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MALTA: MACRO FISCAL ASSESSMENT

**AN ANALYSIS OF THE DECEMBER 2008 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. Comments should be sent to Ivan Ebejer (ivan.ebejer@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. The ECOFIN Council is expected to adopt its opinion on the programme on date.

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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/sqp/main_en.htm

1. INTRODUCTION

This document assesses the December 2008 update of Malta's stability programme. It takes into account all currently available information, notably the Commission services' January 2009 interim forecast and the short-term measures to support the economy in 2009 adopted by the Maltese authorities in response to the economic downturn. The programme, which was submitted on 3 December 2008, covers the period 2008-2011 and builds on the 2009 budget proposal. It was approved by the government but was not discussed in Parliament. An addendum to the programme, detailing the measures adopted by the Maltese authorities in response to the economic downturn (without changing the programme's macroeconomic and budgetary projections), was submitted on 22 December.

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

In the early 2000s Malta's growth was below the euro area average. Adverse external shocks hit the electronics industry and tourism - two important economic activities for Malta - particularly strongly. Domestically, longstanding structural weaknesses progressively led to a deterioration of Malta's competitiveness. During the period 2004-2007, growth exceeded that of the euro area and was driven mainly by domestic demand. Exports registered a turnaround spurred by an expanding services sector, as tourism recovered and emerging activities following from Malta's FDI-led diversification strategy, namely ICT and remote gaming, offset losses in manufacturing. The loss in competitiveness was halted thanks to wage moderation and stronger productivity gains.

Small and open economies like Malta exhibit greater output volatility as they typically are less well diversified, which increases their exposure to external shocks. While until now the financial crisis has had a modest effect on Malta economic activity¹, especially the external sector, is expected to suffer from the ensuing global slowdown.² According to the Commission services' January 2009 forecast GDP growth is expected to decelerate to 2.1% in 2008 (from 3.9% in 2007) and further to 0.7% in 2009 followed by a mild recovery in 2010. Domestic demand is projected to decelerate mostly in response to lower private consumption. This, in turn, reflects a deteriorating labour market due to a sluggish export sector. Indeed, exports will contract mostly in response to faltering external demand and in the face of competitive pressure brought about by unfavourable cost developments. As a result, the current account deficit is anticipated to deteriorate further. Private investment will be influenced by the construction of a major foreign ICT project. Otherwise, investment decisions are set to suffer from the weak global economic scenario and the cooling domestic housing market. The Maltese economy appears to be moving into economic 'bad times' in 2009.

¹ In October 2008, the government announced an increase in the guarantee on deposits held with banks in Malta from €20,000 to €100,000. No other measures to help stabilise the financial system have proved necessary so far.

² One reason for the modest impact is that the Maltese financial system is less sophisticated than in other Member States. The Maltese banks have a well-diversified portfolio of investments while their exposure to subprime-related assets is negligible. Moreover, the banks have strong liquidity positions and are well capitalised. Banks are mainly funded from resident deposits and their lending is almost exclusively local. Maltese banks are not much involved in inter-banking activity with overseas banks.

The notable reduction in the headline general government deficit which took place over the period 2004-2007 was halted in 2008 when the deficit is estimated to have increased to 3.5% of GDP. The deterioration by 1¾ percentage points of GDP in 2008 was linked to specific expenditure-increasing decisions, namely: (i) a one-off cost related to the granting of early retirement schemes to Malta Shipyards employees in the context of the privatisation of the yards and (ii) the decision to freeze utility tariffs amid a rising international cost of oil. With the vanishing of this one-off expenditure and the removal of energy subsidies to households, and despite the economic slowdown, the budget for 2009 as reflected in the updated stability programme targets a reduction in the deficit ratio to 1.5% of GDP in 2009. However, in view of projected lower tax revenue and higher compensation of employees and intermediate consumption, the Commission services' January 2009 interim forecast foresees the deficit to reach 2.5% of GDP in 2009.

The 2009 budget seeks to strike a balance between the need to provide a counter-cyclical response to the economic slowdown and the need to retain investor confidence by resuming the path towards fiscal consolidation, while at the same time respecting that the fiscal space available for Malta is limited in view of the high deficit and debt ratio and deteriorated competitive position. In response to the economic downturn, the 2009 budget provides for an increase in public investment on infrastructure and the environment (partly financed by EU funds) as well as direct support to the economy. The latter refers to both supply-side incentives, specifically to manufacturing, tourism and SMEs, as well as measures to support demand.

Resuming the path towards fiscal consolidation together with the need to bolster the export sector by strengthening competitiveness are key challenges facing Malta. Within an EMU context, and in the specific case of small and open economies like Malta, competitiveness as a channel of adjustment takes a more prominent role which, in turn, is determined by productivity and wage developments. While Malta's strategy to promote non-price competitiveness by facilitating upwards shifts in value-added activity and diversifying its export base is commendable, cost competitiveness remains key to export-led growth. Malta's weak competitiveness position along the years has translated into a persistent current account deficit which is projected to continue over the forecast horizon. In this context, it is important that labour market institutions do not unduly hamper the efficiency of the wage-setting process by, amongst others, allowing a closer link between wage and productivity developments. While emphasising the importance of wage restraint (especially in the public sector since, in view of its size, wage increases could spill over into the private sector), there is a need for further productivity-enhancing structural reforms by redirecting resources to growth-enhancing areas, investing in human capital development as well as in R&D.

3. MACROECONOMIC SCENARIO

According to the 2008 update of the stability programme, Malta's real GDP growth is forecast to decelerate in 2009 and to recover in the subsequent two years (see Table I). Starting from a more positive estimate of real GDP growth in 2008, the programme projects markedly favourable growth assumptions in 2009 compared to the Commission services' January 2009 interim forecast, reflecting more optimistic growth in private consumption and to a lesser extent a less negative contribution from net exports. For 2010, the programme also foresees a markedly favourable pace of GDP growth (2.5% vs. 1.3%), which is mainly explained by a rebound in net exports. It projects GDP to grow by 2.8% in 2011, on the back of a further improvement in exports and, to a lesser extent, in private consumption, both of which appear to be optimistic.

A less favourable development in Malta's exports than implied by the 2008 update of the stability programme would be expected in view of the following risks: (i) higher wage growth from possible demonstration effects from certain segments of the public sector on other segments as well as on the private sector and (ii) adverse exchange rate developments, in particular a further weakening of the UK sterling against the euro which would adversely affect tourism exports from the source market; however, a stronger US dollar would ease price pressures on the electronics industry.

Table I: Comparison of macroeconomic developments and forecasts

	2008		2009		2010		2011
	COM	SP	COM	SP	COM	SP	SP
Real GDP (% change)	2.1	2.8	0.7	2.2	1.3	2.5	2.8
Private consumption (% change)	2.0	3.5	0.6	2.1	0.8	2.0	2.2
Gross fixed capital formation (% change)	0.4	3.6	3.4	4.0	3.3	3.6	2.9
Exports of goods and services (% change)	-0.2	-5.3	-1.7	-3.1	-0.7	0.0	1.4
Imports of goods and services (% change)	-0.3	-4.7	-0.8	-2.2	-0.2	-0.5	0.0
<i>Contributions to real GDP growth:</i>							
- Final domestic demand	2.2	3.8	1.6	2.8	1.7	2.0	1.7
- Change in inventories	-0.2	-0.7	0.0	0.0	0.0	0.1	0.0
- Net exports	0.1	-0.3	-0.8	-0.6	-0.4	0.4	1.1
Output gap ¹	1.2	0.1	0.0	-0.3	-0.6	-0.5	0.5
Employment (% change)	1.1	3.0	0.2	1.3	0.5	1.3	1.5
Unemployment rate (%)	6.5	5.8	7.4	6.0	7.9	6.1	5.9
Labour productivity (% change)	1.0	-0.2	0.5	0.8	0.8	1.1	1.3
HICP inflation (%)	4.6	4.5	1.9	2.7	2.2	2.3	2.0
GDP deflator (% change)	2.7	3.1	2.3	2.2	2.5	2.0	1.6
Comp. of employees (per head, % change)	2.8	3.3	3.0	2.8	2.4	2.9	2.5
Net lending/borrowing vis-à-vis the rest of the world (% of GDP)	-5.5	-5.1	-5.5	-3.1	-5.3	-2.7	0.7
<u>Note:</u>							
¹ In percent of potential GDP, with potential GDP growth according to the programme as recalculated by Commission services.							
<u>Source:</u>							
Commission services' January 2009 interim forecasts (COM); Stability programme (SP)							

According to the programme, labour market conditions are expected to weaken slightly throughout the programme period. After an exceptional growth of 3% in 2008, the update anticipates employment growth to hover around 1.3% in the period 2009-2011. This is significantly higher than in the Commission services' January 2009 interim forecast and appears to be explained by a better performing export sector and stronger growth in investment. As a result, unemployment is expected to rise mildly, reaching 5.9% by 2011. The programme envisages wage growth to ease from 3.3% in 2008 to 2.5% in 2011. Apart from loosening labour market conditions, this trend reflects a rise in the public service remuneration as well as generous wage increases to public health service employees both occurring in 2008. The programme's projections for inflation appear to be on the high side in 2009 but are plausible thereafter.

In sum, the outlook for competitiveness remains vulnerable, a challenge which the programme falls short of identifying explicitly. Productivity developments over the programme's horizon, although improving will remain weak. The planned higher capital

investment could be expected to have a positive effect on productivity in the longer run. While the update's macroeconomic scenario factors in the effects of the measures taken so far in response to the economic downturn, it does not provide their estimated impact on growth.

4. BUDGETARY STRATEGY

4.1. Budgetary implementation in 2008

According to the update of the stability programme, the general government deficit is planned to reach 3.3% of GDP in 2008, representing a reversal in the notable reduction in the headline deficit which took place over the period 2004-2007. In contrast, the November 2007 stability programme targeted a headline deficit of 1.2% of GDP for 2008. The Commission services' January 2009 interim forecast estimates a deficit of 3.5% of GDP for 2008.

The difference between the end-2007 stability programme target and the estimated outcome in the Commission services' forecast (2.3 percentage points of GDP) primarily reflects a higher-than-planned expenditure growth, driven mainly by: (i) the unbudgeted one-off cost related to the granting of early retirement schemes to shipyard employees (1% of GDP); (ii) additional expenditure in respect of energy subsidies (0.8% of GDP) and (iii) a higher-than-planned increase in the wage bill on account of additional recruitment and higher wages in particular in the health sector (0.5% of GDP). At the same time, revenue grew less than budgeted, especially EU capital inflows.

4.2. Near-term budgetary strategy

According to the 2009 budget as confirmed in the 2008 update of the stability programme, the general government deficit is targeted to fall to 1.5% of GDP in 2009 (one-off transactions taking the form of sales of land are projected to amount to 0.3% of GDP). The decline is projected to result from a higher revenue-to-GDP ratio and a decline in the expenditure ratio.

The budget for 2009, which was presented to Parliament on 3 November 2008, introduced measures which should help cushion the impact of the global economic downturn, while ensuring a continuation of fiscal consolidation³. Amongst others, the measures include higher public investment on infrastructure and the environment, support to the tourism industry and SMEs, a widening of personal income tax bands and a reform of the motor vehicle taxes, while an increase in excise duty on a number of products and a reduction in various subsidies constitute the main financing measures. A package of measures related to the environment should be neutral for the budget. The budgetary impact of the fiscal stimulus measures in 2009 is expected to amount to 1.5% of GDP. However, the two financing measures, the reduction in energy subsidies and higher tax buoyancy together with the elimination of the early retirement schemes for shipyard workers are planned to exert a deficit-reducing effect of around 2¼% of GDP.

With the exception of public investment, which will moderate as a share of GDP in 2011, the measures as presented in the addendum appear to be of a permanent rather than temporary nature. Most of the measures appear to be timely as they will come into effect in 2009 along with the approval of the budget implementing laws. The measures are targeted to cushion the impact of the slowdown, for instance the revision in personal income tax brackets and higher public investment. However, in the case of small and open economies like Malta, it is

³ As confirmed in the addendum to the update of the stability programme.

doubtful to what extent fiscal stimulus measures can counteract the impact on economic growth resulting from sluggish external demand.

Table II. Main budgetary measures for 2009

Revenue measures ¹	Expenditure measures ²
<ul style="list-style-type: none"> • Widening of personal income tax bands (-0.2% of GDP)* • Motor Vehicle Licences reform (-0.1% of GDP)* • Increase in excise duty (0.3% of GDP) • Environmental measures (0.1% of GDP) 	<ul style="list-style-type: none"> • Support for tourism (0.1% of GDP)* • Infrastructure – roads, maritime facilities (0.2% of GDP)* • Education (0.1% of GDP)* • Investment projects related to industry (0.1% of GDP)* • Higher incentives for investors (0.2% of GDP)* • Investment in educational institutions (0.3% of GDP)* • Sustainable development at a local level (0.1% of GDP)* • Environmental measures (0.1% of GDP) • Lower subsidies (-0.4% of GDP) • Reduction in energy subsidies** (-1% of GDP)
<p><i>Source: Commission, 2009 budget and addendum to the updated stability programme 2008-2011</i></p> <p><u>Note:</u></p> <p>¹ Estimated impact on general government revenue</p> <p>² Estimated impact on general government expenditure</p> <p>* Short-term measures in response to downturn</p> <p>** Measure not specific to 2009 budget</p>	

In 2009, total revenue as a ratio of GDP is, according to the programme, expected to increase by around 1 percentage point to 41.7%. Direct taxes are expected to rise to 14% of GDP because they would maintain the same pace of growth as in 2008, which the programme attributes to Malta's success in attracting international business. Another reason is the fact that the scale of personal income tax relief is lower for 2009 than for 2008. Indirect taxes as a ratio of GDP are projected to increase marginally to 14.6% in 2009, partly reflecting the revenue-enhancing measures announced in the 2009 budget. The share of social contributions in GDP is set to decline slightly to 7.3% on the back of both weaker employment growth and compensation of employees. Other revenue, specifically capital transfers received, accounts for the highest increase in the revenue-to-GDP ratio. The programme assumes a higher

absorption of EU funds in line with the government's plans to stimulate the economy through an increase in public investment aimed at bolstering economic growth, infrastructure and the environment⁴.

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	40.4	40.7	40.6	41.1	41.7	41.2	41.8	41.9	1.2
<i>of which:</i>									
- Taxes on production and imports	14.7	14.7	14.5	14.7	14.6	14.6	14.7	14.7	0.1
- Current taxes on income, wealth, etc.	13.3	13.5	13.6	13.5	14.0	13.5	14.3	14.5	0.9
- Social contributions	7.3	7.4	7.4	7.3	7.3	7.2	7.3	7.4	0.0
- Other (residual)	5.1	5.1	5.1	5.8	5.8	5.9	5.5	5.4	0.3
Expenditure	42.2	44.2	43.9	43.7	43.2	43.8	42.1	40.7	-3.2
<i>of which:</i>									
- Primary expenditure	38.8	40.8	40.6	40.3	39.8	40.4	38.8	37.5	-3.1
<i>of which:</i>									
Compensation of employees	12.9	13.2	13.0	13.3	13.0	13.2	12.6	12.3	-0.7
Intermediate consumption	5.3	5.6	5.6	6.0	5.7	6.2	5.4	5.1	-0.5
Social payments	12.8	14.1	14.1	13.8	13.6	13.7	13.5	13.4	-0.7
Subsidies	2.0	2.4	2.4	1.0	1.0	0.9	0.9	0.8	-1.6
Gross fixed capital formation	4.0	3.3	3.4	4.1	4.4	4.1	4.4	4.0	0.6
Other (residual)	1.7	2.2	2.2	2.2	2.1	2.2	2.0	1.9	-0.2
- Interest expenditure	3.3	3.4	3.3	3.4	3.4	3.4	3.3	3.2	-0.2
General government balance (GGB)	-1.8	-3.5	-3.3	-2.6	-1.5	-2.5	-0.3	1.2	4.5
Primary balance	1.6	-0.2	0.0	0.8	1.9	0.8	3.0	4.3	4.3
One-off and other temporary measures	0.6	-0.6	0.3	0.3	0.3	0.0	0.1	0.1	-0.2
GGB excl. one-offs	-2.4	-2.9	-3.6	-2.9	-1.8	-2.5	-0.4	1.0	4.7
Output gap ²	1.1	1.2	0.1	0.0	-0.3	-0.6	-0.5	0.5	0.3
Cyclically-adjusted balance ²	-2.2	-4.0	-3.4	-2.6	-1.4	-2.3	-0.1	1.0	4.4
Structural balance³	-2.8	-3.3	-3.7	-2.9	-1.7	-2.3	-0.2	0.9	4.6
<i>Change in structural balance</i>		<i>-0.5</i>	<i>-0.9</i>	<i>0.4</i>	<i>2.0</i>	<i>0.6</i>	<i>1.4</i>	<i>1.1</i>	
Structural primary balance ³	0.6	0.0	-0.3	0.5	1.7	1.0	3.0	4.0	4.4
<i>Change in structural primary balance</i>		<i>-0.5</i>	<i>-0.9</i>	<i>0.4</i>	<i>2.0</i>	<i>0.6</i>	<i>1.4</i>	<i>1.0</i>	
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:									
<i>Stability programme (SP); Commission services' January 2009 interim forecasts (COM); Commission services' calculations</i>									

Total expenditure is set to fall by $\frac{3}{4}$ of a percentage point to 43.2% of GDP in 2009. In particular, subsidies are projected to decline around $1\frac{1}{2}$ percentage points primarily as a result of the elimination of energy subsidies to households. In addition, social payments are

⁴ It should be noted that this has a counter-entry in the expenditure side which largely eliminates the impact on the general government balance.

projected to fall by ½ a percentage point, reflecting the vanishing of the one-off expenditure related to the early retirement schemes to shipyard employees which is partially offset by a projected increase in retirement pensions. The decline in spending is partly offset by an increase in gross fixed capital formation of 1 percentage point to 4.4% of GDP.

For 2009, the programme projects a decline in the structural deficit (as recalculated by the Commission services on the basis of the information in the programme according to the commonly agreed methodology). The planned fiscal stance can be characterised as restrictive in 2009⁵.

4.3. Medium-term budgetary strategy

The medium-term budgetary strategy outlined in the update aims at pursuing further fiscal consolidation over the programme period, with the overarching objective of achieving the medium-term objective (MTO) of a balanced budgetary position in structural terms by 2011, one year later than planned in the previous update of the stability programme.

The budgetary consolidation envisaged over the programme horizon will be primarily achieved through expenditure restraint. Indeed, expenditure is projected to decline by 3.2 percentage points of GDP, whilst revenue is expected to increase by 1.2 percentage points. As a result, the update foresees the headline deficit to decline further to 0.3% of GDP in 2010, before turning into a surplus of 1.2% of GDP in 2011. The update projects a decline in the structural deficit (as recalculated by the Commission services) over the programme's horizon which would lead an almost balanced position by 2010. The planned fiscal stance can be characterised as restrictive in the years 2010 and 2011, as the primary structural deficit is projected to decline by 1½ and 1 percentage points of GDP, respectively. Recourse to one-off transactions is planned to fall to 0.1% of GDP in 2010 and 2011, which is significantly below the yearly average of 1.3% of GDP in the period 2004-2007. The programme does not disclose details on the measures underpinning the consolidation process in 2010 and 2011.

Total expenditure is set to fall by 3.2 percentage points between 2008 and 2011. The bulk of the decline is planned to be carried out through lower subsidies (1.6 percentage points of GDP), frontloaded to 2009. According to the programme, this would be achieved following the elimination of energy subsidies to households and the termination of state aid to the shipyards sector. Notwithstanding improved pay conditions, compensation of employees is set to decline by 0.7 percentage points of GDP over the programme period. The decline is based on the assumption that recruitment in the public sector will be restrained. After the significant drop in 2009 reflecting the vanishing of the one-off cost related to early retirement schemes, social payments are projected to fall only marginally. On the other hand, the steep increase in gross fixed capital formation in 2009 would be mitigated over the rest of the programme period.

According to the programme, revenue is projected to rise by 1.2 percentage points between 2008 and 2011. The bulk of this increase is accounted for by current taxes on income and wealth which is expected to yield almost 1 percentage point of GDP more over the

⁵ One-off transactions in 2008 increased the deficit by 0.6% of GDP and comprised (i) a deficit-increasing one-off cost related to the early retirement schemes to shipyard employees and (ii) a deficit-decreasing one-off transaction of 0.4% of GDP in relation to sale of land. In contrast, according to the updated stability programme, one-off transactions in 2008 reduced the deficit by 0.3% of GDP. Even with the one-offs according to the Commission services, the change in the structural balance would still point to a restrictive stance.

programme horizon which the update attributes to a higher number of registered international operators in Malta. The significant increase in non-tax revenue in 2009, driven mainly by higher capital inflows by improving the absorption capacity from EU funds, is foreseen to normalise over the programme horizon.

4.4. Risks to the budgetary targets

The budgetary projections as presented in the update of the stability programme appear to be optimistic compared to the Commission services' January 2009 interim forecast. The difference of around 1 percentage point of GDP in 2009 widens to around 2¼ percentage points in 2010, the latter partly explained by the customary no-policy change scenario used in the Commission services' forecast.

The downside risks stemming from the macroeconomic outlook underlying the programme's budgetary targets relate to a weaker performance of net exports. This is particularly relevant for Malta in view of the economy's high degree of openness and in the context of the expected economic downturn in its trading partners. A worsening export performance is considered to adversely affect employment (especially in the labour-intensive tourism sector) and thereby private consumption with consequences to fiscal consolidation.

For 2009, changes in the tax-to-GDP ratio envisaged in the programme are higher than the Commission services' forecast and reflect stronger buoyancy from direct taxes. As noted in Section 4.2 above, the increase in revenue from taxes on income and wealth in 2009, notwithstanding the revision in personal income tax brackets, relies to some extent on the authorities' assumption of stronger revenue from tax on international companies and is based on Malta's recent success in attracting such business. The reliance on such volatile revenue presents downside risks to the 2009 budgetary targets. Similarly, the programme envisages an increase of 0.4 percentage points of GDP in the tax-to-GDP ratio in 2010. Underlying this increase is higher revenue from current taxes on income and wealth which the update also attributes to the expected increase in international companies operating in Malta. There could also be a risk related to a possible further cooling down of the property market, which would translate in lower revenue from direct taxes and, to a lesser extent, indirect taxes.⁶

The different projections in changes in the tax-to-GDP ratio should be seen in the light of lack of information in the programme regarding policy measures for 2010 and 2011 and that, for 2010, the Commission services' projections are based on the customary no-policy-change assumption. Although this makes it difficult to assess budgetary outcomes, it appears that as far as the evolution of tax-to-GDP ratio is concerned, there are downside risks to the targets throughout the programme period.

The downward trajectory of expenditure envisaged in the updated stability programme relies partly on restraining compensation of employees. The additional staff needed to ensure the full operation of the *Mater Dei* hospital in the medium term as well as the possibility of demonstration effects arising from the recent wage agreements in the health and education segments of the public sector could trigger calls by other public sector employees for similar conditions and could pose risks to the programme's projected decline in this expenditure component over the programme period.

⁶ Simulations carried out by DG ECFIN suggest that in the event of property prices falling to their 1999 level, the property-related tax revenue shortfall would amount to around ¾% of GDP, slightly above the EU average.

The significant decline in subsidies, which contributes to more than half of the planned reduction in the headline deficit over the forecast horizon and which is front-loaded to 2009, seems plausible.

A commitment stated in the programme that the authorities stand ready to introduce additional corrective measures, should this be warranted by unforeseen circumstances, mitigates downside risks. While over the period 2004-2007 expenditure outturns have been below budgeted amounts and Malta's track record of achieving its deficit targets has been good until 2007, the budgetary framework shows signs of weaknesses at the execution stage. Public expenditure is to a large extent still subject to discretionary decisions in the budget implementation phase, which may derail consolidation plans as evidenced by the experience in 2008. In particular, besides the unbudgeted early retirement schemes, spending overruns in 2008 were due to the electoral cycle (energy subsidies) and a higher wage bill in health care (both average wages and staff levels).

Summing up, the budgetary outcomes are subject to downside risks throughout the programme period. For 2009, this mostly relates to the favourable macroeconomic scenario, the reliance on volatile revenue items (an uncertain increase in direct taxes from international companies) and the possibility of expenditure slippages compared to the envisaged back-loaded decline in public consumption. For 2010 and 2011, outcomes could be worse than targeted because of the same three factors, compounded by the lack of information on measures underpinning the consolidation process, in particular as regards the envisaged continued restraint in the public wage bill.

5. DEBT DEVELOPMENTS AND LONG-TERM SUSTAINABILITY

5.1. Debt developments

General government gross debt has exceeded the 60% of GDP reference value since 2001, standing at 61.9% of GDP in 2007 and having been on a declining path since 2004, when it peaked at some 72% of GDP. The decline between 2004 and 2007, by around 10 percentage points of GDP or by 3¼ percentage points of GDP per year on average, was mainly driven by stock-flow adjustments. Specifically, this was due to proceeds from privatisation amounting to some 6½% of GDP (of which around 4½% of GDP in 2006 alone) as the government continued with its policy to divest non-core public entities. A growing primary surplus also made a significant contribution to the falling debt ratio.

The declining trend in the debt-to-GDP ratio was reversed in 2008. According to the Commission services' January 2009 interim forecast, the debt ratio in 2008 is projected at 63.3% of GDP as a result of a return to a primary deficit, coupled with weak nominal GDP growth. According to the programme, general government debt would resume a downward trend from 2009 onwards, declining gradually to around 56% of GDP in 2011. By contrast, in the Commission services' forecast, more subdued nominal GDP growth in 2009 and 2010 and a much higher primary deficit are expected to result in an increasing debt-to-GDP ratio⁷. The debt ratio would rise to some 64% of GDP in 2009 and 2010. Moreover, a specific risk factor to the debt in 2009 relates to the liquidation of the shipyards. According to the most recent

⁷ For the period 2009-2011, the programme foresees debt-increasing below-the-line operations of around ¼ percentage points of GDP each year. The Commission services' forecast assumes that stock-flow adjustments make a neutral contribution to the change in the debt ratio.

information, the debt assumption of Malta shipyards would be debt-increasing.⁸ Preliminary estimates indicate that the general government debt could increase by an additional 0.5 to 1% of GDP in 2009 as a result of this transaction. There is thus a risk that the debt ratio turns out higher than expected in the programme over and above the risks deriving from the above-mentioned risks to the budgetary adjustment.

Taking into account risks, the debt ratio seems to be sufficiently diminishing towards the reference value in a medium-term perspective, bearing in mind the significant decline in the general government debt during the period 2004-2007.

Table IV: Debt dynamics

(% of GDP)	average 2002-06	2007	2008		2009		2010		2011
			COM	SP	COM	SP	COM	SP	SP
Gross debt ratio¹	67.0	61.9	63.3	62.8	64.0	61.9	64.2	59.8	56.3
Change in the ratio	0.3	-1.9	1.4	0.6	0.7	-0.9	0.2	-2.1	-3.5
<i>Contributions²:</i>									
1. Primary balance	1.5	-1.6	0.2	0.0	-0.8	-1.9	-0.8	-3.0	-4.3
2. "Snow-ball" effect	0.5	-0.6	0.5	-0.1	1.5	0.7	1.0	0.6	0.7
<i>Of which:</i>									
Interest expenditure	3.6	3.3	3.4	3.3	3.4	3.4	3.4	3.3	3.2
Growth effect	-1.3	-2.3	-1.2	-1.6	-0.5	-1.3	-0.8	-1.5	-1.6
Inflation effect	-1.7	-1.6	-1.6	-1.8	-1.4	-1.3	-1.5	-1.2	-0.9
3. Stock-flow adjustment	-1.6	0.4	0.8	0.8	0.0	0.3	0.0	0.4	0.2
<i>Of which:</i>									
Cash/accruals diff.	-0.6	0.4							
Acc. financial assets	-0.5	0.0							
<i>Privatisation</i>	-1.2	-0.5							
Val. effect & residual	0.0	0.0							

Notes:
¹End of period.
²The 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 forecasts (COM); Commission services' calculations

5.2. Long-term sustainability

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

⁸ Pending a final decision by Eurostat and in view of the incomplete information, this assessment is made under the technical assumption that the impact of the liquidation of the shipyards is deficit-neutral.

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.

Table 3 in the Annex shows that the projected dynamics in age-related spending are much below the EU average, falling by 0.6 percentage point of GDP between 2010 and 2050. This reflects the specific design of the Maltese pension system prior to the 2006 reform, with a cap on the level of both pensions and contributions. Sustainability indicators for two scenarios are presented in Table 4 in the Annex. Even after including the negative impact of age-related expenditure but assuming that the structural primary balance remained at its 2008 level, the sustainability gap (S2)¹⁰ would amount to 0.9% of GDP, about 1½ percentage points of GDP more than in last year's assessment, which is due to a lower estimated structural primary balance in the starting year. The starting budgetary position is not sufficient to stabilise 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.

The "programme scenario", which is based on the end-of-programme structural primary balance and projects the budgetary situation to improve, shows a smaller gap. If the budgetary consolidation planned in the programme was achieved, risks to long-term sustainability of public finances would be significantly reduced.

Based on the assumptions used for the calculation of the sustainability indicators, Figure 4 in the Annex displays the projected debt ratio over the long term.

For an overall assessment of the sustainability of public finances, other relevant factors are taken into account. They are summarized in Table 5 in the Annex. Notably, the programme expects (in qualitative terms) the 2006 pension reform to increase pension expenditure.

The long-term budgetary impact of ageing in Malta is significantly lower than the EU average, with pension expenditure decreasing as a share of GDP over the long term according to the projections made in 2005. Yet, the 2006 pension reform, which aims at improving the level of pension while also increasing the retirement age, is likely to imply higher spending over the long run. In addition, the current level of gross debt is still above the Treaty reference value. The budgetary position in 2008 as estimated in the programme, which is worse than the starting position of the previous programme, compounds the budgetary impact of population ageing on the sustainability gap. Improving the budgetary position would contribute to reducing the medium risks to the sustainability of public finances.

6. INSTITUTIONAL FEATURES OF PUBLIC FINANCES

As noted in section 4.4, while expenditure outturns over the period 2004-2007 were below budgeted amounts, Malta's budgetary framework shows weaknesses. In particular, recent experience in 2008 has shown that public expenditure is still subject to discretionary decisions in the budget implementation phase, whilst the budget lacks a clear medium-term focus. The programme does not envisage improvements in this area.

High-quality budgetary policies ensure durable fiscal consolidation and enhance economic growth potential. Malta scores relatively low in terms of its quality of public finances. This is especially the case for the efficiency and effectiveness of expenditure in education, health, R&D and public infrastructure.

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.

This seems to be corroborated by findings of a recent study¹¹ which shows that, although education expenditure in Malta is high at the primary and secondary level, it is inefficient at the tertiary level. Ensuring a more efficient transformation of spending into tertiary educational output could result in higher attainment levels. Similarly, the study also shows that the efficiency of health-related spending in Malta is low since the same level of output could be attained with lower outlays. Containing expenditure would ensure the financial sustainability of the public health provision.

These findings suggest that there is a need to create effective spending control mechanisms to restrict expenditure growth in order to generate additional resource savings. Success in the overall effort of containing expenditure and increasing efficiency would make possible the reallocation of resources to growth-enhancing expenditure categories, thereby bolstering Malta's growth potential. In addition, in the face of the current economic downturn, it would increase the effectiveness of the fiscal policy instrument to respond to changing policy priorities or macroeconomic circumstances.

7. ASSESSMENT

This section assesses the budgetary strategy, taking into account risks, in the light of (i) the adequacy of the measures supporting the economy in response to the Commission Communication of 26 November 2008 on the European Economic Recovery Plan (EERP) as agreed by the European Council in 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.

In line with the EERP, Malta has adopted several measures to support the economy in 2009. Those with budgetary impact are part of a broader consolidation effort, which is adequate in the light of the limited fiscal space available in Malta. Determinants of the fiscal space are for instance the deficit and debt ratios, which are (slightly) above the reference values in Malta, as well as long-term sustainability of public finances, for which Malta is at medium risk. A further determinant of the fiscal space relates to the risks to the fiscal position from the slowdown in the housing market which according to some indicators is currently underway. Finally, the fiscal space is limited by the fact that Malta's competitive position has deteriorated since the late nineties, with the current account showing a persistent deficit.

The European Economic Recovery Plan sets out a number of criteria for assessing countries' measures in response to the economic crisis. In particular, measures need to be *targeted*, *timely* and *temporary*.

The measures in response to the crisis as presented in the addendum feature both revenue and expenditure instruments targeted at increasing public investment on infrastructure and the environment (partly financed by EU funds) as well as direct support to the economy consisting of supply-side initiatives (specifically to manufacturing, tourism and SMEs) as well as measures to support purchasing power.

Most of the measures are *timely* and *targeted* as they will come into effect in 2009 along with the approval of the budget implementing laws and are addressed to sectors which are expected to be hit hardest by the economic slowdown e.g. tourism and manufacturing. Most of the measures will provide immediate support to economic activity. A case in point is the revision

¹¹ I. Ebejer. and U. Mandl (2009), 'The efficiency of public expenditure in Malta', *ECFIN Country Focus*, Vol. 6 Issue 2. (Brussels: European Commission).

in the personal income tax brackets which came into effect on January 2009 and is expected to support purchasing power. Several of the public investment projects will, besides stimulating demand in the short term, also enhance long-term economic growth. However, with the exception of public investment, which will moderate as a share of GDP in 2011, the measures as presented in the addendum are of a permanent rather than temporary nature.

A number of structural measures, which are part of the longer-term policy reform agenda, should provide support in view of the challenges posed by the downturn by enhancing growth potential. Specifically, the planned liberalisation of public transport will render the sector more efficient and competitive, while the implementation of a flexicurity roadmap will help ensure an adequate supply of skills in emerging high-skill sectors. Furthermore, the programme envisages higher outlays on infrastructure and environmental projects. The measures are related to the medium-term reform agenda and the country-specific recommendations proposed by the Commission on 28 January 2009 under the Lisbon Strategy for Growth and Jobs.

In addition to the reversibility of deficit-increasing measures, the EERP underscored the need for strengthening national budgetary rules and frameworks and ensuring long-term sustainability of public finances. The update of the stability programme does not envisage any reform in the area of budgetary rules and frameworks. On long-term sustainability, although the programme highlights new measures intended at improving the cost-effectiveness and efficiency of healthcare, they seem insufficient to ensure financial sustainability of the public health system.

Regarding compliance of the budgetary strategy with the requirements in the Treaty and the Stability and Growth Pact, and taking into account the important risks to the budgetary targets, the stance in the programme would not provide a sufficient safety margin against breaching the 3% of GDP deficit limit by the end of the programme period. The planned consolidation in the outer years should be backed up by measures. Again taking into account risks, the debt ratio seems to be sufficiently diminishing towards the reference value in a medium-term perspective, bearing in mind the significant decline in the ratio during the period 2004-2007.

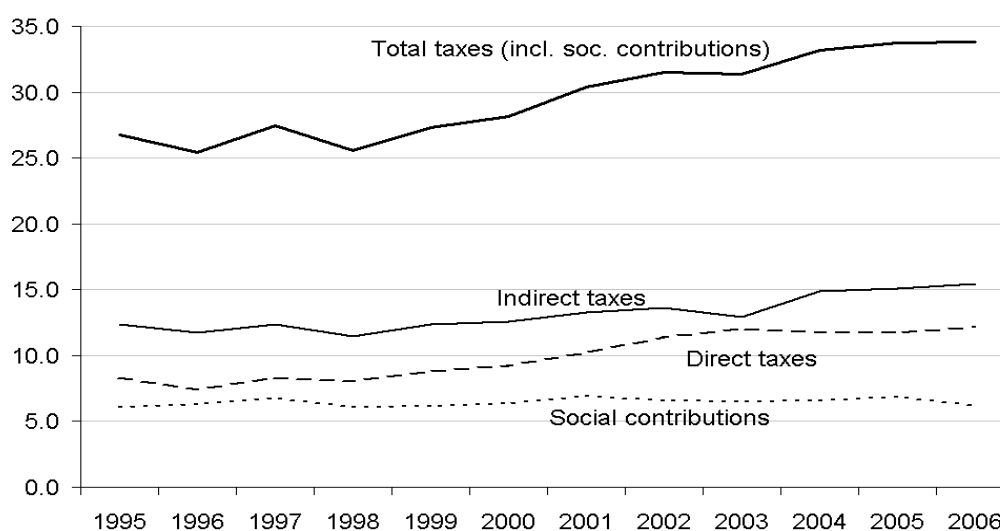
ANNEX 1. SPECIAL TOPIC: THE ROLE OF TAX REVENUE IN MALTA'S FISCAL POLICY: PAST TRENDS AND FUTURE CHALLENGES

1. INTRODUCTION

Tax receipts have traditionally accounted for the highest proportion of Malta's total government revenue, averaging 85% in the period 2000-2007. Although following an upward trend since the mid-nineties, tax revenue has displayed sizeable fluctuations caused by above-average output volatility – in turn a reflection of the openness and small size of the economy – the specific characteristics of the tax structure and changes in the tax policy. In the past years, tax policy in Malta has undergone significant reforms reflecting most notably efforts to improve efficiency and aligning the tax system with that prevailing in the EU. In the process, the Maltese economy has moved away from being largely sheltered by taxes to more open to international trade.

After a review of the composition and evolution of tax revenue in Malta since the mid-nineties, this Annex analyses the concept of volatility of tax receipts as it applies to the Maltese economy. The focus is on the sources of tax revenue volatility, specifically output fluctuations, the characteristics of the tax system and changes in the tax code along the years. Finally, as tax revenue volatility may spill-over into the budget and thus threaten Malta's efforts to achieve fiscal consolidation, some policy implications to fiscal policy formulation are considered.

Figure 1: Evolution of tax revenue by major type of tax, in percent of GDP



Source: Commission services

2. THE EVOLUTION AND STRUCTURE OF TAX REVENUE: SOME STYLISTED FACTS

This section provides an overview of the past trends in the evolution and structure of taxes using two approaches: (i) by type of taxes, whereby a distinction is made between developments in direct taxes, indirect taxes, and social contributions; and (ii) the structure of taxes based on their economic function, i.e. labour, goods and services, and capital. In both cases a comparison is carried out with the euro area.

2.1. Tax revenue by major type of tax

Figure 1 shows the evolution of tax revenue as a percent of GDP for the period 1995-2006 decomposed in major tax categories. Throughout this period, total taxes followed an upward trend increasing from 26.8% of GDP in 1995 to 33.8% of GDP in 2006. This rapid increase in the tax-to-GDP ratio has moved Malta closer to the euro area average (40.5% of GDP in 2006). More than half of this increase was accounted for by direct taxes, largely due to higher corporate income tax receipts. This appears to mainly reflect the stepping up of efforts made by the authorities during the early 2000s to strengthen tax compliance by businesses (see further below). The second highest contributor to the increase in total tax revenue is accounted for by indirect taxes, specifically higher VAT receipts, which were underpinned primarily by a broadening of the tax base and a hike in the standard rate. Social contributions as a share of GDP remained practically flat during the period 1995-2006, reflecting the fact that compensation of employees grew in line with nominal GDP.

Table 1: Structure of tax revenue by major type of tax, in percent of total tax revenue

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Indirect taxes	46.1	46.1	45.1	44.8	45.3	44.6	43.6	43.2	41.1	44.8	44.8	45.6
VAT	23.0	23.3	21.9	17.7	19.3	21.4	21.1	22.1	19.8	22.0	23.4	23.9
Excise duties & consumption taxes	6.9	7.1	8.8	11.6	10.3	8.9	9.2	8.5	8.5	8.6	9.2	9.2
Other taxes on products	15.2	14.8	13.4	14.3	14.5	13.2	12.1	11.3	11.4	11.8	10.5	10.9
Other taxes on production	1.0	1.0	0.9	1.2	1.2	1.2	1.2	1.3	1.4	2.4	1.7	1.7
Direct taxes	31.1	29.0	30.2	31.3	32.1	32.7	33.5	36.1	38.2	35.3	34.9	35.9
Personal income taxes	18.8	17.7	18.4	18.7	19.3	19.8	20.3	19.4	20.0	20.7	19.2	20.1
Corporate income tax	9.8	9.0	9.4	9.6	10.0	10.3	10.6	12.3	14.4	12.0	11.8	13.3
Other	2.5	2.4	2.5	3.0	2.9	2.6	2.6	4.4	3.8	2.7	3.9	2.6
Social contributions	22.8	24.9	24.6	23.9	22.5	22.6	22.9	20.7	20.7	19.9	20.3	18.5
Employers	11.2	12.2	12.0	11.7	10.6	10.0	10.3	9.3	9.3	8.9	9.1	8.3
Employees	9.3	10.1	9.9	9.7	9.5	9.9	10.3	9.3	9.3	8.9	9.1	8.3
Self-employed	2.3	2.6	2.7	2.5	2.5	2.7	2.3	2.1	2.1	2.0	2.1	1.9

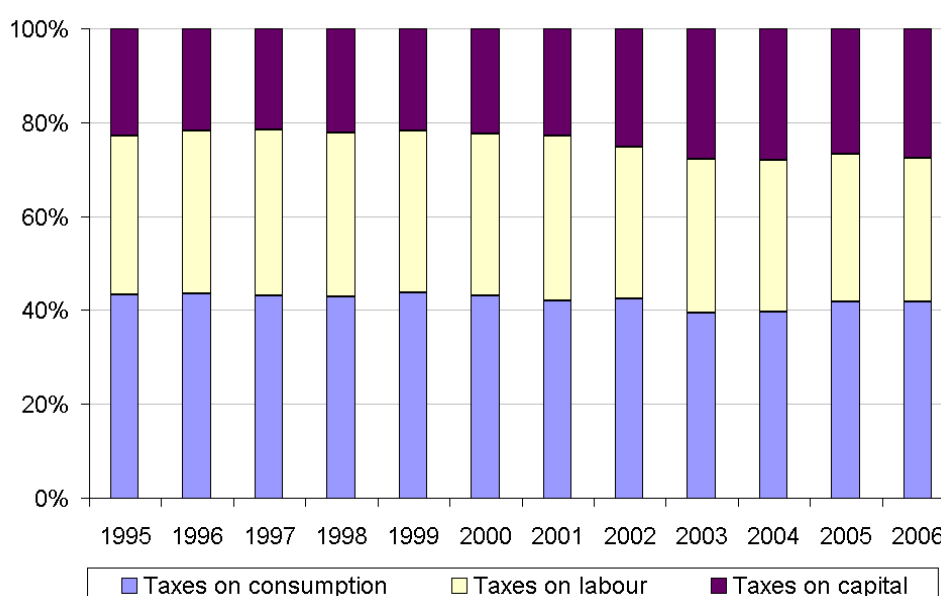
Source: Commission Services

The composition of tax revenue by type of tax in Malta has remained unchanged during the period 1995-2006, with indirect tax revenue representing the largest share in total taxes (Table 1). For the euro area, the structure of tax revenue is more balanced with the proportion of each tax type hovering around one-third of total tax revenue. The proportion of indirect taxes hovered around 45% of total taxes during this period interrupted briefly in the early 2000s as a result of the gradual dismantling of import levies in anticipation of Malta's EU accession. On the other hand, the share of direct taxes followed an upward trend increasing from slightly above 31% in 1995 to almost 36% in 1996. Receipts from income tax, particularly from corporate income, explain the increasing ratio during this period. These developments seem at odds with the government's stated objective of achieving a tax-split that favours indirect taxes. The proportion of social contributions to the total intake followed a downward path during the period 1995-2006 as this tax component grew at a slower pace than total tax receipts. For the euro area the proportion of revenue from social contributions is significantly higher than in Malta, which is compensated for by a lower share of indirect taxes. Such a lower proportion of social contributions can be explained by the fact that most of the social protection expenditure in Malta is funded through general taxes.

2.2. Tax revenue by economic function

Analysis of taxation according to economic function indicates that during the period under consideration, taxes on consumption contributed approximately to 42% of the overall tax revenue (Figure 2). Although on a declining trend, this was significantly above the euro area average of 27%. The analysis also indicates that over the period 1995-2006, the share of taxes on labour in total tax revenue in Malta averaged above 34%, albeit on a declining path. This compares favourably with the euro area for which taxes on labour represent more than half of the total tax revenue. The proportion of taxes on capital to total taxes averaged some 24% of the total tax intake. Although this is broadly in line with the euro area average of 21%, a striking difference is that whereas in Malta the share of taxes on capital¹² followed a rising trend since 2002, in the euro area the tendency was a decline in this tax component in response to the higher international mobility of capital.

Figure 2: Structure of tax revenue by economic function, in percent of total tax revenue



Source: Commission services

3. VOLATILITY OF TAX REVENUE

The small and open nature of the Maltese economy implies a narrow range of economic activity which gives rise to risks associated with lack of diversification. This, coupled with the dependence on strategic imports, in particular energy and industrial supplies, increases the economy's vulnerability to external shocks. In the event that such shocks lead to fluctuations in the tax bases, government revenue may also be exposed to higher volatility. Apart from the implications posed by a limited tax base, certain elements in the tax structure, such as the reliance on tax on property, may also increase the vulnerability of government receipts. Lastly, changes in the tax system, although commendable in as far as they promote economic efficiency, may also add to revenue volatility. These cases represent a challenge to fiscal policy, since the presence of significant tax volatility may spill over into the budget.

¹² Apart from taxes on profits, capital taxes include taxes and levies that could be regarded as a prerequisite for earning profit, such as a real estate tax or the motor vehicle tax paid by enterprises.

3.1. Tax revenue volatility and economic fluctuations

In analysing the variability of different tax categories a two-step approach is adopted. First, statistical tests are carried out for each tax category to establish the degree of volatility of tax receipts. Second, an estimate of the cyclical value of tax revenue and output is obtained by applying the Hodrick-Prescott (HP) filter. The cross correlation between the cyclical components of these two variables can provide more insight on the implications of economic swings on tax revenue, and hence budgetary outcomes.

Table 2: Variability of growth in key tax revenue categories, in percent

	Direct taxes				Indirect taxes						Social contributions		Total	
	Personal		Corporate		VAT		Taxes and duties on imports		Taxes on products		Malta	EA-15	Malta	EA-15
	Malta	EA-15	Malta	EA-15	Malta	EA-15	Malta	EU-15	Malta	EA-15				
Mean	8.5	:	12.8	:	9.5	4.4	-4.7	2.3	9.2	4.2	6.1	3.1	8.2	4.1
Maximum	24.5	:	26.1	:	31.5	7.6	18.2	10.0	24.6	7.1	19.3	6.6	19.8	6.7
Minimum	-6.4	:	-8.6	:	-20.3	1.8	-47.3	-6.3	-2.5	0.2	-4.1	-2.6	-2.1	2.1
Standard deviation	9.8	:	12.3	:	15.7	1.9	19.2	4.2	8.4	2.1	7.9	2.3	7.5	1.7
Co-efficient of variation	1.2	:	1.0	:	1.7	0.4	-4.1	1.8	0.9	0.5	1.3	0.7	0.9	0.4

Source: Eurostat and Commission services' calculations

Results of the variability of the growth in total tax revenue and the main components are shown in Table 2. The average annual growth rate in total tax revenue over the period 1995-2006 was 8.2%, which was double that for the euro area average. In addition, at 7.5% the standard deviation (defined as the root-mean-square deviation of the values from their mean) was significantly higher than that for the EA-15, suggesting that tax revenue in Malta displays a high degree of volatility. In analysing tax revenue volatility over time and among different sources, it can be helpful to look at the relative measure of variation in addition to the absolute measure captured by the standard deviation. A commonly used relative measure is the co-efficient of variation defined as the ratio of standard deviation to the mean. For the period 1995-2006, the co-efficient of variation of total tax revenue is calculated to be more than double that of the euro area average. The substantial variability is evident across all tax components. Most notably, VAT receipts grew by an annual average of 9.5% over the period 1995-2006, but the standard deviation was an even larger 15.7%.¹³ As a result the co-efficient of variation was 1.7%, significantly above that of total tax revenue. Similarly, the standard deviation in the growth of social contributions and personal income tax was larger than the mean which translated in a variation of 1.3% and 1.2%, respectively. Taxes on products display the lowest variation at 0.9% reflecting deviations below the historical average.

Fluctuations in tax revenue are further compounded when output is highly volatile, as is the case with Malta.¹⁴ As illustrated in Table 3, Malta's GDP growth during the period 1995-2007 has fluctuated by almost double that of the euro area.

¹³ This seems to run counter to conventional wisdom which states that consumption taxes vary less than income taxes because individual's consumption expenditure vary less than their income. However, in the case of Malta, the counter-intuitive results for VAT can be explained by the policy reversals in indirect tax system that occurred in the late nineties (see below).

¹⁴ The high volatility in GDP makes macroeconomic forecasting challenging and introduces a potential source of forecast error when projecting tax revenues.

Table 3: Output volatility 1995-2007, percentage change

	Malta	EA-15
Mean	3.2	2.2
Maximum	6.4	3.9
Minimum	-1.6	0.8
Standard deviation	2.3	0.9
Co-efficient of variation	0.7	0.4

Source: Ameco and Commission services' calculations

The specific characteristics of the tax structure could be another source of volatility in tax receipts. For instance, taxes on assets (property and shares) may lead to fluctuations in government revenue as they follow asset cycles which tend to be less than perfectly correlated to GDP cycles. In Malta, the share of taxes on assets over the period 1995-2007 averaged around 2.5% of GDP. Over these years, the growth rate of tax receipts from this source was double that for total taxes. This increase was mainly concentrated in 2006 and 2007 and appears to be related to a higher yield from the introduction of the new system of 12% withholding tax on the value of the property transacted. The volatility of this source of tax revenue has been substantial and comparable with that of the major tax categories discussed earlier.¹⁵ In this context, and since the tax intake on property is dependent on both property prices and the number of transactions, a slowdown in the housing market which according to some indicators is currently underway may pose a risk to tax revenues.¹⁶ Simulations carried out by DG ECFIN suggest that in the event of property prices falling to their 1999 level, the revenue shortfall from this tax component would amount to around ¾% of GDP.

Changes in the tax code over time are another factor which reinforce fluctuations in tax revenue. As explained further below, the Maltese tax system has undergone significant changes in the past twenty years which broadly implied moving from a protective tax regime to a single market competitive one. In particular, the policy-reversal on VAT in the second half of the nineties as well as the reforms in import taxes in the run-up to EU accession can be considered as major sources of volatility in tax revenue.¹⁷ Such discretionary measures may amplify the role played by output volatility and the specific characteristics of tax system on tax revenue fluctuations discussed earlier. While acknowledging the importance of disentangling the effects of discretionary changes from the other sources of revenue volatility, such analysis goes beyond the scope of this paper. It is however noteworthy that even for those tax components which have undergone relatively few discretionary changes, such as social contributions, volatility is appreciably high (Table 2).

4. MAJOR TAX REFORMS IN THE LAST DECADE

The basic feature of Malta's tax structure until the mid-nineties was the reliance on direct taxation and import duties and a lack of a broad-based consumption tax. Until 1991, the top rate of personal income tax stood at 65%, before being brought down to 35%.¹⁸ Apart from

¹⁵ The co-efficient of variation of taxes on transactions of property and shares amounted to 1.1.

¹⁶ It should however be noted that the increase in property prices had slowed down significantly when the new final withholding tax on the property value was introduced.

¹⁷ This was reinforced by the fact that VAT became the component accounting for the highest proportion in total tax revenue.

¹⁸ Along with the reduction in the top tax rate, the number of tax bands was reduced from 10 to 5.

providing a main source of government revenue, import duties were significant and together with other product-specific import levies acted as protection to local industry.¹⁹ In view of Malta's ambitions to become an EU member, the tax system underwent a major overhaul in the mid-nineties. Therefore, the Maltese economy moved from being sheltered by extremely stringent trade-protection measures which combined very high import duties and taxes with quantitative restrictions to a more open one.

4.1. Tax reforms in the mid-nineties

A major change in tax policy involved the introduction of VAT for the first time in 1995. The VAT was levied on goods and services at a standard rate of 15% and a reduced rate of 10% on selected items (catering services and tourist accommodation) while the tax system provided also for a zero-rate on other items (including exports, certain food items, medication and education) and exempted other services. The yield from VAT amounted to around 6% of GDP in 1995 and 1996, which compares favourably with the average of the euro area (6.5% of GDP) and suggests that the tax was an effective source of revenue. Moreover, as a result of the VAT's audit trail, tax compliance improved helping to uncover hitherto informal economic activity.²⁰

The tax reforms in 1995 also comprised a broadening of personal income tax brackets with a view to cushion the impact of VAT and the removal of a number of indirect taxes. Specifically, import duties on EU-originating products were eliminated, while those on non-EU products were brought down in line with the EU common external tariff. In parallel, import levies remained in effect and new ones introduced so as to alleviate the impact of the lower import duties on local manufacturing by protecting them from competing imports.

The VAT was replaced with an alternative indirect tax structure in 1997, following a change in government. The customs and excise tax (CET) system consisted of three separate taxes on products, services and imports.²¹ Unlike VAT, the new indirect taxes suffered from cascading since the system did not allow crediting of the excise taxes and were thus an input cost for businesses. The change to the new indirect taxes after two years of VAT represented a shock to the system which had repercussions on the tax intake in 1998.

The political crisis in the same year led to early elections and a change in administration which marked the reintroduction of VAT in 1999. The new VAT was introduced at a standard rate of 15 percent, and having a preferential rate of 5% for tourist accommodation, several exemptions and a zero rating mainly on food products and exemptions from charging VAT for small businesses whose turnover is below the established entry threshold according to type of activity. At the same time specific rates of excise on cigarettes and petroleum were raised sharply. Social contribution rates on employees were increased from 8.3% to 9% of the basic pay. In parallel, various steps were taken to strengthen the tax administration and enhance the efficient collection of tax including by increasing the penalties on non-declaration of tax, late submission and late payment.

¹⁹ In 1989, steps were taken to liberalise trade by replacing quantitative restrictions on imports with an import levy called the 'local manufacturers protection tax', which is a charge having equivalent effect to a customs duty and was levied in addition to import duties.

²⁰ In 1995, real GDP increased by 6.2% while employment grew by 3.2%, both significantly above the average recorded in the previous four years.

²¹ The CET system consisted of: (i) an excise tax on products (ETP) of 5% on the wholesale price of all taxable goods along the supply chain but not collected by retailers on sales to the public; (ii) an excise tax on services (ETS) of 5% which, being a turnover tax, was levied on the total value of taxable services; and (iii) an excise tax on imports (ETI) of 15% on the value of taxable imports.

4.2. Recent tax reforms

Tax reforms in the 2000s were shaped, to a large extent, by Malta's reactivation of the EU membership bid. The objective of the tax policy was to bring the tax system closer to the EU *acquis communautaire* and at the same time address the rising fiscal imbalance by increasing government revenue. The latter was mainly achieved through a broadening of the tax base in the early years of 2000. Specifically, VAT was extended to cover activities which hitherto were exempt (e.g. travel agents, electricity consumption, health and education services), while fringe benefits and profits on collective investment schemes became liable to personal income tax.

The harmonisation of indirect taxes with EU regulations comprised the gradual phasing out of import levies and revisions of import and excise duties in line with the common external tariff. The step-wise reduction of the import levies, which were primarily aimed at protecting the local industry, amounted to 20% in 2002, 30% in 2003 and the remaining 50% in 2004. The cost of the elimination of the import levies during this three-year period amounted to some 0.6% of GDP.

Immediately after EU accession in 2004, and with the initiation of the excessive deficit procedure, the Maltese authorities stepped-up efforts to improve the tax yield. Of significance was the hike in the standard VAT rate in 2004 from 15% to 18% which increased tax revenue by around 1% of GDP. In the same year, another notable change in the tax system was the introduction of an eco-tax aimed at abating pollution and encouraging reusable containers. Revenue from the tax, which is payable by businesses, increased steadily and amounted to 0.3% of GDP in 2007.

In the period 2004-2006, important changes were also implemented in taxes related to the transfer of property.²² In particular, the exemption from tax on capital gains on immovable property acquired through inheritance was repealed (with some exceptions), while the transfer of property between companies became subject to capital gains and duty taxes. In 2006, the tax system on the sale of immovable property was further amended whereby the previous 35% tax on capital gains was replaced by a final withholding tax of 12% on the sale value of property. These reforms increased government tax revenue by an annual average of ¼% of GDP during the period 2004-2006. More recently, the government initiated a review of the personal income tax system. In 2007, the number of tax brackets was reduced from 6 to 4, while the threshold for each tax bracket was raised in 2008 and 2009. The accumulated budgetary cost of the reform of personal income tax amounts to 1.2% of GDP.

5. CONCLUSION

Being a small open economy, the formulation of fiscal policy in Malta faces specific challenges. Tax revenue volatility has been significant in Malta. While historically this was partly policy-induced, specifically as a result of changes in indirect taxes, several other factors aggravate volatility. In particular, significant output volatility – a feature of small open economies – amplifies revenue fluctuations. The lack of economic diversification and the heavy reliance on trade imply that the tax revenue base is significantly volatile which, in turn, may induce greater volatility on the budget. In this light, building upon the efforts taken in

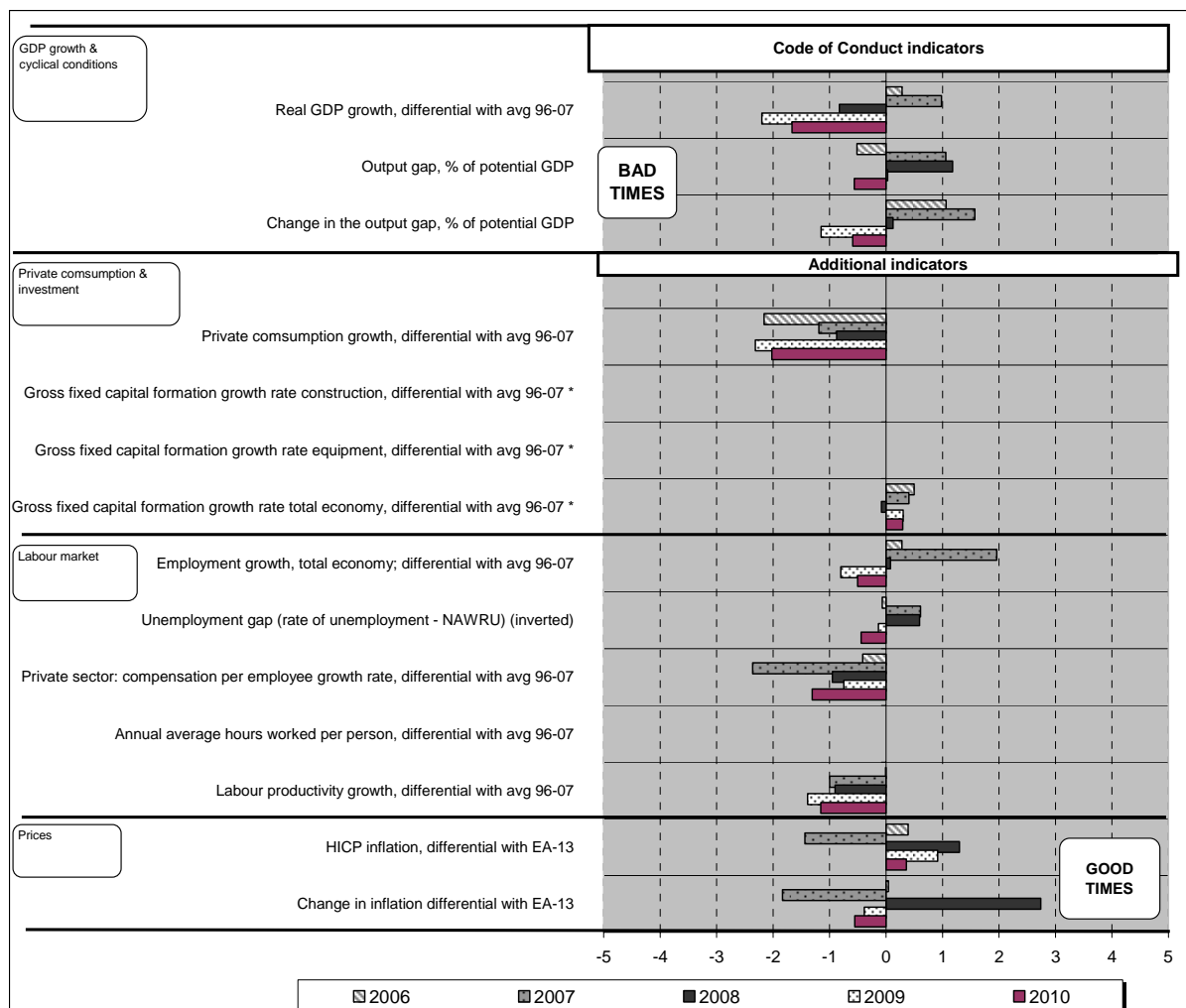
²² Malta has no wealth or property tax but the transfer of immovable property is normally subject to stamp duty (at a rate of 5% of the transfer value) and capital gains tax/final withholding tax. Moreover, the disposal of shares in investment schemes is subject to a withholding tax of 15%.

recent years, diversifying economic activity would help reduce both output and tax revenue volatility. However, the extent to which policymakers can control fluctuations in revenue arising from cyclical changes in the economy is generally limited in the short term.

On the other hand, policymakers can minimise the impact of fluctuations in budgetary outcomes by improving budgetary strategies and adopting prudent budgetary planning and execution. An effective budgetary tool for dealing with revenue volatility and enhancing fiscal stabilisation is to build up savings from unexpected revenue generated in good economic times which would cushion fiscal policy during bad times. In this way, government can smooth spending and avoid pro-cyclical cuts. A revenue-stabilising mechanism could be considered given Malta's above-average swings in tax receipts. Such a mechanism would encourage the accumulation of savings by running fiscal surpluses as a result of setting aside any realised tax revenue above a benchmark.

ANNEX 2. ADDITIONAL TABLES AND FIGURES

Figure 1: Good and bad economic times



* These variables have been divided by their standard deviation over the period 2003-2010, with a view to reducing their variability relative to other variables in the graph.

Source: Commission services' January 2009 interim forecast (COM)

Table 1: Budgetary implementation in 2008

	2007		2008	
	Planned	Outcome	Planned	Outcome
	SP Nov 2007	COM	SP Nov 2007	COM
Government balance (% of GDP)	-1.6	-1.8	-1.2	-3.5
Difference compared to target	-0.1		-2.3	
<i>Of which</i> : due to a different starting position end 2007			-0.2	
due to different revenue / expenditure growth in 2008			-1.9	
p.m. Denominator effect and residual ^{2,3}			-0.1	
<i>p.m. Nominal GDP growth (planned and outcome)</i>			6.1	4.9
Revenue (% of GDP)	41.0	40.4	40.9	40.7
Revenue surprise compared to target ¹	-0.6		-0.2	
<i>Of which</i> : due to a different starting position end 2007			-0.6	
due to different revenue growth in 2008			-0.1	
p.m. Denominator effect ²			0.4	
p.m. Residual ³			0.0	
<i>p.m. Revenue growth rate (planned and outcome)</i>			5.7	5.5
Expenditure (% of GDP)	42.7	42.2	42.2	44.2
Expenditure surprise compared to target ¹	0.5		-2.0	
<i>Of which</i> : due to different starting position end 2007			0.5	
due to different expenditure growth rate in 2008			-1.9	
p.m. Denominator effect ²			-0.5	
p.m. Residual ³			-0.1	
<i>p.m. Expenditure growth rate (planned and outcome)</i>			5.0	9.9
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				
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.				
<i>Source: Commission services</i>				

Table 2: Evolution of budgetary targets in successive programmes

		2007	2008	2009	2010	2011
General government balance (% of GDP)	SP Dec 2008	-1.8	-3.3	-1.5	-0.3	1.2
	<i>CP Nov 2007</i>	<i>-1.6</i>	<i>-1.2</i>	<i>-0.1</i>	<i>0.9</i>	<i>n.a.</i>
	COM Jan 2009	-1.8	-3.5	-2.6	-2.5	n.a.
General government expenditure (% of GDP)	SP Dec 2008	42.4	43.9	43.2	42.1	40.7
	<i>CP Nov 2007</i>	<i>42.7</i>	<i>42.2</i>	<i>40.0</i>	<i>38.5</i>	<i>n.a.</i>
	COM Jan 2009	42.2	44.2	43.7	43.8	n.a.
General government revenue (% of GDP)	SP Dec 2008	40.6	40.6	41.7	41.8	41.9
	<i>CP Nov 2007</i>	<i>41.0</i>	<i>40.9</i>	<i>39.9</i>	<i>39.5</i>	<i>n.a.</i>
	COM Jan 2009	40.4	40.7	41.1	41.2	n.a.
Structural balance ¹ (% of GDP)	SP Dec 2008	-2.4	-3.7	-1.7	-0.2	0.9
	<i>CP Nov 2007</i>	<i>-2.1</i>	<i>-1.4</i>	<i>-0.5</i>	<i>0.1</i>	<i>n.a.</i>
	COM Jan 2009	-2.8	-3.3	-2.9	-2.3	n.a.
Real GDP (% change)	SP Dec 2008	3.7	2.8	2.2	2.5	2.8
	<i>CP Nov 2007</i>	<i>3.5</i>	<i>3.1</i>	<i>3.2</i>	<i>3.4</i>	<i>n.a.</i>
	COM Jan 2009	3.9	2.1	0.7	1.3	n.a.

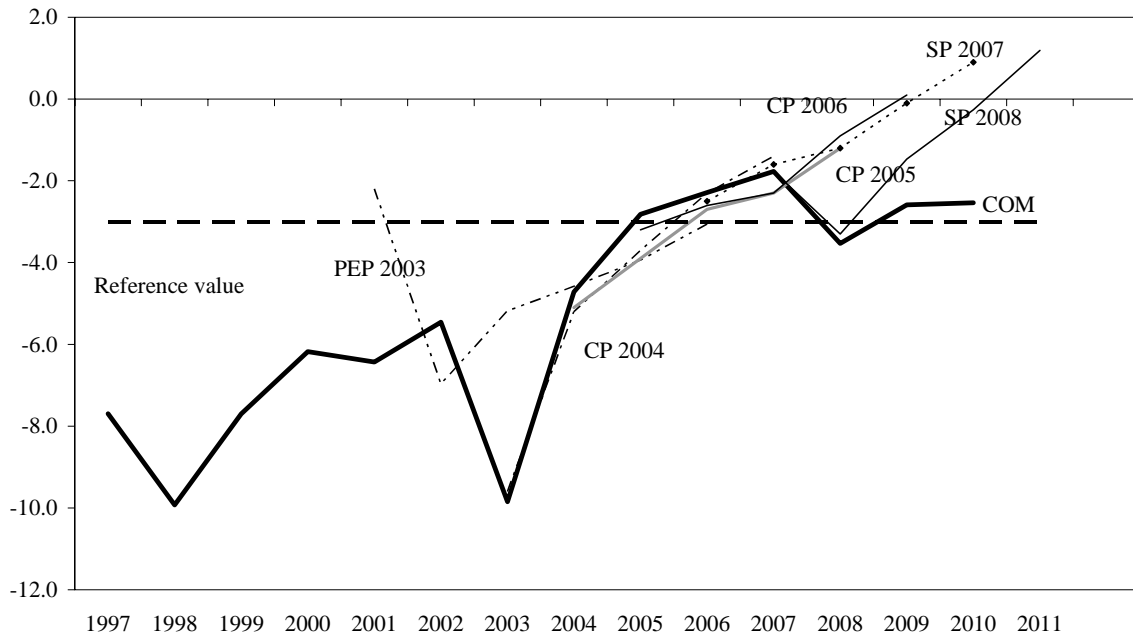
Note:

¹Cyclically-adjusted balance excluding one-off and other temporary measures. Cyclically-adjusted balances according to the programmes as recalculated by the Commission services on the basis of the information in the programmes. One-off and other temporary measures are 0.6% of GDP in 2007, 0.3% of GDP in 2008 and 2009 and 0.1% of GDP in 2010 and 2011; all deficit-reducing, according to the 2008 stability programme and 0.6% of GDP in 2007, -0.6% of GDP in 2008, 0.3% of GDP in 2009 and zero in 2010 according to the Commission services' January interim forecast.

Source:

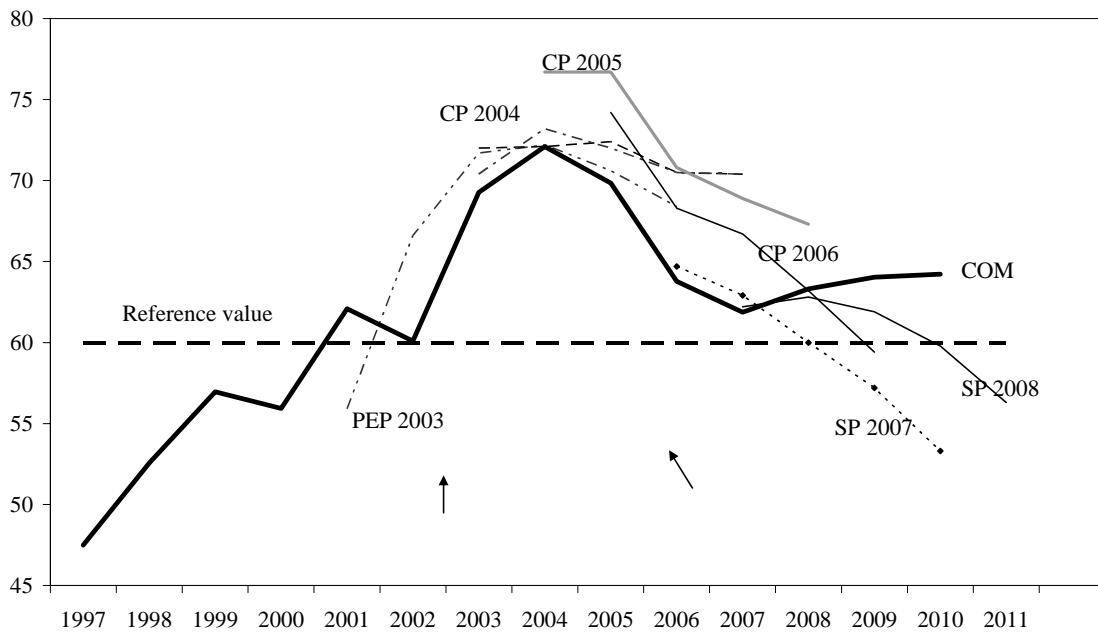
Stability programmes (SP); Commission services' January 2009 interim forecasts (COM)

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



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

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



Source: Commission services' January 2009 interim forecast (COM) and successive stability and convergence 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	18.2	19.1	20.4	20.0	19.2	18.5	-0.6
- Pensions	7.4	8.8	10.2	9.1	7.9	7.0	-1.8
- Healthcare	4.2	4.5	5.0	5.5	5.9	6.1	1.6
- Long-term care	0.9	0.9	0.9	1.0	1.1	1.1	0.2
- Education	4.4	3.7	3.2	3.3	3.3	3.3	-0.4
- Unemployment benefits	1.2	1.2	1.0	1.0	1.0	1.0	-0.2
Property income received	1.5	1.3	1.2	1.2	1.1	1.1	-0.2

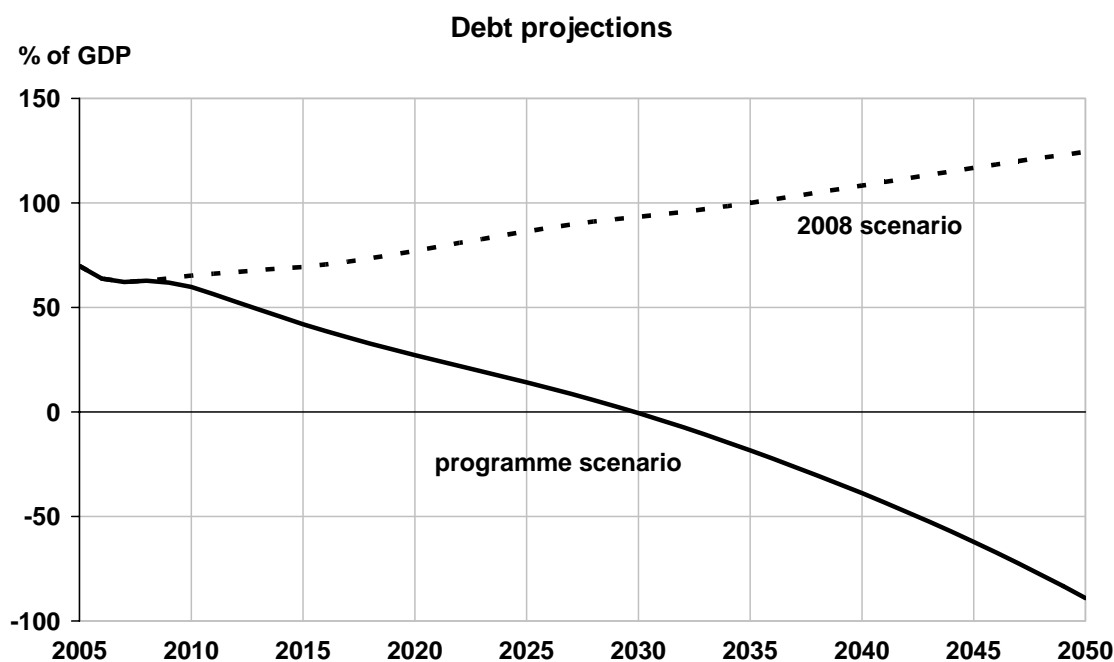
Source: Economic Policy Committee and Commission services.

Table 4: Sustainability indicators and the required primary balance

Value	2008 scenario			Programme scenario		
	S1	S2	RPB	S1	S2	RPB
Value	1.4	0.9	0.1	-3.2	-3.6	0.0
<i>of which:</i>						
Initial budgetary position (IBP)	0.8	1.2	-	-3.6	-3.3	-
Debt requirement in 2050 (DR)	0.1	-	-	-0.1	-	-
Long-term change in the primary balance (LTC)	0.4	-0.3	-	0.4	-0.3	-

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	-
Decline in structural balance until 2010 in COM January forecast 2009	na
Significant revenues from pension taxation	na
Alternative projection of cost of ageing	-
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

This annex provides an assessment of whether the programme respects the requirements of Section II of the code of conduct (guidelines on the format and content), notably as far as (i) the model structure (Annex 1 of the code of conduct); (ii) the formal data provisions (Annex 2 of the code of conduct); and (iii) other information requirements is concerned.

The programme broadly follows the model structure for stability and convergence programmes specified in Annex 1 of the new code of conduct.

The programme has no gaps in compulsory data and gaps in the optional data prescribed by the code of conduct. However, these gaps did not prevent an assessment of the stability programme.

The gaps in optional data relate to: data on general government debt developments, in particular data on stock-flow adjustment in respect of differences between cash and accruals, net accumulation of financial assets, net accumulation of financial assets - privatisation proceeds, valuation effects and other, liquid financial assets, net financial debt, all for the period 2007-11. Figures for the following variables related to long-term sustainability of public finances are missing throughout the years; total expenditure, social security pension, other age-related expenditures, interest expenditure, total revenue, participation rate males (aged 20-64). Data for the year 2000 are missing.

The tables on the following pages show the data presented in the December 2008 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	4476.992	3.7	2.8	2.2	2.5	2.8
2. Nominal GDP	B1*g	5415.01	6.3	6.0	4.4	4.6	4.4
Components of real GDP							
3. Private consumption expenditure	P.3	2878.945	1.6	3.5	2.1	2.0	2.2
4. Government consumption expenditure	P.3	839.296	-0.1	4.3	2.9	-0.3	-2.0
5. Gross fixed capital formation	P.51	912.152	4.1	3.6	4.0	3.6	2.9
6. Changes in inventories and net acquisition of valuables (% of GDP)	P.52 + P.53	132.9	3.0	2.2	2.2	2.2	2.2
7. Exports of goods and services	P.6	4266.117	-4.1	-5.3	-3.1	n.a	1.4
8. Imports of goods and services	P.7	4552.382	-3.8	-4.7	-2.2	-0.5	0.0
Contributions to real GDP growth							
9. Final domestic demand		-	1.9	3.8	2.8	2.0	1.7
10. Changes in inventories and net acquisition of valuables	P.52 + P.53	-	1.9	-0.7	n.a.	0.1	n.a.
11. External balance of goods and services	B.11	-	-0.1	-0.3	-0.6	0.4	1.1

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		121	2.5	3.1	2.2	2.0	1.6
2. Private consumption deflator		114.9	1.6	4.2	2.9	2.6	2.4
3. HICP¹		103.3	0.7	4.5	2.7	2.3	2.0
4. Public consumption deflator		124.3	2.5	2.7	2.9	2.8	2.3
5. Investment deflator		116.5	1.4	1.8	2.4	1.9	1.7
6. Export price deflator (goods and services)		113.8	6.0	7.9	3.9	3.1	2.5
7. Import price deflator (goods and services)		109.9	4.7	7.9	4.4	3.4	3.2

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, persons¹		158.7	2.7	3.0	1.3	1.3	1.5
2. Employment, hours worked ²		307.795	3.9	3.0	1.3	1.3	1.5
3. Unemployment rate (%)³		10.7	6.4	5.8	6.0	6.1	5.9
4. Labour productivity, persons⁴		28218	0.9	-0.2	0.8	1.1	1.3
5. Labour productivity, hours worked ⁵		14.5	-0.2	-0.2	0.8	1.1	1.3
6. Compensation of employees	D.1	2323.5	4.4	5.9	4.2	4.1	3.9
7. Compensation per employee		16618	1.7	3.3	2.8	2.9	2.5

¹Occupied population, domestic concept national accounts definition.

²National accounts definition.

³Harmonised definition, Eurostat; levels.

⁴Real GDP per person employed.

⁵Real GDP per hour worked.

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	-5.5	-5.1	-3.1	-2.7	0.7
<i>of which :</i>						
- Balance on goods and services		-2.9	-3.3	-4.3	-4.2	-3.5
- Balance of primary incomes and transfers		-3.5	-2.8	-0.6	-0.4	2.4
- Capital account		0.9	0.9	1.9	1.9	1.8
2. Net lending/borrowing of the private sector	B.9	-6.6	-1.9	-1.4	-2.4	-0.3
3. Net lending/borrowing of general government	EDP B.9	-1.8	-3.3	-1.5	-0.3	1.2
4. Statistical discrepancy		2.9	0.0	-0.2	0.0	-0.2

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	-96.407	-1.8	-3.3	-1.5	-0.3	1.2
2. Central government	S.1311	-95.801	-1.8	-3.3	-1.5	-0.3	1.2
3. State government	S.1312	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
4. Local government	S.1313	-0.606	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
5. Social security funds	S.1314	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
General government (S13)							
6. Total revenue	TR	2200.277	40.6	40.6	41.7	41.8	41.9
7. Total expenditure	TE ¹	2296.683	42.4	43.9	43.2	42.1	40.7
8. Net lending/borrowing	EDP B.9	-96.406	-1.8	-3.3	-1.5	-0.3	1.2
9. Interest expenditure	EDP D.41	182.064	3.4	3.3	3.4	3.3	3.2
10. Primary balance²		85.658	1.6	0.0	1.9	3.0	4.3
11. One-off and other temporary measures³		34.7	0.6	0.3	0.3	0.1	0.1
Selected components of revenue							
12. Total taxes (12=12a+12b+12c)		1541.834	28.5	28.4	28.8	29.2	29.4
12a. Taxes on production and imports	D.2	800.213	14.8	14.5	14.6	14.7	14.7
12b. Current taxes on income, wealth, etc	D.5	725.955	13.4	13.6	14.0	14.3	14.5
12c. Capital taxes	D.91	15.666	0.3	0.2	0.2	0.2	0.2
13. Social contributions	D.61	398.304	7.4	7.4	7.3	7.3	7.4
14. Property income	D.4	73.56	1.4	1.3	1.0	1.0	0.9
15. Other⁴		186.579	3.4	3.6	4.5	4.3	4.2
16=6. Total revenue	TR	2200.277	40.6	40.6	41.7	41.8	41.9
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)⁵			36.3	36.2	36.6	36.9	37.1
Selected components of expenditure							
17. Compensation of employees + intermediate consumption	D.1+P.2	995.658	18.4	18.6	18.7	18.0	17.4
17a. Compensation of employees	D.1	705.036	13.0	13.0	13.0	12.6	12.3
17b. Intermediate consumption	P.2	290.622	5.4	5.6	5.7	5.4	5.1
18. Social payments (18=18a+18b)		699.021	12.9	14.1	13.6	13.5	13.4
18a. Social transfers in kind supplied via market producers	D.6311, D.63121, D.63131	32.256	0.6	0.6	0.6	0.6	0.6
18b. Social transfers other than in kind	D.62	666.765	12.3	13.5	12.9	12.9	12.8
19=9. Interest expenditure	EDP D.41	182.064	3.4	3.3	3.4	3.3	3.2
20. Subsidies	D.3	109.102	2.0	2.4	1.0	0.9	0.8
21. Gross fixed capital formation	P.51	216.963	4.0	3.4	4.4	4.4	4.0
22. Other⁶		93.875	1.7	2.2	2.1	2.0	1.9
23=7. Total expenditure	TE ¹	2296.683	42.4	43.9	43.2	42.1	40.7
p.m.: Government consumption (nominal)	P.3	1036.169	19.1	19.3	19.4	18.6	17.9

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

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

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

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

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

⁶D.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	2007	2008	2009	2010	2011
1. General public services	1	6.7	6.4	7.1	7.7	7.8	7.4
2. Defence	2	0.8	0.7	0.7	0.7	0.6	0.6
3. Public order and safety	3	1.5	1.5	1.6	1.7	1.8	1.6
4. Economic affairs	4	5.8	5.9	5.9	4.6	4.1	3.9
5. Environmental protection	5	1.5	1.5	1.3	1.6	1.4	1.4
6. Housing and community amenities	6	0.8	0.7	0.9	0.4	0.6	0.6
7. Health	7	6.4	5.8	5.5	5.5	5.3	5.0
8. Recreation, culture and religion	8	0.6	0.6	0.6	0.7	0.5	0.5
9. Education	9	5.6	5.5	5.5	5.9	5.7	5.4
10. Social protection	10	14.0	13.8	14.8	14.4	14.3	14.2
11. Total expenditure (=item 7=23 in Table 2)	TE	43.6	42.4	43.9	43.2	42.1	40.7

¹Adjusted 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 debt¹		62.2	62.8	61.9	59.8	56.3
2. Change in gross debt ratio		-1.6	0.6	-0.9	-2.1	-3.5
Contributions to changes in gross debt						
3. Primary balance²		-1.6	0.0	-1.9	-3.0	-4.3
4. Interest expenditure³	EDP D.41	3.4	3.3	3.4	3.3	3.2
5. Stock-flow adjustment		0.4	0.8	0.2	0.3	0.2
<i>of which:</i>						
- 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.
<i>of which:</i>						
- 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 debt⁷		5.6	5.7	5.6	5.5	5.5
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.

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

²Cf. item 10 in Table 2.

³Cf. item 9 in Table 2.

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

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

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

⁷Proxied by interest expenditure divided by the debt level of the previous year.

⁸AF1, 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	2.8	2.2	2.5	2.8
2. Net lending of general government	EDP B.9	-1.8	-3.3	-1.5	-0.3	1.2
3. Interest expenditure	EDP D.41	3.4	3.3	3.4	3.3	3.2
4. One-off and other temporary measures¹		0.6	0.3	0.3	0.1	0.1
5. Potential GDP growth (%)		2.7	2.6	2.3	2.0	2.0
contributions:						
- labour		1.4	1.2	0.8	0.5	0.4
- capital		1.2	1.2	1.2	1.2	1.2
- total factor productivity		0.1	0.2	0.3	0.3	0.4
6. Output gap		-0.6	-0.4	-0.5	-0.1	0.7
7. Cyclical budgetary component		-0.2	-0.2	-0.2	0.0	0.3
8. Cyclically-adjusted balance (2 - 7)		-1.6	-3.1	-1.3	-0.2	0.9
9. Cyclically-adjusted primary balance (8 + 3)		1.8	0.2	2.1	3.1	4.1
10. Structural balance (8 - 4)		-2.2	-3.5	-1.6	-0.4	0.8

¹A 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		3.5	3.1	3.2	3.4	n.a.
Current update		3.7	2.8	2.2	2.5	2.8
Difference		0.2	-0.3	-1.0	-0.9	n.a.
General government net lending (% of GDP)	EDP B.9					
Previous update		-1.6	-1.2	-0.1	0.9	n.a.
Current update		-1.8	-3.3	-1.5	-0.3	1.2
Difference		-0.2	-2.1	-1.4	-1.2	n.a.
General government gross debt (% of GDP)						
Previous update		62.9	60.0	57.2	53.3	n.a.
Current update		62.2	62.8	61.9	59.8	56.3
Difference		-0.7	2.8	4.7	6.5	n.a.

Table 7. Long-term sustainability of public finances

% of GDP	2000	2005	2010	2020	2030	2050
Total expenditure	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Of which: age-related expenditures	n.a.	18.3	19.1	20.4	20.0	18.5
Pension expenditure	n.a.	7.5	8.8	10.2	9.1	7.0
Social security pension	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Old-age and early pensions	n.a.	3.9	5.2	7.0	6.9	6.5
Other pensions (disability, survivors)	n.a.	3.6	3.6	3.2	2.2	0.5
Occupational pensions (if in general government)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Health care	n.a.	4.3	4.5	5.0	5.5	6.1
Long-term care (<i>this was earlier included in the health care</i>)	n.a.	0.9	0.9	0.9	1.0	1.1
Education expenditure	n.a.	4.4	3.7	3.2	3.3	3.3
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.	1.5	1.3	1.2	1.2	1.1
<i>Of which</i> : from pensions contributions (or social contributions if appropriate)	n.a.	7.0	6.8	5.9	4.7	3.3
Pension reserve fund assets	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<i>Of which</i> : consolidated public pension fund assets (assets other than government liabilities)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Assumptions						
Labour productivity growth	n.a.	1.5	0.9	2.4	2.7	1.7
Real GDP growth	n.a.	2.0	2.5	2.7	3.1	1.7
Participation rate males (aged 20-64)	n.a.	83.1	84.3	84.9	85.0	85.0
Participation rates females (aged 20-64)	n.a.	38.3	44.1	51.3	53.8	54.4
Total participation rates (aged 20-64)	n.a.	60.9	64.5	68.3	69.5	69.6
Unemployment rate	n.a.	8.5	8.3	7.0	7.0	7.0
Population aged 65+ over total population	n.a.	13.1	13.9	19.1	22.3	24.8

Table 8. Basic assumptions

	2007	2008	2009	2010	2011
Short-term interest rate¹ (annual average)	4.3	4.6	3.5	4.1	4.1
Long-term interest rate (annual average)	4.7	4.9	4.8	4.9	4.9
USD/€ exchange rate (annual average) (euro area and ERM II countries)	1.37	1.48	1.36	1.36	1.36
Nominal effective exchange rate	3.1	2.5	-2.9	-2.9	-2.9
(for countries not in euro area or ERM II) exchange rate vis-à-vis the € (annual average)	n.a.	n.a.	n.a.	n.a.	n.a.
World excluding EU, GDP growth	5.6	4.3	2.9	3.8	3.8
EU GDP growth	2.9	1.4	0.2	1.1	1.1
Growth of relevant foreign markets	2.4	1.1	-0.2	0.7	0.7
World import volumes, excluding EU	7.2	6.0	3.1	4.7	4.7
Oil prices (Brent, USD/barrel)	73.0	104.0	86.0	89.0	89.0

¹If necessary, purely technical assumptions.

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