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**MONETARY AND FISCAL POLICIES  
IN THE TRANSITION TO EMU:  
AN OVERVIEW OF THE SPANISH EXPERIENCE\***

**1. Introduction**

On May 1<sup>st</sup> 2004, eight Central and Eastern European countries (CEECs hereafter), i.e., the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia, joined, together with Cyprus and Malta, the European Union (EU); and two other countries, Bulgaria and Romania, joined the EU on 1<sup>st</sup> January 2007.

One of the main achievements of the EU is the Economic and Monetary Union (EMU). This consists of the adoption of a single currency, the euro, which also implies a common monetary policy for all participating countries. All member states of the EU are expected to participate in EMU, and currently sixteen of them (including two of the CEECs, namely, Slovenia and Slovakia) have adopted the euro as their currency. As regards the rest of the CEECs, they should enter EMU and adopt the euro at a time sooner or later after their integration into the EU. To do this, they must previously fulfil several conditions, the so called convergence criteria, which had to be met by the current EMU members, and refer to the evolution of the inflation rate, long-term interest rate, exchange rate, and government deficit and debt.

Spain is one of the participating members of EMU since its start. Despite the liberalization during the 1960s, the Spanish economy suffered at the time of the return to a democratic regime a still higher degree of interventionism than in most

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Western European countries. Moreover, the Spanish economy was also characterized by a lower level of development as compared to the average of the EU countries at the start of EMU. For all these reasons, the Spanish case can be of interest for those CEECs wishing to join EMU in the next few years. Since monetary and fiscal policies are the ultimate determinants of the degree of fulfilment of the convergence criteria, in this paper we provide an overview of the main recent developments experienced by these policies in the Spanish case.

## 2. Monetary policy

From the beginning of the 1970s, Spanish monetary policy was oriented to the control of the money supply. Specifically, the period from 1978 to 1989 was characterised by a monetary control at two levels where the money supply was the intermediate target, and bank reserves were the instrumental variable.

Since 1989, the Spanish monetary policy faced an external constraint imposed by the European Monetary System (EMS) commitments on exchange rate stability. At the same time, monetary management was implicitly forced to follow Bundesbank's monetary policy focused on controlling inflation. Once Spain joined the EMS, following the episodes of instability experienced by the EMS between 1992 and 1993, and the widening of the fluctuation bands in August 1993, the Spanish monetary policy focused explicitly on controlling inflation. This decision was accompanied by the independence statute of the Bank of Spain, and the change in the design of the monetary control at a single level. This new way of policy management consisted in fixing an explicit target for inflation, oriented to reach price stability in the short and in the long run. This period finished in January 1999 when Spain joined EMU.

The role of monetary policy rules to explain the behaviour of central banks has received an increasing attention during the last few years. Among these rules, the contribution of Taylor [1993] has attracted considerable interest of policymakers, central banks' governors, as well as the academic community. In particular, Taylor-type rules try to describe the adjustment of short-term nominal interest rate by the monetary authorities in response to (i) the deviation of the current inflation rate from its target; and (ii) the output gap, i.e., the difference between the current and the potential output levels. The first attempt of describing the monetary policy followed by the Bank of Spain in terms of a Taylor-type rule is [Díaz-Roldán, Montero-Soler 2004]. They estimate an equation for the short-run nominal interest rate for the period between 1978, when the monetary target was first announced, and 1998, the year before the launching of EMU. The sample was next divided into two periods, according to the changes brought about in the monetary policy designed by the Bank of Spain. June 1989, when the peseta joined the EMS, is the date when a significant monetary policy shift can be observed.

After estimating the reaction function of the Bank of Spain, the results appear clearly different when comparing the two periods. For the first period (1978:I - 1989:II), the estimated coefficients are significant and show the expected signs; but their sizes were far away from those found in the available literature, with estimated coefficients on inflation and the output gap of 0.71 and 0.57, respectively. On the contrary, the estimates for the second period (1989:III - 1998:IV) were more satisfactory. Significant coefficients were found, together with the expected signs and sizes of the coefficients close to those available in the literature. In particular, the response of the nominal interest rate to changes in inflation was around 2.30, and the degree of output gap stabilisation was 0.39. Hence, these results reveal that the Spanish monetary authorities would have been more concerned about controlling inflation than stabilizing output.

As Figure 1 shows, before joining the EMS in June 1989, the interest rate describes an irregular path that differs from that followed by inflation and the output gap. On the contrary, after joining the EMS, the evolution of the three variables

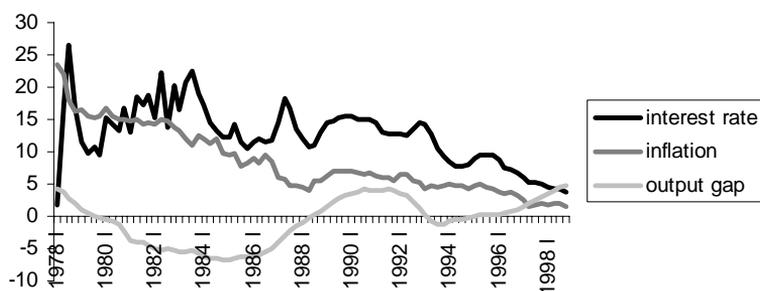


Figure 1. Interest rate, inflation and output gap in Spain, 1978-1998

Source: Spanish National Institute of Statistics and OECD.

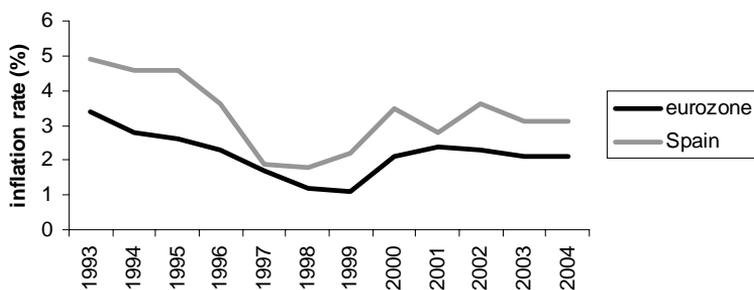


Figure 2. Evolution of the inflation rate in Spain and the euro zone, 1993-2004

Source: Eurostat.

seems to be more synchronized. In turn, Figure 2 shows the evolution of the inflation rate in Spain and the euro zone, after the independence statute of the Bank of Spain in 1993. As can be seen, in the years before the adoption of the European Central Bank's monetary policy in January 1999, the Spanish inflation rate tended to approach the euro zone average; but after that date the differential with the euro zone turned to grow again. This evidence would reflect the more anti-inflationary stance of the previous Spanish monetary policy.

### 3. Fiscal policy

Table 1 presents average values, across four-year periods since 1978 to 1998, of total general government expenditure, total general government revenue, public balance (net borrowing/lending of consolidated general government sector), and general government consolidated gross debt, as a percentage of GDP, for Spain and the EU-15 (i.e., the EU member states before the integration of the CEECs). The last line of the table provides also this information for the post-EMU period, i.e., 1999-2007. The evolution of these variables in a long-term perspective over the years 1964-2007 is shown in Figures 3-6, where a vertical bar separates the pre- and post-EMU periods.

Table 1. Government expenditure, government revenue, public balance and government debt in Spain and the EU-15 (% of GDP)

Years	Government expenditure		Government revenue		Public balance		Government debt	
	Spain	EU-15	Spain	EU-15	Spain	EU-15	Spain	EU-15
1978-1981	30.6	45.6	28.2	41.9	-2.4	-3.6	16.4	38.1
1982-1985	37.7	49.0	32.4	44.3	-5.4	-4.8	34.0	49.4
1986-1989	40.6	47.8	36.6	44.5	-4.0	-3.2	42.4	54.3
1990-1993	44.7	49.4	39.9	44.7	-4.8	-4.7	48.3	58.2
1994-1998	43.3	49.5	38.4	45.7	-4.8	-3.7	64.9	69.9
1999-2007	38.8	46.7	38.9	45.1	0.2	-1.6	49.5	63.3

Source: Eurostat.

The ratio government revenue/GDP has experienced a remarkable growth, starting from much lower levels than in the EU-15 (e.g., 26.2% in 1978 versus 41% in the EU-15). This relates to the fiscal reform of 1978, of which the main building block was the creation of a modern personal income tax, completed in 1986 with the introduction of the value added tax at the time of the integration into the EU.

The difference between revenue and expenditure gives the public sector balance, i.e., its surplus (if the difference is positive) or deficit (if the difference is negative). After 1976 the Spanish public sector begins to develop an increasing deficit, due to the higher growth of expenditures as compared to revenue (despite the 1978 fiscal reform). Since then, the evolution of the deficit parallels that of public expenditure: it

begins to curb in 1986, increases again after 1989, and reaches its maximum level (around 6.5% of GDP) in 1995, coinciding with the economic crisis of the first 1990s. After that year, the public deficit begins to fall gradually, due to the higher budgetary discipline imposed in order to satisfy the convergence criteria, which would allow the Spanish economy to join the third stage of EMU since its start.

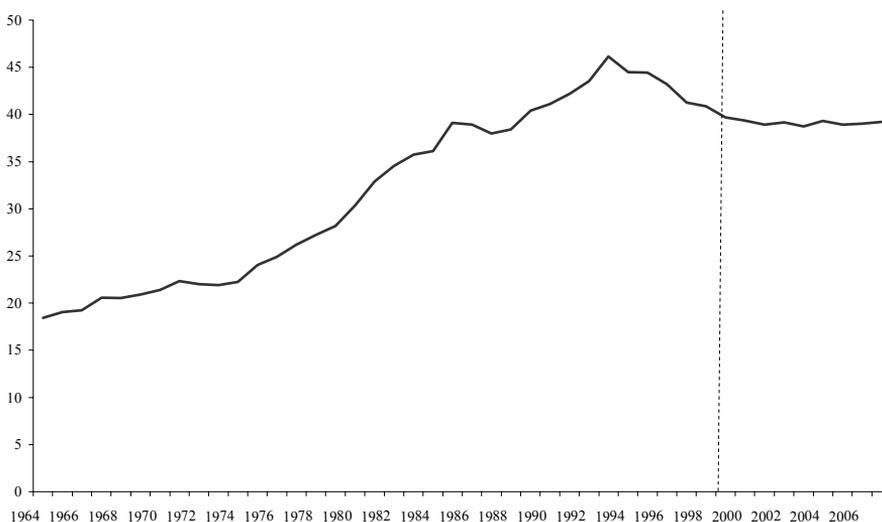


Figure 3. Government expenditure/GDP: Spain, 1964-2007

Source: Financial Accounts of the Spanish Economy, Bank of Spain.

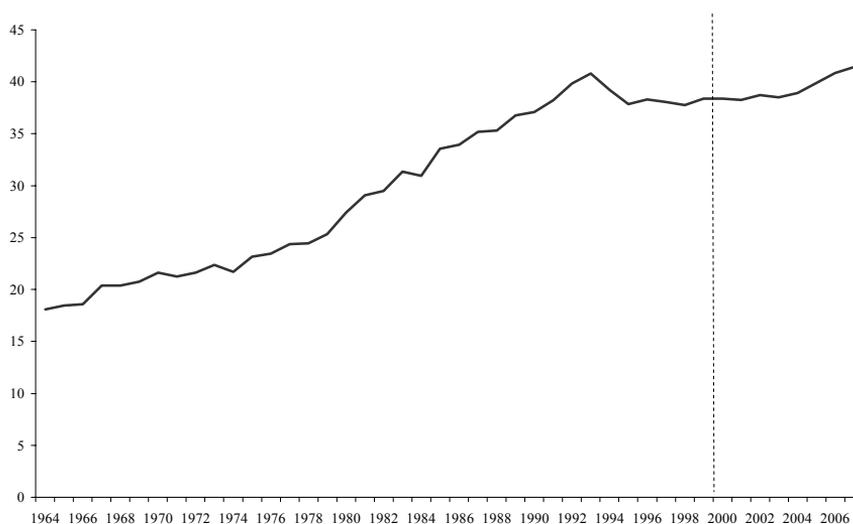


Figure 4. Government revenue/GDP: Spain, 1964-2007

Source: Financial Accounts of the Spanish Economy, Bank of Spain.

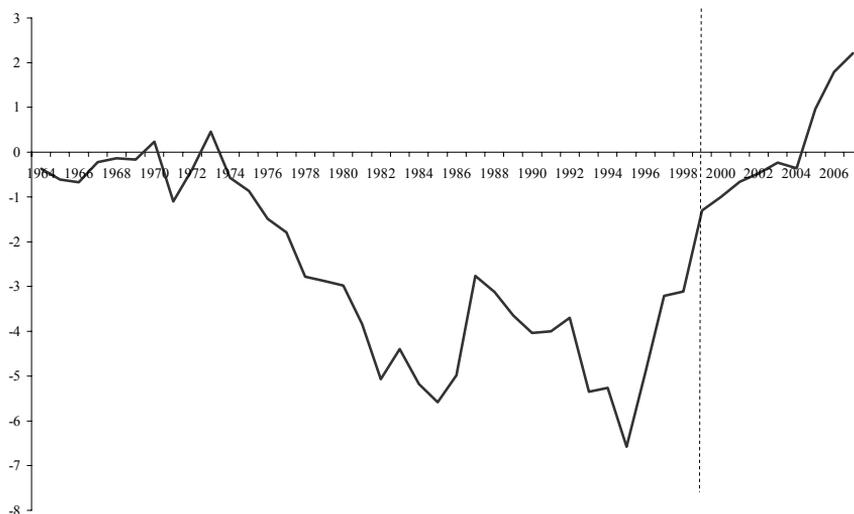


Figure 5. Public balance/GDP: Spain, 1964-2007

Source: Financial Accounts of the Spanish Economy, Bank of Spain.

Finally, the path of the public balance is reflected in the evolution of the public debt. Accordingly, the government debt experienced a continuous increase since the mid 1970s to the mid 1980s, when it reached around 45% of GDP; it stagnated



Figure 6. Government debt/GDP: Spain, 1964-2007

Source Financial Accounts of the Spanish Economy, Bank of Spain.

later on, and turned to increase again in the first 1990s, exceeding in 1994 60% of GDP (i.e., the reference value established in the Treaty of Maastricht). The ratio debt/GDP started to decrease in a clear way only after 1997, which allowed the Spanish economy to join EMU after 1999.

As we have seen, since the mid 1970s to very recently, the Spanish public sector has always registered a deficit. In principle, a deficit of the public sector can be sustainable in the short run provided that the government can borrow. However, if the deficit becomes persistent over time, it is possible that the government was unable to repay its accumulated debt. When assessing the long-run sustainability of fiscal policy, the usual procedure consists of testing the government's inter-temporal budget constraint. In short, for the budget deficit being sustainable, the government must run future budget surpluses equal, in present-value terms, to the current value of its outstanding debt.

The sustainability of fiscal policy is usually analyzed by means of the econometric estimation of a long-run relationship between public balance and government debt, and then testing for the presence of co-integration between both variables. An extension of this approach involves analyzing whether the behaviour of fiscal authorities is non-linear. In particular, fiscal authorities would adjust the deficit only when the difference between expenditure and revenue would exceed a certain threshold, so ensuring the deficit sustainability in the long run.

Some evidence for the Spanish case along these lines can be found in [Bajo-Rubio, Díaz-Roldán, Esteve 2004; 2006]. Specifically, in the last paper a non-linear long-run relationship between government revenue and expenditure is estimated for the period 1964-2003. The estimated threshold in this case was 5.3, indicating that the fiscal authorities would adjust the deficit only when the ratio public deficit/GDP would exceed 5.3%; in other words, fiscal authorities would adjust the deficit only when this was "too large", being the estimated threshold 5.3% of GDP. In particular, the main effort of fiscal consolidation would have occurred at the end of the first half of the 1980s, and in the period 1993-1995.

Finally, which has been the evolution of the Spanish fiscal policy since the beginning of EMU? Beginning with the ratios of government expenditure and revenue to GDP, while the former has remained roughly stable, the latter has experienced a moderate increase. In this way, in 2007 government expenditure in Spain amounted to 38.8% of GDP, and government revenue to 41% of GDP, as compared to 46.1% and 45.3% in the EU-15 for the same year, respectively; i.e., still below the average of the EU-15. This evolution of government expenditure and revenue was related in turn to (i) the improvement of the whole economic situation, which favoured the increase in tax collections; as well as to (ii) the lower interest rates in the context of EMU, which allowed reducing to a large extent the interest payments on the public debt. As a result, the public balance of the general government started to show levels closed to zero and even a surplus after 2005, reaching around 2.2% of GDP in 2007. Finally, as a consequence of all this, the ratio debt/GDP decreased steadily, falling below 60% in 2001, and reaching 36.2% in 2007.

Unfortunately, the current world economic recession is quickly changing this situation. So, the decrease in tax collections coupled with a raising level of expenditure (basically, due to the increase in unemployment benefits and some specific spending programs aimed to fight unemployment) have led to a budget deficit of 3.8% of GDP in 2008, after three years of surpluses.

#### 4. Concluding remarks

Before the formation of EMU, and particularly after joining the EMS, Spanish monetary policy would have followed a Taylor-type rule with a high coefficient on the inflation target. This behaviour would have led to a significant fall in the inflation rate, which allowed Spain to be able to join EMU from its start. In contrast, after joining EMU an increase in both inflation rates and the differential with the euro zone can be observed.

The size of the Spanish public sector (measured from the ratios government expenditure/GDP and government revenue/GDP) is still lower than the EU-15 average, despite its great increase since the restoration of democracy. Also, the big effort of budgetary discipline since the mid 1990s, coupled with the good overall economic performance, has led to a significant fall in the ratios of public deficit and debt to GDP, which allowed Spain to join EMU since its start in 1999. The government deficit was sustainable over the last forty years, with the main effort of fiscal consolidation occurring at the end of the first half of the 1980s, and in the period 1993-1995.

To conclude, in the face of the current international economic crisis, since the power of monetary policy is expected to be somewhat reduced, in a situation not far from the “liquidity trap”, the role of fiscal policy would seem to be reinforced. In the Spanish case, the good situation of public finances on the eve of the crisis has provided the government with a higher room of manoeuvre for the operation of fiscal policy. All this, however, would not exclude other policies that could be more suited against some specific features of the crisis in the Spanish case, such as the still insufficient degree of competition in price setting, the working of the labour market (with the important role of fixed-term contracts), or the excessive share of the construction sector and the need for sectoral reallocations.

#### Literature

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