

REFORM OF THE FISCAL GOVERNANCE FRAMEWORK: A DEBT ANCHOR AND EXPENDITURE RULE PROPOSAL FOR SPAIN

TECHNICAL PAPER 3/22



Independent Authority
for Fiscal Responsibility



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for Fiscal Responsibility

The mission of the Independent Authority for Fiscal Responsibility, AAI (AIReF) is to ensure strict compliance with the principles of budgetary stability and financial sustainability enshrined in Article 135 of the Spanish Constitution.

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EXECUTIVE SUMMARY

Public debt in the Spanish economy has reached levels not previously seen in peacetime. In this context, it is essential to design a medium- and long-term fiscal policy strategy that generates room for manoeuvre to deal with future economic challenges and shocks. In AIREF's view, this fiscal strategy should be based on four fundamental pillars: a reform of the tax system; a thorough review and evaluation of public spending; a reform of the regional financing system; and a fiscal framework that allows the stabilising role of fiscal policy to be preserved in adverse situations while ensuring the sustainability of public finances.

So far, the fiscal framework has not been sufficient to design stable and predictable national fiscal policies, despite the huge web of rules and procedures it contains. In general terms, national fiscal policies have been pro-cyclical and have not prevented a gradual increase in government debt ratios. In several EU economies these ratios currently stand at values that raise their vulnerability to any changes in market sentiment, which could ultimately endanger the stability of the EMU itself.

Aware of these weaknesses, the European Commission (EC) initiated a review process of the fiscal framework in February 2020, which was interrupted by the COVID-19 pandemic. The consultation resumed in October 2021 and allowed the EC to gather opinions on how to ensure the long-term sustainability of public debt while allowing short-term economic stabilisation; how to encourage investment and structural reforms; ways to simplify the rules and improve their transparency and how to improve the coordination of fiscal policies and take into account the position of the euro area economy as a whole.

AIReF took part in this consultation and published its [contribution in January this year](#). This document seeks to delve further into the reform of the fiscal governance framework issues.

In practice, the current fiscal framework has operated with three fundamental problems: (i) the anchoring of budgetary policy through nominal deficit targets, which has exacerbated its pro-cyclical nature; (ii) the major volatility of fiscal targets – both in the medium, and in the short and very short term; and (iii), at an institutional level, the initiative to propose and approve the fiscal paths applicable to each Member State has mainly fallen on EU institutions, which has led to limited political ownership by the national governments that had to implement them.

Therefore, this technical paper addresses three elements that should be included in the reform: (i) the timing, (ii) material and (iii) institutional aspects applied to the specific context of the Spanish economy.

With regard to the timing aspects, the framework must combine, on the one hand, the flexibility necessary to respond to shocks that have become much more frequent in recent years than previously thought and, on the other hand, a medium-term orientation of fiscal policy that makes it possible to internalise the implications that current decisions have for future debt sustainability. In this regard, the paper puts forward the possibility that, at the start of each legislature, the incoming government should propose a fiscal path that is binding for the entire legislature, replicating, to some extent, the governance scheme of the Recovery and Resilience Facility. This would give each government the opportunity to set its own priorities and paths, within common guidelines for all Member States, thus promoting their political ownership. At the same time, the investment of political capital in the design and approval of the fiscal path would increase the reputational cost associated with non-compliance or modification, thus providing more stability to medium-term paths.

Regarding the material aspects, since 2018 AIReF has worked¹ on the proposal of structuring the reform of the fiscal framework around a debt anchor and an operational expenditure rule in the short and medium term. This framework would allow for a better combination of feasibility and enforceability of commitments against currently existing maximalist targets that are difficult to meet (such as the debt rule). On this basis, the technical paper proposes a methodology for setting a specific debt anchor for Spain that will generate a feasible path of reduction. When establishing this anchor, the country's

¹ See "Some Elements for a Revamped Fiscal Framework in Spain," AIReF, Working Paper 2018/3.

information regarding the starting level of debt (present), the historical evolution of the ratio (past) and the trend projections of public revenue and expenditure (future) are taken into account so as to consider the implications of possible fiscal policy commitments. Once the debt anchor is derived, its implications for fiscal policy in the short and medium term are set out through a path of primary spending in levels, net of new revenue measures. To demonstrate this, the technical paper proposes an illustrative example from a simulation exercise.

Relating the timing aspects to the material aspects, the proposal of this paper would imply that each incoming government would propose to the EU institutions at the start of each mandate a debt anchor and a corresponding expenditure path which will be feasible and will contribute to a sufficient reduction in the debt ratio over the legislature. Once approved, this path would be the binding benchmark over the next four years. Of course, this path could be modified in exceptional circumstances through the existence of an escape clause.

Finally, regarding institutional aspects, the need for the new fiscal framework to better reflect the specific features of each country can be strengthened by the work of national independent fiscal institutions. These institutions are particularly well positioned to provide useful information to the national debate in aspects such as debt sustainability analysis as well as medium- and long-term fiscal projections under a no-policy-change scenario. These institutions can also oversee compliance with the rules and the degree of realism of the macroeconomic and budgetary projections. The European Commission would maintain its central role in providing country-specific fiscal policy guidance and guidance for the euro area as a whole. In addition, in the event of non-compliance by governments, supervision would pass entirely to the EC, which could set stricter requirements, thus increasing the reputational cost of non-compliance.

1. INTRODUCTION. SCOPE OF THE PAPER

There is a consensus that fiscal policy should operate within a fiscal framework in order to ensure that it is properly designed and implemented.

The argument in favour of rules rather than discretion stems from the problem of the time inconsistency of economic policy, raised for the first time in the seminal article by Kydland & Prescott (1977). This problem arises because economic policymakers may announce a certain course of action to influence the expectations of the agents and then later fail to deliver. Once this time inconsistency is understood, private agents may become wary of economic policy announcements, resulting in a worse balance for all parties. One way to solve this problem is to replace the discretion of policymakers with a credible commitment to an economic policy rule. In the fiscal area, the timing inconsistency crystallises in deficit bias, also linked to the problem of common resources (Calmfors & Wren-Lewis, 2011). In its intertemporal dimension, this problem is related to the tendency to shift the burden of fiscal discipline to future governments or generations. The intratemporal dimension relates to the fact that governments can increase their likelihood of re-election by implementing deficit-raising measures that favour certain interest groups. The existence of information asymmetries or incomplete information means that taxpayers are unable to perceive the full extent of the consequences of these decisions for their own welfare or that of future generations (Wyplosz, 2012). Therefore, fiscal rules seek to correct distorted incentives and contain spending pressures that can lead to financial sustainability problems.

In addition, in a monetary union, supranational rules seek to internalise the regional cost of fiscal indiscipline and establish a framework for enhanced coordination of macroeconomic policies (Kumar *et al.*, 2009). The Stability and Growth Pact arises from the main motivation that EU Member States should internalise the implications that maintaining excessive deficits can

have on the financial stability of the Union (another aspect of the common pool problem).

A fiscal framework should have two fundamental objectives: to ensure the long-term sustainability of public debt and to implement countercyclical fiscal policies in both expansionary and recessionary phases. The latter is particularly important in the case of a monetary union since in this case countries do not have autonomy in the design of monetary policy to stabilise their economies in the event of asymmetric shocks. Fiscal policy is therefore a key tool of macroeconomic stabilisation policy in the event of common and specific shocks. This is why fiscal rules in the euro area - more so than in countries with independent monetary policy - must help to generate room for fiscal manoeuvre in expansionary phases and allow this to be used in adverse situations. And all this without losing sight of the sustainability of public finances.

At the level of the EU Member States, there is often a national fiscal framework which is applied in parallel to the EU framework. The fiscal policy pursued by each Member State must therefore comply with the limits set in both sets of rules, which are not always consistent (AIReF, 2018). In addition, national budgetary procedures overlap with EU budgetary procedures, such as the European Semester, and both national and EU institutions can be involved in the *ex ante* and *ex post* evaluation of fiscal policy.

However, fiscal rules are not immune from problems. The greatest problem lies in striking a difficult balance between flexibility, so that they may cater for as many situations as possible, and simplicity. Along with fiscal rules, countries are therefore increasingly relying on independent fiscal institutions to curb the deficit bias (Beetsma *et al.*, 2018).

A debate on the reform of fiscal governance in the EU was launched in 2017. The COVID-19 crisis has further highlighted the need for this reform. The difficulties posed by the practical implementation of the current EU framework of fiscal rules have been amply highlighted in extensive literature (see for example Martin *et al.*, 2021) and clearly identified by the European Commission itself (2020). On the one hand, the need to provide flexibility and adaptability to the original framework has resulted in a process of incremental reform and a high level of complexity of the framework: the existence of multiple, diverse and complex interpretative rules and procedures, the volatility of some relevant indicators for setting fiscal policy recommendations, the absence of a true medium-term dimension and the inability to avoid a pro-cyclical fiscal policy. In addition, the general economic context has changed drastically in recent years

and new needs have arisen that may make it is advisable to take into account the quality of public spending when defining fiscal commitments.

At the same time, the current high debt levels suggest that a medium- and long-term consolidation strategy should be designed. The level of public debt in the Spanish economy has reached records not previously seen in peacetime. In addition to this is the upward pressure on debt exerted by an ageing population over the coming years. It is important to design a medium- and long-term fiscal policy strategy that generates room for manoeuvre to deal with future challenges and shocks. It is true that in recent years the nominal growth-interest rate differential has been favourable to debt containment and this has given rise to a debate on sustainability in this context of persistently low interest rates (Blanchard, 2019). However, it should not be forgotten that the reduction in natural interest rates has been accompanied by a moderation in potential growth in many economies. In addition, there is no certainty that the growth-interest rate differential will remain favourable as seen in the current context of supply shocks and tightening of monetary conditions. It will therefore be necessary to devise a consolidation plan to be implemented as soon as the economic and social crisis is overcome.

This calls for an in-depth review of the framework within which fiscal policy operates and, more specifically, of the rules that govern it. The debate on the reform of economic governance is very broad. It includes a wide variety of elements ranging from the possible creation of a joint central capacity, the differentiated treatment of certain expenditure items, the modification of fiscal rules, the treatment of current debt levels and the reform of the European Semester to name but a few.

In this context, AIReF's technical paper focuses on a reform proposal that improves the way in which fiscal policy recommendations are formulated in Spain. Ensuring that fiscal targets are set with greater internal consistency, transparency and adequacy to the underlying situation of public finances is a necessary condition for achieving a more efficient fiscal framework and also with regard to compliance aspects.

In the case of Spain, this amounts to reforming how the stability path is set. This reform must cover both the timing aspects – when the targets are set, for what time horizon and how often they are reviewed – as well as the material aspects – in relation to which variable the targets are set, i.e. in what terms the limit of fiscal policy action is expressed – as well as institutional aspects.

The document is structured into four chapters. The first chapter analyses the operation of the current framework that has been applied in Spain since the entry into force of Organic Law 2/2012, of April 27th, on Budgetary Stability and Financial Sustainability (hereinafter, Organic Law 2/2012). An alternative framework anchored in long-term debt sustainability is then proposed. The third chapter puts forward a non-exhaustive set of open questions that will need to be fleshed out in subsequent documents in order to improve the functioning of the reformed fiscal framework. The paper ends with some conclusions.

2. THE CURRENT FRAMEWORK IN SPAIN: HOW HAS IT OPERATED?

2.1. Timing aspects

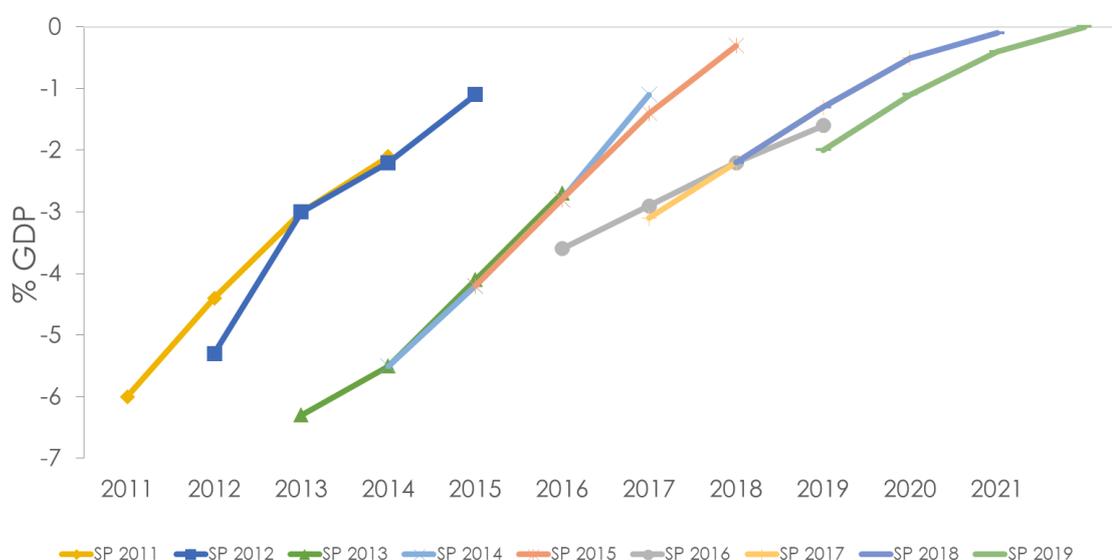
Spanish legislation sets out the need to draw up medium-term budgetary plans, which are reflected in the so-called stability path that marks the start of the budget cycle each year. The Organic Law on Budgetary Stability and Financial Sustainability establishes that in the first half of each year, the Government of Spain must set the budgetary stability targets, by means of a resolution of the Council of Ministers and following a report from the Council of Fiscal and Financial Policy of the Autonomous Regions and the National Commission for Local Administration. These targets are set in terms of total deficit (and government debt) for the following three years, both for the General Government as a whole and for each of its sub-sectors. They are expressed as a percentage of GDP and are included each year in the Stability Programme Update. The resolution of the Council of Ministers also includes the non-financial expenditure limit of the State Budget, which is the first step to start preparing the draft General State Budget.

Although Spanish legislation sets out the need to draw up medium-term budgetary plans, in practice fiscal policy has maintained a purely annual approach. The path of budgetary stability is drawn up and approved every year, instead of once for the next three or four years as in other countries with a truly multi-year dimension, such as Sweden or the Netherlands. Furthermore, neither national nor EU legislation set limits to the modification of the stability

path. Therefore, changes to fiscal targets (usually to relax them) is a political decision that is not subject to control or accountability.

Fiscal policy targets have so far been changing. The fact that they are set annually for a period of three years has not helped to anchor expectations as to the future fiscal policy stance. As shown in Figure 1, deficit targets have regularly been revised and sometimes to a large extent. This feature is common to a large number of countries in the euro area (EU IFIs, 2018).

FIGURE 1. EVOLUTION OF THE PATHS OF TOTAL GG DEFICIT. STABILITY PROGRAMMES, 2011 - 2019



2.2. Material aspects

2.2.1. Structural dominance in legislation versus nominal dominance in practice

There is a clear dominance of structural fiscal targets in the Spanish legal system, in line with what has been happening in the EU framework since the 2005 reform. Over recent years, the reforms of the Stability and Growth Pact have given more weight to the structural balance as a target and as an indicator to evaluate the performance of fiscal policy. The Fiscal Compact² consolidated this path by establishing the obligation for all Member States signing the intergovernmental agreement to include the objective of structural balance in their Constitutions or regulations of equivalent rank. Accordingly, Article 135(2) of the Spanish Constitution lays down that the State

² https://www.consilium.europa.eu/media/20399/st00tscg26_en12.pdf

and the Autonomous Regions may not incur a structural deficit that exceeds the margins established by the EU. In the implementation of this article, Organic Law 2/2012 established the objective of a structural balance – cyclically adjusted deficit, net of one-offs, equal to zero – and set 2020 as the time by which the General Government should have reached that position. The same legislation also includes rules relating to the evolution of expenditure and public debt.

The theoretical advantages of structural objectives are well known. By construction, the structural balance (and its variation) aims to capture the part (and its evolution) of fiscal variables that is attributable to the discretionary action of the public authorities, as opposed to the part that responds automatically to the evolution of the cycle. Therefore, in principle and from a theoretical point of view, it is an appropriate indicator for assessing compliance with fiscal rules to the extent that it requires results in relation to the part of public finances under the control of the authorities and not beyond. Furthermore, it is conceptually an appropriate way to set fiscal targets of a countercyclical nature since reaching and maintaining a position of structural equilibrium makes it possible, if properly measured, to limit the upward bias of public spending in good times and *vice versa* - i.e. for automatic stabilisers to operate effectively. Targets in structural terms were introduced in the SGP in its first reform of 2005 as the nominal benchmarks were considered to be very strict by some countries – including Germany and France – in times of economic slowdown.

The problem is that the structural balance is not observable. Therefore, in order to be an operational variable of fiscal policy, it must necessarily be translated in terms of a variable that is. It is in this operationalisation and in its implementation that numerous problems arise that undermine the theoretical advantages. These difficulties, which have been analysed extensively in the literature, have led, in practice, both in Spain and in many peer countries³, to the structural targets being transformed into nominal targets, i.e. in total balance targets for the General Government. The EC itself set dual targets in terms of structural and nominal balances for countries subject to a macroeconomic or financial adjustment programme in the aftermath of the euro area sovereign debt crisis.

This practice has led to significant discrepancies between legislation and practice in Spain. It should be noted that, while Spanish legislation sets requirements in terms of the level and evolution of the structural balance,

³ Austria, Cyprus, Finland, France, Greece, Ireland, Italy, Latvia, Portugal, Romania and Slovenia, among others. See EUFI (2021) “How to strengthen fiscal surveillance towards a medium-term focus”

expenditure and public debt, there are no requirements relating to the nominal deficit. However, it is precisely in relation to the nominal deficit that the stability path sets out its targets.

However, it is important to stress, above all, that setting targets in nominal terms is not without its difficulties, as explained below.

2.2.2. Implications of nominal prevalence: advantages and disadvantages

The dominance in practice of the General Government nominal deficit as the operational variable of fiscal policy has some advantages. Any diagnosis of the need to reform the current fiscal framework requires them to be weighed up. These include the fact that it is an easy variable to report and well established in public and parliamentary debate. In addition, from a theoretical point of view, it has a direct connection with debt and, therefore, with medium- and long-term sustainability.

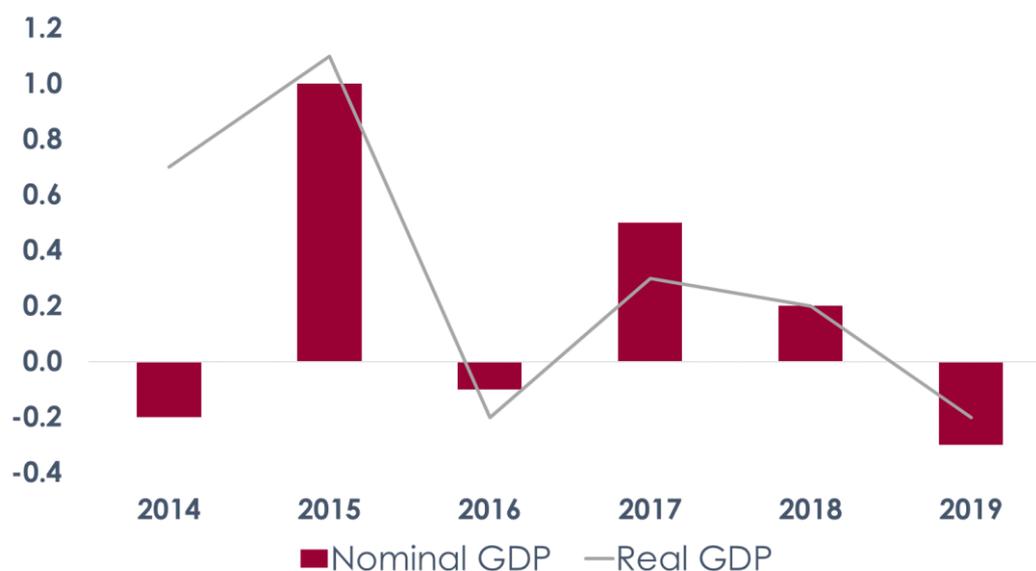
However, the total deficit also has drawbacks, two of which are noteworthy. The first concerns traceability itself in the *ex ante* definition of the nominal target, when what underlies the legislation is a structural commitment. Moving from a structural target to a nominal one requires a series of assumptions and projections that are subject to uncertainty. In this regard, the translation of the structural target into the deficit that the Government sets in the stability path has not been carried out in the past in a transparent manner. This would require reporting step-by-step the elements and assumptions the Government makes in order to translate structural fiscal rules into nominal deficit targets.

The second problem is that the nominal deficit target exacerbates the problem of pro-cyclicality: the effort to reach a nominal deficit commitment is greater the worse the cyclical position becomes. The same structural effort corresponds to different nominal deficit figures depending on a series of elements and *vice versa*. If the figure reported for public purposes and binding for political purposes is the nominal target, the variability of macroeconomic conditions, the year-end figure of the previous year and elements unrelated to the unadulterated deployment of fiscal policy may interfere with compliance. Therefore, in the event of a change in these elements, if the nominal deficit target is to be met, the discretionary component (i.e. the fiscal policy stance) needs to intervene to correct and compensate for that variability as set out below. In other words, given a nominal deficit target, the discretionary effort to be implemented to achieve it is a direct function of the

cyclical surprise⁴ (the more adverse the surprise, the more discretionary effort is required to achieve the nominal target and *vice versa*; i.e. it makes it necessary to counter the surprise in a procyclical manner) and the year-end deficit figure of the previous year (the more negative the surprise with respect to expectations, the more effort is required and *vice versa*).

A retrospective view allows us to obtain an order of magnitude of this drawback related to procyclicality. In the period between 2014 and 2019, the average surprise in real growth was 0.2 pp. In other words, on average, growth at the time of fiscal policy implementation was 0.2 points higher than expected at the time the budgets were adopted, making the nominal target achievable with somewhat less effort than initially expected. Although the average impact of growth surprises over the period as a whole is relatively moderate, in specific years their magnitude was certainly high (as in 2015 and 2017, for example). With regard to the year-end deficit figure, on average, during the period analysed, when fiscal policy had to be implemented to achieve a certain nominal deficit target in a specific year, the year-end of the previous year had been 0.5 points worse than expected when preparing the draft budget.

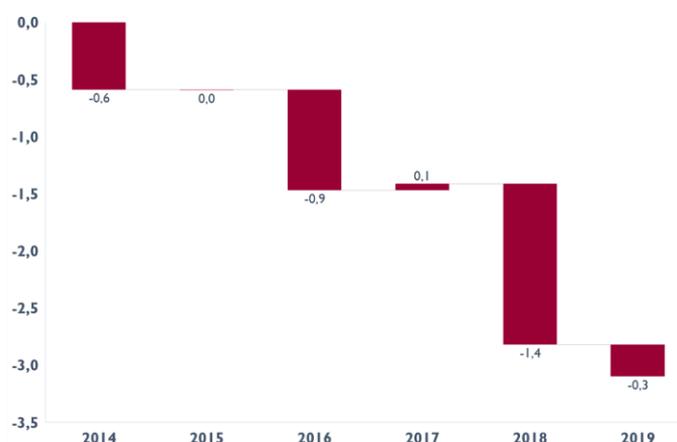
FIGURE 2. SURPRISES IN REAL GDP GROWTH BETWEEN THE TIME THE STABILITY PATH IS SET (T-1) AND THE STABILITY PROGRAMME OF YEAR T, 2014 – 2019 (PP)



Source: Stability Programme Updates and AIReF

⁴ And more specifically, surprises in real GDP growth, which in the short term are more relevant than surprises in potential GDP growth. See Hernández de Cos *et al.* (2016).

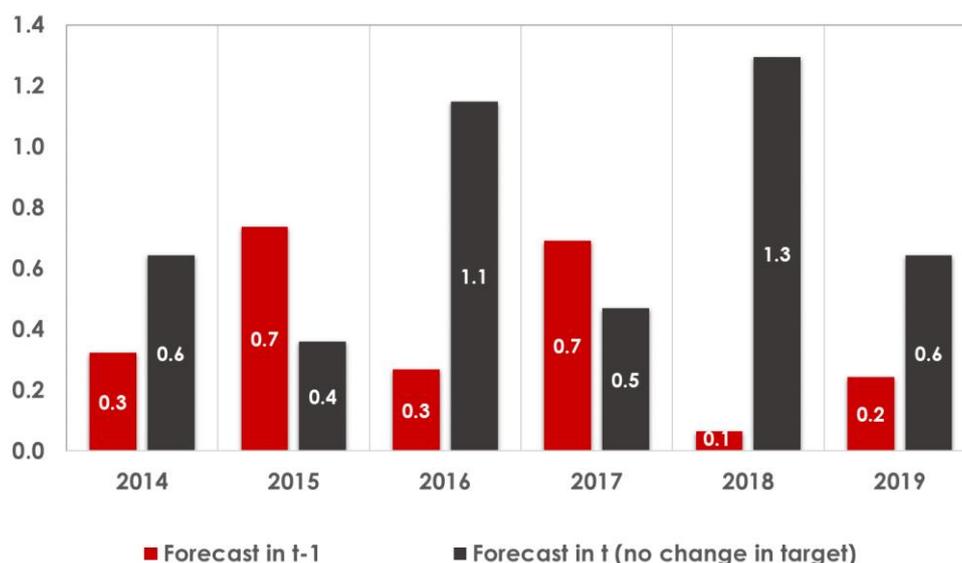
FIGURE 3. DEVIATIONS IN THE YEAR-END DEFICIT OF YEAR T-1 – ESTIMATED FIGURE IN T MINUS ESTIMATED FIGURE AT THE TIME OF T-1 AT WHICH TARGET SET FOR T, 2014 – 2019 (PP OF GDP)



Source: Stability Programme Updates and AIReF

These two factors (each with a different weight depending on the year) have meant that at the time of implementing the fiscal policy, the magnitude of the measures that would have been necessary to achieve the committed and publicly communicated target differed substantially from that expected at the time the budgets were prepared and adopted. An analysis of the period since 2014 between the time when fiscal policy is planned (in t-1) and the time when the discretionary effort to be implemented to achieve the nominal target set in the stability path must be executed (in t), reveals that the magnitude varied on average by 0.5 percentage points. In other words, once the budgets had been approved, the fiscal authorities would have had to implement additional restrictive measures every year worth 0.5 pp on average to counteract other elements that made the nominal deficit evolve in the opposite direction.

FIGURE 4. DISCRETIONARY EFFORT REQUIRED TO REACH THE NOMINAL DEFICIT TARGET, 2014 – 2019 (% GDP)



Source: Stability Programme Updates and AIReF

As these updated fiscal efforts were often impossible to take on, the nominal deficit target was changed. Specifically, in the decade before the pandemic, the nominal deficit target was changed six times between the time of preparation and the time of execution of the budgets, that is, in the space of a few months. This implies that fiscal policy planning has not only not worked in the medium term, as indicated in the previous section; but also in the (very) short term.

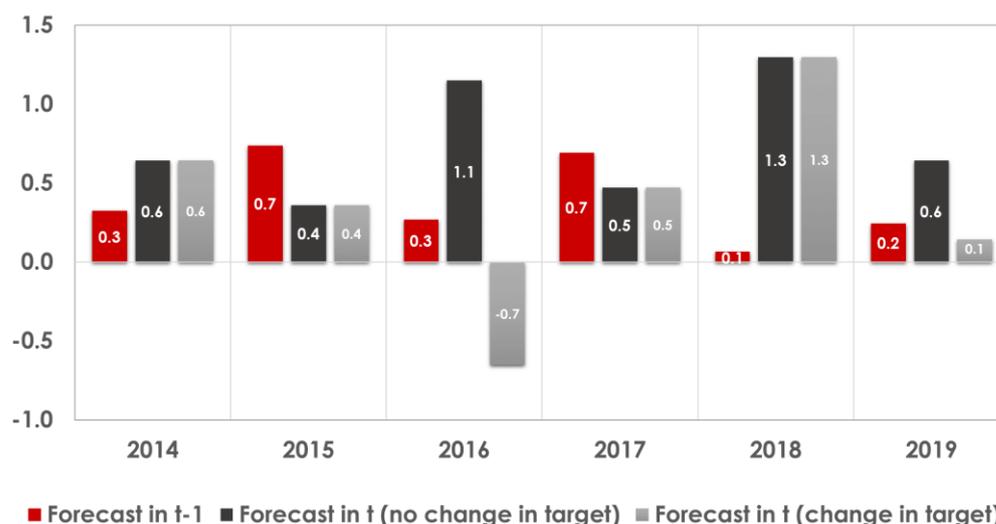
FIGURE 5. DEFICIT TARGETS, % GDP, 2009-2019



Source: Stability Programme Updates and AIReF

The update of the nominal deficit target resulted in an additional revision of the effort required to achieve it, as shown below. In 2016 and 2019, for example, this meant a very significant change in the fiscal policy stance.

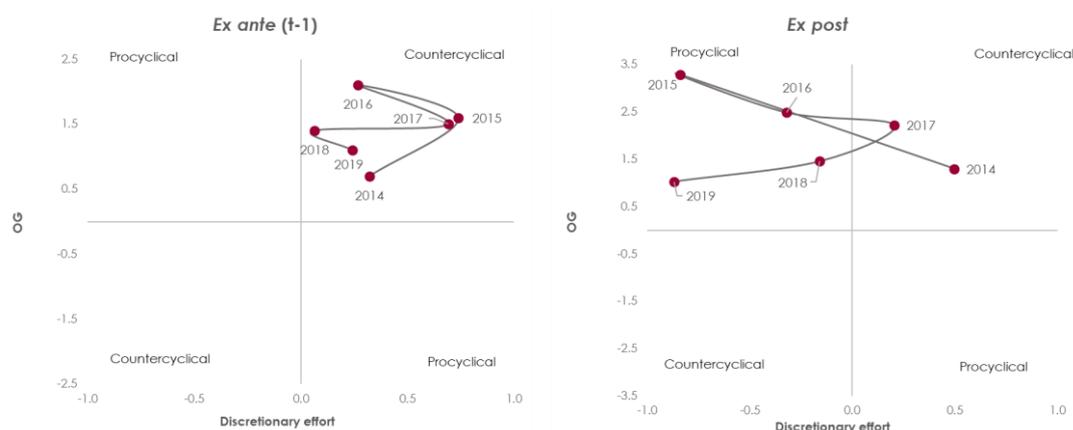
FIGURE 6. DISCRETIONARY EFFORT REQUIRED TO ACHIEVE THE NOMINAL DEFICIT TARGET, INCLUDING THE 2014 – 2019 TARGET CHANGE (% GDP)



Source: Stability Programme Updates and AIReF

As a consequence of the above, the fiscal policy stance has been erratic and unpredictable. Not only in the medium term as a result of the annual revision of the targets of t+1 onwards, but also in the very short term. Cyclical surprises are inevitable and affect any type of fiscal framework or rule. However, the manner in which fiscal policy has been conducted in recent years means that this inevitable uncertainty is compounded by an additional uncertainty as effort also varies. With a nominal deficit target, fiscal effort is, in fact, a direct function of cyclical surprise. This is compounded by the uncertainty around the estimated output gap (and its change). This means that changes in the estimate of potential GDP introduce additional variability to the actual stance adopted by fiscal policy.

FIGURE 7. EVOLUTION OF THE FISCAL POLICY STANCE. COMPARISON BETWEEN EX ANTE PLANNING AND EX POST EXECUTION. 2014 – 2019



Source: AMECO, Stability Programme Updates and AIReF

Although fiscal policy is always considered as countercyclical when it is designed, this does not anchor the execution of fiscal policy, which ex post shows a fundamentally procyclical stance. As shown in Figure 7, ex post changes can be noted both in the horizontal axis (which represents the discretionary fiscal effort) and in the vertical axis (which represents the cyclical position). As noted, these latter changes are inevitable: real-time revisions of output gaps (both in levels and changes) are mainly due to revisions in GDP growth forecasts⁵. The problem posed by nominal deficit targets is that in order to achieve them, movements along the horizontal axis are often also taking place: discretionary effort is not fixed, it is not exogenous in that sense, but it is rather a function of the cyclical position and the year-end figure of the previous year as previously noted.

In short, any alternative proposal must seek to preserve as far as possible the advantages associated with the nominal deficit as an operational variable of fiscal policy, namely: being easily to report, relevant and well established in the public and parliamentary debate, in addition to having an obvious connection with debt. At the same time, it would be desirable for the proposal to be able to overcome some of its drawbacks, mainly the fact that it favours the pro-cyclicality of fiscal policy since the worse the cyclical position, the greater the effort to reach a nominal deficit commitment.

⁵ Hernández de Cos *et al*, (2016)

2.3. Institutional aspects

The current framework is based on the allocation of a large number of powers to the EU institutions when setting fiscal policy recommendations. The European Commission proposes to the Council the annual adjustment to be made by a Member State in application of the Stability and Growth Pact, both in its preventive and corrective aspect. Once approved by the Council, that is the adjustment that is *de facto* relevant in Spain, irrespective of whether or not it is sufficient to comply with our domestic law. In fact, the adjustment path up to 2020 established in the First Transitional Provision of Organic Law 2/2012 often set stricter fiscal requirements than EU requirements. Therefore, compliance with the former would have comfortably guaranteed the SGP targets. However, the latter have been predominant in fiscal policy planning, and non-compliance with the Organic Law has not been relevant in the national debate.

Monitoring has been conducted at two levels which overlap in part, the EU level and the national level. In particular, the Government publishes its fiscal plans in the spring and autumn of each year with the presentation of the Stability Programmes and the budgetary plans, respectively. These documents are based on the Government's macroeconomic scenario, both on a no-policy change basis and with economic policy measures, which is subject to AIReF's endorsement. AIReF also periodically assesses the existence of significant biases in the Government's forecasts over a period of four consecutive years.⁶ When fiscal plans are submitted (*ex-ante* supervision), both the Commission and AIReF issue their opinion on the feasibility of the targets set and their compliance with the applicable requirements. Differences in the estimates of some key variables open up the possibility that the assessment of the two institutions does not match. Once the fiscal policy has been implemented (*ex-post* supervision), it is mainly the European Commission that conducts the evaluation. Although AIReF also makes an assessment, it does not have the power to trigger procedural consequences within the EU framework in the event of non-compliance.

⁶ There have been systematic errors and biases in the Government's forecasts, which are mainly concentrated in the estimates for $t+1$ and in the variables relating to public consumption - which tends to be underestimated, with a systematically negative error in the Government's forecasts - and to exports, whose growth the Government tends to overestimate (AIReF, 2021).

3. AN ALTERNATIVE FRAMEWORK BASED ON LONG-TERM DEBT SUSTAINABILITY

3.1. Timing aspects

The literature considers that medium-term fiscal and budgetary frameworks play an essential role in the design and implementation of fiscal policy. The European Commission (2007) lists some of the advantages of using medium-term frameworks in fiscal planning, including improving the quality and stability of the decision-making process, resulting in more predictable fiscal policies. In addition, according to the International Monetary Fund (IMF, 2013) the use of medium-term frameworks in fiscal planning can contribute towards improving fiscal discipline by showing the multi-year impact of planned revenue and expenditure measures, issuing early warning signals on the possible sustainability problems of existing policies and establishing binding multi-year expenditure ceilings. The IMF (2013) also notes that they improve efficiency in the allocation of budgetary resources, as expenditure centres have more predictable and stable financial conditions, which helps in their planning. Along the same lines, the OECD (2014) highlights the importance of medium-term planning for the quality of the decision-making process in different circumstances, such as the execution of capital projects with changing operating costs or the adoption of programmes whose spending implications do not materialise in the year they are adopted but later, such as a reform of pensions or healthcare spending.

So far, however, medium-term fiscal policy targets have been very changeable in Spain and in most EU countries. The drawing up of stability programmes containing up to t+3 plans has in no way guaranteed a medium-term fiscal policy dimension or helped to anchor expectations regarding the future fiscal policy stance. In fact, the fiscal framework provides for the possibility of changing the targets on an annual basis, without the need to be

accountable for such a change. This means that there is no political commitment to the specific path that is included each year in the stability programmes.

In contrast, some peer countries have managed to establish binding medium-term paths. In the Netherlands, the medium-term dimension of national fiscal policy translates into a four-year multi-year budgetary framework in which the Government adheres to expenditure ceilings during its legislature alongside other rules and budgetary targets set on an annual basis. The Dutch independent fiscal institution (*Centraal Planbureau*, CPB) plays a key role in the operation of the framework through its medium-term projections. These serve as the basis for fiscal policy-making and incorporate a sustainability analysis of public finances as a long-term anchor. Sweden's fiscal framework also provides for binding national medium-term paths through a budgetary framework based on an expenditure ceiling set three years in advance, which is combined with a medium-term debt anchor. In both cases, the national link to a path is translated into annual implementation commitments, non-compliance with which entails a high reputational cost.

Rethinking how the fiscal paths are set could encourage their political ownership by the government of each Member State responsible for developing these measures. In this regard, some authors are putting forward the possibility of transferring to the fiscal sphere some aspects of the governance model of the Recovery and Resilience Facility (De Angelis *et al.*, 2021). Specifically, the RRF gives countries the opportunity to set their own political and investment priorities, within common guidelines for all Member States. Monitoring is carried out at an EU level, with agreed milestones and reform commitments. According to some authors (Verwey & Monks, 2021), the possibility that national debt consolidation could be structured along equivalent lines deserves to be explored. National governments would thus lead the design of their own fiscal plans within common guidelines set by the Commission and agreed by the Council. This would create greater national and political ownership and allow for greater country specificity.

Setting a fiscal path that is binding on the entire legislature is a proposal that has a certain amount of acceptance at an EU level. The duration of the legislature is the planning time frame of countries with binding medium-term paths, such as the Netherlands and Sweden, and was part of past Commission proposals⁷. In order to reduce debt in the medium and long term, Member States must present a consistent path, based on a set of EU guidelines that

⁷ See the Proposal for a Council Directive laying down provisions for strengthening fiscal responsibility and the medium-term budgetary orientation in the Member States.

would be the same for all countries and based on variables under their control. This path should be established as soon as a new government takes office, for the entire legislature. It should be submitted to Parliament and to the EU institutions for approval so that, once agreed, the annual budgets can be aligned to this path in order to promote steady convergence towards more prudent debt paths.

The framework should also provide for a number of circumstances in which the promised fiscal path can be revised. While achieving stability in fiscal planning is key, there are several circumstances in which changing fiscal trajectories can be the optimal course of political action. The necessary activation of an escape clause in a context of recession, the mere functioning of the democratic process with alternating governments or a drastic change in the conditions of the sovereign debt market are some of the factors that could require a re-evaluation and possible modification of fiscal targets. Independent fiscal institutions should continue to play an important role in making an unbiased assessment of the existence of these circumstances. The aforementioned Dutch and Swedish cases provide for a revision of the fiscal paths in exceptional cases. In Sweden, the expenditure ceilings have been modified in cases of a change of government or in exceptional situations such as the onset of Covid-19, as in the Netherlands⁸.

A binding fiscal path proposed by the incoming government for the entire legislature could significantly raise the political cost associated with its modification. Changes to the path would be subject to the same approval process by Parliament and the EU institutions – and with the same majorities – as their initial adoption. This represents a significant change from current practice, where the modification of fiscal targets is neither restricted to a set of assumptions nor subject to an accountability procedure. The increase in the

⁸ In the case of the Netherlands, there is a monthly follow-up to prevent the agreed expenditure limit being exceeded. Deviations from expenditure, whether positive or negative, are expected to be reported to the Ministry of Finance. When an excess of expenditure is expected, whatever the cause, it must be offset in a “specific” way, that is, within the ministry or sector in which it takes place. If, for example, there were more applications for university access than had been estimated in the education budget, the Ministry of Education should offset it with other measures, either by reducing students' scholarships or by raising university fees, for example. Where expenditure is lower than expected, the surplus may be used to offset possible over-expenditure, but not for additional policies. In addition, the framework provides for the nature of the surplus to be taken into account. In the case of lower expenditure resulting from a more favourable economic development than initially expected, this surplus can only be used to offset temporary deviations from expenditure, but not for a structural deviation.

political cost reduces the likelihood of opportunistic changes to the medium-term path.

3.2. Material aspects

Since 2018, AIReF has worked on the proposal of reforming the fiscal framework around a debt anchor and an operational expenditure rule in the short and medium term⁹. On this basis, this section proposes a methodology for setting a specific debt anchor for Spain that will generate a feasible path of reduction. When establishing the anchor, the country's information regarding the level of starting (present) debt, the historical evolution of the ratio (past) and the trend projections of public revenue and expenditure (future) are taken into account. An *ad hoc* exercise is proposed to set a debt anchor for a period of 10 years. Once the debt anchor has been derived - based on a baseline forecast with a medium-term scenario and long-term modelling - its implications for fiscal policy in the short and medium term are reflected in a path of primary spending net of new revenue measures.

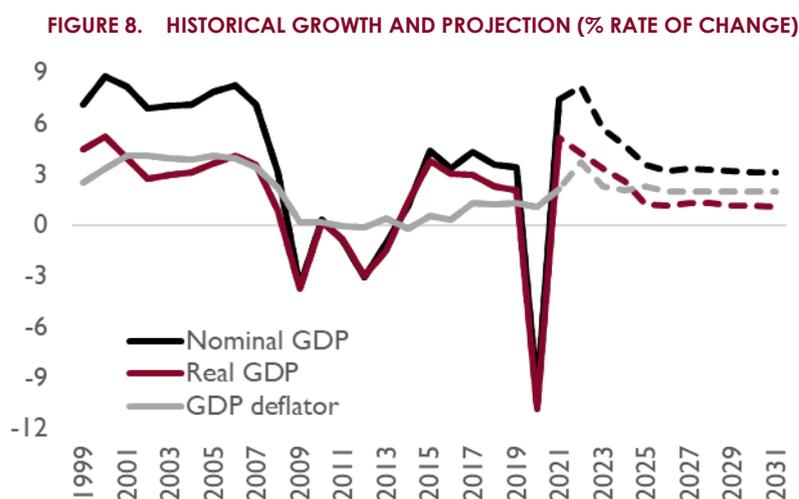
The assessment of the sustainability of public finances requires a prior exercise of baseline projection of long-term public debt through its determining factors, incorporating future pressures and risks. The projection of the trend or no-policy change evolution in the long-term debt-to-GDP ratio will be the starting point for a diagnosis of its sustainability. The aim would be to calibrate an alternative path through an operational variable to help steer the course towards the anchor value deemed to be most prudent. Knowing the sensitivity of the different variables that contribute to debt dynamics makes it possible to evaluate and calibrate the importance of the different factors in the design of a strategy for the sustainable evolution of public accounts. This projection exercise must be updated regularly (at the beginning of each parliamentary term according to the timing aspects already mentioned or when the escape clause is activated in the event of exceptional circumstances) to incorporate the new information and new risks. An illustrative exercise is proposed below on the basis of projections developed for this simulation that do not constitute the current AIReF forecast.

⁹ See "Some Elements for a Revamped Fiscal Framework in Spain", AIReF, Working Paper 2018/3.

3.2.1. Derivation of the debt anchor. The future: elements of the trend forecast

Deriving the ten-year trend projection of the debt ratio requires generating a forecast of its determining factors through different models and assumptions. In particular, the forecasts¹⁰ used in the exercise proposed in this Technical Paper have been prepared in line with the following considerations:

- Real and nominal growth.** Forecasts for real growth over a three-year horizon are drawn up using short- and medium-term models, in line with those included in the Stability Programme Updates. In the longer term, potential growth models are used based on the evolution of productivity and the labour factor, taking into account population dynamics, with a period of convergence between the two horizons. Like real growth, price forecasts are derived from short- and medium-term models, and then anchored to the ECB's 2% price target, with a convergence period. In this illustrative exercise, real average growth of 1.9% over a period of 10 years (2022-2031) has been considered, with an average GDP deflator of 2.2% and nominal growth of 4.1%. These values are not far removed from the average of the previous economic cycle (1999-2019), i.e. of 2% real growth, 2% deflator and 4% nominal growth.



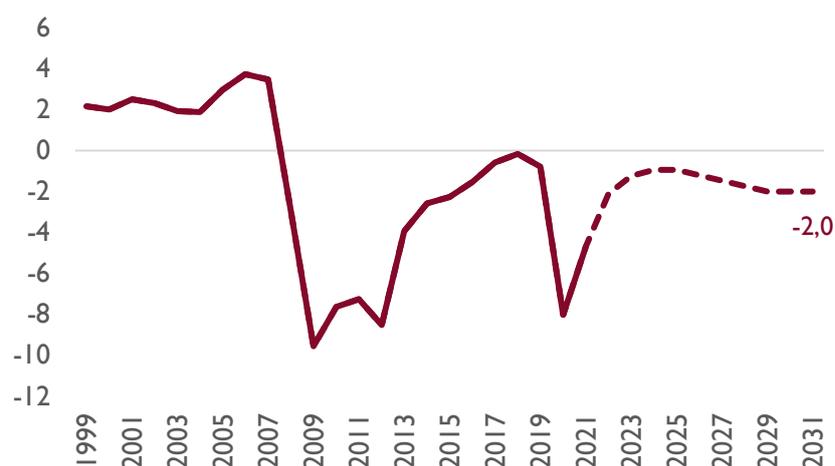
Source: INE and AIReF

- Evolution of the primary balance.** The projection of the primary balance up to a three-year horizon is built using revenue and expenditure projection models as in the Stability Programme Updates. In the longer

¹⁰ The forecasts incorporated in this paper do not represent AIReF's official forecasts. They have been prepared as an illustrative exercise for the derivation of the fiscal rule.

term, a constant structural primary balance will be considered, resulting from the progressive narrowing of the output gap in the following years. The primary structural balance, which in this exercise is assumed to be constant in the future at -2% of GDP, may deteriorate by adding the pressure of higher ageing expenditure. Alternatively, replacing the approximation of a structural balance with projections of revenue and expenditure broken down by type, with modelling and information for the short, medium and long term, will enrich the analysis. In this regard, AIReF plans to publish an "Opinion on the Long-Term Sustainability of the General Government", where this modelling will be carried out. This illustrative exercise considered an average primary deficit of 1.6% of GDP over a ten-year period (2022-2031), slightly higher than the average deficit of the previous economic cycle (1.2% between 1999 and 2019).

FIGURE 9. HISTORICAL PRIMARY BALANCE AND PROJECTION (% GDP)



Source: IGAE, INE and AIReF

- Evolution of interest rates and the financial burden.** The evolution of the financial burden will be conditioned by the interest rates at which new debt is issued, the interest rates at which existing debt was issued and the evolution of the level of debt. In order to obtain a forecast of the evolution of the average interest rate of the debt, the portfolio was characterised at the starting point, that is, the repayment profile together with the rates at which it was issued. In addition, account has been taken of the evolution of the expectations of the issuance rates of sovereign debt at different maturities, which, together with the issuance strategy, makes it possible to calculate the average rates of the new issues. The evolution of the total average interest rate will be

determined by the weighting of the interest rate of the existing debt and the interest rate of the new issues.

In this exercise, the future evolution of the curve discounts a sharp rebound in the short end from values of around 0% to place them near 2% in the next five years, while the longer sections will rise to a much lesser extent, causing a notable flattening of the curve. Following a 7.5-year issuance strategy, the average issuance rate would rise rapidly from a low of 0% in 2021 to 2.5%, before converging more gradually to 2.8%. The implicit rate would rise from 1.9% to 2.6%.

FIGURE 10. EXPECTATIONS ON THE EVOLUTION OF THE RATE CURVE (%)

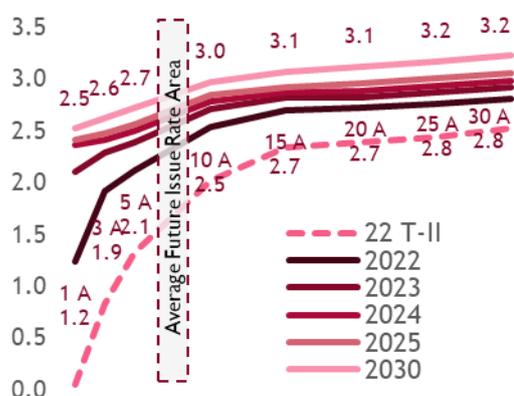
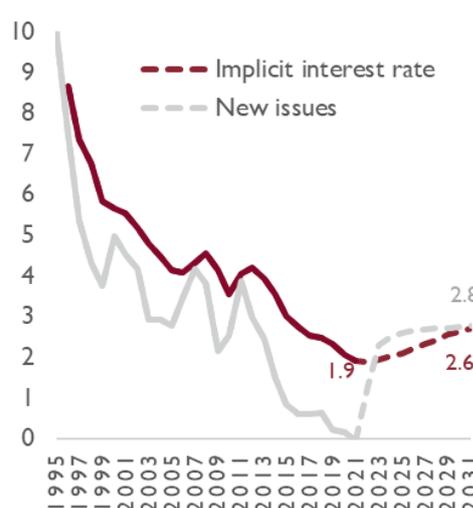


FIGURE 11. EVOLUTION OF DEBT INTEREST RATES (%)



Source: AIReF

This rise in interest rates together with higher debt place the financial burden on an upward path after a long period of decline. For this exercise, it stands at around 3% in the next 10 years. The financial burden added to the projection of the primary balance puts the total deficit at 5% of GDP in the same period.

FIGURE 12. INTEREST (% GDP)

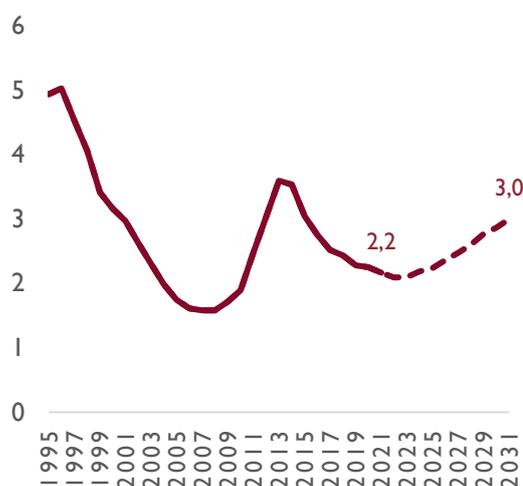
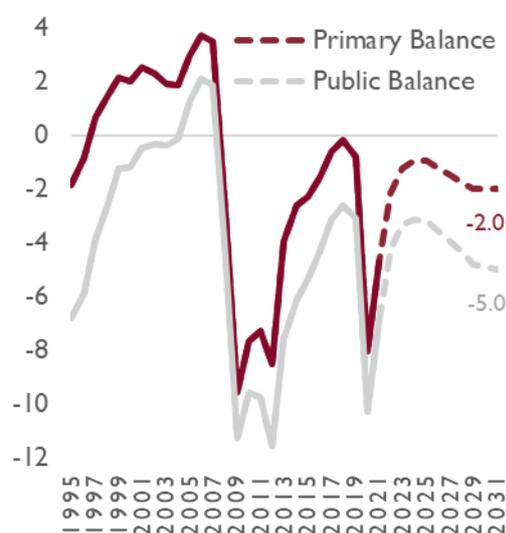


FIGURE 13. PRIMARY BALANCE AND TOTAL BALANCE (% GDP)



Source: AIReF

- Stock-flow adjustment.** The stock flow adjustment represents the change in the debt that is outside the definition of the “public balance” flow variable of national accounting. These adjustments refer to changes in financial assets such as deposits and other volume change adjustments. In the past, this adjustment has meant an average increase in debt of 0.3 points of GDP per year in the period 1995-2020 (varying slightly depending on the period considered). Key moments are 2012 with the rescue of the financial system and the reclassification of Sareb. As a base assumption, in this exercise a zero value will be considered for this adjustment, i.e. all changes in debt will correspond to the “public balance” flow variable.

FIGURE 14. STOCK-FLOW ADJUSTMENT (% GDP)



Source: AIReF

Once the determining factors of the evolution of the debt have been estimated, the evolution of the ratio as a percentage of GDP is projected, determined by the following identity:

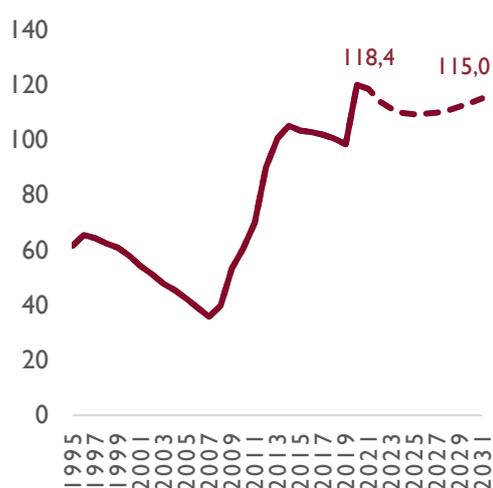
$$\Delta b_t = \underbrace{\frac{i_t - g_t}{1 + g_t} b_{t-1}}_{(1)} \underbrace{- pb_t}_{(2)} + \underbrace{dda_t}_{(3)}$$

Where,

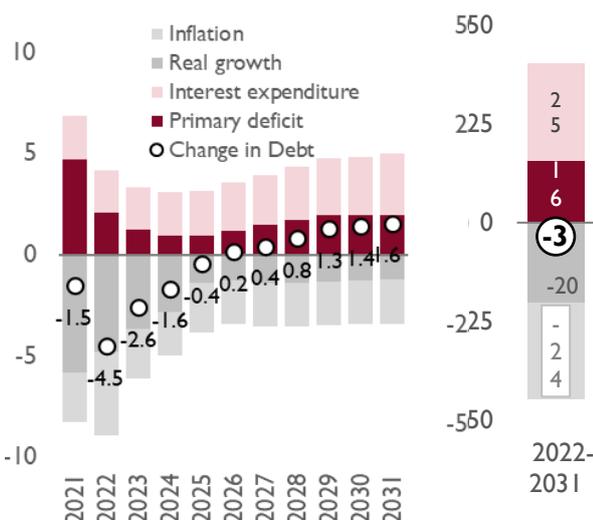
- Δb_t change in debt ratio over period t
- i_t implicit interest rate of the debt
- g_t nominal growth
- pb_t primary balance as a percentage of GDP
- dda_t stock-flow adjustment as a percentage of GDP

In this exercise, the debt ratio records a downward path in the first few years, conditioned by the strong upturn in economic activity and the inflation recorded after the pandemic. As the strong momentum of nominal growth fades, the path returns to an upward curve. Over the period as a whole, the baseline projection shows a decrease in the ratio of 3 points of GDP.

FIGURE 15. DEBT RATIO (% GDP)



CHANGE IN THE RATIO AND CONTRIBUTIONS (GDP POINTS)



Source: AIReF

3.2.2. Derivation of the debt anchor. The past: stochastic analysis

The derivation of a fiscal rule based on a debt anchor with an operational variable requires:

- A trend debt path, generated by projecting the various determining factors of its evolution (as in the previous section) for the period over which the anchor is to be set.
- Estimating an anchor value or a corridor defined by a range. To derive this anchor, a stochastic analysis is performed based on the past evolution of fiscal variables through a vector autoregressive model (fiscal VAR), estimating the probability bands and percentiles using bootstrapping or Monte Carlo techniques. This allows a value (or a range) to be obtained in which to place the debt-to-GDP ratio over a time horizon in relation to a probability percentile that is feasible, within the demanding requirements.

In the proposed exercise, the debt anchor is set for a 10-year time horizon, placing the value of the ratio between the 10th and 20th decile of the simulations carried out by bootstrapping an estimated fiscal VAR model with five variables: public revenue, public expenditure, 10-year interest rates on sovereign debt, nominal GDP and public debt-to-GDP ratio (see Box 1, where more detail is provided on the stochastic projections of the debt). The result of this simulation indicates an anchor value of debt that will require an additional reduction of around 15 points of GDP on the trend path. This is consistent with a debt anchor of 100% in 2031.

FIGURE 16. BASELINE DEBT PATH (% GDP)

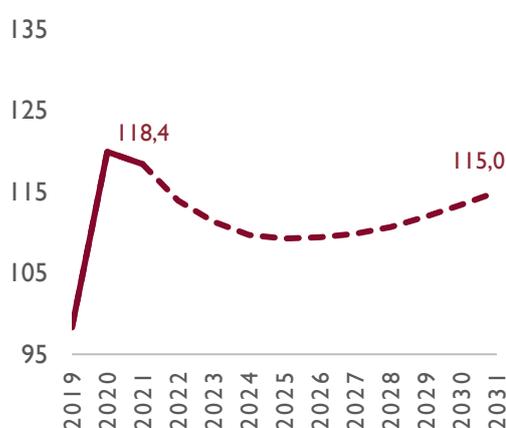
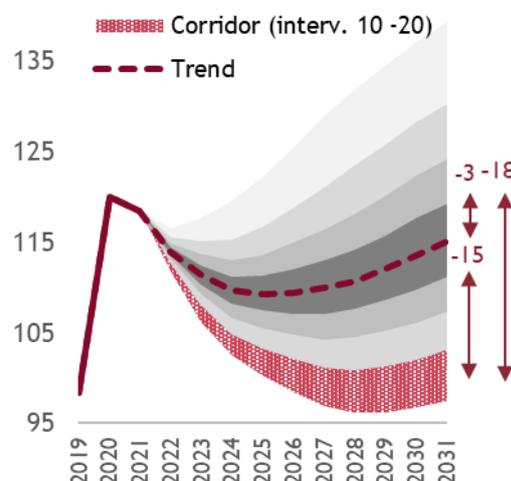


FIGURE 17. STOCHASTIC DEBT PROJECTIONS (% GDP)



Source: AIReF

Box 1. Stochastic Projections of Public Debt

Stochastic analysis captures the uncertainty surrounding deterministic debt paths. Exploiting the historical volatility and co-movements of the variables that determine the evolution of the debt ratio allows for the production of different scenarios calibrated according to their probability of occurrence.

The stochastic approach assesses the uncertainty surrounding the deterministic path using a vector autoregressive (VAR) model. The VAR model uses five variables: government revenue (r), government expenditure (e), 10-year interest rates on sovereign debt (i), nominal GDP (y) and public debt-to-GDP ratio (b). These variables are taken quarterly, as from 1995: Q1, seasonally-adjusted and logarithms are applied to: r , e , y .

By combining the five variables in a vector $\mathbf{y} = [r, e, i, y, b]^T$, we can express a VAR(p) model:

$$\mathbf{y}_t = A_0 + A_1\mathbf{y}_{t-1} + \dots + A_p\mathbf{y}_{t-p} + \mathbf{u}_t$$

According to the Hannan-Quinn criterion, a VAR is selected (4). Under this specification, the model with OLS is estimated and it is observed that according to the eigenvalues, the model is stable and its diagnosis and residuals are favourable.

The next step is the production of the stochastic projections by bootstrapping. To do this, a new vector is constructed in each iteration based on the model coefficients and a random sampling of the residuals obtained. This process is carried out 15,000 times to obtain a probability function associated with each of the paths of the public debt ratio.

Finally, the probability function obtained with the VAR model can be added to the deterministic path. This makes it possible to characterise, within all plausible paths given the historical dynamics of the variables, demanding but likely paths from a budgetary perspective. In particular, the value of the debt anchor can be determined as that which, in 10 years, is between the 10th and 20th percentiles.

This approach has three virtues. Firstly, it makes it possible to derive debt anchors that are consistent with reductions in the public debt-to-GDP ratio, while being feasible. Secondly, it makes it possible to adjust the methodology for each country and each moment in time, deriving an adjustment that is realistic, plausible and independent of the economic cycle. Thirdly, it takes into account the information on the starting level, and the trend projections of revenue and expenditure. This allows progress towards greater sustainability of finances, but always within what is reasonable and plausible according to past observations.

The quantification of uncertainty offered by stochastic analysis gives us the possibility of assessing the probability that the debt ratio will remain below a particular level over a given horizon. In this exercise, we can see that the baseline projection of the debt ratio would be below the starting level of 58.2% of the time over a 10-year horizon. The probability that the debt will not increase from its starting level with compliance with the rule would be 83.4%.

FIGURE 18. STOCHASTIC BASELINE PATH SIMULATION

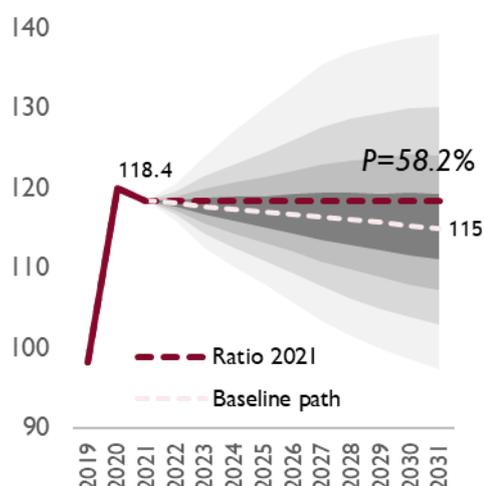
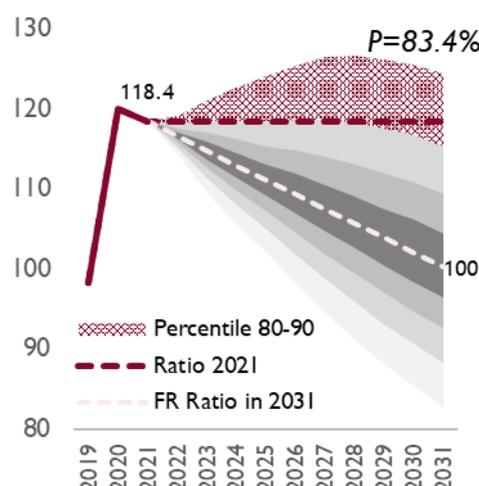
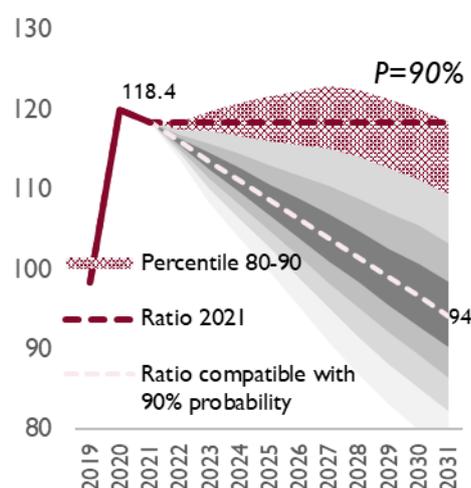


FIGURE 19. STOCHASTIC SIMULATION OF THE PATH DERIVED FROM THE FISCAL RULE



This analysis can be used to introduce a second level of requirement when considering a path for reducing the ratio by establishing a minimum necessary threshold in probabilistic terms. This would mean that the resulting anchor would guarantee that the debt will fall in the future with a certain level of probability. For example, if the requirement was established that the chosen anchor should guarantee, with a 90% probability, that the 10-year debt ratio will be below the starting level, then the anchor should be at 94% of GDP. This would require an additional 6-point reduction over the 100% anchor. In contrast, a probabilistic threshold of 75% would correspond to a ratio of 106.3%. Therefore, in this case it would not be necessary to adjust the debt anchor resulting from the stochastic analysis.

FIGURE 20. STOCHASTIC PATH SIMULATION COMPATIBLE WITH A 90% PROBABILITY OF REDUCING THE DEBT RATIO IN 2031

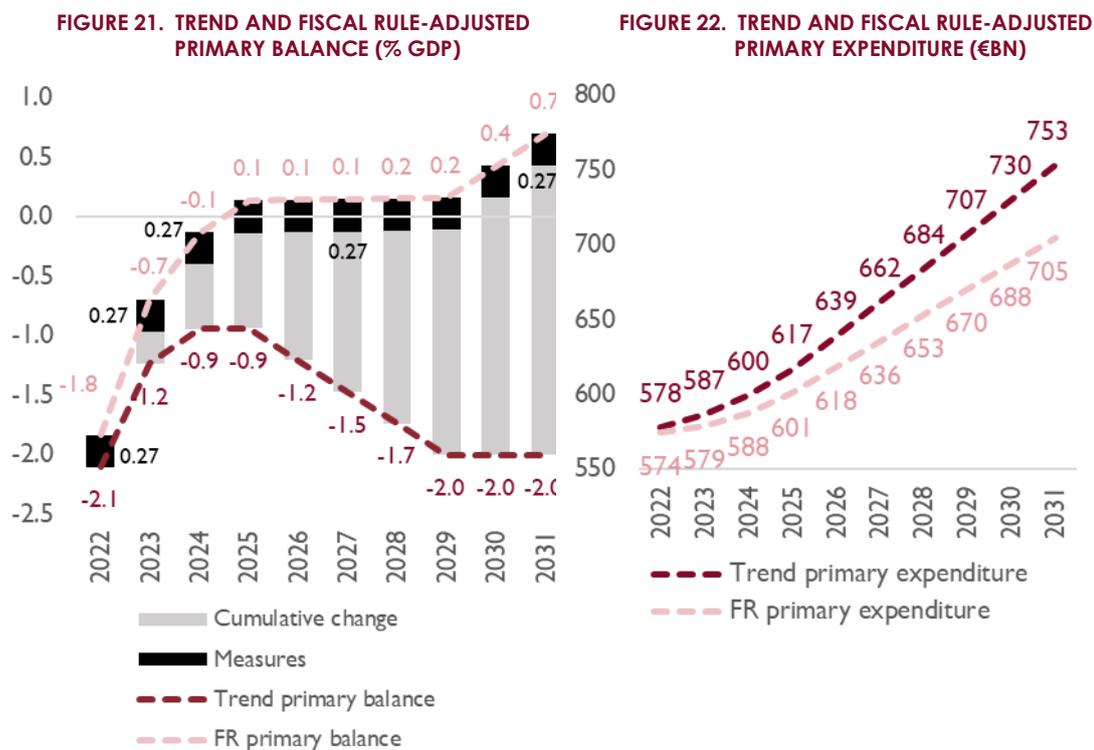


3.2.3. Operationalisation of the fiscal rule based on a debt anchor.

Operationalising the fiscal rule involves selecting the fiscal variable on which the intervention will be made and calibrating the necessary adjustment to its trend path compatible with the achievement of the estimated anchor value. The operating variable must be one over which the Government has control in order to be able to directly evaluate its level of compliance.

In this exercise, it is proposed that the fiscal rule be operationalised through the primary expenditure path¹¹ at levels that allow a debt ratio of 100% to be achieved in 2031. Adjustment can be calculated in different ways, either through a constant effort over the time horizon or with sharper adjustments at the beginning or at the end of the period. It is proposed to achieve the target path by calibrating a constant annual adjustment of the primary balance (as a percentage of GDP). Given a trend revenue path, the adjusted level primary expenditure path is derived. The magnitude of deficit reduction measures that need to be implemented compared with the trend scenario amounts to 0.27 points of GDP per year.

¹¹ Primary expenditure is an observable variable under the direct control of the fiscal authorities. In addition, it is strongly linked to the fiscal instrument *par excellence*, the Budget. See AIReF (2018) "Some elements for a revamped fiscal framework for Spain".



Source: AIReF

The path of primary expenditure net of revenue measures derived from the debt anchor would imply a reduction of 0.67 points on the rate of change of primary expenditure in the trend scenario. The fiscal rule would require the design of a medium-term scenario that implies a cumulative improvement in the primary balance of 1.08 points compared with the trend scenario over a four-year legislative period.

FIGURE 23. CHANGE IN TREND AND RULE-ADJUSTED PRIMARY EXPENDITURE (%)

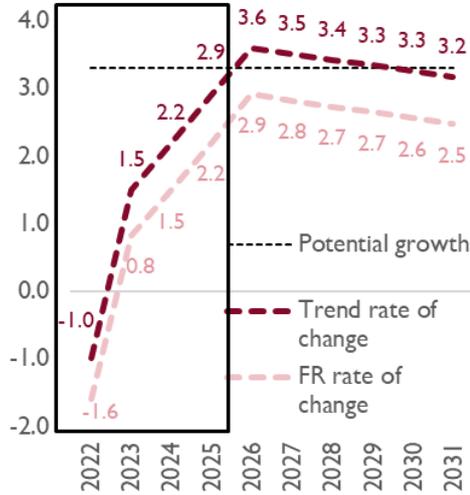
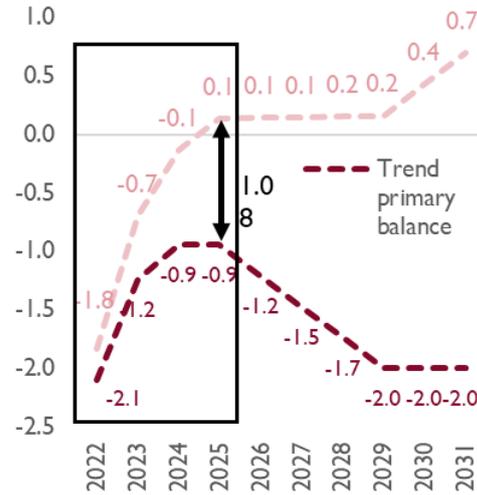


FIGURE 24. TREND AND FISCAL RULE-ADJUSTED PRIMARY BALANCE (% GDP)



Source: AIReF

A gradual and sustained adjustment to reduce the primary deficit by 0.27 points for 10 years would have a cumulative effect with a very favourable impact on debt dynamics in the long term and the associated interest rates.

FIGURE 25. TREND AND RULE-ADJUSTED PRIMARY BALANCE (%)

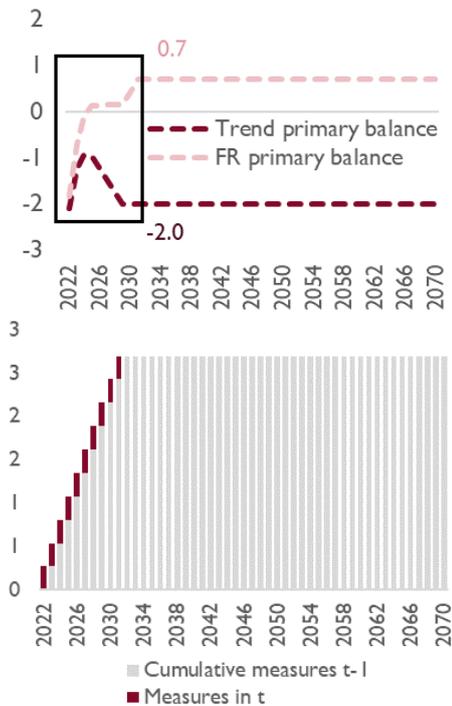


FIGURE 26. FISCAL RULE-ADJUSTED LONG-TERM DEBT PROJECTION (% GDP)



Source: AIReF

Other fiscal metrics such as the structural balance or the total deficit figure would still be relevant for the analysis, but they would no longer be the operational variables of the fiscal framework. Analysing the evolution of these metrics will be important for monitoring sustainability and determining *ex ante* whether the proposed expenditure path is appropriate. In addition, it would be important to analyse their evolution *ex-post* to check whether compliance with the expenditure path results in the expected deficit dynamics.

However, the deficit figure (nominal or structural) would no longer be the variables for which fiscal requirements are formulated and assessed. In the Dutch case, for example, the structural balance and its relationship with the MTO serves as a reference for the treatment of extraordinary revenue. If the structural balance is higher than the MTO, 50% of the positive surprises in public revenue can be used for tax reductions while the remaining 50% must be used for payment of the debt. If the structural balance is below the MTO, all the positive revenue surprises have to be allocated to payment of the debt.

3.2.4. Derivation of the non-financial expenditure limit (% GDP)

The expenditure path for the legislature, which represents the medium-term macro-fiscal target, must be translated into a non-financial expenditure limit in budgetary accounting¹². A clear and transparent connection must be established between the national accounting variables and the budgetary variables so that the macro-fiscal requirements can be effectively transferred to the political decision-making process, which is ultimately reflected in a draft budget. If the connections between macro-fiscal budgetary aspects are not well established, there is a risk that these two elements will remain disconnected. This is one aspect of the current framework that can be

¹² Medium-term fiscal frameworks (MTFFs) establish multi-year macro-fiscal targets, relevant at the level of the General Government as a whole, such as the nominal balance, the structural balance or the public debt. Stability Programmes are an example of MTFFs. For their part, medium-term budgetary frameworks (MTBFs) are derived from MTFFs following a top-down approach. They focus on the budget variables and are therefore usually expressed in terms of cash, establishing limits on the level of non-financial budget expenditure or its rate of growth. MTBFs are a mechanism for prioritising, reconciling and presenting multi-year expenditure allocations. Their role is to identify the revenue needs of the expenditure bodies and reconcile them with the overall revenue allocation of the MTFFs. In this regard, the MTBFs allow governments to programme their budgetary policy for longer periods and are essential for bringing the fiscal constraints included in the MTFF into the realm of policy decision making. There are also differences in terms of the scope of application of both types of framework: in national accounting, the relevant criterion is the economic activity performed, while in the budgetary field, it is the legal nature of the entity that is important.

improved: without a transparent connection between the two, the risk of decoupling is high, with the result that fiscal constraints are not adequately incorporated into the political and budgetary process (EUIFIS, 2021). The existence of a medium-term budgetary path can also lead to better budgetary management since it allows the presentation and prioritisation of multi-year expenditure by expenditure bodies.

Therefore operationalising the expenditure rule implies establishing the equivalence between the non-financial expenditure budget and government expenditure in national accounting. The methodological criteria of the European System of Accounts (ESA) differ from the budgetary methodology in several aspects that affect the valuation of non-financial expenditure and revenue. ESA methodological criteria express budgetary stability targets in national accounting terms and allow for a homogeneous comparison between different European countries. It is the criterion used for the purposes of the Stability and Growth Pact. The most significant differences with the budget methodology are found in the recording of expenditure, as in national accounting it is generally charged in accordance with the accrual principle, while in the budget the cash criterion applies and, therefore, the expenditure is accounted for in the year in which the obligation is recognised. Therefore, in order to determine whether budgets comply with the expenditure limit in national accounting, it is necessary to establish the equivalence between the non-financial expenditure budget and expenditure in national accounting.

Depending on the type of adjustment and the year, the differences between criteria may result in lower expenditure in national accounting in relation to non-financial budgetary expenditure and vice versa. Some of the most frequent adjustments between budgetary forecasts and national accounting relate to the differences between (i) the criterion of budgetary accrual and economic accrual, (ii) interest (which is recorded in the budget at the time the coupon becomes due while the national accounting criterion determines the allocation to the year of the interest accrued in that period according to its IRR), (iii) investments financed by the “lump-sum payment” method (in budgetary accounting, the expenditure is charged at the time of completion of the contract and delivery of the work, whereas in national accounting the part corresponding to the work that has been carried out is recorded each year), and (iv) the capital contributions from the State to public companies (in budgetary accounting, capital contributions to companies considered as public administrations, as well as capital contributions that are not considered to generate economic profitability, are recorded as financial transactions, and therefore do not affect non-financial budgetary expenditure, whereas in national accounting, they are treated as non-financial transactions which do affect public expenditure).

National fiscal frameworks need to be reformed to ensure that EU countries have a medium-term budgetary framework consistent with the fiscal framework over the same time horizon. Practical experience shows that most EU countries do not have an effective medium-term budgetary framework. Although sometimes provided for in national legislation, the budgetary process has in most cases been limited to a purely annual exercise. This contrasts with the medium-term fiscal frameworks which – irrespective of their effectiveness – have been developed on the basis of EU fiscal rules, in the form of the Stability and Convergence Programmes.

In particular, it should be ensured that the necessary adjustments to translate the expenditure path in national accounting into an equivalent path in budgetary accounting terms are public and transparent. This means going beyond the ESA adjustments¹³ that Member States currently send in the context of the EDP notifications. These adjustments are expressed in terms of the general government balance, which sometimes prevents them from being allocated to the expenditure headings because the amount that only affects these items and not the revenue is unknown (for example, in the case of the adjustment for funds without legal personality). In addition, although there are EDP notification adjustments that only affect expenditure, sometimes they also cannot be fully allocated either because there is not enough detail for full allocation across headings (e.g. the accrual adjustment), or the exact content of the adjustment is unknown (e.g. the adjustment for capital contributions to public companies of Chapter 8). The size of these adjustments can be very significant, particularly in certain national accounting headings.

In the case of Spain, the ESA adjustments are not public. On a quarterly and monthly basis, the Local Governments and the Autonomous Regions, respectively, provide the Ministry of Finance with information in accordance with a manual and systematised annexes¹⁴ that allow the General State

¹³ ESA adjustments are those adjustments to be applied to the balance resulting from estimated non-financial revenue and expenditure at the end of the year in order to relate it to the net lending or borrowing calculated in accordance with the ESA.

¹⁴ In the case of Local Governments, the list of the adjustments to be applied and their calculations are set out quarterly, and each time they have to submit specific annual information, in a guide that is published online (for example, for the information to be submitted corresponding to the second quarter of 2022, they can be found in form F.1.1.B1 of the document: "[Information to be reported for the fulfilment of obligations provided for in Order HAP/2105/2012, of October 1st, implementing the reporting obligations provided for in Organic Law 2/2012, of April 27th, on Budgetary Stability and Financial Sustainability](#)"). In the case of the Autonomous Regions, the reporting forms to be sent and instructions for their completion are also published "[AR information capture applications](#)". The manuals for calculating the deficit in national accounting

Comptroller (or the local comptroller in the case of Local Governments) to make these adjustments. However, this information is not publicly available. State adjustments used to be published at the time of the presentation of the draft budget, but this has ceased to be the case since 2017. This is an issue that can reach significant proportions: it follows from the draft 2023 General State Budget that the initial ESA adjustments may amount to more than one point of GDP. These include, for example, adjustments for non-execution of expenditure, accrued interest and implementation of European Funds. In this regard, AIReF has repeatedly recommended the need to publish information on national accounting adjustments to reconcile the budget balance with net borrowing or lending in terms of ESA 2010¹⁵.

A more transparent link between expenditure in national accounting and non-financial budgetary expenditure is also important from the point of view of monitoring execution. The use of the high-frequency information published by the General State Comptroller would allow a better analysis of the pace of execution of that part of the expenditure headings in national accounting that are explained by the budget.

3.3. Institutional aspects

The need for the new fiscal framework to better reflect the specific features of each country should be supplemented by an enhanced role for national independent institutions. The desirability of greater political ownership at a national level has recently been highlighted when it comes to proposing binding, country-specific medium-term expenditure paths, based on common guidelines agreed at an EU level (European Commission, 2022). Regardless of whether the governments themselves establish their legislative commitments, this expenditure path should be based on independent and objective analyses and projections, which could be provided by the national IFIs and which make it possible to assess to what extent the commitments are feasible and demanding. At any event, the EU institutions should discuss and approve the national expenditure paths, which would strengthen commitment to the targets of the legislature and could also facilitate coordination at a euro area level. Furthermore, it must

for ARs and LGs, "[Manual for Calculating the Deficit in National Accounting](#)", specifically in Section III "Adjustments between the non-financial budget balance and the National Accounting deficit or surplus", are also published on the website of the General State Comptroller.

¹⁵ See for example the "[Report on the Main Budgetary Lines and Draft Budget of the General Government: General State Budget 2023](#)" and the "[Opinion on Fiscal Transparency in the General Government in Spain](#)".

be ensured that EU-level discussions can be had on fiscal policy options that, while they do not involve risk from a national perspective in the short term, may be inappropriate from a broader perspective at a euro area level. In this latter field, the role of the European Fiscal Board could be strengthened as its reports and diagnoses currently only have an advisory role and have had little influence on the design of fiscal policy at the level of the euro area.

The specific features of national budgetary processes at different stages, especially in decentralised contexts, require very specific experience in the fiscal policy planning stage. To conduct an *ex ante* evaluation of fiscal policy planning at the different budgetary stages, it is essential to have detailed knowledge of very specific circumstances. These include which fiscal policy variables are most politically binding in the national context - regardless of whether they are codified or not - and whether the way in which the aggregate targets are distributed among the different General Government sub-sectors is conducive to general fiscal responsibility. IFIs are particularly well positioned to identify these issues and provide useful information in the context of the national debate. In particular, in the *ex ante* evaluation stage of fiscal policy – that is, when analysing whether fiscal and budgetary plans contribute to sustainability - the evaluation of IFIs in aspects such as the analysis of the sustainability of the national debt or medium- and long-term no-policy change projections can be useful. The latter could serve as a starting point for coalition or investiture agreements¹⁶.

In the *ex post* evaluation, the fiscal framework must analyse for each year compliance with the expenditure limit applicable to that year within the medium-term path. Progress towards a fiscal framework with a debt anchor, an operational expenditure rule and transparent adjustments between national and budgetary accounting would significantly simplify the manner in which fiscal policy recommendations are made, thus facilitating subsequent assessment of compliance. In this context – and faced with a framework with fiscal requirements expressed in terms of changes in the structural balance – it should be easier to translate the fiscal requirements into specific budget proposals. This would also subsequently make it easier to determine to what extent the evolution of fiscal variables is attributable to underlying elements, beyond the control of the Government, or to discretionary fiscal policy decisions.

¹⁶ This is the case in the Netherlands where the CPB provides medium-term no-policy change projections on which the impact of the measures included in the legislative agreement is estimated.

It is important to bear in mind that, even if the fiscal authorities stick to the agreed expenditure path over the four years, the impact on other fiscal variables, such as the deficit and debt, could differ from what was initially expected. There may be several reasons for this: elasticities may not have behaved in line with their historical values, the cyclical contribution has differed from what was expected when the medium-term path was devised, or inflation projections were exceeded. All issues that are external to the actions of the public authorities must be excluded from the *ex post* evaluation, which must distinguish between fiscal actions and results. The aim of the fiscal framework must be to bind governments through an obligation of conduct, related to the fiscal policy variable most directly under their control and not so much an obligation of outcome in terms of deficit or debt. If the projections underlying the expenditure path are exceeded *ex post*, this new information must be incorporated into the framework of the sustainability analysis for the medium-term path that corresponds to the next commitment of the legislature¹⁷. In this context, what is important is to ensure that medium-term projections are unbiased and independent.

In the *ex-post* evaluation stage, IFIs could play a more active role in fiscal oversight. The analyses of IFIs – which have specific knowledge of the particular fiscal issues of each country – could help determine in the short and medium term the fiscal impact of exogenous elements, as opposed to the impact of the evolution of expenditure net of revenue measures. National IFIs can assume fiscal oversight in low-risk circumstances, with regular reports to EU counterparts at the relevant forums (e.g. Eurogroup and ECOFIN). However, mechanisms should be in place to ensure that oversight can be central when the IFI considers that there is a manifest fiscal policy error.

Such a reorganisation of oversight tasks between national and EU institutions would need to be accompanied by a strengthening of national IFIs, expanding their mandates as appropriate on a country-specific basis, and providing them with sufficient resources to fulfil these new tasks (see Contribution of the EU IFI Network to the EU Fiscal and Economic Management Review).

Finally, the synergies between fiscal sustainability and the composition of public finances should be exploited in the reformed fiscal framework. As shown below, as opposed to some proposals that suggest establishing some kind of exception for investment in general or for investment associated with

¹⁷ This is assuming that the shocks are not large enough to support a change in the committed expenditure path. Otherwise, the procedure established in the framework for its modification should be activated as established in Section III.1.

climate change or digitalisation to address the medium-term challenges of EU countries, this proposal prioritises the sustainability of public accounts. Therefore, the expenditure rule is exhaustive in the sense that only interest expenditure and cyclical unemployment would be excluded. Fiscal policy design would thus be strengthened by conducting public spending reviews and periodic assessments of the quality of public finances by IFIs or other national institutions, such as National Productivity Councils. These analyses can generate benefits in terms of efficient allocation of resources and medium-term sustainability, as well as in relation to the stabilising capacity and redistributive impact of fiscal policy. Similarly, these institutions could evaluate the impact of reforms with a potential impact on the potential growth of the economy or the expenditure path in the medium and long term.

Another important element to bear in mind is the macro-fiscal consequences of the transition to a climate-neutral economy. The Paris Agreement aims to prevent the increase in the planet's global average temperature from exceeding 2°C compared with pre-industrial levels and also seeks to promote additional efforts that will make it possible for global warming not to exceed 1.5°C compared with pre-industrial levels. In this context, the EU has announced its target to reduce net emissions to zero by 2050 and Spain has published its long-term decarbonisation strategies with specific targets over different time horizons¹⁸. The transition to a climate-neutral economy will entail an unprecedented structural transformation, with an impact on all sectors and also on public finances. There are multiple channels through which the green transition will impact long-term debt and they operate in opposite directions. They include the direct increase in public expenditure required for decarbonisation, a decrease in emission-related revenues as emissions decline, and indirect fiscal effects resulting from the macroeconomic implications of the transition. Some estimates for other countries with similar targets, such as the United Kingdom, indicate that reducing carbon emissions to zero could lead to an increase in the public debt ratio of around 20 percentage points by 2050 (OBR, 2021). At any event, this increase in debt is less than that which would be recorded in alternative climate scenarios such as non-mitigation or late action¹⁹.

¹⁸ See the [2021-2030 Integrated National Energy and Climate Plan](#) and [the Long-Term Decarbonisation Strategy 2050](#)

¹⁹ According to the OBR, a non-mitigation scenario could raise UK public debt to 290% of GDP in the long term, more than 100 points above an alternative debt projection based on historical shocks. In addition, the OBR notes that in fiscal terms it is also preferable to address the green transition early (as opposed to late intervention) since the levying of emissions at increasing rates generates additional tax revenues that can finance part of the public investment needed to carry out decarbonisation.

4. OPEN ISSUES

The need to limit the scope of this paper prevents a detailed analysis of elements that will be important for the functioning of the fiscal framework and these will have to be addressed at a later time. Some of these elements include, for example, the specific coverage of the expenditure variable whose level is limited, a discussion on whether these limits should be set in nominal or real terms and the territorial distribution of the aggregate targets.

The coverage of the expenditure variable on which the fiscal policy recommendations are made should be broad. This is important to ensure that it is a truly operational variable whose management can influence the evolution of the long-term anchor, i.e. public debt. In order for the operating variable to function as such, it must meet a series of requirements (Bindseil, 2004): (i) the authorities can control it on a regular basis through the use of their instruments, in this case the budget; (ii) its level can communicate to the public the fiscal policy stance; and (iii) that it has a stable or at least predictable relationship with the final target of monetary policy. The decision on the coverage of the expenditure variable should be taken in an attempt to strike a balance between these elements, i.e. by discounting those elements whose development cannot be controlled by the fiscal authorities, while at the same time being sufficiently broad to communicate the fiscal policy stance and allow it to influence long-term debt. In the search for this balance, there are some items on which there is already a consensus at an EU level regarding the need to exclude them, either because their evolution is beyond the control of the Government, or because they are specific measures that do not affect the underlying position of public finances. These are, for example, cyclical expenditure on unemployment and interest (European Commission, 2019)²⁰.

²⁰ The Swedish and Dutch frameworks also exclude interest from their expenditure ceilings. In the Netherlands, in contrast, cyclical expenditure on unemployment is not currently excluded without prejudice to a reform proposal put forward by the

The treatment of public investment is currently the subject of intense debate.

On the one hand, it is argued that major investment needs for the green and digital transitions that have already been identified will need to be addressed in the coming decades. In addition, the need to promote a growth-friendly composition of public finances is used as an argument to treat investment differently from other public expenditure. On the other hand, there are a number of problems associated with setting a golden rule for investment. The first refers to the specific identification of the categories of expenditure that promote growth - digitalisation, education, green transition, research, etc. - (and which do not necessarily coincide with or are limited to what is understood as gross capital formation in national accounting). The issue of the eligibility of the type of investment to be excluded from the expenditure limit is technically controversial and politically costly. The second problem of a golden rule for investment relates to its impact on sustainability: whether or not it is excluded for the purposes of the expenditure limit, the investment that is undertaken must continue to be financed. If it is not financed through revenue measures, it will lead to further increases in public debt that may strain the high levels of debt recorded in some EU countries. Beyond the appropriateness of a golden rule and the difficulties that its practical implementation would entail, public investment expressed in levels shows a certain volatility that might justify some smoothing when introducing it in the expenditure limit – as is the case with the "expenditure benchmark" at present (European Commission, 2019) – or some other specific adjustment depending on the country or GG sub-sector in question.

Finally, when setting an expenditure limit, there is no consensus in the literature as to whether it should be set in nominal or real terms.

From a theoretical point of view and focusing on its link to the debt anchor, the margin provided by the expenditure ceiling should not be affected by shocks that have the same impact on revenue and expenditure, and therefore leave the General Government balance unchanged (Ljungman, 2008). If this were true in the case of inflation, the medium-term expenditure limit could be set in real terms, since the spending margin would not be narrowed or widened by errors in the short- and medium-term inflation forecast. Whether or not this criterion is met is, however, somewhat difficult to establish in a stable manner. It will have to be assessed on a case-by-case basis as it could depend on the composition of each country's government revenue and expenditure and also vary over time depending, for example, on the nature of the shocks underlying inflation.

Studiegroep Begrotingsruimte (SBR). This is the national advisory group on budgetary principles, which issues recommendations on budgetary policy.

Possible distortions caused by inflation in the context of an expenditure limit are associated with forecasting errors. As long as the inflation rate is constant - or, more precisely, accurately forecast - future price and wage increases can be taken into account when setting the expenditure ceiling for the medium term and preparing the budget year by year. In contrast, in a situation where unexpected deviations from forecast inflation occur, a nominal expenditure ceiling may have unintended effects on fiscal policy. In addition, a failure to comply with the nominal expenditure ceiling results in the additional complexity of determining whether the deviation is attributable to the price shock or the real component²¹.

The practical problems of translating real parameters into nominal figures and the resulting loss of transparency must also be taken into account. One of the advantages of adopting the expenditure ceiling as an operating variable is that it provides a fixed and stable point of reference for determining the evolution of expenditure for the different economic policy options. In the event that the expenditure ceiling is set in real terms, there is an element of ambiguity with regard to nominal expenditure limits and this may reduce the operability of the expenditure limit for a given year.

The literature notes that setting the expenditure limit in nominal terms in the medium term may, in certain circumstances, introduce a countercyclical effect on the expenditure side. An adverse (favourable) aggregate demand shock would reduce (increase) inflation and, with a nominal ceiling, widen (narrow) the scope for spending. This would automatically strengthen stabilisers on the expenditure side. Along the same lines, Hauptmeier & Kamps (2020) argue in favour of orienting fiscal policy towards the ECB's 2% target with an expenditure rule that is adjusted according to whether the inflation recorded is above or below that target. In particular, when inflation falls below the target, nominal expenditure growth could be higher and *vice versa*. This would allow for further countercyclical modulation of fiscal policy requirements and would contribute towards enhanced alignment of the fiscal

²¹ In this regard, the inflation adjustments that need to be made to ensure that actual expenditure remains at the projected level will depend on the nature, level and volatility of inflation. *A priori*, practically all public expenditure can be affected by changes in the level of prices and wages. However, sensitivity to inflation is not the same across the board. In the case of price-indexed transfers, interest on inflation-indexed government bonds and any inflation-indexed subsidies, the inflationary effect is automatic and predictable. For other items, such as the civil service wage bill and subsidies set in nominal terms by the Government, the Government has room to manoeuvre. Lastly, for goods and services purchased by the Government, the inflationary effect is determined exogenously.

policies of euro area Member States with the ECB's monetary policy objective²².

In this area, the experience of countries that have adopted medium-term expenditure limits is mixed. In the case of the Netherlands and Finland, the four-year expenditure limits of the legislature agreement are set in real terms. Subsequently, year by year, these real levels are transformed into nominal expenditure ceilings shortly before preparation of the annual budget begins with deflators that, in the case of the Netherlands, are calculated at a very disaggregated level of expenditure items by the independent fiscal institution (Vierke & Masselink, 2017)²³. In Sweden, in contrast, the medium-term expenditure limits are set in nominal terms, while in the case of the Stability and Growth Pact, the expenditure benchmark imposes a limit on the growth of expenditure that is set in real terms, using the GDP deflator of the European Commission's forecasts.

²² These authors point out that the adjustment for inflation of the expenditure limit should be based on the growth rate of the GDP deflator and not on HICP inflation. They argue that the GDP deflator is a broad indicator of the evolution of core domestic prices (including the public sector) and is usually less volatile than the HICP, given that, for example, it is less affected by the evolution of the prices of imports or raw materials. However, over the long term, the HICP and the GDP deflator show similar average inflation.

²³ At present, a deflator is used to establish the medium-term expenditure levels in the legislature agreement and a different deflator is used to translate year by year the corresponding real expenditure level for the current year into a nominal expenditure ceiling for the budget. Depending on the evolution of the two deflators, this generates a greater or lesser spending margin. There is currently a reform proposal which advocates using the same deflator in both cases.

5. CONCLUSION

Up to now the fiscal framework has not been sufficient to ensure the design of a stable and predictable budgetary policy that, in a countercyclical manner, helps to preserve a sufficient margin for fiscal policy over time. In this context, there is consensus on the need for reform. The reform must address several elements simultaneously since evidence from recent decades proves that the design aspects of the framework can be as important as institutional and implementation aspects.

This paper proposes a reform of the fiscal framework that incorporates country-specific elements in relation to setting a debt anchor. The heterogeneity in the current position of public finances across EU countries justifies differentiated debt anchors which, taking into account the features of each country, act as a benchmark for setting feasible fiscal paths. Differentiation by country is also important if the aim is to obtain greater political ownership of the fiscal targets by the national governments of each Member State.

The debt anchor needs to be operationalised through an observable variable, which is both under the control of the fiscal authorities and strongly linked to the fiscal instrument *par excellence* – the Budget. In this regard, primary expenditure in levels, net of additional revenue measures, seems an appropriate operating variable. Furthermore, a fiscal framework more closely linked to the specific situation of each Member State should involve changes to the institutional division of supervisory tasks both in their *ex ante* and *ex post* dimensions. Specifically, a greater contribution of independent fiscal institutions as providers of analysis and assessments is envisaged.

A number of issues remain open for further analysis. These include coverage of the expenditure variable that operationalises the debt anchor and how to integrate the macro-fiscal consequences of the transition to a climate-neutral economy.

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