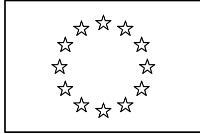


EUROPEAN COMMISSION
DIRECTORATE GENERAL
ECONOMIC AND FINANCIAL AFFAIRS

Brussels, 4 March 2009
ECFIN/50744/09-EN

SPAIN: MACRO FISCAL ASSESSMENT

AN ANALYSIS OF THE JANUARY 2009 UPDATE OF THE STABILITY PROGRAMME

The Stability and Growth Pact requires each EU Member State to present an annual update of its medium-term budgetary programme, called "stability programme" for countries that have adopted the euro as their currency and "convergence programme" for those that have not.

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 (DG ECFIN) of the European Commission, was finalised on 18 February 2009. Comments should be sent to Manuel PALAZUELOS MARTINEZ and Pedro CARDOSO (Manuel.Palazuelos-Martinez@ec.europa.eu, Pedro.Cardoso@ec.europa.eu). The main aim of the 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.

The analysis takes into account (i) the Commission services' January 2009 interim 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. Technical issues are explained in an accompanying methodological paper prepared by DG ECFIN.

Based on this technical analysis, the European Commission adopted a recommendation for a Council opinion on the programme on 18 February 2009. The ECOFIN Council is expected to adopt its opinion on the programme on 10 March 2009.

* * *

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

1. INTRODUCTION

This document assesses the January 2009 update of Spain's stability programme. It takes into account all currently available information, notably the Commission services' January 2009 Interim Forecast and the short-term fiscal stimulus measures adopted by the Spanish authorities in response to the economic downturn. The programme, which was submitted on 16 January 2009[1], covers the period 2008-2011 and builds on the 2009 Budget Law. The update was approved by the government but it does not provide information on its status vis-à-vis the Parliament.

2. MAIN CHALLENGES IN THE ECONOMIC DOWNTURN AND THE POLICY RESPONSE

For more than a decade, the Spanish economy recorded high growth rates, higher than the euro area average and in excess of potential GDP. More specifically, between 1995 and 2007, Spain's GDP grew by an annual average of over 3½% on the back of a strong and broad-based domestic demand expansion. Employment creation was the main driver of economic activity and, thanks to large migration inflows, population increases accounted for roughly half of the recorded GDP growth (see Annex 1). However, economic activity is estimated to have decelerated markedly in 2008, reflecting weakening household consumption and declining housing investment with overall GDP growth estimated at 1¼% in the Commission services January 2009 interim forecast.

Such a strong growth pattern was accompanied by the accumulation of imbalances, which can be traced back to the regime changes brought about by EMU accession. First, the subsequent domestic financial liberalisation and international integration and the concomitant deepening of external financing opportunities paved the way for a significant credit expansion to finance domestic activity. Second, such a credit impulse widened the gap between aggregate domestic investment and savings, which has a counterpart in growing external deficits since the late nineties. Third, the structure of domestic spending itself changed, notably with an increasing weight of the housing sector. Fourth, the overheating of the economy resulted in inflationary pressures in excess of the euro area average, and against a backdrop of subdued productivity growth, cost competitiveness suffered. Whereas export market shares have been largely preserved, domestic cost developments did not help in skewing GDP growth drivers away from domestic demand and towards net exports.

In the turn from the year 2006 to 2007, when the credit impulse was fading out, a slow correction of the imbalances described above started taking place, especially with the housing sector showing the firsts signs of fatigue, starting with decelerating prices and following with slowing activity. The international financial crisis in late 2007, and especially in 2008, accelerated and deepened that adjustment, now visible also at the level of household consumption. Going hand in hand with cooling economic activity, bank credit has decelerated since its peak of end 2006 with construction and real-estate related activities accounting for most of that credit slowdown as they had accounted for the expansion of earlier years. However and overall, the domestic banking sector has coped well with this backdrop and without major government intervention.

[1] The English language version was submitted on 21 January 2009.

According to the Commission services' January 2009 interim forecast, the output gap is estimated to have been positive until 2008 but is expected to turn negative in 2009. Consideration of other factors beyond the output gap and the GDP growth path such as the quickly weakening demand, the deteriorating labour market and the falling tax proceeds[2] confirm a change in economic patterns around the year 2008. In summary, having enjoyed 'good economic times' until 2007, Spain has been slipping to 'bad economic times'.

Between the mid-nineties and 2007, significant progress was achieved in improving government finances thanks to high economic growth, falling interest burden as well as expenditure containment efforts in earlier years. That was reflected in the gradual improvement in the fiscal balance from large deficits in the nineties to surpluses between 2005 and 2007 as well as in the fall of the government debt ratio. Furthermore, and beyond the overall GDP growth figure, public finances benefited from a tax-friendly growth environment. That was the result of continued expansions of private consumption and employment as well as of other factors such growing values of housing transactions and soaring financial profits. At the same time, by improving its lending position over the past several years – in opposition to the domestic private sector – the government sector partially off-set the financing needs of the private sector.

However, in 2008, the fiscal position deteriorated considerably with the general government deficit estimated to have exceeded the 3% of GDP reference value as the result of not only sizeable discretionary measures but also of rather large composition effects on account of a much less tax-rich GDP growth pattern than in previous years, including a shrinking housing sector. The government gross debt is estimated to have grown to almost 40% of GDP in 2008, consequently ending the continuous downward trajectory recorded since 1996.

The quickly changing outlook for the Spanish economy seriously hampers the fiscal prospects mainly to the extent that important tax bases will further suffer from the demand retrenchment as suggested already by the developments observed in 2008. Even though it is departing from a very comfortable position, public debt seems to be edging up in times of high deficits and rather low nominal GDP.

Spain has adopted a number of measures to stimulate economic activity since the first half of 2008. They include, among other, tax cuts and speeding up of VAT tax rebates by the government, with both temporary and permanent measures. For 2009, a temporary sizeable government investment effort was outlined in November 2008 in line with the European Economic Recovery Plan (EERP), including substantial public investment and support to strategic sectors of the Spanish economy.

In addition, the Spanish authorities have adopted a range of measures to stabilise the financial sector (summed up in box 1 below). This includes an increase of the amount of the Deposit and Investment Guarantee Fund (from 20,000 to 100,000 euro per account-holder and bank) and the creation of the Financial Asset Acquisition Fund in order to promote lending to companies and individuals, endowed with 30 billion euro (close to 3% of GDP), including the possibility of an expansion up to 50 billion euro. Moreover, the authorities decided to grant exceptional authorisations to the Ministry of Economy and Finance to award State guarantees for new

---

[2] This sharp decrease in the tax revenues reflects not only a number of discretionary measures aiming at reducing the tax burden but apparently also rather large composition effects on account of a much less tax-rich GDP growth pattern.

funding transactions by Spanish-resident banks in 2009 up 100 billion euro (10% of GDP), maturing between three months and three years, and to acquire securities issued by Spanish-resident banks in order to strengthen their own funds. Finally, support to credit lines to firms, especially for SMEs, or to re-finance mortgages of financially-troubled households have been put in place.

All in all, the Spanish economy is facing various challenges. In particular, the gap between income and spending, as reflected in the external imbalance, seems to raise concerns in the light of the present financial crisis to the extent that stricter credit conditions may constrain the space available for a very smooth adjustment of demand. Additionally, the recessive backdrop in external markets hampers the margin for a strong re-balancing of GDP growth towards external demand. In addition, the current juncture is the result of not just adverse cyclical developments and external shocks but also of structural elements such as subdued productivity growth, eroded competitiveness, an oversized housing sector or a vulnerable financial position of private agents due to high debt levels. On this respect, efforts to support the resilience of the supply side seem also necessary in the light inter alia of a productivity gap of Spain vis-à-vis the euro area average and an eroded cost position. Finally, public finances seem to be significantly affected by the downturn, which clearly limits the space for further fiscal impulses without jeopardising sustainability of public finances.

Box. Measures to help stabilise the financial system

The Spanish authorities have adopted a range of measures to help stabilising the financial sector:

First, increasing amount of the Deposit and Investment Guarantee Fund (from 20,000 to 100,000 euro per account-holder and bank).

Second, granting of exceptional authorisations to the Ministry of Economy and Finance to acquire securities issued by Spanish-resident banks in 2009 in order to strengthen their equity capital.

Third, granting of State guarantees for new funding transactions by Spanish-resident banks in 2009 up 100 billion euro (10% of GDP), maturing between three months and three years (exceptionally up to five years), of which almost 90% has already been allocated.

Fourth, creation of the Financial Asset Acquisition Fund (FAAF) in order to promote lending to companies and individuals (with preference being given to asset-backed loans) until end 2009, endowed with 30 billion euro (close to 3% of GDP), including the possibility of an expansion up to 50 billion euro.

3. MACROECONOMIC SCENARIO

The programme's macroeconomic outlook projects GDP to contract by 1.6% in real terms in 2009 after having grown by 1.2% in 2008. The recovery is foreseen to take place in 2010 and 2011 with real GDP growth rates of 1.2% and 2.6% respectively (Table 1). Domestic demand is projected to be the driver of this adjustment path by shrinking considerably in 2009 and recovering rapidly thereafter. In particular, investment is foreseen to be behind this V-shape profile with a deep sink in 2009 expected to be followed by a mild contraction in 2010 and a notorious expansion in 2011. Private consumption swings in the same directions but in a much

more muted way. The external sector is expected to post significant positive contributions to GDP growth but by a declining margin over the programme period, which would be the result of a marked retrenchment of imports in 2009 and of an acceleration of exports in 2010 and again in 2011.

The cyclical conditions implied by the update (as measured by the output gap recalculated by the Commission services based on the information provided in the programme following the commonly agreed methodology) are expected to deteriorate considerably over the programme period. In particular, after the positive readings for the years up to 2008, the output gap is estimated to fall to -2½% of GDP in 2009 and an average of some -3% of GDP in 2010/11.

The programme's GDP prospects exceed those of the Commission services January 2009 interim forecast and do so by an increasing margin: the latter projects GDP to shrink by 2% in 2009 and by 0.2% in 2010. In other words, the Commission forecast projects a more protracted downturn. In addition, the programme's GDP growth projection for 2011 is twice as high as the average estimate for potential GDP growth for the period 2008-2010 in the Commission forecast. Beyond the GDP scenario, other differences between the update and the Commission forecast on the macroeconomic scenario are limited and apparently deriving from the different assumptions for the GDP path. The labour market outlook for 2010 is perhaps the finest example, being more benign in the update, although the programme foresees the downturn to take a very heavy toll on employment. Inflationary pressures are assumed to ease significantly in 2009 and to remain contained thereafter, which is broadly in line with the patterns foreseen in the Commission services' January 2009 interim forecast.[3]

The programme envisages a decline of the external deficit from 9.2% of GDP in 2008 to 5.4% of GDP in 2011 driven by a reduction in the deficit of the goods and services balance of almost 4 percentage points of GDP. This envisaged improvement is just slightly better than the one in the Commission services' January 2009 interim forecast. In terms of sector composition, and unlike in past years, the bulk of the deficit would be accounted for by the government sector, with the private sector presenting annual net borrowing needs of some 1% of GDP on average.

The programme's macroeconomic scenario seems to implicitly incorporate the impact of various stimulus measures to economic activity taken by the Spanish authorities, notably the investment package announced in November. Yet the programme does not elaborate on their macroeconomic impact neither presents a scenario in the absence of such measures, which renders an assessment difficult.

[3] Since the programme does not provide data on HICP, this assessment is based on the private consumption deflator.

Table I: Comparison of macroeconomic developments and forecasts

	2008		2009		2010		2011
	COM	SP	COM	SP	COM	SP	SP
Real GDP (% change)	1.2	1.2	-2.0	-1.6	-0.2	1.2	2.6
Private consumption (% change)	0.4	0.5	-2.6	-1.5	0.0	0.7	1.3
Gross fixed capital formation (% change)	-1.9	-1.8	-6.0	-9.3	-3.7	-1.2	4.4
Exports of goods and services (% change)	2.9	2.9	-2.7	0.3	0.6	3.6	4.6
Imports of goods and services (% change)	0.5	0.6	-4.6	-4.6	-2.1	0.4	3.0
Contributions to real GDP growth:							
- Final domestic demand	0.6	0.7	-2.8	-3.2	-1.0	0.4	2.2
- Change in inventories	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Net exports	0.6	0.6	0.8	1.6	0.8	0.9	0.4
Output gap[1]	0.8	0.3	-2.3	-2.6	-3.4	-3.2	-2.7
Employment (% change)	-0.6	-0.5	-3.9	-3.7	-0.4	0.1	1.3
Unemployment rate (%)	11.3	11.1	16.1	15.9	18.7	15.7	14.9
Labour productivity (% change)	1.8	1.7	1.9	2.1	1.9	1.2	1.2
HICP inflation (%)	4.1	n.a.	0.6	n.a.	2.4	n.a.	n.a.
GDP deflator (% change)	3.4	3.4	3.0	1.6	2.0	2.0	2.3
Comp. of employees (per head, % change)	5.0	5.2	3.0	2.9	2.2	3.1	3.5
Net lending/borrowing vis-à-vis the rest of the world (% of GDP)	-9.0	-9.2	-6.7	-6.6	-6.2	-5.8	-5.4

Note:

[1]In percent of potential GDP, with potential GDP growth according to the programme as recalculated by Commission services.

Source :

Commission services' January 2009 Interim economic forecasts (COM); Stability programme (SP)

Assessed against currently available information[4], this scenario appears to be based on slightly favourable growth assumptions for 2009 and markedly favourable thereafter. Notably, the quick recovery foreseen for 2010 and 2011 seems difficult to attain. More specifically, household income and thereby consumption prospects may be more affected than assumed owing to rising unemployment, tighter credit conditions and possibly adverse wealth effects (related to re-assessments of housing prices, for instance), against a backdrop of vulnerable balance sheets, as suggested by the fact that, as a whole, households have been net borrowers for a number of years. Exports are expected to grow well above external demand over the update period, which in times of falling world trade would be difficult to attain without a fast and marked change in Spanish exporters' competitive position. Finally, with bleak demand prospects and tighter borrowing conditions, few incentives will exist for investment, which, in addition, is bound to further reflect the marked downsizing of the housing sector, which can be regarded as having a more structural nature; consequently, the rapid recovery of investment after 2009 seems to be on the high side. This overall assessment of the GDP outlook is corroborated by the fact that GDP growth for 2010 and especially for 2011 is above potential.

[4] The assessment notably takes into account the Commission services' January 2009 interim forecast, but also other information that has become available since then.

Should the present juncture trigger a fast adjustment of macroeconomic imbalances, GDP growth tracking behind potential for some years would be a distinctive scenario.

4. BUDGETARY STRATEGY

4.1. Budgetary implementation in 2008

The 2008 general government deficit is estimated at 3.4% of GDP, against a target of a surplus of 1.2% of GDP set in the previous update of the stability programme. This significant deterioration of around 4½% of GDP would be reflecting the sharp worsening of the economic situation, which has resulted in a less tax-rich economic activity, as well as a number of some discretionary fiscal measures, mainly on the revenue side. Tax revenue is estimated to have fallen by about 3½ % of GDP, with an approximately equal contribution of direct and indirect taxes to the shortfall. The reduction of direct tax revenue is explained by a combination of personal and corporate tax cuts, as well as by a significant fall in corporate profits, linked to developments in asset markets, including real estate. On the other hand, the contraction of transactions in dwellings, the significant deceleration in consumer spending, and some discretionary revenue-reducing measures of a temporary nature account for the reduction in indirect tax revenue. These discretionary measures include one-off changes to VAT payments by firms[5], amounting to around 0.3% of GDP, as well as a modification of the system of VAT returns, representing 0.1% of GDP.

The sharp slowdown has led to expenditure overruns. The ratio of expenditure to GDP increased to 40.2%, which is 1 percentage point higher than expected in the 2007 stability programme. Expenditure overruns reflect in particular the working of automatic stabilisers through higher social transfers, including unemployment benefits.

4.2. Near-term budgetary strategy

The update projects a budget deficit of 5.8 % of GDP in 2009. The worsening of the budget balance is explained by the adoption of a number of discretionary measures in response to the economic downturn, composition effects that result from a move to less tax-rich economic activities, prompting a rapid decline in tax revenue, and to a lesser extent, to the effect of automatic stabilisers, mainly in the form of increases in unemployment benefits. The discretionary measures amount to around 2¼% of GDP and include the November 2008 stimulus package (slightly below 1¼ % of GDP), which is in line with the European Economic Recovery Plan (EERP) and encompasses two sets of measures. First, this package foresees the creation of a Central Government Fund for Local Public Investment, endowed with €8 billion euro (¾% of GDP), and it is aimed at carrying out new public works in municipalities. Second, €3 additional billion (¼% of GDP) were allocated to improve the situation of certain strategic sectors (e.g. car industry and R+D+i) and public consumption projects. This adds to the measures included in the 2009 budget to increase R&D and infrastructure investment, amounting to around 0.1% of GDP.

[5] Firms integrated in economic groups are able to consolidate among them the VAT payments to the government with the VAT reimbursement owed by the government.

Revenue-reducing measures target both households and firms and intend to provide income support and enhance liquidity. On the one hand, households' disposable income is boosted, mainly through a new personal income tax credit for earned income, which represents ½% of GDP. The government also decided the abolition of the property income tax (less than ½% of GDP in 2009) and introduced a temporary partial moratorium on mortgage instalments, although this moratorium has no direct budgetary impact in 2009 since the government (through the public entity, ICO) only guarantees the payments associated with the moratorium on mortgage repayments. On the other hand, measures to support firms include the possibility to accelerate depreciation on investments made in 2009 and 2010 in new property, plant and equipment for use in economic activities.

The 2009 budget deficit also reflects revenue-reducing one-off measures amounting to around ¾% of GDP. These include the modification of the system of VAT returns, which will have a budgetary impact of around ½% of GDP, and the reduction of up to 2 percentage points in personal income withholding tax for tax payers with mortgages, with a budgetary impact of less than ¼% of GDP. Overall, the stance of fiscal policy will be expansionary in 2009.

Table II. Main budgetary measures for 2009

Revenue measures[1]	Expenditure measures[2]
Measures in response to the downturn	
• Specific reduction of tax withholdings to taxpayers with mortgages (-0.15% of GDP)	• Central Government Fund for Local Public Investment (0.72% of GDP) • Fund to improve certain strategic sectors (Fondo para la dinamización de la economía y el empleo) (0. 27% of GDP)
Other measures	
• Change of the system of VAT returns (-0. 54% of GDP) • Reduction of tax withholdings (-0.45% of GDP) • Abolition of the property income tax (-0.16% of GDP)	
Note: [1] Estimated impact on general government revenue [2] Estimated impact on general government expenditure Source: Commission services	

The stimulus provided by the Spanish authorities is in line with the general principles of the Commission Communication of 26 November 2008 on the European Economic Recovery Plan as it is timely, targeted and temporary. Overall, the programme awards particular priority to

measures aimed at expanding infrastructure and other productive investment, which are likely have a significant impact on the Spanish economy.

Table III: Composition of the budgetary adjustment

(% of GDP)	2007	2008		2009		2010		2011	Change: 2008-2011
	COM	COM	SP	COM	SP	COM[1]	SP	SP	SP
Revenue	**41.0**	**36.8**	**37.0**	**36.4**	**37.5**	**36.9**	**38.3**	**38.7**	**1.7**
of which:									
- Taxes on production and imports	11.7	9.5	9.8	9.2	10.0	9.7	10.3	10.3	0.5
- Current taxes on income, wealth, etc.	12.9	10.6	10.8	10.4	10.6	10.4	10.9	11.1	0.3
- Social contributions	13.0	13.3	13.1	13.2	13.3	13.2	13.5	13.6	0.5
- Other (residual)	3.4	3.5	3.3	3.6	3.6	3.6	3.6	3.7	0.4
Expenditure	**38.8**	**40.2**	**40.4**	**42.6**	**43.3**	**42.5**	**43.1**	**42.6**	**2.2**
of which:									
- Primary expenditure	37.2	38.6	38.9	41.0	41.6	40.9	41.2	40.6	1.7
of which:									
Compensation of employees	10.2	10.6	10.5	11.0	10.9	10.9	10.9	10.8	0.3
Intermediate consumption	5.1	5.3	5.3	5.5	5.5	5.4	5.5	5.4	0.1
Social payments	14.1	14.9	15.2	16.1	16.6	16.9	16.7	16.5	1.3
Subsidies	1.1	1.0	1.1	1.1	1.1	1.0	1.1	1.0	-0.1
Gross fixed capital formation	3.8	3.9	3.9	4.6	4.4	3.8	4.0	4.0	0.1
Other (residual)	2.9	2.8	2.9	2.8	3.0	2.8	2.9	2.8	-0.1
- Interest expenditure	1.6	1.6	1.5	1.6	1.7	1.6	1.9	2.0	0.5
General government balance (GGB)	**2.2**	**-3.4**	**-3.4**	**-6.2**	**-5.8**	**-5.7**	**-4.8**	**-3.9**	**-0.5**
Primary balance	**3.8**	**-1.8**	**-1.9**	**-4.6**	**-4.1**	**-4.0**	**-2.9**	**-1.9**	**0.0**
One-off and other temporary measures	0.0	-0.4	0.0	-0.5	0.0	0.0	0.0	0.0	0.0
GGB excl. one-offs	**2.2**	**-3.0**	**-3.4**	**-5.6**	**-5.8**	**-5.7**	**-4.8**	**-3.9**	**-0.5**
Output gap[2]	1.5	0.8	0.3	-2.3	-2.6	-3.4	-3.2	-2.7	-3.0
Cyclically-adjusted balance[2]	1.6	-3.7	-3.5	-5.2	-4.7	-4.2	-3.4	-2.8	0.8
Structural balance[3]	**1.6**	**-3.3**	**-3.5**	**-4.6**	**-4.7**	**-4.2**	**-3.4**	**-2.8**	**0.8**
Change in structural balance		*-4.9*	*-5.1*	*-1.3*	*-1.2*	*0.5*	*1.3*	*0.7*	
Structural primary balance[3]	3.2	-1.7	-2.0	-3.0	-3.0	-2.5	-1.5	-0.8	1.3
Change in structural primary balance		*-4.9*	*-5.2*	*-1.3*	*-1.0*	*0.5*	*1.5*	*0.8*	

Notes:

[1]On a no-policy-change basis.

[2]Output gap (in % of potential GDP) and cyclically-adjusted balance according to the programme as recalculated by Commission services on the basis of the information in the programme.

[3]Structural (primary) balance = cyclically-adjusted (primary) balance excluding one-off and other temporary measures.

Source:

Stability programme (SP); Commission services' January 2009 interim forecasts (COM); Commission services' calculations

4.3. Medium-term budgetary strategy

According to the programme, the goal of this adjustment is to regain the medium-term budgetary objective (MTO) of a balanced position, but it is not expected to be met within the programme period. Spain has experienced a substantial deviation from its MTO, which is not foreseen to be reached within the programme period. The headline balance will attain a deficit of 4.8% of GDP in 2010 and 3.9% of GDP in 2011. Similarly, the primary balance will reach a deficit of 1.9% of GDP by 2011, which compares with a deficit of 4.1% in 2009. In structural terms, the government balance will increase from 3.½% of GDP in 2008 to 4.¾% in 2009,

reflecting discretionary measures and the reversal of windfall tax revenues related to the on-going adjustment in the real estate sector.

The fiscal adjustment path in the update, projects improvements in the structural balance of 1.¼% and ½% of GDP in 2010[6] and 2011 respectively. As a result, the programme envisages a reduction in the structural deficit to 2.¼% in 2011, which implies that fiscal policy will turn restrictive from 2010 onwards, after being expansionary in 2008 and 2009.

The proposed budgetary adjustment entails an increase in revenue of 1.¾ percentage points between 2008 and 2011. In addition to this expected increase in revenues, according to the update the consolidation of the public accounts will focus primarily on expenditure restriction, which would decline by 2.½ percentage points between 2008 and 2011. The improvement in 2010 can partly be explained by the temporary nature of the stimulus package adopted in November 2008. However, achieving the projected decline in the structural balance would need to be underpinned by budgetary measures, which are not spelled out in the programme, apart from the aforementioned discontinuation of the November 2008 stimulus package.

4.4. Risks to the budgetary targets

The budgetary outcomes are subject to downside risks throughout the programme period, although the past good track record of Spain could be a mitigating factor against the materialisation of these risks. First, the macroeconomic scenario projected in the update appears to be based on favourable growth assumptions, particularly for 2010 and 2011. A path for economic activity more contained than the one envisaged in the programme, especially from 2010, would provide less relief to public finances.

Second, budgetary targets for 2010 and 2011 are not backed up by measures, other than the announced discontinuation of the November 2008 package. In addition, fiscal outcomes might be worse than targeted since regional and local governments are allowed to incur deficits in 2009. While the Budgetary Stability Act foresees the obligation to present a rebalancing plan to revert the deviation from the stability target within at most the following three budget years, in 2009 local governments were exempted from this obligation. This has pushed to its limits the margin of flexibility of the Budgetary Stability Act, which introduced the principle of budgetary stability over the cycle.

Another risk emerges from the composition effects that result from a move to less tax-rich economic activities, including the severe contraction of the real state and housing sector, which is prompting a rapid decline in tax revenues. The loss of revenue associated to this composition effects might have a permanent effect, since a significant part of the increase in tax revenues observed in Spain between 1995 and 2006 might have been of a transitory nature, and would therefore disappear with the asset boom[7].

[6] The improvement in 2010 can partly be explained by the temporary nature of the stimulus package adopted in November 2008.

[7] Martinez Mongay, C., L. Maza Lasierra and J. Yaniz Igal (2007), 'Asset booms and tax receipts: The case of Spain, 1995–2006', *European Economy — Economic Papers*, No. 293, Economic and Financial Affairs DG, European Commission, November.

Although the update does not explicitly acknowledge any one-offs, the size of one-off deficit-increasing measures is significant and amounts to less than ½% of GDP in 2008 and around ¾% of GDP in 2009. In 2008, this includes changes to VAT payments by firms[8], amounting to 0.27% of GDP, as well as a modification of the system of VAT returns, representing 0.1% of GDP. In 2009, there is also a one-off modification of the system for VAT returns, which will have a budgetary impact of around ½% of GDP, and a reduction of up to 2 percentage points in personal income withholding tax for tax payers with mortgages, with a budgetary impact of less than ¼% of GDP.

Overall, budgetary outcomes in the programme are subject to downside risks, despite a traditionally good track record in respecting budgetary targets.

5. DEBT DEVELOPMENTS AND LONG-TERM SUSTAINABILITY

5.1. Debt developments

Government gross debt, estimated at 39.5% of GDP in 2008, is projected to increase by approximately 14 points, reaching 53.7% of GDP, between 2009 and 2011. On the one hand, the accumulation of primary deficits will be the main factor driving debt, contributing by 8.9 points to the surge in the debt ratio and rising interest expenditure by 5.5 points. In addition to the rise in the deficit and the decline in GDP growth, the acquisition of assets from banks within the framework of the financial rescue package contributes to the rise in the debt ratio by 3.7 points. On the other hand, the effect of nominal GDP growth will reduce it by 4 points.

The evolution of the debt ratio may be less favourable than projected in the update, given the risks to the macroeconomic scenario and the budgetary targets, and the uncertainty about the impact of the guarantees granted in the context of the financial rescue package. However, the increase in debt linked to recapitalisations could be (partly) reversed if the support scheme and the financial operations linked to it were successful.

[8] Firms integrated in economic groups are able to consolidate among them the VAT payments to the Government with the VAT reimbursement owed by the Government.

Table IV: Debt dynamics

(% of GDP)	average 2002-06	2007	2008		2009		2010		2011
			COM	SP	COM	SP	COM	SP	SP
Gross debt ratio[1]	**46.0**	**36.2**	**39.8**	**39.5**	**46.9**	**47.3**	**53.0**	**51.6**	**53.7**
Change in the ratio	-3.2	-3.5	3.6	3.3	7.1	7.8	6.1	4.3	2.1
Contributions [2] *:*									
1. Primary balance	**-2.5**	**-3.8**	**1.8**	**1.9**	**4.6**	**4.1**	**4.0**	**2.9**	**1.9**
2. "Snow-ball" effect	**-1.3**	**-0.9**	**0.0**	**-0.1**	**1.2**	**1.7**	**0.8**	**0.4**	**-0.4**
Of which:									
Interest expenditure	2.1	1.6	1.6	1.5	1.6	1.7	1.6	1.9	2.0
Growth effect	-1.5	-1.4	-0.4	-0.4	0.8	0.6	0.1	-0.5	-1.3
Inflation effect	-1.9	-1.2	-1.2	-1.2	-1.2	-0.6	-0.9	-1.0	-1.1
3. Stock-flow adjustment	**0.7**	**1.3**	**1.8**	**1.5**	**1.3**	**2.0**	**1.3**	**1.0**	**0.7**
Of which:									
Cash/accruals diff.	-0.6	-1.0		n.a.		n.a.		n.a.	n.a.
Acc. financial assets	1.3	2.4		n.a.		n.a.		n.a.	n.a.
Privatisation	0.0	0.0		n.a.		n.a.		n.a.	n.a.
Val. effect & residual	-0.1	0.0		n.a.		n.a.		n.a.	n.a.

Notes:

[1]End of period.

[2]The snow-ball effect captures the impact of interest expenditure on accumulated debt, as well as the impact of real GDP growth and inflation on the debt ratio (through the denominator). The stock-flow adjustment includes differences in cash and accrual accounting, accumulation of financial assets and valuation and other residual effects.

Source :

Stability programme (SP); Commission services' January 2009 Interim economic forecasts (COM); Commission services' calculations

5.2. Long-term sustainability

This section presents sustainability indicators based on the long-term age-related government spending as projected by the Member States and the EPC in 2006 according to an agreed methodology.[9]

Table 3 in Annex 2 shows that the projected increase in age-related spending is projected to rise by 8.9 percentage points of GDP between 2010 and 2050, above the EU average. Sustainability indicators for two scenarios are presented in Table 4 in Annex 2. Including the increase of age-related expenditure and assuming that the structural primary balance remained at its 2008 level except for the impact of age-related expenditure, the sustainability gap (S2)[10] would amount to

[9] Economic Policy Committee and the European Commission (2006), 'The impact of aging on public expenditure: projections for the EU-25 Member States on pensions, health care, long-term care, education and unemployment transfers (2004-50)', *European Economy − Special Report* No. 1/2006. European Commission (2006), The long-term sustainability of public finances in the European Union, European Economy No. 4/2006. European Commission (2008), *Public finances in EMU – 2008*, *European Economy* No. 4/2008.

[10] The S2 indicator is defined as the change in the current level of the structural primary balance required to make sure that the discounted value of future structural primary balances (including the path of property income) covers the current level of debt.

9.2% of GDP; about 6½ percentage points of GDP more than in last year's assessment, which is mainly due to a lower estimated structural primary balance in the starting year. The starting budgetary position is not sufficient to stabilize the debt ratio over the long-term and entails a risk of unsustainable public finances even before considering the long-term budgetary impact of ageing. If the 2009 budgetary position of the Commission services' January 2009 forecast was taken as the starting point, the long-term budgetary impact of ageing would be compounded by the budgetary deterioration. The sustainability gap would widen to about 10% of GDP.

While the "2008 scenario" already reflects the weakening of the budgetary position on account of the current economic crisis, the "programme scenario", which is based on the projected end-of-programme structural primary balance, shows a smaller gap. If the budgetary consolidation planned in the programme was achieved, risks to long-term sustainability of public finances would be somewhat mitigated.

Based on the assumptions used for the calculation of the sustainability indicators, figure 4 in Annex 2 displays the projected debt/GDP ratio over the long-term.

For an overall assessment of the sustainability of public finances, other relevant factors are taken into account. They are summarised in Table 5 in Annex 2.

6. INSTITUTIONAL FEATURES OF PUBLIC FINANCES

The medium-term budgetary framework has been instrumental in promoting an appropriate fiscal planning and shows an overall good track record, although it has worsened since 2008. No reforms to this framework are planned, although the programme outlines several reforms aiming at improving the quality of public finances. On the revenue side, these include a reduction in the tax burden on earned income through a personal income tax credit of up to 400 euro per taxpayer, the elimination of the wealth tax, the second phase of the corporate income tax reform. In addition, measures aimed at improving the efficiency of the tax system have already been implemented, such as the possibility of obtaining VAT refunds on a monthly basis and a mechanism for advancing the tax credit for mortgage payments. On the expenditure side, priority is being awarded to productive expenditure in order to maximise the capacity to enhance the economy’s potential growth, especially R&D&I, education and infrastructure, which grow much faster than total expenditure with very significant increases in investment in these areas in recent years. In fact, R&D&i, education and infrastructure, has increased accumulated expenditure on these three areas in 2004-2008 by 168%, 92% and 33%, respectively.

The programme also underlines the role of the State Agency for the Assessment of Public Policy and Service Quality as a step forward in the promotion of a culture of assessment, which should enhance the efficiency and quality of public services. This Agency received around 5.½ million euro in the 2009 Budget, which represents 6.2% more than in 2008. Moreover, the Government's Commission for Economic Affairs is playing a key role as coordinator of the National Reform Programme (NRP) and this stability programme, providing coherence between both documents. The existing domestic budgetary framework had been strengthened with the reform of the Budgetary Stability Act, which introduced the principle of budgetary stability over the cycle. This allowed budgetary objectives to be established on the basis of the cyclical situation. However, in 2009 the margin of flexibility of this legislation is being pushed to the limits, as exceptionally, administrations have been allowed present deficit in 2009 and a

rebalancing plan including revenue and expenditure policies to revert the deviation from the stability target.

7. ASSESSMENT

This section assesses the budgetary strategy, taking into account risks, in the light of (i) the adequacy of the fiscal stimulus package in response to the Commission Communication of 26 November 2008 on the European Economic Recovery Plan (EERP) as agreed by the European Council conclusions on the European Economic Recovery Plan (EERP) on 16 December 2008 and the overall fiscal stance (ii) the criteria for short-term action laid down in the above mentioned Commission Communication, and (iii) the objectives of the Stability and Growth Pact.

The stimulus package for 2009 appears to be an adequate response to the economic downturn. In particular, it has a clear potential to support economic activity and consequently is in spirit of the EERP. Overall, the stimulus package is foreseen to be at core of the overall clearly expansionary fiscal stance planned for 2009. Taking into account budgetary risks, its withdrawal in 2010 is expected to yield a mildly restrictive fiscal stance in that year. However, in view of Spain's limited fiscal space, it will weight on the medium-term fiscal position. In addition, it may also backload the narrowing of the savings-investment gap since by supporting activity it prevents overall demand, and consequently the borrowing needs of the economy, to narrow more than without it.[11] This trade-off is relevant as the government sector is foreseen to account for most of the external deficit over the programme period, which is a marked change from past years when it used to be a net lender as described in Section 2 above. This increase in financing needs can also have consequences for (relative) financing cost of Spain's sovereign debt believing on the recent upturns in credit default swaps and in interest rate spreads vis-à-vis some other public debts, notably German (but in both cases from negligible readings as recently as January 2008).

The response to the economic downturn seems to be in line with the EERP. Namely, it is timely to the extent that it has the potential to quickly underpin economic activity; it is targeted as it is focused on well-defined areas; finally, it is temporary since it is foreseen to be limited to 2009 and reversed afterwards. Nevertheless, the programme does not outline measures clearly showing potential to improve the long-term sustainability of public finances. Finally, it is important to note that Spain's budgetary framework has shown a good track record, although it worsened in 2008, and that it still has to be tested in times of subdued economic conditions, for instance on the coordination between the different layers of the government sector.

The programme itself projects the headline deficit to breach the 3% of GDP reference value since 2008 and throughout its period: the deficit would peak in 2009 and is set to decline gradually thereafter. In addition, after the deviation from its MTO observed in 2008, the programme plans a trajectory of return to the MTO that is fully in line with the Stability and Growth Pact to the extent that the structural balance is envisaged to improve by more than 0.5%

[11] However, the composition of the November 2008 stimulus, notably the focus on local government investment projects seems to be very favourable to domestic production to the extent that its imported content is likely to be very low.

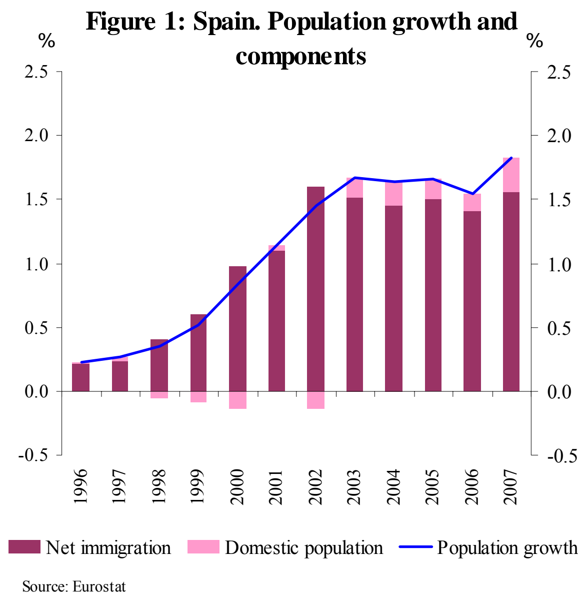
of GDP per year on average, although it does not target the achievement of the MTO by its horizon. Moreover, taking into account the balance of risks to the budgetary targets the pace of this adjustment is likely to turn out less pronounced than planned. It is worthy to highlight that succeeding in consolidating public finances over the medium term will also help in curbing the large external deficit.

ANNEX 1. SPECIAL TOPIC: IMMIGRATION AND PUBLIC FINANCES

1. INTRODUCTION

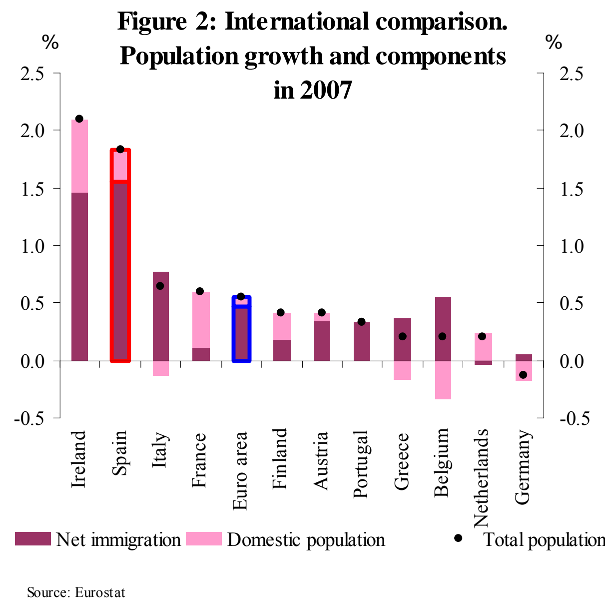
Between 2000 and 2007, Spain has been one of the main recipients of migration flows to Western Europe. While the average population growth rates attained 1.5% per year, immigration contributed almost 95% to the demographic growth. The resident foreign population in Spain has increased from around a million in 2000 to 4.5 million in 2007. As a result, the percentage of foreigners in total population has risen from 2½% in 2000 to 10% in 2007. This is a rather new phenomenon, and it is different from the development in other euro area members, as only Ireland presents a similar population growth profile (see figure 1 and 2).

Figure 1: Spain. Population growth and components



Source: Eurostat

Figure 2: International comparison. Population growth and components in 2007

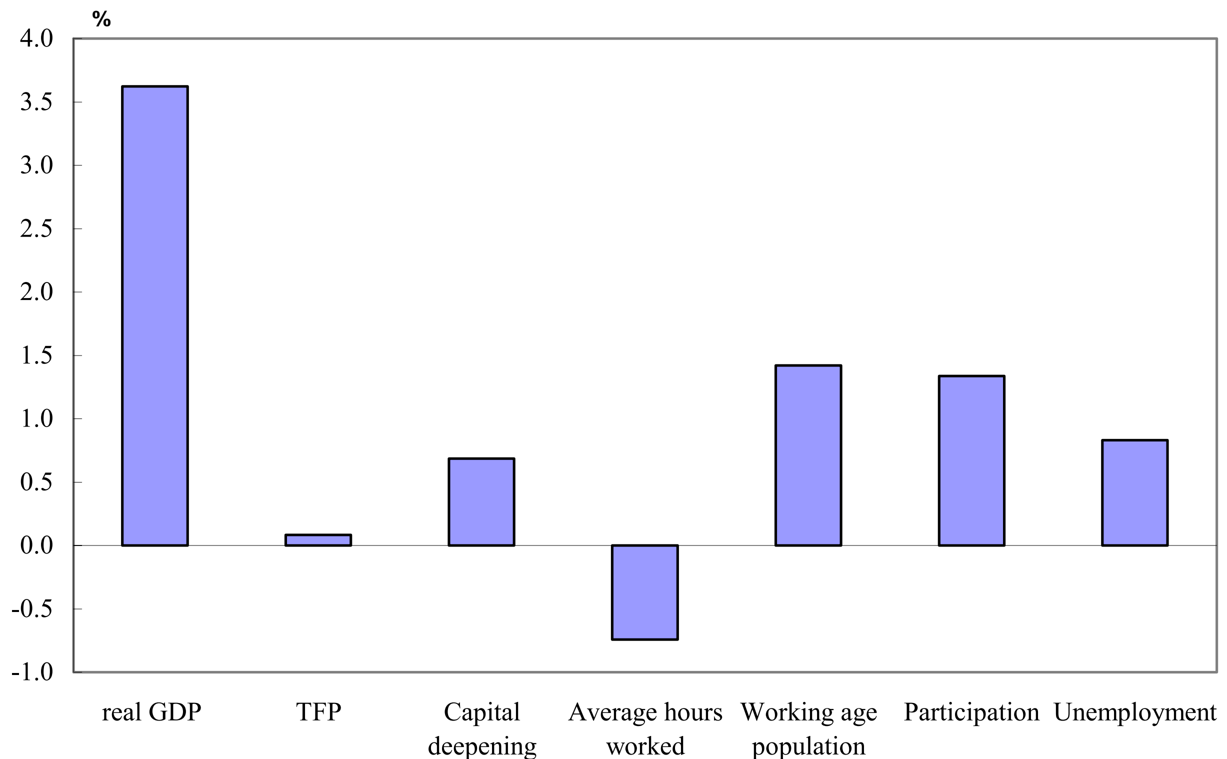


Source: Eurostat

The contribution of immigrants to economic growth since 2000 seems to have been substantial and could help explain why Spain showed such a strong resilience at the beginning of the 2000s. Figure 3 shows that the main drivers of growth in Spain are related to population growth and job creation. Specifically, around 5 million jobs were created between 2000 and 2007, half of which were occupied by immigrants. The sectoral distribution of non-native workers presents certain divergences when compared to that of the native population, i.e. an overrepresentation in construction (22% of immigrants work in this sector, which compares with 12% of natives) and an underrepresentation in industry (12% vs. 16%). The analysis of the age profile of migration reveals that the average age of non-natives is 31 years, below the average Spain's population at 40. While foreigners coming from EU countries present a rather similar age profile when compared to nationals, extra-EU immigrants are considerably younger.

Likewise, the inflow of immigrants might have contributed indirectly to boost economic activity, for instance by increasing female employment participation, given the availability of a larger supply of labour for personal services from immigrant workers. Moreover, immigrants seem to have affected the economy in other ways, such as (i) an increase of the external deficit of Spain via higher remittances to their origin countries, (ii) a negative effect on productivity for the economy as a whole, since migrants tend to be low-skilled labour (iii) a downward pressure on real wages and (iv) an increased worker mobility.

Figure 3: Real GDP growth and its components in Spain 2000-2007



The assessment of Spain's December 2007 convergence programme invited Spain to maintain a strong budgetary position and improve further the long-term sustainability of public finances. Both aspects can be heavily influenced by immigration developments, which suggests the need to scrutinise more in detail its implications on short and long-term outcomes in public finances.

After a strong consolidation process in the second half of the nineties, general government accounts have been broadly in balance between 2000 and 2004, recording increasing surpluses between 2005 and 2007. The surplus recorded in the most recent years came exclusively from the revenue side, as expenditure had been growing above nominal GDP, but was more than compensated by the strong dynamism of revenues. Specifically, between 2000 and 2007, total government receipts grew by almost 3 percentage points of GDP, mostly between 2005 and 2007. GDP growth composition during last years was based on domestic demand, and has therefore been very rich in taxes. Migrants seem to have contributed substantially to the evolution of taxes in their double role of workers (paying social security contributions and personal income tax) and consumers (paying indirect taxes), while benefiting proportionally less than natives from public spending, especially pensions.

The rest of the chapter is divided into three parts: the first analyses in more detail the impact of immigration in GDP growth rates. The second examines the impact of immigration in public accounts and the third presents the challenges that public finances may be facing in the future in relation to the migratory phenomenon.

2. HOW DID IMMIGRANTS AFFECT GDP GROWTH?

According to the available literature[12], the economic impact of immigration crucially depends on a number of characteristics of the immigrants and of the economy of the immigrant-receiving country, such as the "skill-mix" of migrants and the native population, the capital structure of the receiving economy, and whether and how quickly the economy adjusts to immigration through, for example, a change in capital or technology.

Most economic analyses of immigration distinguish between short-run and long-run effects. Focusing in the short run, and assuming that capital and technology are fixed, the primary effect of immigration is the increase of the supply of workers in the economy. The available literature seems to agree on the fact that immigration can have a two-fold impact in the short run, provided that it is low-skilled relatively to natives. Firstly, it can lower the aggregate level of wages of local workers. Secondly, it may concomitantly increase the wage of more skilled natives and the profit of capital owners. In a longer-run perspective, immigration seems to be capable of expanding employment and the economy, with a small or negligible impact on per capita income of the resident population. This conclusion is nonetheless subject to some controversy, as it would exclude the possibility of dynamic effects and spillovers that may arise from, for example, having a bigger economy or a more diverse society. Divergent conclusions stem from the fact that, even in retrospect, it is not easy to distinguish the influence of immigration from that of other economic forces unfolding at the same time.

In the case of Spain, the literature on its economic effects in the country is rather scarce, probably because immigration is a rather recent phenomenon. The Economic Bureau of the President, OEP (2006)[13] and the Annual report of Banco de España (2007)[14] present estimations on the contribution of migrants to economic growth, on the basis of a GDP growth decomposition into the sum of population and income per capita growth:

(1) $\Delta GDP = \Delta Population + \Delta(GDP / Population)$

The migratory phenomenon can impact GDP growth through both factors. On the one hand, more population represents an impulse to economic activity through increased demand for goods and services. On the other hand, immigration can also have a beneficial impact on income in per capita terms. This effect will nevertheless depend on the overall impact of the new population on productivity, the employment rate and the activity rate of the economy as a whole, as these are the main components determining per capita GDP growth:

(2) $\Delta(GDP / Population) = \Delta(GDP / Employment) + \Delta(Employment / PWA)$[15] $+ \Delta(PWA/Population)$

---

[12] A good summary of available studies can be found in "The economic impact of immigration" published by the House of Lords (London) in March 2008.
http://www.publications.parliament.uk/pa/ld200708/ldselect/ldeconaf/82/82.pdf

[13] Economic Bureau of the President (2006): "Immigration and the Spanish economy 1996-2006"

[14] The report can be found in www.bde.es

[15] PWA stands for population of working age.

Both studies decompose GDP growth according to the breakdown presented in equations (1) and (2). The relevant data required to calculate equation (1) can be obtained from national accounts', which provide a population breakdown between natives and non-natives.

Table 1: Contribution by immigration to economic growth (2001-2005)

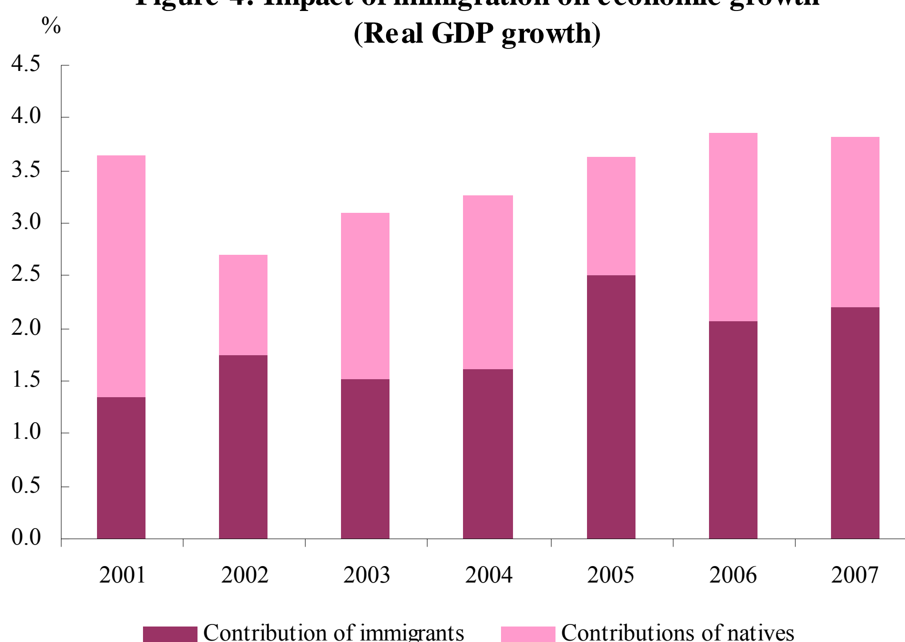
	ON GDP GROWTH					
		ON GDP PER CAPITA				ON POPULATION
	(1)=(2)+(6)	TOTAL (2)=(3)+(4)+(5)	Productivity Δ (GDP / Empl) (3)	Employment rate Δ (Empl / PWA) (4)	Demographic factor Δ (PWA/Pop) (5)	(6)
Economic Bureau of the President (2006)	1.6	0.4	-0.2	0.2	0.4	1.2
Bank of Spain (2007)	1.6	0.4	-0.2	0.3	0.3	1.2
Memorandum item :						
Total economy	3.3	1.8	0.5	1.1	0.2	1.5

Concerning equation (2) the reports present a decomposition between natives and non-natives for each of the three subcomponents. Particular attention deserves the productivity item. OEP (2006) considers that, in the specific case of Spain, immigration has discouraged investment and jeopardised productivity growth by putting downward pressure on wages. The study specifies an econometric model and concludes that immigration has negatively affected productivity growth. Banco de España (2007) reaches a similar conclusion by directly analysing real wage developments per sector as a proxy to calculate productivity growth differentials.

These two studies do not explain in detail how to estimate the other two subcomponents of equation (2), the employment rate and the activity ratio, but it seems the decomposition takes account of the contributions of both foreigners and non foreigners to employment growth, working age population and population growth. These data can in turn be directly obtained from the available statistics.

Table 1 presents the main findings of the reports, according to which, between 2001 and 2005, almost half of economic growth would have come from the impact of immigration. Non-natives would have contributed with 1.6pp, which accounts for about 45% of total growth registered in Spain between 2001 and 2005. Most of this effect is explained by immigrants' population growth (1.2pp), which represents over ¾ of total population growth, and contrasts with the modest contribution of per capita growth (0.4pp). Apart from the economic impulse directly associated to the population increase, immigrants would have boosted economic activity by increasing income per capita, through higher activity and employment rates. Nonetheless, these studies concluded that the contribution of immigration to productivity growth would have been negative.

Given that the aforementioned studies refer to a period ending in 2005, figure 4 presents Commission Services' calculations that have extended the period until 2007, on the basis of the methodology presented in the reports. These figures suggest that the immigrants' contribution has remained broadly unchanged during the past two years with respect to the calculations for 2005, confirming that the impact of migrants to GDP growth has continued to be substantial.



3. HOW DID IMMIGRANTS CONTRIBUTE TO PUBLIC FINANCES?

The available literature presents two possible avenues to measuring the net fiscal impact of immigration. The first one is of a static nature and would capture the short-term impact of immigration on fiscal accounts by calculating the difference between the taxes immigrants pay and the costs of public services and benefits they consume. The second adopts a dynamic approach, taking a long-term view and assessing the expected fiscal costs and benefits of immigrants over their entire lifetime, including the expected taxes immigrants will pay in the future as well as their future use of public services and pension rights.

OEP (2006) chooses a static short-term approach and estimates the immigrants' fiscal balance in 2005. As a general rule, the authors use official figures for revenues and expenditures providing separately the contribution of non-natives. In other cases, immigrants' contribution is calculated on the basis of simplifying hypotheses. Concerning revenues, the contribution of non-natives to both personal income tax and social security contributions is estimated by using data from the tax administration. However, VAT was approximated by considering that immigrants earn 30% less than nationals and their spending propensity is 2% higher. Regarding expenditure, public expenses associated with immigrant's needs in health care, education, unemployment benefits and pensions can be directly estimated as available data allow an individual estimation. Other items such as gross fixed capital formation, interest, justice or security are calculated under the assumption that immigrants present a per capita expenditure level around 10% lower than that of nationals.

OEP (2006) presents an estimate of the immigrants' fiscal balance for the year 2005 using the aforementioned short-term approach, showing a surplus of 0.5% of GDP (out of a general government surplus of 1% of GDP), which is the difference between a contribution to revenues of 2.6% and to expenditures of 2.1% of GDP.

As regards revenues, OEP (2006) recalls that non-natives contributed to only 3.2% to the total personal income tax collection, well below their population share of 8.7% in 2005. This can be partly explained by an average salary around 30% lower than natives. Moreover, the progressivity of this tax category implies that lower income segments are largely exempted from paying personal income tax and, as a result, tax payments become much lower than what could have been initially expected if we took into account their weight in population. Social security contributions by immigrants would amount to around 7%.

Regarding other taxes, some assumptions need to be made due to insufficient statistical information and given the difficulties of assigning the tax burden to specific population groups. In particular, the study assumes that each immigrant can be assigned at most the same contribution as a national with a similar income level. The conclusion is that migrants account for around 7% of total collection of corporate taxes, and indirect taxes.

The authors also provide an estimate of public spending on immigrants. Specifically, education and health care spending would reach 6.6% and 4.6% of total expenditure respectively. This relatively low share might reflect the fact that the number of students among the immigrant population is below native levels and that immigration, which tends to be young, make less use of health services than nationals. Unemployment benefits for immigrants were estimated more precisely at 4.4% of total expenditure, also reflecting lower unemployment levels in 2005.

In order to estimate the migrants' share in other expenditures (excluding pensions), such as defence or justice, simplifying assumptions need to be made. This report explains that there are several potential avenues. One of them would consist of dividing expenditure by their population weight. Another possibility would take the idea of "fixed expenditure", implying that defence or justice spending is independent from economic shocks and, as a result, the impact of immigration on expenditure would be negligible. This study takes a mid-way option, which consists in estimating an average spending per immigrant 20% lower than a Spaniard. This would lead us to conclude that migrants contribute about 7.6% to other expenditures.

Adopting a longer-term perspective, pensions deserve a closer look. This expenditure item accounts for around one fourth of total general government expenditure, and the current share of immigrants in pension expenditure is marginal. This is indeed coherent with the overrepresentation of immigrants in the early age cohorts, so foreigners are just starting to generate pension rights, and would only retire in large numbers in around 25-30 years. Therefore, in spite of the uncertainties and necessary assumptions introduced in the calculation of the contribution of immigration to both revenues and expenditures, it can be stated that the bulk of the positive result estimated by OEP (2006) undoubtedly stems from the pension item.

On the basis of this methodology and the Commission services autumn 2008 forecast, table 2 presents our calculations for the migrants' fiscal balance between 2007 and 2010. These figures reveal that, although it will present positive figures for 2007 and 2008, the rapid increase of unemployment among non-natives should fully compensate their previous surplus position. Therefore, the fiscal balance would worsen in 2009 and it could be close to zero or even turn negative due to lower tax revenues and higher unemployment benefits, although in a context of a sharp deterioration of public finances as a whole.

Table 2: Migrants' contribution to public finance (in % of GDP)

	2007	2008	2009	2010
Revenues	**2.7**	**2.3**	**2.3**	**2.3**
Personal income tax	0.3	0.2	0.3	0.3
Social security	1.0	0.9	0.9	0.9
VAT	0.4	0.3	0.3	0.3
Others	1.1	0.9	0.8	0.8
Expenditures	**2.1**	**2.2**	**2.4**	**2.4**
Unemployment benefit	0.1	0.1	0.2	0.2
Others (Pension, Healthcare, Education, etc.)	2.0	2.1	2.3	2.2
Fiscal balance	**0.6**	**0.2**	**-0.1**	**-0.2**
Pro memoria: Total fiscal balance	**2.2**	**-3.0**	**-5.9**	**-5.6**

Source: European Commission.

4. CHALLENGES FOR THE SHORT, MEDIUM AND LONG RUN

The evolution in the short, medium and long term of the migratory phenomenon might present important challenges to public finances. The impact of immigration on public finances will be determined by a macroeconomic context driven by a severe adjustment in the construction sector, which has absorbed a large part of this immigration and a labour market characterised by a large increase in the unemployment rate. Likewise, the economic scenario might affect the magnitude and sign of migration flows[16]. This rise in unemployment may affect particularly low-skilled workers with temporary contracts, which is the average profile of immigrants in Spain. Taking into account this economic environment, the main challenges for fiscal accounts stemming from immigration can be summarised as follows:

- In the short term, tax revenues associated to immigration might lose share in an expected context of sluggish economic growth and fast rising unemployment. Unemployment could hit immigrants on average more than natives because they are overrepresented in lower-skilled jobs such as the construction sector, tourism and domestic services. In parallel, unemployment benefits granted to migrants should increase more than proportionally to their population weight. Having said this, the immigrant labour force tends to be more flexible than national workers in terms of functional and geographical mobility, which might partially mitigate their unemployment levels. The government is trying to mitigate this negative effect by encouraging immigrants to return to their home countries by granting one-off payments of their unemployment benefits. However, it is unclear whether non-natives will find incentives to return, and, even this were the case, the measure would initially impact negatively on unemployment expenditure.

- In the medium run, immigrants' children who, in a first stage, stayed in their home countries, could join their family in Spain, putting further pressure on education spending. Moreover, the increasing presence of immigrants in older population cohorts would bring about a concomitant pressure on the health care bill. Such higher spending

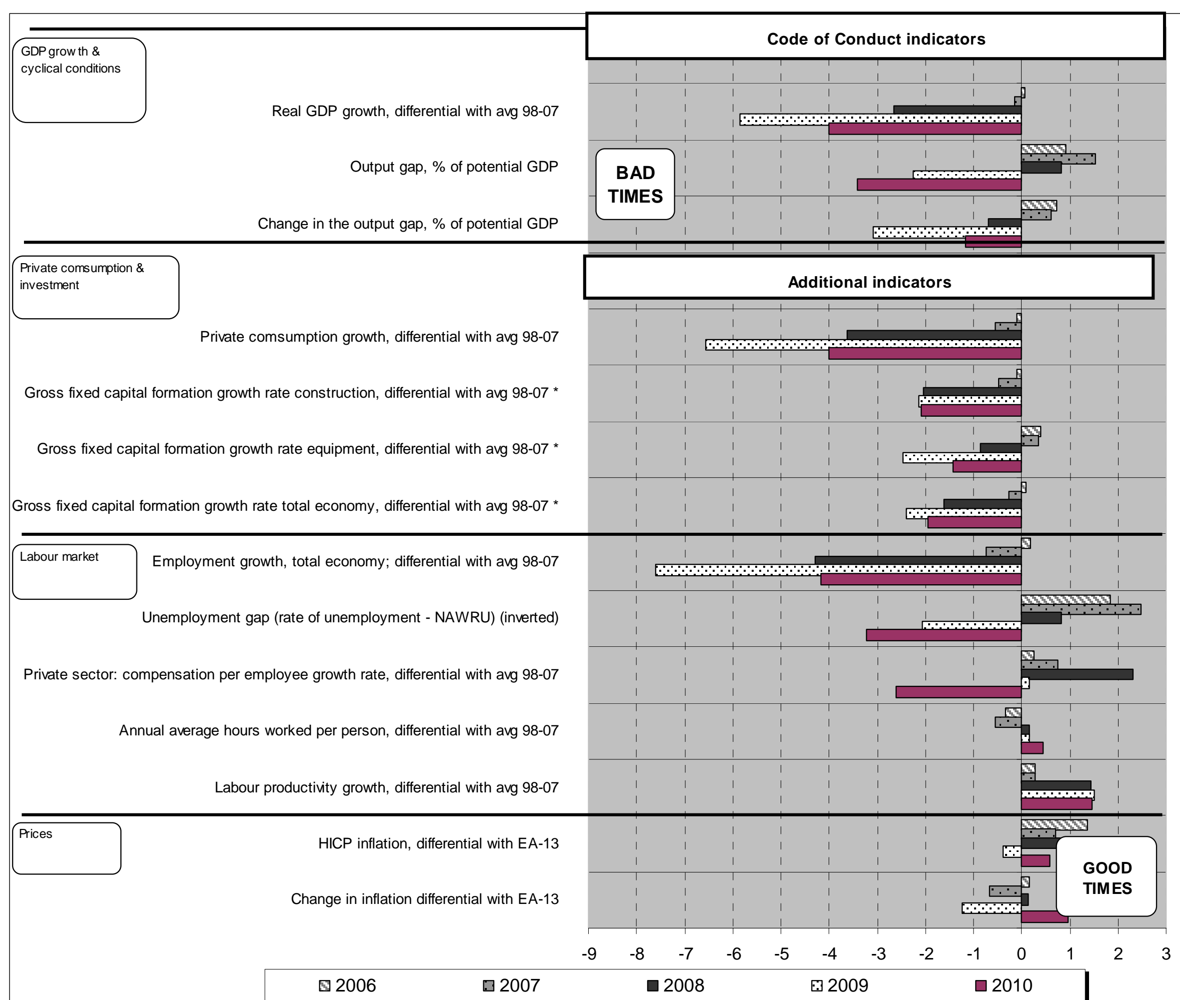
[16] These conclusions broadly assume that there are not marked changes in migration patterns.

in education and health could nevertheless be partly offset by an increase in the average income of non-natives, i.e. higher tax collection, assuming that they enhance their professional skills and get higher experience in the labour market. The authorities could then envisage the possibility of decisively reinforcing professional training and life-long learning as a way to ensure successful and long-lasting integration of non-natives into the domestic labour market, thus counteracting risks to medium term sustainability of public finances.

In the long run, immigration might have an ambiguous impact on the sustainability of public finances. On the one hand, higher fertility rates could indeed help to sustain public spending levels in the future. In this sense, immigrants are currently contributing more than nationals given their higher birth rates. However, on the other hand, it can be expected that in the future fertility rates would come closer to national levels in parallel to their progressive integration into the domestic society. Moreover, migrants will be entitled to much higher pension benefits than today. Therefore, the Spanish authorities might consider ensuring the long term sustainability of public finances by implementing further measures aiming at fostering birth levels in the country. In addition, a pension reform aiming at better aligning contributions and benefits should not be delayed on the basis of the healthy position of social security accounts at the present time.

ANNEX 2. ADDITIONAL TABLES AND FIGURES

Figure 1: Good and bad economic times



Source: Commission services' January 2009 forecast (COM) and successive stability programmes

Table 1: Budgetary implementation in 2008

	2007		2008	
	Planned SP Dec 2007	Outcome COM	Planned SP Dec 2007	Outcome COM
Government balance (% of GDP)	1.8	2.2	1.2	-3.4
Difference compared to target	**0.4**		**-4.6**	
Of which : due to a different starting position end 2007			0.4	
due to different revenue / expenditure growth in 2008			-4.7	
p.m. Denominator effect and residual [2,3]			-0.3	
p.m. Nominal GDP growth (planned and outcome)			6.7	4.6
Revenue (% of GDP)	40.8	41.0	40.4	36.8
Revenue surprise compared to target [1]	**0.2**		**-3.6**	
Of which : due to a different starting position end 2007			0.2	
due to different revenue growth in 2008			-4.3	
p.m. Denominator effect [2]			0.8	
p.m. Residual [3]			-0.2	
p.m. Revenue growth rate (planned and outcome)			5.7	-6.1
Expenditure (% of GDP)	39.0	38.8	39.2	40.2
Expenditure surprise compared to target [1]	**0.2**		**-1.0**	
Of which : due to different starting position end 2007			0.2	
due to different expenditure growth rate in 2008			-0.4	
p.m. Denominator effect [2]			-0.7	
p.m. Residual [3]			-0.1	
p.m. Expenditure growth rate (planned and outcome)			7.2	8.3

Notes:

[1] A positive number implies that the outcome was better (in terms of government balance) than planned.

[2] The denominator effect captures the mechanical effect that, if GDP turns out higher than planned, the ratio of revenue or expenditure to GDP will fall because of a higher denominator. Although the denominator effect can be very significant for revenue and expenditure separately, on the balance they

[3] The decomposition leaves a small residual that cannot be assigned to the previous components. The residual is generally small, except in some cases where planned and actual growth rates of revenue, expenditure and GDP differ significantly.

Source : Commission services

Table 2: Evolution of budgetary targets in successive programmes

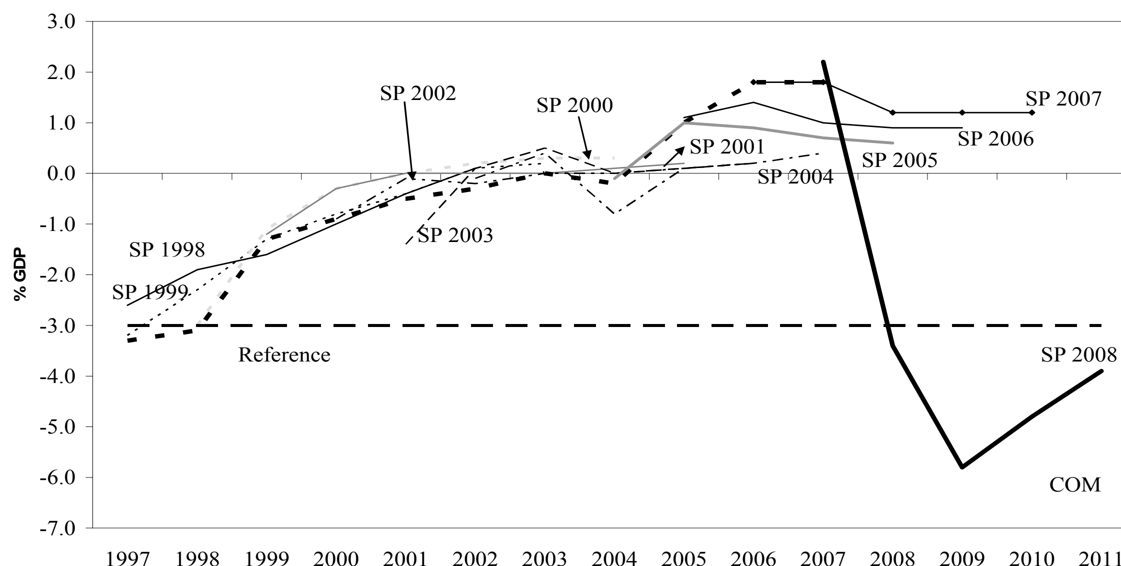
		2007	2008	2009	2010	2011	2012
General government balance (% of GDP)	**SP Jan 2009**	**2.2**	**-3.4**	**-5.8**	**-4.8**	**-3.9**	**-**
	SP Dec 2007	*1.8*	*1.2*	*1.2*	*1.2*	*n.a*	*n.a*
	COM Jan 2009	2.2	-3.4	-6.2	-5.7	n.a.	n.a.
General government expenditure (% of GDP)	**SP Jan 2009**	**38.8**	**40.4**	**43.3**	**43.1**	**42.6**	**-**
	SP Dec 2007	*39.0*	*39.2*	*39.2*	*39.1*	*n.a*	*n.a*
	COM Jan 2009	38.8	40.2	42.6	42.5	n.a.	n.a.
General government revenue (% of GDP)	**SP Jan 2009**	**41.0**	**37.0**	**37.5**	**38.3**	**38.7**	**-**
	SP Dec 2007	*40.8*	*40.4*	*40.4*	*40.3*	*n.a*	*n.a*
	COM Jan 2009	41.0	36.8	36.4	36.9	n.a.	n.a.
Structural balance[1] (% of GDP)	**SP Jan 2009**	**1.6**	**-3.5**	**-4.7**	**-3.4**	**-2.8**	**n.a.**
	SP Dec 2007	*2.2*	*1.8*	*2.0*	*1.9*	*n.a*	*n.a*
	COM Jan 2009	1.6	-3.3	-4.6	-4.2	n.a.	n.a.
Real GDP (% change)	**SP Jan 2009**	**3.7**	**1.2**	**-1.6**	**1.2**	**2.6**	**-**
	SP Dec 2007	*3.8*	*3.1*	*3.0*	*3.2*	*n.a*	*n.a*
	COM Jan 2009	3.7	1.2	-2.0	-0.2	n.a.	n.a.

Note:

[1]Cyclically-adjusted balance excluding one-off and other temporary measures. No one-offs are included in the most recent programme. One-off and other temporary measures are below ½% of GDP in 2008 and above ½% in 2009, all deficit-reducing, are included in the Commission services' January 2009 interim forecast.

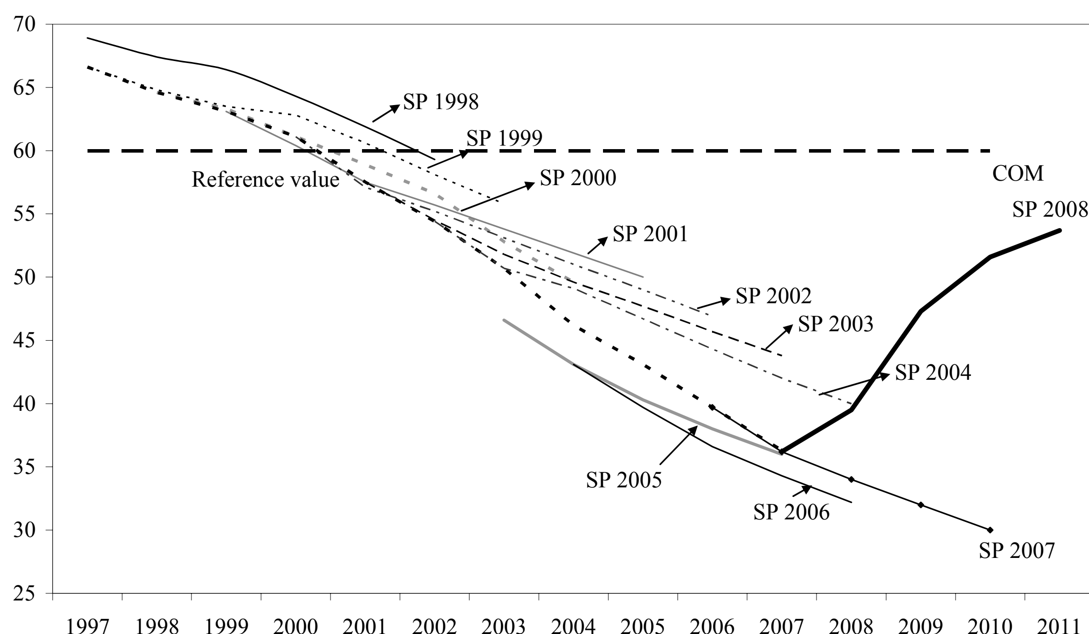
Source :
Stability programmes (SP); Commission services' January 2009 interim forecasts (COM)

Figure 2: Government balance projections in successive programmes (% of GDP)



Source: Commission services' January 2009 interim forecast (COM) and successive stability programmes

Figure 3: Debt projections in successive programmes (% of GDP)



Source: Commission services' January 2009 interim forecast (COM) and successive stability programmes

Table 3: Long-term age-related expenditure: main projections

(% of GDP)	2004	2010	2020	2030	2040	2050	Change 2010- 50
Total age-related spending	**20.1**	**19.7**	**20.4**	**23.4**	**27.3**	**28.6**	**8.9**
- Pensions	8.6	8.9	9.3	11.8	15.2	15.7	6.8
- Healthcare	6.1	6.3	6.7	7.3	7.9	8.3	2.0
- Long-term care	0.5	0.5	0.5	0.5	0.6	0.8	0.3
- Education	3.7	3.2	3.2	3.0	2.9	3.1	-0.1
- Unemployment benefits	1.1	0.9	0.7	0.7	0.7	0.7	-0.2
Property income received	**0.6**	**0.7**	**0.7**	**0.6**	**0.6**	**0.5**	**-0.2**

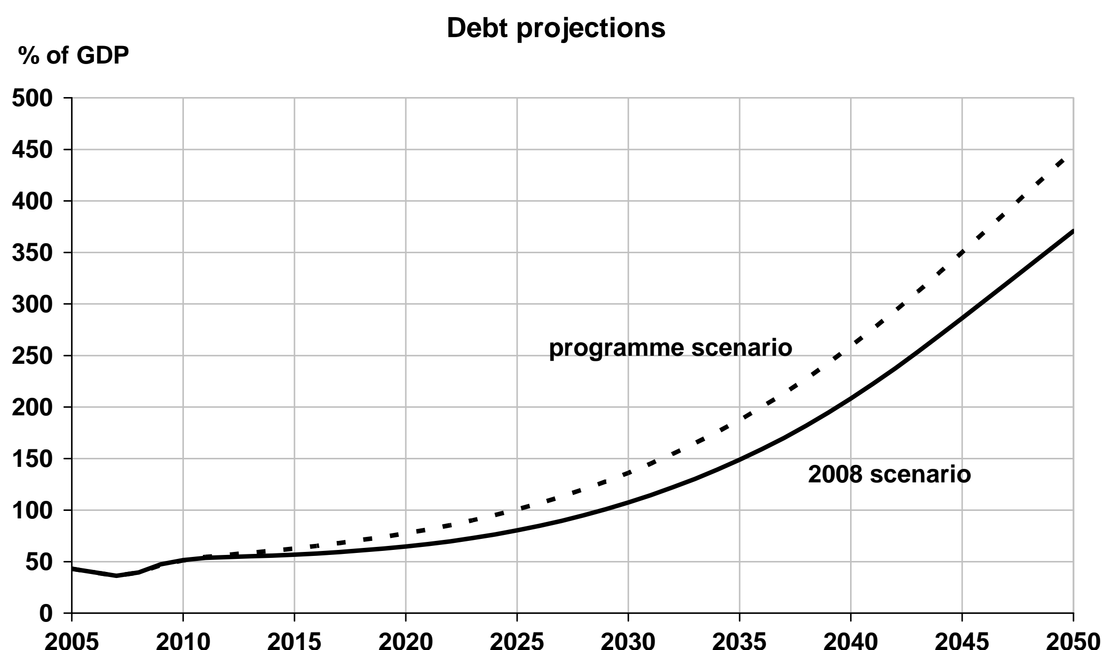
Source: Economic Policy Committee and Commission services.

Table 4: Sustainability indicators and the required primary balance

	2008 scenario			Programme scenario		
	S1	**S2**	**RPB**	**S1**	**S2**	**RPB**
Value	6.5	9.2	7.2	5.2	7.9	7.2
of which:						
Initial budgetary position (IBP)	3.0	3.1	-	1.7	1.8	-
Debt requirement in 2050 (DR)	-0.1	-	-	-0.1	-	-
Long-term change in the primary balance (LTC)	3.6	6.1	-	3.6	6.1	-

Source: Commission services.

Figure 4: Long-term projections for the government debt ratio



Note: 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.
Source: Commission services.

Table 5: Additional factors

	Impact on risk
Debt and pension assets	na
Decline in structural balance until 2010 in COM January forecast 2009	-
Significant revenues from pension taxation	na
Alternative projection of cost of ageing	na
Strong decline in benefit ratio	na
High tax burden	na
Non-age related budgetary measures with intertemporal effect	na

Note: '-': factor tends to increase the risk to sustainability, '+': factor tends to decrease the risk to sustainability.
'na': not applicable.
Alternative projections are often presented in the programmes, whose assumptions often diverge from the common method. Projections currently discussed in the Economic Policy Committee but not yet published, are for the time being also considered "unofficial".
An explanation on these factors can be found in chapter IV of: European Commission (2006), The long-term sustainability of public finances in the European Union, European Economy No. 4/2006.
Source: Commission services.

ANNEX 3. COMPLIANCE WITH THE CODE OF CONDUCT AND TABLES FROM THE PROGRAMME

The programme adheres to the code of conduct for stability and convergence programmes as far as its table of contents is concerned, notably follows the model structure in Annex 1 of the code of conduct.

As regards the data requirements specified in the code of conduct, the programme presents some gaps in the required and optional data as detailed in Annex 2 of the code. In particular, missing data concern compulsory data on one-offs and other temporary measures (table 2) and optional data on HICP (table 1b); labour productivity per hours worked, compensation per employee (table 1c); general government expenditure by function (table 3); structural balance (table 5); and, detailed information on debt developments (table 4) such as the composition of the stock-flow adjustment (differences between cash and accruals, net accumulation of financial assets, privatisation proceeds, and valuation effects and others), liquid financial assets and net financial debt.

The tables on the following pages show the data presented in the January 2009 update of stability programme, following the structure of the tables in Annex 2 of the code of conduct. Compulsory data are in bold, missing data are indicated with grey-shading.

Table 1a. Macroeconomic prospects

	ESA Code	2007	2007	2008	2009	2010	2011
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
1. Real GDP	B1*g	*126.5*	3.7	1.2	-1.6	1.2	2.6
2. Nominal GDP	B1*g	*1050.6*	7.0	4.7	0.0	3.3	5.0
Components of real GDP							
3. Private consumption expenditure	P.3	*127.8*	3.5	0.5	-1.5	0.7	1.3
4. Government consumption expenditure	P.3	*139.9*	4.9	5.1	2.1	1.5	1.7
5. Gross fixed capital formation	P.51	*145.6*	5.3	-1.8	-9.3	-1.2	4.4
6. Changes in inventories and net acquisition of valuables (% of GDP)	P.52 + P.53	*49.2*	0.2	0.2	0.2	0.2	0.2
7. Exports of goods and services	P.6	*131.7*	4.9	2.9	0.3	3.6	4.6
8. Imports of goods and services	P.7	*159.3*	6.2	0.6	-4.6	0.4	3.0
Contributions to real GDP growth							
9. Final domestic demand		-	4.5	0.7	-3.2	0.4	2.2
10. Changes in inventories and net acquisition of valuables	P.52 + P.53	-	-0.1	0.0	0.0	0.0	0.0
11. External balance of goods and services	B.11	-	-0.8	0.6	1.6	0.9	0.4

Table 1b. Price developments

	ESA Code	2007	2007	2008	2009	2010	2011
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
1. GDP deflator		*131.8*	3.2	3.4	1.6	2.0	2.3
2. Private consumption deflator		*125.4*	3.2	4.1	1.0	2.2	2.3
3. HICP[1]		*n.a.*	n.a.	n.a.	n.a.	n.a.	n.a.
4. Public consumption deflator		*126.7*	3.2	3.8	2.3	2.5	2.5
5. Investment deflator		*137.5*	2.7	2.1	-0.6	0.9	2.0
6. Export price deflator (goods and services)		*115.5*	2.4	3.0	1.7	2.1	2.5
7. Import price deflator (goods and services)		*108.2*	2.1	3.2	-0.8	1.7	2.2

[1] Optional for stability programmes.

Table 1c. Labour market developments

	ESA Code	2007	2007	2008	2009	2010	2011
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
1. Employment, persons[1]		*20.6*	3.0	-0.5	-3.7	0.1	1.3
2. Employment, hours worked[2]		*n.a.*	n.a.	n.a.	n.a.	n.a.	n.a.
3. Employment (fte)		*19.1*	2.9	-0.4	-3.6	0.2	1.4
4. Unemployment rate (%)[3]		*8.3*	-	11.1	15.9	15.7	14.9
5. Labour productivity, persons[4]		*38.6*	0.6	1.7	2.1	1.2	1.2
6. Labour productivity, hours worked[5]		*n.a.*	n.a.	n.a.	n.a.	n.a.	n.a.
6. Labour productivity, (fte)		*41.8*	0.8	1.6	2.0	1.1	1.1
8. Compensation of employees	D.1	*n.a.*	n.a.	n.a.	n.a.	n.a.	n.a.
9. Compensation per employee[6]		*30.1*	3.7	5.2	2.9	3.1	3.5

[1]Occupied population, domestic concept national accounts definition.

[2]National accounts definition.

[3]Harmonised definition, Eurostat; levels.

[4]Real GDP per person employed.

[5]Real GDP per hour worked.

[6] Compensation per employee full time equivalent

Table 1d. Sectoral balances

% of GDP	ESA Code	2007	2008	2009	2010	2011
1. Net lending/borrowing vis-à-vis the rest of the world	B.9	-9.7	-9.2	-6.6	-5.8	-5.4
of which :						
- Balance on goods and services		-6.8	-6.2	-3.9	-2.8	-2.3
- Balance of primary incomes and transfers		-3.3	-3.6	-3.3	-3.4	-3.5
- Capital account		0.5	0.5	0.6	0.4	0.4
2. Net lending/borrowing of the private sector	B.9	-11.9	-5.8	-0.8	-1.0	-1.5
3. Net lending/borrowing of general government	EDP B.9	2.2	-3.4	-5.8	-4.8	-3.9
4. Statistical discrepancy		-	optional	optional	optional	optional

Table 2. General government budgetary prospects

	ESA Code	2007	2007	2008	2009	2010	2011
		Level	% of GDP	% of GDP	% of GDP	% of GDP	% of GDP
Net lending (EDP B.9) by sub-sector							
1. General government	S.13	*23259*	2.2	-3.4	-5.8	-4.8	-3.9
2. Central government	S.1311	*13675*	1.3	-2.7	-4.7	-4.1	-3.7
3. State government	S.1312	*-1695*	-0.2	-1.0	-0.9	-0.8	-0.5
4. Local government	S.1313	*-2438*	-0.2	-0.5	-0.4	-0.3	-0.2
5. Social security funds	S.1314	*13717*	1.3	0.8	0.2	0.4	0.5
General government (S13)							
6. Total revenue	TR	*431121*	41.0	37.0	37.5	38.3	38.7
7. Total expenditure	TE[1]	*407862*	38.8	40.4	43.3	43.1	42.6
8. Net lending/borrowing	EDP B.9	*23259*	2.2	-3.4	-5.8	-4.8	-3.9
9. Interest expenditure	EDP D.41	*16862*	1.6	1.5	1.7	1.9	2.0
10. Primary balance[2]		*40121*	3.8	-1.9	-4.1	-2.9	-1.9
11. One-off and other temporary measures[3]		-	0.0	0.0	0.0	0.0	0.0
Selected components of revenue							
12. Total taxes (12=12a+12b+12c)		*263373*	25.1	21.1	21.1	21.6	21.9
12a. Taxes on production and imports	D.2	*122779*	11.7	9.8	10.0	10.3	10.3
12b. Current taxes on income, wealth, etc	D.5	*135773*	12.9	10.8	10.6	10.9	11.1
12c. Capital taxes	D.91	*4821*	0.5	0.5	0.5	0.5	0.5
13. Social contributions	D.61	*136640*	13.0	13.1	13.3	13.5	13.6
14. Property income	D.4	*10715*	1.0	1.0	1.0	1.0	1.0
15. Other[4]		*20393*	1.9	1.8	2.1	2.1	2.2
16=6. Total revenue	TR	*431121*	41.0	37.0	37.5	38.3	38.7
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)[5]			37.1	33.2	33.2	34.0	34.5
Selected components of expenditure							
17. Compensation of employees + intermediate consumption	D.1+P.2	*161058*	15.3	15.8	16.4	16.4	16.2
17a. Compensation of employees	D.1	*107093*	10.2	10.5	10.9	10.9	10.8
17b. Intermediate consumption	P.2	*53965*	5.1	5.3	5.5	5.5	5.4
18. Social payments (18=18a+18b)		*148272*	14.1	15.2	16.6	16.7	16.5
18a. Social transfers in kind supplied via market producers	D.6311, D.63121, D.63131	*26146*	2.5	2.6	2.8	2.9	2.9
18b. Social transfers other than in kind	D.62	*122126*	11.6	12.5	13.8	13.9	13.6
19=9. Interest expenditure	EDP D.41	*16862*	1.6	1.5	1.7	1.9	2.0
20. Subsidies	D.3	*11099*	1.1	1.1	1.1	1.1	1.0
21. Gross fixed capital formation	P.51	*40362*	3.8	3.9	4.4	4.0	4.0
22. Other[6]		*30209*	2.9	2.9	3.0	2.9	2.8
23=7. Total expenditure	TE[1]	*407862*	38.8	40.4	43.3	43.1	42.6
p.m.: Government consumption (nominal)	P.3	*192025*	18.3	19.0	19.9	20.0	19.9

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

[2] The primary balance is calculated as (EDP B.9, item 8) plus (EDP D.41, item 9).

[3] A plus sign means deficit-reducing one-off measures.

[4] P.11+P.12+P.131+D.39+D.7+D.9 (other than D.91).

[5] Including those collected by the EU and including an adjustment for uncollected taxes and social contributions (D.995), if appropriate.

[6] D.29+D4 (other than D.41)+ D.5+D.7+D.9+P.52+P.53+K.2+D.8.

Table 3. General government expenditure by function

% of GDP	COFOG Code	2006	2011
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=23 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	ESA Code	2007	2008	2009	2010	2011
1. Gross debt[1]		36.2	39.5	47.3	51.6	53.7
2. Change in gross debt ratio		-3.5	3.3	7.8	4.3	2.1
Contributions to changes in gross debt						
3. Primary balance[2]		-3.8	1.9	4.1	2.9	1.9
4. Interest expenditure[3]	EDP D.41	1.6	1.5	1.7	1.9	2.0
5. Stock-flow adjustment		1.3	1.5	2.0	1.0	0.7
of which:						
- 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]		4.33	4.49	4.25	4.10	4.00
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.

[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 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	2007	2008	2009	2010	2011
1. Real GDP growth (%)		3.7	1.2	-1.6	1.2	2.6
2. Net lending of general government	EDP B.9	2.2	-3.4	-5.8	-4.8	-3.9
3. Interest expenditure	EDP D.41	1.6	1.5	1.7	1.9	2.0
4. One-off and other temporary measures[1]		0.0	0.0	0.0	0.0	0.0
5. Potential GDP growth (%)		3.2	2.4	1.4	2.3	2.4
contributions:						
- labour		1.1	0.5	-0.1	0.8	0.7
- capital		1.7	1.5	1.1	1.0	1.0
- total factor productivity		0.3	0.4	0.5	0.5	0.6
6. Output gap		1.4	0.3	-2.7	-3.7	-3.6
7. Cyclical budgetary component		0.7	0.1	-1.2	-1.6	-1.6
8. Cyclically-adjusted balance (2 - 7)		1.6	-3.5	-4.6	-3.2	-2.3
9. Cyclically-adjusted primary balance (8 + 3)		3.2	-2.0	-3.0	-1.3	-0.3
10. Structural balance (8 - 4)		1.6	-3.5	-4.6	-3.2	-2.3

[1]A plus sign means deficit-reducing one-off measures.

Table 6. Divergence from previous update

	ESA Code	2007	2008	2009	2010	2011
Real GDP growth (%)						
Previous update		3.8	3.1	3.0	3.2	n.a.
Current update		3.7	1.2	-1.6	1.2	2.6
Difference		-0.1	-1.9	-4.6	-2.0	n.a.
General government net lending (% of GDP)	EDP B.9					
Previous update		1.8	1.2	1.2	1.2	n.a.
Current update		2.2	-3.4	-5.8	-4.8	-3.9
Difference		0.4	-4.6	-7.0	-6.0	n.a.
General government gross debt (% of GDP)						
Previous update		36.2	34.0	32.0	30.0	n.a.
Current update		36.2	39.5	47.3	51.6	53.7
Difference		0.0	5.5	15.3	21.6	n.a.

Table 7. Long-term sustainability of public finances

% of GDP	2005	2007	2010	2020	2030	2040	2050
Total expenditure	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Of which: age-related expenditures	20.0	19.9	19.7	20.4	23.4	27.3	28.6
Pension expenditure	8.7	8.8	8.9	9.3	11.8	15.2	15.7
Social security pension	7.8	8.0	8.1	8.5	11.0	14.4	15.2
Old-age and early pensions	5.2	5.2	5.2	5.5	7.7	10.9	11.8
Other pensions (disability, survivors)	2.6	2.8	2.8	3.0	3.3	3.5	3.4
Occupational pensions (if in general government)	0.8	0.8	0.8	0.8	0.8	0.7	0.5
Health care	6.1	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	0.5	0.6	0.8
Education expenditure	3.6	3.6	3.2	3.2	3.0	2.9	3.1
Other age-related expenditures	1.1	1.1	0.9	0.7	0.7	0.7	0.7
Interest expenditure	n.a.	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.	n.a.
Of which: property income	n.a.	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.	n.a.
Pension reserve fund assets	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Of which : consolidated public pension fund assets (assets other than government liabilities)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Assumptions							
Labour productivity growth	0.8	0.9	1.6	2.0	1.7	1.7	1.7
Real GDP growth	3.1	3.5	2.8	2.0	1.0	0.4	1.0
Participation rate males (aged 20-64)	80.8	81.5	82.4	82.9	82.0	81.8	82.9
Participation rates females (aged 20-64)	58.0	60.1	62.9	67.9	69.0	69.4	70.4
Total participation rates (aged 20-64)	69.5	70.9*	72.7	75.5	75.6	75.7	76.8
Unemployment rate	10.4	9.4	8.7	7.0	7.0	7.0	7.0
Population aged 65+ over total population	24.5	24.4	25.3	29.8	38.2	52.5	65.6

Table 8. Basic assumptions

	2007	2008	2009	2010	2011
Short-term interest rate[1] (annual average)	n.a	4.5	2.1	2.8	3.3
Long-term interest rate (annual average)	n.a	4.0	3.1	3.3	3.6
USD/€exchange rate (annual average) (euro area and ERM II countries)	n.a	1.47	1.38	1.38	1.38
Nominal effective exchange rate	n.a	4.4	-3.2	0.0	0.0
(for countries not in euro area or ERM II) exchange rate vis-à-vis the €(annual average)	n.a	2.6	-5.4	0.0	0.0
World excluding EU, GDP growth	n.a	3.9	1.2	2.9	3.8
EU GDP growth	n.a	1.0	-1.9	0.9	2.1
Growth of relevant foreign markets	n.a	3.3	-1.7	3.0	4.4
World import volumes, excluding EU	n.a	4.1	-1.3	3.9	5.2
Oil prices (Brent, USD/barrel)	n.a	98.5	52.1	61.7	61.7

[1]If necessary, purely technical assumptions.

* * *