EUROPEAN COMMISSION
DIRECTORATE GENERAL
ECONOMIC AND FINANCIAL AFFAIRS

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ECONOMIC ASSESSMENT OF THE STABILITY PROGRAMME OF SPAIN (UPDATE OF DECEMBER 2006)

The Stability and Growth Pact requires each EU Member State to present an annual update of its medium-term fiscal programme, called “stability programme” for countries that have adopted the euro as their currency and “convergence programme” for those that have not. The most recent update of Spain’s stability programme was submitted on 29 December 2006.

The attached technical analysis of the programme, prepared by the staff of, and under the responsibility of, the Directorate-General for Economic and Financial Affairs of the European Commission, was finalised on 2/3/2007. Comments should be sent to Javier Yaniz-Igal (Javier.Yaniz-Igal@ec.europa.eu). The main aim of the technical analysis is to assess the realism of the budgetary strategy presented in the programme as well as its compliance with the requirements of the Stability and Growth Pact. However, the analysis also looks at the overall macro-economic performance of the country and highlights relevant policy challenges.

Based on this technical analysis, the European Commission adopted an assessment of the programme as well as a recommendation for a Council opinion on the programme on 7 March 2007. The ECOFIN Council is expected to adopt its opinion on the programme on 27 March 2007.

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All these documents, as well as the provisions of the Stability and Growth Pact, can be found on the following website:

http://ec.europa.eu/economy_finance/about/activities/sgp/main_en.htm

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SUMMARY AND CONCLUSIONS[1]

As part of the preventive arm of the Stability and Growth Pact, each euro area Member State has to submit a stability programme and annual updates thereof. The most recent programme, covering the period 2006-2009, was submitted on 22 December 2006.

Since the mid-nineties, Spain seems to be enjoying a virtuous economic circle. Domestic demand, fuelled by private consumption and investment in construction, has been at the origin of an intense job creation in housing and services, which, in turn, has fed domestic demand again, in a context of healthy public finances and very low or even negative real interest rates. However, a persistent inflation differential with the euro area, coupled with slow productivity growth, has deteriorated the external competitive position of a country whose comparative advantages are still based on low production costs rather than on products with a high technological content. Widening external deficits might jeopardise medium-term growth prospects. Furthermore, high households' indebtedness, largely explained by massive investment in dwellings, has increased the vulnerability of a large share of the population to a rise in interest rates. In this context, the prudent fiscal policies implemented by Spain have been appropriate.

Against this background, the following challenges in the area of public finances can be identified. First, fiscal policy can play an important role, not only as a stabilization tool but also as a way of achieving higher efficiency in the economy. A restrictive orientation of fiscal policy would help cool down domestic demand pressures, which, in turn, would decelerate import growth. Whilst the budget has been in balance for the past several years, high tax elasticities might have temporarily contributed to the improvement of fiscal revenues, hence the structural fiscal position may be less strong than standard calculations show. This calls for a prudent assessment of the sustainability of tax cuts and spending increases. On top of this, fiscal policy should also seek to achieve a higher efficiency in the economy by redistributing expenditure with an aim to prioritizing productivity-enhancing measures. An adequate fiscal policy should focus on a significant and efficient accumulation of physical, human and knowledge capital. This would include a continuous effort to enhance R&D spending, not only from the public side, but also encouraging private agents, while promoting an educational system decisively focused on excellence. While no risks for the sustainability of public finances seem to exist in the short term, population ageing and slow productivity growth bring some clouds to the long term sustainability outlooks. Fiscal policy, often dependent on the short or medium-term political cycle, should be more long-sighted. Further reform of the pension system, which would better align contributions and benefits, coupled with a moderation of health care spending growth, would represent a milestone assuring the sustainability of the, at the present time, healthy Spanish public accounts.

The macroeconomic scenario underlying the stability programme envisages that real GDP growth will moderate from 3.8% in 2006 to 3.3% on average over the rest of the programme period. Assessed against currently available information, this scenario appears to be based on plausible growth assumptions. The programme's projections for

[1] The analysis takes into account (i) the Commission services' autumn 2006 forecast, (ii) the code of conduct ("Specifications on the implementation of the Stability and Growth Pact and guidelines on the format and content of stability and convergence programmes", endorsed by the ECOFIN Council of 11 October 2005) and (iii) the commonly agreed methodology for the estimation of potential output and cyclically-adjusted balances.

inflation also appear realistic. The projected inflation differential with the euro area, although decreasing, is still significant. The increasing household indebtedness and the widening current account deficit constitute some downward risks in the medium term, as would also be implied if the extended residential construction boom came to an end.

Taking into account the main features of the Spanish growth model, in which employment is growing fast, but mostly in rather non-qualified areas, and the strong investment in construction, which plays a predominant role in gross fixed capital formation, it could well be that the commonly agreed methodology might be overestimating the potential output of the country. Among other factors, inflation differentials with the euro area, strong employment growth rates leading to a sustained reduction of unemployment, and widening external imbalances, would point to the opposite direction, which would suggest that, at least, the Spanish economy is growing at around its potential. Thus, the economy would find itself neither in good nor in bad economic times.

For 2006, the Commission services' autumn 2006 forecast estimated the general government surplus at around 1½% of GDP, fully in line with the updated stability programme, but against a target of 0.9% of GDP set in the previous update of the stability programme. This positive outcome is the result of higher-than-expected revenues stemming from strong job creation and buoyant corporate profits, which are estimated to have boosted direct tax revenues well above nominal GDP growth.

The update aims at (i) maintaining macroeconomic and budgetary stability and (ii) fostering productivity by increasing infrastructure, human and technological capital.. The general government surplus is envisaged to decline from 1.4% of GDP in 2006 to about 1% in 2009. The time profile of the primary surplus is similar, falling from 3% of GDP in 2006 to 2¼% in 2009. While revenues should decline by 0.2% of GDP over the programme period, primary expenditures should increase by around 0.5% of GDP, partly offset by a decline in the interest burden. The previous update projected smaller surpluses against a broadly similar macroeconomic outlook. The difference between the two updates is to be found in a much better 2006 surplus outcome than projected one year earlier, which is projected to have favourable carryover effects over the programme period. Government gross debt is planned to decline from around 40% of GDP in 2006 to 32% by the end of the programme period.

The medium-term objective (MTO) set in the programme is a balanced general government budget in cyclically-adjusted terms and net of one-off and temporary measures, which is in line with the Pact. The MTO is planned to be maintained throughout the programme period, with the structural balance calculated according to the commonly agreed methodology planned to marginally decline from around 1¾% of GDP in 2006 to 1½% at the end of the programme period.

The risks to the budgetary projections in the programme appear broadly balanced. The macroeconomic scenario underlying the update is plausible and revenue projections seem to reflect cautious assumptions. On the expenditure side, there is a risk of some expenditure overruns (at the level of regional authorities) if past trends in education and health care are confirmed. In view of this risk assessment, the budgetary stance seems sufficient to maintain the MTO throughout the programme period. The fiscal policy stance implied by the programme is in line with the Stability and Growth Pact.

The long-term budgetary impact of ageing in Spain is well above the EU average, mainly as a result of a relatively high increase in pension expenditure as a share of GDP over the coming decades. The initial budgetary position, improved compared with 2005, contributes to easing the projected long-term budgetary impact of ageing populations, but, as mentioned above, is not sufficient to fully cover the substantial increase in expenditure due to the ageing of the population. Maintaining high primary surpluses over the medium term and implementing further measures aimed at curbing the significant increase in age-related expenditures would contribute to reducing risks to the sustainability of public finances. Overall, Spain appears to be at medium risk with regard to the sustainability of public finances.

The implementation report of the national reform programme (NRP) of Spain, provided in the context of the renewed Lisbon strategy for growth and jobs, was submitted on 15 October 2006. The NRP identifies as key challenges/priorities: budgetary stability; R&D strategy; a better environment for business; promoting competition; infrastructure development; a better functioning of the labour market; and better education and human capital. The Commission's assessment of this programme (adopted as part of its December 2006 Annual Progress Report[2]) showed that Spain is making good progress in the implementation of its NRP. Further implementation of new laws and measures across the seven key policy areas are now essential in order to increase employment and productivity and progress towards full GDP per capita convergence with EU-25. Against the background of strengths and weaknesses identified, Spain was recommended to take action in the areas of competition; active labour market policies; life-long learning and education. The stability programme and the NRP are to some extent integrated. For instance, both programmes envisage the gradual increase of public R&D expenditures and of infrastructure investments.

The overall conclusion is that the medium term budgetary position is sound and the budgetary strategy provides a good example of fiscal policies conducted in compliance with the Stability and Growth Pact. A strong budgetary position is important in the light of rising external imbalances and the existing inflation differential with the euro area.

[2] Communication from the Commission to the Spring European Council, "Implementing the renewed Lisbon strategy for growth and jobs - A year of delivery", 12.12.2006, COM(2006)816.

Comparison of key macro economic and budgetary projections

		2005	2006	2007	2008	2009
Real GDP (% change)	**SP Dec 2006**	**3.5**	**3.8**	**3.4**	**3.3**	**3.3**
	COM Nov 2006	3.5	3.8	3.4	3.3	n.a.
	SP Dec 2005	*3.4*	*3.3*	*3.2*	*3.2*	n.a.
HICP inflation[6] (%)	**SP Dec 2006**[6]	**3.4**	**3.5**	**2.7**	**2.6**	**2.5**
	COM Nov 2006	3.4	3.6	2.8	2.7	n.a.
	SP Dec 2005[6]	*4.2*	*3.5*	*3.3*	*3.2*	n.a.
Output gap (% of potential GDP)	**SP Dec 2006**[1]	**-0.9**	**-0.9**	**-1.2**	**-1.5**	**-1.6**
	COM Nov 2006[5]	-0.8	-0.9	-1.1	-1.3	n.a.
	SP Dec 2005[1]	*-0.5*	*-0.8*	*-1.1*	*-0.7*	n.a.
General government balance (% of GDP)	**SP Dec 2006**	**1.1**	**1.4**	**1.0**	**0.9**	**0.9**
	COM Nov 2006	1.1	1.5	1.1	0.9	n.a.
	SP Dec 2005	*1.0*	*0.9*	*0.7*	*0.6*	n.a.
Primary balance (% of GDP)	**SP Dec 2006**	**2.9**	**3.0**	**2.5**	**2.3**	**2.2**
	COM Nov 2006	2.9	3.1	2.7	2.3	n.a.
	SP Dec 2005	*2.8*	*2.6*	*2.2*	*2.0*	n.a.
Cyclically-adjusted balance (% of GDP)	**SP Dec 2006**[1]	**1.5**	**1.8**	**1.5**	**1.6**	**1.6**
	COM Nov 2006	1.5	1.9	1.6	1.4	n.a.
	SP Dec 2005[1]	*1.2*	*1.2*	*1.2*	*0.9*	n.a.
Structural balance[2] (% of GDP)	**SP Dec 2006**[3]	**1.5**	**1.8**	**1.5**	**1.6**	**1.6**
	COM Nov 2006[4]	1.5	1.9	1.6	1.4	n.a.
	SP Dec 2005	*1.2*	*1.2*	*1.2*	*0.9*	n.a.
Government gross debt (% of GDP)	**SP Dec 2006**	**43.1**	**39.7**	**36.6**	**34.3**	**32.2**
	COM Nov 2006	43.1	39.7	37.0	34.7	n.a.
	SP Dec 2005	*43.1*	*40.3*	*38.0*	*36.0*	n.a.

Notes:

[1]Commission services calculations on the basis of the information in the programme.
[2]Cyclically-adjusted balance (as in the previous rows) excluding one-off and other temporary measures.
[3]One-off and other temporary measures taken from the programme.
[4]One-off and other temporary measures taken from the Commission services' autumn 2006 forecast.

[5]Based on estimated potential growth of 3,9%, 3,8%, 3,6% and 3,6% respectively in the period 2005-2008.
[6]Private consumption deflator instead of HICP.
[7] According to first estimates, growth was 3.9% in 2006. The Commission services' interim forecast of 16 February 2007 projects growth of 3.7% in 2007.

Source:
Stability programme (SP); Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations

1. INTRODUCTION

Spain submitted its eighth update of the stability programme, covering the period 2006-2009, on 22 December 2006[3], three weeks beyond the 1 December deadline specified in the Code of Conduct on the content and format of stability and convergence programmes without providing any reason for such delay. The budgetary projections provided in the update are more ambitious than the budgetary targets set in the 2007 Budget Law as approved by the Parliament on 28 December 2006. The update was approved by the Spanish government on 22 December and provides scarce information on its status vis-à-vis the Parliament, by simply mentioning that it may be presented to the Spanish Parliament.

The programme broadly follows the model structure and data provision requirements for stability and convergence programmes specified in the code of conduct. The programme includes all the compulsory data but presents some gaps in the optional data prescribed by the code of conduct[4]. Annex 3 provides a detailed overview of all aspects of compliance with the code of conduct.

2. ECONOMIC TRENDS AND POLICY CHALLENGES

The section is in five parts. The first provides a brief overview of the Spanish macroeconomic performance in terms of growth and other major macro-variables. The second presents the results of an exercise of decomposition of GDP growth and tries to identify the main reasons for low or high average annual economic growth vis-à-vis the euro area. The third looks at the volatility of growth and other key macroeconomic variables and the stabilising or destabilising role of macro-policies. The fourth part focuses on trends in public finances. Based on the picture outlined in the first four parts, the fifth identifies major economic challenges with fiscal policy implications.

2.1. Economic performance

The mid-nineties mark the beginning of the longest and more stable expansionary phase of the Spanish economy since the oil price hike of the seventies. Over the period 1996-2005 real GDP grew at an annual average rate of 3½%, compared with around 2% in the euro area (Figure 1). Convergence has been decisively underpinned by the EMU stability-oriented economic policy framework, which brought about a macroeconomic policy mix in Spain aiming at achieving low inflation and budgetary discipline. The Spanish real GDP per capita rose from around 80% of the euro area average in the mid-nineties to 90% in 2005.

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[3] The English version was delivered on 28 December 2006.

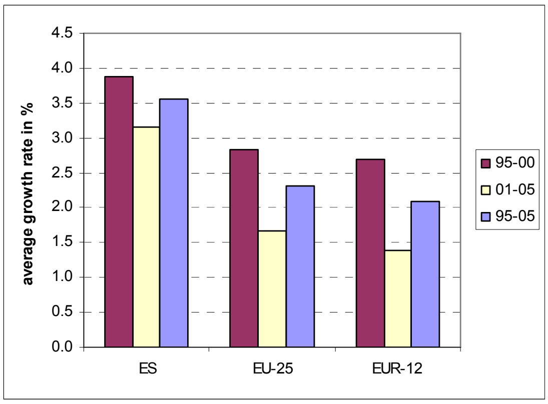
[4] Missing optional data are: Table 1b (price developments): item 3 (HICP); Table 1c (labour market developments): items 2 (employment in hours) and 5 (productivity per hour); Table 3 (general government expenditure by function); Table 4 (general government debt developments): details on the SFA and "other relevant variables"; Table 5 (cyclical developments): contributions to potential growth in item 4; items 6 (cyclical budgetary component), 7 (cyclically-adjusted balance) and 8 (cyclically-adjusted primary balance); Table 7 (long-term sustainability of public finances): no information on interest expenditure and revenues is provided.

Inflation, although low in historical terms, is still high compared with that of the euro area. The inflation differential with the euro area attained 1½ percentage points in 2005. Not only cyclical factors associated to the strong economic activity, but also structural determinants seem to be behind a persistent inflation differential[5]. High inflation in Spain has its origin in sheltered sectors, especially utilities and some services characterised by insufficient competition and in a too rigid wage bargaining system, which fails to take due account of productivity differentials across sectors.

Although economic growth has been strong and sustained since the mid-nineties, its composition is leading to widening imbalances. Domestic demand, especially private and public consumption and investment in dwellings, has outpaced the level of output with a negative contribution to growth of net exports. This particular growth composition, based on labour intensive sectors such as housing and services, has boosted employment growth at strong and sustained rates of around 3% per year. Migration inflows, without precedent in the Spanish history, are having a strong demographic impact and largely explain intense job creation. Specifically, the Spanish population has increased by around 7½% (more than 3 million people) in the last five years.

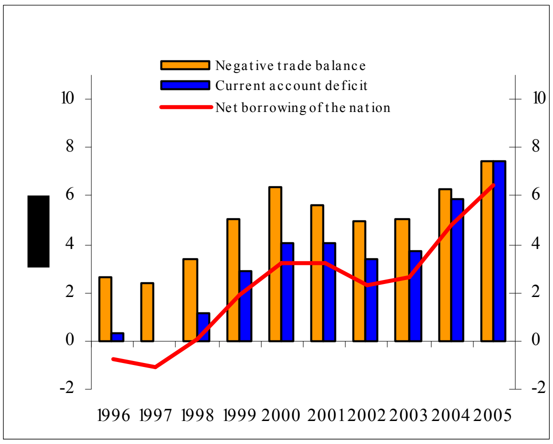
On the back of easier financial conditions, the boom of investment in dwellings started in 1998. Investment in dwellings, which already represents 30% of total investment in 2005, has created one million new jobs in Spain since 1995. Housing is also behind the rapid increase in households' indebtedness, which, from 33% of GDP in 1996, attained 71% of GDP in 2005, thus substantially increasing the exposure of households to interest rate shocks.

Figure 1: Average GDP growth: Spain vs. EU25 and EU12



Source: ***Commission services***

Figure 2: Trade and current account deficit and Net borrowing position



Source: Commission services

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[5] For a more detailed analysis on Spanish inflation developments, please see Ayuso-Casals et al. (2004), "The Spanish inflation differential: a never-ending story" European Commission, Country Focus Vol I, No 12.

Since job creation is concentrated in labour-intensive activities, such as housing and services, productivity growth is low (½ of a percentage point per year, compared with 1% in the euro area). Furthermore, productivity growth in the manufacturing sector has also been deceiving. The combination of a negative productivity differential and a positive inflation differential with Spain's main trade partners is steadily deteriorating competitiveness as measured by unit labour costs (ULCs), which have increased by 2½% per year, in contrast with 1½% in the euro area. As a result, while economic activity is boosting imports, exports have been growing at a slower pace not only due to cyclical factors, associated to lower growth in the euro area, but also to competitiveness losses of a more structural nature. The secular deficit in goods trade has widened, while the shrinking surpluses in the services sector (mainly tourism) are offset by the increasing deficits in the primary incomes and the current transfers' accounts, driven by the stock of foreign capital accumulated in the past and the migrants' current transfers abroad. As a result, the current account has deteriorated significantly from a close-to-balance position in 1996 to a deficit of 7½% of GDP in 2005 (Figure 2).

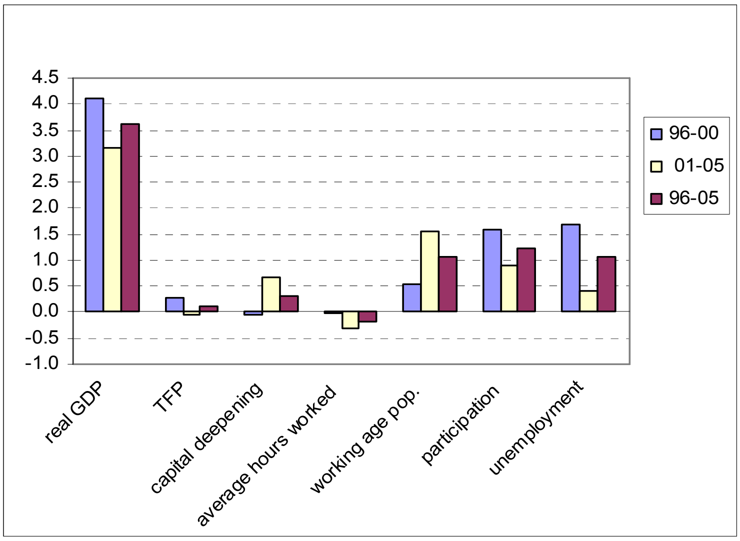
Price competitiveness losses are particularly relevant for Spain, a country where export price elasticities are high due to the relative Spain's product specialisation on medium-high technology goods. Moreover, exports of high technology goods are growing much slower than in the euro area.

The increasing external balance deficit since the mid-nineties is being financed mainly through portfolio investment. This contrasts with the eighties, when net foreign direct investment (FDI) covered a significant part of the potential financing needs of the Spanish economy. Nowadays, foreign investors acquire financial instruments such as mortgage securitization through their own banking system or financing intermediates. Moreover, portfolio investment has to finance, not only current account deficits, but net FDI outflows. As a result, the net external debt has increased from 45% of GDP in 1996 to 120% in 2005, which might imply a worsening of the results of the banking system to higher interest rates in case of, for example, higher mortgage repayment failures.

2.2. Anatomy of medium-term growth

Within the framework of a traditional growth accounting exercise, this section dissects the sources of average growth as well as possible differences in average economic growth of Spain vis-à-vis the euro area in the last ten years. The growth accounting exercise is carried out on the basis of the Cobb-Douglas production function underlying the commonly agreed method for the assessment of stability and convergence programmes. The results of the exercise, covering the period 1996-2005, are shown in Figure 3 and 4.

Figure 3: Real GDP growth and its components



Note:

Assuming a Cobb-Douglas-production function $Y = A(L \cdot H)^{\alpha} K^{1-\alpha}$ where Y denotes the level of *GDP*, L employment, H the average hours worked per person employed, K the capital stock and α the labour share in income, real GDP can be written as $Y = \frac{Y}{H \cdot L} H \cdot L = A \cdot \left(\frac{K}{H \cdot L}\right)^{1-\alpha} H \cdot WP \cdot PART \cdot (1-ur)$ where *WP* stands for working age population, *PART* denotes the participation ratio as a share of *WP* and *ur* the rate of unemployment. In terms of growth rates *g* this is:

$$g_Y = g_A + (1-\alpha)(g_K - g_L - g_H) + g_H + g_{WP} + g_{PART} - g_{ur} \cdot \frac{ur}{1-ur}$$

The expression $(g_K - g_L - g_H)$ is referred to as capital deepening, i.e. the increase in the capital labour ratio.

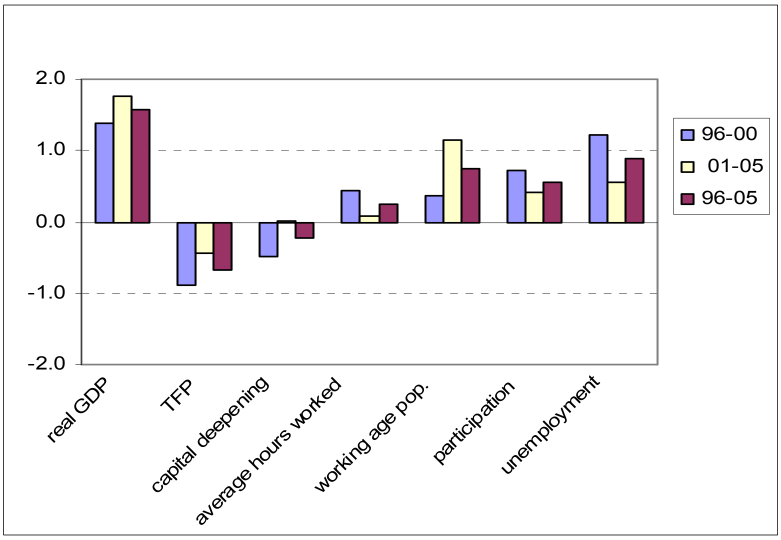
Source: Commission services

The results of the decomposition highlight the overwhelming predominance of labour as contributor to growth during the last decade. In contrast, the contribution of capital and, in particular of the technology uptake, recorded by total factor productivity (TFP), has been very low and remains well below euro area standards.

The high contribution of labour is not surprising given the prominence of labour-intensive sectors in its productive system. While between 1996 and 2000 the contribution of labour reflected declining unemployment, mainly due to a sharp increase in female employment rates, during the second half of the decade migrant inflows significantly contributed to growth by raising the working age population and total employment rates.

Regarding capital accumulation, its contribution to growth has strongly accelerated during the last five years to attain around ¾ of a percentage point per year. This seems the result of the housing boom rather than higher productive investment. Although within the framework of this growth-account exercise investment in dwellings contributes to growth via capital deepening, housing is not necessarily a promise of future growth given its small productive content compared to investment in equipment or innovation. This constellation of labour-intensive activities and the comparatively low productive capacity of capital deepening, linked to housing investment, results in very low contribution of TFP growth to overall GDP growth. While in the period 1985-1995 TFP growth averaged 0.7%, it dwindled to ¼% between 1996 and 2005. A number of structural factors seem to be behind the sluggish growth of TFP, such as human capital, training, research and development, slow incorporation of information and communication technologies to the productive structure, product specialisation and the composition of imports[6].

Figure 4: Real GDP growth and its components: Difference vis-à-vis the euro area



Note: See note of Figure 3
Source: Commission services

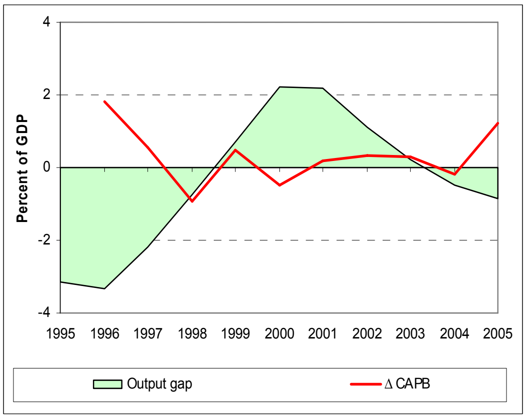
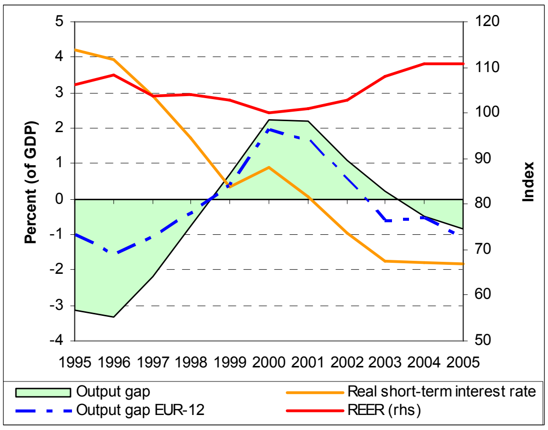
Differences in the contribution of labour almost fully explain the growth differences with the euro area over the last decade (Figure 4). In fact, a purely mechanical projection would lead to the conclusion that, had it been the contribution of capital and technology uptake of a similar magnitude in Spain than in the euro area, the Spanish growth differential with the euro area would have been around 2½ percentage points higher per year, instead of the actual average of 1½ percentage points during the last decade.

2.3. Macro-policies against the backdrop of the economic cycle

Between 1996 and 2005, annual GDP growth in Spain has been not only robust but also rather stable, between 3% and 4% in most years, peaking up at 5% in 2000 and bottoming out at 2.7% in 2002.

Figure 5 shows that during the second half of the nineties headline GDP was below potential although growing faster. Actual GDP outpaced potential in 1999, mainly due to the acceleration of private consumption growth fuelled by declining interest rates. Since 1999, both strong private consumption and high investment in dwellings, together with a somewhat less restrictive fiscal policy than in the second half of the nineties, resulted in a strong acceleration of economic activity, which led to positive output gaps.

[6] For a more in-depth analysis on TFP developments in Spain, please see: European Commission (2005), "Country Study: Spain in EMU: a virtuous long-lasting cycle?", Directorate-General for Economic and Financial affairs, European Economy, Occasional Papers no 14.

Figure 5: Spain - Output gap and fiscal stance	**Figure 6: Spain - Output gap and monetary conditions**
	
Note:ΔCAPB denotes the change in the cyclically-adjusted primary budget balance *Source: Commission services*	*Source: Commission services*

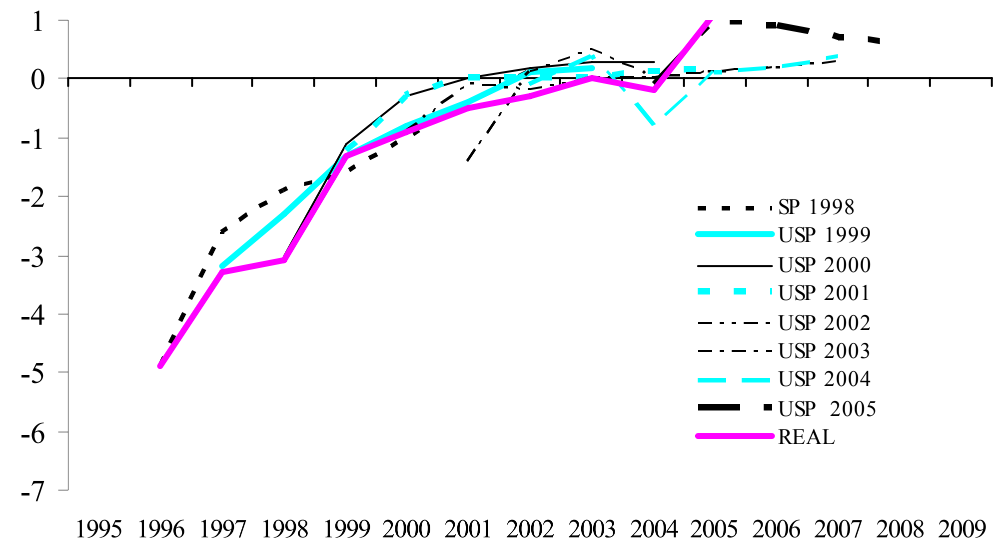
During the second half of the 1990s, coincidental with a sustained fiscal consolidation process, fiscal policy was pro-cyclical, although the economy was already moving to "good-times" territory. However, between 1998 and 2003, the stance can be considered as broadly neutral as shown by the stability of the cyclically-adjusted primary balance. In 2004 (net of one-off measures) and 2005, a revenue-based fiscal tightening might be taking place, part of which could be linked to the present growth composition, which would push up tax-income elasticities above historical trends and might not, therefore, be of a permanent nature *stricto sensu* (see next section).

Since the mid-nineties the Spanish monetary authority, the Bank of Spain, aimed at keeping inflation under control with a view to meeting the Maastricht criteria. Lower inflation rates allowed for a steady reduction of interest rates, which resulted in looser monetary policies between 1996 and 1998. Once in EMU, a single nominal interest rate responding to the euro area average inflation lead to looser monetary conditions in Spain due to persistently higher inflation rates. Such monetary conditions have supported consumption and facilitated access to credit, boosting mortgages and underpinning the boom in the housing market and improving corporate profits. Accordingly, monetary conditions have been especially growth-supportive in Spain since the mid-nineties, but most particularly since 1999 (see Figure 6). Although for most of the period the monetary conditions have been more expansionary in Spain, such loose monetary conditions have been accompanied by a much tighter fiscal policy. Overall, it is difficult to assess whether the policy mix during the last decade has been more expansionary in Spain than in the euro area as a whole.

2.4. Public finances

Fiscal consolidation has left behind the age of high deficits and debt accumulation in Spain. Partly fostered by the need to fulfil the Maastricht criteria to join EMU in 1998, the public deficit, which had peaked to 6.6% of GDP in 1995, began shrinking gradually from 1996 onwards to reach a balanced budget in 2002 and register a surplus above 1% in 2005 (Figure 7).

Figure 7: General government balance projections in successive stability programmes (% of GDP)

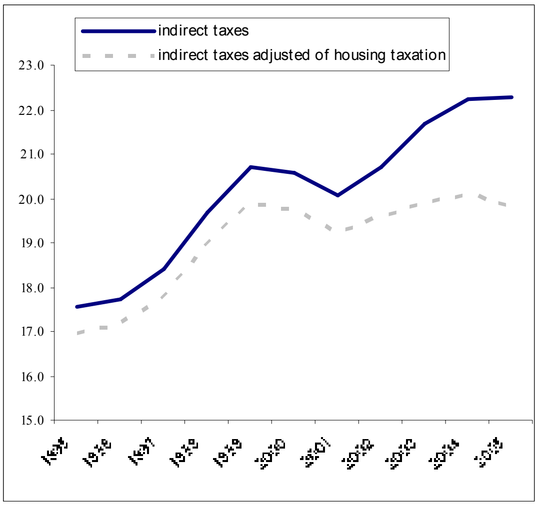


Source: Commission services and national convergence programmes

Where the composition of the adjustment is concerned, consolidation was mainly based on spending retrenchment, although revenues also grew with respect to GDP. The consolidation process had a positive effect on public debt. Between 1996 and 2005 gross debt has fallen by 25 percentage points of GDP down to 43.1%.

Regarding expenditures, from 44½% of GDP in 1995, they represented 38¼% in 2005. However, the reduction mostly took place during the first part of the last decade (4¾% of GDP). The bulk of this reduction was almost equally shared by interest payments, social benefits and capital expenditure (1½ percentage points). Between 2000 and 2005, total expenditures were reduced by additional 1½ percentage points of GDP, almost exclusive due to lower interest payments on the back of lower interest rates and a declining debt stock. Government final consumption gained momentum actually, reaching in 2005 the weight recorded previously in 1996 (around 18% of GDP).

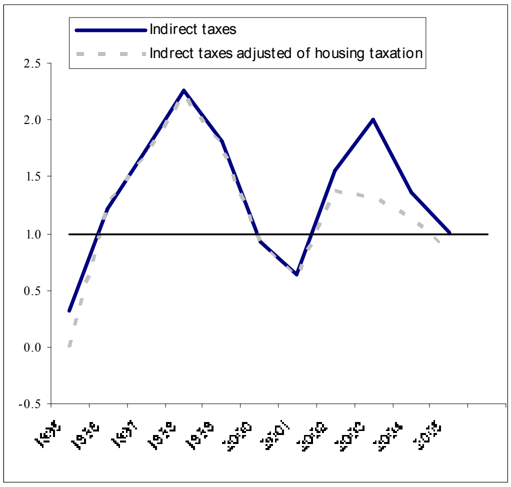
Figure 8: Effect of house taxation on the indirect taxes: Implicit tax rates (in %)



<u>Note:</u> For the calculation of implicit tax rates, the base for indirect taxes refers to private consumption + public consumption – compensation of government employees – revenues from indirect taxes.

<u>Source</u>: Commission services

Figure 9: Elasticity (w.r.t. the base)



<u>Note</u>: Although the amount of indirect tax revenues stemming from the housing market is not available, an estimate can be calculated using the number of mortgages signed per year, the average square price, the average square meters per property and the average ratio price-mortgage and estimated by the Commission services.

<u>Source</u>: Commission services

Total revenues have been increasing slightly since 1995, when they were at 37½% of GDP, to reach 39½% in 2005. While capital revenues fell by ½ of a percentage point of GDP, current receipts jumped by 2½ percentage points. The bulk of this increase is attributable to higher indirect taxes (by around 2¼ percentage points of GDP), particularly VAT, as well as to higher revenues from social contributions (¾% of GDP). Such additional revenues partially financed the reform of the personal income tax, which lowered direct taxes paid by households by 1 percentage point of GDP. The dynamism of indirect taxes seems largely explained by higher consumption content in GDP and especially by the housing boom. Therefore, while a part of current trends of indirect taxes are taken to be permanent, when assessed against the average tax elasticities, changes in the composition of growth in a more or less near future might lead to a fall in tax revenues in terms of GDP, even if growth would remain close to current rates. As shown in figures 7 and 8 indirect tax revenues over the last decade look very different after netting them out from the effects of indirect taxes on housing.

2.5. Medium and long-term policy challenges for public finances

Spain seems to be enjoying a kind of virtuous economic circle. Domestic demand, fuelled by private consumption and investment in construction, is at the origin of an intense job creation in housing and services, which, in turn, feeds domestic demand again, in a context of healthy public finances and negative real interest rates. However, a persistent inflation differential with the euro area, coupled with slow productivity growth, is deteriorating the external competitive position of a country whose traditional comparative advantages are based on low production costs rather than on products with a high technological content. Widening external deficits might jeopardise medium-term growth prospects. Furthermore, high households' indebtedness, largely explained by massive investment in dwellings, is increasing the vulnerability of a large share of the population to a rise in interest rates.

- Against this scenario, fiscal policy can play an important role, not only as a **stabilization** tool but also as a way of achieving higher efficiency in the economy. A restrictive orientation of fiscal policy would help cool down domestic demand pressures, which, in turn, would decelerate import growth. Whilst the budget has been in balance for the past several years, very high tax elasticities might have temporarily contributed to the improvement of fiscal revenues, hence the structural fiscal position may be less strong than standard calculations would show. This calls for a prudent assessment of the long-term sustainability of tax cuts and spending increases.

- On top of this, fiscal policy should also seek to achieve a higher **efficiency** in the economy by redistributing expenditure with an aim to prioritizing productivity-enhancing measures. An adequate fiscal policy should focus on a significant and efficient accumulation of physical, human and knowledge capital. This would include a continuous effort to enhance R&D spending, not only from the public side, but also encouraging private agents, while promoting an educational system decisively focused on excellence.

- While no risks for the **sustainability** of public finances seem to exist in the short term, population ageing and slow productivity growth bring some clouds to the long term sustainability outlooks. Fiscal policy, often dependent on the short or medium-term political cycle, should be more long-sighted. An adequate reform of the pension system, which would better align contributions and benefits, coupled with a moderation of health care spending growth, would represent a key milestone assuring the sustainability of the, at the present time, healthy Spanish public accounts.

Table 1: Key economic indicators

	Spain						Euro area					
	Averages			2003	2004	2005	Averages			2003	2004	2005
	'96 - '05	'96 - '00	'01 - '05				'96 - '05	'96 - '00	'01 - '05			
Economic activity												
Real GDP (% change)	3.7	4.1	3.2	3.0	3.2	3.5	2.1	2.7	1.4	0.8	2.0	1.4
Contributions to real GDP growth:												
Domestic demand	4.5	4.7	4.2	3.9	4.9	5.2	2.0	2.7	1.3	1.4	1.8	1.6
Net exports	-0.8	-0.6	-1.0	-0.8	-1.7	-1.7	0.1	0.1	0.1	-0.7	0.2	-0.2
Prices, costs and labour market												
HICP inflation (% change)	2.9	2.6	3.2	3.1	3.1	3.4	1.9	1.7	2.2	2.1	2.1	2.2
Labour productivity (% change)	0.4	0.3	0.5	0.6	0.6	0.4	1.2	1.5	0.8	0.8	1.6	0.9
Real unit labour costs (% change)	-1.0	-0.6	-1.3	-1.1	-1.5	-1.8	-0.5	-0.6	-0.5	-0.1	-1.0	-0.8
Employment (% change)	3.5	3.9	3.2	3.1	3.4	3.8	1.2	1.5	0.9	0.7	0.7	0.8
Unemployment rate (% of labour force)	12.6	14.6	10.5	11.1	10.7	9.2	9.1	9.8	8.5	8.7	8.9	8.6
Competitiveness and external position												
Real effective exchange rate (% change) (1)	0.5	-1.1	2.2	4.8	2.4	0.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Export performance (% change) (2)	0.7	1.8	-0.3	1.0	-2.8	-3.6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
External balance (% of GDP)	-2.3	-0.6	-4.1	-2.9	-4.8	-6.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public finances												
General government balance (% of GDP)	-1.3	-2.7	0.0	0.0	-0.2	1.1	-2.3	-2.1	-2.5	-3.1	-2.8	-2.4
General government debt (% of GDP)	56.2	63.2	49.2	48.7	46.2	43.1	70.9	72.5	69.3	69.3	69.8	70.8
Structural budget balance (% of GDP) (3)	n.a.	n.a.	n.a.	-0.1	0.0	1.5	n.a.	n.a.	n.a.	-3.2	-2.9	-2.0
Financial indicators (4)												
Long term real interest rate (%) (5)	1.6	3.1	0.2	0.0	0.1	-0.7	3.1	4.1	2.1	2.0	2.2	1.5
Household debt (% of GDP) (6)	48.936	38.952	58.92	57.7	64.5	72.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corporate sector debt (% of GDP) (7)	63.552	51.248	75.856	74.5	79.3	89.6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Notes:

More detailed tables summarising the economic performance of the country are included in Annex 4.

(1) Unit labour costs relative to rest of a group of industrialised countries (USD): EU24 (=EU25 excl. LU), BG, RO, TR, CH, NR, US, CA, JP, AU, MX and NZ.

(2) Market performance of exports of goods and services on export weighted imports of goods and services of 35 industrial markets.

(3) Cyclically-adjusted budget balance net of one-off and other temporary measures.

(4) Data available up to 2004.

(5) Using GDP deflator.

(6) Households' and non-profit institutions serving households' debt, defined as loans and securities other than shares.

(7) Non-financial corporate sector debt, defined as loans and securities other than shares.

Source:

Commission services

3. MACROECONOMIC OUTLOOK

This section is in seven parts, six of which refer to various dimensions of the macroeconomic scenario, notably: the external assumptions, overall economic growth, the labour market, costs and prices, sectoral balances and potential output growth. The final part summarises the assessment and includes (i) an overall judgement on the plausibility of the macroeconomic scenario and (ii) an indication of whether economic conditions over the programme period can be characterised as economic ‘good’ or ‘bad’ times.

3.1. External assumptions

The assumptions underpinning the programme's macroeconomic scenario are in line with those underlying the Commission services' autumn 2006 forecast. According to the update, the world economic activity (excluding the EU) will continue to expand strongly, although the pace of growth should slow down slightly, from 5¾% in 2006 to 5¼% in 2009. Extra-EU import volumes, although in a slightly decelerating path, should remain at around 8% providing market opportunities to the European economies. Regarding the EU-25, the update projects that the upturn of 2006, in which GDP is expected to have increased by 2.8%, will be consolidated over the programme horizon. Thus, the growth rate should remain stable at around 2½% per year until 2009.

Oil prices are projected from 65 USD/barrel in 2006 and 2007 to slightly increase to 68 USD/barrel in 2008 and 2009. The euro should appreciate marginally slightly against the dollar in 2007 (1.27 USD/€ compared with 1.25 USD/€ in 2006) and would remain virtually unchanged until the end of the programme period. Short-term interest rates in the euro area, at 3.1% in 2006, are expected to increase by around half of one percentage point in 2007 and remain broadly stable at that level until 2009.

3.2. Economic activity

The update estimates GDP growth at 3.8% in 2006, which is fully in line with the Commission services autumn 2006 forecast. The programme also presents broadly plausible GDP growth projections for 2007-2009. Specifically, in 2007 and 2008, GDP is expected to grow at 3.4% and 3.3% respectively, likewise in line with the Commission services' projections. The growth projection for 2009 of 3.3% appears plausible when assessed against current estimates of potential growth calculated following the commonly agreed methodology (see table 2).

According to the update, GDP growth would exclusively be sustained by domestic demand, although its contribution to growth is forecasted to fall from 4.7 percentage points in 2006 to 4.1 percentage points in 2008 and 4 percentage points in 2009. Based on slightly higher real interest rates, private consumption should moderate and grow at the same rate as real GDP. On the other hand, the negative contribution of net exports to growth would decline from around 1 percentage points in 2006 to 0.8 percentage points in 2008 and 0.7 percentage points in 2009, thus still feeding an increasing current account deficit.

The negative contribution to growth of the external sector is the reflection of insufficient exports, whose growth is projected to remain below that of imports over the programme period. Specifically, export growth should remain rather stable at around 6% per year, whereas import growth is projected to moderate from 8½% in 2006 to around 7% in

2008. Due to persistently higher imports growth during the last decade, the current level of imports is around 25% higher than that of exports.

Although this growth composition is almost fully in line with that of the Commission services' autumn 2006 forecast until 2008, some divergences can be highlighted regarding the main components. Specifically, according to the Commission services' forecast, private consumption should decelerate slightly faster, growing by 3.1% in 2008 compared to 3.3% in the update. This reflects a different estimation of the impact of interest rates increases, which, according to the Commission would pull private consumption to grow below GDP, whereas the update projects it growing at the same pace as GDP.

In line with private consumption, gross fixed capital formation is also expected to decelerate quicker in the Commission forecast. Although the update does not provide sufficiently detailed information, the divergence might reflect of a more pronounced deceleration of investment in construction in the Commission services' forecast. Yet, given the current intense activity of this sector, a substantial growth moderation can be expected in 2007 and 2008. In contrast, the dynamism of investment in equipment should not fade out. All in all, the contribution of domestic demand to GDP growth is almost coincidental in both scenarios from 4¾ percentage points of GDP in 2006 to 4 percentage points in 2009.

Table 2: Comparison of macroeconomic developments and forecasts

	2006		2007		2008		2009
	COM	SP	COM	SP	COM	SP	SP
Real GDP (% change)	3.8	3.8	3.4	3.4	3.3	3.3	3.3
Private consumption (% change)	3.6	3.7	3.4	3.4	3.1	3.3	3.3
Gross fixed capital formation (% change)	6.1	6.3	5.2	5.4	4.7	4.9	4.6
Exports of goods and services (% change)	6.9	5.7	4.9	6.1	5.4	5.6	5.8
Imports of goods and services (% change)	8.9	8.4	6.9	7.9	6.2	6.8	6.7
Contributions:							
- Final domestic demand	4.7	4.7	4.3	4.3	4.0	4.1	4.0
- Change in inventories	0.1	0.1	0.0	0.0	0.0	0.0	0.0
- External balance on g&s	-1.0	-1.1	-1.0	-0.9	-0.7	-0.8	-0.7
Output gap[1]	-0.9	-0.9	-1.1	-1.2	-1.3	-1.5	-1.6
Employment[2] (% change)	3.2	3.1	3.0	2.6	2.5	2.4	2.3
Unemployment rate (%)	8.1	8.3	7.9	7.8	7.4	7.7	7.6
Labour productivity growth (%)	0.5	0.6	0.4	0.8	0.8	0.9	1.0
HICP inflation[3] (%)	3.6	3.5	2.8	2.7	2.7	2.6	2.5
GDP deflator (% change)	3.9	3.8	3.2	3.2	3.1	3.1	2.9
Comp. of employees (% change)	3.1	3.2	2.9	2.8	2.9	2.7	2.6
Real unit labour costs (% change)	-1.4	-1.2	-0.7	-1.2	-1.1	-1.3	-1.3
External balance (% of GDP)	-7.8	-7.5	-9.0	-8.2	-9.5	-8.4	-8.7

Notes

[1]In percent of potential GDP, with potential GDP growth as reported in Table 2 below.
[2] Employment in full time equivalent.
[3]SP figures are the private consumption deflator.

Source:
Commission services' autumn 2006 economic forecasts (COM); Stability programme

Exports present a particularly divergent profile in 2007. Whereas the Commission forecast projects a slight deceleration based on lower GDP growth in the euro area, the update seems to consider that the strong rebound of exports in 2006 might still be sustained in 2007, mainly based on tourism inflows. Imports, in line with private consumption and investment, present a quicker decelerating path in the Commission services' forecast. In spite of these slightly different projections, the growth gap between exports and imports is broadly the same in both scenarios. Therefore, the contribution to growth of net exports is almost coincidental.

Table 3 presents the output gap estimates on the basis of the Commission services calculations, based on the information in the programme and according to the commonly agreed methodology. Specifically, the calculations point to a negative and widening output gap. This contrasts with the calculations carried out on the basis of the previous version of the Stability Programme, according to which, the negative output gap was projected to narrow in 2008. As real GDP growth projections are coincidental in both Stability Programmes, different estimates should come from a divergent estimation of potential growth. Yet, while potential growth was projected in the previous programme to fall sharply in 2008 associated to a concomitant decline of population growth, the most recent estimates would suggest that potential growth, backed by still a buoyant population increase, might not decelerate as quickly as previously projected.

The estimates of output gap in the last update are broadly in line with those implied by the Commission services' autumn 2006 forecast.

Macroeconomic developments do not appear consistent with a negative and widening output gap. Specifically, given the particular characteristics of the Spanish economy, fast growing population and high investment in construction, the commonly agreed methodology might be overestimating potential output. Among other factors, inflation differentials with the euro area, strong job creation, and widening external imbalances, would suggest that, at least, the Spanish economy would be growing at around its potential. The updated Stability Programme acknowledges the sensitivity of the estimation of the output gap to the methodology used and also presents a statistical approach based on the Hodrick-Prescott methodology, which points to a slightly positive output gap between 0.1% and 0.2% of GDP over the programme period.

Table 3: Output gap estimates in successive Commission services' forecasts and Stability programme updates (% of potential GDP)

	2006		2007		2008	
	COM	SP[1]	COM	SP[1]	COM	SP[1]
SP Dec 2006		-0.9		-1.2		-1.5
Autumn 2006	-0.9		-1.1		-1.3	
Spring 2006	-1.0		-1.5			
SP Dec 2005		-0.8		-1.1		-0.7
Autumn 2005	-0.2		-0.5			
Spring 2005	-2.8		0.0			
SP Dec. 2004		-0.2		-0.1		0

Note:

[1] Commission services' calculations according to the commonly agreed method based on the information in the programme.

Source: Commission services' forecasts, national Stability programme and Commission services.

3.3. Potential growth and its determinants

Table 4 presents the potential growth estimates on the basis of the Commission services calculations, based on the information in the programme and according to the commonly agreed methodology. The estimates are slightly higher than those implied by the Commission services' autumn 2006 forecast. Potential growth rates remain above 3.5% until 2008 in view of still buoyant employment growth and high rate of investment. In 2009, potential growth appears to fall to 3¼% driven by a lower contribution of labour.

The contribution of labour to potential growth should decline slightly from 1.8% in 2006 to 1.1% in 2009 and seems to be based on the increase in population of working age, especially intense at the beginning of the programme period. The contributions of a further unemployment decline and a participation rate increase should be modest, as the programme only projects a slight decline of unemployment of around ½ of one percentage point until 2009, and the participation rate might not substantially increase from current levels, already above 70% of the population of working age. The increase of employment and, therefore, of potential output seems to especially depend on an increase of population, i.e. additional migrant inflows.

The contribution of capital accumulation to potential growth would remain stable at around 1.7 percentage points per year until 2009. Although investment in construction is projected to decelerate over the programme horizon, it should be compensated by robust investment in equipment. However, given the particular investment structure of the Spanish economy, the commonly agreed methodology might be overestimating the capital deepening due to the relatively higher weight in terms of GDP of residential construction in Spain (8% of GDP compared to 5% in the euro area), which also account for a large share of the increase in total investment. This kind of investment probably has a lower capacity for generating future growth, but the commonly agreed methodology does not discriminate among investments.

The TFP contribution to potential growth should increase marginally to attain ½ of one percentage point in 2009. This seems to mirror the slight acceleration of productivity projected in the programme macroeconomic outlook, but does not imply a substantial change in the growth composition of the economy.

Table 4: Sources of potential output growth

	2006		2007		2008		2009
	COM	SP[2]	COM	SP2	COM	SP2	SP2
Potential GDP growth[1]	3.8	3.8	3.6	3.7	3.6	3.6	3.3
Contributions:							
- Labour	1.9	1.8	1.7	1.7	1.6	1.5	1.1
- Capital accumulation	1.6	1.6	1.7	1.7	1.7	1.7	1.7
- TFP	0.2	0.3	0.2	0.3	0.3	0.4	0.5

Notes:
[1]Based on the production function method for calculating potential output growth
[2]Commission services' calculations on the basis of the information in the stability programme (SP).
Source:
Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations

3.4. Labour market developments

The programme projects employment growth at 3.1% in 2006, which should slowdown to 2.4% in 2008 and 2.3% in 2009, while the unemployment rate is expected to fall from 8.3% in 2006 to 7.8% in 2008 and 2009. These figures do not represent a significant change with respect to previous trends since 1995 and are broadly in line with the Commission services' autumn 2006 forecasts.

The composition of growth of the economy implies that job creation should concentrate in low productivity sectors, such as construction, tourism and domestic services. Specifically, in 2006, around 33% of all new jobs (around 600,000) were created in the construction sector and an additional 15% were services closely linked to housing (renting, real estate purchases and sales, etc). Another 30% refers to tourism and domestic services. All in all, these sectors account for more than 75% of all the employment created. In contrast, industry only created 5% of all new employment.

Most of new jobs created in 2006 have been occupied by immigrants, the bulk of which concentrate precisely in the construction sector, tourism and domestic services. Estimations point to around new 500,000 immigrants having entered Spain in 2006. With a participation rate close to 80% and an unemployment rate slightly above 10%, around 350,000 new immigrants would have joined the Spanish labour market. This would represent around 70% of employment creation in those sectors.

3.5. Costs and price developments

As the update does not provide information on changes in the HICP, the outlook for price inflation is assessed on the basis of the private consumption deflator. According to the programme, the deflator should decline from 3.5% in 2006 to 2.6% in 2008, broadly in line with the Commission services' autumn 2006 forecasts for the HICP (3.6% in 2006 and 2.7% in 2008)[7]. In 2009, the private consumption deflator should further moderate to 2½%, closer to the ECB target for HICP at a rate of 2%.

The transitory inflationary effect associated to higher oil prices in 2006 should largely explain the decline of price pressures and a slight reduction of the inflation differential with the euro area. Given the still low projection of productivity growth over the programme period, the Balassa-Samuelson effects can probably be discarded as a main contributor. Referring to the sources of inflation, although cyclical factors associated to a strong domestic demand would explain in part the persistence of the inflation differential with the euro area, it would still be largely the result of insufficient competition and rigidities in certain product markets, especially utilities and services. Inflation in Spain seems to have its origin in the sheltered sector and not in the open one, representing a key element behind the ongoing deterioration of competitiveness in Spain. Sheltered sectors can easily pass through to the final consumer wage increases due to insufficient competition, whereas the manufacturing open sector might eventually hardly cope with wage pressures.

Compensation of employees per head is projected to grow slightly below inflation expectations at around 3½% in 2006, easing to 2¾% in 2007 and stable thereof, a similar

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[7] In the Commission services autumn 2006 forecast, HICP projections are broadly in line with the deflator of private consumption.

rate as inflation The Commission services' autumn 2006 forecasts projects similar wage growth. According to the update, unit labour costs would grow at around 2½% in 2006, decelerating to 2.1% in 2008, fully in line with the Commission services' autumn 2006 forecast. In 2009, unit labour costs are projected to grow in the update by only 1.6% explained by slightly enhanced productivity growth prospects at 1% in the updated stability programme, still above the forecast for the euro area at 1.3%.

The modest nominal increase of wages and their stagnation in real terms can be explained by strong and persistent labour supply shock stemming from immigration. Migrants, less demanding in terms of salaries than the domestic workforce, would be largely offsetting upward wages demand pressures, in particular in the above mentioned sectors, in which the bulk of foreign labour force concentrate. Strong migrant inflows might also largely explain that unemployment keeps on falling without additional inflationary pressures. In other words, the NAIRU in Spain seems to continue in a declining path.

3.6. Sectoral balances

As regards sectoral balances, the macroeconomic scenario of the update implies a steady deterioration of the net borrowing position vis-à-vis the rest of the world, which is projected to rise from 7½% of GDP in 2006 to 8½% of GDP in 2008 and 8¾% in 2009. This stems mainly, but not exclusively, from a rising deficit in the trade balance, reflecting the deterioration of the competitiveness of the economy. In parallel to the widening of the trade deficit, declining net tourism inflows are expected to further narrow the surplus recorded by services. Specifically, the update projects the deficit of the goods and services balance to increase from 6¼% of GDP in 2006 to around 7% in 2008. The deficit of the balance of primary incomes and current transfers together is expected to remain broadly stable at around 2% of GDP, as the increase of migrants' transfers abroad would be compensated by higher revenues from the Spanish investments abroad. The programme projects a reduction of the surplus of the capital account (from ¾% of GDP in 2006 to ½% in 2008 and 2009), reflecting the steady decline of capital transfers from the EU.

The Commission services forecasts present a broadly similar picture. However, the projected deterioration of the trade deficit is somehow more acute. Although export and import growth in real terms is fully comparable in both scenarios, the deflator of imports is projected to be higher by the Commission services, leading to a higher nominal trade deficit, and subsequently, to a higher net borrowing position of the country of 9½% of GDP in 2008.

The Spanish trade deficit appears to be the result of two different factor categories. Firstly there might be cyclical factors, reflecting strong and sustained growth in comparison to Spain's main trade partner, namely the euro area. Secondly, structural factors associated with the above mentioned persistent inflation differentials between Spain and the euro area, together with low productivity growth, would be behind a deterioration of competitiveness and could explain why growth in exports is projected to keep on growing below that of imports.

Taking into account the net lending position of the general government sector, the net borrowing requirement of the private sector is projected to increase from 9% of GDP in 2006, to 9¼% in 2008 and 9½% in 2009. Although the high borrowing requirement of the private sector mainly mirror the financial position of the corporate sector, which might attain 7% of GDP in 2008, the projected increase over the programme period is also largely explained by increasing indebtedness of the household sector to finance spending on residential housing, with net borrowing needs above 2% of GDP. These dynamics are in line with the Commission services' autumn 2006 forecast.

External financing is channelled mainly through two instruments: foreign direct investment (FDI) and portfolio. Net FDI in Spain might be negative until 2009, not only because of declining FDI inflows (1¾% of GDP in 2006 compared to 2% in 2005) but also due to increasing FDI outflows associated to the internationalization of Spanish corporations (6% of GDP in 2006 compared to 5½% in 2005). Therefore, portfolio investments need to finance both the net borrowing needs of the country and the net FDI outflows. As a result, net portfolio investment from the rest of the world is estimated to have attained 12% of GDP in 2006.

These financial developments are closely linked to the particular composition of the present expansionary phase of the Spanish economy based on private consumption and investment in dwellings. Domestic saving remains below rapidly increasing credit demand, and, Spanish investors, mainly households and private non-financial firms, are being financed by foreign financial institutions mainly through the domestic banking and other financial institutions. This seems to explain the current predominance of private financing institutions in the sectoral breakdown of the financial account. Foreign investors, through investment or pension funds, are expected to acquire financial instruments such as mortgage securitization to the Spanish banking system. This channel, by financing the bulk of the Spanish external deficit, should remain predominant until 2009.

3.7. Assessment

The assessment of the macroeconomic outlook covers two questions: first, whether the macroeconomic scenario is plausible, and, second, whether the economy should be considered to be in economic ‘good’ or ‘bad’ times.

3.7.1. Plausibility of the macroeconomic scenario

The macroeconomic scenario presented in the updated stability programme can be considered as plausible. The update estimates GDP growth at 3.8% in 2006 and a slight slowdown to 3.4% in 2007 and 3.3% in 2008 and 2009 respectively. Growth should exclusively be sustained by domestic demand, although its contribution to growth is forecasted to fall from 4.7 percentage points in 2006 to 4.1 percentage points in 2008 and 4 percentage points in 2009. The negative contribution of net exports to growth would decline from around 1 percentage points in 2006 to 0.8 percentage points in 2008 and 0.7 percentage points in 2009, thus still feeding an increasing current account deficit. The programme scenario does not present significant breakdowns vis-à-vis past trends, nor internal inconsistencies. The programmes' macroeconomic outlook is almost fully in line with the Commission services' autumn 2006 forecast for the period 2006-2008 and broadly in line with the Commission services’ estimate of potential GDP growth thereafter. Furthermore, there are no major differences concerning the composition of growth and price developments.

Although there might be some downside risks to this growth scenario, especially those associated to the inflation differential, the household indebtedness and the external imbalance, the estimated associated risk remains limited. Specifically, on current information, the likelihood of a drastic slowdown appears small for several reasons. First, albeit remaining high, the inflation differential with the euro area is being reduced as energy prices ease. Second, in spite of the rising borrowing position of households, mortgage repayment failures remain at the lowest historical levels, underpinning the short-term solvency of the private banking system. Finally, while the external deficit is not projected to recede, the stock of debt of the country, which could attain 140% of GDP in 2008, does not depart significantly from other euro area members.

While the macroeconomic scenario can be considered as plausible, given the particular growth composition of the Spanish economy, a note of caution must be sounded with respect to the distinct possibility of less buoyant growth in the medium term horizon than foreseen in the programme, notably if the extended residential construction boom would come to an end.

3.7.2. Economic good vs. bad times

By mechanically using the output gap estimations, Spain should be classified as being in economic bad times. The commonly agreed methodology takes account of the huge population increase and the impressive investment rate in Spain, especially housing. It is, therefore, not surprising that the potential output calculated using such inputs is persistently above actual GDP growth, leading to a negative and widening output gap. However, given the particular growth model of Spain, in which employment is growing fast, but mostly in rather non-qualified areas, and investment in construction, which plays a predominant role in gross fixed capital formation, the commonly agreed methodology might be overestimating the potential output of Spain.

Among other factors, inflation differentials with the euro area, strong employment growth rates leading to a sustained reduction of unemployment, and widening external imbalances, would point to the opposite direction, which would suggest that, at least, the Spanish economy is growing at around its potential. Thus, the economy would find itself neither in good nor in bad economic times.

4. GENERAL GOVERNMENT BALANCE

This section consists of four parts. The first part discusses budgetary implementation in the year 2006 and the second presents the budgetary strategy in the new update, including the programme's medium-term objective (MTO) for the budgetary position. The third analyses the risks attached to the budgetary targets in the programme. The final part contains the assessment of the fiscal stance and of the country's position in relation to the budgetary objectives of the Stability and Growth Pact.

4.1. Budgetary implementation in 2006

The 2006 Budget Law targeted a small surplus of 0.2% of GDP based on a GDP growth scenario of 3.3%. In contrast, the December 2005 update, published only one week later, targeted a surplus of 0.9% of GDP for the general government with the same GDP growth assumption but incorporating more accurate information on the implementation of the 2005 Budget. The current update estimates a surplus of 1.4% of GDP for 2006 with GDP growing at 3.8%, higher than foreseen in the 2006 budget. This is fully in line with the Commission services autumn 2006 forecast.

Table 5: Evolution of budgetary targets in successive programmes

		2005	2006	2007	2008	2009
General government balance (% of GDP)	**SP Dec 2006**	**1.1**	**1.4**	**1.0**	**0.9**	**0.9**
	SP Dec 2005	1.0	0.9	0.7	0.6	n.a.
	SP Dec 2004	*0.1*	*0.2*	*0.4*	*0.4*	n.a.
	COM Nov 2006	1.1	1.5	1.1	0.9	n.a.
General government expenditure (% of GDP)	**SP Dec 2006**	**38.2**	**38.4**	**38.6**	**38.6**	**38.6**
	SP Dec 2005	38.4	38.4	38.4	38.3	n.a.
	SP Dec 2004	*39.8*	*39.8*	*39.8*	*39.8*	n.a.
	COM Nov 2006	38.2	38.2	38.3	38.5	n.a.
General government revenues (% of GDP)	**SP Dec 2006**	**39.4**	**39.8**	**39.6**	**39.5**	**39.5**
	SP Dec 2005	39.4	39.3	39.1	38.9	n.a.
	SP Dec 2004	*39.9*	*40.0*	*40.1*	*40.2*	n.a.
	COM Nov 2006	39.4	39.6	39.5	39.3	n.a.
Real GDP (% change)	**SP Dec 2006**	**3.5**	**3.8**	**3.4**	**3.3**	**3.3**
	SP Dec 2005	3.4	3.3	3.2	3.2	n.a.
	SP Dec 2004	*2.9*	*3.0*	*3.0*	*3.0*	n.a.
	COM Nov 2006	3.5	3.8	3.4	3.3	n.a.

Source:
Stability programme (SP); Commission services' autumn 2006 economic forecasts (COM)

This outcome appears to be the result of higher-than-expected revenues in line with stronger GDP growth. Specifically, direct taxation, which represented 11% of GDP in 2005, is estimated in the update to have increased to 11½% of GDP in 2006, against an initial target of around 11% of GDP in the 2006 Budget Law as approved by the Parliament. This is consistent with the strong growth of compensation of employees, stemming from the strong job creation during the year, and with buoyant corporate profits. As regards expenditures, the estimated outcomes for general government would be slightly higher than in the initial budgetary plans. While the expenditure ceilings of the central government will most likely be met, a small deviation in regional and local budgets of around 0.3% of GDP cannot be discarded.

4.2. The programme's medium-term budgetary strategy

This section covers in turn the following aspects of the medium-term budgetary strategy outlined in the programme: (i) the main goal of the budgetary strategy; (ii) the composition of the budgetary adjustment, including the broad measures envisaged; and (iii) the programme's medium-term objective and the adjustment path towards it in structural terms.

4.2.1. The main goal of the programme's budgetary strategy

The update aims at (i) maintaining macroeconomic and budgetary stability and (ii) fostering productivity by increasing infrastructure, human and technological capital. The update targets a continuation of general government surpluses over the entire programme period (see Table 6). However, the surplus is projected to decline from 1.5% of GDP in 2006 to 0.9% in 2008 and 2009. The time profile of the primary surplus is similar, falling by 0.8 percentage points of GDP, from 3% in 2006 to 2¼% at the end of the programme period. There is a continuity of fiscal policy compared with the budgetary plans set out one year ago. However, compared with the previous update, the projected surpluses are somewhat higher, reflecting the stronger-than-targeted 2006 outturn (by ½ percentage point) carrying over to 2007 and 2008 (surpluses ¼ higher than in previous update). The macroeconomic scenario is broadly similar for 2007-2008.

Table 6: Composition of the budgetary adjustment

(% of GDP)	2005	2006	2007	2008	2009	Change: 2009-2006
Revenues	39.4	39.8	39.6	39.5	39.5	**-0.3**
of which:						
- Taxes & social contributions	36.5	36.9	36.8	36.7	36.8	**-0.1**
- Other (residual)	2.9	2.9	2.8	2.8	2.7	**-0.2**
Expenditure	38.2	38.4	38.6	38.6	38.6	**0.2**
of which:						
- Primary expenditure	36.4	36.8	37.1	37.2	37.3	**0.5**
of which:						
Consumption	18.0	17.9	17.9	17.9	17.9	**0.0**
Transfers other than in kind & subsidies	12.6	12.7	12.8	12.8	12.8	**0.1**
Gross fixed capital formation	3.6	3.7	3.9	3.9	4.0	**0.3**
Other (residual)	2.2	2.5	2.5	2.6	2.6	**0.1**
- Interest expenditure	1.8	1.6	1.5	1.4	1.3	**-0.3**
General government balance (GGB)	**1.1**	**1.4**	**1.0**	**0.9**	**0.9**	**-0.5**
Primary balance	**2.9**	**3.0**	**2.5**	**2.3**	**2.2**	**-0.8**
One-offs[1]	0.0	0.0	0.0	0.0	0.0	0.0
GGB excl. one-offs	**1.1**	**1.4**	**1.0**	**0.9**	**0.9**	**-0.5**

Note:
[1]One-off and other temporary measures.
Source:
Stability programme update; Commission services' calculations

4.2.2. The composition of the budgetary adjustment

The declining path for the surplus projected in the update is reflecting not only lower revenues (0.3 percentage points of GDP), but also an increase in primary spending (0.5 percentage points of GDP), which more than offsets the projected fall of 0.3 percentage points of GDP in interest payments until 2009.

Revenues are projected to decrease by 0.3 percentage points of GDP over the programme period (from 39.8% in 2006 to 39.5% in 2009). The decline reflects in part the impact of the direct tax reform implemented in 2007, which will lower personal income and corporate tax rates from 2007 onwards. Specifically, revenue losses are projected to amount to ½ of one percentage point of GDP between 2007 and 2008. Therefore, had the reform not been implemented, revenues would have increased by around ¼ of one percentage point between 2006 and 2009.

The main features of the reform can be summarized as follows: Concerning the personal income tax, (i) the reform would imply the reduction of tax payments by around 17% for 60% of the taxpayers; (ii) the marginal top rate is lowered by 2 points, from the current 45% to 43%; (iii) the number of tax brackets is reduced from 5 to 4; and (iv) all saving products will be taxed at a single flat rate of 18. With respect to corporate taxes, the rate should gradually ease from the current 35% to 30% by 2008. In the case of small and medium enterprises the rate would go down from 30% to 25%. However, in parallel, most fiscal deductions will be abolished.

No other significant policy changes have been introduced in the 2007 Budget Law on the revenue side. Revenues in the current update are around ½ percentage points of GDP higher than in the December 2005 update, which would be consistent with the high tax elasticities of both direct and indirect taxes recorded in 2006.

Expenditures should increase by around ¼ percentage points of GDP by 2009, from about 38¼% of GDP in 2006 to 38½% in 2009. Public consumption is envisaged to marginally widen by 0.1 percentage points of GDP, remaining stable at around 18% of GDP between 2006 and 2009. In real terms, it is projected to grow at around the same rate as real GDP. Social transfers (other than in kind) and subsidies are set to increase by 0.1 percentage points of GDP over the programme period (at around 12¾%) while gross fixed capital formation is projected to increase by around ¼ percentage points of GDP, from 3¾% of GDP in 2006 to 4% in 2009. This implies that public investment should grow in real terms at around 5% over the programme period, well above real GDP. The envisaged debt reduction (see Section 5.1) should bring interest payments down by ¼ percentage points of GDP.

By subsectors of the general government, the social security sector is the source of the bulk of the surplus of the general government balance over the programme period. Specifically, in 2007, the central government is expected to register a surplus of around ¼% of GDP, while regional and local entities would each record a small deficit of 0.1% of GDP. The surplus of the social security sector should remain at around 1% of GDP. In 2008 and 2009, the central government is expected to keep the small surplus of ¼% of GDP, whereas regional and local governments should present a close-to-balance position. In line with the recent past, and still underpinned by buoyant employment creation, the social security subsector is envisaged to keep recording high, although declining surpluses, from 0.9% of GDP in 2007 to 0.6% in 2009.

Box 1: The budget for 2007

The 2007 Budget Law was sent for approval by the government to the Parliament on 20 September of 2006 and adopted by the latter on 28 December of 2006. It targets a general government surplus of 0.7% of GDP. According to this target, the expected surpluses of the social security (0.7% of GDP) and the central government (0.2% of GDP) should be partially compensated by small deficits of 0.1% in both the regional and local governments.

The main priorities of the 2007 Budget Law represent a continuation of those set out in the 2005 and 2006 Budget Laws. Specifically, the Budget aims at (i) strengthening competitiveness by promoting education and productivity-enhancing expenditure such as public R&D, (ii) further investing in infrastructures and (iii) raising social expenditure such as pensions and unemployment benefits. Spending on these policies is projected to increase above nominal GDP.

Compared with the 2006 budget plans, total revenues are set to increase by around 7% in nominal terms, at around the same pace as nominal GDP. Direct taxes, after having deducted the impact of a reform of personal income and corporate taxes, are still expected to grow by 7% boosted by buoyant employment creation. This is similar to the nominal rate of growth projected for indirect taxes (7%), which, in turn, appears consistent with the slight deceleration in private consumption projected in the macroeconomic scenario of the Budget Law. Fuelled by strong job creation, social security contributions are expected to grow slightly above 7%. Such projections are consistent with past trends in tax collection and implicit taxation.

Concerning the revenue side, the most measure refers to the entry into effect of the new personal income and corporate tax law.. A reduction of employers' social security contributions aims at encouraging permanent employment contracts. The impact of all these measures is expected to amount to a revenue loss of around € 5 billion (0.5% of GDP)

Central Government expenditures are projected to grow by 6¾% in nominal terms. However, some productive expenditure is set to increase well beyond the average rate. R&D expenditure is projected to grow at 34¼% to attain 0.7% of the GDP. Education spending should increase by 28½%, amounting to 0.2% of GDP. This only covers the small part under the direct control of the central government, since most education spending is directly managed by regional governments. Investment is budgeted to grow by 10%.

4.2.3. The medium-term objective (MTO) and the structural adjustment

The update sets an MTO of a balanced budget (in structural terms) for the general government, which it aims to maintain by a large margin throughout the programme period. This is the same as in the previous update of the stability programme.

The MTO is more demanding than the minimum benchmark, which is the estimated budgetary position in cyclically-adjusted terms that provides a sufficient safety margin for automatic stabilisers to operate freely during normal economic downturns without breaching the 3% of GDP deficit reference value and has been estimated at a deficit of around 1¼% of GDP for Spain. The MTO lies within the range indicated for euro-area and ERM II Member States in the Stability and Growth Pact and the code of conduct and is more demanding than implied by the debt ratio and average potential output growth in the long term.

Table 7 shows that according to the calculations carried out by the Commission services on the basis of the programme and the commonly agreed methodology the structural surplus is planned to decline slightly from around 1¾% of GDP in 2006 to 1½% of GDP in the period 2007-2009. The structural primary balance is also projected to slightly decline from 3½% in 2006 to 3% in 2007-2009. This points to an overall neutral fiscal policy stance in both 2008 and 2009; in 2007 the stance is broadly neutral to slightly expansionary.

Table 7: Output gaps, cyclically-adjusted and structural balances

% of GDP	2005		2006		2007		2008		2009	Change: 2009-2006
	COM	SP[1]	COM	SP[1]	COM	SP[1]	COM	SP[1]	SP[1]	SP[1]
Gen. gov't balance	1.1	1.1	1.5	1.4	1.1	1.0	0.9	0.9	0.9	-0.5
One-offs[2]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Output gap[3]	-0.8	-0.9	-0.9	-0.9	-1.1	-1.2	-1.3	-1.5	-1.6	-0.7
CAB[4]	1.5	1.5	1.9	1.8	1.6	1.5	1.4	1.6	1.6	-0.2
change in CAB	1.5	1.4	0.4	0.3	-0.2	-0.3	-0.2	0.0	0.0	-0.3
CAPB[4]	3.3	3.3	3.5	3.4	3.1	3.0	2.9	3.0	2.9	-0.5
Structural balance[5]	1.5	1.5	1.9	1.8	1.6	1.5	1.4	1.6	1.6	-0.2
change in struct. bal.	1.5	1.4	0.4	0.3	-0.2	-0.3	-0.2	0.0	0.0	-0.3
Struct. prim. bal.[5]	3.3	3.3	3.5	3.4	3.1	3.0	2.9	3.0	2.9	-0.5

Notes:
[1]Output gaps and cyclical adjustment according to the stability programme as recalculated by Commission services on the basis of the information in the programme.
[2]One-offs and other temporary measures.
[3]In percent of potential GDP. See Table 2 above.
[4]CA(P)B = cyclically-adjusted (primary) balance.
[5]Structural (primary) balance = CA(P)B excluding one-offs and other temporary measures.
Source:
Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations

Box 2: The medium-term objective (MTO) for the budgetary position

According to the Stability and Growth Pact, stability and convergence programmes must present a medium-term objective (MTO) for the budgetary position. The MTO is country-specific to take into account the diversity of economic and budgetary positions and developments as well as of fiscal risk to the sustainability of public finances.

The MTO should fulfil a triple aim. First, it should provide a safety margin with respect to the 3% of GDP deficit limit. Second, it should ensure rapid progress towards sustainability. Third, taking into account the first two goals, it should allow room for budgetary manoeuvre, considering in particular the needs for public investment. The code of conduct further specifies that, as long as the methodology for incorporating implicit liabilities is not fully developed and agreed by the Council, the country-specific MTOs are set taking into account the current government debt ratio and potential growth (in a long-term perspective), while preserving a sufficient margin against breaching the 3% of GDP deficit reference value. Member States are free to set an MTO that is more demanding than strictly required by these provisions.

The MTO is defined in structural terms, i.e. it is adjusted for the cycle and one-off and other temporary measures are excluded. For countries belonging to the euro area or participating in the exchange-rate mechanism (ERM II), the MTO should be in a range between a deficit of 1% of GDP and balance or surplus (in structural terms).

4.3. Risk assessment

This section discusses the plausibility of the programme's budgetary projections by analysing various risk factors. For the period until 2008, Table 8 compares the detailed revenue and expenditure projections in the Commission services' autumn 2006 forecast, which are derived under a no-policy change scenario, with those in the updated programme.

As mentioned in Section 3.7.1 above, the budgetary projections in the update are based on plausible growth assumptions, in line with the Commission services autumn 2006 forecasts.

Referring to risks stemming from the macroeconomic outlook, the updated stability programme presents an alternative, not fully fledged scenario of ½ percentage point of lower GDP growth between 2007 and 2009 than the central one, resulting in a declining budgetary surplus from 0.8% of GDP in 2007 to 0.2% in 2009, hence around ½ percentage point lower than in the central scenario. Commission services' simulations of the cyclically-adjusted balance under the assumptions of (i) a sustained 0.5 percentage point deviation from the real GDP growth projections in the programme over the 2006-2009 period; (ii) trend output based on the HP-filter and (iii) no policy response (notably, the expenditure level is as in the central scenario), reveal that, by 2009, the cyclically-adjusted balance is around 0.7 percentage point of GDP below the central scenario. Therefore, in the case of persistently lower real growth, additional measures of around 0.7 percentage point of GDP would be necessary to keep the public finances on the path targeted in the central scenario.

The most relevant budgetary measure presented in the programme consists of a reform of personal income and corporate taxes, whose revenue loss is estimated at around ½% of GDP between 2007 and 2008. Having increased their GDP-share from 39.4% of GDP in 2005 to 39.8% in 2006, revenues should decline slightly to 39.6% and 39.5% in 2007 and 2008. Without the expected impact of the reform, revenues should have attained 39.9% and 39.7% of GDP in 2007 and 2008 respectively. This stabilization around 39.8% of GDP, once revenues netted out from the effect of the direct tax reform, implies that the programme assumes a quick return of tax elasticities to historical trends close to the unit in spite of past inertia and still strong GDP projections. Therefore, the underlying revenues estimates, even broadly in line with the Commission services autumn 2006 forecast, might be considered as slightly cautious.

Table 9 presents annual changes in the overall tax-to-GDP ratio and the tax elasticity relative to GDP. The assumptions about the tax intensity of economic activity on which the update is based are broadly in line with those in the Commission services autumn 2006 forecasts. The assumed quick return of tax elasticities to "normal values" in the update would point to a risk of higher-than-projected revenues. **Table 8. Composition of the budgetary adjustment**

(% of GDP)	2005	2006		2007		2008		2009
		COM	SP	COM	SP	COM[1]	SP	SP
Revenues	**39.4**	**39.6**	**39.8**	**39.5**	**39.6**	**39.3**	**39.5**	**39.5**
of which:								
- Taxes & social contributions	36.1	37.0	36.9	36.9	36.8	36.8	36.7	36.8
- Other (residual)	3.3	2.6	2.9	2.6	2.8	2.6	2.8	2.7
Expenditure	**38.2**	**38.2**	**38.4**	**38.3**	**38.6**	**38.5**	**38.6**	**38.6**
of which:								
- Primary expenditure	36.4	36.5	36.8	36.8	37.1	37.1	37.2	37.3
of which:								
Consumption	18.0	18.1	17.9	18.3	17.9	18.4	17.9	17.9
Transfers other than in kind & subsidies	12.6	12.6	12.7	12.7	12.8	12.6	12.8	12.8
Gross fixed capital formation	3.6	3.6	3.7	3.6	3.9	3.7	3.9	4.0
Other (residual)	2.3	2.3	2.5	2.3	2.5	2.3	2.6	2.6
- Interest expenditure	1.8	1.6	1.6	1.5	1.5	1.4	1.4	1.3
GGB	**1.1**	**1.5**	**1.4**	**1.1**	**1.0**	**0.9**	**0.9**	**0.9**
Primary balance	**2.9**	**3.1**	**3.0**	**2.7**	**2.5**	**2.3**	**2.3**	**2.2**
One-offs[2]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GGB excl. one-offs	**1.1**	**1.5**	**1.4**	**1.1**	**1.0**	**0.9**	**0.9**	**0.9**

Notes:

[1]On a no-policy change basis.

[2]One-offs and other temporary measures.

Source:

Commission services' autumn 2006 economic forecast (COM); Stability programme update (SP); Commission services' calculations

On the expenditure side, the update projects a slight increase in expenditures in terms of GDP over the programme period. The envisaged increase in current primary expenditures (by 0.5% of GDP in four years) should be partially offset by the estimated reduction of interest payments (0.3% until 2009). Although this overall projection appears to be plausible when compared to the Commission services' autumn 2006 forecast, the Commission services' forecast was largely the result of developments in public consumption. In contrast, according to the update, public consumption growth should stagnate in terms of GDP over the same period, the bulk of expenditure growth being accounted by public investment. The Commission services' forecast of public expenditure growth was based on past trends, according to which a relatively strong expansion of education and health care expenditures have resulted in higher-than-expected spending (at the level of regional authorities). Consequently, if public investment materializes as planned in the last update, there is a risk of expenditure overruns because public consumption may again turn out to be (slightly) higher than expected.

The reduction of interest payments envisaged in the update (of 0.3% of GDP over the programme period) appears plausible.

Spain has a good track record in respecting budgetary spending. Overruns for general government expenditure have amounted annually to around ¼% of GDP in the past years and, as mentioned above, mainly reflect quick increases in regional health care and education budgets.

Overall, the risks to the budgetary targets appear broadly balanced. The macroeconomic scenario underlying the update is plausible and revenue projections seem to reflect cautious assumptions. On the expenditure side, there is a risk of (small) expenditure overruns (at the level of regional authorities), mainly if past trends in health care are confirmed. However, the government's track record is good and overall, the programme projections are close to those in the Commission services' autumn 2006 forecast.

However, although the risks to the budgetary targets seem broadly balanced, the public finance situation is vulnerable to a possible change in the growth pattern of the country, which is currently based on private consumption and investment in dwellings. Indeed, the current surplus position partly reflects exceptionally high revenues in some areas, such as those associated to the housing boom.

Table 9: Assessment of tax projections

	2007			**2008**			**2009**
	SP	**COM**	**OECD[3]**	**SP**	**COM[1]**	**OECD[3]**	**SP**
Change in tax-to-GDP ratio (total taxes)	0.0	0.0	0.2	0.0	-0.1	0.2	0.0
Difference (SP– COM)	-0.0		/	0.1		/	/
of which[2]:							
- discretionary and elasticity component	-0.2		/	-0.1			/
- composition component	0.1		/	0.2		/	/
Difference (COM - OECD)	/	-0.1		/	-0.2		/
of which[2]:							
- discretionary and elasticity component	/	-0.1		/	-0.1		/
- composition component	/	-0.1		/	-0.2		/
p.m.: Elasticity to GDP	1.0	1.0	1.1	1.0	1.0	1.1	1.0

Notes:
[1]On a no-policy change basis.
[2]The decomposition is explained in Annex 5.
[3] Based on OECD ex-ante elasticity relative to GDP.

Source:
Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations and OECD (N. Girouard and C. André (2005), "Measuring Cyclically-Adjusted Budget Balances for the OECD Countries", OECD Working Paper No. 434)

4.4. Assessment of the fiscal stance and budgetary strategy

Table 10 offers a summary assessment of the country's position relative to the budgetary requirements laid down in the Stability and Growth Pact. In order to highlight the role of the preceding analysis of the risks that are attached to the budgetary targets presented in the programme, this assessment is done in two stages: first, a preliminary assessment on the basis of the targets taken at face value is made (middle column) and, second, the final assessment that also takes into account risks (final column).

Table 10: Overview of compliance with the Stability and Growth Pact

	Based on programme[3] (with targets taken at face value)	**Assessment** (taking into account risks to targets)
a. Safety margin against breaching 3% of GDP deficit limit[1]	throughout programme period	throughout programme period
b. Achievement of the MTO	throughout programme period	throughout programme period
c. Fiscal stance in line with Pact[2]?	In line	In line

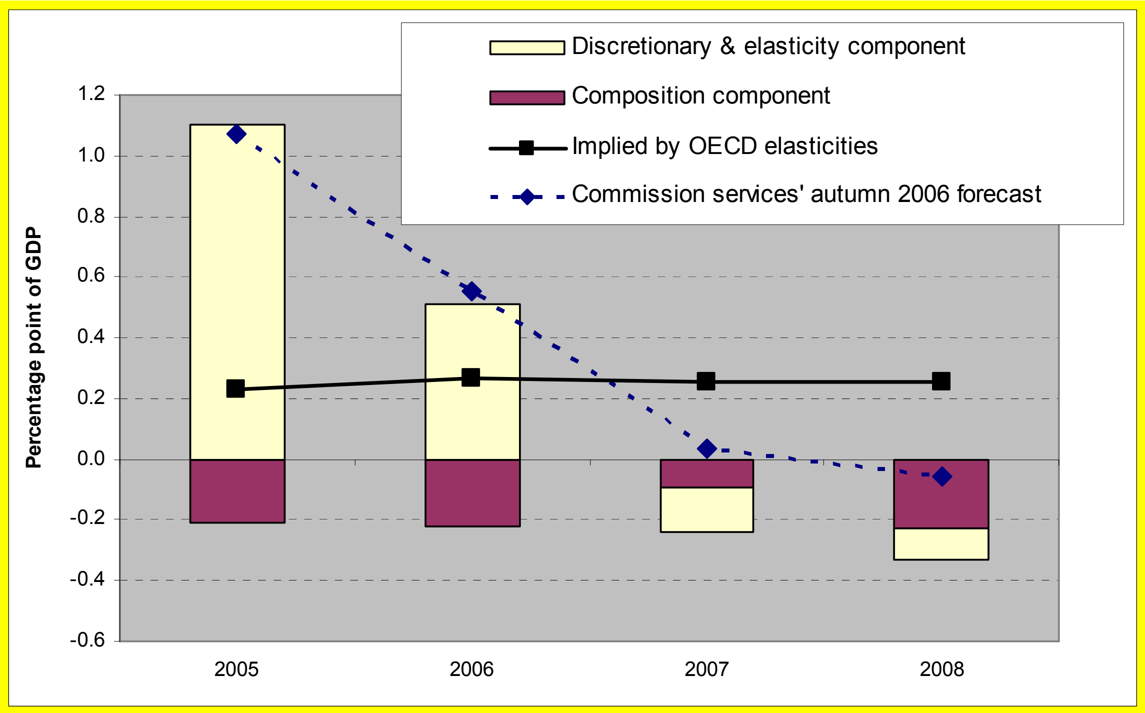
Notes:
[1]The risk of breaching the 3% of GDP deficit threshold with normal cyclical fluctuations, i.e. the existence of a safety margin, is assessed by comparing the cyclically-adjusted balance with the above mentioned minimum benchmark (estimated as a deficit of around 1¼% of GDP for Spain). These benchmarks represent estimates and as such need to be interpreted with caution.
[2]According to the Stability and Growth Pact, countries which have already achieved their MTO should avoid pro-cyclical fiscal policies in "good times".
[3]Targets in structural terms as recalculated by Commission services on the basis of the information in the programme.
Source: Commission services

Taking into account that the risks to the budgetary targets are broadly balanced, the budgetary stance in the programme seems sufficient to maintain the MTO throughout the programme period, as also envisaged in the update. By the same token, a safety margin against breaching the 3% deficit ceiling with normal cyclical fluctuations is provided in every year.

For countries in MTO, the Stability and Growth Pact requires that pro-cyclical fiscal policies in good times (taking into account tax elasticities) be avoided. As shown in Table 6 above, there is a slight loosening of fiscal policy in 2007 (deterioration in the structural balance of ¼ of GDP and in the primary structural balance of ½ % of GDP). However, the assessment of economic conditions in Section 3.7.2 above shows that Spain cannot be considered as experiencing good economic times (rather "neutral" economic times). This is not entirely confirmed by the analysis of tax elasticities (in Table 9 and Figure 10), which would point to Spain enjoying good times, at least in 2005 and 2006.

Figure 10 compares the change in the tax-to-GDP ratio underlying the Commission services' forecast with that implied by the ex-ante OECD elasticities. The figure shows that the tax ratio increased by much more than implied by the OECD elasticities in both 2005 and 2006, while, for 2007 and 2008, the opposite is projected because the discretionary & elasticity component shifts from very positive to negative on the back of the reform of the personal income and corporate tax regime. Overall, Spain cannot be regarded as planning pro-cyclical fiscal policies in good times in the year 2007 (nor in subsequent years).

Figure 10: Changes in the tax-to-GDP ratio:
actual/projected changes vs. changes implied by OECD elasticity



Note:
The dashed line displays the change in the tax ratio in the Commission services' 2006 autumn forecast, for 2008, on a no-policy-change basis. The solid line shows the change in the tax ratio implied by the ex-ante OECD elasticity with respect to GDP. The difference between the two is explained by the bars. The composition component captures the effect of differences in the composition of aggregate demand (more tax rich or more tax poor components). The discretionary and elasticity component captures the effect of discretionary fiscal policy measures as well as variations of the yield of the tax system that may result from factors such as time lags, variations of taxable income that do not necessarily move in line with GDP e.g. capital gains. Both components may not add up to the total difference because of a residual component, which is generally small. The decomposition is explained in detail in Annex 5.

Source:
Commission services

5. GOVERNMENT DEBT AND LONG-TERM SUSTAINABILITY

Government debt is the result of the financing needs of government over the years. It corresponds primarily to an accumulation of deficits, although the build-up of financial assets and other adjustments may also play a role.[8] The reform of the Stability and Growth Pact has raised attention to the crucial importance of government debt and of sustainability in fiscal surveillance.

This section is in two parts: a first part describes recent developments and the medium-term prospects for government gross debt; it describes the stability programmes targets, compares them with the Commission services' forecasts and assesses the associated risks. A second part looks into the government debt from a longer-term perspective with the aim of assessing the long-term sustainability of public finances.

5.1. Recent debt developments and medium-term prospects

5.1.1. Debt projections in the programme

According to the update, the government debt ratio will be kept on a downward path throughout the programme period and should remain well below the 60% of GDP Treaty reference value; as illustrated in Figure 11 and Table 11. Specifically, the debt-to-GDP ratio is expected to steadily decline from 40% of GDP in 2006 to 32% of GDP in 2009. The Commission services' autumn 2005 forecasts projected the general government debt in a similar downward path. The projected reduction in the government deficit (7% points of GDP between 2005 and 2008) is quite similar to the projection in the previous programme of December 2005. The debt ratio at the end of 2006 was around 1% of GDP below previous projections. The difference is largely explained by the better-than-expected budget outcome in 2006, as well as by higher nominal GDP growth.

The programme projects the stock-flow adjustment to decline from 1.1% of GDP in 2006 to 0.4% in 2007, increasing to 0.8% in 2008 and 2009. Further provisions to the Security System Pension Fund, as well as investments of the national railway infrastructure company, ADIF, should be behind such developments.

5.1.2. Assessment

Overall, the general government gross debt reduction path presented in the update appears plausible. Once taking into account the most recent information on the implementation of the 2006 budget, which points to a primary balance of around 3% of GDP, the projections in the programme are broadly in line with the Commission services' autumn 2005 forecast. In 2007, a small deviation of around ½ of one percent of GDP between the programme and the Commission services' forecast point is due to a decline of the stock-flow adjustment projected in the programme.

The projected pace of debt reduction does not seem to be subject to major risks. According to the high-interest-rate scenario included in the update, which projects a market interest rate increase of 1 percentage point per year, the debt-to-GDP ratio would

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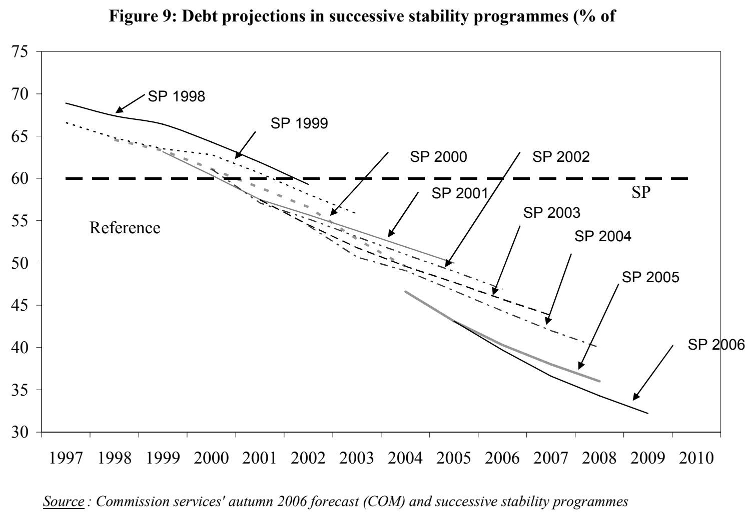
8 On the factors other than the deficit which explain the evolution of the government debt, see "The dynamics of government debt: decomposing the stock-flow adjustment", chapter II.2.2 of *Public Finances in EMU 2005*, European Economy, N°3/2005.

fall to 36.7% in 2007 and 32.5% in 2008, still on a declining path and well below the 60 % of GDP threshold.

Figure 11: Debt projections in successive stability programmes (% of GDP)



Source: Spanish Stability Programmes and Commission Services

Table 11: Debt dynamics

(% of GDP)	average 2000-04	2005	2006		2007		2008		2009
			COM	SP	COM	SP	COM	SP	SP
Gross debt ratio[1]	**46.2**	**43.1**	**39.7**	**39.7**	**37.0**	**36.6**	**34.7**	**34.3**	**32.2**
Change in the ratio	-3.1	-3.1	-3.5	-3.4	-2.6	-3.1	-2.4	-2.3	-2.1
Contributions[2]*:*									
Primary balance	-2.3	-2.9	-3.1	-3.0	-2.7	-2.5	-2.3	-2.3	-2.2
"Snow-ball" effect	-1.3	-1.6	-1.5	-1.5	-1.0	-1.0	-0.9	-0.9	-0.8
Of which:									
Interest expenditure	2.7	1.8	1.6	1.6	1.5	1.5	1.4	1.4	1.3
Growth effect (real GDP)	-1.8	-1.5	-1.5	-1.5	-1.3	-1.3	-1.2	-1.1	-1.1
Inflation (GDP deflator)	-2.1	-1.8	-1.6	-1.6	-1.2	-1.2	-1.1	-1.1	-1.0
Stock-flow adjustment	0.5	1.4	1.2	1.1	1.0	0.4	0.8	0.9	0.9
Of which:									
Cash/accruals diff.	-0.1	-0.9	-	n.a.	-	n.a.	-	n.a.	n.a.
Acc. financial assets	0.7	2.2	-	n.a.	-	n.a.	-	n.a.	n.a.
Privatisation	0.0	0.0	-	n.a.	-	n.a.	-	n.a.	n.a.
Val. effect & residual	0.0	0.0	-	n.a.	-	n.a.	-	n.a.	n.a.

Notes:
[1]End of period.
[2]The change in the gross debt ratio can be decomposed as follows:

$$\frac{D_t}{Y_t} - \frac{D_{t-1}}{Y_{t-1}} = \frac{PD_t}{Y_t} + \left(\frac{D_{t-1}}{Y_{t-1}} * \frac{i_t - y_t}{1 + y_t} \right) + \frac{SF_t}{Y_t}$$

where t is a time subscript; D, PD, Y and SF are the stock of government debt, the primary deficit, nominal GDP and the stock-flow adjustment respectively, and i and y represent the average cost of debt and nominal GDP growth (in the table, the latter is decomposed into the growth effect, capturing real GDP growth, and the inflation effect, measured by the GDP deflator). The term in parentheses represents the "snow-ball" effect. The stock-flow adjustment includes differences in cash and accrual accounting, accumulation of financial assets and valuation and other residual effects.
Source:
Stability programme update (SP); Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations

5.2. Long-term debt projections and the sustainability of public finances

The issue of long-term sustainability is a multi-faceted one. It involves avoiding imposing an excessive burden on future generations and ensuring the country's capacity to appropriately adjust budgetary policy in the medium and long run.[9]

Debt sustainability is derived from the government's *intertemporal budget constraint*. It imposes that current total liabilities of the government, i.e. the current public debt and the discounted value of future expenditure including the budgetary impact of ageing populations, should be covered by the discounted value of future government revenue. If current policies ensure that the intertemporal budget constraint is fulfilled, current policies are sustainable.

The approach adopted by the Commission services and the Ageing Working Group of the Economic Policy Committee (EPC) is to project the debt, and to calculate the associated sustainability indicators (see box 4), on the basis of two different scenarios. The first scenario assumes that the structural primary balance will remain unchanged from 2006 through 2009, the final year of the stability programme; it is called the "2006 scenario". Debt projections in this scenario start in 2007. The second scenario assumes that the macroeconomic and budgetary plans until 2009 provided in the stability programme will be fully respected. This is the "programme scenario". Debt and primary balance projections in this scenario start in 2010. Both projections assume zero stock-flow adjustments. In addition to this quantitative analysis, other relevant factors are taken into account which allows to better qualify the assessment with regard to where the main risks are likely to stem from and to reach an overall assessment.

5.2.1. Sustainability indicators and long-term debt projections

Table shows the evolution of government spending on pensions, healthcare, long-term care for the elderly, education and unemployment benefits according to the EPC's projections.[10] Non age-related primary expenditure and revenue is assumed to remain constant as a share of GDP.

Table 12: Long-term age-related expenditure: main projections

(% of GDP)	**2004**	**2010**	**2020**	**2030**	**2040**	**2050**	**changes**
Total age-related spending	20.1	19.7	20.4	23.4	27.3	28.6	8.5
Pensions	8.6	8.9	9.3	11.8	15.2	15.7	7.1
Healthcare	6.1	6.3	6.7	7.3	7.9	8.3	2.2
Long-term care	0.5	0.5	0.5	0.5	0.6	0.8	0.2
Education	3.7	3.2	3.2	3.0	2.9	3.1	-0.6
Unemployment benefits	1.1	0.9	0.7	0.7	0.7	0.7	-0.4
Source: Economic Policy Committee and Commission services.							

9 For a detailed analysis of long-term sustainability issues, see "The Long Term Sustainability of Public Finances – A report by the Commission services", European Economy n°4/2006, published in October 2006 (hereinafter Sustainability Report).

10 These assumptions cover labour productivity growth, real GDP growth, participation rates, unemployment rate, demographic developments, government spending in pensions, healthcare, long-term care for the elderly, education and unemployment benefits. See Economic Policy Committee and European Commission (DG ECFIN) (2006), "The impact of ageing on public expenditure: projections for the EU25 Member States on pensions, health-care, long-term care, education and unemployment transfers (2004-2050)", European Economy, Special Report No 1 (hereinafter Ageing Report).

The projected increase in age-related spending in Spain is above the EU average, rising by 8.5% points of GDP between 2004 and 2050. This is particularly due to a relatively large increase in pension expenditure, by 7.1 p.p. of GDP. The increase in health-care expenditure is projected to be 2.2 p.p. of GDP, also above the EU average. For long-term care, the projected increase of 0.2 p.p. of GDP up to 2050 is below the EU average.

Based on the long-term budgetary projections, sustainability indicators can be calculated.

Table 13: Sustainability indicators and the required primary balance

	2006 scenario			Programme scenario		
	S1	S2	RPB	S1	S2	RPB
Value	-0.2	2.8	6.4	0.4	3.3	6.4
of which:						
Initial budgetary position	-3.0	-2.9	-	-2.4	-2.4	-
Debt requirement in 2050	-0.5	-	-	-0.5	-	-
Future changes in budgetary position	3.3	5.7	-	3.3	5.7	-

Source: *Commission services.*

Box 4 – Sustainability indicators*

- The **sustainability gap S1** shows the permanent budgetary adjustment (often presented as an increase in the tax burden**) required to reach a debt ratio in 2050 of 60% of GDP.
- The **sustainability gap S2**, shows the permanent budgetary adjustment that guarantees the respect of the intertemporal budget constraint of the government. In order to estimate S2, the revenue and expenditure ratios (age-related and non age-related) after 2050 are assumed to remain constant at the 2050 level.
- The sustainability indicators can be decomposed into the:*** (i) **initial budgetary position (IBP)**; and, (ii) **long-term change in the budgetary position (LTC)**;
- In addition, the **required primary balance (RPB)** can be derived from the S2 indicator. It measures the average primary balance over the first five years after the programme horizon (i.e. 2010-2014) that results from a permanent budgetary adjustment carried out to comply fully with the S2 indicator.

Summarizing the sustainability indicators

	Impact of		
	Initial budgetary position		**Long-term changes in the primary balance**
S1*=**	Gap to the debt-stabilizing primary balance	+	Additional adjustment required to finance the increase in public expenditure *up to 2050*
S2=	Gap to the debt-stabilizing primary balance	+	Additional adjustment required to finance the increase in public expenditure *over an infinite horizon*

* For a complete description of the sustainability indicators, see Annex I of the "The Long Term Sustainability of Public Finances – A report by the Commission services", European Economy n°4/2006, published in October 2006.

** Although the sustainability gap indicators (S1, S2) are usually defined as differences between revenue ratios, this does not mean that countries are asked to increase taxes to reach sustainability.. There are several ways to ensure sustainability and governments typically choose a combination of budget consolidation over the medium term (either through expenditure reduction and/or tax hikes) and the implementation of structural reforms aiming at curbing long-term public spending (e.g. pension reforms).

*** Moreover, in the case of S1, the decomposition also separates the impact of the debt position (60% of GDP in 2050); the debt requirement in 2050 (DR). In particular, if the current debt/GDP ratio is below 60% of GDP debt is allowed to rise and this component reduces the sustainability gap as measured by the S1 indicator, and

Table 13 shows the sustainability indicators for the two scenarios. In the "2006 scenario", the sustainability gap (S2) which satisfies the intertemporal budget constraint would be 2.8 % of GDP. Compared with the results of the Commission's Sustainability Report, the sustainability gaps are lower in the present assessment, by around one-third of a percentage point of GDP. This is mainly due to a higher structural primary balance in 2006 (3.4 % of GDP) compared to the structural primary balance in 2005 estimated in spring 2006 (at 3.1 % of GDP) that was used in the Sustainability Report.

The initial budgetary position contributes to offset part of the impact of the increase in age-related expenditure up to 2050. The budgetary plans in the programme imply a slight weakening of the structural balance between 2006 and 2009, by 0.2 p.p of GDP. The budgetary plans in the programme imply however a larger reduction in the structural primary balance, of 0.5% points of GDP, between 2006 and 2009. The estimated reduction in the structural primary balance over the programme period, has a negative impact on the sustainability gaps, which increases by about ½ % of GDP ("programme scenario") and shows the importance of maintaining a strong structural budgetary position to contain risks to the sustainability of public finances. According to both sustainability gaps, the long-term budgetary impact of ageing is high.

The required primary balance (RPB) is 6.4 % of GDP, higher than the structural primary balance of almost 3% of GDP in the last year of the programme's period.

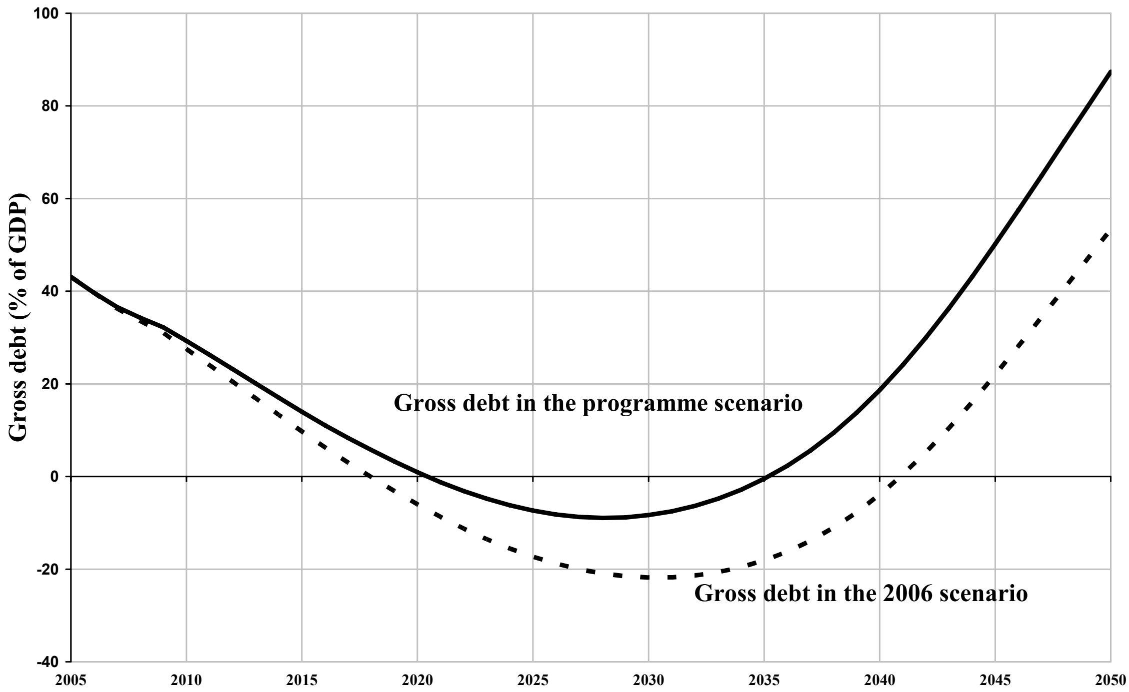
Moreover, the S2 sustainability gap indicators would increase by about ¼% of GDP if the planned adjustment was to be postponed by 5 years, highlighting that savings can be made over time if action is taken sooner rather than later.

Another way to look at the prospects for long-term public finance sustainability is to project the debt/GDP ratio over the long-term using the same assumptions as for the calculations of S1 and S2. The long-term projections for government debt under the two scenarios are shown in Figure 12.

The gross debt ratio is currently below the 60% of GDP reference value, estimated in the programme at just above 40% of GDP in 2006. According to the "2006 scenario", the debt ratio is projected to decrease up to the 2030s and thereafter increase throughout the projections period, although not breaching the 60% of GDP reference value before 2050. In the "programme scenario", the debt ratio decline up to 2030 would not be as substantial as in the 2006 scenario and would breach the reference value in the second half of 2040s.[11]

[11] It should be recalled, however, that being a mechanical, partial-equilibrium analysis, the long-term debt projections are bound to show highly accentuated profiles. As a consequence, the projected evolution of debt levels should not be seen as a forecast similar to the Commission services' short-term forecasts, but as an indication of the risks faced by Member States.

Figure 12: Long-term projections for the government debt ratio



Source: Commission services

Note: The government debt ratio is usually compiled in gross terms, that is assets are not netted out from government liabilities. Therefore, the gross debt can never be negative. In this chart, the negative values for the debt ratio should be understood as accumulation of financial assets. This issue has no implications on the conclusions drawn from the sustainability assessment.

5.2.2. Additional factors

To reach an overall assessment of the sustainability of public finances, other relevant issues are taken into account which in addition allows to better qualify the assessment.

First, assets are being regularly accumulated in the Social Security Reserve Fund (estimated at 4% of GDP in 2007). This strategy reflects the commitment of the Spanish authorities to pre-fund part of future government spending on pensions. However, around 2/3 of the fund consist of holdings of central government debt. Being gross debt presented in consolidated terms, 2/3 of the Social Security Reserve Fund is already counted as debt reduction. Only the other 1/3 represents an additional funding.

Second, the policy strategy outlined in the update is based on (i) maintaining strong budgetary position, (ii) fostering employment and encouraging longer working life, and (iii) reforming social security systems. Budgetary stability contributes to long-term sustainability, as noted above. Concerning the other two pillars, the Agreement on Social Security Measures signed in July 2006 introduces measures aimed at the rationalisation of the pension system, linking better the contributions to pension benefits and providing incentives for prolonging the working life. The latter will be phased in over the next 4 years. Nonetheless, while the recently decided measures are a step in the right direction and would improve slightly long-term sustainability, additional measures will prove necessary given the large budgetary impact of population ageing in Spain.

5.2.3. Assessment

The long-term budgetary impact of ageing in Spain is well above the EU average, mainly as a result of a relatively high increase in pension expenditure as a share of GDP over the coming decades.

The initial budgetary position, which improved compared with 2005, contributes to ease the projected long-term budgetary impact of ageing populations. However, this is not sufficient to fully cover future spending pressures. Maintaining high primary surpluses over the medium term and implementing further measures aimed at curbing the substantial increase in age-related expenditures would contribute to reducing risks to the sustainability of public finances.

Overall, Spain appears to be at medium risk with regard to the sustainability of public finances.

6. STRUCTURAL REFORM, THE QUALITY OF PUBLIC FINANCES AND INSTITUTIONAL FEATURES

The 2006 update outlines several measures, the objective of which is budgetary stability with a major focus on the quality of public finances.

On the expenditure side, the priority is to foster the economy's growth potential by enhancing productivity growth. This would be pursued by increasing public accumulation of physical, human and knowledge capital through spending programmes on infrastructures, education and R&D. The programme also announces the creation of a State Agency for the evaluation of the quality of public policies through the adoption of a Royal Decree in December 2006. The Agency aims at promoting and conducting assessments of public policies and programmes managed by the Central Government with a view to fostering rational use of public resources and quality management of services. Each year, the Council of Ministers should approve the list of public programmes and policies, which the Agency must include in its schedule as well as presenting a report to the Parliament on the improvement of the quality of public services. The budget assigned to the agency in 2007 attains € 5 million.

On the revenue side, the most relevant development refers to the reform of the personal income and corporate taxes. Specifically, the corporate income tax reform aims at improving efficiency by simplifying the tax structure. The general rate will be reduced from 35% in 2006 to 30% in 2008. At the same time, most tax deductions will be eliminated, partially compensating the rate decline but eliminating distortions. The question arises on the elimination of deductions for R&D activities, which might be in contradiction with the expansion of the public R&D budget. However, the update clarifies that R&D investments will instead be encouraged through rebates on social security contributions paid by entrepreneurs, although it does not provide further details.

These structural reforms on both expenditure and revenue sides could improve the long-term sustainability and quality of public finances, although in some cases a complete *ex ante* assessment of their effectiveness appears difficult since the measures are presented in a rather general way.

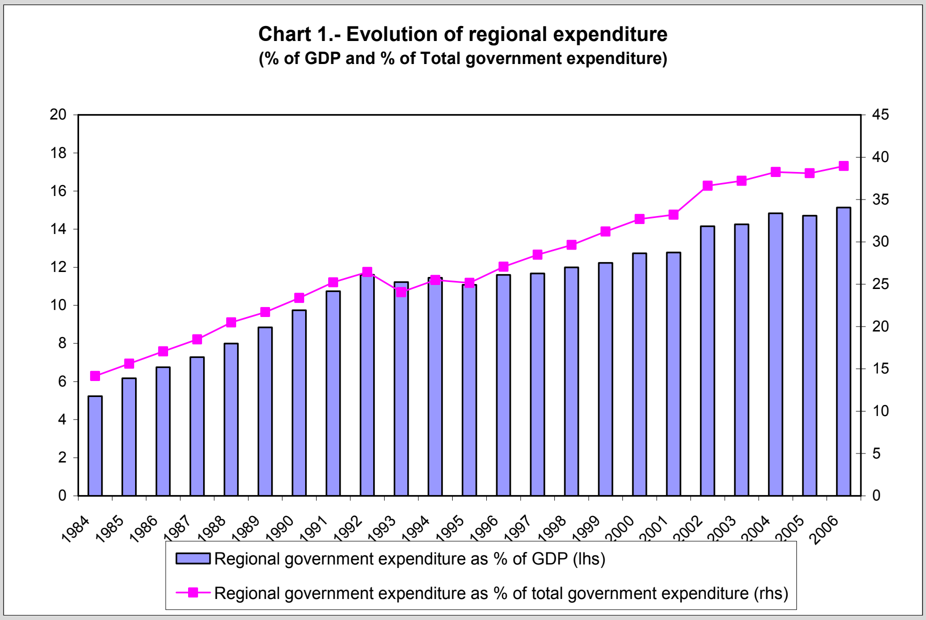
Referring to institutional features, the update points to the reform of the Regional financing system, whose objective is to increase the symmetry of the regions fiscal powers in terms of revenues and expenditures. Specifically, expenditure increases might imply so far additional transfers from the central government. The reform aims at enhancing fiscal co-responsibility, according to which regional governments would increase their capacity to raise their own revenues.

Box 5: Fiscal decentralization process and composition of general government expenditure in Spain

In the early eighties, half of the general government expenditure was managed by the central government. Of the other half, around one third represented the social security system, 10% was managed by the local authorities and only 7% was controlled by the regions. The far-reaching decentralization process that has taken place in Spain during the last 25 years has led to a redistribution of spending from the central government to the regions.

In 2005, regional governments controlled 40% of the total government expenditure, whereas the share of the central government had declined to 20%. The share in total expenditure of social security and of the local authorities has remained broadly stable at around 30% and 10%

respectively. In terms of GDP, regional expenditures represented 5% of GDP in 1985, whereas they accounted for 15% in 2005, with an average annual growth in real terms at around 10%, well above real GDP growth (see chart 1).



Source: Ministry of Finance and Commission Services

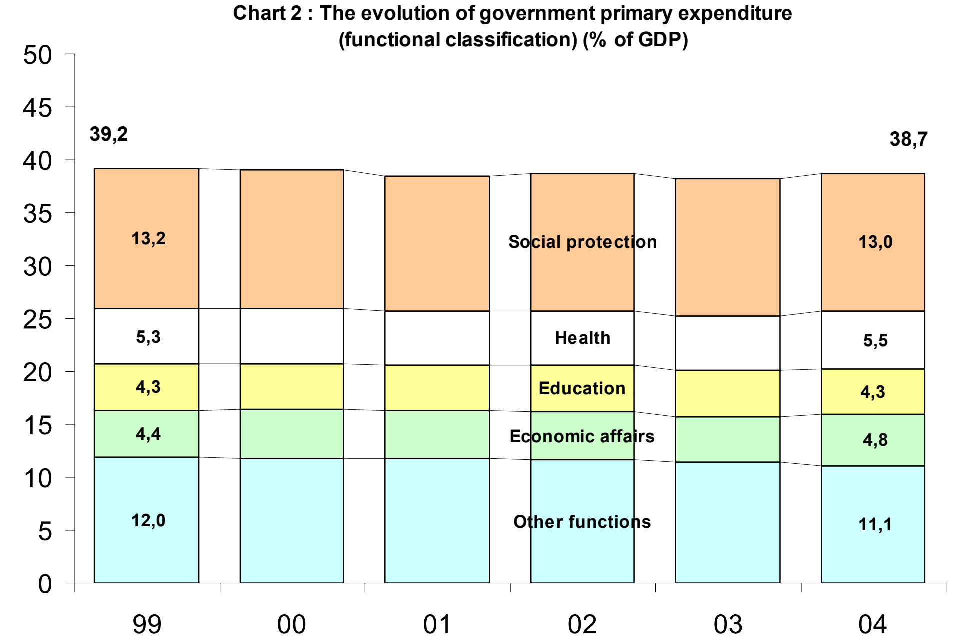
Regional expenditures encompass a wide variety of areas, namely, health care, education, agriculture and fisheries, tourism, and even a part of infrastructure investments in the region. Health care and education represent more than half the budget of the regions (33% and 23% respectively). Agriculture and fisheries account for around 8%, infrastructures 6%, security and social protection 5% and general administration 5% . Furthermore, the regions transfer part of their revenues (around 5%) to the local layer. The remaining 15% includes various items such as social promotion, housing or industry.

The rapid increase in the regions' spending is the consequence of the transfer from the general government of competences in these fields over the last 25 years. However, regions' tasks are not the same across the country and some regional governments are responsible for more services than others. Furthermore, transfers of tasks did not take place at the same time. For example, Catalonia started managing health care in 1981, whereas the Canary Islands did it in 1994 and the Madrid region in 2002. In the case of tertiary education, Valencia has managed universities since 1985, whereas the region of Madrid received the competence from the central government ten years later, in 1995.

Between 2001 and 2005, health care expenditure is estimated to have grown at an average rate of around 10% per year in nominal terms. As total regional government expenditure has also been growing at a similar pace, its share in total regional expenditure has remained rather stable at around 1/3. Specifically, in Andalusia, health care expenditure represents 30% of the regional government budget, whereas in Catalonia and Valencia it approaches 40%.

Therefore, any attempt to present a functional classification of general government expenditure in Spain has to take into account regional developments.

Chart 2 presents the functional classification of general government expenditure since 1999. If general government expenditure has declined by 0.5 of one percentage point between 1999 and 2004, this seems to be the result of a lower GDP share of social protection (-0.2% points of GDP) and, especially, due to a substantial reduction of the item "other functions" (-0.9% points of GDP), namely the item "general public services", which refers mainly to general administration spending while other items such as defence, environment, public order or culture would have remained rather stable in terms of GDP.



Note: "Other functions" include general services, defence, environment, culture, public order and housing.
Source : Commission services

Between 1999 and 2004, education expenditure has been growing at an average rate of around 8% in nominal terms. This would represent a similar growth pace as nominal GDP. As result, education expenditure represents a rather stable 4½%.

Whereas education has remained broadly stable in terms of GDP, the health care bill has increased slightly , which might in part explain regional deficits. Specifically, and in order to cope with growing expenditures on this item, the central government included in the 2006 Budget Law an additional transfer to the regional governments of around 0.1% of GDP.

Economic affairs includes, among other items, expenditures devoted to agriculture, industry or transport policies. Specifically, the moderate increase as a share of GDP took place in 2004 and is explained by the assumption of the RENFE debt (the national railway company) by the central government.

7. CONSISTENCY WITH THE NATIONAL REFORM PROGRAMME AND WITH THE BROAD ECONOMIC POLICY GUIDELINES

The measures presented in the stability programme as described in preceding sections are in line with the National Reform Programme (NRP) and the progress recorded in the Implementation Report of the National Reform Programme (IR-NRP) submitted in October 2006 in the context of the renewed Lisbon strategy for growth and jobs. Specifically, the update states that the expenditure policies, e.g. annual increases of 25% of R&D expenditures are the result of medium-term strategic plans and programmes, the most relevant of which is the NRP.

In this vein, the update provides a qualitative assessment of the overall impact of the NRP within the medium term fiscal strategy as well as sufficient information on the direct budgetary costs associated with the some of the reforms envisaged in the NRP, e.g. R&D, education and infrastructures. In sum, the update is consistent with the NRP and the budgetary measures presented embodies budgetary implications of most actions envisaged in the IR-NRP.

Box 6: The Commission assessment of the implementation report of the National Reform Programme

The implementation report of the National Reform Programme (NRP) of Spain, provided in the context of the renewed Lisbon strategy for growth and jobs, was submitted on 15 October 2006. The Commission's assessment of this report, which was adopted on 13 December 2006 as part of its Annual Progress Report, can be summarised as follows.

The NRP presented two over-arching policy objectives related to growth and employment: culminating the real convergence of Spain with the EU-25 in terms of per capita income and increasing the employment rate to 66% by 2010. In order to achieve these two main objectives, the programme identifies seven key policy areas, which encompass budgetary stability, a R&D strategy, a better environment for business, the achievement of higher competition, infrastructure development, a better functioning of the labour market and better education and human capital.

Overall the report acknowledges that progress in implementation of the NRP is good and measures have been adopted in all key policy areas. Reinforcement of macro-economic and budgetary stability continues and the objective of full GDP per capita convergence with the EU25 is close to being met.

On the macro part, there is satisfactory progress, built on good recent performance, notably in terms of fiscal consolidation. However, while a pension reform is proposed, it will not fully counterbalance the significant projected increase in age-related spending.

On the microeconomic front, many positive measures are being taken and should help address low productivity. Emphasis should now be put on implementation, in particular of policies to boost research and innovation and improve the business environment. There is some progress on generating competition in the retail and the energy sectors, but further measures are needed to help ease inflationary pressure.

Regarding the labour market, a new agreement with social partners aims to help address a number of the labour market challenges but overall there is only partial progress in the employment field, where particular attention should be paid to the implementation of the new education law in order to fight early school leaving and raise the general level of skills. Reinforced measures are needed to address the segmented labour market. Although progress on increasing the availability of child care is in line with the NRP objective, more progress is needed.

According to the report, important strong points in the implementation and reinforcement of the Spanish National Reform Programme include: a quicker than targeted reduction of government debt; good progress on implementation of the R&D and innovation plan; the inclusion of entrepreneurship in national curricula at all education levels; and satisfactory progress towards the quantified objectives, in particular for female employment.

The policy areas in the Spanish National Reform Programme where weaknesses need to be tackled with the highest priority, according to the Commission assessment, are: improving competition in electricity markets; reducing segmentation in the labour market; and further improvements to education and training. Against this background, the report recommended that Spain:

• take further measures to **increase competition** in the energy sector, notably by improving cross-border interconnection capacity to ensure security of supply;

• modernise employment protection, including legislation in order to foster flexibility and security in the labour market; **to counter segmentation**; and to increase the attractiveness of part-time work.

• ensure the effective implementation of **education reforms**, also at regional level, to reduce early school leaving, and to integrate training systems to provide a better response to labour market needs.

In addition, the report stressed that Spain needs to focus on containing inflation in the medium-term; raising competition in professional services and retail markets; improving the regulatory framework; implementing environmental measures, in particular to reduce CO2 emissions; raising skill levels and productivity and integrating immigrants into the labour market; and further increasing access to childcare.

The table below provides an overview of whether the strategy and policy measures in the programme are consistent with the broad economic policy guidelines in the area of public finances, which are included in the integrated guidelines for the period 2005-2008. The assessment of guideline 1 corresponds to the evaluation in Section 4.4 above, whereas that of the pace of debt reduction in guideline 2 (relevant for high-debt countries only) is covered in Section 5.1.2 above. Information on the different elements covered by the remaining guidelines in the table can be found in Sections 5.2 and 6.

Although Spain is respecting its medium term budgetary objectives, its fiscal policy should envisage to further contribute to cool down excessive demand pressures, thus contributing to the correction of increasing, and potentially unsustainable, current account deficits. Additionally, further reforms might be necessary in order to ensure long term sustainability of public finances. Finally, the fiscal policy is aiming at redirecting public expenditure towards growth-enhancing categories in line with the Lisbon strategy.

Overall, the budgetary strategy in the stability programme is broadly consistent with the broad economic policy guidelines.

Table 14: Consistency with the broad economic policy guidelines

Broad economic policy guidelines	Yes	Steps in right direction	No	Not applicable
1. To secure economic stability				
– Member States should respect their medium-term budgetary objectives. As long as this objective has not yet been achieved, they should take all the necessary corrective measures to achieve it[1].	X			
– Member States should avoid pro-cyclical fiscal policies[2].	X			
– Member States in excessive deficit should take effective action in order to ensure a prompt correction of excessive deficits[3].				X
– Member States posting current account deficits that risk being unsustainable should work towards (…), where appropriate, contributing to their correction via fiscal policies.		X		
2. To safeguard economic and fiscal sustainability In view of the projected costs of ageing populations,				
– Member States should undertake a satisfactory pace of government debt reduction to strengthen public finances.				X
– Member States should reform and re-enforce pension, social insurance and health care systems to ensure that they are financially viable, socially adequate and accessible (…)		X		
3. To promote a growth- and employment-orientated and efficient				

Broad economic policy guidelines	Yes	Steps in right direction	No	Not applicable
allocation of resources				
Member States should, without prejudice to guidelines on economic stability and sustainability, re-direct the composition of public expenditure towards growth-enhancing categories in line with the Lisbon strategy, adapt tax structures to strengthen growth potential, ensure that mechanisms are in place to assess the relationship between public spending and the achievement of policy objectives and ensure the overall coherence of reform packages.	X			

Notes:
[1]As further specified in the Stability and Growth Pact and the code of conduct, i.e. with an annual 0.5% of GDP minimum adjustment in structural terms for euro area and ERM II Member States.
[2]As further specified in the Stability and Growth Pact and the code of conduct, i.e. Member States that have already achieved the medium-term objective should avoid pro-cyclical fiscal policies in "good times".
[3]As further specified in the country-specific Council recommendations and decisions under the excessive deficit procedure.

Source:
Commission services

* * *

Annex 1: Glossary

Automatic stabilisers Various features of the tax and spending regime which tend to have a dampening effect on economic fluctuations without requiring a discretionary intervention of the fiscal authorities. As a result, the budget balance in percent of GDP tends to improve in years of high growth and deteriorate during economic slowdowns. See also *cyclically-adjusted balance*, *structural balance* and *minimum benchmark*.

Broad economic policy guidelines (BEPGs) Guidelines for the economic and budgetary policies of the Member States. Together with the Employment Guidelines, they form the Integrated Guidelines, prepared by the Commission and adopted by the Council of Ministers responsible for Economic and Financial Affairs (ECOFIN). See also *Lisbon strategy*.

Budget balance The balance between total public revenue and expenditure (according to *ESA95*); with a positive balance indicating a surplus (also know as *government net lending*) and a negative balance indicating a deficit (also known as *government net borrowing*). For the monitoring of Member States' budgetary positions, the EU uses *general government* aggregates. See also *cyclically-adjusted balance*, *primary balance, structural balance* and *reference values*.

Budget constraint A basic condition applying to the public finances, according to which total public expenditure in any one year must be financed by taxation, borrowing or changes in the monetary base; the latter is prohibited in the EU. See also *stock-flow adjustment* and *long-term sustainability*.

Budgetary sensitivity The variation in the *budget balance* brought about by a change in the *output gap*. In the EU, it is estimated to be 0.5 on average, i.e. for any percentage point of GDP below or above potential, the budget-balance-to-GDP ratio deteriorates or improves by half a percentage point. The size of the budgetary sensitivity essentially reflects (i) the revenue and expenditure elasticities of the budget and (ii) the size of discretionary government expenditure. See also *cyclically-adjusted balance, structural balance* and *tax elasticity*.

Code of conduct Policy document adopted by the Economic and Financial Committee (an advisory committee gathering high-level officials from national governments, national central banks, the European Central Bank and the European Commission which prepares the meetings of the Council of Ministers responsible for Economic and Financial Affairs (ECOFIN)) and endorsed by the ECOFIN Council in October 2005, containing specifications on the implementation of the *Stability and Growth Pact* and guidelines on the format and content of *stability programmes* and *convergence programmes*.

Contingent liabilities A possible government obligation to pay, the existence of which will be confirmed by the occurrence of one or more uncertain events in the future not wholly under the control of the government. For instance, government guarantees on debt issued by private or public companies are contingent liabilities since the government obligation to pay depends on the non-ability of the original debtor to honour its obligations. See also *implicit liabilities*.

Convergence programme Medium-term budgetary strategy presented by each Member State that has not yet adopted the euro; updated annually, according to the provisions of the *Stability and Growth Pact*. See also *stability programme, code of conduct* and *medium-term objective*.

Cyclically-adjusted balance The *budget balance* adjusted for its cyclical component (which captures the part of public revenue and expenditure that is linked to the *output gap*), i.e. the budget balance that would prevail if GDP were at its potential level. See also *structural balance, budgetary sensitivity* and *output gap*.

Cyclically-adjusted primary balance The *cyclically-adjusted balance* net of interest expenditure on *general government* debt. See also *interest burden*.

Debt dynamics The evolution of *government debt* as a ratio to GDP; it depends on the primary deficit, the debt-increasing impact of interest payments, the dampening effect of GDP growth on the ratio and the *stock-flow adjustment*.

EDP notification See *notification of deficit and debt*.

ERM II Exchange rate mechanism linking some currencies of non-euro Member States to the euro, which is the centre of the mechanism. For the currency of each Member State participating in the mechanism, a central rate against the euro and a standard fluctuation band of ±15% are defined.

ESA95 European accounting standards for the compilation and reporting of macroeconomic (including budgetary) data by the EU Member States.

Excessive deficit procedure (EDP) A procedure, laid down in the EC Treaty, according to which the Commission and the Council monitor the development of national *budget balances* and *public debt* in relation to the *reference values*, in order to assess the existence (or risk) of an excessive deficit in each Member State and to ensure its correction. Its application has been further clarified in the *Stability and Growth Pact*.

Fiscal stance A measure of the thrust of discretionary fiscal policy such as, in this document, the change in the *structural balance* (or in the *structural primary balance*) relative to the preceding year. When the change is positive (negative) the fiscal stance is said to be restrictive (expansionary).

Funded pension scheme Pension system in which current pension expenditures are financed by running down assets accumulated over the years on the basis of contributions by the scheme beneficiaries. According to *ESA95*, defined-contribution funded pension schemes are not considered as part of the *general government* sector. See also *pay-as-you-go pension scheme*.

Government debt See *public debt*.

General government The focus of EU budgetary surveillance under the *Stability and Growth Pact* and the *excessive deficit procedure* is on general government aggregates, with the general government sector covering national, regional and local government, as well as social security. In principle, public enterprises are excluded.

Government net lending/borrowing See *budget balance*.

Implicit liabilities Future government expenditure which has not yet been funded, even when future expenditure is not backed by law or contractual obligations, but is simply grounded in strong expectations of the public. To be meaningful for economic analysis, implicit liabilities should be assessed net of future revenue assuming that the government will keep collecting taxes (and other non-tax revenue) at rates comparable to current levels. See also *contingent liabilities*.

Interest burden *General government* interest expenditure on *government debt* as a share of GDP.

Intertemporal budget constraint A basic condition imposing that current total liabilities of the government, i.e. the current public debt and the discounted value of future expenditure including the budgetary impact of ageing populations, be covered by the discounted value of future government revenue.

Lisbon strategy Partnership between the EU and Member States for growth and more and better jobs. Originally approved in 2000, the Lisbon Strategy was revamped in 2005. Based on the Integrated Guidelines (merger of the *broad economic policy guidelines* and the employment guidelines, dealing with macro-economic, micro-economic and employment issues) for the period 2005-2008, Member States drew up 3-year national reform programmes in autumn 2005. They reported on the implementation of the national reform programmes for the first time in autumn 2006. The Commission analyses and summarises these reports in an EU Annual Progress Report each year, in time for the Spring European Council.

Long-term sustainability A combination of *budget balance* and *public debt* that ensures that the latter does not grow without bound. While conceptually intuitive, an agreed operational definition of sustainability has proven difficult to achieve.

Maturity structure of public debt The profile of *public debt* in terms of when it is due to be paid back. Interest rate changes affect the *budget balance* directly to the extent that the *general government* sector has debt with a relatively short maturity structure. Long maturities reduce the sensitivity of the *budget balance* to changes in the prevailing interest rate. See also *interest burden*.

Medium-term objective (MTO) According to the *Stability and Growth Pact*, *stability programmes* and *convergence programmes* must present a medium-term objective for the budgetary position. It is country-specific to take into account the diversity of economic and budgetary positions and developments as well as of fiscal risk to the sustainability of public finances, and is defined in structural terms (see *structural balance*).

Minimum benchmark Estimated budgetary position (in *cyclically-adjusted* terms) that provides a "safety margin" that is enough for the *automatic stabilisers* to operate freely during normal economic slowdowns without breaching the 3% of GDP deficit *reference value*. The minimum benchmarks are estimated by the European Commission. They do not cater for other risks such as unexpected budgetary developments and interest rate shocks.

National reform programme (NRP) See *Lisbon strategy*.

Notification of deficit and debt (EDP notification) Twice a year (by 1 April and 1 October), EU Member States have to notify their *general government* deficit and debt figures (and a number of associated data) to the Commission, the quality of which is then checked by Eurostat, the Commission department in charge of statistics. See also *budget balance* and *public debt*.

One-off and temporary measures Government transactions having a transitory budgetary effect that does not lead to a sustained change in the intertemporal budgetary position. See also *structural balance*.

Output gap The difference between actual GDP and potential GDP in any given year, usually expressed as a percent of potential GDP. Potential GDP is an unobserved variable and needs to be estimated from actual data. It is the level of real GDP in a given year that is consistent with a stable rate of inflation. If actual output rises above its potential level, then constraints on capacity begin to bind and inflationary pressures build; if output falls below potential, then resources are lying idle and inflationary pressures abate. See also *production function method*.

Pay-as-you-go pension scheme (PAYG) Pension system in which current pension expenditures are financed by the contributions of current employees. Also known as *unfunded pension scheme*. See also *funded pension scheme*.

Primary balance The *budget balance* net of interest expenditure on *general government* debt. See also *interest burden*.

Pro-cyclical fiscal policy A *fiscal stance* which amplifies the economic cycle by lowering the *structural balance* when the *output gap* is positive or improving, or by increasing the *structural balance* when the *output gap* is negative or widening, as opposed to a counter-cyclical fiscal policy stance. A neutral fiscal policy keeps the *structural balance* unchanged over the economic cycle by letting the *automatic stabilisers* work.

Production function method A method to estimate potential GDP typically based on a Cobb-Douglas production function. Potential GDP is estimated as the level of GDP consistent with a full utilisation of capital, an unemployment rate that does not accelerate inflation and factor productivity at its trend level. See also *output gap, cyclically-adjusted balance, budgetary sensitivity*.

Public debt (or government debt) Consolidated gross debt for the *general government* sector. It includes the total nominal value of all debt owed by government units, except that part of the debt which is owed to government units in the same Member State. It is a gross debt measure meaning that government financial assets on other sectors are not netted out. See also *debt dynamics* and *reference values*.

Public investment The component of total public expenditure which consists in the acquisition of durable assets and through which governments increase and improve the stock of capital employed in the production of the goods and services they provide. Also known as government gross fixed capital formation (GFCF).

Public-private partnerships (PPP) Agreements between government and corporations according to which the latter build and operate public-use infrastructure (roads, tunnels, bridges, but also hospitals, prisons, concert halls, etc.) which were traditionally directly controlled by government. In exploiting the infrastructure, the corporation receives prices paid by final users, rentals or fees from the government or both. Infrastructure built under PPPs is considered as either *public investment* or corporate investment depending on a number of specific criteria.

Quality of public finances A multi-dimensional concept which refers to the contribution that public finances make to the efficient allocation of resources in the economy and to achieving the government's strategic objectives (sustainable growth, macroeconomic stability, competitiveness, social cohesion etc.). It concerns notably the overall level of expenditure and taxation, their composition, the budgeting and control mechanisms and the institutional arrangements for deciding on public finance issues.

Reference values for public deficit and debt Respectively, a 3 percent *general government* deficit-to-GDP ratio and a 60 percent *general government* debt-to-GDP ratio. See also *excessive deficit procedure, government debt* and *budget balance*.

Sensitivity analysis An econometric or statistical simulation designed to test the robustness of an estimated economic relationship or projection to changes in the underlying assumptions.

'Snow-ball' effect The self-reinforcing effect of *public debt* accumulation or decumulation arising from a positive or negative differential between the implicit interest rate on public debt and the GDP growth rate. See also *debt dynamics*.

Stability and Growth Pact (SGP) Approved in 1997 and reformed in 2005, the SGP clarifies the provisions on budgetary surveillance in the EC Treaty. The "preventive" arm of the SGP obliges Member States to submit annual *stability programmes* or *convergence programmes*, while the "corrective" arm of the SGP clarifies and speeds up the *excessive deficit procedure*.

Stability programme Medium-term budgetary strategy presented by each Member State that has already adopted the euro; updated annually, according to the provisions of the *Stability and Growth Pact*. See also *convergence programme, code of conduct* and *medium-term objective*.

Stock-flow adjustment (SFA) The stock-flow adjustment (also known as the debt-deficit adjustment) ensures consistency between *government net borrowing*, which is a flow variable, and the variation in *government debt*, which is a stock variable. It includes differences between cash and accrual accounting, accumulation of financial assets, changes in the value of debt denominated in foreign currency and remaining statistical adjustments. See also *debt dynamics.*

Structural balance The *budget balance* in *cyclically-adjusted* terms and excluding *one-off and temporary measures*. See also *fiscal stance*.

Structural primary balance The *structural balance* net of interest expenditure on *general government* debt. See also *interest burden*.

Tax elasticity A parameter measuring the relative change in tax revenues with respect to a relative change in GDP. The tax elasticity is an input to the *budgetary sensitivity*.

Annex 2: Summary tables from the programme update

The tables below present the information provided in the programme in the format prescribed by the code of conduct (Annex 2 thereof).

Table 1a. Macroeconomic prospects

	ESA Code	2005 Level	2005 rate of change	2006 rate of change	2007 rate of change	2008 rate of change	2009 rate of change
1. Real GDP	B1*g	117.2	3.5	3.8	3.4	3.3	3.3
2. Nominal GDP	B1*g	905.5	7.8	7.7	6.7	6.6	6.4
Components of real GDP							
3. Private consumption expenditure	P.3	118.7	4.2	3.7	3.4	3.3	3.3
4. Government consumption expenditure	P.3	126.8	4.8	4.2	4.0	3.9	3.8
5. Gross fixed capital formation	P.51	128.9	7.0	6.3	5.4	4.9	4.6
6. Changes in inventories and net acquisition of valuables (% of GDP)	P.52 + P.53	59.6	0.2	0.4	0.4	0.3	0.3
7. Exports of goods and services	P.6	116.4	1.5	5.7	6.1	5.6	5.8
8. Imports of goods and services	P.7	135.1	7.0	8.4	7.9	6.8	6.7
Contributions to real GDP growth							
9. Final domestic demand		122.6	5.2	4.7	4.3	4.1	4.0
10. Changes in inventories and net acquisition of valuables	P.52 + P.53	59.6	0.0	0.1	0.0	0.0	0.0
11. External balance of goods and services	B.11	451.2	-1.7	-1.1	-0.9	-0.8	-0.7

Table 1b. Price developments

	ESA Code	2005 level	2005 rate of change	2006 rate of change	2007 rate of change	2008 rate of change	2009 rate of change
1. GDP deflator		122.5	4.1	3.8	3.2	3.1	2.9
2. Private consumption deflator		117.4	3.4	3.5	2.7	2.6	2.5
3. HICP[1]		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4. Public consumption deflator		118.4	3.6	2.8	2.8	2.7	2.6
5. Investment deflator		126.5	5.2	4.8	3.8	3.6	3.3
6. Export price deflator (goods and services)		108.5	4.3	3.9	2.4	1.9	2.0

Table 1c. Labour market developments

	ESA Code	2005 Level	2005 rate of change	2006 rate of change	2007 rate of change	2008 rate of change	2009 rate of change
1. Employment, persons[1]		17.9	3.1	3.1	2.6	2.4	2.3
2. Employment, hours worked[2]		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3. Unemployment rate (%)[3]		n.a.	9.2	8.3	7.8	7.7	7.6
4. Labour productivity, persons [4]		41.2	0.4	0.6	0.8	0.9	1.0
5. Labour productivity, hours worked[5]		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6. Compensation of employees	D.1	27.6	2.6	3.2	2.8	2.7	2.6
7. Import price deflator (goods and services)		102.1	3.8	3.8	2.0	1.5	1.7

[1] Optional for Stability programmes.

Table 1d. Sectoral balances

% of GDP	ESA Code	2005	2006	2007	2008	2009
1. Net lending/borrowing vis-à-vis the rest of the world	B.9	-6.5	-7.5	-8.2	-8.4	-8.7
of which:						
- Balance on goods and services		-5.4	-6.2	-6.8	-7.1	-7.3
- Balance of primary incomes and transfers		-2.1	-2.0	-2.1	-2.0	-1.9
- Capital account		0.9	0.7	0.6	0.6	0.6
2. Net lending/borrowing of the private sector	B.9/EDP B.9	-7.6	-8.9	-9.2	-9.3	-9.5
3. Net lending/borrowing of general government	B.9	1.1	1.4	1.0	0.9	0.9
4. Statistical discrepancy		n.a.	n.a.	n.a.	n.a.	n.a.

Table 2. General government budgetary prospects

	ESA code	2005 Level	2005 % of GDP	2006 % of GDP	2007 % of GDP	2008 % of GDP	2009 % of GDP
Net lending (EDP B.9) by sub-sector							
1. General government	S.13	10239.0	1.1	1.4	1.0	0.9	0.9
2. Central government	S.1311	4102.0	0.5	0.6	0.3	0.3	0.3
3. State government	S.1312	-2729.0	-0.3	-0.1	-0.1	0.0	0.0
4. Local government	S.1313	-971.0	-0.1	-0.2	-0.1	0.0	0.0
5. Social security funds	S.1314	9837.0	1.1	1.1	0.9	0.6	0.6
General government (S13)							
6. Total revenue	TR	356403.0	39.4	39.8	39.6	39.5	39.5
7. Total expenditure	TE[1]	346164.0	38.2	38.4	38.6	38.6	38.6
8. Net lending/borrowing	EDP B.9	10239.0	1.1	1.4	1.0	0.9	0.9
9. Interest expenditure (incl. FISIM)	EDP D.41 incl. FISIM	16144.0	1.8	1.6	1.5	1.4	1.3
pm: 9a. FISIM		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10. Primary balance	[2]	26383.0	2.9	3.0	2.5	2.3	2.2
Selected components of revenue							
11. Total taxes (11=11a+11b+11c)		213096.0	23.5	23.9	23.8	23.8	23.9
11a. Taxes on production and imports	D.2	110004.0	12.1	12.1	12.0	12.0	11.9
11b. Current taxes on income, wealth, etc	D.5	99037.0	10.9	11.4	11.4	11.5	11.5
11c. Capital taxes	D.91	4055.0	0.4	0.4	0.4	0.4	0.4
12. Social contributions	D.61	117415.0	13.0	13.0	13.0	12.9	12.9
13. Property income	D.4	6060.0	0.7	0.7	0.7	0.6	0.6
14. Other (14=15-(11+12+13))		19832.0	2.2	2.2	2.2	2.1	2.0
15=6. Total revenue	TR	356403.0	39.4	39.8	39.6	39.5	39.5
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)[3]		322306.0	35.6	35.9	35.9	35.9	35.9
Selected components of expenditure							
16. Collective consumption	P.32	67503.0	7.5	7.3	7.3	7.3	7.3
17. Total social transfers	D.62 + D.63	200455.0	22.1	22.2	22.4	22.4	22.4
17a. Social transfers in kind	P.31 = D.63	95131.0	10.5	10.6	10.6	10.6	10.6
17b. Social transfers other than in kind	D.62	105324.0	11.6	11.7	11.8	11.8	11.8
18.=9. Interest expenditure (incl. FISIM)	EDP D.41 incl. FISIM	16144.0	1.8	1.6	1.5	1.4	1.3
19. Subsidies	D.3	8978.0	1.0	1.0	1.0	1.0	1.0
20. Gross fixed capital formation	P.51	32159.0	3.6	3.7	3.9	3.9	4.0
21. Other (21=22-(16+17+18+19+20))		20925.0	2.3	2.5	2.6	2.6	2.6
22=7. Total expenditure	TE[4]	346164.0	38.2	38.4	38.6	38.6	38.6
Pm: compensation of employees	D.1	90569.0	10.0	9.9	9.9	9.9	9.9

Table 3. General government expenditure by function

% of GDP	COFOG Code	2004	2009
1. General public services	1	n.a.	n.a.
2. Defence	2	n.a.	n.a.
3. Public order and safety	3	n.a.	n.a.
4. Economic affairs	4	n.a.	n.a.
5. Environmental protection	5	n.a.	n.a.
6. Housing and community amenities	6	n.a.	n.a.
7. Health	7	n.a.	n.a.
8. Recreation, culture and religion	8	n.a.	n.a.
9. Education	9	n.a.	n.a.
10. Social protection	10	n.a.	n.a.
11. Total expenditure (= item 7=26 in Table 2)	TE[1]	n.a.	n.a.

[1] Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.

Table 4. General government debt developments

% of GDP		2005	2006	2007	2008	2009
1. Gross debt[1]		43.1	39.7	36.6	34.3	32.2
2. Change in gross debt ratio		-3.1	-3.4	-3.1	-2.4	-2.1
Contributions to changes in gross debt						
3. Primary balance[2]		-2.9	-3.0	-2.5	-2.3	-2.2
4. Interest expenditure (incl. FISIM) [3]		1.8	1.6	1.5	1.4	1.3
5. Stock-flow adjustment		1.4	1.1	0.4	0.8	0.8
- Differences between cash and accruals[4]		n.a.	n.a.	n.a.	n.a.	n.a.
- Net accumulation of financial assets[5]		n.a.	n.a.	n.a.	n.a.	n.a.
of which - privatisation proceeds		n.a.	n.a.	n.a.	n.a.	n.a.
- Valuation effects and other[6]		n.a.	n.a.	n.a.	n.a.	n.a.
p.m. implicit interest rate on debt[7]		4.2	4.0	4.0	4.1	4.1
Other relevant variables						
6. Liquid financial assets[8]		n.a.	n.a.	n.a.	n.a.	n.a.
7. Net financial_debt (7=1-6)		n.a.	n.a.	n.a.	n.a.	n.a.
8, Effect of nominal GDP growth		-3.3	-3.1	-2.5	-2.3	-2.1

[1] As defined in Regulation 3605/93 (not an ESA concept).

[2] Cf. item 10 in Table 2.

[3] Cf. item 9 in Table 2.

[4] The differences concerning interest expenditure, other expenditure and revenue could be distinguished when relevant.

[5] Liquid assets, assets on third countries, government controlled enterprises and the difference between quoted and non-quoted assets could be distinguished when relevant.

[6] Changes due to exchange rate movements, and operation in secondary market could be distinguished when relevant.

[7] Proxied by interest expenditure (incl. FISIM recorded as consumption) divided by the debt level of the previous year.

[8] AF1, AF2, AF3 (consolidated at market value), AF5 (if quoted in stock exchange; including mutual fund shares).

Table 5. Cyclical developments

% of GDP	ESA Code	2005	2006	2007	2008	2009
1. Real GDP growth (%)		3.5	3.8	3.4	3.3	3.3
2. Net lending of general government	EDP B.9	1.1	1.4	1.0	0.9	0.9
3. Interest expenditure (incl. FISIM recorded as consumption)	EDPD.41 + FISIM	1.8	1.6	1.5	1.4	1.3
4. Potential GDP growth (%) (1)		3.5	3.5	3.5	3.4	3.4
contributions:						
- labour		n.a.	n.a.	n.a.	n.a.	n.a.
- capital		n.a.	n.a.	n.a.	n.a.	n.a.
- total factor productivity		n.a.	n.a.	n.a.	n.a.	n.a.
5. Output gap		0.0	0.3	0.2	0.1	0.1
6. Cyclical budgetary component		0.0	0.1	0.1	0.1	0.0
7. Cyclically-adjusted balance (2-6)		1.1	1.3	0.9	0.8	0.8
8. Cyclically-adjusted primary balance (7+3)		2.9	2.9	2.4	2.2	2.1

PRODUCTION FUNCTION: MS NAIRU

4. Potential GDP growth (%) (1)		3.8	3.7	3.7	3.6	3.3
contributions:						
- labour		2.0	1.9	1.7	1.6	1.3
- capital		1.6	1.7	1.7	1.7	1.6
- total factor productivity		0.2	0.2	0.2	0.3	0.4
5. Output gap		-0.2	-0.1	-0.4	-0.7	-0.6
6. Cyclical budgetary component		-0.1	-0.1	-0.2	-0.3	-0.3
7. Cyclically-adjusted balance (2-6)		1.2	1.5	1.2	1.2	1.2
8. Cyclically-adjusted primary balance (7+3)		3.0	3.1	2.7	2.6	2.5

PRODUCTION FUNCTION: EU NAIRU

4. Potential GDP growth (%) (1)		3.7	3.7	3.6	3.6	3.3
contributions:						
- labour		2.0	1.9	1.7	1.6	1.2
- capital		1.6	1.7	1.7	1.7	1.6
- total factor productivity		0.2	0.2	0.3	0.3	0.4
5. Output gap		-0.9	-0.9	-1.1	-1.4	-1.3
6. Cyclical budgetary component		-0.5	-0.4	-0.6	-0.7	-0.6
7. Cyclically-adjusted balance (2-6)		1.6	1.9	1.6	1.6	1.5
8. Cyclically-adjusted primary balance (7+3)		3.4	3.5	3.1	3.0	2.8

Table 6. Divergence from previous update

	ESA Code	2005	2006	2007	2008	2009
Real GDP growth (%)						
Previous update		3.4	3.3	3.2	3.2	n.a.
Current update		3.5	3.8	3.4	3.3	3.3
Difference		0.1	0.5	0.2	0.1	n.a.
General government net lending (% of GDP)	EDP B.9					
Previous update		1.0	0.9	0.7	0.6	n.a.
Current update		1.1	1.4	1.0	0.9	0.9
Difference		0.1	0.5	0.3	0.3	n.a.
General government gross debt (% of GDP)						
Previous update		43.1	40.3	38.0	36.0	n.a.
Current update		43.1	39.7	36.6	34.3	32.2
Difference		0.0	-0.6	-1.4	-1.7	n.a.

Table 7 Long term sustainability of public finances

% of GDP	2005	2010	2020	2030	2040	2050
Total expenditure						
Of which: age-related expenditures	20.0	19.7	20.4	23.4	27.3	28.6
Pension expenditure	8.7	8.9	9.3	11.8	15.2	15.7
Social security pension	7.8	8.1	8.5	11.0	14.4	15.2
Old-age and early pensions	5.2	5.2	5.5	7.7	10.9	11.8
Other pensions (disability, survivors)	0.9	1.0	1.1	1.2	1.2	1.1
Occupational pensions (if in general government)	1.7	1.8	1.9	2.1	2.3	2.3
Health care	6.1	6.3	6.7	7.3	7.9	8.3
Long-term care *(this was earlier included in the health care)*	0.5	0.5	0.5	0.5	0.6	0.8
Education expenditure	3.6	3.2	3.2	3.0	2.9	3.1
Other age-related expenditures	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Interest expenditure	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total revenue	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Of which: property income	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
of which: from pensions contributions (or social contributions if appropriate)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Pension reserve fund assets						
Of which: consolidated public pension fund assets	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
(assets other than government liabilities)						
Assumptions						
Labour productivity growth	0.8	1.6	2.0	1.7	1.7	1.7
Real GDP growth	3.1	2.8	2.0	1.0	0.4	1.0
Participation rate males (aged 20-64)	85.6	86.9	87.9	87.0	86.1	87.8
Participation rates females (aged 20-64)	61.5	66.4	72.2	73.5	73.4	74.9
Total participation rates (aged 20-64)	73.6	76.7	80.2	80.3	79.9	81.5
Unemployment rate	10.4	8.7	7.0	7.0	7.0	7.0
Population aged 65+ over total population	24.5	25.3	29.8	38.2	52.5	65.6

Table 8. Basic assumptions

	2004	2005	2006	2007	2008	2009
Short-term interest rate[1] (annual average)		2.2	3.1	3.7	3.6	3.5
Long-term interest rate (annual average)		3.4	3.8	4.0	4.2	4.2
USD/€ exchange rate (annual average) (euro area and ERM II countries)		1.25	1.25	1.27	1.27	1.27
Nominal effective exchange rate		-1.4	0.8	1.1	0.3	0.0
(for countries not in euro area or ERM II) exchange rate vis-à-vis the € (annual average)		-1.2	1.9	2.1	0.1	0.0
World excluding EU, GDP growth		5.6	5.7	5.2	5.2	5.2
EU GDP growth		1.7	2.8	2.4	2.4	2.4
Growth of relevant foreign markets		9.0	9.6	8.6	7.8	7.9
World import volumes, excluding EU		8.2	9.1	8.3	7.9	8.0
Oil prices, (Brent, USD/barrel)		54.5	65.6	66.3	68.0	68.0

[1] If necessary, purely technical assumptions.

Other items (non-CoC)

% of GDP		2005	2006	2007	2008	2009
one-off – expenditure		0.0	0.0	0.0	0.0	0.0
one-off – revenue		0.0	0.0	0.0	0.0	0.0
one-off – balance		0.0	0.0	0.0	0.0	0.0
GG deficit						
GG debt						

ADDITIONAL ITEMS FROM 2004 SC/CP

% of GDP		2005	2006	2007	2008	2009
Output gap (% of potential)		-0.2	-0.2	-0.1	0.0	
General government balance		0.1	0.2	0.4	0.4	
General government Expenditure		39.8	39.8	39.8	39.8	
General government Revenues		39.9	40.0	40.1	40.2	
Real GDP (% change)		2.9	3.0	3.0	3.0	

Annex 3: Compliance with the code of conduct

The table below provides a detailed assessment of whether the programme respects the requirements of Section II of the code of conduct. It is in four parts, covering compliance with (i) the window for the date of submission of the programme; (ii) the model structure (table of contents) in Annex 1 of the code; (iii) the data requirements (model tables) in Annex 2 of the code; and (iv) other information requirements.

Guidelines in the code of conduct	Yes	No	Comments
1. Submission of the programme			
Programme was submitted not earlier than mid-October and not later than 1 December[1].		X	It arrived four weeks after the deadline
2. Model structure			
The model structure for the programmes in Annex 1 of the code of conduct has been followed.	X		
3. Model tables (so-called data requirements)			
The quantitative information is presented following the standardised set of tables (Annex 2 of the code of conduct).	X		
The programme provides all compulsory information in these tables.	X		
The programme provides all optional information in these tables.		X	
The concepts used are in line with the European system of accounts (ESA).	X		
4. Other information requirements			
a. Involvement of parliament			
The programme mentions its status vis-à-vis the national parliament.	X		
The programme indicates whether the Council opinion on the previous programme has been presented to the national parliament.		X	
b. Economic outlook			
Euro area and ERM II Member States uses the "common external assumptions" on the main extra-EU variables.	X		
Significant divergences between the national and the Commission services' economic forecasts are explained[2].	X		
The possible upside and downside risks to the economic outlook are brought out.	X		
The outlook for sectoral balances and, especially for countries with a high external deficit, the external balance is analysed.	X		
c. Monetary/exchange rate policy			
The convergence programme presents the medium-term monetary policy objectives and their relationship to price and exchange rate stability.			Not applicable
d. Budgetary strategy			
The programme presents budgetary targets for the general government balance in relation to the MTO, and the projected path for the debt ratio.	X		
In case a new government has taken office, the programme shows continuity with respect to the budgetary targets endorsed by the Council.			Not applicable
When applicable, the programme explains the reasons for possible deviations from previous targets and, in case of substantial deviations, whether measures are taken to rectify the situation, and provide information on them.			Not applicable
The budgetary targets are backed by an indication of the broad measures necessary to achieve them and an assessment of their quantitative effects on the general government balance is analysed.	X		
Information is provided on one-off and other temporary measures.	X		
The state of implementation of the measures (enacted versus planned) presented in the programme is specified.	X		
If for a country that uses the transition period for the classification of			Not applicable

Guidelines in the code of conduct	Yes	No	Comments
second-pillar funded pension schemes, the programme presents information on the impact on the public finances.			
e. "Major structural reforms"			
If the MTO is not yet reached or a temporary deviation is planned from the achieved MTO, the programme includes comprehensive information on the economic and budgetary effects of possible 'major structural reforms' over time.			Not applicable
The programme includes a quantitative cost-benefit analysis of the short-term costs and long-term benefits of such reforms.			Not applicable
f. Sensitivity analysis			
The programme includes comprehensive sensitivity analyses and/or develops alternative scenarios showing the effect on the budgetary and debt position of: a) changes in the main economic assumptions b) different interest rate assumptions c) for non-participating Member States, different exchange rate assumptions d) if the common external assumptions are not used, changes in assumptions for the main extra-EU variables.	X		
In case of "major structural reforms", the programme provides an analysis of how changes in the assumptions would affect the effects on the budget and potential growth.			Not applicable
g. Broad economic policy guidelines			
The programme provides information on the consistency with the broad economic policy guidelines of the budgetary objectives and the measures to achieve them.	X		
h. Quality of public finances			
The programme describes measures aimed at improving the quality of public finances on both the revenue and expenditure side (e.g. tax reform, value-for-money initiatives, measures to improve tax collection efficiency and expenditure control).	X		
i. Long-term sustainability			
The programme outlines the country's strategies to ensure the sustainability of public finances, especially in light of the economic and budgetary impact of ageing populations.	X		
Common budgetary projections by the AWG are included in the programme. The programme includes all the necessary additional information. (…) To this end, information included in programmes should focus on new relevant information that is not fully reflected in the latest common EPC projections.	X		
j. Other information (optional)			
The programme includes information on the implementation of existing national budgetary rules (expenditure rules, etc.), as well as on other institutional features of the public finances, in particular budgetary procedures and public finance statistical governance.	X		

Notes:

[1]The code of conduct allows for the following exceptions: (i) Ireland should be regarded as complying with the deadline in case of submission on "budget day", i.e. traditionally the first Wednesday of December, (ii) the UK should submit as close as possible to its autumn pre-budget report; and (iii) Austria and Portugal cannot comply with the deadline but will submit no later than 15 December.

[2]To the extent possible, bearing in mind the typically short time period between the publication of the Commission services' autumn forecast and the submission of the programme.

Source:

Commission services

Annex 4: Key economic indicators of past economic performance

This Annex includes two tables. The first displays key economic indicators that summarise the economic performance of the country. To put the country's performance into perspective, the second table displays the same set of indicators for the euro area.

Key economic indicators

SPAIN

	Averages			2003	2004	2005
	96 – 05	96 – 00	01 - 05			
Economic activity						
Real GDP (% change)	3.7	4.1	3.2	3.0	3.2	3.5
Private consumption % change	3.8	4.1	3.5	2.8	4.2	4.2
Government consumption % change	4.1	3.3	4.9	4.8	6.3	4.8
Investment % change	6.1	7.2	5.1	5.6	4.9	7.2
Exports % change	6.6	10.2	3.1	3.7	4.1	1.5
Imports % change	9.3	12.3	6.2	6.2	9.6	7.0
Contributions to real GDP growth						
Demand						
Domestic demand	4.5	4.7	4.2	3.9	4.9	5.2
Net exports	-0.8	-0.6	-1.0	-0.8	-1.7	-1.7
Output gap	-0.1	-0.7	0.4	0.2	-0.5	-0.8
Prices and costs						
HICP inflation % change	2.9	2.6	3.2	3.1	3.1	3.4
Unit labour costs % change	2.5	2.3	2.7	3.0	2.5	2.2
Labour productivity % change	0.4	0.3	0.5	0.6	0.6	0.4
Real unit labour costs % change	-1.0	-0.6	-1.3	-1.1	-1.5	-1.8
Comparative price levels (EUR25=100)	86.4	85.0	87.7	87.8	88.7	90.2
Labour market						
Employment % change	3.5	3.9	3.2	3.1	3.4	3.8
Employment % of pop work age	58.7	55.2	62.3	62.0	63.1	64.5
Unemployment rate in %	12.6	14.6	10.5	11.1	10.7	9.2
NAIRU in %	12.2	13.8	10.6	10.6	9.9	9.1
Participation rate in %	66.8	64.3	69.4	69.6	70.4	70.9
Working age population % change	1.1	0.5	1.6	1.8	1.7	1.5
Competitiveness and external position						
Real effective exchange rate % change (1)	0.5	-1.1	2.2	4.8	2.4	0.4
Export performance % change (2)	0.7	1.8	-0.3	1.0	-2.8	-3.6
External balance of g & s	-2.0	-0.8	-3.3	-2.4	-4.0	-5.4
Net borrowing v-à-v RoW	-2.3	-0.6	-4.1	-2.9	-4.8	-6.5
FDI	3.2	2.8	3.5	2.9	2.4	2.0
Public finances						
Total expenditure % of GDP	39.7	40.9	38.5	38.2	38.8	38.2
Total revenue % of GDP	38.4	38.2	38.5	38.2	38.6	39.4
General government balance % of GDP	-1.3	-2.7	0.0	0.0	-0.2	1.1
General government debt % of GDP	56.2	63.2	49.2	48.7	46.2	43.1
Structural budget balance % of GDP	n.a.	n.a.	n.a.	-0.1	0.0	1.5
Fin.a.ncial indicators (3)						
Short term real interest rate (4)	0.4	2.0	-1.3	-1.7	-1.8	-1.8
Long term real interest rate (4)	1.6	3.1	0.2	0.0	0.1	-0.7
Household credit % change	16.6	15.7	17.6	18.7	20.0	21.0
Corporate sector credit % change (5)	14.9	13.5	16.3	14.9	14.1	22.1
Household debt in % of GDP	48.9	39.0	58.9	57.7	64.5	72.3
Corporate sector debt in % of GDP	63.6	51.2	75.9	74.5	79.3	89.6

Notes:
(1) ulc relative to rest of a group of industrialised countries (usd): EUR24 (excl. LU), BG, RO, TR, CH, NR, US, CA, JP, AU, MX and NZ
(2) Market performance of exports of goods and services on export weighted imports of goods and services of 35 industrial markets (2000=100).
(3) Data available up to 2004
(4) Using GDP deflator
(5) Households' and non-profit institutions serving households' debt defined as loans and securities other than shares
(6) Non-financial corporate sector debt, defined as loans and securities other than shares

Key economic indicators

EURO AREA

	Averages 1996 – 2005	1996 – 2000	2001 -2005	2003	2004	2005
Economic activity						
Real GDP (% change)	2.1	2.7	1.4	0.8	2.0	1.4
Private consumption % change	2.0	2.6	1.4	1.2	1.5	1.3
Government consumption % change	1.7	1.7	1.7	1.8	1.2	1.4
Investment % change	2.6	4.3	1.0	1.0	2.2	2.5
Exports % change	5.8	8.1	3.5	1.1	6.8	4.3
Imports % change	5.9	8.4	3.4	3.1	6.7	5.3
Contributions to real GDP growth						
Demand						
Domestic demand	2.0	2.7	1.3	1.4	1.8	1.6
Net exports	0.1	0.1	0.1	-0.7	0.2	-0.2
Output gap	-0.1	-0.1	0.0	-0.6	-0.5	-1.1
Prices and costs						
HICP inflation % change	1.9	1.7	2.2	2.1	2.1	2.2
Unit labour costs % change	1.3	0.8	1.7	2.0	0.9	1.0
Labour productivity % change	1.2	1.5	0.8	0.8	1.6	0.9
Real unit labour costs % change	-0.5	-0.6	-0.5	-0.1	-1.0	-0.8
Comparative price levels (EUR25=100)	n.a.	n.a.	102.1	103.0	102.7	102.3
Labour market						
Employment % change	1.2	1.5	0.9	0.7	0.7	0.8
Employment % of pop work age	63.7	62.0	65.4	65.4	65.6	65.8
Unemployment rate in %	9.1	9.8	8.5	8.7	8.9	8.6
NAIRU in %	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Participation rate in %	69.9	68.5	71.2	71.4	71.7	71.8
Working age population % change	0.3	0.2	0.4	0.5	0.5	0.5
Competitiveness and external position						
Real effective exchange rate % change (1)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Export performance % change (2)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
External balance of g & s	1.9	1.7	2.0	2.1	2.1	1.5
Net borrowing v-à-v RoW	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FDI	2.4	2.5	2.2	1.9	1.1	n.a.
Public finances						
Total expenditure % of GDP	48.2	48.7	47.7	48.2	47.6	47.6
Total revenue % of GDP	45.8	46.5	45.1	45.1	44.8	45.1
General government balance % of GDP	-2.3	-2.1	-2.5	-3.1	-2.8	-2.4
General government debt % of GDP	70.9	72.5	69.3	69.3	69.8	70.8
Structural budget balance % of GDP	#N/A	#N/A	#N/A	-3.2	-2.9	-2.0
Fin.a.ncial indicators (3)						
Short term real interest rate (4)	1.7	2.7	0.7	0.2	0.2	0.3
Long term real interest rate (4)	3.1	4.1	2.1	2.0	2.2	1.5
Household credit % change	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corporate sector credit % change (5)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Household debt in % of GDP	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corporate sector debt in % of GDP	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Notes:

(1) ulc relative to rest of a group of industrialised countries (usd): EUR24 (excl. LU), BG, RO, TR, CH, NR, US, CA, JP, AU, MX and NZ

(2) Market performance of exports of goods and services on export weighted imports of goods and services of 35 industrial markets (2000=100).

(3) Data available up to 2004

(4) Using GDP deflator

(5) Households' and non-profit institutions serving households' debt defined as loans and securities other than shares

(6) Non-financial corporate sector debt, defined as loans and securities other than shares

Annex 5: Assessment of tax projections

Error! Reference source not found. in the main text compares the tax projections of the programme with those of the Commission services' autumn 2006 forecast and those obtained by using standard ex-ante elasticities, as estimated by the OECD. It summarises the results for the total tax-to-GDP ratio. The underlying analysis exploits information for the four major tax categories, i.e. indirect taxes, corporate and private income taxes and social contributions (see results in the table below)[12].

Conceptually, the analysis draws on the definition of a semi-elasticity, which measures the change in a ratio vis-à-vis the relative change in the denominator. The semi-elasticity of the tax-to-GDP ratio of the *i-th* tax $\frac{T_i}{Y}$ can be written as:

$$\eta_i = \frac{d\left(\frac{T_i}{Y}\right)}{dY} Y = \left(\frac{dT_i}{dY}\frac{Y}{T_i} - 1\right)\frac{T_i}{Y} = \left(\frac{dT_i}{dB_i}\frac{B_i}{T_i}\frac{dB_i}{dY}\frac{Y}{B_i} - 1\right)\frac{T_i}{Y} = (\varepsilon_{T_i,B_i}\varepsilon_{B_i,Y} - 1)\frac{T_i}{Y}$$

where ε_{T_i,B_i} and $\varepsilon_{B_i,Y}$ denote the elasticity of the *i-th* tax T_i relative to its tax base B_i and the elasticity of the tax base B_i relative to aggregate GDP Y respectively.

To the extent that ε_{T_i,B_i} is derived from observed or projected data, it will typically reflect (i) the effect of discretionary measures (including one-offs) and (ii) the tax elasticity[13]. By contrast, if ε_{T_i,B_i} is the standard *ex-ante* elasticity, as estimated by the OECD, it will be net of discretionary measures.

The second elasticity $\varepsilon_{B_i,Y}$ can be used as an indicator of the tax intensity of GDP growth; for instance, a higher elasticity of consumption relative to GDP means that for the same GDP growth indirect taxes will be higher.

The definition of a semi-elasticity has two practical implications. First, any change in the tax-to-GDP ratio of the *i-th* tax can be written as the product of the semi-elasticity and GDP growth:

$$d\left(\frac{T_i}{Y}\right) = \eta_i \cdot \frac{dY}{Y}$$

and the change in the total tax-to-GDP ratio is the sum:

$$\sum_i d\left(\frac{T_i}{Y}\right) = \sum_I \eta_i \frac{dY}{Y}.$$

Second, differences between two tax projections can be decomposed into an elasticity component and a composition component:

$$d\left(\frac{T_i}{Y}\right)' - d\left(\frac{T_i}{Y}\right) \approx \left[\left(\varepsilon'_{T_i,B_i}\varepsilon'_{B_i,Y} - 1\right)\frac{T_i}{Y} - \left(\varepsilon_{T_i,B_i}\varepsilon_{B_i,Y} - 1\right)\frac{T_i}{Y}\right]\frac{dY}{Y}$$

If $(\varepsilon'_{T_i,B_i} - \varepsilon_{T_i,B_i}) = \alpha_i$; $(\varepsilon'_{B_i,Y} - \varepsilon_{B_i,Y}) = \beta_i$,

[12] Private and corporate income taxes are generally not provided, neither in the programme nor in the Commission services' autumn 2006 forecast. Only the aggregate, direct income taxes, is given. For the purpose of this exercise the breakdown is obtained using the average shares over the past ten years, i.e. the composition of direct taxes is assumed to stay constant.

[13] The observed or projected elasticity (ex-post elasticity) of the *i*-th tax also includes the effect of other factors (OF) such as discretionary measures: $\frac{\Delta T_i}{T_i} = \varepsilon_{T_i,B_i exante}\frac{dB_i}{B_i} + \frac{OF_i}{T_i} = \varepsilon_{T_i,B_i ex post}\frac{dB_i}{B_i}$.

then $d\left(\frac{T_i}{Y}\right)^{'} - d\left(\frac{T_i}{Y}\right) \approx \left[\left(\alpha_i \varepsilon_{B_i,Y} + \beta_i \varepsilon_{T_i,B_i} + \alpha_i \beta_i\right)\frac{T_i}{Y}\right]\frac{dY}{Y}$

where $\alpha_i \varepsilon_{B_i,Y} \frac{T_i}{Y}\frac{dY}{Y}$ determines the elasticity component and $\beta_i \varepsilon_{T_i,B_i} \frac{T_i}{Y}\frac{dY}{Y}$ the composition component. The third component in the equation $\alpha_i \beta_i \frac{T_i}{Y}\frac{dY}{Y}$ measures the interaction of the elasticity and the composition components. It is generally small but can become important in some cases. The tax elasticity relative to GDP of total taxes is obtained as $\varepsilon = \sum_i w_i \varepsilon_{T_t B_i} \varepsilon_{B_i Y}$ with w_i the share of the *i-th* tax in the overall tax burden.

Assessment of tax projections by major tax category

Table Annex 5

	2007			2008			2009
	SP/CP	COM	OECD1	SP/CP	COM[2]	OECD[1]	SP/CP
Taxes on production and imports:							
Change in tax-to-GDP ratio	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
Difference SP/CP – COM	0.0			0.1			/
of which[3]:							
- discretionary & elasticity component	-0.1			0.0			/
- composition component	0.1			0.0			/
Difference COM – OECD[1]	/	0.0		/	-0.1		/
of which[3]:							
- discretionary & elasticity component	/	0.1		/	0.0		/
- composition component	/	-0.1		/	-0.1		/
p.m.: Elasticity							
- of taxes to tax base[4]	1.0	1.1	1.0	1.1	1.0	1.0	1.1
- of tax base[4] to GDP	1.0	0.9	1.0	0.9	0.9	1.0	0.9
Social contributions:							
Change in tax-to-GDP ratio	0.0	0.0	-0.2	0.0	0.0	-0.2	0.0
Difference SP/CP – COM	0.0		/	0.0		/	/
of which[3]:							
- discretionary & elasticity component	0.0		/	-0.1		/	/
- composition component	0.0		/	0.1		/	/
Difference COM – OECD[1]	/	0.1		/	0.2		/
of which[3]:							
- discretionary & elasticity component	/	0.2		/	0.3		/
- composition component	/	0.0		/	-0.1		/
p.m.: Elasticity							
- of taxes to tax base[5]	1.1	1.1	0.8	1.1	1.2	0.8	1.1
- of tax base[5] to GDP	0.9	0.9	0.9	0.9	0.8	0.9	0.9
Personal income tax[6]:							
Change in tax-to-GDP ratio	0.0	0.0	0.3	0.0	0.0	0.3	0.0
Difference SP/CP – COM	0.0		/	0.0		/	/
of which[3]:							
- discretionary & elasticity component	0.0		/	-0.1		/	/
- composition component	0.0		/	0.1		/	/
Difference COM – OECD[1]	/	-0.3		/	-0.3		/
of which[3]:							
- discretionary & elasticity component	/	-0.5		/	-0.4		/
- composition component	/	0.0		/	-0.1		/

p.m.: Elasticity							
- of taxes to tax base[5]	1.1	1.2	2.1	1.1	1.3	2.1	1.1
- of tax base[5] to GDP	0.9	0.9	0.9	0.9	0.8	0.9	0.9
Corporate income tax[6]:							
Change in tax-to-GDP ratio	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Difference SP/CP – COM	0.0		/	0.0		/	/
of which[3]:							
- discretionary & elasticity component	0.0		/	0.0		/	/
- composition component	0.0		/	0.0		/	/
Difference COM – OECD[1]	/	0.1		/	0.2		/
of which[3]:							
- discretionary & elasticity component	/	0.2		/	0.3		/
- composition component	/	0.0		/	-0.1		/
p.m.: Elasticity							
-of taxes to tax base[7]	0.9	0.9	0.8	0.9	0.9	0.8	0.9
-of tax base[7] to GDP	1.1	1.1	0.9	1.1	1.2	0.9	1.1

Notes:

[1]Based on OECD ex-ante elasticities

[2]On a no-policy change basis

[3]The decomposition is explained in the text above

[4]Tax base = private consumption expenditure

[5]Tax base = compensation of employees

[6]Taxes on income and wealth are split into private and corporate income tax using the average tax share over the past ten years, i.e. the share is assumed to be constant over the programme period

[7]Tax base = gross operating surplus

Source:

Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations and OECD (N. Girouard and C. André (2005), "Measuring Cyclically-Adjusted Budget Balances for the OECD Countries", OECD Working Paper No. 434)