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Working Paper

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Working Paper, Institute for International Political Economy Berlin, No. 84/2017

Provided in Cooperation with:
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Abstract
On the one hand, every official document about fiscal policy in Spain, and most orthodox academic papers argue that Spain has no “fiscal space” and that it should apply resolute actions to assure budget consolidation. On the other hand, Spain also had the second highest unemployment rate in the Eurozone in 2015: 21% of the active population. A rapid decline in that rate would require a higher fiscal impulse to sustain higher economic growth rates. This paper addresses this dilemma, presenting two alternative scenarios for the coming years and analyzing their impact on unemployment and fiscal sustainability. The first scenario represents a firm commitment to budget consolidation, while in the second the government uses the fiscal instrument to stimulate domestic demand and ensure a GDP growth rate target. The second scenario is based on an application of an “imperfect” balanced budget multiplier, proposing a combination of discretionary increases in both public expenditure and revenue. The main conclusion is that the end of fiscal austerity is feasible and perfectly compatible with fiscal finances sustainability for Spain.

Keywords: Fiscal Policy, Fiscal Space, Functional Finance, Balance Budget Multiplier, Spain

JEL Codes: E61, E62

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1. **Introduction**

After the double-dip recession suffered by the Eurozone, with negative growth rates in 2009 and 2012-2013, GDP growth returned to positive figures in 2014, reaching 2% in 2015. However, this recovery is very weak, and the IMF (2016) forecasts that annual GDP growth will average 1.5% in 2016-2021. Consequently, the unemployment rate, which stood at 7.5% in 2007, will not return to its pre-crisis level during this period with the IMF estimating that it will remain at 8.4% in 2021.

Given such a context, this article deals with the possibility of using fiscal policy to stimulate domestic demand and strengthen GDP growth in those Eurozone Member States most affected by high unemployment rates. Specifically, we will use the case of Spain to show that this active use of fiscal policy is desirable on economic grounds, but that some political and institutional constraints are currently preventing it.

The international economic authorities first reacted to the Great Recession by recommending the use of fiscal measures to stimulate domestic demand and support economic growth. The European Council (2008), for example, proposed implementing a European Plan for Economic Recovery, aimed at restoring domestic demand through a program of fiscal stimulus. Nevertheless, after the onset of the sovereign-debt crisis in May 2010, a U-turn took place and fiscal consolidation was established as the top priority of economic policy, although high deficits were mainly the consequence of the crisis, and not its cause. In order to enhance the surveillance and “discipline” of national fiscal policies, numerous reforms of the European governance framework were also introduced (six-pack, two-pack, Fiscal Compact)\(^1\). As a result, at least between 2010 and 2014, the fiscal policy stance was restrictive and procyclical in many Eurozone countries, particularly in the so-called peripheral economies (Spain, Greece, Portugal, Ireland), where unemployment skyrocketed.

From a theoretical point of view, this emphasis on budget balance found support in the “expansionary fiscal consolidation” hypothesis (Alesina 2010). Supposedly, fiscal austerity could have positive effects on private demand through some “non-Keynesian effects”, especially decreasing interest rates or improved confidence. By contrast, fiscal austerity has been systematically associated with lower growth during the crisis\(^2\). Moreover, the weak performance of the European economies over a prolonged period of time has translated into a lower potential GDP, through “hysteresis effects” (Ball 2014).

Some attempts at changing this political fixation with fiscal consolidation can be seen in a recent communication published by the European Commission (2016a), where it recommends “a positive fiscal stance for the euro area, in support of the monetary policy of the European Central Bank” (page 2). While the aggregate fiscal stance – derived from the Draft Budgetary Plans presented by the national governments – is expected to be broadly neutral in 2017, the European Commission states that some expansionary measures should be adopted, recognizing that the current low growth-low inflation situation is due to a shortfall in domestic demand. Fiscal policy should thus contribute more directly to its recovery since “there is

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\(^1\) See Uxó and Paúl (2011) as well as Dodig and Herr (2014) for a critical assessment.

\(^2\) Muñoz de Bustillo (2014) offers a criticism of the theoretical underpinnings of the concept of “expansionary austerity”. 
widespread acceptance that monetary policy cannot take the full burden of macroeconomic stabilization” (page 5).

After five years in which the stabilizing role of fiscal policy has been repeatedly called into question (Stockhammer 2016 relates this with the neoliberal foundation of the European economic policy regime), such a declaration is surely a step forward. However, the same European Commission foresees two kinds of obstacles to implementing the (very moderate\(^3\)) expansive change in fiscal policy that it advocates: on the one hand, “economic” constraints related to preserving the sustainability of public finances in the medium term, and on the other, the “legal” constraints (which we prefer to call “political”), which have to do with the EU fiscal surveillance framework\(^4\).

The obstacles invoked to apply more expansive fiscal policies can be summarized in this sentence from the communication: “those [countries] who do not have fiscal space want to use it; those who have fiscal space do not want to use it” (page 3). The problem here lies in the notion of “fiscal space”, which is not actually defined in economic terms, but exclusively in relation to complying with the current Eurozone fiscal rules. A country is thus felt to have a certain margin to apply more expansive fiscal policies only if certain fiscal ratios – specifically, public deficit and debt over GDP – are below a given threshold established a priori (3% and 60%, respectively) and if the Medium Term Objective (MTO) has been achieved\(^5\): “Under the rules of the Stability and Growth Pact, the logic is that the Member States are best able to let automatic stabilisers play their role fully once the budget has reached its medium-term objective (MTO), and that some fiscal consolidation is expected until this is the case” (page 9, emphasis added). In contrast, we argue here that the appropriate approach is to consider the effect of different combinations of public revenue and expenditure on basic macroeconomic variables, and evaluate their sustainability. For example, the dynamic evolution of the ratio of public or foreign debt over GDP is much more relevant than specifically meeting predetermined budget targets.

Adopting this approach, we analyze the case of Spain and conclude that it does indeed have fiscal space to apply a more expansive fiscal policy than is currently suggested by the European authorities. The example of Spain is especially illustrative since it is currently under an Excessive Deficit Procedure and every official document concerning fiscal policy in Spain, as do most orthodox academic papers, commences with a reminder that in 2015 Spain had the highest public deficit in the Eurozone (-5.1% of GDP, in spite of the strongly restrictive fiscal policy applied by the Spanish authorities between 2010 and 2013). The argument then

\(^3\) An increase in the structural primary deficit equivalent to 0.5% of Eurozone GDP.

\(^4\) From an academic standpoint, Stockhammer, Constantine and Reissl (2016) point out that in spite of some convergence towards Post-Keynesian positions on economic policy proposals, especially on fiscal policy and the role of the ECB, there is still almost no connection between the New Keynesian literature on fiscal multipliers (Blanchard and Leigh 2013) and the effects of fiscal policy on the one hand, and practical policy recommendations for the Eurozone, on the other. Thus, far from finding it supportive of a more expansive and discretionary fiscal policy, we remain skeptical over the EC’s shift towards this kind of Keynesianism.

\(^5\) According to the Fiscal Compact, this MTO should imply the achievement of a balanced structural deficit. Nevertheless, Sawyer (2013a) provides sound economic arguments against the rationale of this objective: “a balanced budget and economy operating at potential output are in general incompatible and hence a balanced structural budget is not possible”.
continues that Spain has no “fiscal space” and that it should take resolute action to ensure budget consolidation, setting a fiscal deficit of below 3% as soon as possible and achieving budgetary balance⁶.

Nevertheless, in 2015 Spain also had the second highest unemployment rate in the Eurozone: 21% of the active population, exceeded only by Greece with 25%. Despite current GDP growth, macroeconomic forecasts foresee no rapid reduction in this rate which, according to the IMF (2016), will stand at 15.6% in 2020. Therefore, any sharper fall in the unemployment rate would require a more expansive fiscal policy to sustain higher economic growth rates, particularly in a context such as the one envisaged for the end of 2016, in which a slowdown in international economic growth is expected.

We address said dilemma, presenting two alternative scenarios for the coming years and analyzing their different impact on unemployment and fiscal sustainability. The first represents a firm commitment to budget consolidation, while in the second the government uses the fiscal instrument to stimulate domestic demand and ensure a GDP growth rate target. The main conclusion to emerge is that bringing fiscal austerity to an end is feasible for Spain, and that a more expansive fiscal policy aimed at a faster reduction in the unemployment rate is perfectly compatible with fiscal finance sustainability (the “economic definition” of fiscal space). We thus advocate implementing the fiscal policies described in the second scenario.

Although we discuss this problem in the context of the Spanish economy, similar arguments could easily be applied to the case of other Eurozone economies, and especially those peripheral economies who are suffering high unemployment rates. In addition, the paper also raises some more general topics.

First of all, we adopt the “functional finance” approach to fiscal policy, in contrast to the “sound finances” approach that characterizes the current policies recommended by the European authorities. According to the latter, structural budgets must be balanced, and all the decisions adopted by the fiscal authorities should be conditioned by such an objective. In contrast, the functional finance perspective implies that “budget deficits are incurred where it is necessary to support aggregate demand, and in effect absorb the excess of private savings over private investment” (Sawyer 2011).

We also take into account that Spain belongs to a monetary union and does not have its own monetary policy. This means that fiscal deficits must be funded by issuing public debt without the support of the central bank, and that rapid increases in the public debt over GDP ratio could lead to financial instability. We consequently incorporate the notion of a (partially) balanced budget expansion in order to achieve the desired stimulus in GDP and employment with the least possible effect on public debt (Wren-Lewis 2011; IMF 2012a; Karagounis et al. 2015), proposing a combination of discretionary increases in both expenditure and revenue in the second scenario. This strategy would also allow the extension of some basic services.

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⁶ The European Commission (2016b) itself “is of the opinion that the Draft Budgetary Plan is at risk of non-compliance with the provisions of the SGP. (...) Therefore, in line with the Commission Communication ‘Towards a positive fiscal stance for the euro area’, further measures will be needed to meet the headline deficit and structural effort targets going forward” (page 4).
related to the Welfare State or the implementation of much needed public investment programs.

Regarding European fiscal rules, they have actually “institutionalized” austerity policies in the EU, and full compliance with them would substantially reduce the governments’ room for maneuver. Nevertheless, the analysis of the second scenario defined in this paper clearly shows that more expansive fiscal policies are by no means incompatible with the economic principle of fiscal stability in the medium term. A faster reduction in the unemployment rate is possible by simultaneously changing public revenue and expenditure and slowing down the pace at which the public deficit is reduced, without any increase in the public debt over GDP ratio. Were European authorities to allow such a delay it would be more of a political than an economic decision. In any case, this contradiction between a perfectly viable alternative that would improve the employment situation in the Spanish economy, on the one hand, and the EU economic policy framework, on the other, reflects the inadequacy of the latter rather than the economic impossibility of the former. Consequently, we agree with Sawyer (2013b) when he says that the Fiscal Compact, and specifically the structural balance budget objective, should be abandoned, in coherence with the functional finance approach to fiscal policy.

The rest of our paper is organized as follows. In Section 2, we very briefly describe the recent fiscal development in Spain. In Section 3, the core of the paper, we describe the two alternative scenarios and the Baseline Scenario used as a reference for comparison. We also present the methodology and sum up the macroeconomic consequences derived from implementing each scenario. Section 4 explores whether the balance of payment constraint might hinder the application of expansive fiscal policies. Finally, Section 5 concludes.

2. Recent fiscal policy and the application of the Stability and Growth Pact in Spain (2010-2015)

In 2007, before the Great Recession, Spain had a fiscal surplus of 2% of GDP, and public debt stood at only 36% of GDP. However, mainly as a result of the burst of the real estate bubble and the economic crisis itself, but also partially due to implementing a fiscal stimulus package in line with the European Economic Recovery Plan, fiscal deficit increased substantially after 2008 (reaching -11.1% in 2009, Figure 1), and the European Council decided that Spain’s deficit was excessive. It established 2013 as the deadline to put an end to this situation.

Between 2010 and 2013, the Spanish authorities applied severe public spending cutbacks and increased certain taxes, in addition to which the budgetary policy stance became restrictive and procyclical. Figure 2 shows how the cyclically-adjusted fiscal balance rose

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7 Uxó and Álvarez (2016) present some arguments which might facilitate implementation of a similar strategy within a flexible interpretation of current fiscal rules. Feigl and Truger (2015) argue that a more expansive interpretation of the current fiscal framework is indeed possible. Nevertheless, the most recent decision taken by the Eurogroup (2016), rejecting even the Commission’s proposal for a modest fiscal impulse in the Eurozone, shows the political difficulties for this needed change in European fiscal policy.

8 See Truger (2015) for a discussion of the problems related to estimating this concept and the procyclical bias of the methodology used by the European Commission.
during these years, and Figure 3 illustrates the negative contribution to GDP growth made by the sum of public consumption and public investment (-1% on average).

The economic authorities initially argued that fiscal consolidation could be “expansive” through the “non-Keynesian effects” mentioned in the introduction. However, quite the opposite proved to be true since combining fiscal austerity and internal/wage devaluation had strong restrictive effects on domestic demand, triggering a second recession with severe effects on employment. Real GDP decreased by 5.2% between 2011 and 2013, and the unemployment rate reached a peak of 26.9% in the first quarter of 2013 (Figure 4).

Moreover, Spain failed to cut the public deficit in line with the established targets. While the public deficit should have been reduced to -3% by 2013, it actually stood at -7% (Figure 1). This does not mean that even further cuts in spending should have been implemented. On the contrary, it can be interpreted as an indication that “austerity does not work”: the restrictive effects of austerity policy prevent the very objectives it pursues from being achieved.

Source: Eurostat and authors’ calculations.
In June 2013, arguing “adverse economic circumstances”, the European Council set 2016 as the new deadline to reach the -3% threshold, and new annual deficit targets were decided. Specifically, the public balance should have been -4.2% in 2015, although it was actually -5%. The origin of this new non-fulfillment of fiscal targets, however, is completely different this year. If, in 2011-2013, it was due to the negative effects of restrictive measures and negative growth on tax collecting, in 2015 the main reason for having a higher deficit than the original target recommended by the European Council was the application of an expansive fiscal stance. This is illustrated by the negative change in 2015 in the cyclically adjusted balance (Figure 2), and by the fact that public consumption and public investment made a positive 1% contribution to GDP growth (Figure 3). Indeed, this is one of the main factors underlying the recovery of positive GDP growth rates in Spain, in addition to various external factors that have provided an important tailwind to the Spanish economy (for example, Quantitative Easing applied by the ECB, with a substantial impact on consumption since most mortgages are agreed at variable interest rates; the fall in oil prices in a country highly dependent on fossil fuel consumption; and a booming tourism sector). The boost in economic growth during 2015-2016 shows that “fiscal policy does matter” and that a more expansive fiscal stance could have positive effects on the high unemployment rate that plagues the Spanish economy.

Nevertheless, the expansive fiscal policy applied by the Spanish authorities during 2015 might only be temporary, since the Stability Program presented by the Spanish government in April 2016 once again focused on budgetary consolidation. Additionally, the European Council declared in August 2016 that Spain had not applied effective measures to put an end to excessive deficit, and is asking for a strict consolidation effort to ensure faster deficit reduction, under the threat of applying economic sanctions if effective action is not taken.

This leads us to think that austerity has not been abandoned, but merely softened or delayed. However, some of the major problems that burden the Spanish economy remain unsolved and require more expansive fiscal policies. Despite current GDP growth, real GDP is still 4% lower than its pre-crisis level and the unemployment rate is very high (20%). Industrial policies and public investment are needed in order to change the sectorial specialization of the Spanish economy. Last but by no means least, austerity policies have meant drastic cuts in some areas such as education or health care.

### 3. Alternative Scenarios for fiscal policy in Spain: austerity is not inescapable

In this section, we present a discussion of the economic consequences of two alternative and totally contrasting fiscal policy strategies for Spain, called “Scenario 1” and “Scenario 2”. Both strategies are designed to be applied between 2017 and 2020.

In the first scenario, the main objective of the authorities is to reduce the fiscal deficit following the path “recommended” by the European Council (2016) for the years 2016-2018 (-4.6%, -3.1% and -2.2%, respectively), and to converge to structural equilibrium in 2019-2020, as the Fiscal Compact requires. The government implements the discretionary changes in public expenditure that are required to achieve these aims, without any discretionary change on the
We consider that this scenario would mean a return to austerity, after the last brief period of expansive fiscal policies.

Contrastingly, the second scenario heralds a complete reversal of current fiscal policy orientation, in line with the “functional finance” approach. In this scenario, the government sets an annual GDP growth target (3% during the whole period, 2017-2020) and takes discretionary action (regarding both expenditures and taxes) to ensure the necessary impulse on aggregate demand. A deficit target is not established a priori. This second scenario would mean truly abandoning austerity policies in Spain.

Following the same approach as Rosnick and Weibstrot (2013), we take the macroeconomic forecasts of the Spanish economy included in the latest edition of the World Economic Outlook (IMF 2016) as the “Baseline Scenario”, and then analyze how it would alter as a result of the changes in fiscal policy implemented in these two scenarios. We do not intend either to validate or refute the likelihood of the IMF’s projections actually materializing. Rather, our intention is to isolate the changes in the evolution of the Spanish economy that could be attributed exclusively to a change in fiscal policy, maintaining the same assumptions about the rest of the variables that affect the economy.


Table 1 summarizes the latest IMF medium-term projections for GDP growth, the unemployment rate and the main fiscal variables of the Spanish economy for the period 2016-2020, and their actual values in 2015. Figures 5, 6 and 7 compare the expected evolution of GDP growth, the unemployment rate and the fiscal balance in Spain and the Eurozone. We highlight the following information:

- Growth is expected to remain close to 3% in 2016, but will decrease in 2017-2020, when the average growth rate will be slightly below 2%.
- As a consequence of this, and as a result of a faster evolution in apparent labor productivity, the number of employed people will grow at a slower rate than in 2015-2016. In 2020, there will be 1.2 million fewer people working in Spain than in 2008. The unemployment rate will continue to decrease, but will remain as high as 15.6% at the end of the period.
- Regarding fiscal finances, the IMF expects the fiscal targets currently set for 2016 and 2017 to be reached, but not in 2018. Furthermore, the structural deficit will not decrease afterwards, but will remain constant at around 2.5%.
- This reduction in public deficit will occur through a reduction in the public expenditure/GDP ratio, while the ratio between public revenue and GDP will not change significantly between 2016 and 2020.

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9 This strategy is consistent with the latest Stability Programs presented by the Spanish government, where all the expected reduction in public deficit as a percentage of GDP resulted from decreasing public expenditure over GDP ratios.

10 The structural balance is a highly problematic concept, both from a theoretical and an empirical standpoint, since it is a non-observable variable whose value is based on estimating potential GDP and the NAIRU. For example, in this forecast the IMF considers that the output gap will be zero in Spain in 2019, with an unemployment rate of 16%. Nevertheless, we use these figures here because they are included in the Fiscal Compact.
**Figure 5:** Real GDP growth, IMF forecast

**Figure 6:** Unemployment rate, IMF forecast

**Figure 7:** Fiscal Balance, IMF forecast

*Source: IMF (2016).*

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**Table 1: macroeconomic and fiscal variables in the “Baseline Scenario”**

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP real growth rate (%)</th>
<th>Unemployment rate (%)</th>
<th>Public balance (% GDP)</th>
<th>Total revenue (%GDP)</th>
<th>Total expenditure (% GDP)</th>
<th>Structural balance (% potential GDP)</th>
<th>Gross debt (% GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>3.2</td>
<td>22.1</td>
<td>-5.1</td>
<td>38.2</td>
<td>43.3</td>
<td>-2.8</td>
<td>99.3</td>
</tr>
<tr>
<td>2016</td>
<td>3.1</td>
<td>19.4</td>
<td>-4.5</td>
<td>37.4</td>
<td>41.9</td>
<td>-2.7</td>
<td>100.1</td>
</tr>
<tr>
<td>2017</td>
<td>2.2</td>
<td>18.0</td>
<td>-3.1</td>
<td>38.0</td>
<td>41.1</td>
<td>-2.5</td>
<td>100.2</td>
</tr>
<tr>
<td>2018</td>
<td>1.9</td>
<td>17.0</td>
<td>-2.7</td>
<td>38.0</td>
<td>40.7</td>
<td>-2.4</td>
<td>100.0</td>
</tr>
<tr>
<td>2019</td>
<td>1.9</td>
<td>16.1</td>
<td>-2.3</td>
<td>38.0</td>
<td>40.2</td>
<td>-2.3</td>
<td>99.2</td>
</tr>
<tr>
<td>2020</td>
<td>1.8</td>
<td>15.6</td>
<td>-2.2</td>
<td>37.9</td>
<td>40.1</td>
<td>-2.4</td>
<td>98.3</td>
</tr>
</tbody>
</table>

*Source: IMF (2016).*
3.2. Equations

We can carry out most of our calculations using a model very similar to that proposed by Rosnick and Weibstrot (2013), which enables us to analyze the consequences of a change in fiscal policy on the economy (GDP and unemployment rate, specifically) and on public finances.

The symbol $\Delta$ represents the variation experienced by a variable compared to the baseline scenario. Distinguishing between “discretionary” decisions adopted by the authorities and the impact of automatic stabilizers, the change in GDP ($\Delta Y$) resulting from the change in fiscal policy is:

$$\Delta Y = \alpha_G \Delta G - \alpha_T \Delta T$$
$$\Delta Y = \alpha_G (\Delta G^D + \Delta G^C) - \alpha_T (\Delta T^D + \Delta T^C)$$
$$\Delta Y = \alpha_G (\Delta G^D + \gamma_G \Delta Y) - \alpha_T (\Delta T^D + \gamma_T \Delta Y)$$

where $G$ is total public expenditure, $T$ total public revenue, $\alpha_G$ refers to the expenditure multiplier, $\alpha_T$ to the tax multiplier, the superscript $D$ means “discretional”, the superscript $C$ implies a change in public revenue or expenditure due to a change in cyclical conditions, and $\gamma_T > 0$ and $\gamma_G < 0$ measure these latter effects.\(^{11}\)

Finally, if $\Omega_G$ and $\Omega_T$ are the multipliers linking the discretionary change in expenditure and revenue to national income, we have:

$$\Delta Y = \frac{\alpha_G}{1 - \alpha_G \gamma_G + \alpha_T \gamma_T} \Delta G^D - \frac{\alpha_T}{1 - \alpha_G \gamma_G + \alpha_T \gamma_T} \Delta T^D$$

$$\Delta Y = \Omega_G \Delta G^D - \Omega_T \Delta T^D$$ (1)

This first equation tells us the variation in (nominal) GDP derived from a discretionary change in expenditure and revenue. In order to translate it into changes in employment and in the unemployment rate, we assume that fiscal policy decisions do not modify the evolution of the GDP deflator, apparent labor productivity and active population included in the IMF forecasts for the Spanish economy.

The second equation in the model measures the final effect of the change in fiscal policy on the public budget balance ($B$), taking into account not only the discretionary decisions adopted by the authorities, but also its impact on GDP and the full operation of automatic stabilizers:

$$\Delta B = (\Delta T^D - \Delta G^D) + (\Delta T^C - \Delta G^C)$$
$$\Delta B = (\Delta T^D - \Delta G^D) + (\gamma_T - \gamma_G) \Delta Y$$

\(^{11}\) Differentiating between the discretionary and the cyclical component of expenditure and tax changes is strictly speaking not necessary when applying empirical estimates of the multiplier which can be interpreted to typically already include all cyclical or otherwise endogenous changes. We use the differentiation nevertheless for reasons of technical clarity. It should be noted that using standard empirical multiplier estimates within our approach generates considerably smaller multipliers $\Omega_G$ and $\Omega_T$ in equation 1 below which can be interpreted as cautious estimates of the multipliers.
Replacing $\Delta Y$ by equation (1) and operating:

$$\Delta B = [1 - (y_T - y_G)\Omega_T]\Delta T^D - [1 - (y_T - y_G)\Omega_G]\Delta G^D$$  \hspace{1cm} (2)

### 3.3. Multipliers and cyclical sensitivity of public revenue and expenditure

According to equations (1) and (2), the impact of a change in fiscal policy on income and public balance actually depends to a great extent on two kinds of parameters: the expenditure and revenue multipliers ($\alpha_G$ and $\alpha_T$) and the cyclical sensitivity of expenditure and revenue ($\gamma_G$ and $\gamma_T$).

An abundant empirical and theoretical literature on fiscal multipliers has proliferated since the onset of the Great Recession, particularly after the IMF (2012b) acknowledged it had underestimated their values. Its main conclusion was that current public deficit multipliers might stand somewhere in the range of 0.9 to 1.7. An interesting characteristic of this literature is that it has discussed not only the value but also the stability of fiscal multipliers, highlighting that their size is path-dependent, as well as instrument-dependent.

Specifically, a first general conclusion is that the multiplier is higher in times of crisis, which can be defined as periods of high unemployment rates and wide negative output gaps. Gechert and Rannenberg (2014) conduct a meta-regression analysis of 98 empirical studies, controlling for the economic regime (whether the economy is going through bad, normal or good times) and they find that the public expenditure multiplier increases during bad times, mainly because accommodative monetary policies are more likely during economic downturns. Semmler and Haider (2016: 1) confirm this last statement when they say that “the multiplier is not only dependent on the state of the business cycle, financial fragility and financial stress, but also subject to the size of fiscal action as well as on the accompanying monetary policy”. Hall (2009) concludes that the size of the multiplier is around 1.7 when the real interest rate is close to zero, as can be the case when the economy is stagnating. A complementary explanation is provided by Corsetti, Meier and Müller (2012), arguing that the number of liquidity or credit-constrained households and firms increases when the economy undergoes a downturn, preventing monetary policy from functioning.

The European Commission (2016a: 5) also recognizes this, when it states that: “Given the particular circumstances, the macroeconomic impact of fiscal policy is likely to be stronger than in normal times. The effectiveness of fiscal policy as a stabilization tool depends on the overall economic environment in which it is used. Given the fact that monetary policy is at the “zero interest floor” (or “zero lower bound”), the impact of fiscal policy measures both on the real economy (the “multiplier” effect) and on other countries’ economies (the “spillover” effect) are larger than would otherwise be the case, for instance if interest rates were high or at risk of rising fast”.

A second conclusion of this recent literature is that the precise value of the multiplier also depends on the specific instrument applied. For example, public transfers prove to be the most effective expenditure type when the economy is suffering a downturn, with a multiplier of 2.3, while the multiplier for unspecified government expenditure is 1.3. Regarding tax multipliers, they are rather small in all regimes (their mean is around half the mean of public expenditure multipliers) and they appear to be almost unaffected by the economic situation.
Therefore, in Spain’s current economic situation – high unemployment, low utilization of productive capacity, very low inflation rates, coupled with an accommodative monetary policy with near zero interest rates – we can take it as given that the expenditure multiplier is above 1 and higher than the revenue multiplier, which in turn is below 1. As Blot et al. (2014: 162) underline, this gives a strong case for delaying austerity, and “it logically calls for an alternative strategy where it would be optimal to delay consolidation until economic growth has resumed”.

The precise value of the multiplier would depend on different factors, such as the composition of the fiscal impulse. We deliver our simulation exercise considering that the expenditure multiplier is 1.25 and that the tax multiplier is 0.6. These values are compatible with the findings of the empirical literature we have just summarized, and with some particular estimations for the Spanish economy. They even could be considered as “conservative”12. For example, Martínez and Zubiri (2014) offer their own calculations of expenditure and revenue multipliers in Spain. They also conclude that expenditure multipliers are considerably larger during recessions than expansions, and that changes in taxes always have a lower impact on GDP than changes in expenditure. Specifically, their estimated value for the expenditure multiplier is between 1.3 and 1.7. And Truger (2016) presents some multiplier-based simulations of alternative fiscal policies in Europe, using a multiplier of 1.4 for general public expenditure, and 1.8 for public investment.

As regards cyclical sensitivity, the European Commission estimates a one-to-one cyclical reaction of revenue vis-à-vis GDP, such that the public revenue/GDP ratio remains approximately constant along the cycle. In contrast, most public expenditure does not exhibit a cyclical pattern. As a consequence, the ratio between public expenditure and GDP tends to vary anti-cyclically, mostly driven by the cyclical effect on the denominator. Specifically, the European Commission calculates a cyclical sensitivity for public revenue ($\gamma_T$) of 0.38 and a cyclical sensitivity for expenditure ($\gamma_G$) of -0.05 for Spain, giving a total cyclical sensitivity of 0.43 (Mourre et al. 2013, Table 2.4). This means that for each 100 Euro increase in GDP, the public deficit automatically falls by 43 Euros.

Using these values for $\alpha_G$, $\alpha_T$, $\gamma_G$ and $\gamma_T$, equations (1) and (2) become:

\begin{align*}
\Delta Y &= 0.97 \Delta G^D - 0.46 \Delta T^D \\
\Delta B &= 0.80 \Delta T^D - 0.58 \Delta G^D
\end{align*}

3.4. **Scenario 1: Return to austerity and full compliance with the Fiscal Compact**

According to IMF forecasts, Spain would reach the deficit targets proposed by the latest EC Recommendation in 2016 and 2017 but not in 2018. Furthermore, public deficit would remain more or less constant during the period 2019-2020, without any expected convergence towards structural equilibrium, as would be required by strict application of the Fiscal Compact.

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12 This is all the more so as our approach of differentiating between the discretionary and the cyclical component of fiscal changes in fact leads to even smaller effective multipliers of 0.97 and 0.46 on the expenditure and tax side respectively.
In Scenario 1, we assume the Spanish government maintains a strong commitment to meeting these deficit targets, taking the necessary measures to ensure it comes about. Consistent with past Stability Programs, we can also assume that these measures would imply public spending cuts, without changes in the public revenue over GDP ratio (in both cases, relative to the IMF forecast). The second column in Table 2 shows the public deficit figure that the government sets each year as its objective in this scenario. For 2019 and 2020, we have set the same targets as the Spanish Government originally established for 2017 and 2018 in its previous Stability Program.

### Table 2: Fiscal balance. IMF forecasts and targets in Scenario 1

<table>
<thead>
<tr>
<th></th>
<th>Baseline (IMF WEO)</th>
<th>Scenario 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>-4.5%</td>
<td>-4.5%</td>
</tr>
<tr>
<td>2017</td>
<td>-3.1%</td>
<td>-3.1%</td>
</tr>
<tr>
<td>2018</td>
<td>-2.7%</td>
<td>-2.2%</td>
</tr>
<tr>
<td>2019</td>
<td>-2.3%</td>
<td>-1.5%</td>
</tr>
<tr>
<td>2020</td>
<td>-2.2%</td>
<td>-0.3%</td>
</tr>
</tbody>
</table>

Source: IMF (2016), European Council (2016) and authors’ calculations.

$\Delta B$ is the difference between the total (not % GDP) public balance recorded once the government has changed its fiscal policy to meet the aforementioned targets, and the public balance forecast by the IMF. If we call $b^*$ the targeted public deficit when it is expressed as a percentage of GDP (for example, -2.2% in 2018), $Y^*$ the nominal GDP recorded taking into account the consequences of the fiscal policy adopted by the authorities, and $Y$ and $B$, respectively, the nominal GDP and total public balance forecast by the IMF for a specific year, we have:

$$\Delta B = b^*Y^* - B = b^*(Y + \Delta Y) - B = b^*Y + b^*\Delta Y - B$$

(3)

Equation (2) shows the variation in public balance derived from discretional changes in public expenditure and revenue. As $\Delta T^D=0$, we have:

$$\Delta B = -[1 - (\gamma_T - \gamma_G)\Omega_G]\Delta G^D$$

(2b)

As (3) = (2b):

$$b^*Y + b^*\Delta Y - B = -[1 - (\gamma_T - \gamma_G)\Omega_G]\Delta G^D$$

Finally, by using equation (1) with $\Delta T^D=0$, and reorganizing, we can calculate the required discretional change in public expenditure ($\Delta G^D$) to reach the targeted deficit ($b^*$) each year:

$$\Delta Y = \Omega_G\Delta G^D$$

(1b)

$$\Delta G^D = \frac{B - b^*Y}{1 - \Omega_G(\gamma_T - \gamma_G - b^*)}$$

(4)

Table 3 sums up the evolution of GDP growth, the unemployment rate and fiscal finances were this Scenario to take place. As a result of the government’s strong commitment to comply strictly with the Fiscal Compact, a very restrictive fiscal policy would be applied, and nominal public expenditure would be frozen between 2017 and 2020, or cut by 39 billion € if compared to IMF projections (Figure 8). As a percentage of GDP, public expenditure would
have been cut by 3.6 p.p. in 2020 (Figure 9). As for public revenue, the total amount would be lower than currently forecast by the IMF as a consequence of lower GDP. Finally, Figure 10 represents the different evolution of public deficit in the two scenarios.

**Table 3: macroeconomic and fiscal variables in “Scenario 1”**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP real growth rate (%)</td>
<td>3.2</td>
<td>3.1</td>
<td>2.2</td>
<td>1.2</td>
<td>1.3</td>
<td>-0.1</td>
</tr>
<tr>
<td>Unemployment rate (%)</td>
<td>22.1</td>
<td>19.4</td>
<td>18.0</td>
<td>17.6</td>
<td>17.3</td>
<td>18.3</td>
</tr>
<tr>
<td>Public balance (% GDP)</td>
<td>-5.1</td>
<td>-4.5</td>
<td>-3.1</td>
<td>-2.2</td>
<td>-1.5</td>
<td>-0.3</td>
</tr>
<tr>
<td>Total revenue (%GDP)</td>
<td>38.2</td>
<td>37.4</td>
<td>38.0</td>
<td>38.0</td>
<td>38.0</td>
<td>37.9</td>
</tr>
<tr>
<td>Total expenditure (% GDP)</td>
<td>43.3</td>
<td>41.9</td>
<td>41.1</td>
<td>40.2</td>
<td>39.4</td>
<td>38.2</td>
</tr>
<tr>
<td>Gross debt (% GDP)</td>
<td>99.3</td>
<td>100.1</td>
<td>100.3</td>
<td>99.2</td>
<td>98.2</td>
<td></td>
</tr>
</tbody>
</table>


**Figure 8:**

**Figure 9:**

**Figure 10:**

Source: IMF (2016) and authors’ calculations.
3.5. **Scenario 2: More expansive fiscal policy to ensure a targeted GDP growth (3% annual)**

According to IMF forecasts, the unemployment rate would be 15.6% of the active population in 2020, and there would be 19.3 million people employed that year (1.2 million fewer than at the end of 2008). We find these figures disappointing and so, in this second scenario, present an alternative fiscal policy that does not focus on deficit reduction but on securing higher GDP growth and creating jobs at a faster pace between 2017 and 2020. Although this policy requires increased public expenditure, we show that it is also compatible with sustainable public finances.

Specifically, we set a target of maintaining an annual GDP growth rate of 3% throughout the whole period, similar to that recorded in 2015 and 2016, while the IMF is currently forecasting a rapid deceleration in the Spanish economy. Although it is true that even this lower growth rate (1.9% in 2017-2020) would be higher than the Eurozone average (1.5%), any significant reduction in the extremely high unemployment rates that characterize the Spanish economy would require several years of sustained growth in GDP.

Having set the targeted increase in real GDP, we calculate the difference between the nominal GDP recorded in this Scenario 2 and the nominal GDP forecast by the IMF ($\Delta Y = Y^* - Y$).

There are multiple combinations of revenue and expenditure by which this stimulus in aggregate demand might be achieved: only through increased spending, only through tax reductions, by a combination of greater spending and lower taxation, or by increasing both spending and taxes, taking advantage of the fact that the multipliers associated to each instrument are not equal. We advocate here the latter of these alternatives, making (partial) use of the notion of the Balanced Budget Multiplier and proposing simultaneous, albeit different, increases in taxes and public expenditure.

We opt for this alternative for two complementary reasons. First, this would enable the targeted impulse in GDP and employment to be achieved with the least possible impact on public debt. Second, said proposal would not only provide the much needed macroeconomic boost to the Spanish economy but would also improve the funding of basic public services and industrial policies. Spanish public revenue in relation to GDP stands at around 9 p.p. below the Eurozone average, sparking a chronic lack of resources to properly finance the development of the welfare state and to implement public investment aimed at structural change (public expenditure as a percentage of GDP is six points lower in Spain than in the Eurozone).

Nevertheless, our proposal is only a sort of “imperfect” Balanced Budget expansion, in the sense that we have based it on the idea that simultaneous increases in public revenue and expenditure can boost GDP, but without any pretension of keeping public deficit unchanged (relative to the Baseline Scenario).

Specifically, we consider that an achievable objective for the next four years is going from the current 37.4% of public revenue over GDP to the highest value of this ratio in the last two decades (41% of GDP, reached in 2007). Providing this target is met, we calculate in turn the necessary discretionary change in public expenditure to ensure that the Spanish economy grows at a rate of 3% each year.
It should be underlined that the increase in the ratio of public revenue over GDP recorded in 2007 was the consequence of the expansion of real estate activities and not the result of an efficient tax system. On the contrary, one main component of an alternative fiscal policy for Spain should be progressive\textsuperscript{13} tax reform, to address the chronic problems related to the design and equity of its tax system. A concerted effort to fight tax evasion should also be made, since another reason for the low percentage of Spanish public revenue over national income is the enormous size of the informal sector (20% of GDP according to Schneider 2012).

Calling $t^*$ the targeted public revenue/GDP ratio for a year\textsuperscript{14}, the total increase in public revenue ($\Delta T$) derived from the whole change in fiscal policy is:

$$\Delta T = t^*Y^* - T$$ \hspace{1cm} (5)

We can also distinguish between the discretional component of public revenue increase and the positive impact of the higher GDP growth:

$$\Delta T = \Delta T^D + \gamma_T \Delta Y$$ \hspace{1cm} (6)

After substituting (5) in (6), the discretional variation in public revenue needed to reach the targeted $t^*$ is thus equal to:

$$\Delta T^D = t^*Y^* - T - \gamma_T \Delta Y$$ \hspace{1cm} (7)

Finally, we substitute (7) in the equation (1) of $\Delta Y$ and are able to obtain the value of $\Delta G^D$ that the government needs to implement in order to ensure the economy grows at a rate of 3%, taking into account the restrictive effect of a higher $t^*$:

$$\Delta Y = \Omega_G \Delta G^D - \Omega_T \Delta T^D$$ \hspace{1cm} (1)

$$\Delta G^D = \frac{\Delta Y (1-\Omega_T \gamma_T) + \Omega_T (t^*Y^* - T)}{\Omega_G}$$ \hspace{1cm} (8)

Table 4 summarizes the evolution of GDP growth, the unemployment rate and fiscal finances were this scenario to take place. As Figure 11 illustrates, the more expansive stance of fiscal policy in Scenario 2 means an important increase in public expenditure, which in 2020 would be 73 billion more than in the Baseline Scenario\textsuperscript{15}.

In terms of GDP, expenditure would rise by 2 p.p. between 2016 and 2020 in Scenario 2, rather than decreasing by 2 p.p. (Figure 12), and the Spanish economy would converge towards the Eurozone average (46% in 2020). By contrast, this gap would remain constant in the Baseline Scenario.

This higher increase in public expenditure is partly funded by higher tax revenues due to the discretional measures adopted by the authorities and to the positive effect of more dynamic GDP. As a consequence, total deficit actually decreases if compared to 2016, although

\textsuperscript{13} Godar, Paetz and Truger (2014) provide theoretical and empirical arguments for progressive tax reforms in the current context.

\textsuperscript{14} We assume that the increase in the revenue/GDP ratio takes place progressively over the whole period, from 37.4% in 2016 to 41.0% in 2020 ($t^*$ increases by 0.9 percentage points each year).

\textsuperscript{15} Of course, just as important as the actual amount involved is ensuring the right distribution. We would prioritize spending that would have a high multiplier effect, a strong social impact and which would evidence a greater ability to stimulate the necessary changes in the Spanish economy.
at a slower rate than in the Baseline Scenario. In any case, it would be under the 3% threshold after 2018 (Figure 13).

**Table 4: macroeconomic and fiscal variables in “Scenario 2”**

<table>
<thead>
<tr>
<th></th>
<th>GDP real growth rate (%)</th>
<th>Unemployment rate (%)</th>
<th>Public balance (% GDP)</th>
<th>Total revenue (%GDP)</th>
<th>Total expenditure (% GDP)</th>
<th>Gross debt (% GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>3.2</td>
<td>22.1</td>
<td>-5.1</td>
<td>38.2</td>
<td>43.3</td>
<td>99.3</td>
</tr>
<tr>
<td>2016</td>
<td>3.1</td>
<td>19.4</td>
<td>-4.5</td>
<td>37.4</td>
<td>41.9</td>
<td>100.1</td>
</tr>
<tr>
<td>2017</td>
<td>3.0</td>
<td>17.3</td>
<td>-3.4</td>
<td>38.3</td>
<td>41.7</td>
<td>99.8</td>
</tr>
<tr>
<td>2018</td>
<td>3.0</td>
<td>15.4</td>
<td>-3.1</td>
<td>39.2</td>
<td>42.3</td>
<td>99.0</td>
</tr>
<tr>
<td>2019</td>
<td>3.0</td>
<td>13.7</td>
<td>-2.8</td>
<td>40.1</td>
<td>42.9</td>
<td>97.7</td>
</tr>
<tr>
<td>2020</td>
<td>3.0</td>
<td>12.1</td>
<td>-2.9</td>
<td>41.0</td>
<td>43.9</td>
<td>96.4</td>
</tr>
</tbody>
</table>


**Figure 11:** Public revenue and expenditure (Billion €)

**Figure 12:** Public revenue and expenditure (% GDP)

**Figure 13:** Public Balance (% GDP)

*Source: IMF (2016) and authors’ calculations.*
3.6. *A comparison of the effects of both scenarios on public finances and employment*

Table 5 sums up the expected change between 2016 and 2020 in the main economic and fiscal variables in the three scenarios considered. Tables 6 and 7 compare the effects of Scenarios 1 and 2 with the Baseline Scenario and with 2016, and finally Table 8 provides the difference between Scenario 2 and Scenario 1. Our main findings are the following:

- Strict compliance with the Fiscal Compact and with the exact path of deficit reduction marked out by the European Commission for the coming years would have a strong restrictive effect on the Spanish economy, and would prevent its very high unemployment rate from being cut. In contrast, the effect on GDP growth and employment would be positive if the alternative fiscal policy proposed in Scenario 2 were to be applied, since expenditure multipliers are greater than revenue multipliers. Specifically, according to our estimations, this fiscal policy might lead to an accumulated increase in real GDP of 4% in 2020 compared to the Baseline Scenario, with an average growth rate of 3% instead of 2%. The unemployment rate would fall to 12% in 2020, 3.6 p.p. below the IMF forecast, and 7.3 p.p. lower than in 2016.

- In this Scenario 2, the functioning of automatic stabilizers would mean fresh revenue from taxes coupled with less public expenditure due to higher economic dynamism. By adding this effect to the discretionary measures adopted by the government, revenue would increase by 121.6 billion Euros and public expenditure by 109.5 billion compared to 2016. This means that the public deficit would continue to fall, albeit at a slower rate than in the Baseline Scenario. In 2020, the reduction in deficit would be 12.1 billion (the IMF foresees a reduction of 22.5 billion). As a result, the public deficit would be 2.9% of GDP in 2019, while it would be 2.2% in the Baseline Scenario. However, there are no economic reasons to support the idea that this lower deficit and 15.6% unemployment is better than a public deficit of 2.9% and 12% unemployment.

- All of this means that, although our proposal involves a significant increase in public expenditure, it would prove perfectly viable in financial terms; firstly, through increased revenue stemming from fiscal reform and the fight against evasion, and secondly, because economic growth itself would translate into higher public revenue and lower cyclical expenditure. We calculate that 42% of the discretionary expansion in public expenditure is self-financed. Finally, some fiscal breathing space could be gained by postponing the goal of reducing public deficit to 3%.

- Figure 14 illustrates another important difference between Scenario 1 and Scenario 2. While current fiscal policies in Spain are characterized by a low and constant revenue/GDP ratio, and a low and decreasing expenditure/GDP ratio, an alternative fiscal policy would permit an increase in both ratios, converging to the Eurozone average. This would have two positive consequences: sustaining higher GDP growth, required to ensure a faster reduction in the unemployment rate; and providing better public services and the funding of some industrial policies needed to change the productive structure of the Spanish economy.

- Regarding public debt, although the total debt figure is higher in Scenario 2, this would also be divided by a larger nominal GDP, and the public debt burden in GDP would even be a little lower in our scenario than in the Baseline (96% versus 98% in 2020). It is worth mentioning that the highly restrictive fiscal policy applied in Scenario 1 does not mean a
lower debt to GDP ratio in 2020 compared to the Baseline Scenario, while the supposed unsustainability of Spanish public debt is one of the main arguments used to support it (Figure 15). The dynamic evolution of the debt to GDP ratio shows the sustainability of Scenario 2.

- It may therefore be concluded that the choice lies between prioritizing either the rate at which unemployment is reduced or that at which public deficit is reduced, as Figure 16 clearly shows.

### Table 5: Main economic and fiscal variables in 2016 and 2020; three scenarios

<table>
<thead>
<tr>
<th></th>
<th>2016 (IMF WEO)</th>
<th>Baseline (IMF WEO)</th>
<th>Scenario 1: Fiscal Compact</th>
<th>Scenario 2: 3% GDP growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Billion€</td>
<td>%GDP</td>
<td>Billion€</td>
<td>%GDP</td>
</tr>
<tr>
<td>Revenue</td>
<td>419.6</td>
<td>37.4%</td>
<td>481.1</td>
<td>37.9%</td>
</tr>
<tr>
<td>Expenditure</td>
<td>469.8</td>
<td>41.9%</td>
<td>508.8</td>
<td>40.1%</td>
</tr>
<tr>
<td>Fiscal Balance</td>
<td>-50.2</td>
<td>-4.5%</td>
<td>-27.7</td>
<td>-2.2%</td>
</tr>
<tr>
<td>Public Debt</td>
<td>1122.4</td>
<td>100.1%</td>
<td>1245.7</td>
<td>98.3%</td>
</tr>
<tr>
<td>Av. GDP growth (2017-2020)</td>
<td>2.0%</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>19.4%</td>
<td>15.6%</td>
<td>18.2%</td>
<td>18.3%</td>
</tr>
<tr>
<td>Employment (Million)</td>
<td>18391.0</td>
<td></td>
<td>19279.8</td>
<td></td>
</tr>
</tbody>
</table>

Source: IMF (2016) and authors’ calculations.

### Table 6: Comparison with Baseline Scenario in 2020

<table>
<thead>
<tr>
<th></th>
<th>Scenario 1: Fiscal Compact</th>
<th>Scenario 2: 3% GDP growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Billion€</td>
<td>%GDP</td>
</tr>
<tr>
<td>Revenue</td>
<td>-15.2</td>
<td>0.0%</td>
</tr>
<tr>
<td>Expenditure</td>
<td>-39.2</td>
<td>-1.9%</td>
</tr>
<tr>
<td>Fiscal Balance</td>
<td>24.1</td>
<td>1.9%</td>
</tr>
<tr>
<td>Public Debt</td>
<td>-39.6</td>
<td>0.0%</td>
</tr>
<tr>
<td>Av. GDP growth (2017-2020)</td>
<td>-0.5%</td>
<td></td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>2.7%</td>
<td></td>
</tr>
<tr>
<td>Employment (Million)</td>
<td>-621.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: IMF (2016) and authors’ calculations.

### Table 7: Comparison between 2020 and 2016, Scenario 1 and Scenario 2

<table>
<thead>
<tr>
<th></th>
<th>Scenario 1: Fiscal Compact</th>
<th>Scenario 2: 3% GDP growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Billion€</td>
<td>%GDP</td>
</tr>
<tr>
<td>Revenue</td>
<td>46.4</td>
<td>0.5%</td>
</tr>
<tr>
<td>Expenditure</td>
<td>-0.2</td>
<td>-3.6%</td>
</tr>
<tr>
<td>Fiscal Balance</td>
<td>46.5</td>
<td>4.2%</td>
</tr>
<tr>
<td>Public Debt</td>
<td>83.7</td>
<td>-1.9%</td>
</tr>
<tr>
<td>Av. GDP growth (2017-2020)</td>
<td>-1.1%</td>
<td></td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>-1.1%</td>
<td></td>
</tr>
<tr>
<td>Employment (Million)</td>
<td>267.8</td>
<td></td>
</tr>
</tbody>
</table>

Source: IMF (2016) and authors’ calculations.
Table 8: Comparison between Scenario 2 and Scenario 1, 2020

<table>
<thead>
<tr>
<th></th>
<th>Billion€</th>
<th>%GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>75.2</td>
<td>3.1%</td>
</tr>
<tr>
<td>Expenditure</td>
<td>109.7</td>
<td>5.6%</td>
</tr>
<tr>
<td>Fiscal Balance</td>
<td>-34.5</td>
<td>-2.6%</td>
</tr>
<tr>
<td>Public Debt</td>
<td>66.7</td>
<td>-1.8%</td>
</tr>
<tr>
<td>Av. GDP growth (2017-2020)</td>
<td>1.5%</td>
<td></td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>-6.3%</td>
<td></td>
</tr>
<tr>
<td>Employment (Million)</td>
<td>1428.3</td>
<td></td>
</tr>
</tbody>
</table>

Source: IMF (2016) and authors’ calculations.

Figure 14:  

Figure 15:  

Figure 16:  

Source: IMF (2016) and authors’ calculations.
4. **Could the external constraint prevent the application of a more expansive fiscal policy?**

Spain requires greater economic growth than the European average over a period of several years if the Spanish unemployment rate is to be cut as fast as possible, although this is also likely to lead to a deterioration in the current account balance. This raises some concerns vis-à-vis the possible limits of “one country Keynesianism”, whose potential relevance is highlighted by the current account imbalances evident in the European Monetary Union between 2000 and 2007. Those (unsustainable) imbalances were mostly related to persistent differences in the growth rates of its members, and can be considered one of the main causes of the current crisis and its severity (Uxó et al 2011). Will Spain suffer similar current account deficits as a consequence of the fiscal strategy described by Scenario 2, again accumulating unsustainable levels of external debt, and sparking the need for fresh adjustments sooner or later?

To answer this question properly, it is necessary to take into account that: a) Spain presents a current account surplus, which provides some breathing space to apply a more expansive fiscal policy without being constrained by the balance of payments; b) precisely as a result of higher growth rates, stabilizing the net foreign debt-GDP ratio can be compatible with a lower external surplus, or even a deficit if it does not exceed a certain threshold (Hein and Detzer 2015).

The Spanish current account balance has radically changed over the last few years, from a strong deficit in 2007 (-9.6% of GDP) to a surplus equivalent to 1.4% of GDP in 2015. This adjustment stems mainly from a much lower deficit in the trade balance of goods, and is due to several reasons: some increases in price-competitiveness, the collapse of domestic demand up to 2013, the fall in energy prices, how well the tourist sector is performing, lower interest payments, or the diversification of the geographical distribution of Spanish exports. Taking into account the surplus of the capital balance (0.5%), the Spanish economy presented a net lending position equivalent to 1.9% of GDP in 2015.

The IMF forecasts that the current account surplus will be even higher between 2016 and 2020 (1.8% of GDP on average). As a result, the Net International Investment Position (NIIP, -91% of GDP in 2015) should drop, both in nominal terms and as a percentage of GDP\(^\text{16}\).

Spanish imports are characterized by high income elasticity, mainly because of the dependence on imported energy\(^\text{17}\), structural specialization, and the high import content of exports. The estimated value of this elasticity is between 1.5 and 2.0 (Orsini 2015; IMF 2015). The improved growth to emerge from a more expansive fiscal policy would have a negative impact on the external sector due to the increase in imports of goods and services\(^\text{18}\). Nevertheless, using a value of 1.75 for this elasticity, we estimate that the Spanish economy would still register a current account surplus in 2020 (0.8% instead of the 1.8% foreseen by the

\(^{16}\) The evolution of NIIP is not only determined by the net lending/borrowing position of the economy but also by certain valuation effects. However, as we are mainly interested in analyzing the change in the NIIP derived from our expansive fiscal policy proposal, they are not taken into account here.

\(^{17}\) Actually, this fact provides a new argument for an increase in public expenditure: driving public investments that are able to foster a new energy model, based on renewable energy sources and that is less dependent on fossil fuels.

\(^{18}\) We assume that the rest of the sub-balances remain unchanged.
IMF, Figure 17), and this ratio would be compatible with an improvement in the NIIP/GDP ratio.

The evolution of the NIIP/GDP ratio depends on the joint current plus capital account balances (EB, expressed as a % of GDP) and the nominal rate of growth (g):

\[
\left( \frac{NIIP}{GDP} \right)_t = \left( \frac{NIIP}{GDP} \right)_{t-1} + EB
\]  

As the external balance forecast by the IMF is a surplus, the net external debt ratio will decrease over the next few years in the Baseline Scenario, reaching a value close to -67% of GDP in 2020. Applying our proposed fiscal policy would mean a lower external surplus, but also a higher average nominal growth. Therefore, net external debt would also decrease in Scenario 2 and would mean the same percentage over GDP in 2020 as in the IMF forecasts (Figure 18).

![Figure 17:](image1.png)  
![Figure 18:](image2.png)

Source: IMF (2016) and authors’ calculations.

5. Conclusions

Austerity policies are often presented as inevitable, and the proposals for a more expansive fiscal policy which focus on creating employment as well as other social and structural objectives are defined as “wishful thinking”. Moreover, the “legal” constraints derived from the European fiscal rules are currently used to prevent its application in those countries that need them more urgently, because of their high unemployment rates. This paper shows, however, that an alternative plan to austerity may not only be expansionary – with a faster reduction in unemployment – but also fully compatible with fiscal sustainability and external constraints. This is what we have called an “economic” definition of fiscal space.

We use the case of Spain to illustrate our argument. We take the latest IMF forecast for the Spanish economy as a Baseline Scenario and simulate two alternative scenarios: Scenario 1 represents a strict application of European fiscal rules, while Scenario 2 focuses on ensuring 3% annual GDP growth in the years 2017-2020. This second alternative, whose application we
advocate, is based on a “functional finance” approach to fiscal policy and makes (partial) use of the idea of Balanced Budget Expansion. The two main components of this plan are progressive fiscal reform to increase public revenue over GDP, and a simultaneous increase in the ratio of public expenditure over GDP.

We compare the outcomes of these two alternative fiscal policies in terms of the main macroeconomic variables as well as public deficit and debt, obtaining the following conclusions:

1. Strict compliance with European fiscal rules would have a strong restrictive effect on the Spanish economy, and would prevent its extremely high unemployment rate from being cut. In contrast, the effect on GDP growth and employment would be positive were the alternative fiscal policy proposed in Scenario 2 to be applied, with the unemployment rate falling to 12% in 2020, 3.6 p.p. below the IMF forecast, and 7.3 p.p. lower than in 2016.

2. The significant increase in public expenditure that this proposal involves could be perfectly funded through three complementary sources: fiscal reform and the fight against tax evasion increase public revenue; almost half of the discretionary increase in public expenditure is self-financed, because its expansive effect produces higher public revenue and lower cyclical expenditure; and postponing the goal of reducing public deficit to 3% provides some additional fiscal breathing space.

3. Public deficit would continue to fall, albeit at a slower rate than forecast by the IMF. However, there are no economic reasons to support the idea that a lower deficit and higher unemployment is better than the contrary, especially when the public debt burden in GDP would be nearly the same. It is worth underlining that the latter is also true for Scenario 1: a lower deficit does not translate into lower debt to GDP ratios, since the contractive effects of this restrictive fiscal policy also reduce the denominator.

4. Higher growth would also mean some deterioration in the current account surplus which the IMF is forecasting for the Spanish economy over the next four years. Nevertheless, net external debt, expressed as a percentage of GDP, would continue to decrease at a similar rate in Scenario 2 to the Baseline Scenario. The Spanish authorities should, however, take some measures aimed at securing external sustainability in a context of high growth, especially considering that the Spanish economy has a historically high dependency on imports and that the income elasticity of imports is clearly above the Eurozone average. Transforming the productive structure is necessary if the “balance of payments constraint” is to be avoided. This means, for example, pointing the productive structure towards high value added sectors, increasing exports and reducing dependency on imports (particularly energy).

Economic policy usually implies the need to establish certain priorities among different objectives. In this case, the choice lies between prioritizing either the rate at which unemployment is reduced or that at which public deficit decreases. The second of these alternatives cannot be justified in economic terms and can only be seen as a result of the political decision to maintain an economic policy framework that has proven to be inadequate.
References


European Council (2008), Conclusions of the Presidency, 11-12 December.

European Council (2016), Council Decision giving notice to Spain to take measures for the deficit reduction judged necessary in order to remedy the situation of excessive deficit, August.


IMF (2012a), World Economic Outlook, April.

IMF (2012b), World Economic Outlook, October.


IMF (2016), World Economic Outlook, October.


