule is respected in the future as well as administrative measures. There is much variation in accounting practices; it is nevertheless most common to use the same reporting standard for SCGs as for the central government. Independent auditing of SCG reporting is also very common.

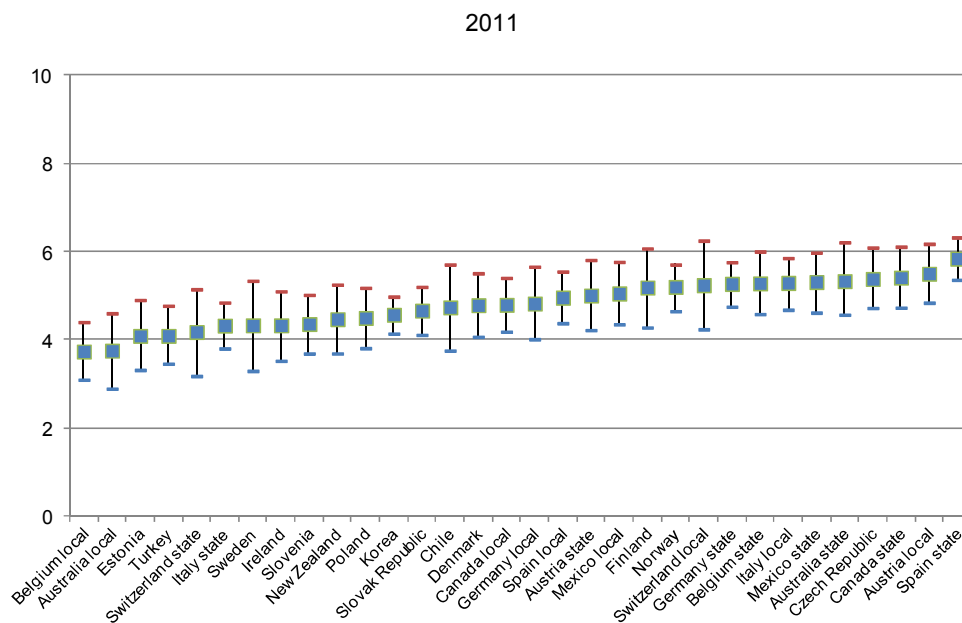
20. Exemptions from fiscal rules are not widely practiced. This is especially the case for exemptions in case of special circumstances, although some SCGs can breach the fiscal rule in case of a natural or other disaster. The most common approach to deal with the cycle is setting up rainy day funds. Off-budget liabilities, which in reality are non-transparent exemptions, can occur notably through SCG relationships with enterprises. In most cases when SCGs are allowed to own or control private enterprises there are, nevertheless, limits on the borrowing of these enterprises. SCGs can rarely own or control banks.

3.2. The composite indicator

21. The value of the composite indicator is quite similar across countries (Figure 2). The indicator range is from 0 to 10 and the scores vary from about 3.5 in Belgium, to almost 6 at the state level in Spain. To account for the uncertainty surrounding the weighting of lower level indicators in the composite indicator a random weight procedure is used.⁶ The fact that indicator values do not vary much across the sample must be seen in connection with the existing trade-offs between the various policy objectives. Rules that favour expenditure, deficit and debt control tend to decrease allocative efficiency and SCG capacity to deal with shocks and vice versa. It is therefore important not to mistake this synthetic indicator for a measure of optimal fiscal rules. Nonetheless, the previous section identified policy options to minimise such trade-offs and reconcile the various objectives. This is achieved when not only the value of the composite indicator is high, but also the variance of the lower-level indicators is low (Figure 3).

6. Ranges of possible values for the composite indicator are obtained by drawing random weights from a uniform distribution between zero and one (normalized so as to sum to one) which are then assigned to each sub-dimension.

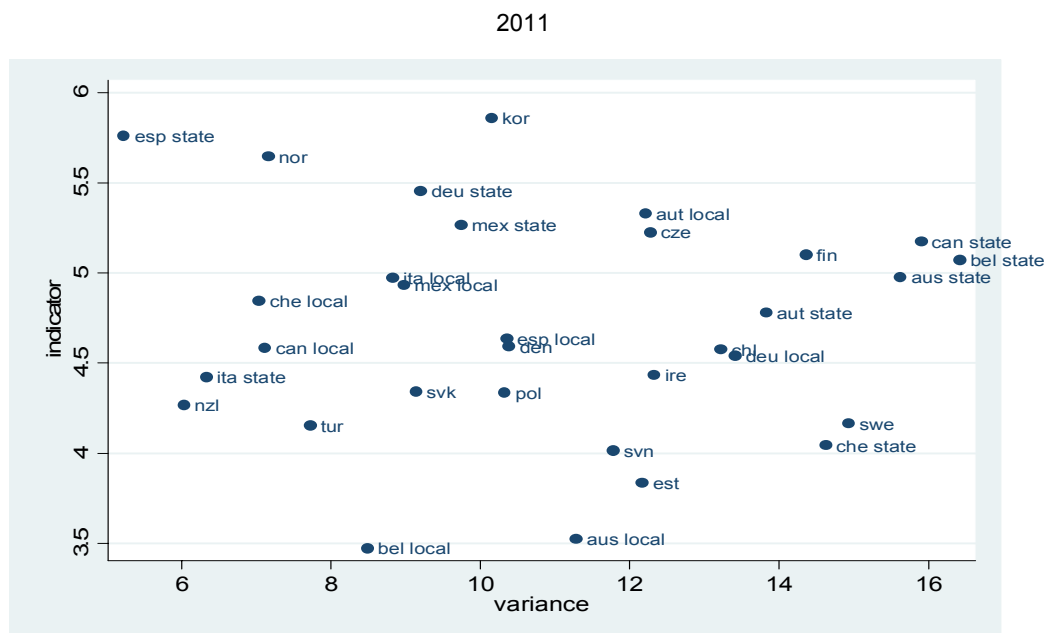
Figure 2. OECD synthetic SCG fiscal rule indicator



Note: The square symbolizes the mean indicator value and is asymptotically equivalent to assigning the same weight for each sub-indicator. The surrounding range corresponds to possible values for different weights assigned to sub-indicators.

Source: OECD Secretariat calculations based on Network questionnaire responses.

Figure 3. Relationship between the composite indicator and variance of lower-level indicators



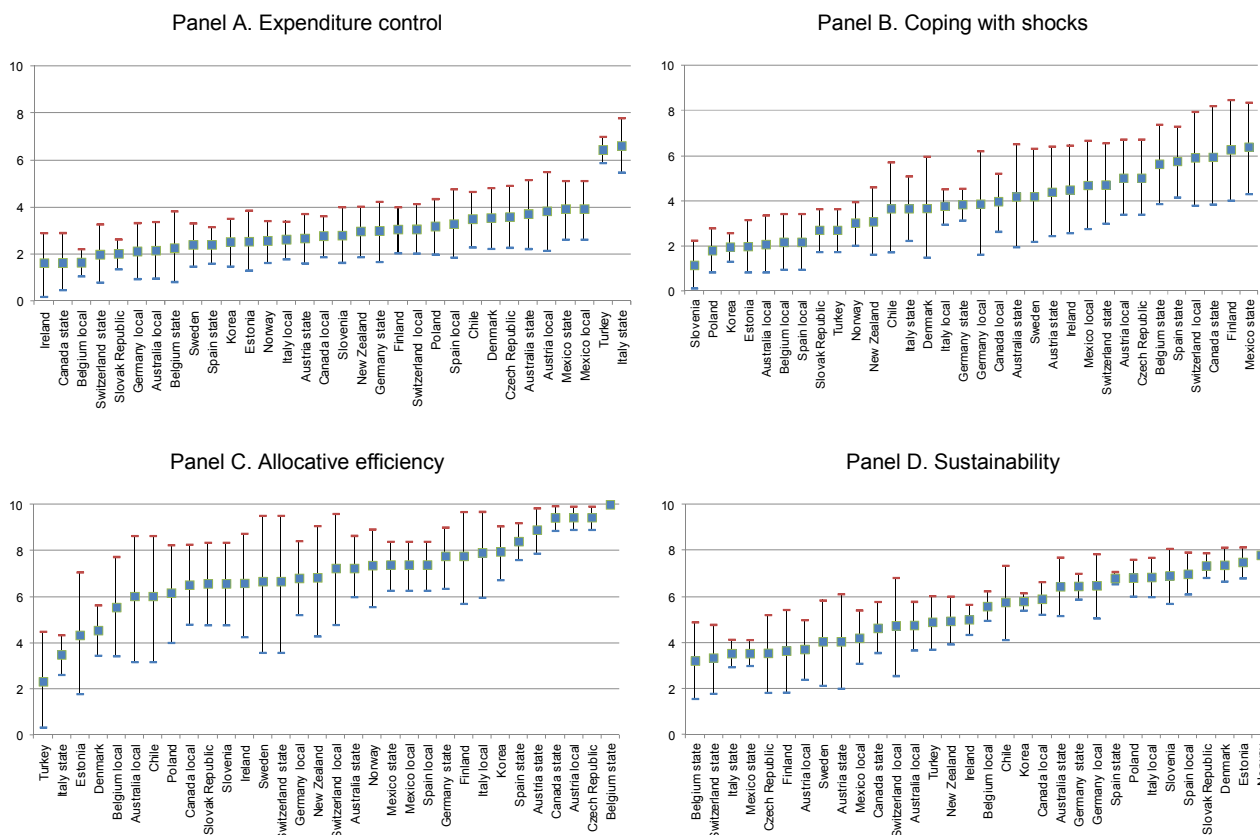
Note: The vertical axis depicts the value of the composite indicator and the horizontal axis depicts the variance of the sub-indicators.

Source: OECD Secretariat calculations based on Network questionnaire responses.

3.3. The four “sub-dimensions”

22. Policymakers may want to give priority to a certain objective. Contrary to the composite indicator there is considerable cross-country variation across the 14 lower-level indicators (Annex 2) and the sub-indicators for expenditure control, allocative efficiency, deficit and debt control and capacity to deal with shocks (Figure 4). Again, the indicators are aggregated from lower-level indicators using a random weight procedure. The indicator for expenditure control varies from a very low score around 1.5 in Ireland, at the state level in Canada and at the local level in Belgium to 6.6 at the state level in Italy. This indicator has the lowest average score in the sample which must be seen in connection with the limited use of expenditure limits. The indicator for allocative efficiency has on average the highest score. The state level in Belgium achieves the highest possible outcome (10) for this indicator whereas a few countries create potentially substantial distortions through their fiscal rules and the lowest score is found for Turkey (2.3). The average score for deficit and debt sustainability is quite high, but again the range of observed values is large ranging from 3.2 at the state level in Belgium to almost 8 in Norway. The capacity to deal with shocks is highest at the state level in Mexico (6.4) and lowest in Slovenia (2.3).

Figure 4. OECD SCG fiscal rule indicator for different policy outcomes



Note: The square symbolizes the mean indicator value and is equivalent to assigning the same weight for each sub-indicator. The surrounding range corresponds to possible values for different random weights assigned to sub-indicators.

Source: OECD Secretariat calculations based on Network questionnaire responses.

23. Clustering allows the grouping of SCGs whose fiscal rules yield similar outcomes. As less dissimilarity within one cluster is permitted the number of clusters increases whereas the size of each cluster decreases. Table 2 shows the SCGs in the sample categorised into six groups according to their score on the four indicator dimensions. The first cluster groups SCGs where fiscal frameworks are quite performing both in terms of sustainability and efficiency. Cluster two consists of SCGs with high allocative efficiency but low spending control, while cluster is the opposite. Cluster four consists of SCGs submitted to strong deficit control but little shock absorption. Cluster five groups those countries that have both good sustainability and efficiency features. The final cluster is comprised of SCGs with overall weak rules.

Table 2. Cluster analysis

Cluster					
Strong spending control and high efficiency	High allocative efficiency but low spending control	Strong spending control but lower efficiency	Strong deficit control but often less shock absorption	Good efficiency and sustainability	Overall weak rules
Korea	Austria State Austria Local Belgium State Canada State Czech Republic Finland Ireland Mexico State Mexico Local Switzerland Local	Italy State New Zealand Turkey Belgium State Canada State Czech Republic Finland Ireland Mexico Local Mexico State Sweden Switzerland State	Australia State Canada Local Germany State Germany Local Italy Local Norway Spain State	Chile Denmark Estonia Poland Slovak Republic Slovenia Spain Local	Australia Local Belgium Local

Source: OECD Secretariat calculations based on Network questionnaire responses.

24. A closer analysis of the features that make for “good” indicator results reveal that the top performers in terms of expenditure control have expenditure limits or – in the case of Italy – a taxation limit. With regards to allocative efficiency, among the attributes that yield high scores are absence of mandatory fiscal rules being imposed from above (Austria Local) and budget balance rules that cover the aggregate budget so as to not encourage inefficient budget allocations (Australia state, Czech Republic, Germany State and Spain Local).

25. In Denmark, Norway and the Slovak Republic the most important reason behind the stringent deficit and debt control is a strict budget balance objective which is set annually for realised budgets with no deficit allowed. Estonia stands out with a particularly strong monitoring of SCG compliance by central government as well as by financial markets since SCG bankruptcy is permitted. Spain State and Mexico have one of the highest scores for coping with shocks mainly because SCGs receive revenues from the central government to compensate for cyclical fluctuations. The results show that reconciling deficit and debt control with flexibility to deal with shocks is not easy. However, Spain State is an example that shows that sustainability can be combined with a relatively good capacity to deal with shocks by requiring any budget deficit to be offset within three years. This is accompanied by good monitoring and reporting standards.⁷

7. The values for Spain take into account the substantial changes to the SCG fiscal framework in 2012 in response to the financial difficulties faced by the general government.

3.4. Changes in SCG fiscal rules over time

26. There has been little change in the average indicator values over time. The average overall indicator value in 2011 is the same as in 2005, as is the case for most of the sub-indicators (Table 3). This result is at first surprising. One might have expected that the increased focus on fiscal sustainability sparked by the worsening of general government finances over the past years would have resulted in more stringent rules, when actually the only noticeable change in the average indicators is a slight decrease in the indicator for expenditure control. A possible explanation is that rising deficits have made just respecting current fiscal rules more difficult and therefore deterred policymakers from tightening the rules. Observations on sample averages may, however, also suffer from a sampling-bias since the countries who responded to the questionnaire in 2011 are not exactly the same as in 2005. In addition, changes in individual countries may also “cancel each other out”. It is therefore useful to look at the evolution for the sub-sample of SCGs that answered the questionnaire both in 2005 and 2011. While the evolution of the average indicator value again shows little change, it is now apparent that there have been changes to SCG fiscal rule frameworks in some countries. There has, however, been no common trend across countries which explains why the average values of the synthetic indicator and the sub-indicators are unchanged (Table 3 and Figure 5).

Table 3. Change in average indicator values
2005-11

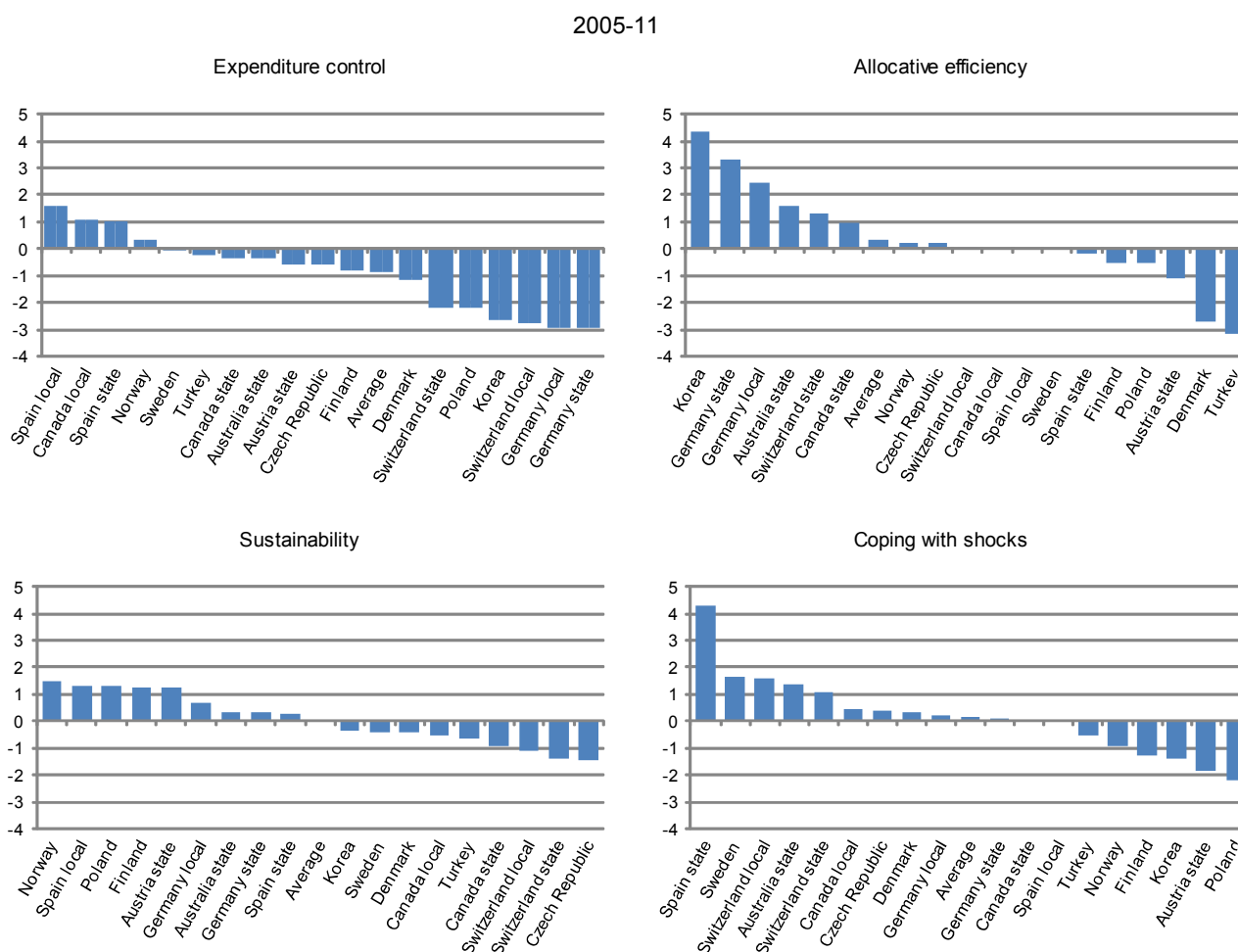
	Synthetic indicator	Expenditure control	Allocative efficiency	Sustainability	Coping with shocks
2011	4.7	3.0	6.9	5.4	3.8
2005	4.8	4.1	6.6	5.5	3.6
Change	-0.1	-1.9	0.3	-0.1	0.2

Source: OECD Secretariat calculations based on Network questionnaire responses.

27. Some interesting cases worth highlighting are: In Germany, there has been a significant increase in allocative efficiency both at the state and local level since 2005 and a similar drop in expenditure control. A key explanation for this is the elimination of a negotiated limit on state-level expenditure and an imposed limit on local expenditure. Other cases where expenditure control is lower because binding expenditure limits have been removed are Australia State and Switzerland State.⁸ But there are also examples (Spain local) of reforms making the expenditure limit more binding, thereby increasing expenditure control. Replacing a borrowing constraint prohibiting all borrowing with one discriminating between current (prohibited) and capital (allowed) in Denmark has reduced allocative efficiency. Moreover, this reform also affected sustainability negatively. In Korea, the abolishment of both an expenditure limit and a tax limit imposed from above has led to a very important decrease in expenditure control and increase in allocative efficiency.

8. To some extent this is also the case of Poland although the expenditure limit imposed on Polish SCGs was never binding.

Figure 5. Country-specific changes



Source: OECD Secretariat calculations based on Network questionnaire responses.

28. Reforms have had somewhat less impact on fiscal sustainability and the capacity of SCGs to deal with shocks. Both the Czech Republic and Switzerland State have seen a reduction in deficit and debt control. In the case of the Czech Republic an imposed borrowing constraint has been replaced by a more implicit constraint on debt service in addition to the introduction of an escape clause from this borrowing constraint in case of a natural or other disaster. Finland has introduced a budget balance rule which has improved its score on the sustainability indicator, though this reform has caused a decline in SCG capacity to deal with shocks (Box 1). Sweden has introduced expenditure cuts on mandated spending, which has increased the value of the indicator for dealing with shocks, and the introduction of rainy-day funds both at the local and state level in Switzerland have had the same effects. The largest increase in the capacity to cope with the cycle has, however, taken place at the State level in Spain as the budget balance objective has been changed from being negotiated to being imposed which is considered to be less binding in the case of a mid-level government. The introduction of an escape clause both for the budget balance rules and the borrowing constraint have also contributed.

Box 1. Fiscal challenges and fiscal rules in Finland

Finland has reformed its SCG fiscal framework quite substantially since 2005. With the aim of tightening the control over SCG finances, the central government has among other changes implemented an SCG budget balance rule. These reforms have resulted in a slight decrease in the composite OECD SCG fiscal rules indicator yet it still remains slightly above the sample average. Expenditure control and deficit and debt control has increased but is still well below average. The reverse is true for allocative efficiency and SCG capacity to deal with the economic cycle which has decreased between 2005 and 2011 but is high in comparison with other countries.

As is the case in most OECD countries, local finances in Finland are rather sound. Moreover, contrary to many other countries, total government finances are in good shape. At nearly 60% of GDP in 2010, total public debt was considerably below the average of the OECD. However, there are also reasons for concern for the sustainability of local finances in Finland as the sub-central primary balance deficit and gross financial liabilities have recently increased. Furthermore, the primary balance of Finnish SCGs has deteriorated over time despite the reforms that have tightened SCG fiscal rules. From the 1970s until the mid-1990s, the SCG primary balance was always in surplus whereas the reverse has been true since then. This, in combination with the underlying pressures on public spending notably from population ageing, raises the question of whether SCG fiscal rules should be tightened further.

Currently, the central government in Finland imposes a budget balance rule on current revenues and spending over a four year period as well as tax limitations on SCGs. In order to strengthen prudent fiscal behavior further, the country has two general reform options: Strengthening the surrounding institutional environment and/or strengthening the rules themselves. The OECD sub-central fiscal rules indicator can be used to make simple simulations of the effects of reforming fiscal rules as well as of changing institutional elements that are accounted for in the indicator on different policy objectives. This helps pinpointing which changes will allow better expenditure control and fiscal sustainability without increasing the risk of pro-cyclical policies and creating distortions. The resulting observations are:

- **A borrowing constraint** imposed from above prohibiting both current and capital borrowing increases the value of the debt sustainability indicator quite substantially which would then exceed the average value of the sample. When the constraint is self-imposed the indicator value also increases but remains below average. The cost is a significantly reduced capacity to deal with shocks. Expenditure control is slightly reduced because of stronger ratchet effects. The score for allocative efficiency remains the same under the condition that the borrowing constraint does not discriminate between types of spending.
- **An expenditure limit imposed** by the central government that is mandatory and covers all expenditure causes a large increase in the expenditure control indicator to what would be the highest value in the sample. The values of all other indicators remain the same under the condition that the limit does not discriminate between categories of spending. If not, allocative efficiency may be reduced to well below the sample average.
- **Broadening the coverage of the budget balance rule** by making it apply not only to the current budget but both the current and capital budget improves sustainability without any changes to other policy outcomes.
- **Introducing an annual rule of no deficit in realised budgets** increases sustainability slightly though the indicator value would remain well below the sample average. The cost is a drop in SCG capacity to deal with the cycle which is much higher than the gain in terms of deficit and debt control. Expenditure control is also slightly reduced because of a stronger ratchet effect.
- **More comprehensive reporting and stricter reporting standards** have a beneficial impact on fiscal control without side effects on other outcomes. In the Finnish case the scope for improved reporting includes: a) Extending reporting also to the public (today local governments only report to the central government), b) applying the same reporting standards for SCGs and the central government, c) taking into account implicit liabilities and d) introducing a maximum delay for SCG reporting.
- **Strengthening sanctions by central government in case of breaches to existing rules** have beneficial but very small effects. Possible measures include: a) Demanding non-compliant SCGs to off-set the breach to existing rules, b) imposing automatic central government financial sanctions and c) introducing the possibility of sanctioning SCG officials.
- Allowing **SCGs to declare bankruptcy** also increases slightly the value of the deficit and debt sustainability indicator without changes to other outcomes. When this is done in conjunction with eliminating risks due to

contingent liabilities by cutting ties between local governments and private firms,¹ the improvement in the sustainability indicator is larger.

- **Eliminating all current measures to deal with the cycle** causes a large drop in SCG capacity to deal with shocks to an indicator score equal to the average sample value. Expenditure control is also reduced because of a stronger ratchet effect.

From these simulations, it is clear that there are several ways of promoting sound fiscal positions of local governments without, or at little, cost to other policy objectives. This is notably the case for measures that improve the institutional environment such as broadening and standardising reporting procedures, tougher sanctions in case of non-compliance, and explicit no-bail out clauses which strengthen financial market monitoring. The size of the impact of such changes is nevertheless limited. Other measures to tighten the fiscal rules, notably introducing more stringent fiscal rules, appear to yield much stronger positive results on expenditure control and sustainability but they often have negative side-effects on allocative efficiency and/or SCG capacity to deal with shocks.

A particularly low hanging fruit for improvement in the case of Finland is the current coverage of the balanced budget rule which, if broadened to include also the capital budget, would yield a non-negligible gain in deficit control while also fostering the efficient allocation of public resources. While a so-called “golden rule” favoring public investment may be justified in the case of perceived underinvestment, it constitutes a distortion that could lead to investment with a low social return. Ultimately, regardless of the reforms considered, an essential challenge is to ensure that the fiscal framework is credible. While threat of sanctions, no bail-out clauses etc. are important contributors to this, credibility also partly depends on institutional features often difficult to quantify and therefore not included in synthetic indicators.

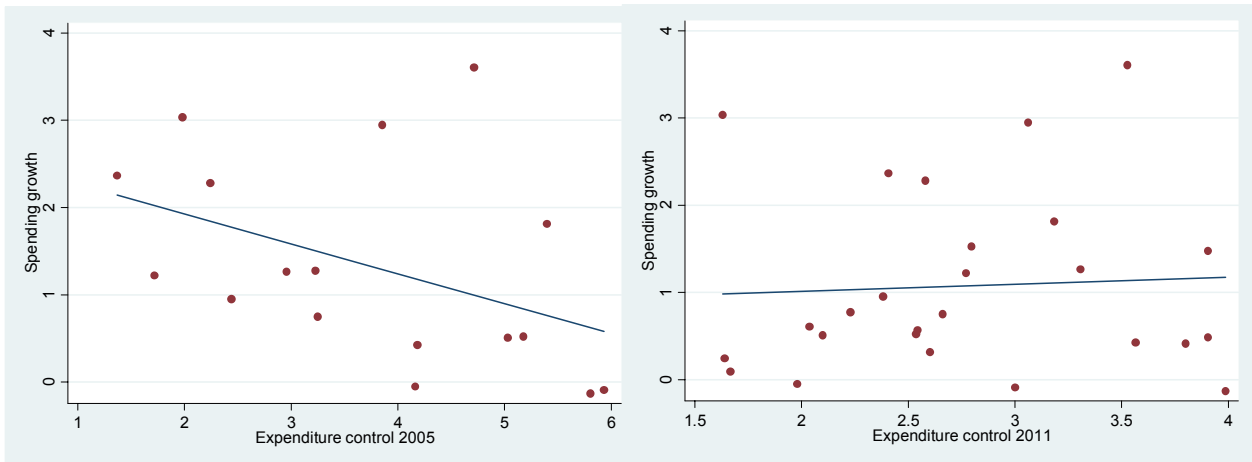
1. Finnish SCGs may own or control enterprises and there are no limits as to the amount these companies can borrow.

3.5. Fiscal rules and fiscal outcomes

29. Estimating the correlation between indicator values and fiscal outcomes does not yield significant results. Both the 2005 or the 2011 indicator set are used since changes to fiscal frameworks in different countries have occurred throughout the period 2005-11. A positive but insignificant relationship is found between the deficit and debt control indicator both in 2005 and 2011, and the increase in the SCG debt to GDP ratio between 2005 and 2010. The correlation between the indicator for coping with shocks and SCG spending volatility between 2000 and 2010 is insignificant for both indicator sets. The weak correlations can be explained by institutional factors not accounted for in the OECD indicators as well as the time-lag from institutional reform to results on fiscal outcomes which would predominantly affect the correlations using the 2011 indicator set. Also, there are probably issues of endogeneity since current fiscal rules may reflect a response to past fiscal problems.

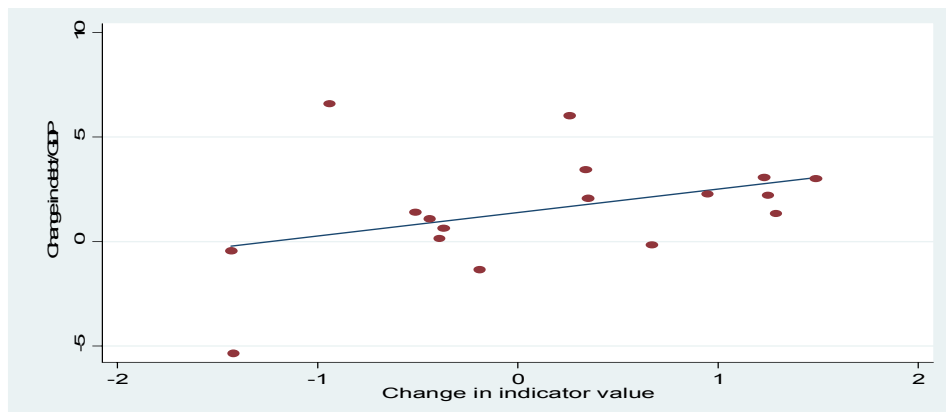
30. The reversal of the relationship between the indicator for expenditure control and SCG expenditure and SCG expenditure growth over the period 2005-10 from negative using the 2005 indicator set to (slightly) positive using the 2011 indicator set (Figure 6) is likely to reflect that countries with weak expenditure control in 2005 saw higher growth in SCG spending over the period 2005-10 motivating reforms to tighten SCG rules. The positive correlation between increases in SCG debt-to-GDP ratios over the period 2005-10 and change in the sustainability indicator from 2005 to 2011 suggests even more strongly that fiscal rules are endogenous (Figure 7). This illustrates how fiscal challenges change over time and institutional frameworks adapt. As a result, fiscal rule design is a complex matter and no fiscal rule is likely to be optimal for all times and in every place.

Figure 6. Correlation between the OECD SCG indicator for expenditure control and SCG expenditure growth 2005-10



Source: OECD Secretariat calculations based on Network questionnaire responses.

Figure 7. Correlation between changes in SCG debt and changes in the sustainability indicator



Source: OECD Secretariat calculations based on Network questionnaire responses.

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ANNEX 1. CODING TABLES

Table A1.1. Coding for putting a limit on expenditure growth

Low-level indicator	Weight 1	Weight 2	Coding
LLI-1 Expenditure control			
<i>Expenditure limitation coverage</i>	$\frac{1}{2}$		
Wide			10
Partial			5
No expenditure limit			0
<i>Binding</i>	$\frac{1}{2}$		
Imposed or negotiated and binding			10
Self-imposed or non-binding			5
No expenditure limit			0
LLI-2 Limit on tax autonomy			
<i>Sub-central government has:</i>			
(where S_i is the share of tax revenue from that category)			
Control over rates and reliefs	S_i		0
Control over rates or reliefs	S_i		3.33
Shared taxes	S_i		6.67
No control over tax revenue	S_i		10
LLI-3 Budget transparency			
<i>(for this low-level indicator, the given scoring if present, 0 otherwise)</i>			
<i>Monitoring</i>	$\frac{1}{4}$		
External monitor			
Tax limit		$\frac{1}{2}$	10
Expenditure limit		$\frac{1}{2}$	10
<i>Reporting</i>	$\frac{1}{4}$		
For each group reported to			
Tax limit		$\frac{1}{2}$	+3.33
Expenditure limit		$\frac{1}{2}$	+3.33
<i>Transparency</i>	$\frac{1}{4}$		
Common reporting standard		$\frac{1}{3}$	
Independent audit		$\frac{1}{3}$	10
Deadline for submission of audit		$\frac{1}{3}$	10
<i>Sanctions</i>	$\frac{1}{4}$		
Financial sanctions for tax limits		$\frac{1}{6}$	
Imposed mandatory			10
Imposed discretionary			5
none			0
Financial sanctions for expenditure limits		$\frac{1}{6}$	
Imposed mandatory			10
Imposed discretionary			5
none			0
Budgetary measures for tax limits		$\frac{1}{6}$	
Imposed offset			10
Imposed correct			5
Self-imposed offset			5
Self-imposed correct			2.5

Table A1.1. Coding for putting a limit on expenditure growth (cont.)

Low-level indicator	Weight 1	Weight 2	Coding
LLI-3 Budget transparency (cont.)			
Budgetary measures for expenditure limits		1/6	
Imposed offset			10
Imposed correct			5
Self-imposed offset			5
Self-imposed correct			2.5
Administrative sanctions for tax limits		1/6	
Imposed sanctions			+5
Punishment of officials by higher level of government			+2.5
Punishment of officials by SCGs themselves			+1.25
Recommendations for action			+1.25
Administrative sanctions for expenditure limits		1/6	
Imposed sanctions			+5
Punishment of officials by higher level of government			+2.5
Punishment of officials by SCGs themselves			+1.25
Recommendations for action			+1.25
LLI-4 Ratchet effect			
<i>Access to borrowing</i>	1/4		
Current budget		1/2	
Prohibited			10
Prior approval required			5
No restrictions			0
Capital budget		1/2	
Prohibited			10
Prior approval required			5
No restrictions			0
<i>Binding</i>	1/4		
(if the capital budget is not treated separately, weight 2 is set to 1 for the budget balance rule and 0 for the capital budget)			
Budget balance requirement		1 or 1/2	
Imposed or negotiated and binding			0
Self imposed or voluntary			5
No balanced budget requirement			10
Capital budget		1/2 or 0	
Imposed or negotiated and binding			0
Self-imposed or voluntary			5
No borrowing constraint exists			10
<i>Budget objective</i>	1/4		
Applies to an outturn with no carryover			0
Applies to an outturn with carryover			5
Does not apply to an outturn			10
<i>Escape clause and means to cope with the cycle</i>	1/4		
If escape clauses exist		1/2	
Budget balance requirements			+5
Borrowing constraints			+5
Means to cope with the cycle		1/2	
Transfers are adjusted			10
Other mechanisms			5
None			0

Table A1.2. Coding for supporting allocative efficiency

Low-level indicator	Weight 1	Weight 2	Coding
LLI-5 Broad budget coverage			
<i>Balanced budget coverage</i>	1/3		
Current budget only			0
Wide budget objective			10
<i>Balanced budget binding</i>	1/3		
If narrow budget objective and binding			0
If narrow budget and voluntary or self-imposed			5
If wide budget objective			10
<i>Applies to single year</i>	1/3		
LLI-6 Broad spending targets			
<i>Expenditure limit coverage</i>	1/2		
Current budget or individual items only			0
Wide budget objective or none			10
<i>Expenditure limit binding</i>	1/2		
If narrow budget objective and binding			0
If narrow budget and voluntary or self-imposed			5
If wide budget objective or none			10
LLI-7 Uniform rules for borrowing			
<i>Access rules</i> (prohibited, unrestricted access, or subject to prior approval)	1/4		
Current and capital borrowing treated differently			0
Current and capital treated identically			10
<i>Access restrictions</i> (limited to special purposes or prior approval is required)	1/4		
Current borrowing		1/2	
No restrictions			10
1 restriction			5
2 restrictions			0
Limits on the use of capital borrowing		1/2	
No restrictions			10
1 restriction			5
2 restrictions			0
<i>Numerical constraint</i>	1/4		
No constraints			10
For each constraint			-2.5
<i>Borrowing constraint binding</i>	1/4		
If narrow budget objective and binding			0
If narrow budget and voluntary or self-imposed			5
If wide budget objective			10

Table A1.3. Coding for ensuring debt sustainability

Low-level indicator	Weight 1	Weight 2	Coding
LLI-8 Deficit control			
<i>Balanced budget requirement coverage</i>	1/5		
Current budget only			0
Wide budget objective			10
<i>Balanced budget binding</i>	1/5		
Self imposed or voluntary			0
Imposed or negotiated and binding			10
<i>Budget objective</i>	1/5		
No outturn objective			0
Outturn with carry over allowed			5
Outturn with no carry over allowed			10
<i>Escape clauses</i>	1/5		
No escape clauses			10
For each possible escape clause			-5
<i>Means to cope with the cycle</i>	1/5		
Special financial support		1/2	
Available			0
Not available			10
Cut mandated spending		1/2	
Not possible			0
Possible			10
LLI-9 Debt control			
<i>Access to borrowing</i>	1/5		
Current borrowing		1/2	
Unrestricted			0
Subject to prior approval			5
Prohibited			10
Capital borrowing		1/2	
Unrestricted			0
Subject to prior approval			5
Prohibited			10
<i>Restrictions on borrowing</i>	1/5		
Limiting uses		1/2	
No limits on use			0
If limited to particular uses			+5
Numerical constraints		1/2	
No numerical constraints			0
For each numerical constraint applied			+2.5
<i>Borrowing constraint binding</i>	1/5		
None			0
Self-imposed or voluntary			5
Imposed or negotiated and binding			10
<i>Escape clauses</i>	1/5		
No escape clauses			10
For each escape clause			-2.5
No borrowing constraint			0
<i>Relations with enterprises</i>	1/5		
Enterprise ownership or control			
No ownership or control			10
Ownership or control, but subject to restriction			5
Ownership or control with no restriction			0

Table A1.3. **Coding for ensuring debt sustainability** (cont.)

Low-level indicator	Weight 1	Weight 2	Coding
LLI-10 Deficit and debt monitoring			
<i>(for this low-level indicator, the given scoring if present, 0 otherwise)</i>			
<i>Monitoring</i>	1/6		
External monitor			
Budget balance requirement		½	10
Borrowing constraint		½	10
<i>Reporting</i>	1/6		
For each group reported to			
Budget balance requirement		½	+3.33
Borrowing constraint		½	+3.33
<i>Transparency of budgetary reporting</i>	1/6		
Common reporting standard		1/3	10
Independent audit		1/3	10
Deadline for submission of audit		1/3	10
<i>Transparency of balance sheets</i>	1/6		
Common reporting standard		1/3	10
Independent audit		1/3	10
Deadline for submission of audit		1/3	10
<i>Possible financial market monitoring</i>	1/6		
Bankruptcy possible		1/3	10
Higher level of governments guarantees borrowing		1/3	10
Implicit liabilities are reported		1/3	10
<i>Sanctions</i>	1/6		
Financial sanctions for budget balance requirements		1/6	
Imposed mandatory			10
Imposed discretionary			5
none			0
Financial sanctions for borrowing constraints		1/6	
Imposed mandatory			10
Imposed discretionary			5
none			0
Budgetary measures for budget balance requirements		1/6	
Imposed offset			10
Imposed correct			5
Self-imposed offset			5
Self-imposed correct			2.5
Budgetary measures for borrowing constraints		1/6	
Imposed offset			10
Imposed correct			5
Self-imposed offset			5
Self-imposed correct			2.5
Administrative sanctions for budget balance requirements		1/6	
Imposed sanctions			+5
Punishment of officials by higher level of government			+2.5
Punishment of officials by SCGs themselves			+1.25
Recommendations for action			+1.25
Administrative sanctions for borrowing constraints		1/6	
Imposed sanctions			+5
Punishment of officials by higher level of government			+2.5
Punishment of officials by SCGs themselves			+1.25
Recommendations for action			+1.25

Table A1.4. Coding for coping with shocks

Low-level indicator	Weight 1	Weight 2	Coding
LLI-11 Protection from the cycle			
<i>Means to cope with the cycle</i>			
Transfers are adjusted			10
Other mechanisms			5
None			0
LLI-12 Protection from non-cyclical shocks			
(For this low-level indicator, the escape clauses have been weighted by a measure of the stringency of the objective-setting fiscal rule S_i . For the Budget balance requirement this includes the duration, whether it applies to an outturn and is binding; For the Expenditure limit this depends on whether it is binding and applies to overall spending; For the tax limit this depends on the inverse of the tax autonomy measure used in LLI-2; For the borrowing constraint this depends on restrictions on access to borrowing, restrictions on use and numerical constraints, as well as whether the rule is binding).			
Budget balance requirements	1/4		
If rule and no escape clause			0
If rule and escape clause			$S_i \cdot 10$
If no rule			10
Expenditure Limit	1/4		
If rule and no escape clause			0
If rule and escape clause			$S_i \cdot 10$
If no rule			10
Tax limit	1/4		
If rule and no escape clause			0
If rule and escape clause			$S_i \cdot 10$
If no rule			10
Borrowing constraint	1/4		
If rule and no escape clause			0
If rule and escape clause			$S_i \cdot 10$
If no rule			10
LLI-13 Budget balance rigidity			
Budget balance requirement binding	1/3		
Self imposed or voluntary			10
Imposed or negotiated and binding			0
Budget objective	1/3		
No outturn objective			10
Outturn with carry over allowed			5
Outturn with no carry over allowed			0
Budget period	1/3		
Annual			0
Multi-annual			10
LLI-14 Borrowing relief			
Access to borrowing	1/3		
Current borrowing		1/2	
Unrestricted			10
Subject to prior approval			5
Prohibited			0
Capital borrowing		1/2	
Unrestricted			10
Subject to prior approval			5
Prohibited			0
Restrictions on borrowing	1/3		
Limiting uses		1/2	
No limits on use			10
If limited to particular uses			-5
Numerical constraints		1/2	
No numerical constraints			10
For each numerical constraint applied			-2.5
Borrowing constraint binding	1/3		
None			10
Self-imposed or voluntary			5
Imposed or negotiated and binding			0

ANNEX 2. RESULT TABLES

Table A2.1 Sub-indices and composite indicator scoring

2011

	Restraining the size of the public sector	Supporting allocative efficiency	Ensuring debt sustainability	Coping with shocks	<i>Average</i>
Australia state	3.7	8.9	6.4	4.2	5.0
Australia local	2.2	6.0	4.8	2.1	3.8
Austria state	2.7	8.9	4.0	4.4	5.0
Austria local	3.8	9.4	3.7	5.0	5.5
Belgium state	2.2	10.0	3.2	5.6	5.3
Belgium local	1.6	5.6	5.6	2.2	3.7
Canada state	1.6	9.4	4.6	5.9	5.2
Canada local	2.8	6.5	5.9	4.0	4.8
Chile	3.5	6.0	5.8	3.6	4.7
Czech Republic	3.6	9.4	3.5	5.0	5.4
Denmark	3.5	4.5	7.4	3.6	4.8
Estonia	2.5	4.4	7.5	2.0	4.1
Finland	3.1	7.8	3.6	6.3	5.2
Germany state	3.0	9.4	6.4	3.8	5.5
Germany local	2.1	6.8	6.4	3.9	4.8
Ireland	1.7	6.6	5.0	4.5	4.4
Italy state	6.6	3.5	3.5	3.6	4.3
Italy local	2.6	7.9	6.8	3.8	5.3
Korea	2.5	8.0	5.8	2.0	5.9
Mexico state	3.9	7.4	3.5	6.4	5.3
Mexico local	3.9	7.4	4.2	4.7	5.0
New Zealand	3.0	5.1	4.9	3.1	4.3
Norway	2.6	7.8	7.8	3.0	5.6
Poland	3.2	6.6	6.8	1.8	4.3
Slovak Republic	2.0	6.6	7.3	2.7	4.7
Slovenia	2.8	6.6	6.9	1.1	4.4
Spain state	2.4	6.7	6.8	5.7	5.8
Spain local	3.3	7.4	6.9	2.2	4.9
Sweden	2.4	6.7	4.0	4.2	4.3
Switzerland state	2.0	6.7	3.3	4.7	4.2
Switzerland local	3.1	5.6	4.7	5.8	4.8
Turkey	6.4	2.3	4.9	2.7	4.1

Table A2.2. Sub-indices and composite indicator scoring, change 2005-11

	Restraining the size of the public sector	Supporting allocative efficiency	Ensuring debt sustainability	Coping with shocks	Average
Australia state	-0.4	1.6	0.4	1.4	0.2
Austria state	-0.6	-1.1	1.2	-1.9	-0.6
Canada state	-0.3	1.0	-0.9	0.0	-0.1
Canada local	1.1	0.0	-0.5	0.4	0.2
Czech Republic	-0.6	0.2	-1.4	0.4	-0.4
Denmark	-1.2	-2.7	-0.4	0.3	-1.0
Finland	-0.8	-0.6	1.3	-1.3	-0.3
Germany state	-2.9	3.3	0.3	0.1	0.1
Germany local	-2.9	2.4	0.7	0.2	0.1
Korea	-2.6	4.4	-0.4	-1.4	1.4
Norway	0.3	0.2	1.5	-0.9	0.6
Poland	-2.2	-0.6	1.3	-2.2	-1.2
Spain state	1.0	-0.2	0.3	4.3	2.1
Spain local	0.3	0.0	1.3	0.0	0.4
Sweden	-0.1	0.0	-0.4	1.7	0.3
Switzerland state	-2.2	1.3	-1.4	1.1	-0.3
Switzerland local	-2.8	0.1	-1.1	1.6	-0.5
Turkey	-0.2	-3.2	-0.6	-0.5	-1.1

Table A2.3. Low-level indicator scores

2011

	Low-level indicator													
	LLI1	LLI2	LLI3	LLI4	LLI5	LLI6	LLI7	LLI8	LLI9	LLI10	LLI11	LLI12	LLI13	LLI14
Australia state	7.5	0.0	3.4	3.8	6.7	5.0	10.0	9.0	4.0	6.2	10.0	0.0	0.0	6.7
Australia local	0.0	0.0	6.5	5.0	0.0	5.0	8.1	2.5	6.5	5.5	0.0	5.0	0.0	5.8
Austria state	0.0	4.6	1.7	4.4	6.7	10.0	10.0	8.0	0.0	4.1	5.0	2.5	0.0	10.0
Austria local	0.0	6.7	1.7	6.9	8.3	10.0	10.0	6.0	1.0	4.1	5.0	1.7	3.3	10.0
Belgium state	0.0	0.0	2.1	6.9	10.0	10.0	10.0	6.5	0.0	3.1	5.0	0.8	6.7	10.0
Belgium local	0.0	3.0	1.7	1.9	1.7	10.0	5.0	7.0	4.8	4.9	0.0	0.0	3.3	5.4
Canada state	0.0	0.1	0.8	5.6	8.3	10.0	10.0	7.0	3.0	3.8	10.0	2.1	1.7	10.0
Canada local	0.0	3.2	3.5	4.4	3.3	10.0	6.3	5.0	7.5	5.2	5.0	0.0	6.7	4.2
Chile	0.0	5.8	4.9	3.3	0.0	10.0	8.1	2.5	8.8	6.0	10.0	2.5	0.0	2.1
Czech Republic	0.0	3.3	4.1	6.9	8.3	10.0	10.0	6.5	0.0	4.1	5.0	1.7	3.3	10.0
Denmark	5.0	0.2	6.5	2.5	6.7	2.5	4.4	9.0	6.3	6.8	10.0	0.0	0.0	4.6
Estonia	0.0	6.4	2.5	1.3	0.0	10.0	3.1	6.0	8.3	8.2	5.0	0.0	0.0	2.9
Finland	0.0	3.6	3.6	5.0	3.3	10.0	10.0	7.0	0.0	3.9	10.0	0.0	5.0	10.0
Germany state	0.0	6.0	1.7	4.4	8.3	10.0	5.0	7.5	6.5	5.3	5.0	3.7	5.0	6.7
Germany local	0.0	4.7	0.0	3.8	6.7	10.0	3.8	9.0	6.8	3.6	10.0	0.0	0.0	5.4
Ireland	0.0	..	0.0	5.0	1.7	10.0	8.1	5.0	6.3	3.7	10.0	0.0	3.3	4.6
Italy state	10.0	5.4	6.9	4.2	1.7	5.0	3.8	2.5	4.8	3.3	5.0	2.5	0.0	7.1
Italy local	0.0	3.2	3.5	3.8	10.0	10.0	3.8	8.5	6.8	5.2	5.0	1.3	5.0	3.8
Korea	0.0	4.1	1.7	4.4	8.3	10.0	5.6	5.0	6.3	6.1	0.0	2.5	3.3	2.1
Mexico state	5.0	0.0	4.4	6.3	8.3	5.0	8.8	3.0	4.8	2.8	10.0	0.0	6.7	8.8
Mexico local	5.0	0.0	4.4	6.3	8.3	5.0	8.8	3.0	6.8	2.8	10.0	0.0	3.3	5.4
New Zealand	5.0	3.3	3.1	5.6	1.7	5.0	8.8	4.0	3.5	7.3	0.0	1.7	3.3	7.5
Norway	0.0	3.5	2.5	4.4	8.3	10.0	3.8	8.0	7.8	7.6	5.0	0.0	3.3	3.8
Poland	0.0	5.2	2.5	5.0	1.7	10.0	6.9	5.0	7.8	7.7	0.0	0.0	3.3	3.8
Slovak Republic	0.0	3.1	2.5	2.5	6.7	10.0	3.1	8.5	7.0	6.5	5.0	2.5	0.0	3.3
Slovenia	0.0	6.0	3.3	1.9	6.7	10.0	3.1	9.0	7.3	4.4	0.0	0.0	0.0	4.6
Spain state	0.0	2.8	3.1	3.8	8.3	10.0	6.9	6.5	6.5	7.4	10.0	2.9	6.7	3.3
Spain local	7.5	0.0	3.2	2.5	8.3	5.0	8.8	9.0	5.8	6.1	0.0	0.0	3.3	5.4
Sweden	0.0	3.5	1.7	4.4	0.0	10.0	10.0	7.0	0.0	5.1	5.0	0.0	1.7	10.0
Switzerland state	0.0	0.0	2.3	5.6	0.0	10.0	10.0	5.5	0.0	4.5	5.0	2.1	1.7	10.0
Switzerland local	0.0	3.2	3.3	5.6	1.7	10.0	10.0	6.0	0.0	8.1	5.0	0.0	8.3	10.0
Turkey	7.5	7.4	5.1	5.8	0.0	0.0	6.9	2.5	7.0	5.2	5.0	2.5	0.0	3.3

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