Budget Deficit causes Inflation? Application to Portugal

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Abstract: The analysis of Portuguese inflation, based on annual data from 1961 to 2012, using the Johansen Method, allows us to conclude that variation in Portuguese inflation is determined essentially by foreign inflation and by variation in the effective exchange rate, but the lagged variation of budget deficit seems to causes variation of inflation in the studied period. In the long run there are two long-run relationships. Both the inflation rate and the wage inflation rate relate positively with the General Government Balance in percentage of GDP, negatively with the exchange rate index, positively with the foreign inflation index and negatively with the trend. In the short run the variation of the inflation rate relates positively with foreign inflation (or its variation) and the variation in the effective exchange rate, relates negatively with the error correction mechanism, so there is a significant response to the equilibrium error between inflation rate and its determinants. In addition to this adjustment, the inflation rate responds positively and significantly to the lagged variation of the budget deficit, as expected.

Keywords: Inflation. Budget deficit. Cointegration.

JEL Classification: C12; C13; C32; E24; E31.

1 Introduction

The relationship between the budget deficit and the inflation rate is not a stylized fact. In the economic literature there are at least two approaches, which try theoretically to establish a relation from budget deficit to inflation, but more recently some authors present empirically a relation from inflation to budget deficit.

In the approach of Sargent and Wallace (1981), it is assumed that the fiscal authority takes the measures without taking into account the current or future monetary policies. Thus, the monetary authority has to take restrictive measures in the short-run or in the long-run to defeat inflation. A restrictive monetary policy implies an increase in interest rate and the consequent reduction in product, giving rise to an increase in deficit *ceteris paribus* the fiscal policy. The fiscal authority will have to finance this increase in deficit, either by money emission, or by indebtedness. In the first case it implies an increase in inflation.

Another approach, suggests that inflation reduces the real stock of public debt, thus people would tolerate an increase in inflation when the deficit is high because they are adverse to an increase of the fiscal burden. However, an increase in inflation, essentially the non-anticipated inflation, represents an inflationary tax.

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