

## 7 Fiscal policy stance during past periods of expansion

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**Economic activity in the euro area and in most of its member countries has recovered to pre-crisis levels and is currently expanding.** Over the past four years the gradual move towards a broad-based and self-sustained expansion has been accompanied by a broadly neutral fiscal stance for the euro area aggregate. In other words, discretionary policies neither provided a significant impulse to the economy, nor did they act as a drag on growth for the euro area as a whole. As the expansion is becoming more solid and mature, a more countercyclical stance may become appropriate for the euro area. Arguments in favour of a countercyclical fiscal policy put forward in the literature<sup>30</sup> essentially hinge on the need to improve fiscal positions during good economic times and to use the resulting fiscal space to support the economy during recessions, without hampering debt sustainability. In the euro area, the important role that automatic stabilisers play in ensuring counter-cyclical policy requires countries to conduct their policies in line with their commitments under the Stability and Growth Pact (SGP). This will allow countries to rebuild fiscal buffers, reduce debt ratios and keep fiscal policies on a sustainable path.

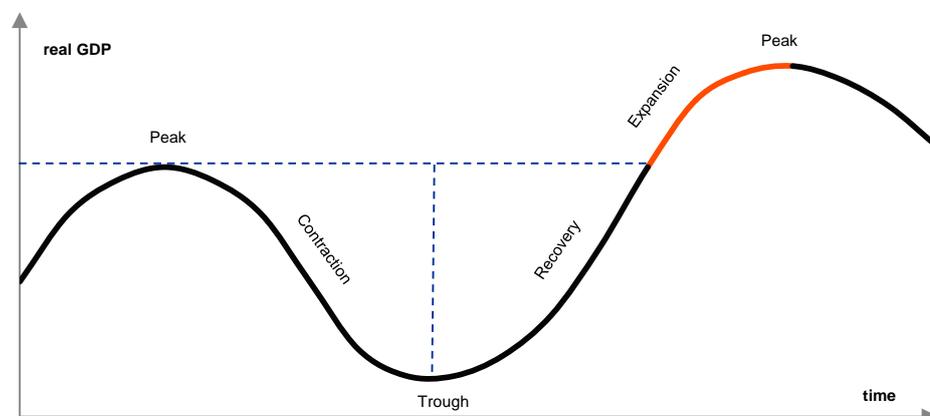
**Against this background, this box looks at the fiscal policy stance during past expansionary periods and the extent to which good economic times have been used to build fiscal buffers.** For the purposes of this box, an expansion is the period of time after the level of GDP has returned to its pre-contraction peak and until it reaches the next peak.<sup>31</sup> This part of the cycle is often called an expansion, as opposed to the recovery phase, i.e., the period of GDP returning from a cyclical trough to the previous peak (see Chart A). An alternative metric used to characterise expansions consists of identifying periods where the output gap is positive and the pace of actual GDP growth is higher than the growth of potential GDP.

<sup>30</sup> See, among others, Taylor, John B., "Reassessing Discretionary Fiscal Policy", *The Journal of Economic Perspectives*, Vol. 14, No 3, 2000, pp. 21-36 and, for a more recent discussion, "Now is the time: Fiscal policies for sustainable growth", *Fiscal Monitor*, IMF, Washington, April 2015.

<sup>31</sup> To determine cyclical peaks and troughs, the Bry-Boschan procedure for quarterly real GDP frequency is used. For more details, see Harding and Pagan, "Dissecting the cycle: a methodological investigation", *Journal of Monetary Economics*, Vol. 49, Issue 2, 2002, pp. 365-381.

## Chart A

### Stylised representation of the business cycle



Notes: The expansion segment in red delineates the period between the point in time when the level of real GDP is back to its previous peak and continues to grow until the next peak is reached. A contraction is defined as a period with at least two consecutive quarters of negative GDP growth.

**Between 1996 and 2007 the euro area experienced a long period of expansion (see Table A).** During this period euro area real GDP grew by 2.4% per year on average. Among the five largest countries, France, Spain and the Netherlands experienced a long period of expansion, with Spain and the Netherlands recording average GDP growth significantly higher than that recorded in France. In the case of Germany and Italy, the very long period of expansion was interrupted in the early 2000s, only to resume around the mid-2000s and last until 2007. Of the five largest euro area countries, Italy recorded the lowest average real GDP growth rate during the period of expansion preceding the great recession. In more recent years, Germany has been the only country for which a short-lived expansion was identified in the immediate aftermath of the 2008-09 financial and economic crisis.

**Table A****Fiscal stance and fiscal developments during expansionary periods**

Expansionary periods	Average annual fiscal stance	Cyclically adjusted primary balance		General government debt		Primary balance	Real GDP growth	Output gap
		beginning	end	beginning	end			
	(% of GDP)						Average (%)	
<b>euro area</b>								
Q1 1996-Q1 2008	0.0	0.5	0.7	70.8	64.9	1.4	2.4	0.6
<b>Germany</b>								
Q1 1996-Q2 2001	0.6	0.4	3.3	54.8	58.9	1.3	1.9	0.0
Q2 2005-Q1 2008	0.6	0.0	1.8	64.8	63.7	1.1	2.6	-0.1
Q1 2011-Q3 2012	1.5	-0.6	1.2	80.9	79.8	1.9	2.5	0.5
<b>France</b>								
Q1 1996-Q1 2008	-0.1	-0.7	-1.7	55.8	64.3	0.2	2.3	0.8
<b>Italy</b>								
Q1 1996-Q1 2001	0.0	3.9	4.0	116.9	105.1	5.0	2.0	0.3
Q4 2003-Q1 2008	0.1	1.5	1.9	100.5	99.8	1.4	1.5	1.4
<b>Spain</b>								
Q1 1996-Q2 2008	0.2	-0.8	1.9	61.7	35.6	2.0	3.8	1.7
<b>Netherlands</b>								
Q1 1996-Q2 2008	0.3	-2.8	0.8	73.6	42.7	2.4	3.0	0.0

Sources: European Commission, Eurostat and ECB calculations.

Notes: Expansionary periods denote the quarters after the level of GDP has returned to its pre-contraction peak and until it reaches the next peak. The annual average fiscal stance is calculated as the average annual change in the cyclically adjusted primary balance (CAPB). Since data for the CAPB are available as of 1995, and thus data on the fiscal stance as of 1996, the start of the first expansionary phase is set to the first quarter of 1996. However, real GDP for the euro area reached the pre-crisis peak in the second quarter of 1994. The indicators refer to end-of-year data, when the end of the expansion is dated from the third quarter onwards. For Germany and the euro area, the CAPB in 1995 is corrected for the large one-off impact of the inclusion, in the German Federal Budget, of the Treuhandanstalt (i.e. a trust agency established to privatise companies in the former German Democratic Republic).

**In the period preceding the financial crisis, the fiscal stance in the euro area was on average neutral.**<sup>32</sup> Across countries, the fiscal stance, defined as the change in the cyclically adjusted primary balance (CAPB), was broadly neutral in Spain, Italy and France, mildly contractionary in the Netherlands and more countercyclical in Germany<sup>33</sup> (see Table A). Given that GDP growth was also strong, the debt ratio declined significantly in Spain and the Netherlands. By contrast, it increased in France not least on the back of a persistently negative CAPB over the entire expansionary period. It should be noted that Italy ran somewhat sizeable

<sup>32</sup> The fiscal stance measures the effect of government policy on the budget balance. The cyclically adjusted primary balance (i.e. the headline balance net of interest payments and the cyclical component) is the main metric used to measure this effect. It could nonetheless be an imperfect measure of government effort, given the uncertainty surrounding the measurement of the output gap and the fact that the metric itself could be influenced by factors outside the government's control. Such factors include government revenues and social contributions that depend on bases which often evolve somewhat differently from GDP, such that standard tax elasticities do not hold. Recently, the assessment of fiscal effort has come to be supplemented by a "bottom-up" analysis, which provides a more detailed quantification of government effort in terms of revenues and expenditure measures. For more details, see the article entitled "The assessment of fiscal effort", *Monthly Bulletin*, ECB, October 2014.

<sup>33</sup> A fiscal stance of between -0.2% and 0.2% of GDP is generally regarded as broadly neutral. The analysis carried out in this box uses ex post data. It should be noted that, compared with the real-time data, ex post data show a deterioration in the CAPB in the euro area countries as a result of ex post downward revisions of potential output during the 1996-2007 expansionary period. This means that real-time data would have shown a more countercyclical stance than its ex post realisation.

primary surpluses during the 1996-2000 period of expansion, resulting in a substantial reduction in its debt ratio. However, this performance was not repeated in the subsequent expansionary period of 2003-07, when average real GDP growth was slightly weaker and the size of the primary surplus was significantly lower. Germany stands out as the country with the consistently highest degree of counter-cyclicality during expansionary phases.

**A simple “fiscal reaction function” approach makes it possible to identify the major factors driving discretionary policies.** According to the relevant literature,<sup>34</sup> when choosing which fiscal stance to take, policymakers may be influenced by (i) the level of debt, as high debt ratios may call for consolidations to ensure sustainability; (ii) the starting level of the primary balance, as the higher the starting level of the primary surplus, the lesser is the need to build fiscal buffers; (iii) electoral considerations, as fiscal policies may be used to gain electoral support during elections; and (iv) the business cycle, as governments may build fiscal buffers during economic good times to counter the effects of a subsequent recession.

**The estimated fiscal reaction function appears consistent with the descriptive evidence presented in Table A.** Chart B shows the relative impact on the predicted fiscal stance of the statistically significant explanatory variables, as obtained on the basis of the fiscal reaction function estimates.<sup>35</sup> They confirm the findings of the literature, namely that the overall fiscal stance has been influenced positively (i.e. in the sense of a tighter fiscal stance) by the level of debt, and negatively (i.e. in the sense of a looser fiscal stance) by the starting level of the primary balance. Furthermore, Chart B shows that during periods of economic expansion, as defined in this box, the fiscal stance also tends to be relatively tighter.

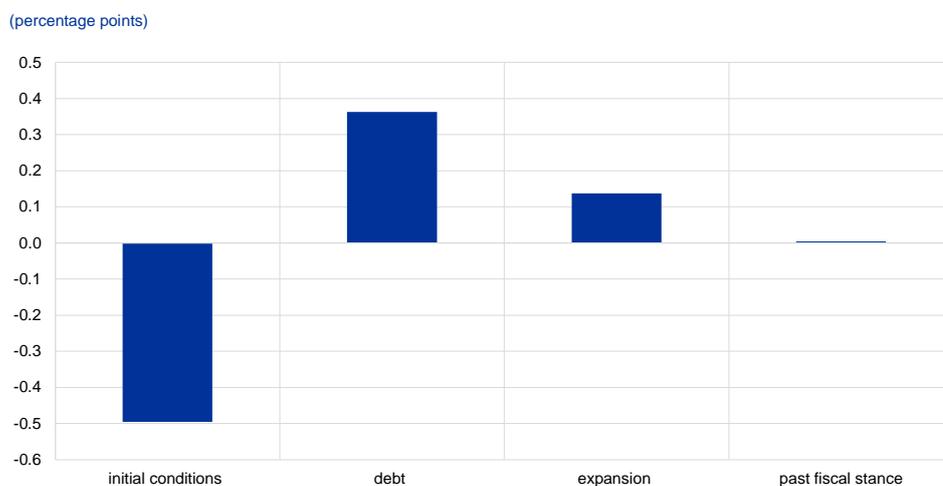
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<sup>34</sup> See Turrini, A., “Fiscal policy and the cycle in the Euro Area: The role of government revenue and expenditure”, *Economic Papers*, No 323, 2008; Checherita-Westphal, C. and Ždársek, V., “Fiscal reaction function and fiscal fatigue: evidence for the euro area”, *Working Paper Series*, No 2036, ECB, 2017; and Golinelli, R., Mammi I., Momigliano, S. and Rizza, P., “The Cyclicity of Fiscal Policy in the Euro Area over the Crisis” in *Proceedings of the 19th Workshop on Public Finance*, Banca d'Italia, 2017, mimeo.

<sup>35</sup> According to the fiscal reaction function approach, the fiscal stance (i.e. the change in the CAPB) is estimated as a function of: (i) the lagged fiscal stance; (ii) the lagged level of the CAPB; (iii) the lagged debt level; and (iv) a dummy variable equal to 1 during years of economic expansion (as defined in Chart A above), and 0 otherwise. This relationship is estimated for a sample of the five largest euro area countries during the period 1996-2017. The estimation methods consist of fixed-effects panel data and instrumental variable techniques to account for potential endogeneity issues. Further robustness checks include estimation by the dynamic generalised method of moments.

## Chart B

### Contributions to the fiscal stance (1996-2017)



Notes: The bars represent the relative impact of each explanatory variable considered in the fiscal reaction function estimates on the fiscal stance (i.e. change in the cyclically adjusted primary balance – CAPB). For each variable the relative impact is calculated as the product of the estimated coefficient and the average value of that variable, taken as a ratio of the predicted value of the fiscal stance. Coefficient estimates have been obtained by means of panel fixed-effects techniques of a fiscal reaction function (see footnote 35). Further robustness checks include estimation by dynamic generalised method of moments to account for potential endogeneity due to inclusion of the lagged dependent variable among the regressors. The instruments used are lagged values of the endogenous variables. Results are robust to the various specifications. Observations = 100. The initial conditions include the lagged level of the CAPB and the constant.

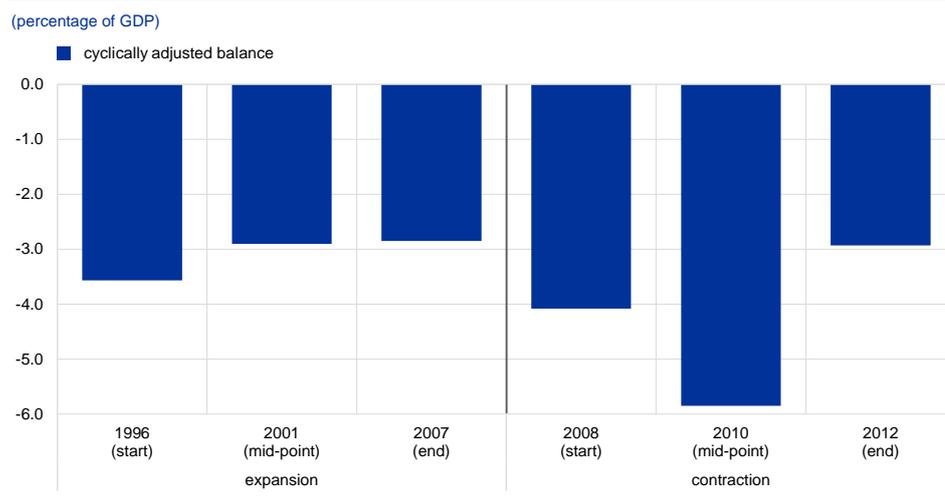
**The mildly countercyclical or broadly neutral stance that prevailed during the expansionary phase before the financial crisis was not sufficient to build adequate buffers for the following recession.** Within the EU fiscal governance framework, all EU countries need to achieve sustainable debt levels while ensuring that their budgets have enough room to manoeuvre and a safety margin against breaching the EU's fiscal rules in the event of negative shocks.<sup>36</sup> During the very long expansionary period before the 2008-09 financial and economic crises, the euro area failed to build sufficient fiscal buffers. This was because it recorded a persistently negative cyclically adjusted budget balance (i.e. the headline budget balance net of the cyclical component – see Chart C). The euro area entered the crisis with a cyclically adjusted budget balance of -2.8%. In the subsequent 2008-10 period the cyclically adjusted budget balance deteriorated further by almost 3 percentage points of GDP (reaching -5.8% in 2010), and the debt-to-GDP ratio increased by almost 20 percentage points of GDP, according to data from the European Commission. Based on this experience and in view of the legacy debt accumulated during the double-dip recession, there seems to be good reason for the euro area countries to take advantage of the current favourable economic conditions to rebuild sufficient fiscal buffers, in line with the SGP. In this context, it is worthwhile recalling the Eurogroup's observation in November 2017 that the limited structural fiscal adjustment expected in 2018 in some Member States was a matter of concern,

<sup>36</sup> Since 2005 this requirement has been operationalised by requiring that countries converge towards their medium-term objective, that is, the budget needs to be in, or close to, balance in structural terms. As this analysis starts before the introduction of the structural balance, the level of the cyclically adjusted budget balance at the end of each expansion is used as a proxy of the degree to which countries have built fiscal buffers.

in particular when coupled with high sustainability risks.<sup>37</sup> The Eurogroup invited all Member States deemed by the Commission to be at risk of not complying with the requirements of the SGP to consider in a timely manner the necessary additional budgetary measures to ensure compliance in 2018.

### Chart C

#### Euro area cyclically adjusted budget balance in the previous expansion and contraction



Source: European Commission.

Notes: See the note to Chart A for the definition of expansion and contraction. The mid-point refers to the year in the middle of the expansion and contraction period.

<sup>37</sup> See the box entitled “An assessment of the review of draft budgetary plans based on the 2018 exercise”, *Economic Bulletin*, Issue 8, ECB, 2017.