Budgetary stability and structural reforms in Spain: Lessons from the recession and options for the future

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Budget balances and public debt in Spain showed clear signs of unsustainability between 2009 and 2011. Despite the fiscal consolidation implemented since then, the increase in public debt has also considerable costs in terms of GDP, employment and private investment. In order to avoid these costs, appropriate reforms to reduce the structural unemployment rate would lead to a significant increase in GDP per capita and public revenues, implying that the public debt to GDP ratio could return to pre-crisis levels without increasing the tax burden or cutting public spending.

After almost ten years since the beginning of the financial crisis, the pace of fiscal consolidation in the Spanish economy is still at the center of the public debate. The intensity of the crisis and the expansionary fiscal policies implemented increased budget deficit to 11.2% of GDP in 2009. Despite the fiscal consolidation measures implemented and the rapid recovery since the second half of 2013, public deficit stood at 4.6% of GDP in 2016, while debt was still at 99.4% of GDP.

As done by Buti and Carnot (2016), in a recent paper we have applied Blanchard's (1984) sustainability framework to the Spanish economy and the results show that the combinations of budget balance and public debt between 2009 and 2011 were close to become unsustainable. According to this framework, the dynamics of both the primary budget balance and the public debt are determined by the government's budget constraint

$$\Delta d_t = \frac{r-\gamma}{1+\gamma} d_{t-1} - t_t + g_t$$

and the policy reaction function

$$\Delta(t_t - g_t) \ \leq \ \alpha[(t_{max} - g_{min}) - (t_{t-1} - g_{t-1})]$$

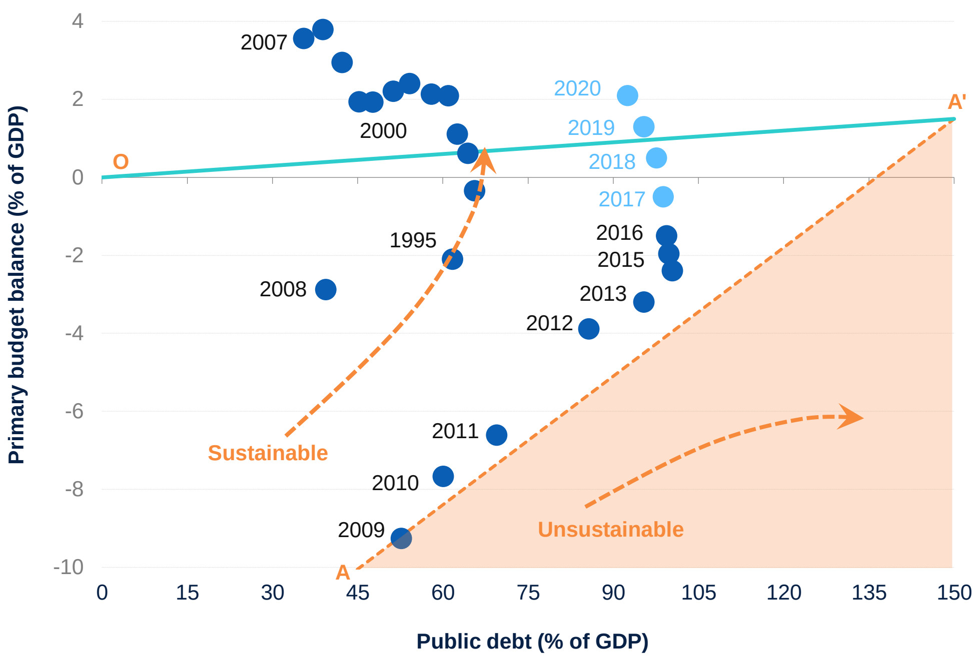
where *d*, *t* and *g* are respectively public debt, revenues and primary expenditures in relation to GDP (therefore, *t-g* is the primary budget balance), *r* the nominal interest rate, γ nominal GDP growth and α the speed of convergence towards the maximum level of the primary budget balance $(t_{max} - g_{min})$. After calibrating the main parameters, the dynamics of the budget balance and debt are shown in Figure 1.[1] The convergence path to the steady state in which the primary budget balance and public debt reach their maximum sustainable level is given by the line *AA*'. This line

1: See Doménech and González-Páramo (2017) for further details.

separates out the debt and primary budget balance combinations in two regions. Above the line *AA*', the primary budget balance increases more rapidly than public debt and eventually a steady state is reached (on the line OA'), in which the primary budget balance is positive and the public debt to GDP ratio remains constant. Below this line, the opposite happens: public debt increases more rapidly than the primary budget balance, following a path in which public accounts are not sustainable.

Figure 1 also represents the combinations of the primary budget balance and debt from 1995 to 2020, using the *Stability Programme 2017-2020* forecasts. Evidence shows that debt and primary budget balances from 2009 to 2011 were tightly balancing on a knife-edge, at risk of falling into the area with unsustainable dynamics. Between 2012 and 2014, this situation improved slightly. It was only after 2015 that there was a change in the trend, as debt ceased to grow as the primary budget balance continued to improve.

Figure 1 Public debt and primary budget balance over GDP. Spain,1995-2020

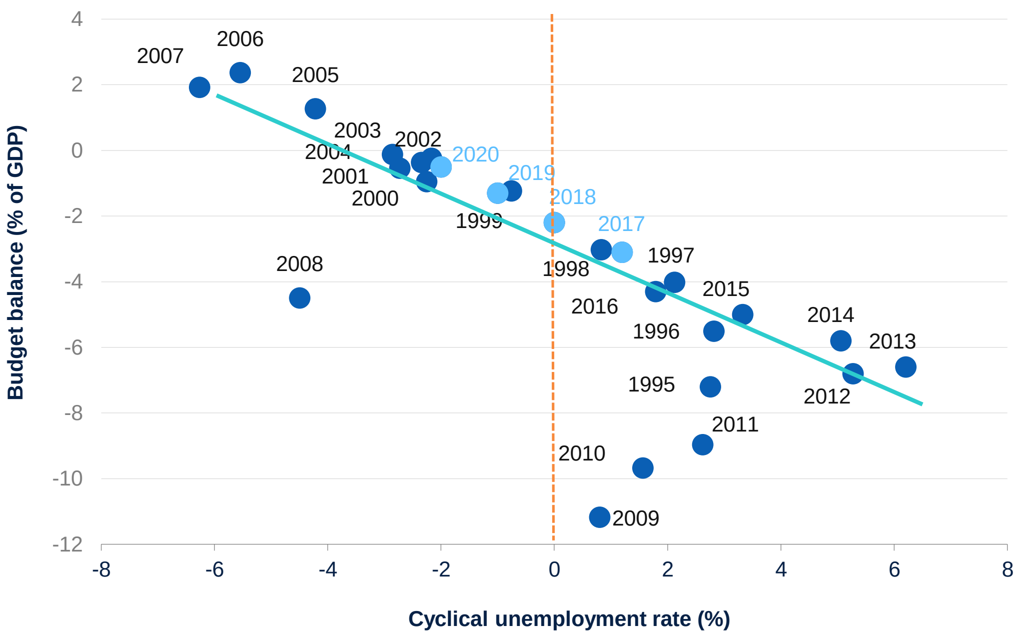


In sharp contrast to the view that fiscal policy in those years was unnecessarily restrictive, the evidence in Figure 1 shows the opposite: fiscal adjustment has been very gradual and slow, in an attempt to affect short-term growth as little as possible and at the limit of what markets would tolerate in order to finance public debt. However, the increase of public debt as a result of this slow fiscal consolidation process is not a free lunch. According to our estimates, the long-run costs of stabilising debt at levels much higher than before the crisis (65 percentage points of GDP higher) are considerable. On average these costs are equivalent to 5.5 pp of GDP, 6.7 pp of private investment and 3.1 pp of employment, in line with Elmendorf and Mankiw (1999) and Woo and Kumar (2015).

Leaving aside, for the moment, the implementation of structural reforms to promote growth, was fiscal adjustment the only alternative to avoid the risk of debt unsustainability observed between 2009 and 2011? Interestingly, DeLong and Summers (2012) and Fatás and Summers (2016) have shown that, under certain conditions (large fiscal multipliers, hysteresis and low interest rates), fiscal adjustments can be self-defeating. However, our interpretation of the evidence is that this was not case for the Spanish economy.

First, the Spanish fiscal adjustment has been nothing other than a partial reversal of the fiscal stimuli applied in 2008 and 2009. In fact, real public spending per capita in 2016 was higher than before the crisis (6%), while public revenues were still 10% below the 2007 level. Figure 2 is consistent with this interpretation: the consolidation following the fiscal expansion of 2008 and 2009 just reversed structural budget balances to their precrisis levels (around -2% of GDP).

Figure 2 Cyclical unemployment rate and the budget balance-to-GDP ratio. Spain 1995-2020



Second, the expansionary fiscal policies implemented in 2008 and 2009 increased public deficit and debt so quickly that they fuelled financial market expectations of explosive debt levels. Third, as a consequence of these negative expectations, higher risk premia accelerated the dynamic of a self-fulfilling prophecy. Fourth, given the experience of 2008 and 2009, financial markets analysts may have had serious doubts about the value of fiscal multipliers and hysteresis if expansionary fiscal policies had continued, affecting their sustainability analysis between 2010 and 2012.

And fifth, more than a consequence of the persistent effects of fiscal adjustments, lower potential growth and public revenues (after the very intense balance sheet recession following the imbalances accumulated during the economic boom) made the subsequent fiscal consolidation unavoidable, when it became clear that aggressive expansionary policies would not suffice to avert the recession. Finally, the interaction between sovereign and banking risks eventually created a vicious circle from which it was impossible to escape without implementing a fiscal consolidation.

The effects of structural reforms on debt sustainability

As higher growth accelerates the consolidation of public accounts, improves the room for policy manoeuvre and reduces debt levels, structural reforms are an interesting and attractive alternative to fiscal adjustments, particularly in a country with a high structural unemployment rate. Thus, the average unemployment rate in Spain has been 15.5% between 1995 and 2016.

According to our estimates, a reduction of structural unemployment from 15.5 to 7.5% (even higher than in Germany or the United States) would allow an improvement in the structural budget balance of 6 percentage points of GDP. This room for manoeuvre could be used to balance the budget (2 pp) and to implement different spending policies, including those needed to address the challenges posed by aging. Obviously, reducing the structural unemployment rate is not an easy task. Along with political economy constraints, lower unemployment rates could not be achieved overnight, but gradually and only if a wide range of measures is introduced, such as those proposed, for example, by Andrés and Doménech (2015) and BBVA Research (2016). However, the slow transition does not represent a serious imitation. First, budgetary stability is a medium- to long-term objective. Second, in the transition to a permanently lower unemployment rate, it is possible to control what percentage of year-on-year fiscal margins can be used to consolidate public accounts or to other public policies.

To illustrate quantitatively the effects of a reduction of 8 percentage points in the structural unemployment rate, we have used a DSGE model specially designed for the Spanish economy, with long-term equilibrium unemployment, as in the Diamond-Mortensen-Pissarides' framework (see Boscá et al, 2011). In particular, we assume that the reduction in the unemployment rate is due to improvements in labour market regulations that reduce duality, temporary employment and the separation rate, and better active labour market policies that increase the efficiency of the matching process between vacancies and unemployment. We also assume that, with the exception of unemployment benefits, public expenditures over GDP remain constant, whereas tax rates decrease as the public debt to GDP ratio falls from 100% to 36%, its level in 2007.

It is not surprising that the effects in the long run of these structural policies are, according to our estimates, very significant: GDP and public spending per working-age population would increase by more than 20%, whereas tax revenues over GDP would fall 5 pp.

Conclusions

Future fiscal policy options will require a strengthening of the fiscal margin, securing a primary budget surplus and gradually reducing public debt. In the case of the Spanish these objectives should be achieved mainly through structural reforms that improve the tax structure (for example, a fiscal devaluation), reduce structural unemployment and temporary employment, and increase aggregate productivity. These policies would produce a significant increase in per capita income and public revenues, reducing the public debt to GDP ratio at pre-crisis levels, without increasing the tax burden or cutting public spending. Increases in aggregate productivity should also be driven by more efficient public services, which should capitalise on opportunities arising from the on-going process of technological and digital transformation to bridge the gap with economies that are at the leading edge of public sector efficiency.

More than an option for fiscal policy, this is a pressing need if we want to ensure that the Spanish economy returns to the path of convergence towards the levels of prosperity and well-being of the most advanced societies.

References

Andrés, J. and R. Doménech (2015): *En Busca de la Prosperidad*. Ediciones Deusto. https://goo.gl/jmJPLl

BBVA Research (2016): “Hacia un mercado de trabajo más eficiente y equitativo.” *Observatorio Económico de España*. http://goo.gl/xbYmdQ

Blanchard, O. (1984): “Current and Anticipated Deficits, Interest Rates and Economic Activity.” *European Economic Review*, 25, 361-381. http://goo.gl/2khDcf

Boscá, J.E., R. Doménech, J. Ferri and J. Varela (2011): *The Spanish Economy: A General Equilibrium Perspective*. Palgrave MacMillan. http://goo.gl/c36j5K

Buti, M. and N. Carnot (2016): “Fiscal space and low interest rates: A Eurozone perspective.'” Vox EU. http://goo.gl/gHDmv2

DeLong, J. B., and L. H. Summers (2012): “Fiscal policy in a depressed economy.'” *Brookings Papers on Economic Activity*, 1, 233-297. https://goo.gl/tBJvAM

Doménech, R., and J. M. González-Páramo (2017): “Budgetary stability and structural reforms in Spain: lessons from the recession and options for the future.” BBVA Research WP 17/11. https://goo.gl/qjMOgf

Elmendorf, D. W., and N. G. Mankiw (1999): “Government Debt,” in J. B. Taylor and M. Woodford, eds., *Handbook of Macroeconomics* 1, part 3, 1615-1669. http://goo.gl/pK6f32

Fatás, A., and L. H. Summers (2015): “The permanent effects of fiscal consolidations.” NBER Working Paper No. 22374. http://goo.gl/POyNZk

Woo, J., and M.S. Kumar (2015): “Public debt and growth.” *Economica*, 82(328), 705-739. http://goo.gl/Rt08DQ

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