Hacienda Pública Española/Review of Public Economics 237-(2/2021): 57-84

https://dx.doi.org/10.7866/HPE-RPE.21.2.3

The Expenditure Rule in the Spanish Organic Law on Budgetary Stability and Financial Sustainability and its Impact on the Autonomous Communities

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Received: November, 2019
Accepted: May, 2020

Abstract

Spanish Autonomous Communities cannot incur a structural deficit, and their debt levels must not exceed the limit set out in the organic law on budgetary stability. This law also includes an expenditure rule that limits their non-financial expenditure. In the last few years, significant differences have been found between the constraints imposed on these regional governments through the budget balance rule and the expenditure rule, which could hinder the internal consistency of the fiscal framework. The present work identifies the reasons for such differences, and examines them for the regional subsector as a whole and for each autonomous community.

Keywords: Budgetary stability, Fiscal rules, Expenditure rule, Autonomous Communities.

JEL Classification: H62, H68, H72.

1. Introduction

After being reformed in 2011, Article 135 of the Spanish Constitution (CE) refers to the principle of budgetary stability basically as the framework under which public administrations have to develop their financial activity. Article 135 establishes, namely, that public administrations have to adapt their actions to the principle of budgetary stability and that neither the central government nor the autonomous communities (ACs) should incur a structural deficit that exceeds the margins established by the EU for its member states. Likewise, this precept includes that these two government subsectors will have their limits set in terms of structural deficit through an organic law, and that the limits of such can only be exceeded in case of natural disasters, economic recession or extraordinary emergency situations. This Article also indicates that the general government's volume of debt may not exceed the reference value set out in the Treaty on the Functioning of the EU (TFEU).

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The Organic Law on Budgetary Stability and Financial Sustainability (LBSFS) was approved in 2012, and develops the aforementioned aspects, among others. Specifically, it defines the budgetary stability of the public administrations as "the situation of equilibrium or structural surplus" (Article 3.2), and establishes that no public administration may incur a structural deficit, except in the case of structural reforms with long-term budgetary effects when they meet the conditions envisaged in the EU regulations for such matters. In these cases, the maximum limit for the structural deficit for the general government has been placed at 0.4% of GDP. In a manner consistent with the provisions of the CE, the LBSFS contemplates that, in exceptional circumstances, the central government and the ACs may incur a structural deficit in case of natural disasters, serious economic recession or extraordinary emergency situations that escape the control of governments and significantly damage their financial situation or their economic or social sustainability

Thus, as indicated in the preamble of the LBSFS, one of its ultimate objectives is the elimination of the government structural deficit. This objective is, in turn, a driver of the governments' goal of financial sustainability, through the reduction of public debt, with limits for the latter being established in Article 13 for the general government sector and for each one of its subsectors. To achieve the purposes described above, the LBSFS provides a set of procedures and instruments, among which the expenditure rule (Article 12) is clearly distinguished; something, which as Ruiz Tarrías (2012) points out, is not expressly provided in Article 135 of the CE. The expenditure rule implemented through the LBSFS imposes a limit on the annual change of the most relevant portion of the non-financial expenditure of public administrations, with the exception of the social security funds subsector.

The present document focuses on the regional government subsector, the Spanish ACs, and aims to analyse the effects of the LBSFS expenditure rule on the boundaries in which these governments have to develop their financial activity. With this purpose in mind, the second section includes a brief summary about the expenditure rule as a fiscal rule, while the third section is dedicated to the LBSFS expenditure rule and to determining analytically the differences between this particular rule and that based on the structural balance. The fourth section analyses the limits that the expenditure rule has produced for the change of non-financial expenditure and the cyclically adjusted balance of the ACs as a whole since its approval, as well as for each regional government for the last two years for which data is available. Finally, the conclusions reached and the main limitations of this work are presented.

2. Expenditure rules in fiscal frameworks

The literature on fiscal rules in general and on expenditure rules in particular is extensive. The purpose of this section is to offer a non-exhaustive summary of some of the most outstanding aspects of the latter. Fiscal rules, from an overall point of view, impose long-lasting restrictions to contain the discretion of policymakers (e. g., Kopits and Symansky, 1998; Eyraud *et al*., 2018a; Sutherland *et al*., 2005), and intend to promote fiscal responsibility and debt sustainability, counteracting the so-called deficit bias in fiscal policy-making, avoiding pro-cyclicality (Shaechter *et al*., 2012; Von Hagen, 2002), and improving trust and credi-

bility (e. g., Kumar *et al*., 2009). When defining fiscal rules, two aspects or dimensions are usually differentiated (e. g., Debrun *et al*., 2008). On the one hand, numerical rules impose a long-lasting constraint on policies through numerical limits on budgetary aggregates or indicators (Kopits and Simansky, 1998; Eyraud *et al*., 2018a; Schaecther *et al*., 2012). On the other hand, procedural rules consist basically of implementing objective-setting fiscal rules, and rules governing the budgetary process (e. g., Sutherland *et al*., 2005; Wyplosz, 2013). The use of fiscal rules has increased over time (e. g., Kopits, 2001; Kumar *et al*., 2009; Schaechter *et al*., 2012); the most recent wave took place in the wake of the global financial crisis, with the creation of rules at the national level, fundamentally in Europe (Debrun *et al*., 2008; Caselli and Reynaud, 2018). Different studies have found that countries with fiscal rules are associated on average with lower deficits (e. g., European Commission, 2019b; Eyraud *et al*., 2018a; Debrun *et al*., 2008; Kumar *et al*., 2009), although causality is not always clear (e. g., Heinemann *et al*., 2017; Caselli and Reynaud, 2018).

There are different types of numerical fiscal rules according to the indicator or aggregate they are based on. Classifications usually distinguish among debt rules, budget balance rules, structural budget balance rules, expenditure rules, and revenue rules (e. g., Kumar *et al*., 2009). Each one of these different types of rule has different properties, and there is currently a consensus on the fact that using a combination of these fiscal rules can help optimise the desired results (e. g., Eyraud *et al*., 2018b; Rodríguez and Cuerpo, 2018; Shaechter *et al*., 2012; Wyplosz, 2013), with this approach being followed by both the SGP in the EU and Spain.

With respect to expenditure rules, Ayuso-i-Casals (2012) argues that research suggests the importance of spending controls to ensure fiscal consolidation, and that the assessment of this type of fiscal rule in terms of the features that a fiscal rule must have according to Kopits and Symansky (1998) is positive. In this sense, one of its most prominent characteristics is that spending shows the real fiscal effort carried out by authorities more directly, and it also offers a clear operational guidance, allows for economic stabilisation (if, for instance, it is defined in terms of level or growth rates), steers the size of government, and is easier to communicate and monitor (e. g., Eyraud *et al*., 2018b; Holm-Hadulla *et al*., 2012). On the other hand, this rule lacks a direct connection with debt, does not consider revenue evolution (European Commission, 2019a), and may result in the crowding out of productive but electorally unattractive initiatives (Cordes *et al*., 2015). The specific design of the expenditure rule has also been addressed, and features, like the terms in which the limit should be set, its coverage with respect to some expenses (e. g., interest, investments, cyclically sensitive items), its temporary framework, and its span across the different tiers of government have been examined (see for instance Ayuso-i-Casals, 2012).

Since expenditure rules are not directly linked to debt sustainability, it is essential to take this into account when designing them and the set of fiscal rules they are included in (Eyraud *et al*., 2018b; Schaechter *et al*., 2012). In this sense, one of the features of a model fiscal rule proposed by Kopits and Symansky (1998) is the internal consistency of the set of rules it is part of. Departing from debt sustainability as the final goal, and as expenditure rules basically look at the spending side of the budget balance, they require specific design features that promote their consistency with debt sustainability (Ayuso-i-Casals, 2012). Eyraud

et al. (2018b), when setting guiding principles for future reforms, claim that well-designed fiscal frameworks are usually structured around two pillars: (1) a fiscal anchor linked to the final objective of fiscal policy –debt sustainability–, and (2) one or more operational rules on fiscal aggregates. Operational rules should concern variables under the direct control of government, with the attainment of debt targets underpinning these rules. Ayuso-i-Casals (2012), Eyraud *et al*. (2018b) and Rodríguez and Cuerpo (2018) propose expenditure rules as operational rules –see also Cordes *et al*., 2015–. Along the same lines, and in the context of the SGP reform, there are proposals that give pre-eminence to the expenditure rule, combined with debt levels (e. g., Benassy-Quéré *et al*., 2018; Darvas, *et al*., 2018).

A key issue in decentralised systems is the application of fiscal rules at subnational levels of government, since policy formulation and decisions are dispersed among the national and subnational levels, and specially when the latter account for a large share of resources (Spanish ACs accounted in 2018 for 32% of general government expenditure). Schaechter *et al*. (2012) found that rules that cover wider levels of government have been associated with more fiscal discipline. Besides fiscal rules, another aspect that is important to foster fiscal discipline in decentralised countries is the design of the funding system of territorial governments (Kopits, 2001; Kumar *et al*., 2009), where it is necessary to promote joint fiscal responsibility (Ayuso-i-Casals, 2012; Hernández de Cos and Pérez, 2015; Lago Peñas, 2010). With respect to this, Argimón and Hernández de Cos (2011) point out that a greater transfer of tax revenues, associated with a greater devolution of power, generates heavier dependency on the economic cycle, which has to be taken into account when designing fiscal rules. When growing spending powers coincide with limited revenue autonomy, vertical fiscal imbalances can arise, making it more necessary to establish a suitable fiscal framework to promote public financial sustainability (Ayuso-i-Casals, 2012). Similarly as indicated by Sutherland *et al*. (2005) for OECD countries, the budget balance rule is the most common fiscal rule for subnational governments in EU member states, whereas the use of the expenditure rule at the regional level was limited in 2015 to only two countries in the EU (European Commission, 2019b).

3. The expenditure rule in the Spanish Organic Law on Budgetary Stability and Financial Sustainability

References to European regulations to specify certain concepts are frequent in the LBSFS, which are a consequence, fundamentally, of the need for Spain's compliance to the commitments that are part of the SGP and the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (TSCG). In this sense, the expenditure rule outlined in the LBSFS presents notable similarities with that integrated in the SGP, although there are also differences (see Table 1).

The expenditure rule contained in Article 12 of the LBSFS basically consists in adapting the change of government non-financial expenditure (except those of the social security funds subsector) to a rate that does not exceed the medium-term rate of potential GDP growth of the Spanish economy –from here on, the reference rate– in order to promote the sustainability of

public finances and a countercyclical budgetary policy. Thus, this rule should help to avoid the procyclicality observed in the past (e. g., Capó y Oliver, 2002; Corrales *et al*., 2002; De la Fuente, 2013), and the disadvantages brought about by focusing on a budget balance rule as was the case before the LBSFS (e. g., Fernández Llera y Monasterio Escudero, 2010).

Similar to what is regulated in the SGP, the restriction described above is not imposed on the interest expenditure, the non-discretionary expenses for unemployment benefits, the expenses funded with earmarked resources, and those expenses incurred for transfers linked to the ACs and local governments funding systems. Likewise, the expenditure aggregate limited by this rule can increase above the reference rate if that rise is fully matched with a permanent increase in revenue as a consequence of a regulatory modification, and being necessary to proceed in the opposite direction if a regulatory modification entails a permanent revenue reduction. On the other hand, Article 12 also establishes that unforeseen revenue (revenue windfalls) should be devoted to reducing public debt, one of the key challenges for Spain (Cuerpo and Ramos, 2015). Furthermore, the reference rate cited in the previous paragraph has to be calculated in accordance with the European Union's methodology, which is regulated in Spain in Order 2741/2012[1].

Likewise, LBSFS provides special rules for the destination of the budget surplus of the local governments that constitute, until now, the only exception to the limit determined by the expenditure rule; these special rules have also been set in a similar way for the ACs through the Central Government Budget Law for 2018 and which was extended for 2019. As regards the ACs, it has been established that they may devote the annual net lending (surplus) in financially sustainable investments (FSI), provided that a number of conditions are met, with those conditions being fundamentally related to the attainment of the fiscal rules and to certain characteristic for those FSIs.

On the basis of all of the above, the annual variation of the non-financial expenditure in the ACs is subject to two parameters or rules. First, there is an obligation to comply with the structural deficit and debt limits established both in the CE and in the LBSFS, already described in the introduction, which would make it necessary to set targets in these terms for each autonomous community (AC) to eliminate the structural deficit and to reach the debt targets specified in that law in a determined period of time. Second, the LBSFS adds the expenditure rule. Specifically, the LBSFS restricts the annual change of the non-financial expenditure of each AC, on the one hand, by the budget stability objective (BSO) set by the central government to each AC, and that fixes the maximum net borrowing (deficit) or the minimum net lending (surplus) in the European System of National and Regional Accounts (ESA) terms for each AC. On the other hand, their expenditure is also constrained by the expenditure rule. As section 4 shows, both parameters usually produce different constraints for each AC, which have to operate within the more stringent limit.

A first reason for the differences between the constraints imposed by each one of these two rules is that the LBSFS expenditure rule does not contain the required adjustment, if any, to meet a specific structural balance target, as opposed to the expenditure benchmark of the SGP (see Table 1). Article 15.2 of the LBSFS stipulates that the setting of the BSOs will be

carried out taking into account the expenditure rule and the structural balance recorded in the previous year. Given that there are relevant differences, as will be shown in the following section, between the different ACs in terms of their structural balance, this should lead, in application of Article 15.2, to the establishment of differentiated BSOs for each AC. However, with the exception of 2013, the BSOs have been set uniformly for the different ACs, despite the fact that the expenditure rule has not allowed all of them to have access to the maximum level of deficit that corresponds to the approved BSOs. This fact constitutes the second reason for the differences between the restrictions set by the BSO and the expenditure rule. In relation to this, AIREF –the Spanish independent fiscal institution– has indicated that it would be advisable when establishing the BSOs to provide greater detail and include an individual analysis of how the expenditure rule affects each AC (e. g., AIREF, 2017), as well as, given the differences between them, setting differentiated BSOs according to their fiscal position (e. g., AIREF, 2019).

In order to identify the factors that determine how these two parameters –the structural balance objective or the expenditure rule- restrict the activity of each AC, the two limits are described analytically below. Starting with the former, expression 1 shows what the rate of variation of the expenditure aggregate limited by the expenditure rule of the previous year should be in order for an AC to reach its structural balance target (SB_n), that is, according to the structural balance rule. Thus, for example, the greater the distance between, on the one hand, the annual non-financial resources, together with the result of regulatory changes, and, on the other, the expenditure aggregate of the previous year, the greater the variation in the expenditure aggregate may be without incurring a structural deficit that is higher than the target.

$$R_{n,i} + Var\ RR_{n,i} - EA_{n-1,i} * \left(1 + rsb_{n,i}\right) - EX_{n,i} - CB_{n,i} - Mof_{n,i} = SB_{n,i}$$

operating,

$$rsb_{n,i} = \frac{R_{n,i} + Var\ RR_{n,i} - EX_{n,i} - CB_{n,i} - SB_{n,i} - Mof_{n,i}}{EA_{n-1,i}} - 1 \qquad (1)$$

where for the AC_i, $R_{n,i}$ represents the non-financial resources in ESA terms for year n without including the part that corresponds to the permanent variation in relation to the previous year due to regulatory changes; $Var\ RR_{n,i}$ is this last revenue variation; $EA_{n-1,i}$, the amount of expenditure aggregate in the previous year; $EX_{n,i}$ the amount of expenditure in n that are excluded of the expenditure aggregate; $CB_{n,i}$ the estimated cyclical balance[2] in year n, determined in accordance with EU agreed methodology –see European Commission, 2019a–; $SB_{n,i}$ the structural balance[2,3] target that AC_i must reach in year n; $Mof_{n,i}$ the amount of the one-off measures for year n, also in accordance with its definition at EU level; and $rsb_{n,i}$ is the rate at which at most its expenditure aggregate can grow in n to meet the structural balance objective.

Likewise, and in a similar sense to the above, expression 2 shows, based on the estimate of the cyclical balance[4], the figures for the one-off measures, and the structural balance objective, the changes that could be registered in the total non-financial expenditure of an AC in order not to incur a structural deficit that is greater than the one set as the objective –that is, to

comply with the structural balance rule. To that end, it is necessary to add to the distance between the structural balance target and the cyclical balance for years n and $n-1$ the deviation in year $n-1$ from the BSO. Thus, those ACs that have presented an unfavourable deviation in the previous year, would have to make an additional effort in the following year. In this sense, the minuend of expression 2 reflects the variation of the non-financial resources between the two years, while the subtrahend contains the change between the BSO –maximum deficit or minimum surplus– for year n and the actual budget balance in $n-1$, broken down into the components indicated above.

(A) *Limit of non-financial uses in n for* $AC_i = R_{n,i} + Var\ RR_{n,i} - CB_{n,i} - SB_{n,i} - Mof_{n,i}$

(B) *Actual non-financial uses in* $n-1 =$

$$R_{n-1,i} - CB_{n-1,i} - SB_{n-1,i} - Mof_{n-1} - DBSO_{n-1,i}$$

$$\begin{aligned}(A) - (B) = R_{n,i} + Var\ RR_{n,i} - R_{n-1,i} - \left(CB_{n,i} - CB_{n-1,i}\right) - (SB_{n,i} - SB_{n-1,i}) - \\ (Mof_{n,i} - Mof_{n-1,i}) + DBSO_{n-1,i} = (Var\ R_{n,i} + Var\ RR_{n,i}) - \\ (Var\ CB_{n,i} + Var\ SB_{n,i} + Var\ Mof_{n,i} - DBSO_{n-1,i})\end{aligned} \quad (2)$$

where for the AC_i, $R_{n-1,i}$ represents the total amount of its non-financial resources in $n-1$; $Var\ R_{n,i}$, the change of resources in n without including $Var\ R_{n,i}$; $Var\ CB_{n,i}$ is the difference between its cyclical balance in n in relation to the previous year; $Var.SB_{n,i}$ the distance between the structural balance targets of those two years; $Var\ Mof_n$ an adjustment to eliminate the one-off measures corresponding to n and a $n-1$; and $DBSO_{n-1,i}$ is the favourable (with positive sign) or unfavourable deviation from the BSO in $n-1$.

On the other hand, expression 3 determines the amount by which the non-financial expenditure of an AC can vary according to the expenditure rule. The amount will depend, fundamentally, on the amount of the reference rate and the total amount of the expenditure aggregate limited by this rule in the previous year, which, given how this rule has been applied, includes the amount corresponding to breaches, if any, of both the BSO and the expenditure rule itself.

$$\begin{aligned}rr_n * EA_{n-1,i} + Var\ RR_{n,i} + Var\ EX_{n,i} = \\ tr_n * \left(EAmax_{n-1,i} - deviation_{n-1,i}\right) + Var\ RR_{n,i} + Var\ EX_{n,i}\end{aligned} \quad (3)$$

where rr_n is the medium term reference rate for the year n; $Var\ EX_{n,i}$ is the difference between non-financial expenditure excluded of the expenditure rule for n and $n-1$; $EAmáx_{n-1,i}$ is the maximum amount of the expenditure aggregate that the AC_i should have incurred in order to fulfil the structural balance target or the expenditure rule in $n-1$ –the most restrictive one in that year–; and $deviation_{n-1,i}$ is the favourable (positive sign) or unfavourable deviation in $n-1$ with respect to the more binding limit of those imposed by the BSO and the expenditure rule.

Table 1
THE EXPENDITURE RULE: SIMILARITIES AND DIFFERENCES BETWEEN THE EU REGULATIONS AND THE LBSFS

	EU regulations	LBSFS (autonomous communities)
	Expenditure aggregate	
Initial basis	Non-financial expenditure in ESA terms.	Non-financial expenditure in ESA terms.
Exclusions	Public debt interest, spending on EU-funded programs, non-discretionary spending on unemployment aid.	Like those contemplated by the EU, plus expenses financed with earmarked funds by other public admin., and the expenditure on transfers linked to territorial funding systems.
Gross fixed capital formation not co-funded	Investments funded by the MS can be averaged over the past four years.	No exception or adjustment is contemplated.
Specific investments	Expenditure in investments that can be considered equivalent to structural reforms, in accordance with the requirements of EU regulations, would not be subject to the expenditure rule.	Financially sustainable investments, financed with previous year's surplus, if the conditions established are met, have not been subject to the expenditure rule in 2018 and 2019.
One-off measurements	The expenditure aggregate is adjusted with the amount of one-off measures for overall evaluation.	No exception or adjustment is contemplated.
Discretionary revenue measures	The expenditure aggregate is corrected with increases and decreases by discretionary revenue measures.	The expenditure aggregate is adjusted with increases and decreases by discretionary revenue measures.
Unexpected revenue (*Windfalls*)	In the global evaluation of the preventive arm, if an MS has overachieved its MTO, a deviation in the expenditure benchmark is not deemed as significant, once windfalls are taken into account[(a)].	Unexpected revenue must be dedicated to debt reduction.
	Rate of change	
Maximum rate for the expenditure aggregate	Reference rate of medium-term growth of the Spanish economy in real terms according to EU regulations, plus GDP deflator; if the MS has not reached its MTO, the rate is reduced by incorporating the required adjustment in expenditure to meet MTO (or the adjustment path towards it).	Same as EU regulations, but with a maximum of 2% for GDP deflator. Unlike SGP, the reference rate is not modulated with the required adjustment for the structural balance target.

(*Continued*)

	EU regulations	LBSFS (autonomous communities)
	Evaluation	
Declaration of significant deviation	For MSs that have not reached their MTO, so that a deviation can be considered significant, either in relation to the change in the structural balance or in the variation of non-financial expenditure, it must be greater than 0.5% of GDP in a year or more than 0.25% of average annual GDP in two consecutive years. If the deviation is significant for both indicators, there is an important basis for initiating a significant deviation procedure (PSD) provided for in Regulation 1466/97.	The level of compliance is considered annually, regarding the observed amount of the expenditure aggregate, and there is always non-compliance if the reference rate is exceeded in one year.
Subordination of the expenditure rule to another fiscal rule	In the preventive arm, a deviation in the expenditure benchmark is not considered significant if the MS has overachieved its MTO (see cell on windfalls). If the EM is not in its MTO, but complies with the adjustment required for the structural balance, non-compliance with EB does not always entail a significant deviation procedure. In the corrective arm, the permitted variation of the expenditure aggregate is adjusted to the compliance required to achieve the adjustment in terms of the structural balance objective.	The limits determined by the expenditure rule are the same regardless of the budget and structural balances and level of debt, without prejudice to what is indicated for the IFS.

(a) See European Commission (2019b: 52-55).

Source: Elaboration by the author from LBSFS, Regulation 1466/97 and European Commission (2019a, b).

Therefore, the difference between the limits for non-financial expenditure that the structural balance rule and the LBSFS expenditure rule produce will depend on the relationship between the two terms of the equation 4.

$$Var\ R_{n,i} - (Var\ CB_{n,i} + Var\ SB_{n,i} + Var\ Mof_{n,i} - DBSO_{n-1,i}) \neq rr_n * (EAmáx_{n-1,i} - deviation_{n-1,i}) + Var\ EX_{n,i} \quad (4)$$

Based on expression 4, the maximum growth of the total non-financial expenditure of an AC in a year to meet its structural balance objective will tend to be higher than that imposed by the LBSFS expenditure rule if some of the following circumstances were to occur:

— The greater the growth of non-financial resources, net of discretionary revenue measures, the greater the distance between the constraints imposed by the structural balance rule and the expenditure rule will be. The inter-annual variation of non-financial resources does not have only to correspond to an improvement in the cyclical balance, but may also be the result of, for example, measures aimed at improving revenue management. In this regard, the European Commission (2019a) indicates that an advantage of the rule based on the structural balance over the expenditure rule is that the former would provide more effective incentives for revenue management. In addition, a significant increase in the region's GDP can result in a marked growth of non-financial resources. Since the LBSFS expenditure rule applies the same reference rate for all the ACs, those with greater economic growth would be subject to a tighter constraint from the expenditure rule.

— The ACs with a more positive structural balance, or that do not have to make adjustments at this level, may make greater variations in non-financial expenditure than those that do have to make these adjustments. On the other hand, the LBSFS expenditure rule does not consider the required adjustment, if any, to meet the structural balance target –as opposed to the expenditure benchmark of the SGP, see Table 1. Eyraud *et al*. (2018a) indicate that a simple expenditure growth rule related to trend GDP should be applied only when the initial fiscal position is deemed appropriate.

— Also for those ACs that have had a higher level of compliance, it is expected that there will be greater differences between the two rules, since, given how the LBSFS expenditure rule is being put into practice, the reference rate is applied to the actual expenditure aggregate amount for the previous year, so any breach of any of the two rules implies a greater amount of this aggregate, and, therefore, a greater possible variation of the same. The contrary would happen for those ACs that are in the opposite situation and present a spending level lower than the limit. Both the AIREF (e. g., AIREF, 2016) and the European Commission (e. g., European Commission, 2018) have aired their disagreement on this aspect.

— When the reference rate of the expenditure rule contains years for which the variation in the output gap has been especially negative, the distance between the limits of these two rules will tend to be greater. As this reference rate consists of an average

for 10 years, recent years have included values from the years of the last economic recession, and for which the output gap and the variation in potential GDP have been exceptionally negative (see European Commission, 2019a: 35)

— The lower the amount of the expenses excluded from the expenditure aggregate (e. g., expenses funded with earmarked grants or interests on public debt), the greater the distance between the limits produced by these two rules. In 2018, expenses that were not part of the expenditure aggregate, not including transfers originating in the regional funding system (RFS) that are registered as ESA uses, totalled 13% of the non-financial uses of the ACs.

— When in the previous year the ACs have implemented one-off measures with, for instance, a positive effect on the budget balance for a higher amount than that corresponding to the fiscal year in question, this fact will contribute to the increase of the limit derived from the structural balance. One-off measures are not considered in the expenditure rule envisaged in the LBSFS, unlike that integrated in the SGP (see Table 1).

4. Analysis of the interaction between the expenditure rule and the structural balance rule in the Spanish autonomous communities

As indicated, the change of the non-financial expenditure in the ACs has become, since 2013 and after the approval of the LBSFS, subject to two rules –achieving a determined level of structural balance and the expenditure rule– which, together with the different degree of compliance of the ACs, largely explains the levels of their most recent non-financial expenditure. Table 2 shows, based on expressions 2 and 3, the estimates of the limits that these two rules would have meant for the regional subsector. These estimates have been made on the basis of the BSOs and the reference rates set each year, as well as the levels of deficit and total non-financial expenditure observed according to their figures today, so the results do not coincide fully with those shown in the annual compliance reports issued by the Ministry of Finance under article 17 of the LBSFS. This table shows that, in 2013, based on actual non-financial expenditure at the end of 2012, the expenditure aggregate limited by this rule, and according to this rule, could grow, although not beyond 3,608 million euros. However, regarding the resources recorded in that year and the BSO set for 2013 (and, therefore, considering the adjustment to the structural balance that it implied), the expenditure aggregate should decrease by 15,848 million euros –a difference between both rules of 1.9% of GDP. This reduction in the expenditure aggregate was necessary, taking into account the modest rise in resources (347 million) and the significant increase in expenditure not included in the expenditure aggregate (8,887 million euros), to comply with the underlying reduction of the structural deficit contained in the BSO of 2013 (0.85% of GDP; see table 2). This adjustment was made almost completely, as in 2013 an excess of deficit above the BSO for 3,111 million euros was registered. The difference between these two rules is mainly due to the fact that the expenditure rule does not contain the adjustment that had to be made to the expenditure amount necessary to achieve the reduction of the structural deficit implicit in the BSO for

2013. This situation of preponderance of the limit imposed by the BSO on that of the expenditure rule was the case, for the regional subsector as a whole, until 2016. Until and including 2016, the fixed BSOs and, therefore, their underlying structural balance targets, would have led to an annual reduction of the expenditure aggregate, as opposed to the expenditure rule, that allowed for an increase in expenditure. This was because the adjustment according to the BSO to be made in relation to the deficit recorded in the previous year was greater than the increase in resources. From that year on, the situation changes mainly as a result of the greater growth of non-financial resources, and that the annual variation of the BSO, together with the deviation presented in the previous year, proved less restrictive than in previous years. From 2017 onwards, the BSO set for that year allowed, for the first time, to increase the amount of the expenditure aggregate for the regional subsector; and it is also at this time that the increase allowed by the expenditure rule becomes more restrictive, at the subsector level, than that established by the BSOs. Thus, the CAB adjustment imposed by the expenditure rule became more exacting than that by the BSO from 2017 on (Table 2). The difference between the limits to the expenditure aggregate derived from these two rules accounted for 0.4% and 0.1% of GDP in 2017 and in 2018. This shorter distance between the two rules in 2018, compared with 2017, is due in particular to the lower growth of resources in 2018, and the increase in expenditure not included in that aggregate (mainly due to the expenses funded by European funds).

Likewise, it was in 2017 and 2018 when the regional subsector presented a favourable deviation from the BSO, with a cyclically adjusted deficit lower than that inherent to the BSOs. This could be attributed, to some extent, to the impact of the expenditure rule, which, as indicated above, limited the growth of expenditure in those years in a more restrictive way than the BSOs. In line with this, Tables 3 and 4 show that the expenditure rule has imposed the strictest limit for the majority of ACs in both 2017 (12 out of 17) and in 2018 (10 out of 17). Most of the ACs that attained the BSO in those two years found the expenditure rule to be a more demanding restriction than that of the BSO. Nevertheless, the limit produced by the LBSFS expenditure rule can be compatible with a worsening of the CAB, as was the case in 2018. As a consequence of the fact that the LBSFS expenditure rule does not consider the required CAB adjustment for some ACs, its attainment in 2018 meant a CAB for the regional subsector not exceeding -0.3% of GDP (budget deficit also of -0.3%), the CAB of this subsector in 2017 having been -0.1% of GDP (budget deficit of -0.4%) (Table 2).

Table 2
ESTIMATION OF THE RESTRICTIONS ON THE CHANGE OF NON-FINANCIAL EXPENDITURE OF THE REGIONAL GOVERNMENT SUBSECTOR (millions of euros)[a]

	2012	2013	2014	2015	2016	2017	2018
Var. RR_n (1)		1,115	299	45	66	419	18
Var. R_n (2) (net amounts of variations in expenditure on transfers of regional funding system)		-768	-2,454	4,616	8,121	10,492	6,702
Change of non-financial resources (1)+(2)=(3)		**347**	**-2,155**	**4,661**	**8,187**	**10,911**	**6,720**

(*Continued*)

	2012	2013	2014	2015	2016	2017	2018
Var. CB_n (4)		-1,437	1,569	3,664	3,594	3,018	2,608
Var. SB_n (5)		3,639	1,374	-886	-3,848	-2,192	-446
$DBSO_{n-1}$ [(+) favourable/ (-) unfavourable deviation] (6)		-5,107	-3,111	-8,374	-11,318	-1,694	2,806
Change in budget balance for compliance of BSOn ((4)+(5)−(6))=(7)		**7,308**	**6,054**	**11,153**	**11,064**	**2,520**	**-644**
Var. EX_n (excluded expenditure on transfer of territorial funding system) **(8)**		**8,887**	**531**	**-875**	**-2,119**	**503**	**2,317**
TOTAL VARIATION ALLOWED IN EXPENDITURE AGGREGATE FOR COMPLIANCE OF BSO_n (3)−(7)−(8)=(9)		**-15,848**	**-8,740**	**-5,617**	**-758**	**7,888**	**5,046**
$rr_n * EAmax_{n-1}$ (10)		2,406	1,961	1,625	2,297	2,900	3,435
$rr_n * deviation_{n-1}$ (11)		-87	-47	-109	-204	-36	-40
Var. PR_n (1)		1,115	299	45	66	419	18
TOTAL VARIATION ALLOWED IN EXPENDITURE AGGREGATE FOR COMPLIANCE OF EXPENDITURE RULE (10)−(11)+(1)=(12)		**3,608**	**2,306**	**1,779**	**2,567**	**3,354**	**3,493**
DIFFERENCE (9)−(12)=(13)		**-19,457**	**-11,047**	**-7,396**	**-3,325**	**4,534**	**1,554**
(13)/GDP (% GDP)		**-1.9%**	**-1.1%**	**-0.7%**	**-0.3%**	**0.4%**	**0.1%**
CAB TARGET (according to BSO_n; % GDP) (14)	**-0.25%**	**0.10%**	**0.23%**	**0.14%**	**-0.21%**	**-0.39%**	**-0.41%**
CAB TARGET (according to Expend. Rule; % GDP) (15)		**-1.8%**	**-0.8%**	**-0.5%**	**-0.5%**	**0.0%**	**-0.28%**
CAB (according to observed budget balance; % GDP) (16)	**-0.75%**	**-0.20%**	**-0.58%**	**-0.91%**	**-0.36%**	**-0.15%**	**-0.29%**
CAB adjustment BSO[(b)] (14 n)−(16 n−1)		**0.85%**	**0.4%**	**0.7%**	**0.7%**	**-0.03%**	**-0.3%**
CAB adjustment Expend. Rule[(b)] (15 n)−(16 n−1)		**-1.1%**	**-0.6%**	**0.0%**	**0.4%**	**0.36%**	**-0.14%**

(a) The figures contained in this table are the result of considering the cyclical balance estimates in percentages of GDP in MINECO (2018) (see appendix), as well as the net lending and non-financial uses recorded annually according to IGAE (2019), so they may differ from those shown in the reports of the degree of compliance with the BSO, debt targets, and the expenditure rule issued by MINHAP (2019). The annual variation of non-financial resources is shown as net of transfers originating in the regional funding system (RFS) that are recorded, in ESA, as expenditure. In order to determine the expenditure aggregate, the amount of the expenditures excluded from the expenditure rule is that in MINHAP (2019), without including those corresponding to the expenditure on transfers of the RFS, since they have been discounted in the variation of the non-financial resources.

(b) Difference between the CAB target and the CAB registered in the previous year.

Source: Author's calculation based on IGAE (2019), MINECO (2018) and MINHAP (2019).

Table 3
ESTIMATE OF THE CONSTRAINTS IMPOSED BY THE BUDGET STABILITY OBJECTIVE AND THE EXPENDITURE RULE IN 2017 (% GDP)

	An	Ar	As	Ba	Cana	Cnt	C-M	CyL	Cat	Ex	Ga	Ma	Mu	Na	Ri	Va	PV	Total
Var. RR_{2017} (1)	0.0%	0.0%	-0.2%	0.1%	0.4%	0.0%	0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%
Var. R_{2017} (2)[(a)]	0.8%	0.8%	0.5%	1.1%	1.4%	1.3%	0.8%	0.4%	0.7%	0.9%	0.6%	0.6%	0.8%	2.4%	0.8%	1.2%	2.5%	0.9%
Change of non-financial resources (1)+(2)=(3)	**0.8%**	**0.8%**	**0.3%**	**1.2%**	**1.8%**	**1.3%**	**0.9%**	**0.4%**	**0.7%**	**0.9%**	**0.6%**	**0.6%**	**0.8%**	**3.2%**	**0.8%**	**1.2%**	**2.5%**	**0.9%**
Var. CB_{2017} (4)	0.3%	0.3%	0.3%	0.2%	0.3%	0.4%	0.3%	0.3%	0.3%	0.4%	0.3%	0.2%	0.3%	0.3%	0.3%	0.3%	0.4%	0.3%
Var. SB_{2017} (5)	-0.2%	-0.2%	-0.3%	-0.2%	-0.2%	-0.3%	-0.3%	-0.2%	-0.2%	-0.4%	-0.2%	-0.1%	-0.2%	-0.3%	-0.2%	-0.2%	-0.3%	-0.2%
$DBSO_{2016}$ (+) Favourable/(–) Unfavourable deviation (6)	0.1%	-0.5%	0.2%	0.1%	0.4%	-0.7%	-0.1%	0.0%	-0.2%	-0.9%	0.1%	0.0%	-0.9%	0.0%	0.1%	-0.8%	0.0%	-0.1%
Change in budget balance for compliance of BSO_{2017} ((4)+(5)–(6))=(7)	**0.0%**	**0.5%**	**-0.1%**	**0.0%**	**-0.3%**	**0.8%**	**0.2%**	**0.1%**	**0.3%**	**1.0%**	**0.0%**	**0.1%**	**1.0%**	**0.1%**	**-0.1%**	**0.9%**	**0.1%**	**0.2%**
Var. EX_{2017} (excluded expenditure on transfers of territorial funding system) (8)	**0.2%**	**0.1%**	**0.0%**	**0.1%**	**0.2%**	**0.2%**	**0.2%**	**0.0%**	**0.0%**	**0.1%**	**-0.1%**	**0.0%**	**0.1%**	**-0.2%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**
TOTAL VARIATION ALLOWED IN EXPENDITURE AGGREGATE FOR COMPLIANCE OF BSO_{2017} (3)–(7)–(8)=(9)	**0.6%**	**0.1%**	**0.5%**	**1.1%**	**1.8%**	**0.25%**	**0.4%**	**0.3%**	**0.5%**	**-0.2%**	**0.7%**	**0.5%**	**-0.3%**	**3.3%**	**0.9%**	**0.2%**	**2.5%**	**0.7%**

(*Continued*)

	An	Ar	As	Ba	Cana	Cnt	C-M	CyL	Cat	Ex	Ga	Ma	Mu	Na	Ri	Va	PV	Total
CAB ADJUSTMENT REQUIRED BY BSO_{2017} (10)	**-0.3%**	**0.3%**	**-0.5%**	**-0.2%**	**-0.6%**	**0.47%**	**-0.1%**	**-0.2%**	**0.0%**	**0.6%**	**-0.4%**	**-0.1%**	**0.7%**	**-0.2%**	**-0.4%**	**0.7%**	**-0.3%**	**-0.05%**
$rr_{2017} * EA_{2016}$ (11)[(b)]	0.3%	0.3%	0.3%	0.2%	0.3%	0.3%	0.3%	0.3%	0.2%	0.4%	0.3%	0.2%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
TOTAL VARIATION ALLOWED IN EXPENDITURE AGGREGATE FOR COMPLIANCE OF EXPENDITURE RULE (11)+(1)=(12)	**0.3%**	**0.3%**	**0.2%**	**0.3%**	**0.7%**	**0.34%**	**0.4%**	**0.3%**	**0.3%**	**0.4%**	**0.2%**	**0.2%**	**0.3%**	**1.1%**	**0.3%**	**0.3%**	**0.3%**	**0.3%**
CAB ADJUSTMENT REQUIRED BY EXPENDITURE RULE (13)	**0.0%**	**0.1%**	**-0.1%**	**0.6%**	**0.5%**	**0.39%**	**0.0%**	**-0.2%**	**0.2%**	**0.0%**	**0.1%**	**0.2%**	**0.1%**	**2.0%**	**0.2%**	**0.6%**	**2.0%**	**0.33%**
DIFFERENCE (9)−(12)=(13)−(10)	**0.3%**	**-0.2%**	**0.4%**	**0.8%**	**1.1%**	**-0.1%**	**0.1%**	**0.0%**	**0.2%**	**-0.6%**	**0.4%**	**0.4%**	**-0.6%**	**2.2%**	**0.6%**	**-0.1%**	**2.2%**	**0.4%**
CAB_{2017} (% GDP)	**-0.1%**	**-0.7%**	**-0.1%**	**0.4%**	**0.9%**	**-0.15%**	**-0.4%**	**-0.8%**	**-0.3%**	**-0.5%**	**0.0%**	**-0.4%**	**-1.2%**	**1.5%**	**-0.1%**	**-0.6%**	**1.8%**	**-0.1%**
$DEBT_{2017}$ (% GDP)	**22.1%**	**22.0%**	**18.6%**	**29.1%**	**15.9%**	**23.1%**	**35.9%**	**21.0%**	**34.8%**	**23.5%**	**18.6%**	**15.0%**	**29.0%**	**18.4%**	**19.3%**	**42.7%**	**14.3%**	**24.8%**
CAB_{2016} (% GDP)	**0.0%**	**-0.7%**	**0.2%**	**-0.2%**	**0.3%**	**-0.8%**	**-0.2%**	**-0.2%**	**-0.4%**	**-0.8%**	**0.0%**	**-0.3%**	**-1.1%**	**-0.1%**	**0.0%**	**-1.0%**	**0.0%**	**-0.3%**

Notes: Author's calculation based on IGAE (2019), MINECO (2018) and BE (2019).

(a) Var. R_{2017} shows the change in non-financial resources net of the variation in expenditure on RFS transfers.

(b) For simplicity, the expenditure aggregate has not been disaggregated in the manner set out in expression 3.

Key: An=Andalusia; Ar=Aragon; As=Asturias; Ba=Balearic Islands; Cana=Canary Islands; Cnt=Cantabria; C-M=Castile-la Mancha; CyL=Castile-León; Cat=Catalonia; Ex=Extremadura; Ga=Galicia; Ma=Madrid; Mu=Murcia; Na=Navarra; Ri=La Rioja; Va=Valencia; PV=Basque Country.

Table 4
ESTIMATE OF THE CONSTRAINTS IMPOSED BY THE BUDGET STABILITY OBJECTIVE AND THE EXPENDITURE RULE IN 2018 (% GDP)

	An	Ar	As	Ba	Cana[b]	Cnt	C-M	CyL	Cat	Ex	Ga	Ma	Mu	Na	Ri	Va	PV	Total
Var. RR_{2018} (1)	-0.1%	0.1%	-0.1%	0.2%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	-0.1%	0.1%	0.0%	0.0%	0.0%	0.0%
Var. R_{2018} (2)[a]	0.8%	1.0%	1.0%	0.7%	1.1%	0.8%	1.0%	0.6%	0.4%	1.1%	0.9%	0.5%	0.8%	-0.2%	0.4%	0.6%	-0.6%	0.6%
Change of non-financial resources (1)+(2)=(3)	**0.7%**	**1.1%**	**0.9%**	**0.9%**	**1.5%**	**0.9%**	**1.0%**	**0.6%**	**0.4%**	**1.1%**	**0.8%**	**0.5%**	**0.7%**	**-0.1%**	**0.4%**	**0.5%**	**-0.6%**	**0.6%**
Var. CB_{2018} (4)	0.3%	0.2%	0.3%	0.2%	0.3%	0.3%	0.3%	0.3%	0.2%	0.4%	0.3%	0.2%	0.3%	0.3%	0.3%	0.2%	0.3%	0.2%
Var. SB_{2018} (5)	-0.1%	-0.1%	-0.1%	0.0%	-0.1%	-0.1%	-0.1%	-0.1%	0.0%	-0.2%	-0.1%	0.0%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
$DBSO_{2017}$ (+) Favourable/(–) Unfavourable deviation (6)	0.2%	-0.4%	0.2%	0.8%	1.2%	0.1%	-0.1%	-0.4%	0.1%	-0.3%	0.4%	0.1%	-0.8%	1.7%	0.2%	-0.2%	2.1%	0.2%
Change in budget balance for compliance of BSO_{2018} ((4)+(5)–(6))=(7)	**0.0%**	**0.5%**	**-0.1%**	**-0.6%**	**-1.0%**	**0.0%**	**0.3%**	**0.6%**	**0.1%**	**0.5%**	**-0.2%**	**0.1%**	**1.0%**	**-1.6%**	**-0.1%**	**0.4%**	**-1.9%**	**-0.1%**
Var. EX_{2018} (excluded expenditure on transfers of territorial funding system) (8)	**0.1%**	**0.3%**	**0.5%**	**0.4%**	**0.5%**	**0.3%**	**0.5%**	**0.1%**	**0.1%**	**0.9%**	**0.3%**	**0.1%**	**0.2%**	**0.2%**	**0.1%**	**0.2%**	**0.2%**	**0.2%**
TOTAL VARIATION ALLOWED IN EXPENDITURE AGGREGATE FOR COMPLIANCE OF BSO_{2018} (3)–(7)–(8)=(9)	**0.6%**	**0.3%**	**0.5%**	**1.1%**	**2.0%**	**0.5%**	**0.3%**	**-0.1%**	**0.2%**	**-0.3%**	**0.7%**	**0.3%**	**-0.5%**	**1.3%**	**0.4%**	**0.0%**	**1.1%**	**0.4%**

(*Continued*)

	An	Ar	As	Ba	Cana[b]	Cnt	C-M	CyL	Cat	Ex	Ga	Ma	Mu	Na	Ri	Va	PV	Total
CAB ADJUSTMENT REQUIRED BY BSO_{2018} (10)	**-0.3%**	**0.3%**	**-0.3%**	**-0.9%**	**-1.3%**	**-0.3%**	**0.0%**	**0.3%**	**-0.1%**	**0.1%**	**-0.5%**	**-0.1%**	**0.8%**	**-1.9%**	**-0.3%**	**0.1%**	**-2.3%**	**-0.3%**
rr_{2018} * EA_{2017} (11)[c]	0.3%	0.3%	0.4%	0.2%	0.3%	0.4%	0.3%	0.3%	0.3%	0.4%	0.3%	0.2%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
TOTAL VARIATION ALLOWED IN EXPENDITURE AGGREGATE FOR COMPLIANCE OF EXPENDITURE RULE (11)+(1)=(12)	**0.2%**	**0.4%**	**0.3%**	**0.4%**	**0.7%**	**0.4%**	**0.3%**	**0.3%**	**0.3%**	**0.4%**	**0.3%**	**0.2%**	**0.2%**	**0.4%**	**0.3%**	**0.3%**	**0.3%**	**0.3%**
CAB ADJUSTMENT REQUIRED BY EXPENDITURE RULE (13)	**0.1%**	**0.2%**	**-0.1%**	**-0.2%**	**0.0%**	**-0.2%**	**0.0%**	**-0.1%**	**-0.2%**	**-0.6%**	**0.0%**	**0.0%**	**0.0%**	**-1.0%**	**-0.3%**	**-0.2%**	**-1.4%**	**-0.2%**
DIFFERENCE (9)−(12)=(13)−(10)	**0.4%**	**-0.1%**	**0.2%**	**0.7%**	**1.3%**	**0.1%**	**0.0%**	**-0.4%**	**-0.1%**	**-0.7%**	**0.5%**	**0.1%**	**-0.7%**	**0.9%**	**0.0%**	**-0.3%**	**0.8%**	**0.1%**
CAB_{2018} (% GDP)	**-0.5%**	**-0.3%**	**0.0%**	**-0.4%**	**0.9%**	**-0.3%**	**-0.4%**	**-0.3%**	**-0.5%**	**-0.3%**	**0.2%**	**-0.3%**	**-1.3%**	**0.5%**	**-0.3%**	**-1.4%**	**0.7%**	**-0.3%**
$DEBT_{2018}$ (% GDP)	**22.1%**	**22.0%**	**18.5%**	**27.8%**	**14.9%**	**23.0%**	**35.3%**	**21.1%**	**34.2%**	**23.9%**	**18.1%**	**14.6%**	**29.7%**	**16.8%**	**19.1%**	**42.2%**	**13.6%**	**24.4%**

Notes: Author's calculation based on IGAE (2019), MINECO (2018) and BE (2019).

(a) Var. R_{2018} shows the change in non-financial resources net of the variation in expenditure on RFS transfers.

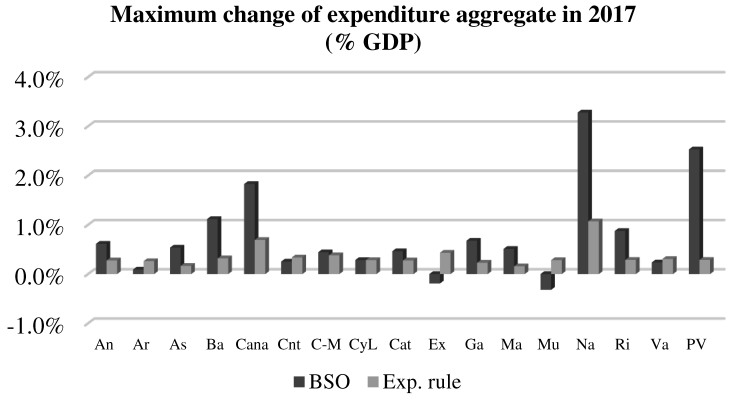
(b) 500.39 million euros have been deducted from the resources of the Canary Islands, since this amount corresponds to judicial rulings and therefore constitute a one-off event.

(c) For simplicity, the expenditure aggregate has not been disaggregated in the manner set out in expression 3.

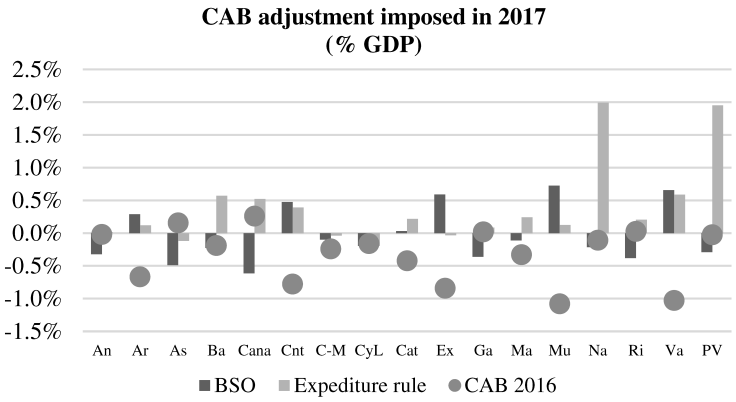
Key: An=Andalusia; Ar=Aragon; As=Asturias; Ba=Balearic Islands; Cana=Canary Islands; Cnt=Cantabria; C-M=Castile-la Mancha; CyL=Castile-León; Cat=Catalonia; Ex=Extremadura; Ga=Galicia; Ma=Madrid; Mu=Murcia; Na=Navarra; Ri=La Rioja; Va=Valencia; PV=Basque Country.

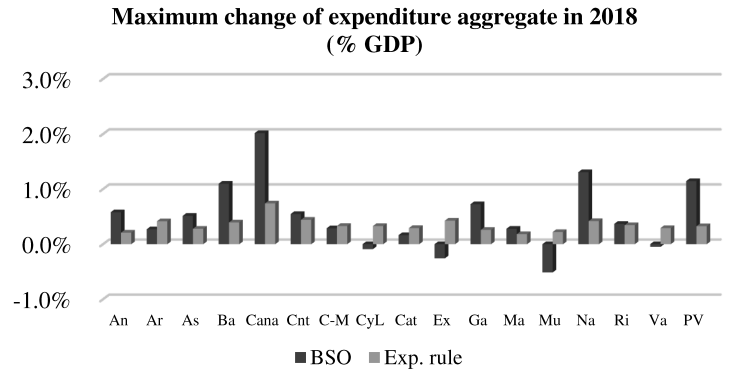
Tables 3 and 4 also show that in 2017 and 2018[5] the situation of each AC was substantially different in the face of the limits that were imposed, on the one hand, by the BSOs, and, on the other, by the expenditure rule (see also Figure 1). CAB figures shown in these tables were calculated by using the same output gap for all ACs and the semi-elasticities of revenue and expenditure contemplated in Order 2741/2012, following the procedure set by this regulation (see appendix on the estimation of the cyclical balance in this work). In 2017 there were some ACs that having registered a close to balance or positive CAB in 2016, the expenditure rule obliged them to improve their CAB, whereas the BSO would have allowed them to incur a deficit (Table 3). The ACs that found themselves in this situation were the Basque Country, Navarra, the Canary Islands, La Rioja, Galicia and the Balearic Islands, with a difference between the limits of both rules exceeding 0.5% of GDP for most of them (see also Figure 1). The most important reasons for these differences are, generally and in addition to the establishment of a uniform BSO, the greater growth of their non-financial resources, as well as the fact that they had presented a null or positive deviation from the BSO in 2016. Other ACs such as Murcia and Extremadura also experienced significant differences between both rules (-0.6% of GDP), but contrary to the aforementioned cases, the adjustment raised by the BSO was more demanding for them, mainly due to the fact that they had a greater deficit in 2016. For other ACs, the differences between the adjustments imposed by both rules were inferior. This was the case of Castile and León, for which both rules allowed a similar worsening of their CAB, and also others such as Cantabria, for which both rules required a similar improvement in the balance. All in all, in 2017 there was a lack of correlation between the adjustment to the CAB imposed by the expenditure rule and the one proposed by the BSO for each AC (correlation coefficient of -0.14), which was a consequence of the fact that the expenditure rule –the rule with greater prominence in 2017– does not take into consideration the budget balance recorded in the previous year nor the variation of non-financial resources, aspects for which there are notable differences between regions. Figure 2 shows that the adjustment to the CAB finally imposed by the most restrictive rule does not have any correlation with the CAB of each AC in 2016.

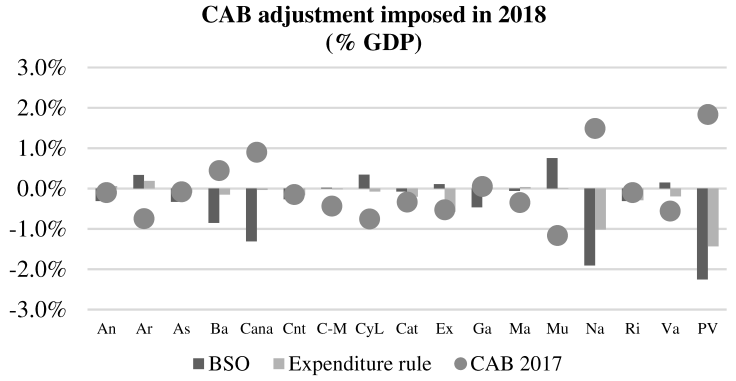
Figure 1
CONSTRAINTS IMPOSED BY THE BSO AND THE EXPENDITURE RULE IN 2017 AND IN 2018 (% GDP)[(a)]



(*Continued*)



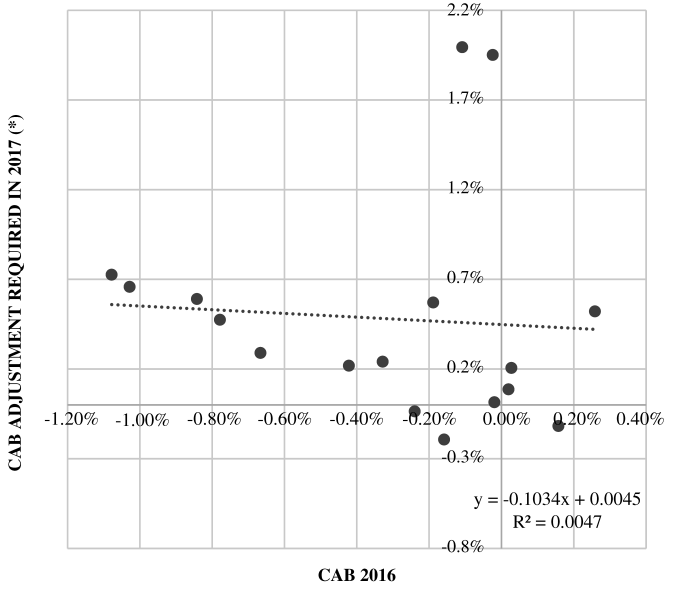


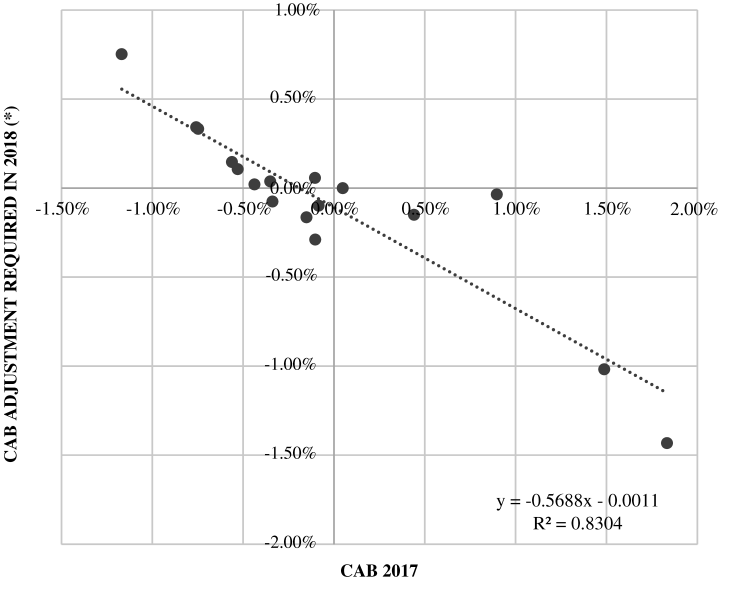


(a) Both the maximum change of the expenditure aggregate and the CAB adjustment derived from the BSO and the expenditure rule are in relation to the actual values in the previous year.

Key: An = Andalusia; Ar = Aragon; As = Asturias; Ba = Balearic Islands; Cana = Canary Islands; Cnt = Cantabria; C-M = Castile-la Mancha; CyL = Castile-León; Cat = Catalonia; Ex = Extremadura; Ga = Galicia; Ma = Madrid; Mu = Murcia; Na = Navarra; Ri = La Rioja; Va = Valencia; PV = Basque Country.

Figure 2
RELATIONSHIP BETWEEN THE CAB ADJUSTMENT REQUIRED BY THE BSO AND THE EXPENDITURE RULE, AND THE CAB OF THE PREVIOUS YEAR[(a)]





(a) BThe required CAB adjustment shown in the Y-axis corresponds to that imposed by the most restrictive rule; this adjustment has been determined on the basis of the CAB of the previous year.

On the other hand, Table 4 shows that in 2018 there were also differences between the variations in the expenditure allowed by these two rules and, therefore, in the adjustments to the CAB that each AC had to undertake according to these two rules, even though these differences were lower than in 2017. Nevertheless, certain ACs again showed large differences between the limits imposed by the BSO and the expenditure rule, such as the Canary Islands, Navarra, the Basque Country, the Balearic Islands, Galicia, Extremadura and Murcia (see also Figure 1). Unlike in 2017, in 2018 a correlation is observed between the adjustments to the CAB that each rule proposed for the different ACs (correlation coefficient 0.74). In contrast to 2017, figure 2 shows that the adjustment imposed by these two rules (the most restrictive one) was associated with the CAB recorded in the previous year. All this comes as a consequence of the lower growth of non-financial resources in 2018 (0.6% of GDP), the positive margin in 2017 between the actual deficit and the BSO for that year (0.2% of GDP), and the increase in expenses that are not part of the expenditure aggregate (0.2% of GDP), which cause minor differences between the two rules. Despite this correlation in 2018, the total amount of the CAB adjustment imposed by the most stringent rule was not always proportional to the fiscal position of each AC. For instance, Andalusia and Cantabria showed a similar CAB in 2017 (see Table 3), but the adjustment each one had to undertake in 2018 was different (Andalusia, an improvement of its CAB of 0.1% of its GDP, whereas Cantabria could increase its cyclically adjusted deficit by 0.2% of GDP), with the reason for this difference being the expenditure rule. On the other hand, the Canary Islands and Castile-La Mancha had to maintain the same level of CAB as in 2017, when the former had made a notable surplus in 2017 (0.9% of GDP) and the latter achieved a deficit of 0.4% of GDP.

5. Conclusions

The main objectives that should guide the financial activity of the Spanish general government sector are to avoid incurring a structural deficit and exceeding the maximum levels of public debt established in Article 13 of the LBSFS. Since the passing of the LBSFS, the non-financial expenditure of the ACs has been limited by the combination of two parameters, the BSO and the expenditure rule, each leading to constraints for which significant differences have been recorded –above 1% of GDP for the regional subsector as a whole in 2013 and 2014, and more than 0.5% of GDP for several ACs in 2017 and in 2018.

The significant differences between these two limits for some ACs are a consequence, first, of the fact that the LBSFS expenditure rule does not factor in the fiscal position of each AC, which hinders the consistency of this rule with the structural balance target. As a result, the LBSFS expenditure rule does not generally act as the most stringent limit for those ACs that have to make adjustments to their deficit according to the BSO and that register a lower growth in revenue. On the contrary, this expenditure rule becomes the most restrictive constraint for those ACs whose resources show a greater growth and who do not have to face adjustments to their CAB. Secondly, the uniform fixing of the BSOs for the different ACs has accentuated those distances between the limits produced by the BSO and the expenditure rule, making the limit to the non-financial expenditure derived from the BSO operate on a general basis only in

those ACs that have been producing greater deficit, and to which the expenditure rule, on the contrary, does not act as the primary restriction. Thus, on the one hand, the expected positive impact of the expenditure rule on the fiscal consolidation process, due to its advantages as a fiscal rule (e. g., it focusses on the side of the budget balance over which governments have greater control, and it helps to avoid procyclical government spending), could be diminished, since it will not bind some ACs in a consistent manner with the required reduction in the CAB. On the other hand, the ACs with a sounder fiscal position are usually restricted only by the expenditure rule, especially when their resources experience a greater growth. The CAB adjustments derived from the expenditure rule which these ACs have to face do not consider their debt, and this could lead in the future, under certain circumstances, to greater levels of CAB than those necessary to reach the debt targets in a determined period of time.

As a consequence of the above, the results show that the adjustments to the CAB imposed on each AC by the BSO and the expenditure rule correlate with each other depending on how their resources vary and to what extent ACs must make adjustments to reduce their CAB in order to comply with the BSO. Thus, the analyses carried out show that this correlation did not occur in 2017, but did so in 2018. Also the adjustment imposed on each AC by the most binding rule in 2017 did not correlate with their CAB in the previous year, although a correlation was observed in 2018. Nevertheless, despite the correlation observed between the adjustments of these two rules in 2018, the amount of the adjustment produced by the most restrictive of these two rules is not always proportional to the fiscal position of each AC, and can impose, for instance, similar adjustments to ACs in different situations.

With respect to the contribution of the LBSFS expenditure rule to the fiscal consolidation process, the restrictions imposed by it in 2017 and 2018 were tighter than those by the BSOs for the regional sector as a whole, and most of the ACs that attained the BSOs in those two years found the expenditure rule to be a more demanding constraint. Nevertheless, the fulfilment of the BSOs did not always entail an improvement of the fiscal position for each AC, due to the uniformity of those targets. Also, for the reasons mentioned above, the expenditure rule has produced less demanding limits than those of the BSOs when the latter made it necessary to reduce the deficit and when revenue grew less, as was the case for most of the ACs during the first years of the application of the expenditure rule.

According to Kopits and Symansky (1998), one of the desired characteristics of a fiscal rule is its consistency with other fiscal rules. Likewise, different proposals that give prominence to the expenditure rule also indicate the need for it to be consistent with the budgetary balance and debt targets (e. g., Ayuso-i-Casals, 2012; Darvas *et al*., 2018; Rodríguez and Cuerpo, 2018). Thus, taking advantage of the benefits of the expenditure rule, at the same time as maintaining consistency between fiscal rules, reinforces the need to set an individualised BSO for each AC, as repeatedly recommended by the AIREF (e. g., AIREF, 2019), based on the fiscal position of each AC and its debt. To those ends, it is also necessary that the limit derived from the expenditure rule factors in those targets to promote this consistency. Eyraud *et al*. (2018a) indicate that inconsistencies between different fiscal rules should be minimised, since, among other reasons, it could tempt authorities to neglect some rules on the grounds that they do comply with others.

One of the limitations of this work is that it does not address the different possibilities for setting these rules, but focuses on justifying the need to establish a link between the structural balance rule and the expenditure rule as long as the former, together with the levels of debt, constitute the cornerstones of the Spanish fiscal framework. On the other hand, the results shown in this work for cyclical balances of the different ACs use as a starting point the estimates of the output gap, of the elasticities and the methodology established in the European regulations, on the basis that this is how it is set in the LBSFS. It does not address any criticism related to the concept and methodology to estimate the structural balance (e. g., Darvas *et al*., 2018). Likewise, the analyses shown in section 4 have been carried out based on the cyclically adjusted balance, instead of the structural one, because there is no information available on the one-off measures.

Appendix

For the estimation of the cyclical balance of the regional government subsector, the output gap levels shown in MINECO (2018) have been used, and to which a semi-elasticity of 0.14 has been applied. This is the resulting value when considering the distribution of the cyclical balance among the government subsectors shown in these reports in recent years, and which start with a semi-elasticity of 0.539 for the Spanish general government budget balance (see Mourre *et al*., 2014). The last update of semi-elasticity (0.597) has not been used (see European Commission, 2019a), based on the fact that for the years considered in this work the first value established has been taken as a reference. The individual cyclical balances of the ACs have been estimated following the methodology proposed by Order 2741/2012 in section III of Appendix II, based, in turn, on that used by the European Commission. Briefly, the methodology contained in this Order proposes the use of the same output gap for each of the ACs, as well as the revenue and expenditure elasticities contemplated in Table 1 of the aforementioned appendix, which correspond to those estimated for Spain in Mourre *et al*. (2014). On the basis of the above, the average elasticity of the revenue and expenditure for each AC has been calculated for the period 2012-2018, taking into account the relative weight for the AC of each of the different types of resources and expenditure considered in the Order, proceeding similarly to Díaz-Mendoza *et al*. (2015) for the latter, although in the present work the transfers originating in the RFS that according to the ESA have to register as uses have been deducted from the non-financial resources. Likewise, the RFS resources have been considered in the year in which they were registered in ESA terms. Based on the average elasticity of each AC for the resources and uses for the period 2012-2018, the average semi-elasticity has been estimated by deducting the unit and pondering it by the average ratio of the resources and non-financial expenditure of each AC to its GDP for the same period. The estimation of the semi-elasticity of the budget balance for the ACs as a whole amounts to 0.15, the same amount as that determined by Díaz-Mendoza *et al*. (2015) and similar to that that can be deduced from MINECO (2018).

Notes

1. Also in relation to the limits for the variation of expenditure, the first transitory provision of the LBSFS indicates that, with the objective of complying in 2020 with the limit imposed by Article 13 for public debt, the non-financial expenditure of each administration will not be able to exceed the real GDP growth rate of the Spanish economy, without in this case referring to permanent variations in revenue or exclusions, as in the case of the expenditure rule.
2. Both the annual cyclical balance and the structural balance objective will be incorporated into this expression with their corresponding sign, so that if they are negative they suppose a greater $rsb_{n,i}$.
3. Analytically, $SB_n = L/B_n - CB_n - Mof_n$, where L/B_n is the net lending or net borrowing in ESA terms for the year n, terms in which BSO have to be set.
4. The estimations of the cyclical balance are provided annually through a report on the Spanish Economy that the Ministry of Economy and Competitiveness draw up in compliance with Article 15.5 of the LBSFS (MINECO, 2018). How this cyclical balance must be estimated for each AC is indicated in the Order 2741/2012 issued by that Ministry. However, those reports to date have only offered such balances at a subsector level and not individually for each AC.
5. Data for each AC about discretionary revenue measures and expenditures excluded from the expenditure aggregate are available for these two years.

References

AIREF (2016), *Informe de cumplimiento esperado de los objetivos de estabilidad presupuestaria, deuda pública y regla de gasto 2016 de las Administraciones Públicas*, Autoridad Independiente de Responsabilidad Fiscal.

AIREF (2017), *Informe sobre el establecimiento de los objetivos individuales de estabilidad presupuestaria y deuda pública 2018-2020 para las Comunidades Autónomas*, Autoridad Independiente de Responsabilidad Fiscal. https://www.airef.es/es/informes-tipo/informe-sobre-el-establecimiento-de-los-objetivos-individuales-de-las-comunidades-autonomas/.

AIREF (2019), *Informe sobre las líneas fundamentales de presupuestos 2020 de las Comunidades Autónomas, Informe 69/2019*, Autoridad Independiente de Responsabilidad Fiscal.

Argimón, I. and Hernández de Cos, P. (2012), "Fiscal Rules and Federalism as Determinants of Budget Performance: An Empirical Investigation for the Spanish Case", *Public Finance Review*, 40: 30-65.

Ayuso-i-Casals, J. (2012), "National Expenditure Rules: Why, How and When", *Economic Papers*, 473, European Commission.

BE (2019), *Deuda según el Protocolo de déficit excesivo (PDE) por comunidades autónomas. Porcentajes del PIB pm*, Banco de España. https://www.bde.es/webbde/es/estadis/infoest/bolest13.html.

Benassy-Quéré, A., Brunnermeier, M., Enderlein, H., Farhi, E., Fratzscher, M., Fuest, C., Gourinchas, P.O., Martin, P., Pisani-Ferry. J., Rey, H., Schnabel, I., Verón, N., Weder di Mauro, B. and Zettelmeyer, J. (2018), *Reconciling risk sharing with market discipline: A constructive approach to euro area reform. CEPR*, Policy Insight, 91, January 2018. https://bruegel.org/2018/01/reconciling-risk-sharing-with-market-discipline-a-constructive-approach-to-euro-area-reform/.

Capó, J. and Oliver, X. (2002), "Evaluación del efecto estabilizador del presupuesto español y propuestas de estabilización fiscal para la Unión Monetaria Europea", *Hacienda Pública Española/Review of Public Economics*, 162(3): 35-59.

Caselli, F. and Reynaud, J. (2018), "Do fiscal rules improve the fiscal balance? A new instrumental variable strategy", in *IMF Staff Discussion Notes* 18/04: 15-26, International Monetary Fund.

Cordes, T., Kinda, T., Muthoora, P. and Weber, A. (2015), "Expenditure Rules: Effective tolls for Sound Fiscal Policy?", *IMF Working Paper* 15/29, International Monetary Fund.

Corrales, F., Varela, J. and Doménech, R. (2002), "Los saldos presupuestarios cíclico y estructural de la economía española", *Hacienda Pública Española/Review of Public Economics*, 162(3): 9-33.

Cuerpo, C. and Ramos, J. M. (2015), "Spanish Public Debt Sustainability Analysis", *Hacienda Pública Española/Review of Public Economics*, 215(4): 95-118.

Darvas, Z., Martin, P. and Ragot, X. (2018), *The economic case for an expenditure rule in Europe*, CEPR Policy Portal. https://voxeu.org/article/economic-case-expenditure-rule-europe.

De la Fuente, A. (2013), "Las finanzas autonómicas en boom y en crisis (2003-2012)", *Hacienda Pública Española/Review of Public Economics*, 205(2): 127-150.

Debrun, X., Moulin, L., Turrini, A., Ayuso-i-Casals, J. and Kumar, M. (2008), *Tied to the mast? National fiscal rules in the European Union*, Economic Policy, International Monetary Fund, European Commission, and CEPR, https://academic.oup.com/economicpolicy/article/23/54/298/2918759.

Díaz Mendoza, M., Rubio Ramírez, J. F., Marín González, C. and Conde Ruiz, J. (2015), *Descomposición de los saldos fiscales en las CCAA. 2007-2014. Estudios sobre la Economía Española*, FEDEA. https://www.fedea.net/descomposicion-de-los-saldos-fiscales-en-las-cc-aa-2007-2014/.

European Commission (2018), *Country Report Spain 2018*, European Commission. https://ec.europa.eu/info/publications/2018-european-semester-country-reports_en.

European Commission (2019a), *Vade Mecum on the Stability&Growth Pact*, European Commission, 2019 Edition. https://ec.europa.eu/info/publications/vade-mecum-stability-and-growth-pact-2019-edition_en.

European Commission (2019b), "Report on Public Finances in EMU, 2018", European Commission, *Institutional Paper* 095. https://ec.europa.eu/info/publications/economy-finance/report-public-finances-emu-2018_en.

Eyraud, L., Debrun, X., Hodge, A., Lledó, V. and Pattillo, C. (2018a), "Second-Generation Fiscal Rules: Balancing Simplicity, Flexibility, and Enforceability", *IMF Staff Discussion Note* 18/04. International Monetary Fund.

Eyraud, L., Lledó, V., Dudine, P. and Peralta Alva, A. (2018b), *How to Select Fiscal Rules. A Primer, How-to Notes*, International Monetary Fund.

Fernández Llera, R. and Monasterio Escudero, C. (2010), "¿Entre dos o entre todos? Examen y propuestas para la coordinación presupuestaria en España", *Hacienda Pública Española/Review of Public Economics*, 195(4): 139-163.

Heinemann, F., Moessinger, M. and Yeter, M. (2017), "Do Fiscal Rules constrain Fiscal Policy? A Meta-Regression analysis", *European Journal of Political Economy*, 51: 69-92.

Hernández de Cos, P. and Pérez, J. J. (2015), "Reglas fiscales, disciplina presupuestaria y corresponsabilidad fiscal", *Papeles de Economía Española*, 143: 147-184.

Holm-Hadulla, F., Hauptmeier, S. and Rother, P. (2012), "The impact of expenditure rules on budgetary discipline over the cycle", *Applied Economics*, 44: 3287-3296.

IGAE (2019), *Contabilidad nacional. Operaciones no financieras del subsector Administración Regional (S.1312) y detalle por Comunidades*, Información anual, Intervención General de la Administración del Estado. https://www.igae.pap.hacienda.gob.es/sitios/igae/es-ES/Contabilidad/ContabilidadNacional/Publicaciones/Paginas/ianofinancierasCA.aspx.

Kopits, G. (2001), "Fiscal Rules: Useful Policy Framework or Unnecessary Ornament?", *IMF working Paper* 01/145, International Monetary Fund. https://www.imf.org/external/pubs/ft/wp/2001/wp01145.pdf_.

Kopits, G. and Symansky, S. (1998), "Fiscal Policy Rules", *Occasional Paper*, 162, International Monetary Fund.

Kumar, M., Baldacci, E., Schaechter, A., Caceres, C., Kim, D., Debrun, X., Escolano, J., Jonas, J., Karam, P., Yakadina, I. and Zymek, R. (2009), *Fiscal Rules-Anchoring Expectations for Sustainable Public Finances*, International Monetary Fund.

Lago Peñas, S. (2010), "El nuevo modelo de financiación autonómica: luces y sombras", in N. Bosch and A. Solé-Ollé (eds.), *Informe sobre Federalismo Fiscal en España 09*, IEP Institut d'Economia de Barcelona, 62-75.

MINECO (2018), *Informe sobre la situación de la economía española. España. 2018*, Ministerio de Economía y Competitividad. https://www.hacienda.gob.es/CDI/estabilidad%20presupuestaria/situaci%C3%B3neconomia2018.pdf.

MINHAP (2019), *Informes sobre el grado de cumplimiento del objetivo de estabilidad presupuestaria y de deuda pública y de la regla de gasto*, Ministerio de Hacienda. https://www.hacienda.gob.es/es-ES/CDI/Paginas/EstabilidadPresupuestaria/InformesCompletosLEP.aspx.

Mourre, G., Astarita, C. and Princen, S. (2014), "Adjusting the budget balance for the business cycle: the EU methodology", *Economic Papers*, 536, November 2014. http://ec.europa.eu/economy_finance/publications/economic_paper/2014/pdf/ecp536_en.pdfComisión Europea, 2017.

Orden 2741/2012, de 20 de diciembre, de desarrollo metodológico de la Ley Orgánica 2/2012, de 27 de abril, de Estabilidad Presupuestaria y Sostenibilidad Financiera sobre el cálculo de las previsiones tendenciales de ingresos y gastos y de la tasa de referencia de la economía española.

Rodríguez, L. and Cuerpo, C. (2018), "Some elements for a revamped fiscal framework for Spain", *Working paper*/2018/3, Autoridad Independiente de Responsabilidad Fiscal. https://www.airef.es/es/centrodocumental/documento-de-trabajo-3/2018-some-elements-for-a-revamped-fiscal-framework-for-spain/.

Ruiz Tarrías, S. (2012), "Cuando las finanzas mandan: a propósito de las últimas reformas constitucionales en Alemania y en España", *Estudios de Deusto*, 60/2: 353-384.

Schaechter, A., Kinda, T., Budina, N. and Weber, A. (2012), "Fiscal Rules in Response to the Crisis-Toward the «Next-Generation» Rules. A New Dataset", *IMF Working Paper* 12/187, International Monetary Fund.

Sutherland, D., Price, R. and Joumard, I. (2005), "Fiscal Rules for Sub-central Governments: Design and impact", *Economic Department Working Paper* 465, Organisation for Economic Co-operation and Development.

Von Hagen, J. (2002), "Fiscal Rules, Fiscal Institutions, and Fiscal Performance", *The Economic and Social Review*, vol. 33, 3, Winter: 263-284.

Wyplosz, C. (2013), "Fiscal Rules: Theoretical Issues and Historical Experiences", in A. Alesina and F. Giavazzi (eds.), *Fiscal Policy after the Financial Crisis*, University of Chicago Press. http://www.nber.org/books/ales11-1.

Resumen

Atendiendo a la Ley Orgánica de Estabilidad Presupuestaria y Sostenibilidad Financiera, las comunidades autónomas no pueden incurrir en déficit estructural ni deben superar los límites de deuda recogidos en esta norma. Esta ley incluye también una regla de gasto que limita la evolución de sus gastos no financieros. En los últimos años se han producido diferencias relevantes entre las restricciones impuestas a las comunidades autónomas por los objetivos de estabilidad presupuestaria y por la regla de gasto, lo que podría debilitar la consistencia del marco fiscal. Este trabajo intenta identificar los motivos para estas diferencias, analizándolas tanto para el conjunto del subsector regional como individualmente.

Palabras clave: estabilidad presupuestaria, reglas fiscales, regla de gasto, Comunidades Autónomas.

Clasificación JEL: H62, H68, H72.