

Volume 31, Issue 1

Has fiscal discretion during good times and bad times changed in the euro area countries?

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Abstract

We study the relationship between the change in the cyclically-adjusted primary balance (an indicator of discretionary fiscal policy) and the change in the output gap (an indicator of cyclical conditions). We use panel data for the euro area and data for 20 individual OECD countries, for the period 1970-2008. We show that countercyclical fiscal policy is less frequent in euro area countries than in other OECD countries. Since 1999, fiscal policies in the euro area have no longer been procyclical during good times, but they have been procyclical during bad times in two countries, Austria and Portugal.

Citation: Florence Huart, (2011) "Has fiscal discretion during good times and bad times changed in the euro area countries?", *Economics Bulletin*, Vol. 31 no.1 pp. 404-415.

Submitted: Dec 10 2010. Published: January 21, 2011.

1. Introduction

In the European Union (EU), Member States are free to use their national fiscal policies in order to smooth GDP fluctuations whenever their economy is hit by large demand shocks. This stabilization role of fiscal policy should not jeopardize the commitment towards fiscal discipline, since the EU fiscal rules, embodied in the Stability and Growth Pact, forbid "excessive" public deficits (that is public deficits above 3% of GDP and public debts above 60% of GDP). Furthermore, all EU member countries are committed to aim at a budgetary position close to balance or in surplus. To do so, they are expected to improve their structural budget balance (cyclically-adjusted budget balance) each year until their budget balance is in surplus. These EU fiscal rules are more biding for EU member countries which participate in the euro area, since other EU countries outside the euro area are not concerned with penalties for non compliance.

For euro area member countries, fiscal policy can be a useful stabilization tool, because in a monetary union, national monetary independence is lost. In addition, the usefulness of fiscal policy is increased if there is some nominal or real rigidity in the economy or alternative adjustment mechanisms are lacking.¹ In this respect, fiscal discipline does not prevent fiscal policy from being a stabilization tool. One condition is that fiscal policy is countercyclical over the business cycle whatever cyclical conditions are, that is both in good times and in bad times. Indeed, if the cyclically-adjusted budget balance improves whenever economic activity is booming (restrictive countercyclical discretionary fiscal policy), then it can worsen whenever economic activity is slowing down (expansive countercyclical discretionary fiscal policy). However, fiscal discipline and fiscal stabilization might not be consistent with each other in cases where a deficit bias results from procyclical fiscal policies². If the cyclicallyadjusted budget balance tends to worsen during good times (expansive procyclical discretionary fiscal policy), then, sooner or later, it will have to be improved during bad times (restrictive procyclical discretionary fiscal policy). In particular, this might be the case in high-deficit countries (peer pressure in the European arena, difficulties to borrow in the financial markets, or perception of negative effects of high public deficits on private sector). This would be the worst scenario: no stabilization (procyclicality) and no discipline (deficit bias).

What has been the cyclical behaviour of discretionary fiscal policy in the euro area? In this article, we want to determine whether there has been a change in the cyclical behaviour of discretionary fiscal policy in the euro area and in individual euro area member countries after 1999 to compare with the pre-1999 period (before the launch of the euro area) and in comparison with other EU countries and OECD countries. To do so, we estimate the relationship between the change in the cyclically-adjusted primary balance (an indicator of discretionary fiscal policy) and the change in the output gap (an indicator of cyclical conditions). In the following, we propose to make a short review of the empirical literature (section 2). We then present our methodology and data (section 3), and explain our results (section 4). We summarize our main findings in conclusion (section 5).

¹ The subject of the effectiveness of fiscal policy is not considered in this article.

² or from more countercyclical fiscal policies during bad times than during good times.

2. Empirical literature

A study by the European Commission shows that there was a bias in the stance of fiscal policies in individual EU-15 countries over the period 1970-1995 (EC, 2002). Specifically, in most EU-15 countries, discretionary fiscal policy was often countercyclical expansive when the output gap (defined as the difference between actual GDP and potential GDP as a percentage of potential GDP) was negative, but procyclical expansive when the output gap was positive. As a consequence, there was a deficit bias. In this study, discretionary fiscal policy is measured by the year-on-year change in the structural budget balance (that is the cyclically-adjusted budget balance in the EC database). As for the stance of discretionary fiscal policy, it is determined with regard to cyclical conditions. The latter are defined by the sign (level) of the output gap. Yet, there are some weaknesses in such an approach.

First, the change in the cyclically-adjusted primary balance describes better fiscal discretion, as long as the government has no influence on the variation of interest payments on public debt in the short term. In subsequent works, the European Commission has been using this variable (see, in particular, the annual publications Public finance in EMU). Second, the definition of cyclical conditions may be critical to the assessment of the stance of discretionary fiscal policy. Using the level of the output gap may be misleading, because the output gap may still be positive while its variation is negative, pointing to an economic slowdown.³ In such a case (as in most EU-15 countries in 2001), one may observe a worsening of the structural primary budget balance, because the government reacts to the decline in economic activity via higher public deficits. As a result, discretionary fiscal policy is countercyclical since the variation of the output gap is negative. But it would be considered as being procyclical if one retained the level of the output gap as the relevant criterion (positive output gap). In this paper, we define cyclical conditions by the change in the output gap. In our framework, fiscal policy is countercyclical (procyclical) if the correlation between the change in the cyclically-adjusted primary balance and the change in the output gap is positive (negative): the budget balance worsens (improves) during bad times or it improves (worsens) during good times.

Thus, according to the European Commission (EC, 2004, 2006), there has been a procyclical bias in fiscal policy in the euro area. This statement results from correlation analysis or regressions of the relationship between the change in the structural primary balance and the level of the output gap. The European Commission admits that this procyclical bias is unlikely if the variation of the output gap is taken instead of the level of the output gap. Besides, when the European Commission uses the variation of the output gap, the finding is that the fiscal stance tends to be countercyclical (EC, 2008) or acyclical (EC, 2004). Yet, the European Commission has still been making statements and warnings to improve public finance, based upon results from the first definition of cyclical conditions (in level terms).

For the United States, Taylor (2000, 2009) and Auerbach (2002, 2008) measured the extent to which the structural budget balance (dependent variable) is associated with the level of the output gap (independent variable) in simple regressions using ordinary least squares (OLS).

³ Except in years where there is a structural break and potential GDP varies significantly from one year to another.

They both found that discretionary fiscal policy has been increasingly countercyclical in the United States, in particular since the beginning of the nineties.

Fatás and Mihov (2009) also defined cyclical conditions by the level of the output gap but they compared two estimation methods: OLS and IV (instrument variables). The latter method accounts for an endogeneity problem, since the level of the output gap may be influenced by the change in the structural budget balance.⁴ They found that discretionary fiscal policy was procyclical in the euro area before 1999, but it has been acyclical since then. Looking at the fiscal stance in individual countries after 1999, it is worth noting that it has become procyclical in Spain, strongly countercyclical in the United States, and no longer countercyclical in Denmark and Sweden. Overall, both methods (OLS and IV) give similar qualitative results. They both lead to the conclusion that discretionary fiscal policy in the euro area is procyclical over the full sample period 1970-2007.

Moreover, some researchers have tested the hypothesis of an asymmetric behaviour of fiscal policy over the business cycle: the cyclical behaviour of fiscal policy could be different depending on whether times are good or bad. Some conclude that fiscal policy has been procyclical in the euro area during good times (Debrun, Faruqee, and Beetsma, 2004; European Commission, 2006). In some other studies, fiscal policy in the euro area has not become procyclical during bad times (OECD, 2003; European Commission, 2004).

At last, several studies conclude that the European framework of fiscal rules has not caused a procyclical bias in the stance of fiscal policies in euro area countries (Gali and Perotti, 2003; OECD, 2003; European Commission, 2004; Annett, 2006; Golinelli and Momigliano, 2006; Wyplosz, 2006; Turrini, 2008; Leigh and Stehn, 2009). Yet, there has not been any robust result towards a clear case of countercyclical fiscal stance.

3. Methodology and data

We want to test the relationship between the change in the cyclically-adjusted primary balance (CAPB) and the change in the output gap (OG). The latter is defined as the difference between actual GDP and potential GDP (as a percentage of potential GDP). We assume that the dependent fiscal variable (*CAPB*_t) can be explained by a few independent variables, namely the lagged CAPB (*CAPB*_{t-1}), the change in the output gap (ΔOG), and the lagged ratio of public debt to GDP (debt_{t-1}). For the model of the euro area (panel data) and for the model of individual countries, we have respectively,

⁴ The endogeneity problem may also be accounted for in a simple way by taking the lagged level of the output gap among the regressors. We compared this specification with a specification where the output gap is in first difference. The degree of statistical significance was similar between both specifications. As we explained *supra*, we prefer the second specification (furthermore, according to panel unit root tests, our variables for the euro area are stationary in first difference but not in level terms ; however, looking at individual countries, there are a few exceptions). Results that are not shown in the text are available upon request.

$$CAPB_{it} = \beta_1 CAPB_{it-1} + \beta_2 \Delta OG_{it} + \beta_3 debt_{it-1} + u_{it}$$

$$\tag{1}$$

$$CAPB_{t} = \beta_{0} + \beta_{1}CAPB_{t-1} + \beta_{2}\Delta OG_{it} + \beta_{3}debt_{t-1} + \varepsilon_{t}$$

$$\tag{2}$$

where the subscript *t* stands for time; the subscript *i* stands for individual country; Δ is the first difference operator. In the model of the euro area (equation (1)), we use the country and time fixed-effects OLS estimation method. The unobservable term u_{it} includes country fixed effects and time effects, in order to take into account national distinctive features, which would not be observed in the variables of the model, and some shocks or common trends to euro area countries. This term could also include a random component (ε_t). As for the model for individual countries (equation (2)), the parameter β_0 is a constant.

The lagged CAPB in the right-hand side of the equation reflects the influence of initial fiscal conditions on current fiscal decisions, in particular the degree of inertia in fiscal policy due to implementation lags or irreversible measures.⁵ In such a specification, the parameter β_1 is expected to be positive. Discretionary fiscal policy is countercyclical if the coefficient β_2 is positive: the fiscal balance improves when the change in the output gap is positive and it worsens when the change in the output gap is negative. On the contrary, discretionary fiscal policy is procyclical if β_2 is negative. As for the lagged debt-GDP ratio, it stands for a discipline effect: a positive β_3 would reflect a debt-stabilization motive in fiscal policy (a higher debt ratio triggers fiscal efforts to improve the structural primary budget balance). Finally, two dummy variables were included to test the relationship between CAPB and OG depending on two different states of nature: a dummy variable was defined for good times (Δ OG > 0) and a dummy variable was defined for bad times (Δ OG < 0).

We used the OECD *Economic Outlook* database. Our variables are the cyclically-adjusted government primary balance as a percentage of potential GDP, output gap of the total economy (actual output minus potential output), general government gross financial liabilities as a percentage of GDP. The sample is 1970-2008, but it does not start at 1970 for all countries (missing data relative to public debt). We also divided the sample into two sub-periods: before and after 1999. We considered 12 euro area countries⁶, and for comparison purposes, 3 EU countries outside the euro area (Denmark, Sweden and the United Kingdom) and 5 OECD countries outside the EU (United States, Canada, Japan, Australia and New Zealand).

4. Results

We first present a correlation analysis, because there are too few observations after 1999 to make easy interpretation of results from econometric tests. We then turn to our estimation results.

⁵ Putting CAPB_{*t*-1} in the left-hand side of the equation, one obtains a specification which would be equivalent to a specification where the dependent variable is expressed in first difference (Δ CAPB).

⁶ Some euro area countries are not considered due to a lack of data (Slovenia, Malta, Cyprus, and Slovakia).

The discretionary fiscal stance in the euro area countries was clearly procyclical during the 1993-1998 Maastricht period (table I), that is to say a period when several governments in the EU were willing to make strong efforts of budgetary consolidation in order to be ready for an entry in the European monetary union, whatever bad cyclical conditions could have been in the early nineties. In sharp contrast to that period, the period 1999-2008 is characterized by a clear countercyclical fiscal stance. This can be explained by the fact that fiscal policies have become more often countercyclical both during good times and during bad times, respectively in 71 % and 100 % of episodes (table II). Over the full period 1970-2008, fiscal policies were more often procyclical during good times (in more than half of episodes) and less often countercyclical during bad times (in half of episodes).

| | 1970-2008 | 1970-1992 | 1993-1998 | 1999-2008 | |
|----------------|-----------|-----------|-----------|-----------|--|
| Euro area | -0,02 | 0,05 | -0,30 | 0,61 | |
| Austria | -0,08 | -0,11 | 0,20 | -0,19 | |
| Belgium | -0,23 | -0,19 | -0,79 | -0,15 | |
| Greece | -0,30 | -0,34 | -0,07 | -0,43 | |
| Spain | 0,18 | 0,03 | 0,19 | 0,46 | |
| Finland | 0,41 | 0,32 | 0,38 | 0,53 | |
| France | 0,09 | 0,00 | 0,24 | 0,43 | |
| Germany | -0,11 | -0,16 | -0,24 | 0,35 | |
| Ireland | 0,13 | -0,27 | -0,64 | 0,62 | |
| Italy | 0,02 | 0,07 | -0,23 | -0,01 | |
| Luxembourg | -0,21 | | -0,03 | 0,15 | |
| Netherlands | 0,07 | 0,07 | -0,14 | 0,42 | |
| Portugal | -0,20 | -0,53 | 0,58 | -0,18 | |
| Denmark | 0,47 | 0,56 | -0,40 | 0,35 | |
| Sweden | 0,29 | 0,33 | 0,03 | 0,28 | |
| United Kingdom | -0,16 | -0,35 | -0,11 | 0,62 | |
| OECD | 0,56 | 0,20 | 0,46 | 0,84 | |
| United States | 0,45 | 0,46 | 0,93 | 0,70 | |
| Canada | 0,29 | 0,27 | -0,36 | 0,79 | |
| Japan | 0,10 | -0,23 | 0,92 | -0,22 | |
| Australia | 0,32 | 0,26 | -0,19 | 0,45 | |
| New Zealand | 0,20 | 0,32 | 0,76 | 0,29 | |

 Table I. Correlation coefficients between the change in the cyclically-adjusted primary balance and the change in the output gap

Source: OECD Economic Outlook database.

Among euro area countries, four groups of countries can be considered. In the first group (Finland, France, Germany, the Netherlands and Luxembourg), discretionary fiscal policy has become more countercyclical since 1999, both in good times and bad times. Governments may want to use fiscal policy as a stabilization policy because of asymmetric shocks (low diversification of production in Finland and Luxembourg), an inappropriate common monetary policy (higher real interest rates in Germany than in the euro area as a whole) or the perception that the effectiveness of fiscal policy is higher in monetary union, especially for small countries (lower effects on the common interest rate and the common exchange rate). In the second group (Ireland and Spain), fiscal policy has also been countercyclical, but for different reasons.⁷ In Ireland, fiscal policy is more often countercyclical during bad times (the national business cycle diverges from the one of the euro area) but it is more often procyclical

⁷ In Ireland and Spain, discretionary fiscal policy was strongly countercyclical in 2008 because these economies were early and severely hit by the crisis in the banking sector and the housing sector. If we excluded the year 2008 from the sample, then conclusions would be changed for these two countries only: the fiscal stance would have been acyclical in Ireland and procyclical in Spain since 1999.

during good times (possibly due to the boom in asset prices)⁸. In Spain, the story is reverse: fiscal policy tends to be countercyclical during good times (fiscal discipline motive) but it has become procyclical during bad times, which has led to an improvement in the budget balance. Note that since 2003, there have been national fiscal rules in Spain according to which the public sector must have a balanced budget or a surplus and in downturns, the overall deficit must not exceed 1 percent of GDP.

| | 1970-2008 | | 1999-2008 | | |
|----------------|------------|-----------|------------|-----------|--|
| | Good times | Bad times | Good times | Bad times | |
| Euro area | 46 | 50 | 71 | 100 | |
| Austria | 35 | 47 | 33 | 75 | |
| Belgium | 43 | 50 | 17 | 75 | |
| Greece (a) | 33 | 36 | 17 | 75 | |
| Spain | 67 | 46 | 60 | 40 | |
| Finland | 56 | 85 | 67 | 100 | |
| France | 55 | 69 | 67 | 100 | |
| Germany | 67 | 41 | 83 | 75 | |
| Ireland | 53 | 23 | 40 | 60 | |
| Italy | 48 | 53 | 33 | 100 | |
| Luxembourg | 56 | 22 | 67 | 50 | |
| Netherlands | 45 | 53 | 67 | 75 | |
| Portugal | 38 | 27 | 60 | 40 | |
| Denmark | 59 | 78 | 60 | 80 | |
| Sweden | 60 | 53 | 60 | 60 | |
| United Kingdom | 61 | 62 | 40 | 60 | |
| OECD | 71 | 78 | 67 | 100 | |
| United States | 71 | 71 | 67 | 100 | |
| Canada | 50 | 57 | 29 | 100 | |
| Japan | 29 | 35 | 33 | 25 | |
| Australia | 67 | 69 | 60 | 60 | |
| New Zealand | 55 | 55 | 50 | 50 | |

Table II. Frequency of episodes of countercyclical discretionary fiscal policy during good times and bad times (%)

We computed the number of times discretionary fiscal policy was countercyclical during good times (defined as periods with positive variations of the output gap) and during bad times (negative variations of the output gap). (a) Since 2001: 20% and 67% respectively during good times and bad times.

(a) Since 2001: 20% and 67% respectively during good time Source: OECD Economic Outlook database.

Source. OLED Leononne Outlook database.

In a third group of countries, the stance of discretionary fiscal policy has become procyclical (Austria, Portugal), more procyclical (Greece) or less procyclical (Belgium). In these countries (except Portugal), fiscal policy has been more often countercyclical during bad times, but more often procyclical during good times. This procyclical fiscal stance in good times may be due to a "voracity effect" (Tornell and Lane, 1999)⁹ which is more likely to apply in coalition governments (Austria, Belgium) or in countries with corruption, a poor quality of institutions and problems of debt sustainability (Greece).¹⁰ In Portugal, fiscal policy has been more often procyclical during bad

⁸ Jaeger and Schuknecht (2004) explain why a procyclical bias can be associated with asset price boom-bust cycles. Extra-revenues related to capital gains and wealth effects on consumption are spent by policymakers either by tax cuts or by extra-spending.

⁹ The "voracity" of powerful groups is such that revenue windfalls translate into a more-than-proportional increase in public spending.

¹⁰ In the literature, procyclical fiscal policy, especially in developing countries, stems from the inability of governments to borrow during bad times because of capital market imperfections (Gavin and Perotti, 1997) and to save during good times because of a "voracity effect" (see supra). This inability can also be explained by issues of debt sustainability (Alberola and Montero, 2006), corruption (Alesina and Tabellini, 2005), a poor quality of institutions (Calderon, Duncan, and Schmidt-Hebbel, 2004), heterogeneous preferences on income redistribution (Woo, 2006), a high variability of the tax base combined with political distortions (Talvi and Végh, 2000) or output volatility (Manasse, 2006).

times. We think that the Portuguese authorities agree to abide strictly by the EU fiscal rules. However, given the poor performance in economic growth, they do not succeed in reducing the public deficit permanently. Finally, in the fourth group, Italy is alone: discretionary fiscal policy has become acyclical, because a procyclical fiscal stance during good times (probably due to political and institutional factors) is counterbalanced by a countercyclical fiscal stance during bad times.

In other countries outside the euro area, discretionary fiscal policy is more often countercyclical, especially in the United Kingdom, the United States and Canada (but procyclical in Japan in the late period). The countercyclicality of fiscal policy can be explained by a higher level of financial development and inflation targeting (Aghion and Marinescu, 2007).

Estimation results for the model of the euro area are shown in table III. As for individual countries, results are too many to be shown here. As a consequence, we only report the estimated coefficients of the output gap variable (table IV), which is not disturbing since our subject is to assess the sign of β_2 in order to determine the countercyclical ($\beta_2 > 0$) or procyclical ($\beta_2 < 0$) stance of discretionary fiscal policies.

Among estimation results about the euro area (table III), the estimated coefficient of the lagged cyclically-adjusted primary balance is highly significant and positive as expected. The inertia in discretionary fiscal policy in the euro area is high (around 0.7) but it has decreased after 1999 (around 0.5). The debt stabilization motive is also significant. The stance of discretionary fiscal policy is acyclical over the full period 1970-2008 and to a lesser extent in sub-periods before and after 1999. Moreover, it tends to be procyclical during good times (significantly over the full period) and countercyclical during bad times (not significantly though).

| | 1970- | -2008 | Before | e 1999 | After 1999 | | |
|-------------------------|----------|----------|----------|----------|------------|---------|--|
| CAPB(-1) | 0.74*** | 0.72*** | 0.73*** | 0.72*** | 0.54*** | 0.52*** | |
| | (0.04) | (0.04) | (0.05) | (0.05) | (0.10) | (0.10) | |
| ΔOG | -0.01 | | -0.02 | | 0.05 | | |
| | (0.08) | | (0.10) | | (0.15) | | |
| $\Delta OG > 0$ | | -0.31** | | -0.29 | | -0.37 | |
| | | (0.15) | | (0.19) | | (0.27) | |
| Δ OG < 0 | | 0.19 | | 0.13 | | 0.34 | |
| | | (0.11) | | (0.14) | | (0.21) | |
| debt(-1) | 0.03*** | 0.03*** | 0.04*** | 0.04*** | 0.04* | 0.05** | |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.02) | (0.02) | |
| Constant | -1.78*** | -1.44*** | -2.65*** | -2.39*** | -2.38 | -2.39 | |
| | (0.50) | (0.51) | (0.70) | (0.71) | (1.49) | (1.47) | |
| Number of observations | 322 | 322 | 202 | 202 | 120 | 120 | |
| Adjusted R ² | 0.75 | 0.75 | 0.76 | 0.76 | 0.62 | 0.63 | |

| Table III. Cyclical behaviour of discretionary | y fiscal policy in the euro area |
|--|----------------------------------|
|--|----------------------------------|

Unbalanced pool of 12 euro-area countries. OLS with fixed effects (country and time effects) estimation method. Standard errors in parentheses. *, **, and *** denote significance at the 10, 5 and 1% level respectively. Coefficients of fixed effects are not reported.

With regard to our regression results for individual countries (table IV), we focus only on significant results. We find that discretionary fiscal policy is rarely countercyclical over the period 1970-2008. Among euro area countries, only Finland and the Netherlands have had a significant countercyclical discretionary fiscal policy. Outside the euro area, it is also the case in the United States and Australia. After 1999, fiscal stance has been significantly and strongly countercyclical in Spain, Ireland, the Netherlands, and outside the euro area, Denmark, the United Kingdom, Canada and Australia.¹¹ A noticeable change is observed in Austria: the discretionary fiscal stance has become significantly procyclical.

| | Change in the output gap | | | Goo | od times (∆OG | > 0) | Bad times (∆OG < 0) | | |
|-------------------|--------------------------|----------------|---------------|---------------|----------------|---------------|---------------------|----------------|---------------|
| | 1970- 2008 | Before 1999 | After 1999 | 1970- 2008 | Before 1999 | After 1999 | 1970- 2008 | Before 1999 | After 1999 |
| Austria | -0,09 | -0,04 | -0,64* | -0,18 | -0,29 | 0,93 | -0,04 | 0,12 | -1,95* |
| Belgium | -0,16 | -0,11 | -0,42 | -0,38 | -0,34 | -0,50 | 0,001 | 0,04 | -0,36 |
| Greece | -0,43 | na | -0,62 | 0,40 | Na | 0,75 | -1,87 | Na | -2,64 |
| Spain | 0,33 | -0,39 | 1,76* | -0,71 | 0,03 | -0,75 | 0,56 | -0,51 | 2,44* |
| Finland | 0,26** | 0,25 | 0,30 | 0,11 | 0,01 | 1,17 | 0,35* | 0,38 | -0,49 |
| France | 0,14 | 0,10 | 0,07 | -0,10 | -0,15 | -0,12 | 0,33* | 0,29 | 0,22 |
| Germany | 0,01 | -0,04 | -0,01 | -0,04 | -0,15 | 0,05 | 0,04 | 0,03 | -0,19 |
| Ireland | Na | na | 1,02** | Na | Na | -1,04 | Na | Na | 1,67*** |
| Italy | -0,07 | -0,07 | -0,13 | -0,22 | -0,26 | 0,07 | 0,02 | 0,03 | -0,38 |
| Luxembourg | -0,01 | na | 0,00 | 0,09 | Na | 0,49 | -0,07 | Na | -0,35 |
| Netherlands | 0,37* | 0,26 | 0,63*** | 0,20 | 0,08 | 0,06 | 0,47 | 0,37 | 1,01*** |
| Portugal | -0,23 | na | -0,32 | 0,98 | Na | 1,57 | -1,07* | Na | -1,32* |
| Denmark | 0,32 | 0,07 | 0,71** | 0,40 | 0,24 | 0,81 | 0,25 | -0,16 | 0,63 |
| Sweden | 0,21 | 0,22 | 0,08 | -0,26 | -0,45 | 0,52 | 0,47 | 0,64 | -0,25 |
| United Kingdom | -0,18 | -0,20 | 0,99** | -0,80*** | -0,92*** | -0,62 | 0,23 | 0,25 | 1,85** |
| United States | 0,23** | 0,17** | 0,76 | 0,22 | 0,11 | 0,55 | 0,23 | 0,22 | 0,88 |
| Canada | 0,11 | 0,09 | 0,55*** | -0,18 | -0,27 | 0,94*** | 0,30** | 0,32* | 0,29 |
| Japan | 0,11 | 0,15 | -0,41 | -0,19 | -0,35 | 0,61 | 0,33 | 0,48 | -1,52 |
| Australia | 0,47*** | 0,37*** | 0,54* | 0,22 | 0,33 | 1,01 | 0,57*** | 0,40** | 0,36 |
| New Zealand | 0,25 | -0,17* | 0,45 | 0,36 | na | -0,39 | 0,18 | Na | 1,25* |
| OECD-5 | 0,20** | 0,20** | -0,05 | -0,05 | -0,03 | -0,10 | 0,38** | 0,35** | 0,01 |
| EU-3 | 0,001 | 0,08 | -0,65 | -0,13 | -0,18 | -0,59 | 0,07 | 0,20 | -0,69 |
| EA-12 | -0,01 | -0,02 | 0,05 | -0,31* | -0,29 | -0,37 | 0,19 | 0,13 | 0,34 |

Table IV. Estimated response coefficient of the CAPB to cyclical conditions in individual countries

*, **, and *** denote significance at the 10, 5 and 1% level respectively. All regressions include constants and coefficients of other explanatory variables (not reported), such as the lagged CAPB and the lagged debt to GDP ratio.

na: not available. Data before 1999 are missing (mainly relative to public debt) for Greece, Ireland, Luxembourg and Portugal.

The European Commission (EC, 2002) warned against procyclical fiscal policies during good times. Is there such a bias? We do not find any bias in the euro area countries after 1999. On the contrary, there have been more countries where the fiscal stance has been countercyclical

¹¹ Results are biased by the year 2008 in Ireland and Spain (see supra).

restrictive during good times (not significantly due to a small number of observations). Elsewhere, it is noteworthy that since 1999, Canada has improved significantly the structural primary budget balance during upturns while the United Kingdom has ceased to worsen it during such periods.

In the end, do national fiscal policies play a stabilization role when economic activity is declining? Yes, they do, but a little in the euro area. Since 1999, the fiscal stance has been countercyclical expansive in Spain (except if we drop the year 2008 from the sample), Ireland, the Netherlands, and to a lesser extent, France (not significantly). Outside the euro area, this has also been the case in the United Kingdom and New Zealand. A noticeable change is found in Austria and Portugal: discretionary fiscal policy is found to be significantly and strongly procyclical during downturns. In Austria, since 1999, there has been a rule of a balanced budget which applies to all levels of government (National Stability Pact) with sanctions in case of non-compliance. In Portugal, since 2002, there has been a balanced budget rule for central government. Such national fiscal rules, which are generally adopted to ease the compliance with supranational fiscal rules, may create an incentive to cut public spending (or increase taxes) in downturns.

5. Conclusion

We wanted to assess whether the cyclical behaviour of discretionary fiscal policies in euro area countries has changed since 1999, and in particular, test whether this behaviour has been asymmetric over the business cycle. Among our most noteworthy estimation results, we found that discretionary fiscal policies have actually not been often countercyclical in euro area countries since 1970. They have been more countercyclical during downturns since 1999, especially in Ireland and the Netherlands. Yet, the fiscal stance has been procyclical restrictive during downturns in two countries, namely Austria and Portugal. In those countries, governments seem to be concerned by the compliance with EU fiscal rules. As for upturns, we did not find evidence of a procyclical bias during good times, but the fiscal stance has not been more clearly countercyclical either.

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