

## ARTICLES

# TEN YEARS OF THE STABILITY AND GROWTH PACT



*The Stability and Growth Pact, which aims to ensure that EU Member States' fiscal policies support the smooth functioning of EMU, came into operation approximately ten years ago.<sup>1</sup> This article reviews fiscal developments in the euro area and in EU Member States since the Pact entered into force. It argues that the fiscal position of the euro area has improved compared with previous decades and that the trend towards ever higher government indebtedness has been brought to a halt. However, the compliance of individual Member States with the budgetary norms of the Maastricht Treaty and the Stability and Growth Pact has been uneven. Breaches of the 3% of GDP reference value for the government deficit have been repeated and persistent in some countries, leading to the conclusion that at least in these cases the implementation of the Pact has lacked sufficient rigour and political will. To varying degrees across countries, deviations from fiscal plans have been caused by over-optimistic growth forecasts, ex post data revisions, larger than expected revenue fluctuations and persistent expenditure slippages. Fiscal positions in most Member States have improved significantly in the past few years, and in 2007 the euro area government deficit reached its lowest level in decades. However, this development has been aided by favourable economic conditions, and further consolidation towards medium-term budgetary objectives is still needed in many countries. Looking ahead, prudent and stability-oriented fiscal strategies are called for, which, taking account of the lessons of the past ten years, ensure long-term fiscal sustainability and contribute to long-term growth and employment creation.*

### I INTRODUCTION

Sound fiscal policies are essential for the successful functioning of EMU. Excessive borrowing by governments contributes to demand and inflationary pressures, potentially requiring the central bank to keep short-term interest rates at a higher level than would otherwise be necessary in order to maintain price stability.<sup>2</sup> By putting upward pressure on interest rates, high government deficits and debt are liable to crowd out private investment and thereby dampen long-term economic growth. At the same time, the traditional incentives for EU Member States to maintain fiscal discipline may be reduced once they enter the euro area as the elimination of intra-area exchange rate risk and the associated interest rate risk premia weakens the link between government lending behaviour and financial market reactions.<sup>3</sup>

Recognising that unrestricted fiscal policies in EMU could be subject to a deficit bias, the Maastricht Treaty introduced a number of provisions which aim to ensure an appropriate degree of fiscal rectitude. Notably, in Stage Three of EMU, Member States are obliged to avoid “excessive government deficits”, which are assessed against reference values of 3% and

60% of GDP for general government deficit and debt respectively. Not having an excessive deficit in the sense of the Treaty is one of the convergence criteria that Member States are expected to fulfil prior to adopting the euro. Moreover, the Treaty provides for an “excessive deficit procedure” to ensure that excessive deficits are corrected promptly should they occur.

In the run-up to Stage Three of EMU, however, concerns emerged that the provisions of the Treaty alone would be insufficient to ensure fiscal discipline once EMU membership had been achieved. In the light of these concerns, at the European Council meeting in Amsterdam in June 1997, EU Member States signed the Stability and Growth Pact. The Pact consists of

- 1 Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies entered into force on 1 July 1998. Council Regulation (EC) No 1467/97 of 7 July 1997 on speeding up and clarifying the implementation of the excessive deficit procedure came into force on 1 January 1999.
- 2 See the article entitled “One monetary policy and many fiscal policies: ensuring a smooth functioning of EMU” in the July 2008 issue of the Monthly Bulletin.
- 3 See the article entitled “Fiscal policies and financial markets” in the February 2006 issue of the Monthly Bulletin.

two Council regulations and a resolution of the European Council, all of which were amended in 2005.<sup>4</sup> The first Council Regulation “on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies” is typically referred to as the “preventive arm” of the Pact.<sup>5</sup> It commits Member States to submit stability and convergence programmes and to pursue appropriate medium-term budgetary objectives, which should ensure that public finances are sustainable in the long run and create a sufficient safety margin to prevent excessive deficits occurring in the short run. The second Council Regulation “on speeding up and clarifying the implementation of the excessive deficit procedure” is usually referred to as the Pact’s “corrective arm”, or alternatively as its “deterrent arm”.<sup>6</sup> Its main purpose is to guarantee a strict and timely implementation of the excessive deficit procedure, including the imposition of sanctions if necessary, thereby also acting as a deterrent against excessively loose fiscal policies. In the European Council Resolution, the European Council solemnly invited all parties concerned, namely the Member States, the EU Council and the European Commission, to implement the Treaty and the Pact in a strict and timely manner.<sup>7</sup>

In autumn 1998 EU Member States began submitting their first “stability and convergence programmes” in accordance with the Stability and Growth Pact. This article considers the experience of fiscal policies during the decade since the Pact entered into force. Section 2 presents a longer-term perspective by reviewing euro area aggregate fiscal developments before and after the Maastricht Treaty and the Pact were adopted. Section 3 provides an overview of the implementation of the Pact, focusing on Member States’ compliance with the main provisions of the preventive and corrective arms. Section 4 draws some lessons from observed deviations of fiscal outcomes from the plans presented by euro area countries in their stability programmes. Section 5 provides some concluding remarks, including an examination of the challenges ahead.

## 2 EURO AREA FISCAL DEVELOPMENTS IN A LONGER-TERM PERSPECTIVE

In the decades preceding EMU, fiscal policies in many European countries were characterised by unsustainable rates of spending growth, large deficits and the building-up of large amounts of government debt. For the 15 countries that currently form the euro area, the aggregate government debt-to-GDP ratio rose from well below 40% of GDP in 1980 to over 70% by the mid-1990s (see Chart 1). This increase in borrowing and indebtedness was accompanied by a notable rise in government spending. The ratio of cyclically adjusted total expenditure to potential GDP increased by around 5 percentage points during this period, reaching levels above 50%.<sup>8</sup> This increase was explained partly by higher primary spending, but also, notably, by a significant rise in the interest burden on government debt. Government revenues also increased as a percentage of (potential) GDP, but not by enough to close a persistently large financing gap.

Since the mid-1990s the aggregate fiscal position of the euro area countries has improved markedly. Fiscal consolidation was particularly strong in the run-up to Stage Three of EMU as countries strove to correct excessive deficits and thereby qualify to be among the first wave of countries adopting the euro. Euro area government net borrowing was reduced from over 5% of GDP in the early 1990s to below 3%

4 For an overview of the Pact in its original form, see the article entitled “The implementation of the Stability and Growth Pact” in the May 1999 issue of the Monthly Bulletin. For an overview and assessment of the changes made to the Pact in 2005, see the article entitled “The reform of the Stability and Growth Pact” in the August 2005 issue of the Monthly Bulletin. See also “The reform and implementation of the Stability and Growth Pact” by R. Morris, H. Ongena and L. Schuknecht, ECB Occasional Paper No 47, June 2006.

5 Council Regulation (EC) No 1466/97 of 7 July 1997 as amended by Council Regulation No 1055/2005 of 27 June 2005.

6 Council Regulation (EC) No 1467/97 of 7 July 1997 as amended by Council Regulation No 1056/2005 of 27 June 2005.

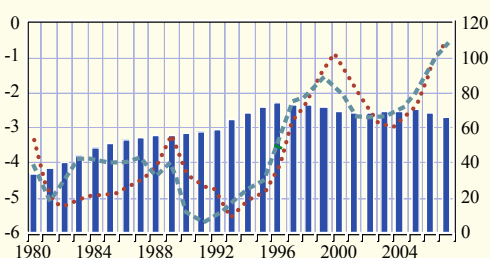
7 Resolution of the European Council on the Stability and Growth Pact, Amsterdam, 17 June 1997.

8 Cyclically adjusted revenue and expenditure are expressed here as a percentage of potential GDP because dividing by actual GDP would cause the ratios to change purely because of cyclical fluctuations in output.

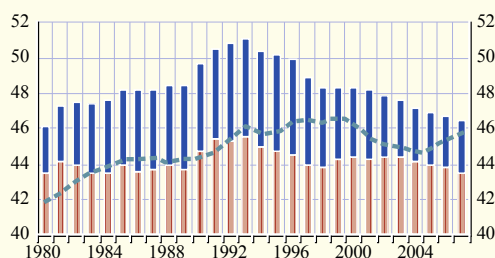
Chart I Euro area fiscal developments

(general government; as a percentage of GDP)

■ consolidated gross debt (right-hand scale)  
 ● net lending/borrowing (left-hand scale)  
 - - - cyclically adjusted net lending/borrowing (left-hand scale)

(general government; as a percentage of potential GDP<sup>1)</sup>)

■ interest expenditure  
 ■ cyclically adjusted primary expenditure  
 - - - cyclically adjusted total revenue



Sources: The European Commission's AMECO database and ECB calculations.

Note: Data exclude receipts from the sale of Universal Mobile Telecommunication System (UMTS) licences.

1) Potential GDP as estimated by the European Commission.

in 1997 and to just 1% in 2000, at the peak of the last economic cycle.<sup>9</sup> However, active fiscal consolidation stalled around the turn of the century and the deficit-to-GDP ratio increased again in the context of the subsequent economic slowdown, reaching 3.1% in 2003. Since then, the euro area deficit-to-GDP ratio has declined again amid more favourable macroeconomic conditions to reach a new low of just 0.6% in 2007. The significant increase in the euro area government debt-to-GDP ratio of earlier decades has also been brought to a halt, with a modest reduction to somewhat below 70% having been achieved in recent years.

As regards the composition of budgetary adjustment, cyclically adjusted total expenditure as a percentage of potential GDP has declined by almost 5 percentage points since the early 1990s and now stands at broadly the same level as in 1980. More than half of this reduction can be explained by a decline in the interest spending ratio, which is mainly due to the lower interest rates paid on government debt as a consequence of having a price stability-oriented monetary policy. The decline in the primary spending ratio has been more limited. Cyclically adjusted total revenue as a percentage of potential GDP has fluctuated around a broadly stable level over the past decade, but still remains at a higher level than at the beginning of the 1980s.

### 3 THE IMPLEMENTATION OF THE STABILITY AND GROWTH PACT

#### THE PREVENTIVE ARM

Under the preventive arm of the original Stability and Growth Pact, Member States were obliged to target “close to balance or in surplus” budgetary positions over the medium term. Initially the term “close to balance or in surplus” was not defined further, but was generally considered to mean a budgetary position which at the very least would provide a sufficient safety margin to avoid breaching the 3% of GDP reference value under normal circumstances while allowing for the free operation of the automatic stabilisers. A measure of whether or not such a safety margin is achieved is provided by the “minimum benchmarks” calculated by the European Commission, based on standard OECD budget elasticities and past output developments. Over time, however, the close to balance or in surplus requirement came to be interpreted more strictly as meaning a broadly balanced budget (i.e. a deficit of no more than 0.5% of GDP) in cyclically adjusted or structural terms. Such a strict interpretation was deemed appropriate not least in view of the need for

<sup>9</sup> The deficit ratio of 1% of GDP for 2000 excludes negative capital expenditure stemming from the sale of Universal Mobile Telecommunication System (UMTS) licences. Including these receipts, the euro area posted a small budget surplus in 2000.

Member States to target sufficiently ambitious budgetary positions that guarantee the long-term sustainability of public finances in a context of ageing populations.

Since the reform of the Pact that took place in 2005, Member States have set themselves differentiated medium-term objectives, which may diverge from a close to balance or in surplus position. Specifically, these objectives should (i) provide a safety margin with respect to the 3% of GDP ceiling for the government deficit ratio, (ii) ensure rapid progress towards fiscal sustainability and, taking this into account, (iii) allow budgetary room for manoeuvre,

considering in particular the need for public investment. For countries participating in the euro area and ERM II, medium-term objectives are set within a range of -1% of GDP and “balance or surplus”, and they are defined in terms of the structural budget balance (measured as the cyclically adjusted balance, net of one-off and temporary measures). If the objective is not reached, a Member State is expected to take steps to achieve it over the economic cycle. In this context, euro area and ERM II countries are expected to pursue an annual improvement of the structural budget balance of 0.5% of GDP as a benchmark. The adjustment effort should be higher in economic “good times”, i.e. periods

**Table I Compliance with the preventive arm of the Stability and Growth Pact**

(as a percentage of GDP)

□ indicates a budgetary position close to balance or in surplus prior to 2005 and compliance with medium-term objective thereafter  
 ■ indicates compliance with minimum benchmark only  
 ■ indicates non-compliance with minimum benchmark

	MB	MTO	General government structural net lending (+)/borrowing (-)									
			1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Belgium	-1.3	0.5	-0.6	-0.8	-0.9	0.1	-0.1	-1.1	-0.9	-0.2	-0.6	-0.3
Germany	-1.6	BB	-1.9	-1.3	-1.9	-3.4	-3.6	-3.3	-3.0	-2.4	-1.4	-0.3
Ireland	-1.5	BB	2.0	1.5	3.0	-0.2	-1.7	-0.1	2.1	1.3	2.9	0.2
Greece	-1.4	BB	-3.3	-2.6	-3.3	-4.9	-4.7	-5.9	-8.0	-5.7	-3.7	-3.5
Spain	-1.2	BB	-3.1	-1.7	-1.9	-1.4	-0.9	-0.3	-0.2	1.2	2.0	2.4
France	-1.6	BB	-2.4	-2.1	-2.6	-2.5	-3.5	-4.0	-3.8	-3.6	-2.7	-2.7
Italy	-1.4	BB	-2.5	-1.6	-2.9	-4.1	-3.4	-5.1	-4.7	-4.5	-2.8	-1.5
Cyprus	-1.8	BB	-3.7	-4.5	-3.1	-3.4	-5.1	-8.1	-5.2	-2.8	-0.7	3.5
Luxembourg	-1.0	-0.8	4.3	3.0	4.0	5.3	1.6	1.2	-0.9	0.4	1.4	2.8
Malta	-1.7	BB	-10.3	-8.5	-7.8	-6.5	-5.8	-6.5	-4.2	-4.1	-2.9	-2.4
Netherlands	-1.1	-1 to -0.5	-1.3	-0.8	-0.4	-1.3	-1.9	-2.0	-1.1	0.8	1.1	0.3
Austria	-1.6	BB	-2.5	-2.8	-3.0	-0.3	-0.3	-0.6	-3.1	-0.8	-1.4	-1.0
Portugal	-1.5	-0.5	-3.8	-3.5	-4.5	-5.4	-3.4	-4.7	-4.9	-5.2	-3.2	-2.2
Slovenia	-1.6	-1.0	-2.5	-2.4	-4.1	-4.5	-2.2	-1.9	-1.6	-0.9	-1.3	-0.7
Finland	-1.2	2.0	0.6	0.6	5.2	4.0	4.1	3.3	2.9	3.7	4.2	4.9
<b>Euro area</b>			<b>-2.1</b>	<b>-1.6</b>	<b>-2.0</b>	<b>-2.6</b>	<b>-2.7</b>	<b>-3.1</b>	<b>-2.9</b>	<b>-2.2</b>	<b>-1.2</b>	<b>-0.7</b>
Bulgaria	-1.3	BB	.	.	-0.9	0.6	-0.1	0.0	1.0	1.5	2.5	3.1
Czech Republic	-1.6	-1.0	-4.0	-2.6	-3.2	-5.4	-5.7	-5.5	-1.3	-3.3	-2.9	-2.3
Denmark	-0.5	0.5-1.5	-0.5	0.5	0.7	0.5	0.4	0.9	2.5	5.3	4.1	3.9
Estonia	-1.9	BoS	-0.8	-2.0	0.2	0.1	0.3	1.9	1.6	1.2	1.0	1.3
Latvia	-2.0	-1.0	0.0	-3.2	-2.3	-2.0	-2.0	-1.2	-0.8	-0.5	-1.1	-1.4
Lithuania	-1.9	≥ -1.0	-3.2	-1.5	-2.1	-3.0	-1.6	-1.9	-2.1	-1.1	-1.0	-1.4
Hungary	-1.6	-0.5	-7.5	-4.8	-2.7	-3.7	-8.6	-6.8	-6.9	-8.6	-9.7	-4.7
Poland	-1.5	-1.0	-4.5	-2.5	-3.5	-5.4	-4.3	-5.9	-5.9	-4.2	-4.0	-2.5
Romania	-1.8	-0.9	-1.3	-1.5	-1.6	-1.7	-0.9	-0.8	-1.8	-1.6	-2.7	-3.4
Slovakia	-2.0	-0.8	-4.6	-5.9	-11.0	-5.3	-7.2	-1.4	-1.4	-1.0	-3.1	-2.6
Sweden	-1.0	1.0	1.7	1.0	2.6	1.6	-1.0	-0.2	0.2	1.9	1.5	2.8
United Kingdom	-1.4	GR	-0.3	0.8	0.7	0.3	-1.9	-3.4	-3.7	-3.4	-2.8	-3.0

Sources: European Commission and ECB calculations.

Notes: One-off and temporary measures as defined by the European Commission are only netted out of the structural balance from 2003 onwards. Before then, the structural balance is equated with the cyclically adjusted balance. Cells are unshaded if a country was not an EU Member State at the time. Data exclude receipts from the sale of UMTS licences.

MB: minimum benchmark, MTO: medium-term objective, BB: balanced budget, BoS: balanced budget or surplus, GR: golden rule (surplus on current spending over the economic cycle).

in which output (growth) is above potential, but may be more limited in economic “bad times”.

Bearing these provisions in mind, Table 1 presents a stylised overview of compliance with the preventive arm of the Stability and Growth Pact over the past ten years. For ease of exposition, a Member State is shown as “fully” complying with the preventive arm (see legend) if (i) for the period prior to 2005 the structural balance is equal to or greater than -0.5% of GDP and (ii) for the period 2005 onwards the structural balance is equal to or greater than the country’s stated medium-term objective.<sup>10</sup> In the absence of “full” compliance, a distinction is also made between Member States whose structural deficits are above or below their respective minimum benchmarks, the latter behaviour being described as “partial” compliance (see legend).

On this basis, among the current euro area countries, Ireland, Luxembourg and Finland have fully complied with the provisions of the preventive arm either in every year or in the vast majority of years since 1998. They have been joined by Spain since 2003, by the Netherlands since 2005 and by Cyprus in 2007. Slovenia is also judged to have partially or fully complied with the preventive arm of the Pact since joining the EU in 2004. Belgium is seen as partially complying in most years and has recently maintained a close to balance budgetary position, but has not achieved the targeted medium-term objective of a surplus of 0.5% of GDP. In recent years Austria has respected its minimum benchmark but has run small deficits and made little or no progress towards its medium-term objective. After several years of non-compliance, Germany has recently reduced its structural deficit and reached a close to balance budgetary position in 2007, but has not yet reached its medium-term objective. Malta entered the EU in 2004 with a high structural deficit, which by 2007 was still above its minimum benchmark.

Four euro area countries, however, stand out as generally not having managed to comply with the provisions of the preventive arm over the

past decade, namely Greece, France, Italy and Portugal. In these countries, structural deficits are judged to have been persistently high, either because deficits were revised upwards ex post (see below), or because fiscal adjustment has been regularly postponed. In Italy and Portugal, structural deficits have recently declined to a somewhat lower level, but without yet achieving an adequate safety margin with respect to the 3% deficit limit.

Among the non-euro area countries, Bulgaria, Denmark, Estonia and Sweden have generally maintained structural budget surpluses, while Latvia has respected its minimum benchmark. By contrast, the Czech Republic, Hungary and Poland have recorded high structural deficits, and structural deficits in Lithuania, Romania, Slovakia and the United Kingdom have either increased or improved little in recent years.

#### THE CORRECTIVE ARM

If a government deficit exceeds or is planned to exceed the reference value of 3% of GDP, the European Commission launches an excessive deficit procedure by preparing a report on the budgetary situation of the country concerned. The Commission assesses in particular whether the excess over the reference value is small, exceptional (due to a severe economic downturn) and temporary. If this is not the case and there are no “other relevant factors” that may explain a “small and temporary” breach of the reference value, the conditions are in place for the EU Council to decide that an excessive deficit situation exists.

If a deficit is deemed to be excessive in the sense of the Treaty and the Stability and Growth Pact, the Council issues a recommendation to the Member State concerned to correct the situation. The correction of the excessive deficit should be “completed in the year following its identification, unless there are special

<sup>10</sup> Data for the cyclically adjusted balance net of one-off and temporary measures are only available from 2003 onwards. Before then, the structural balance is equated with the cyclically adjusted balance.

circumstances”. In other words, under normal conditions an excessive deficit should not persist for more than two consecutive years. If effective action is not taken to achieve the correction within this period, the Council normally issues a “notice” to the Member State concerned and, in the event of continued non-compliance, the Treaty foresees the imposition of sanctions. However, as a result of the reform of the Pact in 2005, the Council has explicitly been given the option of issuing repeated recommendations and notices in which it may extend deadlines if it considers that unforeseen events with major, negative budgetary consequences occurred after the initial recommendation or notice

was issued. In practice, this means that, in the worst case, an excessive deficit can persist for several years.

Table 2 provides a stylised overview of Member States’ compliance with the corrective arm of the Pact on the basis of whether or not the government deficit ratio, as measured ex post, exceeded the 3% of GDP reference value. It can be seen that deficits in the majority of EU Member States have breached the 3% reference value in at least one year since 1998. In many cases, these breaches of the reference value were short-lived. Notably, the Netherlands incurred a deficit above 3% of GDP in 2003

**Table 2 Compliance with the corrective arm of the Stability and Growth Pact**

(as a percentage of GDP)

□ indicates a deficit ratio below the 3% reference value (a debt ratio below the 60% reference value)

□ indicates a deficit ratio above the 3% reference value which was not recognised as excessive in the following year (usually because the deficit was revised upwards ex post)

□ indicates a deficit ratio above 3% of GDP which was recognised as excessive in the following year (a debt ratio above 60%)

**General government:**

	Net lending (+)/borrowing (-)										Gross debt	
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	1998	2007
Belgium	-0.9	-0.5	0.1	0.4	0.0	0.0	0.0	-2.3	0.3	-0.2	117.1	84.8
Germany	-2.2	-1.5	-1.1	-2.8	-3.7	-4.0	-3.8	-3.4	-1.6	0.0	60.3	65.0
Ireland	2.4	2.7	4.7	0.9	-0.6	0.4	1.4	1.6	3.0	0.3	54.0	25.5
Greece	-3.9	-3.1	-3.7	-5.0	-4.7	-5.6	-7.4	-5.1	-2.6	-2.8	105.8	94.5
Spain	-3.2	-1.4	-1.1	-0.6	-0.5	-0.2	-0.3	1.0	1.8	2.2	64.1	36.2
France	-2.6	-1.8	-1.5	-1.6	-3.2	-4.1	-3.6	-2.9	-2.4	-2.7	59.4	63.9
Italy	-2.8	-1.7	-2.0	-3.1	-2.9	-3.5	-3.5	-4.2	-3.4	-1.9	114.9	104.0
Cyprus	-4.1	-4.3	-2.3	-2.2	-4.4	-6.5	-4.4	-2.4	-1.2	3.3	58.4	59.8
Luxembourg	3.4	3.4	6.0	6.1	2.1	0.5	-1.2	-0.1	1.3	2.9	7.4	6.9
Malta	-9.9	-7.7	-6.2	-6.4	-5.5	-9.8	-4.6	-3.2	-2.5	-1.8	53.4	62.6
Netherlands	-0.9	0.4	1.3	-0.2	-2.1	-3.1	-1.7	-0.3	0.5	0.4	65.7	45.4
Austria	-2.3	-2.2	-2.1	0.0	-0.6	-1.4	-3.7	-1.5	-1.5	-0.5	64.3	59.1
Portugal	-3.4	-2.8	-3.2	-4.3	-2.9	-2.9	-3.4	-6.1	-3.9	-2.6	52.1	63.6
Slovenia	-2.4	-2.0	-3.8	-4.6	-2.5	-2.7	-2.3	-1.5	-1.2	-0.1	23.1	24.1
Finland	1.7	1.6	6.9	5.0	4.1	2.6	2.4	2.9	4.1	5.3	48.2	35.4
<b>Euro area</b>	<b>-2.3</b>	<b>-1.4</b>	<b>-1.0</b>	<b>-1.9</b>	<b>-2.5</b>	<b>-3.1</b>	<b>-2.9</b>	<b>-2.5</b>	<b>-1.3</b>	<b>-0.6</b>	<b>72.8</b>	<b>66.3</b>
Bulgaria	1.7	0.4	-0.5	0.2	-0.1	0.0	1.4	1.8	3.0	3.4	n/a	18.2
Czech Republic	-5.0	-3.7	-3.7	-6.1	-6.8	-6.6	-3.0	-3.6	-2.7	-1.6	15.0	28.7
Denmark	0.0	1.3	2.3	1.3	0.2	0.0	1.9	5.0	4.8	4.4	60.8	26.0
Estonia	-0.7	-3.5	-0.2	-0.1	0.4	1.7	1.6	1.8	3.4	2.8	5.5	3.4
Latvia	0.0	-3.9	-2.8	-2.1	-2.3	-1.6	-1.0	-0.4	-0.2	0.0	9.6	9.7
Lithuania	-3.1	-2.8	-3.2	-3.6	-1.9	-1.3	-1.5	-0.5	-0.5	-1.2	16.6	17.3
Hungary	-8.0	-5.4	-2.9	-4.0	-8.9	-7.2	-6.5	-7.8	-9.2	-5.5	62.0	66.0
Poland	-4.3	-2.3	-3.0	-5.1	-5.0	-6.3	-5.7	-4.3	-3.8	-2.0	38.9	45.2
Romania	-3.2	-4.5	-4.6	-3.3	-2.0	-1.5	-1.2	-1.2	-2.2	-2.5	18.8	13.0
Slovakia	-5.3	-7.1	-12.2	-6.5	-8.2	-2.7	-2.4	-2.8	-3.6	-2.2	34.5	29.4
Sweden	1.1	1.3	3.7	1.6	-1.2	-0.9	0.8	2.2	2.3	3.5	69.1	40.6
United Kingdom	-0.1	0.9	1.2	0.5	-2.0	-3.3	-3.4	-3.4	-2.6	-2.9	46.7	43.8

Sources: European Commission and ECB calculations.

Notes: Data exclude receipts from the sale of UMTS licences. Cells are unshaded if a country was not an EU Member State at the time.

and was made subject to an excessive deficit procedure, but corrected the situation in the following year. According to current data, Spain (in 1998) and Austria (in 2004) also had deficits in excess of 3% of GDP, but these arose following ex post data revisions; the deficits were not identified as being excessive at the time. Cyprus and Malta entered the EU in 2004 with excessive deficits, but these were corrected before the two countries joined the euro area on 1 January 2007. These cases apart, more persistent breaches of the 3% reference value occurred in the three largest euro area countries (Germany, France and Italy), as well as in Greece and Portugal. As a result, in the period 2003-05 no fewer than four to six out of (then) twelve euro area countries had a deficit exceeding 3% of GDP.

Portugal was the first euro area country to be made subject to an excessive deficit procedure. In the summer of 2002, a commission headed by the Banco de Portugal was given a mandate to analyse and update the Portuguese government accounts. The outcome of this audit was an upward revision of the deficit-to-GDP ratio of about 2 percentage points to over 4%, while the deficit ratios for 1998-2000 were also revised significantly upwards. The Portuguese deficit ratio fell below 3% in 2002 and 2003, largely owing to temporary fiscal measures. When these expired, however, the deficit ratio again rose to well above 3% of GDP. Following the launch of a new excessive deficit procedure and the granting of an extended deadline for the deficit correction, the Portuguese deficit ratio was finally brought back below 3% of GDP in 2007.

Germany and France became the subject of excessive deficit procedures after their deficits breached the 3% reference value in 2002. As it became clear that neither country would correct its excessive deficit by the initial deadline of 2004 set by the EU Council, the European Commission proposed moving to the next step of the procedures, namely the issuance of a Council notice. However, the Council failed to act on the Commission's recommendations,

instead issuing Council conclusions which put the procedures in abeyance. The resulting procedural deadlock was followed by a court case and the annulment of the Council conclusions as well as a debate which culminated in the reform of the Stability and Growth Pact in 2005 and the introduction of more flexibility into the excessive deficit procedure. After the reform, new Council recommendations with extended deadlines were issued and the French and German deficits were finally brought back below 3% of GDP (in line with these new deadlines) in 2005 and 2006 respectively.

Greece became the subject of an excessive deficit procedure in 2004 following an initial notification that its deficit had exceeded the 3% reference value in 2003. As a result of a subsequent fiscal audit, however, deficits for the whole 1997-2004 period were revised substantially upwards and are now judged to have been above 3% of GDP on the basis of current methodologies. After the initial failure of Greece to take effective action, as well as further data revisions which pushed the 2004 deficit ratio well above 3%, the Council for the first time took the step of issuing a notice, but in doing so also extended the deadline for Greece to correct its excessive deficit until 2006. The Greek deficit ratio was reduced to below 3% in 2006, allowing the Council to end the excessive deficit procedure the following year.<sup>11</sup>

An excessive deficit procedure was launched against Italy in 2005 on the basis that the deficit ratio exceeded the 3% reference value in 2004. However, subsequent statistical revisions were also made in this country and breaches of the reference value are now deemed to have occurred already in 2001 and 2003. In view of the extent of the breach of the reference value, the Council also granted Italy an extended deadline for the correction of its excessive deficit, which was achieved in 2007.

<sup>11</sup> It should be noted that Eurostat is in the process of reviewing the Greek deficit figures for 2007, which is expected to lead to a further upward revision to above 3% of GDP.

Among the non-euro area countries, the Czech Republic, Hungary, Poland and Slovakia were made subject to excessive deficit procedures after joining the EU. All except Hungary have now corrected their excessive deficits. The United Kingdom breached the deficit criterion in 2004 and 2005. This led to the opening of an excessive deficit procedure which was finally abrogated in 2007. Based on a planned deficit of above 3% of GDP for the financial year 2008/9, the Council again decided on the existence of an excessive deficit in July 2008.<sup>12</sup>

Overall, therefore, compliance with the preventive and corrective arms of the Stability and Growth Pact during its first ten years has been uneven. Some Member States have maintained sound fiscal positions according to the Pact's norms. Moreover, in the more favourable economic environment of the past few years, excessive deficits in the vast majority of countries have been corrected and most Member States have now either reached their medium-term objective or made significant progress towards achieving it. This, however, needs to be set against the fact that a large number of countries incurred excessive deficits in the context of the previous downturn, and it is not yet clear whether Member States as a whole are now in a better position to withstand similar shocks in the future.

The uneven compliance with the Pact over the past decade is also reflected in starkly diverging developments in government debt ratios (see Table 2). By achieving close to balance or in surplus budgetary positions, some countries, notably Spain and the Netherlands, have succeeded in reducing previously high debt-to-GDP ratios to well below 60%, while Belgium's very high debt ratio has also been reduced markedly. On the other hand, debt ratios now stand above 60% of GDP and have risen over the past decade in Germany, France and Portugal. The very high debt ratios of Greece and Italy witnessed only modest and disappointing reductions in the period 1998-2007.

#### 4 OUTCOMES VERSUS PLANS: SOME LESSONS ON THE BASIS OF DEVIATIONS FROM FISCAL TARGETS

Member States' stability (or convergence) programmes are updated annually and normally submitted at the end of the calendar year.<sup>13</sup> The programme presents the government's economic and budgetary strategy, including plans or targets for the main fiscal variables, as well as the macroeconomic forecasts and fiscal assumptions on which these targets are based. The plans typically cover a horizon of three to four years and, at least for the first year, usually reflect the projections and measures adopted in national budgets.

Actual budgetary outcomes can deviate from the plans presented in stability and convergence programmes for many reasons. It may be that the projection for economic growth on which the fiscal plans were based turns out to be overly optimistic. If GDP growth is lower than expected, this will typically result in lower tax revenues (owing to lower wages, profits, consumption, etc.) and may also necessitate higher social expenditure (e.g. unemployment benefits). Apart from the impact of higher or lower economic growth, revenue projections may be incorrect because legislative changes do not have their intended effect or because there are other unexpected developments. On the expenditure side, desired levels (or cuts) of government spending may not be achieved because of unexpected spending pressures or because of a lack of willingness to abide by or enforce spending limits. Conversely, outcomes for the overall budget balance may be in line with targets even in the event of divergences from fiscal plans. For example, it may be that the deficit target is achieved only because of higher than expected output growth, windfall revenue gains, a temporary shortfall in expenditure or subsequent one-off measures.

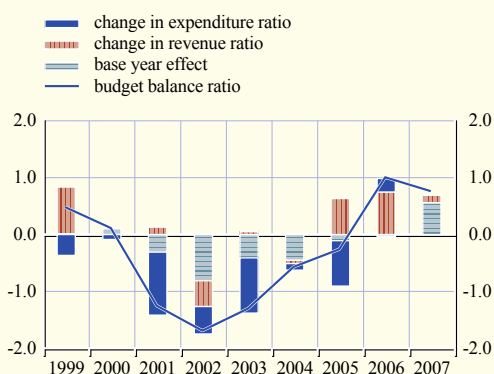
12 It should be noted that for the United Kingdom it is financial year rather than calendar year data that matters for the implementation of the Stability and Growth Pact, while Table 2 reports calendar year figures.

13 Euro area countries submit stability programmes while non-euro area countries submit convergence programmes.

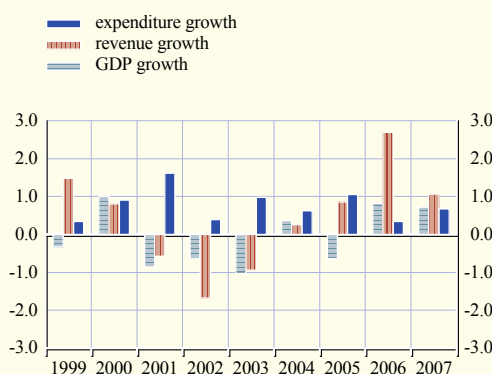


Chart 2 Deviations from stability programme targets (euro area 12 aggregate)

(as a percentage of GDP)



(annual percentage points)



Sources: AMECO, stability programmes and ECB calculations.

Chart 2 and Table 3 present information concerning deviations of actual outcomes from the targets presented by the 12 euro area countries that submitted stability (or convergence) programmes for the period 1999-2007.<sup>14</sup> Chart 2 reports the information for the euro area aggregate (i.e. the weighted average of the 12 countries) for individual years based on deviations from targets for the coming year (i.e. “one-year-ahead” targets). Table 3 reports average deviations for the whole period for individual countries, for both one-year-ahead and three-years-ahead targets.

In Chart 2 and Table 3, the deviations from fiscal plans are broken down to reflect the following factors. First, the budgetary situation may have been different from what was assumed at the time the stability programme was presented. Significant “base year effects” can sometimes be caused by unexpected revenue or expenditure developments towards the end of the budgetary year, i.e. after the finalisation of the programme for the following year. They may also be caused by ex post revisions of fiscal data, which, as already mentioned, have been particularly significant and negative in Greece, Italy and Portugal.<sup>15</sup> The comparison of initial estimates and plans for some countries in the early years of EMU is also complicated by the transition from the ESA 79 to the ESA 95 methodology for compiling government accounts.

Second, abstracting from base year effects, deviations from targeted changes in the budget balance ratio can be attributed to deviations from targeted changes in the revenue ratio and the ratio of (primary and interest) expenditure to GDP. Viewed in isolation, however, developments in revenue and expenditure ratios can be misleading. This is because they may be driven either by deviations of actual revenue and spending from targets or by deviations from the projection for GDP. It is therefore important to take into consideration the effect of deviations of GDP growth from projected levels and also to consider deviations of actual revenue and spending growth from targets. Thus, Chart 2 and Table 3 also report deviations from projected GDP growth (in Table 3 this is also sub-divided into deviations from the projections for the growth of real GDP and the GDP deflator) and deviations from targets for revenue and (primary) spending growth.<sup>16</sup>

<sup>14</sup> Greece submitted convergence programmes prior to its adoption of the euro on 1 January 2001.

<sup>15</sup> The large negative base year effect for Austria reported in Table 3 is essentially due to a very large ex post revision of the deficit for 2004.

<sup>16</sup> As a rule, deviations from projected revenue growth would be expected to be positively correlated with deviations from the projected growth of GDP and the GDP deflator. Deviations from projected expenditure growth would be expected to be positively correlated with deviations from the projected growth of the GDP deflator and (slightly) negatively correlated with deviations from the projected growth of real GDP.

Focusing first on euro area aggregate developments over time (Chart 2), it can be seen that deviations from targets for the budget balance have exhibited a cyclical pattern, being positive or neutral in 1999-2000 and again in 2006-07, but negative in 2001-05. These deviations can largely be explained by errors in the projection for GDP growth and even

larger errors in the projection for tax revenues. Indeed, a notable feature of fiscal developments in the euro area over the past decade has been a tendency for revenues to exhibit short-term fluctuations above and beyond what would normally be expected on the basis of output developments and typically assumed revenue elasticities. This is because tax receipts are

**Table 3 Deviations from stability programme targets/projections (1999-2007)**

	Budget balance-to-GDP ratio	Base year effect	Change in budget balance-to-GDP ratio	Change in revenue-to-GDP ratio	Change in primary spending-to-GDP ratio	Change in interest spending-to-GDP ratio	Nominal GDP growth	of which real GDP growth	of which GDP deflator	Revenue growth	Primary spending growth
	1=2+3	2	3=4-5-6	4	5	6	7=8+9	8	9	10	11
<b>Deviation from one-year-ahead target/forecast</b>											
Belgium	-0.1	-0.1	0.0	0.3	0.3	-0.1	0.2	0.1	0.1	0.9	1.4
Germany	-0.2	0.0	-0.2	0.1	0.3	0.0	-0.7	-0.3	-0.4	-0.4	-0.2
Ireland	0.7	0.3	0.4	0.5	0.2	-0.1	1.1	1.1	0.0	2.7	2.4
Greece	-3.5	-2.6	-0.9	-0.3	0.5	0.1	0.8	0.3	0.5	0.0	1.8
Spain	0.1	-0.3	0.5	0.4	0.1	-0.2	1.6	0.5	1.0	2.6	1.7
France	-0.3	0.0	-0.3	0.2	0.6	-0.1	-0.2	-0.3	0.1	-0.1	1.0
Italy	-1.0	-0.5	-0.5	0.2	0.9	-0.1	-0.3	-0.7	0.3	0.0	1.7
Luxembourg	2.1	1.8	0.2	0.4	0.3	0.0	2.1	1.4	0.7	2.1	2.4
Netherlands <sup>1)</sup>	0.1	0.0	0.1	0.4	0.3	0.0	0.2	0.0	0.2	1.1	0.9
Austria	-0.4	-0.5	0.1	0.2	0.1	0.0	0.2	0.1	0.1	0.5	0.8
Portugal	-1.1	-0.6	-0.4	-0.1	0.4	-0.1	0.0	-0.5	0.4	-0.2	0.8
Finland	1.0	0.5	0.5	0.7	0.2	0.0	0.5	0.3	0.2	1.9	0.9
<b>Euro area</b>	<b>-0.4</b>	<b>-0.2</b>	<b>-0.2</b>	<b>0.2</b>	<b>0.5</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.2</b>	<b>0.1</b>	<b>0.4</b>	<b>0.9</b>
<b>Deviation from three-years-ahead target/forecast</b>											
Belgium	-0.5	0.2	-0.7	0.5	1.5	-0.4	0.1	-0.3	0.4	0.6	1.8
Germany	-1.7	-0.1	-1.6	0.3	2.0	-0.1	-1.4	-1.0	-0.4	-1.2	0.1
Ireland	0.3	0.1	0.1	2.3	2.3	-0.2	1.1	0.6	0.5	3.5	4.4
Greece	-5.1	-3.2	-1.9	-1.3	0.7	-0.1	0.8	0.1	0.6	-0.4	1.7
Spain	0.3	-0.5	0.8	1.0	0.7	-0.5	1.9	0.4	1.4	2.8	2.8
France	-1.7	0.0	-1.7	0.6	2.4	-0.1	-0.2	-0.5	0.3	0.0	1.5
Italy	-2.7	-0.8	-1.9	0.6	2.8	-0.3	-0.7	-1.3	0.7	-0.2	1.8
Luxembourg	-0.1	1.6	-1.7	0.4	2.1	0.0	1.4	0.6	0.7	1.2	3.3
Netherlands	-0.4	-0.1	-0.3	n/a	n/a	n/a	0.4	-0.3	0.7	n/a	n/a
Austria	-0.6	-0.6	0.0	0.6	0.6	0.0	-0.2	-0.4	0.2	0.3	0.5
Portugal	-2.8	-0.9	-1.9	0.8	2.7	-0.1	-0.9	-1.4	0.5	-0.2	1.4
Finland	0.7	0.4	0.4	1.3	1.0	-0.1	0.1	0.3	-0.2	1.0	1.1
<b>Euro area</b>	<b>-1.5</b>	<b>-0.3</b>	<b>-1.2</b>	<b>0.5</b>	<b>1.9</b>	<b>-0.2</b>	<b>-0.3</b>	<b>-0.6</b>	<b>0.3</b>	<b>0.1</b>	<b>1.2</b>

Sources: European Commission, stability programmes and ECB calculations.

Notes: For some countries, budgetary targets could not be drawn from the stability programme for individual years. Where a single observation is missing, the respective year was excluded when calculating average deviations for the period 1999-2007.

1) One-year-ahead revenue and expenditure targets for 2002 are taken from the European Commission's assessment of the 2001 stability programme update.

1= difference between the actual outcome and the target for the budget balance-to-GDP ratio set in the stability programme.

2= difference between the actual outcome for the budget balance-to-GDP ratio in the base year and the estimate contained in the stability programme.

3-6= difference between the actual change in the ratio between the base and the target/forecast year and the change targeted in the stability programme.

7-11= difference between the actual (average) annual growth rate and that projected or targeted in the stability programme over the relevant horizon. Planned growth rates have been calculated on the basis of planned revenue and expenditure ratios and the forecast for nominal GDP growth. They should therefore be seen as approximations owing to rounding.

The sample for one-year-ahead targets/forecasts covers the stability programmes from end-1998 to end-2006 and fiscal outcomes from 1999-2007. The sample for three-years-ahead targets/forecasts covers the stability programmes from end-1998 to end-2004 and fiscal outcomes from 2001-2007.

determined by the development of individual tax bases, the growth rate of some of which (e.g. taxable corporate profits, capital gains, the value of property transactions) can be much more volatile than the overall growth rate of GDP. For the euro area, deviations of revenue growth from planned levels have exhibited a more or less cyclical pattern, being positive in the upturn phases of 1999-2000 and 2004-07, while being negative during the downturn of 2001-03 (see Chart 2). These revenue surprises have tended to be correlated with but also larger than the contemporaneous deviations from projected GDP growth.

While in the short run deviations of fiscal outcomes from plans have tended to be driven by revenue fluctuations, Chart 2 also points to persistently higher than targeted expenditure growth (i.e. in every single year) at the euro area level, a feature which is widespread across countries (see below).

Turning to the average deviations from targets for the euro area and for individual countries (Table 3), budgetary plans are seen to have been too optimistic mainly in countries that have incurred excessive deficits for significant periods (Germany, Greece, France, Italy and Portugal). By contrast, outcomes for the budget balance ratio were generally better than targeted in Ireland, Spain, Luxembourg and Finland. For the euro area aggregate, the actual outcome for the budget balance ratio has been on average 0.4% worse than the forecast for the coming year and 1.5% worse than the three-years-ahead forecast. The greater accuracy of the one-year-ahead forecasts compared with those for three years ahead can be attributed to the fact that the targets for the coming year are usually set at the time of the adoption of the budget for that year and are hence based on more reliable forecasts and more concrete measures than the targets for the following years of the programme. Moreover, fiscal adjustment strategies in some countries have tended to be backloaded, with most of the targeted decline in the deficit ratio being focused on the latter years of the programme horizon, by

when fiscal plans may have been changed and the necessary measures postponed.

The main picture that emerges from Table 3 is one of widespread expenditure slippages compared with initial targets.<sup>17</sup> For the euro area as a whole, the growth rate of primary spending has been almost 1 percentage point higher than projected for the subsequent year and 1.2 percentage points higher than projected over the three-year horizon (see column 11). At the country level, expenditure overruns have prevailed on average in almost all euro area countries. Possible exceptions are Germany and Austria, where the average deviation from planned spending growth has been relatively small and, especially in Germany, may be explained at least partly by the less favourable than expected macroeconomic developments (which have put upward pressure on social spending).

In some countries, notably Ireland, Spain and Luxembourg, even large average expenditure overruns have not prevented compliance with overall targets for the budget balance. This is because these countries have also benefited from much higher than expected revenue growth. This can in part be explained by higher than projected GDP growth and, in the cases of Ireland and Spain in particular, the beneficial impact on revenues of strong growth in “tax-rich” activities, such as the boom in property transactions during this period. In these countries, the boom in revenues made the extra spending temporarily “affordable”. However, the data per se cannot distinguish between, on the one hand, unintended expenditure overruns which just happened to be offset by higher revenues and, on the other hand, discretionary decisions by governments (after initial plans were set) to allocate the additional revenues to higher spending. Looking ahead, with revenue growth declining in a less favourable

<sup>17</sup> For an analysis of the contribution of expenditure and revenue slippages to deviations from stability and convergence programme targets, see also European Commission, “Public finances in EMU – 2008”, Box I.3.1, pp. 40-41.

macroeconomic environment, fiscal soundness in these countries will depend crucially on policy-makers' ability to stick to their spending plans.

It is the countries where expenditure overruns have not been compensated for by higher revenues which have struggled most to comply with the provisions of the Stability and Growth Pact. In the cases of France, Italy and Portugal, macroeconomic conditions have generally turned out to be less favourable than projected in their stability programmes. This has, to varying degrees, given rise to revenue shortfalls and may also explain some part of the observed expenditure slippages. In Greece, by contrast, GDP growth has tended to exceed projected levels, and the fact that this has not yielded higher revenues suggests that the underlying revenue projections in this country's stability programmes (e.g. in terms of the revenue yield of specific budget measures) have tended to be on the optimistic side. Only in the case of Germany do large deviations from stability programme targets appear to have their origin mainly in lower than targeted revenue growth. This is largely a reflection of the significantly lower than projected GDP growth in this country over the period under review.

## 5 CONCLUSIONS AND CHALLENGES AHEAD

Ten years after the entry into force of the Stability and Growth Pact, the aggregate euro area deficit ratio, as estimated for 2007, stands at its lowest level in several decades. Almost all EU Member States have deficit ratios below the 3% reference value of the Treaty, and in the majority, medium-term budgetary objectives have been or are relatively close to being reached. The persistent increases in government spending and debt ratios of earlier decades have also been brought to a halt. It is unlikely that this would have been achieved without the fiscal rules of the Treaty and the Stability and Growth Pact.

However, seen from a broader perspective, the overall experience of the last ten years is

less reassuring. Budgetary improvements in recent years have coincided with favourable macroeconomic conditions together with unusual revenue buoyancy, and in some countries, budgetary positions are now deteriorating again in a less favourable environment. Individual countries vary significantly in terms of their compliance with the budgetary norms of the Pact. The effective implementation of the excessive deficit procedure has been complicated by revisions of past data, and deficits above 3% of GDP have been repeated and persistent in some countries. This suggests that at least in these cases the implementation of the Pact has lacked sufficient rigour and political will. Indeed, the corrective arm of the Pact arguably failed its first real test when, in the context of the economic downturn in 2001-03, the excessive deficit procedures against France and Germany were temporarily suspended. After the recent economic "good times", it remains to be seen whether Member States will build on recent consolidation progress and reach or maintain sound fiscal positions or, should this not be the case, if the corrective arm of the revised Pact will be implemented in a sufficiently strict and timely manner.

What lessons should be drawn from the fiscal policy experience of the last ten years? First of all, slippages in government spending compared with initial expenditure targets have been persistent and widespread among euro area countries as all too often targeted expenditure restraint has not materialised. Whether or not these slippages resulted in overall fiscal targets being missed depended on whether or not they were offset by more favourable than expected developments on the revenue side. Since tax receipts can fluctuate considerably in the short term, compliance with the Pact may be achieved more easily when economic conditions are favourable, but it becomes much more difficult in "bad times". Given the downside risks to economic activity, the revised Pact is likely to be put to the test, as structural adjustment efforts in recent economic "good times" have been insufficient in several Member States, and some countries have failed to create sufficient

safety margins with respect to the 3% deficit ceiling. This latter failure reflects – at least to some extent – a lack of political will to comply with European fiscal obligations. It is of utmost importance that all EU countries remain committed to the rules and procedures of the Pact and thereby support its credibility. Fiscal adjustment efforts should be based on well-specified measures, should preferably be frontloaded, and should be backed up by a tight ex post control of expenditure.

Second, at the national level, fiscal institutions should promote compliance with European obligations. The adoption of medium-term fiscal frameworks encompassing well-designed expenditure rules would go a long way towards guaranteeing fiscal discipline. The effective management of government expenditure is especially important so that persistent spending overruns do not put fiscal targets at risk. Moreover, a sound statistical basis is a precondition for credible fiscal rules and analysis. In this regard, repeated large ex post revisions and uncertainty concerning the reliability of data are a cause for serious concern.

Third, it is the responsibility not only of the Member States, but also of the European Commission and the EU Council, to strictly apply the rules and procedures of the Pact and to exercise adequate pressure with regard to the pursuit of prudent fiscal policies.<sup>18</sup> This should be achieved on the basis of robust assessments of stability and convergence programmes. In this context, due attention should be paid to the link between fiscal policy and the broader macroeconomic situation, including internal and external imbalances, such as high inflation, booms in asset markets and current account deficits, which could threaten fiscal sustainability in the medium to long run.<sup>19</sup>

Fourth, securing the sustainability of public finances also calls for more attention to be paid to implicit liabilities stemming from the fiscal costs of ageing populations, in particular by taking into account such liabilities when setting medium-term objectives. Comprehensive

strategies to deal with ageing-related spending pressures are needed and should combine appropriate fiscal structural reforms with a sufficiently frontloaded fiscal adjustment, in countries where this is still necessary.<sup>20</sup>

Finally, increasing attention needs to be paid to the relationship between fiscal policies and long-term (potential) growth and employment creation. Reforms to improve the quality of public finances, by enhancing the efficiency of government spending, channelling expenditure into growth-enhancing activities and reducing distortions in the tax system, could contribute to raising long-term growth prospects.<sup>21</sup> This in turn would also facilitate the maintenance of sound public finances in the euro area and bolster the credibility of the Stability and Growth Pact, which is essential for the smooth functioning of EMU.<sup>22</sup>

18 A number of the points made in this section are also highlighted in the European Commission's report entitled "EMU@10: successes and challenges after 10 years of Economic and Monetary Union", *European Economy*, 2/2008.

19 See the article entitled "Challenges to fiscal sustainability in the euro area" in the February 2007 issue of the *Monthly Bulletin*.

20 See the article entitled "Demographic change in the euro area: projections and consequences" in the October 2006 issue of the *Monthly Bulletin*.

21 See the article entitled "The importance of public expenditure reform for economic growth and stability" in the April 2006 issue of the *Monthly Bulletin* and the article entitled "Fiscal policies and economic growth" in the August 2001 issue of the *Monthly Bulletin*.

22 See the May 2008 special edition of the *Monthly Bulletin* published on the occasion of the 10th anniversary of the ECB.