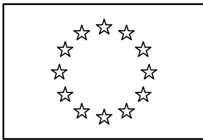

EUROPEAN COMMISSION
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ECONOMIC AND FINANCIAL AFFAIRS

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JANUARY 2006 UPDATE OF THE CONVERGENCE PROGRAMME OF MALTA (2005-2008)

AN ASSESSMENT

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SUMMARY AND CONCLUSIONS[1]

Malta submitted the second update of the convergence programme covering the period 2005-2008 on 6 January 2006, more than a month after the 1 December deadline specified by the Code of Conduct. The programme broadly follows the model structure and data provision requirements for stability and convergence programmes specified in the new code of conduct[2].

On 5 July 2004 the Council decided that Malta was in excessive deficit. According to the Council recommendation under Article 104(7) of 5 July 2004, the excessive deficit has to be corrected by 2006. In its opinion of 17 February 2005 on the previous update of the convergence programme, covering the period 2004-2007, the Council invited Malta to do all the necessary to ensure the correction of excessive deficit by 2006, ensure that the debt ratio declines at a satisfactory pace towards the 60% of GDP reference value and make further progress in the design and implementation of the pension and health care reforms.

Malta's real GDP growth averaged 2¾% per year between 1995 and 2005. However, since 2001 economic growth stalled in the wake of unfavourable external conditions and domestic structural weaknesses. The combination of these two factors resulted in a loss in competitiveness, while export performance worsened adding further pressure on the external deficit. In recent years, the general government deficit has averaged around 6% of GDP, peaking at 10.3% of GDP in 2003, and declined to 5.1% of GDP in 2004.

The update foresees a gradual pick-up in economic activity until the end of the programme period. From 0.9% in 2005, GDP growth is forecast to strengthen to 1.1% and 1.2% in 2006 and 2007, respectively. The update foresees a further acceleration of growth to 2.0% in 2008. Overall, the programme growth assumptions appear to be plausible, except for the relatively quick recovery projected in 2006. The update foresees an improvement in the external deficit of goods and services, falling from 8% of GDP in

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[1] This technical analysis, which is based on information available up to 14 February 2006, accompanies the recommendation by the Commission for a Council opinion on the update of the convergence programme, which the College adopted on 22 February 2006. It has been carried out by the staff of and under the responsibility of the Directorate-General for Economic and Financial Affairs of the European Commission. Comments should be sent to Ivan Ebejer (ivan.ebejer@cec.eu.int). The analysis takes into account (i) the Commission services' autumn 2005 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), (iii) the commonly agreed methodology for the estimation of potential output and cyclically-adjusted balances and (iv) the broad economic policy guidelines included in the integrated guidelines for the period 2005-2008.

[2] The programme has gaps in the compulsory and optional data prescribed by the new code of conduct. Specifically, price data are not consistent with the harmonised definition and employment and unemployment figures are not based on labour force survey data but refer to registered persons, while forecasts for all the items included in the sectoral balances and FISIM data are not provided. Missing optional data are: table 1c (Labour market developments): employment and labour productivity in hours worked are not provided; table 1d (Sectoral balances): no forecasts are provided for almost all items; table 2 (General government budgetary developments): breakdown of total social transfers not provided; table 3 (General government expenditure by function): forecasts for 2008 of single items not provided; table 4 (General government debt developments): breakdown of stock-flow adjustment and other relevant variables not provided; table 5 (Cyclical developments): contributions to potential GDP growth not provided.

2005 to 4¼% in 2008. Inflation, as measured by the Retail Price Index, is projected to decelerate from just above 3% in 2006 to 2½% in 2007 and slightly below 2% in 2008, which appears achievable, though not without risks.

Following a pick-up in HICP inflation in 2004, mainly due to temporary factors, inflation developments in Malta were mixed during 2005. After accelerating in the first three months, inflation showed some volatility in the subsequent two quarters, while further increases were recorded in the last quarter, bringing the yearly average to 2½%. Core inflation (HIPC excluding energy and unprocessed food) remained relatively contained at an annual average of 2%, though with an increase towards the end of the year. Following entry in ERM II on 2 May 2005, the Maltese lira has remained fully stable against the euro. Long-term benchmark bond yields remained stable at some 4.7% through mid-2005 and subsequently recorded a moderate decrease to around 4.4%. The update reiterates Malta's goal to enter the euro area on 1 January 2008.

The update estimates the 2005 deficit close to 4%, against 4¼% of GDP in the Commission services' autumn 2005 forecast and a target of 3¾% of GDP set in the previous update of the convergence programme. The difference between the update and the Commission services' autumn 2005 forecast is explained by the inclusion of recent data showing lower general government expenditure than previously projected.

The budgetary strategy outlined in the update aims at reducing the deficit to below the 3% of GDP reference value in 2006 and at pursuing fiscal consolidation to reach a deficit of 1¼% in 2008. The deficit targets in the update include one-off revenues of ¾% to 1% of GDP per year until 2007. Consolidation is mainly expenditure-based, with expenditures falling by 7½% of GDP until the end of the programme period, almost half of which is accounted for by investment. Compared with the previous programme, the fiscal adjustment in the update is somewhat less ambitious against a less favourable macroeconomic scenario.

According to the Commission services' calculations on the basis of the programme and the commonly agreed methodology, the structural balance (i.e. the cyclically-adjusted balance net of one-off and other temporary measures) is projected to improve from around -3¾% of GDP in 2005, to about ½% of GDP in 2008. The update clearly identifies its medium-term objective (MTO) for the budgetary position as meant in the Stability and Growth Pact of a balanced budget, which it aims to achieve by 2008. As the programme's MTO is more demanding than the minimum benchmark (estimated at a deficit of around 1¾% of GDP), its achievement should fulfil the aim of providing a safety margin against the occurrence of an excessive deficit. The programme's MTO is at an appropriate level because it lies within the range indicated for euro area and ERM II Member States in the Stability and Growth Pact and the code of conduct and adequately reflects the debt ratio and average potential output growth in the long term.

The budgetary outcome could be worse than projected in the programme, especially on account of the favourable macroeconomic scenario projected for 2006. Although, the update foresees higher indirect taxes in 2006 than in the Commission services' autumn 2005 forecast, projections for total revenues in that year are comparable. While the information given in the programme on the policy measures for 2006 do not seem to fully justify these developments, the measures underpinning the consolidation process are not disclosed for 2007 and 2008, making an overall assessment difficult to carry out.

Assuming that the 2006 budget is fully implemented and the macroeconomic risks are duly addressed, the budgetary stance in the programme seems consistent with a correction of the excessive deficit by the deadline indicated by the Council. Following the planned correction of the excessive deficit and taking into account the balance of risks, the projected improvement in the structural budget balance appears ambitious, especially against the backdrop of unfavourable cyclical conditions. The budgetary strategy outlined in the programme seems sufficient to ensure that the programme's MTO of a balanced budget will be broadly achieved by 2008. According to the Commission services' calculations on the basis of the programme and the commonly agreed methodology, the safety margin against breaching the 3% of GDP deficit limit would be provided from 2007 as long as the risks to the budgetary targets are duly addressed.

Gross debt is estimated at 76¾% of GDP for 2005, above the 60% of GDP reference value. Starting in 2006, the debt ratio is expected to gradually fall, reaching 67¼% of GDP by the end of the programme period. This improvement is expected to be achieved through privatisation proceeds, especially in 2006, while for the remaining years an increasing surplus in the primary balance will act as the main driver of a lower debt-to-GDP ratio. There are implementation risks associated to the large privatisation plans for 2006, while there are some unexplained below-the-line operations offsetting potential privatisation receipts. In view of such risks, outcomes may be worse than anticipated, although the debt ratio appears to be sufficiently diminishing.

With regard to the sustainability of public finances, Malta appears to be at medium risk on grounds of the projected budgetary costs of ageing populations. The level of gross debt is currently above the 60% reference value and the currently high structural deficit, if unchanged, will prevent the necessary reduction of the gross debt ratio from falling below the Treaty reference value over the long term. Implementing rigorously the planned budgetary consolidation over the programme period would therefore contribute to reduce debt below the reference value, with positive consequences for risks to public finance sustainability. Changes to the pension system are envisaged by the Maltese authorities, aiming at ensuring adequacy and sustainability of the pension system. Ensuring the financial sustainability of the public pension system would be key in the implementation of a reform.

The envisaged measures in the area of public finances are broadly consistent with the broad economic policy guidelines included in the integrated guidelines for the period 2005-2008. Although the update foresees the correction of the excessive deficit and the reduction of the debt ratio at a satisfactory pace in line with the Council's recommendations and anticipates the achievement of the medium-term budgetary objective within the programme period, it does not announce implementation measures to address the problem of the long-term sustainability.

The National Reform Programme of Malta, submitted on 21 October 2005 in the context of the renewed Lisbon strategy for growth and jobs, identifies the following challenges with significant implications for public finances: sustainability of public finances; competitiveness; the environment; employment; and education and training. Although not explicitly stated, the update takes into account the budgetary implications of the NRP. The measures in the area of public finances envisaged in the convergence programme are broadly in line with the actions foreseen in the National Reform Programme. In particular, the updated convergence programme confirms the intention to

pursue reforms to enhance the efficiency of the public sector, improve tax compliance, pursue privatisation and provide support for the training of the labour force.

In view of the above assessment, the Council notes that, overall, the programme is consistent with the correction of the excessive deficit by 2006. In the light of the recommendations made by the Council under Article 104(7) of 5 July 2004, it would be appropriate for Malta to:

(i) implement with rigour the 2006 budget measures and ensure the correction of the excessive deficit this year;

(ii) ensure that the debt ratio is declining towards the 60% of GDP Treaty reference value at a satisfactory pace from 2006 onwards;

(iii) improve the long-term sustainability of the public finances by making further progress in the design and implementation of the pension reform.

Comparison of key macroeconomic and budgetary projections

		2004	2005	2006	2007	2008
Real GDP (% change)	**CP Jan 2006**	**0.2**	**0.9**	**1.1**	**1.2**	**2.0**
	COM Nov 2005	0.4	0.8	0.7	1.1	n.a.
	CP Dec 2004	*0.6*	*1.5*	*1.8*	*2.2*	*n.a.*
HICP inflation (%)	**CP Jan 2006[1]**	**2.8**	**2.8**	**3.1**	**2.5**	**1.9**
	COM Nov 2005	2.7	3.1	2.6	2.2	n.a.
	CP Dec 2004[1]	*2.9*	*2.4*	*1.9*	*1.9*	*n.a.*
Output gap (% of potential GDP)	**CP Jan 2006[2]**	**-1.8**	**-2.9**	**-3.7**	**-4.2**	**-4.4**
	COM Nov 2005[6]	-2.0	-3.1	-4.3	-5.1	n.a.
	CP Dec 2004[2]	*-2.1*	*-2.4*	*-2.3*	*-1.6*	*n.a.*
General government balance (% of GDP)	**CP Jan 2006**	**-5.1**	**-3.9**	**-2.7**	**-2.3**	**-1.2**
	COM Nov 2005	-5.1	-4.2	-3.0	-2.5	n.a.
	CP Dec 2004	*-5.2*	*-3.7*	*-2.3*	*-1.4*	*n.a.*
Primary balance (% of GDP)	**CP Jan 2006**	**-1.0**	**0.3**	**1.4**	**1.5**	**2.4**
	COM Nov 2005	-1.0	0.2	1.3	1.9	n.a.
	CP Dec 2004	*-1.4*	*0.3*	*1.6*	*2.4*	*n.a.*
Cyclically-adjusted balance (% of GDP)	**CP Jan 2006[2]**	**-4.4**	**-2.8**	**-1.3**	**-0.7**	**0.4**
	COM Nov 2005	-4.3	-3.0	-1.4	-0.5	n.a.
	CP Dec 2004[2]	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*
Structural balance[3] (% of GDP)	**CP Jan 2006[4]**	**-5.1**	**-3.8**	**-2.3**	**-1.4**	**0.3**
	COM Nov 2005[5]	-5.0	-4.0	-2.4	-1.2	n.a.
	CP Dec 2004	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*
Government gross debt (% of GDP)	**CP Jan 2006**	**76.7**	**76.7**	**70.8**	**68.9**	**67.3**
	COM Nov 2005	75.9	77.2	77.4	77.1	n.a.
	CP Dec 2004	*73.2*	*72.0*	*70.5*	*70.4*	*n.a.*

Notes:
[1]CP figures correspond to the Retail Price Index
[2]Commission services' calculations on the basis of the information in the programme
[3]Cyclically-adjusted balance (as in the previous rows) excluding one-off and other temporary measures
[4]One-off and other temporary measures taken from the programme: 0.7% in 2004, 1.0% of GDP in 2005, 1.0% in 2006, 0.7% in 2007 and 0.1 in 2008; all deficit-reducing
[5] The Commission services' forecast include the same one-offs as the programme
[6] Based on estimated potential growth of 1.3%, 2.0%, 2.0% and 2.0% respectively in the period 2004-2007
Source:
Convergence programme (CP); Commission services' autumn 2005 economic forecasts (COM); Commission services' calculations

1. INTRODUCTION

Malta submitted the second update of the convergence programme, which covers the period 2005-2008, on 6 January 2006 more than a month after the 1 December deadline specified by the Code of Conduct. The programme was prepared by the Ministry of Finance with contributions from the Central Bank of Malta and the National Statistics Office. The update is based on the 2006 Budget Law as approved by Parliament on 18 November 2005. The programme is a government document and is not sent to the Parliament.

The programme broadly follows the model structure and data provision requirements for stability and convergence programmes specified in the new code of conduct, but has gaps in the compulsory[3] and optional data[4] prescribed by the new code of conduct. Annex 2 provides a detailed overview of all aspects of compliance with the new code of conduct.

2. ECONOMIC OUTLOOK

Real GDP growth in Malta averaged 2¾% per year between 1995 and 2004, compared to 2½% in the EU25. However, this figure conceals a shift in economic performance taking place in 2001. On average, real GDP growth in Malta stalled during the period 2001-2004 in contrast to an average annual growth close to 2% in the EU25. Although the international economic downturn and geopolitical tensions since 2001 have hit Malta particularly hard, domestic structural weaknesses represent an important contributor to such a protracted slowdown. In line with these developments, per capita income in purchasing power standards declined from 73½% of the EU25 in 1995 to 71% in 2004. This decline, which came hand in hand with the slowdown in GDP growth started in 2001, reflects both weaker job creation and a decline in labour productivity, the latter reflecting labour hoarding. Weak job creation has led to a 1 percentage point increase in unemployment rate between 2000 and 2004 and attaining around 7½% in 2004. Despite rising unemployment, the annual increase in nominal unit labour costs in the 2000s has been above the average of the last ten years reflecting the slowdown in productivity growth. Against this background of weak economic performance, inflationary pressures have slightly receded since 2001. HICP inflation has averaged 2¾% per year between 2001 and 2005 compared to 3% recorded over the decade. However, favourable price developments since 2001 and the depreciation of the real exchange rate as of 2002 (due to a stronger euro) have not had any tangible effects on Malta's export performance. On the contrary, exports of goods and services have suffered as a result of heightened cost pressures and low productivity growth, which are becoming an increasing threat to the existence of some traditional operations such as the clothing and footwear industries.

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[3] Specifically, price data are not consistent with the harmonised definition and employment and unemployment figures are not based on labour force survey data but refer to registered persons, while forecasts for all the items included in the sectoral balances and FISIM data are not provided.

[4] Missing optional data are: table 1c (Labour market developments): employment and labour productivity in hours worked are not provided; table 1d (Sectoral balances): no forecasts are provided for almost all items; table 2 (General government budgetary developments): breakdown of total social transfers not provided; table 3 (General government expenditure by function): forecasts for 2008 of single items not provided; table 4 (General government debt developments): breakdown of stock-flow adjustment and other relevant variables not provided; table 5 (Cyclical developments): contributions to potential GDP growth not provided.

In 2005, GDP is estimated to have grown by 0.9%, only slightly above the Commission services' autumn 2005 forecast of 0.8%. In 2006 and 2007, GDP is forecast to grow by 1.1% and 1.2%, respectively (see Table 1). The corresponding Commission projections stand at 0.7% and 1.1%. The update foresees a further acceleration of growth to 2.0% in 2008. The negative output gap (as recalculated by the Commission services according to the commonly agreed methodology, based on the information provided in the programme) is expected to widen further throughout the programme period. Economic growth in 2005 is estimated to have been driven by domestic demand – supported mainly by strong investment - with the external sector detracting from growth. Over the programme period, domestic demand is projected to gradually add less to growth, giving way to a higher contribution of external demand. For 2006, the programme projects a more balanced contribution to growth. Exports are expected to rebound, continuing to accelerate until the end of the programme period in the wake of an improved external demand. This reflects an assumed upturn in the global semiconductors' industry, which represents a vital component of Malta's manufacturing base. Higher exports and a projected recovery in total consumption expenditure are expected to lead to higher import growth. This is in contrast to the Commission services' forecasts, which foresee a markedly positive contribution of domestic demand, while external demand continues to act as a drag on growth in 2006.

The programme expects that growth in 2007 and 2008 would be supported by a further expansion in the external sector, while domestic demand would remain weak. In 2007, the contribution of domestic demand is projected to be negative due to a contraction in investment, which mainly reflects the advance by one year of expenditure related to the *Mater Dei* hospital. Although the external sector will remain the main contributor to growth, domestic demand is expected to recover somewhat in 2008 as the further contraction of investment would be more than offset by growth in both private and government consumption expenditure. The update projects a recovery in private consumption expenditure, as the contraction in 2005 and 2006 turns into positive growth in the subsequent two years in the wake of improved wage and labour market developments. The Commission services project a similar turnaround in private consumption expenditure, albeit starting in 2006.

The external assumptions underlying the programme's macroeconomic scenario are broadly similar to those underlying the Commission services' 2005 autumn forecasts. The main differences pertain to the nominal effective exchange rate, for which the update assumes a constant percentage change.

Overall, the macroeconomic scenario presented in the update appears to be based on plausible growth assumptions, although it is somewhat on the optimistic side for the year 2006. This is due to the projection in the update of a relatively strong contribution of external demand to growth, associated mainly to a recovery in the electronics industry. The possibility that the long-anticipated pickup in this industry will not materialise in 2006 poses a downside risk to GDP growth.

The update projects a tightening in labour market conditions throughout the programme period, as employment growth gradually picks up and leads to a fall in unemployment[5]. This is in line with the Commission services forecast, although the improvement in

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[5] The Commission services and the programme figures are not directly comparable since they are based on different methodologies.

labour market conditions stabilises in 2007. Throughout the programme period, growth in GDP is in general explained equally by gains in productivity and employment growth; the projected average labour content of GDP growth is substantially higher than historical values. Annual average employment is anticipated to grow by around ¾% during the programme horizon which is higher than the average recorded in the previous four years. However, this is broadly in line with the Commission services' forecast, and is explained by the composition of growth significantly based on construction which is highly labour intensive. In line with this development, the programme envisages annual growth in wages declining from slightly above 3% to around 2½% between 2006 and 2008. Gains in productivity are expected to remain subdued and well below wage growth.

Table 1: Comparison of macroeconomic developments and forecasts

	2005		2006		2007		2008
	COM	**CP**	**COM**	**CP**	**COM**	**CP**	**CP**
Real GDP (% change)	0.8	0.9	0.7	1.1	1.1	1.2	2.0
Contributions:							
- Final domestic demand	1.2	2.1	1.6	0.5	1.6	-0.4	0.5
- Change in inventories	-0.1	1.7	-0.2	0.0	0.1	0.1	0.2
- External balance of g&s	-0.3	-2.7	-0.7	0.6	-0.6	1.5	1.3
Output gap[1]	-3.1	-2.9	-4.3	-3.7	-5.1	-4.2	-4.4
Employment (% change)[2]	0.6	0.3	0.8	0.9	0.8	1.0	1.1
Unemployment rate (%)[2]	7.2	5.1	7.1	4.9	7.1	4.7	4.7
Labour productivity growth (%)	0.2	0.6	-0.1	0.2	0.3	0.2	0.8
HICP inflation[3] (%)	3.1	2.8	2.6	3.1	2.2	2.5	1.9
GDP deflator (% change)	2.8	3.0	2.8	2.7	2.3	2.7	2.0
Compensation of employees (% change)	2.1	3.0	3.0	4.0	2.4	4.0	3.8
External balance of g&s[4] (% of GDP)	-6.7	-8.0	-6.8	-7.6	-7.0	-6.0	-4.3

Note:
[1]In percent of potential GDP, with potential GDP growth as reported in Table 2 below
[2]Figures for the programme relate to administrative records
[3]Figures for the programme relate to the Retail Price Index
[4]The programme only provides information on the external goods and services balance
Source:
Commission services' autumn 2005 economic forecasts (COM); convergence programme update (CP)

Table 2: Sources of potential output growth

	2005		2006		2007		2008
	COM	**CP[2]**	**COM**	**CP[2]**	**COM**	**CP[2]**	**CP[2]**
Potential GDP growth[1]	2.0	2.0	2.0	2.0	2.0	1.8	2.2
Contributions:							
- Labour	0.4	0.4	0.4	0.4	0.4	0.4	1.0
- Capital accumulation	1.6	1.6	1.6	1.6	1.5	1.3	1.2
- TFP	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Notes:
[1]Based on the production function method for calculating potential output growth
[2]Commission services' calculations on the basis of the information in the programme

Source:
Commission services' autumn 2005 economic forecasts (COM); Commission services' calculations

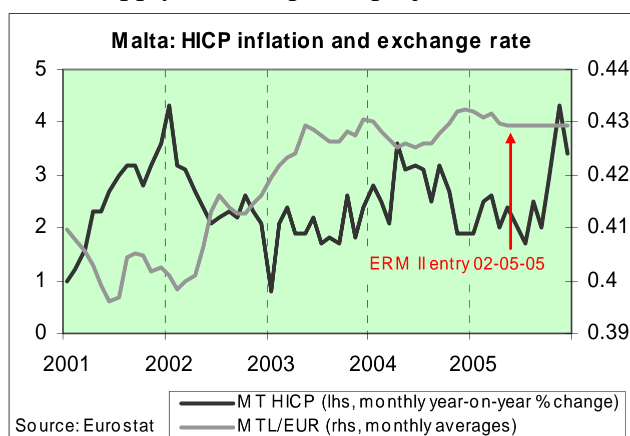
Estimates of potential output growth consistent with the programme's macroeconomic scenario (as recalculated by Commission services on the basis of the information provided in the programme according to the agreed methodology) are broadly in line

with the Commission services' autumn 2005 forecasts (see Table 2). In both cases, capital accumulation is the main contributor to growth in potential output, while total factor productivity does not contribute at all.

The update foresees an improvement in the goods and services balance, from a deficit of 8% of GDP in 2005 to 7½% in 2006. Further declines are projected in 2007 to 6% and to 4¼% in 2008. This is in contrast with the Commission services' autumn 2005 forecast, which project a deterioration in the external balance as a percent of GDP[6]. The difference is due to a weaker turnaround in exports of goods and services projected for 2006 and 2007, coupled with a higher import-content of exports projected by the Commission services' autumn 2005 forecast which is in line with historical values.

3. MEDIUM-TERM MONETARY POLICY OBJECTIVES AND THEIR RELATIONSHIP TO PRICE AND EXCHANGE RATE STABILITY

Following a pick-up in HICP inflation in 2004, mainly due to temporary factors, inflation developments in Malta were mixed during 2005. After accelerating in the first three months, inflation showed some volatility in the subsequent two quarters, peaking in August at 2½%, but falling the following month to 2%. Further significant rises were recorded in the last quarter, mainly on account of higher energy prices, with HICP inflation peaking at 4¼% in November and falling back somewhat to around 3½% in December, bringing the yearly average to 2½%. Core inflation (HIPC excluding energy and unprocessed food) remained relatively contained at an annual average of 2%, though with an increase towards the end of the year (mainly reflecting energy-induced price increases in other categories, such as water supply). The update projects inflation[7] to increase to slightly above 3% in 2006, as a result of higher international oil prices, and to decline in the following two years, reaching around 2% in 2008. This profile appears achievable, though not without risks. Upside risks relate not only to external factors such as oil prices, but also to domestic price and cost dynamics; in particular, the scenario hinges on prudent wage developments in the context of a strengthening economy.



The Central Bank of Malta continues to pursue its primary goal of price stability through a fixed exchange rate system. On 2 May 2005, the Maltese lira entered ERM II at the previous day's ECB reference rate of 0.4293 MTL/EUR. At the same time, the lira was re-pegged from a euro-dollar-sterling basket to the euro. ERM II entry was accompanied by a unilateral commitment to keep the lira/euro exchange rate at the central rate, and a commitment by the authorities to pursue sound accompanying policies, notably in the

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6 Similarly, the Commission services' autumn 2005 forecast projects a deterioration in the external balance expressed as a percent to GDP between 2005 and 2007.

7 Data provided in the update refers to the Retail Price Index, which is the official measure of inflation in Malta.

fiscal and structural fields. Malta's transition to ERM II has proceeded smoothly, and the continued commitment to exchange rate stability has served to anchor expectations and underpin financial market stability, building on Malta's long track record of a fixed exchange rate regime.

Up to April 2005, the Maltese lira recorded only small bilateral fluctuations vis-à-vis the euro in the framework of its euro-dominated basket peg, while from the time of ERM II entry, the lira has remained fully stable against the euro. Movements in the effective exchange rate have also been limited; the modest appreciation of the lira recorded during 2004 was reversed in 2005, with a slight year-on-year depreciation recorded in both nominal and real effective terms (as inflation was broadly comparable to those of trading partners).

Malta's exchange rate peg remains supported by an ample level of official reserves, which have consistently exceeded 100% of currency and central bank deposit liabilities, well above the statutory minimum of 60%. In view of adverse reserve developments in early 2005, which were seen as *inter alia* reflecting a deterioration in the domestic savings-investment balance spurred by high credit growth, the central bank raised its main policy rate by 25 basis points to 3.25% on 8 April. As reserve developments improved and the exchange rate peg continued to operate smoothly, policy interest rates were left unchanged for the remainder of the year. Spreads on Maltese money market rates vis-à-vis the euro area, which had hovered around 80-90 basis points until spring, widened in line with the interest rate hike in April, but narrowed again later in the year to around ¾ percentage point as euro area rates increased.

Long-term benchmark bond yields remained stable at some 4.7% through mid-2005 and subsequently recorded a moderate decrease to around 4.4%. This has implied some fluctuation in spreads vis-à-vis 10-year German bunds around an average of some 120 basis points, with a peak of above 140 basis points in June 2005 and a moderation to some 100 basis points towards year-end.

The update reiterates Malta's goal to enter the euro area on 1 January 2008, which is seen as particularly beneficial for a very small, open economy such as Malta. The update emphasises that this objective would be achievable based on the medium-term fiscal strategy it sets out, while also stressing the importance of structural policies to enhance competitiveness.

4. GENERAL GOVERNMENT BALANCE

This section is in four parts. The first briefly compares the targets for the general government balance in the new update with those presented in previous convergence programmes. It also discusses budgetary implementation in the year 2005. The second part describes the budgetary strategy in the new update, including the programme's medium-term objective. The third provides the analysis of the risks attached to the budgetary targets and assesses the country's position in relation to the budgetary objectives of the Treaty and the Stability and Growth Pact. The final part discusses the results of a sensitivity analysis.

4.1. Targets in successive programmes and implementation in 2005

The update projects an improvement in the general government deficit of 2¾ percentage points of GDP in nominal terms between 2005 and 2008, from almost 4% of GDP in

2005 to around 2¾% in 2006 and 1¼% at the end of the programme period (see Table 3). This adjustment path is less ambitious than that in the December 2004 update, with the divergence increasing toward the end of the programme period. However, the two updates, as well as the first convergence programme, project the correction of the general government deficit below the 3% of GDP reference value by 2006. The consolidation over the 2004-2007 period in the previous two programmes amounted to around 3¾ percentage points of GDP and was somewhat more frontloaded (see Figure 1).

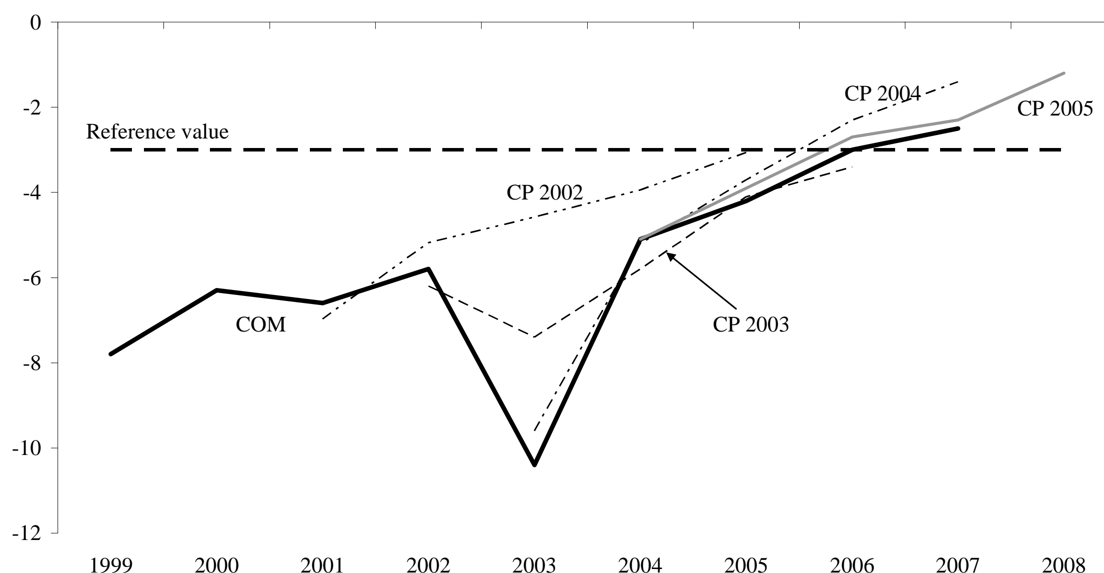
According to the update, the general government balance for 2005 is estimated at just below -4% of GDP, around ¼ of a percentage point of GDP above the target in the December 2004 update. The latter projected a marginal decline in primary expenditure that has not materialised. Instead, primary expenditure is foreseen to have increased in the current update, partly as a result of higher subsidies and social transfers, reflecting a higher-than-planned rise in pension entitlements. However, the effect of higher expenditures is partially mitigated by higher-than-expected revenues, primarily due to higher tax receipts. The update's general government deficit is in turn lower than the Commission services' autumn 2005 forecast of around 4¼% of GDP. The deviation is explained by lower expenditures projected in the programme.

Table 3: Evolution of budgetary targets in successive programmes

		2004	**2005**	**2006**	**2007**	**2008**
General government balance (% of GDP)	**CP January 2006**	**-5.1**	**-3.9**	**-2.7**	**-2.3**	**-1.2**
	CP December 2004	-5.2	-3.7	-2.3	-1.4	n.a.
	CP May 2004	*-5.2*	*-3.7*	*-2.3*	*-1.4*	*n.a*
	COM Nov 2005	-5.1	-4.2	-3.0	-2.5	n.a.
General government expenditure (% of GDP)	**CP January 2006**	**48.8**	**49.6**	**48.6**	**44.9**	**42.1**
	CP December 2004	49.9	49.7	46.8	44.3	n.a
	CP May 2004	*50.5*	*48.9*	*46.3*	*44.4*	*n.a.*
	COM Nov 2005	48.3	50.7	49.2	47.8	n.a.
General government revenues (% of GDP)	**CP January 2006**	**43.6**	**45.7**	**45.9**	**42.7**	**40.9**
	CP December 2004	44.7	45.9	44.5	42.9	n.a
	CP May 2004	*45.3*	*45.2*	*43.9*	*43.0*	*n.a.*
	COM Nov 2005	43.2	46.5	46.1	45.4	n.a.
Real GDP (% change)	**CP January 2006**	**0.2**	**0.9**	**1.1**	**1.2**	**2.0**
	CP December 2004	0.6	1.5	1.8	2.2	*n.a.*
	CP May 2004	*1.1*	*1.7*	*2.1*	*2.1*	*n.a.*
	COM Nov 2005	0.4	0.8	0.7	1.1	n.a.

Source:
Convergence programmes (CP) and Commission services' autumn 2005 economic forecasts (COM)

Figure 1: General government balance projections in successive convergence programmes (% of GDP)



<u>Source</u> : Commission services' autumn 2005 forecast (COM) and successive

Box 1: The excessive deficit procedure for Malta

On 5 July 2004 the Council decided that Malta had an excessive deficit. At the same time, the Council addressed a recommendation under Article 104(7) specifying that the excessive deficit had to be corrected by 2006. Malta was recommended to implement with vigour measures, particularly those of a structural nature, aimed at rationalising and reducing expenditure. The Council also recommended that the rise in the debt ratio is brought to a halt in 2005 and reversed thereafter.

The Commission Communication to the Council of 22 December 2004 concluded that on the basis of the measures contained in the 2005 budget, Malta appeared to have taken effective action regarding the measures to achieve the deficit targets for 2005 in response to the Council Recommendation.

4.2. The programme's medium-term budgetary strategy

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

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

The budgetary strategy outlined in the update aims at reducing the deficit to below the 3% of GDP reference value in 2006 and at pursuing fiscal consolidation over the programme period.

Table 4: Composition of the budgetary adjustment

(% of GDP)	2004	2005	2006	2007	2008	Change: 2008-2005
Revenues	43.6	45.7	45.9	42.7	40.9	**-4.8**
of which:						
- Taxes & social contributions	36.5	38.2	38.6	38.7	38.2	**0.0**
- Other (residual)	7.2	7.5	7.4	4.0	2.6	**-4.9**
Expenditure	48.8	49.6	48.6	44.9	42.1	**-7.5**
of which:						
- Primary expenditure	44.6	45.4	44.6	41.1	38.5	**-6.9**
of which:						
Collective consumption	10.5	10.9	10.7	10.4	10.3	**-0.6**
Social transfers & subsidies	15.8	16.4	16.0	15.4	15.0	**-1.4**
Gross fixed capital formation	4.5	6.6	6.1	4.5	3.0	**-3.6**
Other (residual)	13.8	11.5	11.8	10.8	10.2	**-1.3**
- Interest expenditure	4.1	4.1	4.0	3.8	3.7	**-0.4**
General government balance (GGB)	**-5.1**	**-3.9**	**-2.7**	**-2.3**	**-1.2**	**2.7**
Primary balance	**-1.0**	**0.3**	**1.4**	**1.5**	**2.4**	**2.1**
One-off and other temporary measures	0.7	1.0	1.0	0.7	0.1	
GGB excl. one-off & other temporary measures	**-5.8**	**-4.9**	**-3.7**	**-3.0**	**-1.3**	**3.6**

Source:
Convergence programme update; Commission services' calculations

The update foresees a gradual reduction in the general government deficit from just below 4% of GDP in 2005 to 1¼% in 2008 (see Table 4). The bulk of the adjustment is concentrated in 2006 and 2008, with a relatively smaller correction in 2007. The 2006 Budget Law (see Box 2) targets a deficit of 2¾% of GDP. The time profile of the primary surplus is similar, with an improvement from about ¼% in 2005 to 2½% at the end of the programme period. The primary surplus is projected at 1½% according to the 2006 Budget Law. Compared with the previous programme, the adjustment in the update is less ambitious against a broadly less favourable macroeconomic scenario.

4.2.2. The composition of the budgetary adjustment in the programme

The update envisages a decline of 2¾ percentage points of GDP in the general government deficit over the programme period. According to the 2006 Budget Law, 1¼ percentage points of this adjustment is in 2006. Consolidation is expenditure-based as the update projects a reduction of total expenditure of 7½ percentage points of GDP, with gross fixed capital formation representing almost half of this decline (around 3½ percentage points of GDP). The significantly lower public investment projections reflect the completion of major infrastructure projects, especially the *Mater Dei* hospital. Some current primary expenditures are also foreseen to decline, especially social transfers, subsidies and other items. The fall in expenditure is partially offset by a decline of around 4¾ percentage points of GDP in revenues due to lower inflows from the Italian Financial Protocol[8] and EU Funds[9]. Deficit targets in the update include one-off revenues

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[8] Co-operation agreement signed between Italy and Malta providing grants to finance public projects in Malta.

[9] The update assumes that EU funds for projects initiated in 2007 and 2008 will be low in these years, with the bulk of inflows registered in subsequent years.

(sale of immovable property) of ¾% to 1% of GDP per year until 2007. Net of such one-offs, the general government deficit would attain 3¾% of GDP in 2006 and 3% in 2007.

Box 2: The budget for 2006

The budget for 2006 was presented on 31 October 2005 and was approved by Parliament on 18 November 2005. The budget targets a general government deficit of 2¾% of GDP in 2006. The Budget Law states that the projected deficit targets for the period 2006-2008 represent a revision on those included in the 2004 update convergence programme so as to reflect better present economic conditions, particularly the effect of oil prices on government expenditure.

On the revenue side, the main measures consist of a reform of taxes on transfers of immovable property. Under the new tax, acquired and certain classes of inherited property will be taxed at a flat rate of 12% of the sale value, replacing the previous 35% capital gains tax. The Maltese Government also announced the establishment of a national commission entrusted with assessing and recommending by mid-2006 a review of the current tax framework so as to make it more conducive to growth and employment. Particular attention will be devoted to improvements in the tax framework in terms of incentives to small enterprises and to research and development and by streamlining tax laws to remove excessive administrative burden.

On the expenditure side, the budget provides for new and additional funds to specific programmes aimed at supporting industry and other emerging sectors of the economy. Moreover, the budget plans higher spending on the upgrading of the infrastructure, education and environment. On the other hand, the budget plans expenditure cuts by reducing subsidies, taking additional steps to curb tax evasion and social benefit abuse as well as further restructuring of government entities.

4.2.3. The programme's medium-term objective (MTO) and the adjustment path in structural terms

According to the Stability and Growth Pact, stability and convergence programmes should present a medium-term objective (MTO) for the budgetary position. The MTO should be differentiated for individual Member States, to take into account the diversity of economic and budgetary positions and developments as well as of fiscal risk to the sustainability of public finances. The country-specific MTO is defined in structural terms (i.e. cyclically-adjusted, net of one-off and other temporary measures) and should fulfil a triple aim, namely (i) provide a safety margin with respect to the 3% of GDP deficit limit; (ii) ensure rapid progress towards sustainability; and (iii), taking (i) and (ii) into account, allow room for budgetary manoeuvre, considering in particular the needs for public investment. The code of conduct (Section I thereof) further specifies that, as long as the methodology for incorporating implicit liabilities is not fully developed and agreed by the Council, the country-specific MTOs are set taking into account the current government debt ratio and potential growth (in a long-term perspective), while preserving a sufficient margin against breaching the deficit reference value of 3% of GDP. Member States are free to set an MTO that is more demanding than strictly required to achieve the triple aim of MTOs.

The update sets an MTO of balanced budget over the cycle, which it aims to achieve by 2008. Based on Commission services' calculations on the basis of the programme

according to the commonly agreed methodology, the structural balance would improve from approximately -4% of GDP in 2005 to reach the programme's MTO by the end of the programme period. The structural balance is planned to improve on average by slightly more than 1 percentage points of GDP per year, with some moderate frontloading in 2006, against a background of unfavourable cyclical conditions as measured by a strongly negative output gap (see Table 5).

Table 5: Output gaps, cyclically-adjusted and structural balances

% of GDP	2004		2005		2006		2007		2008	Change: 2008-2005
	COM	CP[1]	COM	CP[1]	COM	CP[1]	COM	CP[1]	CP[1]	CP[1]
Gen. gov't balance	-5.1	-5.1	-4.2	-3.9	-3.0	-2.7	-2.5	-2.3	-1.2	2.7
One-offs[2]	0.7	0.7	1.0	1.0	1.0	1.0	0.7	0.7	0.1	-
Output gap[3]	-2.0	-1.8	-3.1	-2.9	-4.3	-3.7	-5.1	-4.2	-4.4	-
CAB[4]	-4.3	-4.4	-3.0	-2.8	-1.4	-1.3	-0.5	-0.7	0.4	3.2
change in CAB			1.3	1.6	1.6	1.5	0.9	0.6	1.1	-
CAPB[4]	-0.2	-0.3	1.5	1.3	3.1	2.7	4.0	3.1	4.1	2.8
Structural balance[5]	-5.0	-5.1	-4.0	-3.8	-2.4	-2.3	-1.2	-1.4	0.3	4.1
change in struct. bal.			1.0	1.3	1.6	1.5	1.2	0.9	1.3	-
Struct. prim. bal.[6]	-0.9	-1.0	0.5	0.3	2.1	2.4	3.3	2.4	4.0	3.7

Notes:
[1]Output gaps and cyclical adjustment according to the convergence programme (CP) as recalculated by Commission services on the basis of the information in the programme
[2]One-off and other temporary measures
[3]In percent of potential GDP. See Table 1 above.
[4]CAB = cyclically-adjusted balance; CAPB = cyclically-adjusted primary balance.
[5]CAB excluding one-off and other temporary measures
[6]Structural primary balance = CAPB excluding one-off and other temporary measures

Source:
Commission services' autumn 2005 economic forecasts (COM); Commission services' calculations

4.3. Assessment

This assessment is in three parts. The first assesses the appropriateness of the programme's medium-term objective. The second analyses risks attached to the budgetary targets and the third examines whether the budgetary strategy laid down in the programme is consistent with the budgetary objectives of the Treaty and the Stability and Growth Pact.

4.3.1. Appropriateness of the programme's medium-term objective

As the programme's MTO (a balanced budget) is more demanding than the minimum benchmark (estimated at a deficit of around 1¾% of GDP), its achievement should fulfil the aim of providing a safety margin against the occurrence of an excessive deficit.

The programme's MTO is at an appropriate level because it lies within the range indicated for euro area and ERM II Member States in the Stability and Growth Pact and the code of conduct and adequately reflects the debt ratio and average potential output growth in the long term.

4.3.2. Risks attached to the budgetary targets

The balance of risks attached to the budgetary targets outlined in the programme includes a downside risk to the macroeconomic scenario in 2006, when real GDP growth may turn out lower than expected. Furthermore, although the update spells out the budget targets

and the composition of the adjustment over the programme period, the policy measures underpinning the consolidation process are not disclosed for 2007 and 2008.

Changes in the tax-to-GDP ratio envisaged in the programme are somewhat different from those in the Commission services' autumn 2005 forecast for 2006-2007 (see Table 6). For 2006, the update foresees a lower increase in the tax ratio (¾ percentage points of GDP in the Commission services' forecast, compared to ½ percentage points in the update). This is explained almost equally by the assumed composition of aggregate demand (Commission services' forecast projects a higher contribution of domestic demand in GDP growth than the programme) and different assumptions underlying the estimated yield of discretionary measures on which the update does not provide sufficient information[10]. Although, the update foresees higher revenue from indirect taxes in 2006 than in the Commission services' autumn 2005 forecast, projections for total revenues in that year are comparable. For 2007, the difference between the Commission forecasts and the update should mainly be due to discretionary measures on which no information is provided in the programme. For 2008, the assumptions used in the update imply an elasticity which is somewhat below the OECD ex-ante tax elasticity, thus suggesting relatively cautious assumptions on tax revenue in the programme. All in all, the budgetary outcomes in 2006 could be slightly worse than projected in the programme.

Table 6: Assessment of tax projections

	2006		2007		2008	p.m.:
	COM	**CP**	**COM[2]**	**CP**	**CP**	**OECD[1]**
Total taxes						
Change in tax-to-GDP ratio	0.7	0.4	-0.3	0.1	0.0	/
Difference	-0.2		0.4		/	/
of which[3]: - elasticity component	-0.7		0.5		/	/
- composition component	0.6		-0.1		/	/
p.m. Observed elasticity to GDP	1.6	1.3	0.7	1.1	0.7	1.04

Notes:
[1]OECD ex-ante elasticity relative to GDP
[2]On a no-policy change basis
[3]The decomposition is explained in Annex 4

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

4.3.3. Compliance with the budgetary requirements of the Treaty and the Stability and Growth Pact

The programme confirms the correction of the excessive deficit in 2006 as specified by the Council in its recommendation under Article 104(7). However, taking into account

[10] The difference in the change in tax-to-GDP ratio for 2006 is due to the Commission services' autumn 2005 forecast prudent assumptions underlying developments in the specific tax categories. In the case of taxes on production and imports, the Commission services autumn 2005 forecast assumes a lower increase in the tax ratio compared to the programme since the information provided in the update does not seem to justify a higher yield from this component. The update envisages a decline in the change in tax to GDP ratio for social contributions, personal income tax and corporate income tax, whereas the Commission services' autumn 2005 forecast projects a slight increase in 2006, reflecting historic values. The reasons presented in the programme for the decline in these tax categories appear insufficient to warrant a reversal in recent trends.

the balance of risks to the budgetary targets the budgetary outturn could be worse than planned, particularly in 2006 if the favourable growth scenario does not materialise. Assuming that the 2006 budget is fully implemented and the macroeconomic risks are duly addressed, the budgetary stance in the programme seems consistent with a correction of the excessive deficit by the deadline indicated by the Council.

The budgetary strategy outlined in the programme seems sufficient to ensure that the programme's MTO will be almost reached by 2008. Since the cyclically-adjusted budget balance as recalculated by the Commission services on the basis of the programme and according to the commonly agreed methodology is estimated at -1½% of GDP in 2007, the year following the planned correction of the excessive deficit, a safety margin against breaching the 3% of GDP deficit limit should be provided from that year onwards.

As for the adjustment path towards reaching the MTO, the update foresees that after the correction of the excessive deficit in 2006, the annual improvement in the structural balance will on average amount to around 1 percentage point of GDP until 2008. The adjustment is above the 0.5% of GDP benchmark set in the Stability and Growth Pact and is, in broad terms, evenly spread over the programme's horizon.

The adjustment path for the general government balance outlined in the programme is broadly consistent with the broad economic policy guidelines in the area of public finances as it anticipates the correction of the excessive deficit by the deadline set out in the Council's recommendations (see also Annex 3).

Table 7: Assessment of tax elasticities

	2006		**2007**	
	COM (observed)	**ex-ante**[1]	**COM**[2] **(observed)**	**ex-ante**[1]
Total taxes Change in tax-to-GDP ratio	0.7	0.3	-0.3	0.3
Difference	0.4		-0.6	
of which[3]*: - elasticity component*	1.2		-0.6	
- composition component	-0.2		0.4	
p.m.: Elasticity to GDP	1.6	1.0	0.7	1.0

Notes:
[1]Tax projections obtained by applying ex-ante standard tax elasticities estimated by the OECD
[2]On a no-policy change basis
[3]The decomposition is explained in Annex 4

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

4.4. Sensitivity analysis

The update presents sensitivity analyses for GDP, the nominal budget balance and government debt as a result of shocks in interest rate, external demand and economic growth. However, the programme does not provide an analysis of the behaviour of revenues and expenditures to variations in these variables (as required by the new code of conduct). If interest rates would increase by 1 percentage point between 2005 and 2008, then GDP growth would decline marginally by 0.1 percentage points in 2005 with no effect thereafter. The general government balance is estimated to worsen by around 0.3 percentage points of GDP by the end of the programme period. A percentage point increase in external demand in the first year and throughout the programme period is

expected to lead to a higher GDP growth by ½ a percentage point by 2008 compared with the reference scenario. The update also reports improvements in the general government balance by around ½ a percentage point by 2008. Finally, according to the update, a percentage point increase in GDP growth has no effect on the baseline budget balance by the end of the programme horizon[11].

Commission services' simulations of the cyclically-adjusted balance under the assumptions of (i) a sustained 0.5 percentage point deviation from the real GDP growth projections in the programme over the 2005-2008 period; (ii) trend output based on the HP-filter[12] and (iii) no policy response (notably, the expenditure level is as in the central scenario[13]), reveal that, by 2008, the cyclically-adjusted balance is ¾ of a percentage point of GDP above/below the central scenario. Hence, in the case of persistently lower real growth, additional measures of around ½ a percentage point of GDP would be necessary to keep the public finances on the path targeted in the central scenario.[14]

5. GENERAL GOVERNMENT GROSS DEBT

This section is in two parts: the first describes the debt path envisaged in the programme and the second contains the assessment.

5.1. Debt developments in the programme

According to the update, the rising path followed by the debt-to-GDP ratio in the recent past is projected to be reversed in 2006 (see Table 8). Specifically, the debt ratio is projected to fall by almost 9½ percentage points of GDP over the programme period, to 67¼% in 2008. In 2005, the debt ratio is expected to remain unchanged at 76¾% of GDP vis-à-vis the previous year. This represents a departure from the previous programme, which had anticipated a decline of slightly more than 1 percentage point. The upward revision is mostly due to lower than-expected nominal GDP growth. The projected decline in the gross debt ratio until 2008 is front-loaded in 2006, when debt is envisaged to be reduced by around 6 percentage points of GDP, thanks to privatisation proceeds amounting to around 7% of GDP. Should this privatisation plan be unsuccessfully implemented the debt ratio would increase by 1 percentage points in 2006. The primary surplus, which progressively improves during the programme horizon, is another important contributor to the reduction accounting for almost all the decline projected for 2007 and 2008.

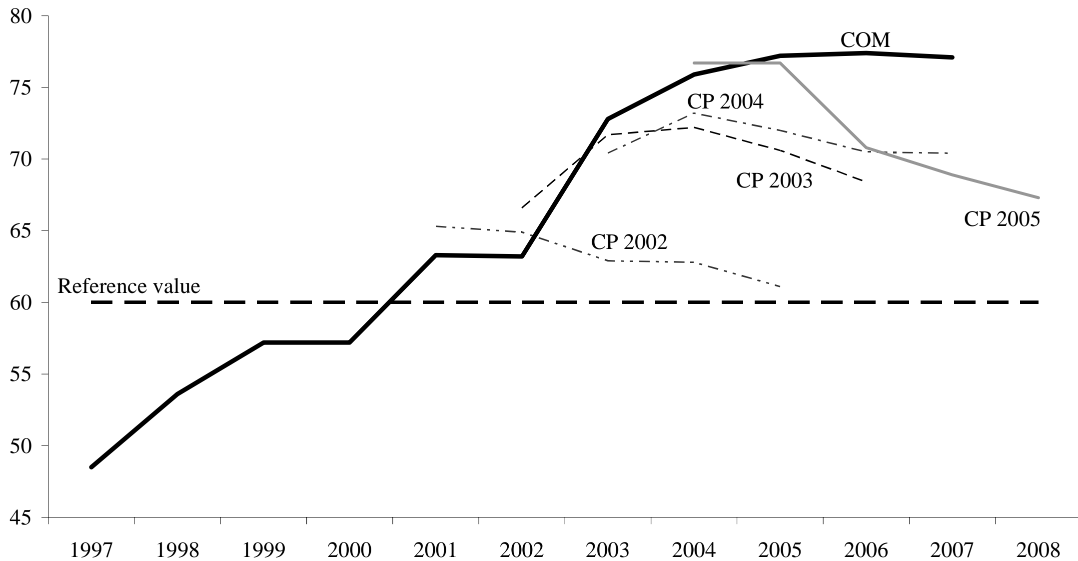
[11] The method employed in the programme to shock GDP is achieved through an increase in private sector investment which although leads to higher domestic demand, is partially offset by leakages resulting from higher imports.

[12] In the absence of a fully-specified macroeconomic scenario that would underlie such deviations, it is obviously impossible to derive new estimates of potential growth from the agreed production function method.

[13] The effect of lower/higher growth on revenues is captured by using the conventional sensitivity parameters adopted in cyclical adjustment procedures.

[14] Unexpected changes in inflation are not assumed to affect the expenditure-to-GDP ratio as nominal expenditure should broadly move in lockstep with the price level.

Figure 2: Debt projections in successive convergence programmes (% of GDP)



Source : Commission services' autumn 2005 forecast (COM) and successive convergence

Table 8: Debt dynamics

	average 2000-2004	2005		2006		2007		2008
	COM	COM	CP	COM	CP	COM	CP	CP
Government gross debt ratio	68.9	77.2	76.7	77.4	70.8	77.1	68.9	67.3
Change in debt ratio (1 = 2+3+4)	4.7	1.4	0.8	0.2	-5.9	-0.3	-1.9	-1.6
Contributions:								
- **Primary balance** (2)	3.0	-0.2	-0.2	-1.3	-1.3	-1.9	-1.5	-2.5
- **"Snow-ball" effect** (3)	2.2	2.4	2.0	1.7	1.1	1.8	1.1	1.0
- Interest expenditure	3.9	4.4	4.1	4.4	4.0	4.3	3.8	3.7
- Real GDP growth	0.1	-0.6	-0.7	-0.5	-0.8	-0.8	-0.8	-1.3
- Inflation (GDP deflator)	-1.8	-1.4	-1.4	-2.1	-2.1	-1.7	-1.9	-1.3
- **Stock-flow adjustment** (4)	-0.6	-0.9	-1.0	-0.2	-5.7	-0.2	-1.5	-0.1
- Cash/accruals	-0.3							
- Accumulation of financial	0.3							
assets	-0.6	1.1	0.9	0.0	6.9	0.0	0.0	0.0
of which: Privatisation proceeds	-0.6							
- Valuation effects & residual adj.								

Note:

The change in the gross debt ratio can be decomposed as follows:

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

where t is a time subscript; D, PD, Y and SF are the stock of government debt, the primary deficit, nominal GDP and the stock-flow adjustment respectively, and i and y represent the average cost of debt and nominal GDP growth. The term in parentheses represents the "snow-ball" effect.

Source:

Convergence programme update (CP); Commission services' autumn 2005 economic forecasts (COM); Commission services' calculations

5.2. Assessment

The downward path of the debt ratio envisaged in the programme differs markedly from that projected by the Commission services' autumn 2005 forecast according to which debt is expected to increase by 1½ percentage points to 77½% of GDP in 2005 and to remain practically unchanged until 2007. The difference with respect to the update's projections for 2005 is explained by divergences in interest expenditure, which seem to have turned out lower than expected in autumn 2005. In 2006 and 2007 the divergence is mainly accounted for by different assumptions on the stock-flow adjustment, especially privatisation which differs from the Commission services' autumn 2005 forecast which is based on a no-policy change scenario.

A number of risks are associated with the evolution of the debt as projected by the update. While the exchange rate risk is insignificant and the debt's long-term structure and medium-term maturity profile reduce exposure to interest rate risk, downside risks encompass lower-than-projected primary surpluses (specifically in view of the higher deficit projections in the Commission services' autumn 2005 forecast) and lower-than-expected GDP growth. Given the importance of privatisation in the reduction of the debt ratio in 2006, implementation risks surrounding privatisation need to be highlighted, namely: (i) the current policy which favours the sale of assets only when the market provides optimal conditions; (ii) the notoriously long gestation period experienced in past privatisation episodes; and (iii) the resistance shown by vested interests to privatisation. Additionally, unexplained below-the-line operations partially offset privatisation receipts by 1¼ percentage points in 2006.

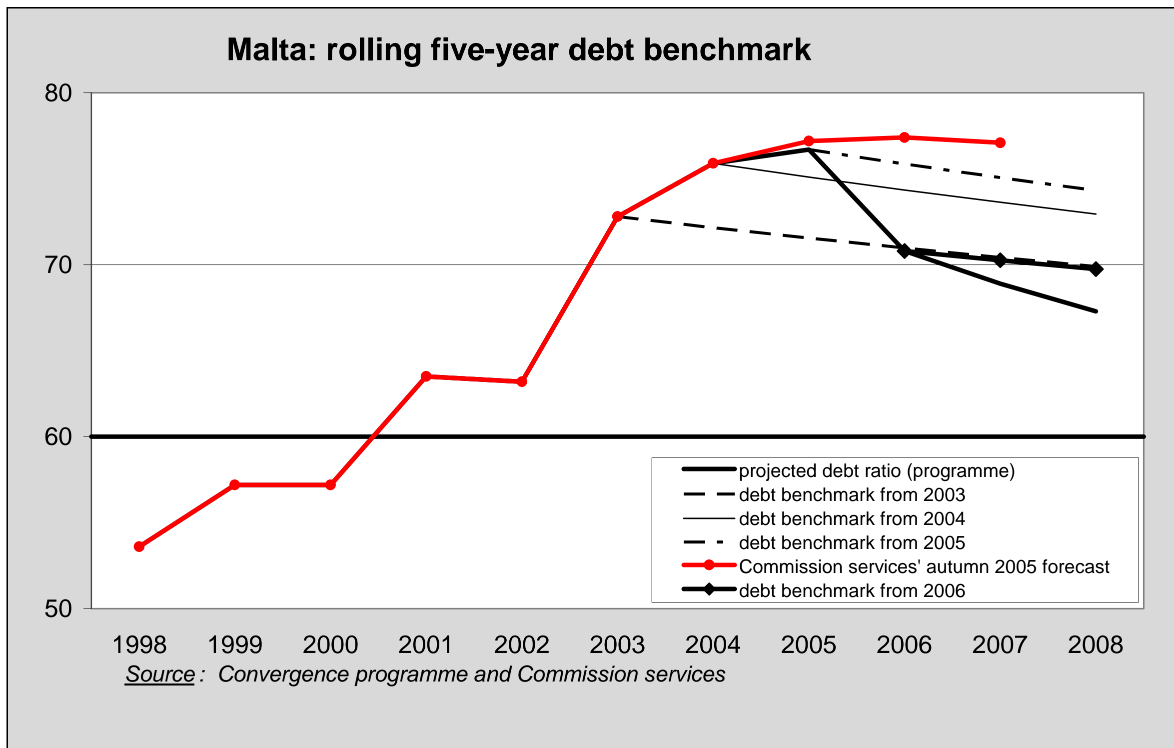
The programme confirms that the debt ratio will be sufficiently diminishing between 2005 and 2008 as specified by the Council in its recommendation under Article 104(7). However, bearing in mind the risks set out above, outcomes may be worse than anticipated. The debt reduction strategy as outlined in the update is broadly consistent with the broad economic policy guidelines in the area of public finances.

Box 3: The rolling debt reduction benchmark

The debt ratio has been exceeding the 60% of GDP reference value since 2001. Malta has entered the EU with a debt ratio in excess of 60% of GDP.

A tentative assessment of the pace of debt reduction over a medium-term horizon is presented in the accompanying graph. It shows historical data, the Commission services' autumn 2005 forecasts until 2007 (which are on a no-policy change scenario) and the multi-annual debt projections in the update and compares them with the paths obtained by applying an illustrative "rolling debt reduction benchmark" (see Annex 5). The benchmark reflects the idea that a minimum debt reduction should be ensured not year after year but over a medium-term horizon (five years in the graph). For instance, the debt projection for 2005 is compared with the value obtained for the same year by applying the formula starting in 2000. Debt level projections in the programme exceeding those obtained by applying the benchmark are taken as an indicator of a slow reduction in the debt ratio.

The graph clearly shows that the planned reduction of the debt ratio in the update is more than implied by the five-year rolling debt reduction benchmark.



6. Structural reform, the quality of public finances and institutional features

In line with what was announced in the 2006 Budget Law, the update outlines a number of measures, estimated to cost ¾ of a percentage point of GDP in 2006, particularly intended to enhance economic growth. These measures mostly consist of incentives to industry, tourism and education and would aim at strengthening the economy's competitiveness. The programme fails to provide projections of the budgetary implications of measures planned for 2007 and 2008. It is nevertheless noteworthy that the update's budgetary adjustment is largely dependent on a reduction in capital expenditure over the programme's period, which might be at odds with the need for enhancing potential growth in Malta.

Privatisation has taken an increasing role in Malta's economic strategy with important economic and budgetary results (see Box 4). The update presents an overview of the next steps in the privatisation process, specifically for 2006. Receipts from privatisation are expected to amount to around 7% of GDP this year, substantially higher than the amounts raised in recent years. The most important entities earmarked for privatisation include a commercial bank and the national telecommunications company.

Box 4: Privatisation in Malta: Growth-enhancing or just debt-reducing?

Privatisation is an important instrument in the policymakers' structural adjustment toolbox since it releases resources held-up by the public to the private sector, in the process enhancing economic efficiency. Besides potential efficiency gains, privatisation affects fiscal performance. Specifically, it enables governments to reduce the budget deficit through lower subsidies and other transfers to public enterprises. The proceeds from privatisation may also be employed to reduce public debt which, in turn, will positively affect the budget through lower interest expenditure.

Public enterprises in Malta consist of public corporations and state-owned enterprises which operate in various activities including communications, banking, transport and shipyards. Privatisation in Malta has moved at varying speeds and two distinct phases can be identified. In the first phase, running from the late 1980s to mid-1990s, government's objective was to sell off or liquidate a number of (small mostly manufacturing) enterprises, while shares in other public enterprises operating in services activities (banking and communications) were partly sold to the general public. In the second phase, starting from the late 1990's, privatisation underwent a major shift of focus. High-quality assets were now the main target, while the involvement of strategic partners was being sought, thereby ensuring that transactions transcend financial considerations. Government's stated objective of privatisation in the latter phase was broadened to include enhancing the long-term performance of the economy.

The success in achieving the twin goals of enhancing efficiency and fiscal performance can be illustrated by looking at the banking sector which offers a relevant study-case given its important spill-over effects over the whole economy. In 1999, Mid-Med Bank a major local bank was privatised to an established international financial player, in the process transforming the market in important ways. A look at the sector's performance indicators, such as profitability per employee, capital adequacy and liquidity ratio, shows that the privatisation yielded significant benefits in terms of productivity and the improved resilience of the sector. After an increase in the year following privatisation, employment in the banking sector declined. The sector underwent substantial restructuring as competition in the market intensified and, spurred by the inward transfer of knowledge, a number of innovative products and delivery channels were introduced by banks. Post-privatisation profitability also reported significant improvements almost increasing threefold in 5 years, albeit effected by the economic slowdown.

The second privatisation phase came in the wake of deteriorating public finances. In principle, privatisation should lead to improvements in the primary balance by way of lower subsidies and other transfers which flow out from the budget to public enterprises. Since 1999, improvements in the government primary balance-to-GDP ratio were generally concentrated in the year when privatisation occurred but deteriorated thereafter which seems to suggest that privatisation had a marginal impact on current budgetary operations. More significant was the impact of privatisation on government debt. Since 1999, developments of the general government debt ratio have been influenced by privatisation receipts. In particular, proceeds from privatisation in 1999, which amounted to around 4¾% of GDP, dampened the impact of the relatively high general government deficit of 8% of GDP on debt which increased by about 3½% of GDP.

Overall, Malta's recent experience has shown that privatisation represents a valid policy tool which may contribute to efficiency gains while supporting public finances. It appears that Malta has been more successful in achieving the stated objective of enhancing efficiency through privatisation and less so in applying it to buttress fiscal performance.

The privatisation of the entities earmarked in the convergence programme should further strengthen the results achieved in recent years in the banking sector, by containing government's role to the regulatory function and similarly in the telecommunication sector, by consolidating the important achievements registered in this sector recognised as being central to economic competitiveness. Therefore, if fully implemented, the current privatisation plans could have a positive impact on the economy's efficiency and potential growth.

The update outlines the reform of the mechanism for the determination of electricity and water charges to consumers. Following the reform, which came into effect in November 2005, the previously administered utility prices fluctuate according to current underlying market conditions. The costs incurred as a result of changes in the international price of fuels will henceforth be borne by the private sector. The mechanism provides for a two-year adjustment period during which energy charges will be gradually brought in line with prevailing international oil prices. As a result, the burden falling on the state energy

provider from higher international oil prices is being contained to around half the estimated increase in cost, thereby mitigating the effect on public finances.

The update outlines the latest steps in the reform of the pensions system. In particular, the programme states that following the feedback from the public consultation process on the Pensions White Paper, the Pensions Working Group presented its final recommendations to government. It is expected that government will announce its decision on the recommendations in due course, paving the way for the implementation of the pension reform.

The measures outlined in the programme are broadly consistent with the broad economic policy guidelines (BEPG's) in the area of public finances. Although the update foresees the correction of the excessive deficit and the reduction of the debt ratio at a satisfactory pace in line with the Council's recommendations, it does not announce implementation measures to address the problem of the long-term sustainability.

Malta's National Reform Programme (NRP), submitted on 21 October 2005, identifies the following challenges with varying implications for public finances: sustainability of public finances; competitiveness; environment; employment; and education and training with the overall aim being to enhance growth and jobs. Although not explicitly stated, the programme reflects the budgetary implications of the actions outlined in the NRP. The update partially includes measures in the area of public finance sustainability foreseen in the NRP. Specifically, the programme confirms the intention to pursue reforms to enhance the efficiency of the public sector, improve tax compliance, continue privatisation and provide support for the training of the labour force.

7. THE SUSTAINABILITY OF THE PUBLIC FINANCES

The assessment of the sustainability of Malta's public finances is based on an overall judgement of the results of quantitative indicators and qualitative features. The debt projections and sustainability indicators are calculated according to two different scenarios, to take into account different budgetary developments over the medium term. The "programme" scenario assumes that the medium-term budgetary plans set up in the programme are actually achieved. The "2005" scenario assumes that the structural primary balance[15] remains unchanged at the 2005 level throughout the programme period.

The long-term projections in the programme have been made by using the agreed assumptions in the current Economic Policy Committee projections. On the basis of information in the programme, age-related expenditure is foreseen to fall by 1.8% of GDP between 2008 and 2050, to which pension expenditures contribute with a decline of 1.4% of GDP (see Table A2 in the Annex). The Commission's analysis is based on the set of government expenditure items covered by the common projections carried out by the Economic Policy Committee[16]. In addition to these expenditure items, the update includes a projected fall in the pension contributions-to-GDP ratio.

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[15] The primary balance where the effect of the cycle and any one-off or temporary measures have been netted out.

[16] Namely, government expenditure on pension, health-care, long-term care, education and unemployment benefits.

The gross debt-to-GDP ratio is currently above the 60% of GDP reference value, at 76.7% of GPD in 2004. In the '2005' scenario, it is projected to remain above the reference value throughout the projection period up to 2050. However, in the 'programme' scenario it is projected to fall below 60%. (see Table A4 in the Annex 6)[17].

According to both sustainability gaps, the impact of ageing is limited, in particular, thanks to the specific design of the Maltese pension system: individual pensions are based on earnings but is subject to a ceiling which is indexed to an index that rises slower than prices. Given the increasing number of pensioners reaching the ceiling, total pension expenditure falls by 3.3% of GDP between 2020 and 2050 according to the update (see the Box 5 below).

Despite this unusual development of pension expenditure as a share of GDP in the face of a rising dependency ratio, a sustainability gap of around ½% of GDP emerges according to the S1 indicator in the '2005' scenario. The sustainability gap (S2) would be negligible. This reflects the weak initial budgetary position, namely the low structural primary budget balance and the relatively high gross debt-to-GDP ratio. As a result of the projected fall in age-related expenditures as a share of GDP, there is no future budgetary impact of ageing. In the 'programme' scenario, which assumes that the budgetary consolidation over the medium-term is achieved, there is no sustainability gap regardless of whether the S1 or S2 indicator is considered. The S2 indicator translates into a required primary balance (RPB) of about -1% of GDP, lower than the structural primary balance of 4% of GDP at the last year of the programme period[18].

In interpreting these results, several factors need to be taken into account.

In the case of Malta, it should be noted that the output gap is estimated to be negative by almost 3 percentage points of GDP in 2005 and that this negative output gap is estimated to widen to 4.4 percentage points of GDP in 2008. The cyclical impact on the budget balance is therefore very significant, at 1.6 percentage points of GDP in 2008. This reduces the sustainability gaps by approximately the same amount in the 'programme' scenario.

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[17] It should be recalled that, being a mechanical, partial equilibrium analysis, projections are in some cases bound to show highly accentuated profiles. As a consequence, the projected evolution of debt levels should not be seen as a forecast.

[18] Given that there is no, or a small, sustainability gap for Malta in the period up to 2050, there is no cost of a five-year delay in adjusting the budgetary position according to the S1 and S2 (see the sensitivity test in Table A3 in the Annex)

Table 9: Sustainability indicators and the required primary balance

	Sustainability indicators and RPB					
	2005 Scenario			Programme scenario		
	S1	S2	RPB	S1	S2	RPB
Value (of which)	**0.4**	**-0.7**	**-0.9**	**-3.6**	**-4.5**	**-1.0**
initial budgetary position	*0.0*	*0.4*		*-3.8*	*-3.4*	
debt requirement in 2050	*0.4*	*:*		*0.2*	*:*	
future changes in budgetary position	*0.0*	*-1.1*		*0.0*	*-1.1*	

Note: The S1 indicator shows the difference, the sustainability gap, between the constant revenue ratio as a share of GDP required to reach a debt ratio in 2050 of 60% of GDP and the current revenue ratio. The S2 indicator, which shows the difference, the sustainability gap, between the constant revenue ratio as a share of GDP that guarantees the respect of the inter-temporal budget constraint of the government, i.e. that equates the actualized flow of revenues and expenses over an infinite horizon, and the current revenue ratio[19]. The Required Primary Balance (RPB) measures the average primary balance over the first five years of the projection period that results from a permanent budgetary adjustment carried out to comply fully with the inter-temporal budget constraint. See European Commission ((2005), European Economy, 'Public finances in EMU – 2005, Section II.3 for a further description.

The underlying assumptions used when making the long-term projections are those commonly agreed and used by the EPC in the current common projections exercise (See Table A1 in the Annex). Overall, the underlying assumptions in the programme can therefore be considered to be plausible.

Box 5: The Maltese current pension system: ceilings on pension disbursements and contributions

As noted above, the apparently favourable results according to the sustainability indicators hinges crucially upon a very strict application of an 'unchanged legislation' approach. Indeed, under current legislation, pensions are indexed to wage growth but are also subject to a maximum which grows in line with the Cost Of Living Adjustment (COLA), which in turn increases slower than the inflation rate. This implies a very slow growth of individual pensions such that pension expenditure will fall as a share of GDP after 2020 despite an increasing number of pensioners.

Moreover, the current pension system contains a similar ceiling on income which is subject to pension contributions. Currently, this ceiling is 33% higher than the average wage and increases with the COLA index. Given that real wages will grow in line with productivity, average wages will increase more rapidly than the ceiling. As more wages approach the ceiling, the share of wages subject to pension contributions will decrease relative to GDP. As a result, the revenue of the pension schemes will decrease as a share of GDP over the projection period.

As a consequence, despite the profile of pension expenditure, the pension system will show an increasing deficit, reaching 5% of GDP in 2020 and improving somewhat thereafter to a deficit of around 4% of GDP.

Indeed, if the projected changes in pension contributions as a share of GDP is taken into account, in line with the current legislation in place, a different picture emerges The gross debt-to-GDP ratio remains close to 60% of GDP throughout the period up to 2050 in the 'programme' scenario

[19] The sustainability gap indicators (S1, S2) do not necessarily suggest that taxes should be increased; strengthening the fiscal position by permanently reducing the level of non-age related primary spending could be preferable and has the same impact.

and rises strongly in the ’2005’ scenario. Moreover, the S1 and S2 indicators show a sustainability gap of around 2½% of GDP in the ’2005’ scenario. This suggests that current settings of the pension scheme are not financially sustainable.

Following the government’s White Paper ‘Pensions Adequate and Sustainable’, released in November 2004, the Pensions Working Group proposed a wide range of reform options in their June 2005 report with regard to improving the Maltese pension system. The report reaches the conclusion that the option of ’no reform’ is not a solution. An eventual reform needs to ensure both adequacy and sustainability of the pension system and the update notes that the government envisages to communicate its decisions in the near future and then enter the implementation phase of the reform. Indeed, the projected pension expenditure developments in the update indicate an unsustainable pension system.

Overall assessment

With regard to the sustainability of public finances, Malta appears to be at medium risk on grounds of the projected budgetary costs of ageing populations. The level of gross debt is currently above the 60% reference value and the currently high structural deficit, if unchanged, will prevent the necessary reduction of the gross debt ratio from falling below the Treaty reference value over the long term. Implementing rigorously the planned budgetary consolidation over the programme period would therefore contribute to reduce debt below the reference value, with positive consequences for risks to public finance sustainability. Changes to the pension system are envisaged by the Maltese authorities, aiming at ensuring adequacy and sustainability of the pension system. The implementation of the reform would be key in ensuring the financial sustainability of the public pension system.

* * *

Annex 1: Summary tables from the convergence programme update

Table 1a. Macroeconomic prospects

	ESA Code	2004(1)	2004	2005(2)	2006	2007	2008
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
1. Real GDP	B1*g	1,651.5	0.2	0.9	1.1	1.2	2.0
2. Nominal GDP	B1*g	1,828.0	2.0	3.9	3.9	3.9	4.0
Components of real GDP							
3. Private consumption expenditure(3)	P.3	1,073.1	-0.7	-0.9	-0.2	0.6	1.0
4. Government consumption expenditure	P.3	352.2	0.7	-1.3	-0.7	0.4	0.6
5. Gross fixed capital formation	P.51	348.4	4.4	11.3	3.3	-3.8	-1.4
6. Changes in inventories and net acquisition of valuables (% of GDP)	P.52 + P.53	-	1.1	1.2	1.2	1.3	1.4
7. Exports of goods and services	P.6	1,560.3	0.3	-4.3	2.1	3.4	4.1
8. Imports of goods and services	P.7	1,700.8	2.2	-3.2	1.2	1.6	2.5
Contributors to real GDP							
9. Final domestic demand		-	0.6	2.1	0.5	-0.4	0.5
10. Changes in inventories and net acquisition of valuables	P.52 + P.53	-	1.6	1.7	0.0	0.1	0.2
11. External balance of goods and services	B.11	-	-2.0	-2.7	0.6	1.5	1.3

(1) Lm million
(2) Forecasts from 2005 onwards
(3) Includes NPISH final consumption expenditure

Table 1b. Price developments

	ESA Code	2004(1)	2004	2005(2)	2006	2007	2008
		level	rate of change	rate of change	rate of change	rate of change	rate of change
1. GDP deflator		110.7	1.8	3.0	2.7	2.7	2.0
2. Private consumption deflator		107.5	3.4	3.4	3.1	3.1	1.9
3. RPI(3)		103.6(4)	2.8	2.8	3.1	2.5	1.9
4. Public consumption deflator		117.0	3.4	1.5	2.6	2.5	1.7
5. Investment deflator		107.1	1.2	2.9	2.9	1.4	1.3
6. Export price deflator (goods and services)		88.8	-4.4	1.8	2.1	1.0	0.1
7. Import price deflator (goods and services)		89.6	-2.2	1.9	2.3	0.7	-0.5

(1) Index (base 2000 unless otherwise indicated)
(2) Forecasts from 2005 onwards
(3) Optional for Stability programmes
(4) Index (base December 2002)

Table 1c. Labour market developments

	ESA Code	2004 Level	2004 rate of change	2005(1) rate of change	2006 rate of change	2007 rate of change	2008 rate of change
1. Employment, persons		137.1(2)	0.3	0.3	0.9	1.0	1.1
2. Employment, hours worked[3]							
3. Unemployment rate (%)			5.6	5.1	4.9	4.7	4.7
4. Labour productivity, persons[4]		12,045.0	-0.1	0.6	0.2	0.2	0.8
5. Labour productivity, hours worked[5]							
6. Compensation of employees	D.1	1.0	3.0	4.0	4.0	4.0	3.8

(1) Forecasts from 2005 onwards

(2) Thousands

(3) National accounts definition (millions of hours)

(4) Real GDP per person employed.

(5) Real GDP per hour worked (euros).

Table 1d. Sectoral balances

% of GDP	ESA Code	2004	2005	2006	2007	2008
1. Net lending/borrowing vis-à-vis the rest of the world	B.9	-8.6			optional	optional
of which: - Balance on goods and services		-7.6	-8.0	-7.6	-6.0	-4.3
- Balance of primary incomes and transfers		-2.7				
- Capital account		1.6				
2. Net lending/borrowing of the private sector	B.9/ EDP B.9	-3.5				
3. Net lending/borrowing of general government	B.9	-5.1	-3.9	-2.7	-2.3	-1.2
4. Statistical discrepancy		4.8	optional	optional	optional	optional

Table 2. General government budgetary prospects

	ESA code	2004(1)	2004	2005	2006	2007	2008
		Level	% of GDP	% of GDP	% of GDP	% of GDP	% of GDP
Net lending (EDP B.9) by sub-sector							
1. General government	S.13	-93.9	-5.1	-3.9	-2.7	-2.3	-1.2
2. Central government	S.1311	-94.1	-5.1	-3.9	-2.7	-2.3	-1.2
3. State government	S.1312	-	-	-	-	-	-
4. Local government	S.1313	0.2					
5. Social security funds	S.1314						
General government (S13)							
6. Total revenue	TR	797.9	43.6	45.7	45.9	42.7	40.9
7. Total expenditure	TE(2)	891.8	48.8	49.6	48.6	44.9	42.1
8. Net lending/borrowing	EDP B.9	-93.9	-5.1	-3.9	-2.7	-2.3	-1.2
9. Interest expenditure (excl. FISIM)	EDP D.41	75.8	4.1	4.1	4.0	3.8	3.7
pm: 9a. FISIM							
10. Primary balance	(3)	-18.0	-1.0	0.3	1.4	1.5	2.4
Selected components of revenue							
11. Total taxes (11=11a+11b+11c)		511.7	28.0	29.8	30.4	30.5	30.3
11a. Taxes on production and imports	D.2	285.2	15.6	16.5	17.3	17.3	17.2
11b. Current taxes on income, wealth, etc	D.5	222.5	12.2	13.1	12.9	13.0	13.0
11c. Capital taxes	D.91	4.0	0.2	0.2	0.2	0.2	0.2
12. Social contributions	D.61	155.1	8.5	8.4	8.2	8.2	7.9
13. Property income	D.4	49.7	2.7	2.0	1.1	1.2	1.1
14. Other (14=15-(11+12+13))		81.4	4.5	5.5	6.3	2.8	1.5
15=6. Total revenue	TR	797.9	43.6	45.7	45.9	42.7	40.9
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)(4)		666.8	36.5	38.2	38.6	38.7	38.2
Selected components of expenditure							
16. Collective consumption	P.32	191.9	10.5	10.9	10.7	10.4	10.3
17. Total social transfers	D.62 + D.63	254.9	13.9	14.4	14.2	13.8	13.6
17a. Social transfers in kind	P.31 =D.63						
17b. Social transfers other than in kind	D.62						
18.=9. Interest expenditure	EDP D.41	75.8	4.1	4.1	4.0	3.8	3.7
19. Subsidies	D.3	35.5	1.9	2.0	1.8	1.6	1.4
20. Gross fixed capital formation	P.51	82.2	4.5	6.6	6.1	4.5	3.0
21. Other (21=22-(16+17+18+19+20))		251.4	13.8	11.5	11.8	10.8	10.2
22=7. Total expenditure	TE(5)	891.8	48.8	49.6	48.6	44.9	42.1
Pm: compensation of employees	D.1	282.1	15.4	15.1	15.0	14.8	14.5

(1) Lm million

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

(3) The primary balance is calculated as (EDP B.9, item 8) plus (EDP D.41 + FISIM recorded as intermediate consumption, item 9).

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

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

Table 3. General government expenditure by function

% of GDP	COFOG Code	1993	2008
1. General public services	1	6.7	
2. Defence	2	0.9	
3. Public order and safety	3	1.8	
4. Economic affairs	4	10.5	
5. Environmental protection	5	0.9	
6. Housing and community amenities	6	1.6	
7. Health	7	6.5	
8. Recreation, culture and religion	8	0.6	
9. Education	9	6.6	
10. Social protection	10	14.3	
11. Total expenditure (= item 7=26 in Table 2)	TE(1)	50.4	

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

Table 4. General government debt developments(1)

% of GDP	2004	2005	2006	2007	2008
1. Gross debt(2)	76.7	76.7	70.8	68.9	67.3
2. Change in gross debt ratio	3.9	0.0	-6.0	-1.8	-1.6
Contributions to changes in the gross debt					
3. Primary balance(3)	1.0	-0.3	-1.4	-1.5	-2.4
4. Interest expenditure and nominal growth (4)	2.7	1.3	1.1	1.1	1.0
5. Stock-flow adjustment	0.2	-1.0	-5.8	-1.4	-0.2
of which: - Differences between cash and accruals[5]					
- Net accumulation of financial assets[20] *of which:* *- privatisation proceeds*					
- Valuation effects and other[6]					
p.m. implicit interest rate on debt[21]	5.8	5.6	5.5	5.5	5.5
Other relevant variables					
6. Liquid financial assets[7]					
7. Net financial debt (7=1-6)					

(1) Developments in the debt-to-GDP ratio depend on:

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

where t denotes a time subscript, D, PD, Y and SFA are the government debt, primary deficit, nominal GDP and the stock-flow adjustment respectively, and i and y represent the average cost of debt and nominal GDP growth
(2) As defined in Regulation 3605/93 (not an ESA concept).
(3) Cf. item 10 in Table 2.
(4) Cf. item 9 in Table 2.
(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 movements, and operations in secondary market could be distinguished when relevant
(7) Proxied by interest expenditure (incl. FISIM recorded as consumption) divided by the debt level of the previous year.

Table 5. Cyclical developments

% of GDP	ESA Code	2004	2005	2006	2007	2008
1. Real GDP growth (%)		0.2	0.9	1.1	1.2	2.0
2. Net lending of general government	EDP B.9	-5.1	-3.9	-2.7	-2.3	-1.2
3. Interest expenditure (excl. FISIM recorded as consumption)	EDP D.41	4.1	4.1	4.0	3.8	3.7
4. Potential GDP growth (%) (1)		1.7	2.2	2.3	2.0	1.5
contributions: - labour - capital - total factor productivity						
5. Output gap		-2.2	-3.5	-4.5	-5.3	-4.9
6. Cyclical budgetary component		-0.8	-1.3	-1.7	-2.0	-1.8
7. Cyclically-adjusted balance (2-6)		-4.3	-2.6	-1.0	-0.3	0.6
8. Cyclically-adjusted primary balance (7-3)		-0.2	1.5	3.0	3.5	4.3

(1) Until an agreement on the Production Function Method is reached, Member States can use their own figures (*SP*)

Table 6. Divergence from previous update

	ESA Code	2004	2005	2006	2007	2008
Real GDP growth (%)						
Previous update		0.6	1.5	1.8	2.2	-
Current update		0.2	0.9	1.1	1.2	2.0
Difference		-0.4	-0.6	-0.7	-1.0	-
General government net lending (% of GDP)	EDP B.9					
Previous update		-5.2	-3.7	-2.3	-1.4	-
Current update		-5.1	-3.9	-2.7	-2.3	-1.2
Difference		0.1	-0.2	-0.4	-0.9	-
General government gross debt (% of GDP)						
Previous update		73.2	72.0	70.5	70.4	-
Current update		76.7	76.7	70.8	68.9	67.3
Difference		3.5	4.7	0.3	-1.5	-

Table 7. Long-term sustainability of public finances

% of GDP	2004	2005	2010	2020	2030	2050
Total expenditure						
Of which: age-related expenditures						
Pension expenditure	7.6	7.8	9.1	10.5	9.3	7.2
Social security pension(1)						
Old-age and early pensions	3.9	4.1	5.4	7.2	7.1	6.6
Other pensions (disability, survivors)	3.7	3.7	3.7	3.3	2.2	0.6
Occupational pensions (if in general government)	-	-	-	-	-	-
Health care(2)		4.5	4.8	5.0	5.1	5.2
Long-term care *(this was earlier included in the health care)*						
Education expenditure(2)	4.5	4.3	3.7	3.2	3.2	3.2
Other age-related expenditures- unemployment benefit(2)		1.2	1.2	1.0	1.0	1.0
Interest expenditure						
Total revenue						
Of which: property income						
of which: from pensions contributions (or social contributions if appropriate)	7.5	7.1	7.0	6.1	4.9	3.4
Pension reserve fund assets	-	-	-	-	-	-
Of which: consolidated public pension fund assets (assets other than government liabilities)	-	-	-	-	-	-
Assumptions						
Labour productivity growth	1.5	1.4	0.9	2.4	2.7	1.7
Real GDP growth	1.5	2.0	2.5	2.7	3.1	1.7
Participation rate males (aged 20-64)	83.6	84.6	85.8	86.3	86.4	86.4
Participation rates females (aged 20-64)	39.4	42.2	48.1	55.3	57.8	58.3
Total participation rates (aged 20-64)	61.2	63.2	66.7	70.4	71.6	71.7
Unemployment rate (1)	8.0	9.2	9.4	9.0	8.8	8.6
Population aged 65+ over total population	15.9	15.9	18.9	23.8	26.0	29.6

(1) Malta's two-thirds pension included under the pension expenditure category
(2) Preliminary estimates based on Economic Policy Committee Assumptions

Table 8. Basic assumptions

This table should preferably be included in the programme itself; if not, these assumptions should be transmitted to the Council and the Commission together with the programme.

	2004	2005	2006	2007	2008
Short-term interest rate[1] (annual average)	3.0	3.3	3.3	3.3	3.3
Long-term interest rate (annual average)	4.7	4.4	4.4	4.4	4.4
USD/€exchange rate (annual average) (euro area and ERM II countries)	1.2	1.2	1.2	1.2	1.2
Nominal effective exchange rate	1.0	1.0	1.0	1.0	1.0
(for countries not in euro area or ERM II) exchange rate vis-à-vis the €(annual average)					
World excluding EU, GDP growth	5.7	5.1	4.9	4.6	4.6
EU GDP growth	2.5	1.5	2.1	2.4	2.4
Growth of relevant foreign markets	2.3	1.3	1.8	1.8	1.8
World import volumes, excluding EU	11.6	8.6	8.7	8.4	8.4
Oil prices, (Brent, USD/barrel)	37.8	55.0	61.4	60.3	60.3

(1) If necessary, purely technical assumptions

Annex 2: Compliance with the code of conduct

The table below provides a detailed assessment of whether the programme respects the requirements of Section II of the new code of conduct. It is in four parts, covering compliance with (i) the window for the date of submission of the programme; (ii) the model structure (table of contents) in Annex 1 of the code; (iii) the data requirements (model tables) in Annex 2 of the code; and (iv) other information requirements. In the main text, points (ii) and (iii) are grouped into the "format" requirements of the code, whereas point (iv) refers to its "content" requirements.

Guidelines in the new code of conduct	Yes	No	Comments
1. Submission of the programme			
Programme was submitted not earlier than mid-October and not later than 1 December[1].		X	
2. Model structure			
The model structure for the programmes in Annex 1 of the code of conduct has been followed.	X		
3. Model tables (so-called data requirements)			
The quantitative information is presented following the standardised set of tables (Annex 2 of the code of conduct).	X		
The programme provides all compulsory information in these tables.		X	
The programme provides all optional information in these tables.		X	
The concepts used are in line with the European system of accounts (ESA).	X		
4. Other information requirements			
a. Involvement of parliament			
The programme mentions its status vis-à-vis the national parliament.		X	
The programme indicates whether the Council opinion on the previous programme has been presented to the national parliament.		X	
b. Economic outlook			
Euro area and ERM II Member States uses the "common external assumptions" on the main extra-EU variables.	X		
Significant divergences between the national and the Commission services' economic forecasts are explained[2].		X	
The possible upside and downside risks to the economic outlook are brought out.		X	
The outlook for sectoral balances and, especially for countries with a high external deficit, the external balance is analysed.		X	
c. Monetary/exchange rate policy			
The convergence programme presents the medium-term monetary policy objectives and their relationship to price and exchange rate stability.	X		
d. Budgetary strategy			
The programme presents budgetary targets for the general government balance in relation to the MTO, and the projected path for the debt ratio.	X		
In case a new government has taken office, the programme			Not applicable

Guidelines in the new code of conduct	Yes	No	Comments
shows continuity with respect to the budgetary targets endorsed by the Council.			
When applicable, the programme explains the reasons for possible deviations from previous targets and, in case of substantial deviations, whether measures are taken to rectify the situation, and provide information on them.	X		
The budgetary targets are backed by an indication of the broad measures necessary to achieve them and an assessment of their quantitative effects on the general government balance is analysed.	X		Only for 2006, but not for 2007 and 2008
Information is provided on one-off and other temporary measures.	X		
The state of implementation of the measures (enacted versus planned) presented in the programme is specified.	X		
If for a country that uses the transition period for the classification of second-pillar funded pension schemes, the programme presents information on the impact on the public finances.			Not applicable
e. "Major structural reforms"			
If the MTO is not yet reached or a temporary deviation is planned from the achieved MTO, the programme includes comprehensive information on the economic and budgetary effects of possible 'major structural reforms' over time.			Not applicable
The programme includes a quantitative cost-benefit analysis of the short-term costs and long-term benefits of such reforms.			Not applicable
f. Sensitivity analysis			
The programme includes comprehensive sensitivity analyses and/or develops alternative scenarios showing the effect on the budgetary and debt position of: a) changes in the main economic assumptions b) different interest rate assumptions c) for non-participating Member States, different exchange rate assumptions d) if the common external assumptions are not used, changes in assumptions for the main extra-EU variables.	 X X		 Not applicable Not applicable
In case of such "major structural reforms", the programme provides an analysis of how changes in the assumptions would affect the effects on the budget and potential growth.			Not applicable
g. Broad economic policy guidelines			
The programme provides information on the consistency with the broad economic policy guidelines of the budgetary objectives and the measures to achieve them.		X	
h. Quality of public finances			
The programme describes measures aimed at improving the quality of public finances on both the revenue and expenditure side (e.g. tax reform, value-for-money initiatives, measures to improve tax collection efficiency and expenditure control).	X		
i. Long-term sustainability			
The programme outlines the country's strategies to ensure the sustainability of public finances, especially in light of the economic and budgetary impact of ageing populations.		X	
Common budgetary projections by the AWG are included in the programme. The programme includes all the necessary additional information. (…) To this end, information included in programmes should focus on new relevant information that	X		

Guidelines in the new code of conduct	Yes	No	Comments
is not fully reflected in the latest common EPC projections.			
j. Other information (optional)			
The programme includes information on the implementation of existing national budgetary rules (expenditure rules, etc.), as well as on other institutional features of the public finances, in particular budgetary procedures and public finance statistical governance.	X		
Notes: [1]The code of conduct allows for the following exceptions: (i) Ireland should be regarded as complying with the deadline in case of submission on "budget day", i.e. traditionally the first Wednesday of December, (ii) the UK should submit as close as possible to its autumn pre-budget report; and (iii) Austria and Portugal cannot comply with the deadline but will submit no later than 15 December. [2]To the extent possible, bearing in mind the typically short time period between the publication of the Commission services' autumn forecast and the submission of the programme.			

Annex 3: Consistency with the broad economic policy guidelines

The table below provides an overview of whether the strategy and policy measures in the programme are consistent with the broad economic policy guidelines in the area of public finances included in the integrated guidelines for the period 2005-2008.

Integrated guidelines	Yes	No	Not applicable
1. To secure economic stability			
– Member States should respect their medium-term budgetary objectives. As long as this objective has not yet been achieved, they should take all the necessary corrective measures to achieve it[1].	X		
– Member States should avoid pro-cyclical fiscal policies[2].			X
– Member States in excessive deficit should take effective action in order to ensure a prompt correction of excessive deficits[3].	X		
– Member States posting current account deficits that risk being unsustainable should work towards (…), where appropriate, contributing to their correction via fiscal policies.	X		
2. To safeguard economic and fiscal sustainability In view of the projected costs of ageing populations,			
– Member States should undertake a satisfactory pace of government debt reduction to strengthen public finances.	X		
– Member States should reform and re-enforce pension, social insurance and health care systems to ensure that they are financially viable, socially adequate and accessible (…)		X	
3. To promote a growth- and employment-orientated and efficient allocation of resources			
Member States should, without prejudice to guidelines on economic stability and sustainability, re-direct the composition of public expenditure towards growth-enhancing categories in line with the Lisbon strategy, adapt tax structures to strengthen growth potential, ensure that mechanisms are in place to assess the relationship between public spending and the achievement of policy objectives and ensure the overall coherence of reform packages.		X	
Notes: [1]As further specified in the Stability and Growth Pact and the new code of conduct, i.e. with an annual 0.5% of GDP minimum adjustment in structural terms for euro area and ERM II Member States. [2]As further specified in the Stability and Growth Pact and the new code of conduct, i.e. Member States that have already achieved the medium-term objective should avoid pro-cyclical fiscal policies in "good times". [3]As further specified in the country-specific Council recommendations and decisions under the excessive deficit procedure.			

Annex 4: Assessment of tax projections

Table 6 compares the tax projections of the programme with those of the Commission services' autumn 2005 forecast and Table 7 those of the Commission services' autumn forecast with tax projections obtained by using standard ex-ante elasticities, as estimated by the OECD. The tables summarise the results for the total tax-to-GDP ratio. The underlying analysis is carried out exploiting information for the four major tax categories, i.e. indirect taxes, corporate and private income taxes and social contributions (see tables below)[22]. Conceptually, the analysis draws on the definition of a semi-elasticity, which measures the change in a ratio vis-à-vis the relative change in the denominator. The semi-elasticity of the tax-to-GDP ratio of the *i-th* tax $\frac{T_i}{Y}$ can be written as:

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

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

To the extent that ε_{T_i,B_i} is derived from observed or projected data, it will typically reflect (i) the effect of discretionary measures (including one-offs) and (ii) the tax elasticity[23]. By contrast, if ε_{T_i,B_i} is the standard *ex-ante* elasticity, as estimated by the OECD, it will be net of discretionary measures.

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

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

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

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

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

[22] Private and corporate income taxes are generally not provided, neither in the programme nor in the Commission services' autumn 2005 forecast. Only the aggregate, direct income taxes, is given. For the purpose of this exercise the breakdown is obtained using the average shares over the past ten years, i.e. the composition of direct taxes is assumed to stay constant.

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

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

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

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

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

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

The tables below report the results of the assessment of the tax projections presented in the programme by major tax category, which, as mentioned above, are the basis for the aggregated results reported in Tables 6 and 7.

Assessment of tax projections by major tax category

	2006		2007		2008	p.m.:
	COM	CP	COM[2]	CP	CP	OECD[1]
Taxes on production and imports:						
Change in tax-to-GDP ratio	0.5	0.8	0.4	0.0	-0.1	/
Difference	0.3		-0.4		/	/
of which[3]: - elasticity component	-0.2		-0.3		/	/
- composition component	0.4		-0.1		/	/
p.m.: Observed elasticity:						
- of taxes to tax base[4]	3.8	3.1	1.6	1.1	1.2	1.00
- of tax base[4] to GDP	0.5	0.7	1.0	0.9	0.7	1.00
Social contributions:						
Change in tax-to-GDP ratio	0.1	-0.2	-0.6	0.0	0.0	/
Difference	-0.4		0.6		/	/
of which[3]: - elasticity component	-0.3		0.6		/	/
- composition component	0.2		0.0		/	/
p.m.: Observed elasticity:						
- of taxes to tax base[5]	2.0	0.4	-1.3	1.0	0.1	0.50
- of tax base[5] to GDP	0.7	1.0	1.0	1.0	1.0	0.70
Personal income tax[6]:						
Change in tax-to-GDP ratio	0.0	-0.2	0.0	0.1	0.0	/
Difference	-0.1		0.1		/	/
of which[3]: - elasticity component	-0.1		0.1		/	/
- composition component	0.1		0.0		/	/
p.m.: Observed elasticity:						
- of taxes to tax base[5]	1.3	0.6	0.8	1.2	1.1	3.70
- of tax base[5] to GDP	0.7	1.0	1.0	1.0	1.0	0.70
Corporate income tax[6]:						
Change in tax-to-GDP ratio	0.0	-0.1	0.0	0.0	0.0	/
Difference	-0.1		0.0		/	/
of which[3]: - elasticity component	0.0		0.0		/	/

- composition component	0.0		0.0		/	/
p.m.: Observed elasticity: - of taxes to tax base[7] - of tax base[7] to GDP	 0.8 1.2	 0.6 1.0	 0.8 1.0	 1.2 1.0	 1.0 1.0	 1.00 1.40

Notes:
[1]OECD ex-ante elasticities
[2]On a no-policy change basis
[3]The decomposition is explained in the text above
[4]Tax base = private consumption expenditure
[5]Tax base = compensation of employees
[6]Taxes on income and wealth are split into private and corporate income tax using the average tax share over the past ten years, i.e. the share is assumed to be constant over the programme period
[7]Tax base = gross operating surplus

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

Assessment of tax elasticities by major tax category

	2006		**2007**	
	COM (observed)	**ex-ante[1]**	**COM[2] (observed)**	**ex-ante[1]**
Taxes on production and imports: Change in tax-to-GDP ratio	 0.5	 0.0	 0.4	 0.0
Difference *of which[3]: - elasticity component* *- composition component*	0.5 1.4 -0.2		0.4 0.3 0.0	
p.m.: Observed elasticity: - of taxes to tax base[4] - of tax base[4] to GDP	 3.8 0.5	 1.0 1.0	 1.6 1.0	 1.0 1.0
Social contributions: Change in tax-to-GDP ratio	 0.1	 -0.2	 -0.6	 -0.2
Difference *of which[3]: - elasticity component* *- composition component*	0.3 0.3 0.0		-0.4 -0.3 0.0	
p.m.: Observed elasticity: - of taxes to tax base[5] - of tax base[5] to GDP	 2.0 0.7	 0.5 0.7	 -1.3 1.0	 0.5 0.7
Personal income tax[6]: Change in tax-to-GDP ratio	 0.0	 0.4	 0.0	 0.4
Difference *Of which[3]: - elasticity component* *- composition component*	-0.4 -0.5 0.0		-0.5 -0.6 0.3	
p.m.: Observed elasticity: - of taxes to tax base[5] - of tax base[5] to GDP	 1.3 0.7	 3.7 0.7	 0.8 1.0	 3.7 0.7
Corporate income tax[6]: Change in tax-to-GDP ratio	 0.0	 0.0	 0.0	 0.0
Difference *of which[3]: - elasticity component* *- composition component*	-0.1 0.0 0.0		-0.1 0.0 0.0	
p.m.: Observed elasticity: - of taxes to tax base[7] - of tax base[7] to GDP	 0.8 1.2	 1.0 1.4	 0.8 1.0	 1.0 1.4

Notes:
[1]Tax projections obtained by applying ex-ante standard tax elasticities estimated by the OECD
[2]On a no-policy change basis
[3]The decomposition is explained in the text above
[4]Tax base = private consumption expenditure

[5]Tax base = compensation of employees
[6]Taxes on income and wealth are split into private and corporate income tax using the average tax share over the past ten years, i.e. the share is assumed to be constant over the programme period
[7]Tax base = gross operating surplus

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

Annex 5: The rolling debt reduction benchmark

The rolling debt reduction benchmark discussed in Box 3 is calculated for successive five-year periods through a recursive application of the formula:

$$\left(\frac{D_t}{Y_t}\right)_{benchmark} = 0.05 * \left[60 - \left(\frac{D_{t-1}}{Y_{t-1}}\right)_{benchmark}\right] + \left(\frac{D_{t-1}}{Y_{t-1}}\right)_{benchmark}$$

where t is a time subscript and D and Y are the stock of government debt and nominal GDP, respectively (note that, in the first year of the five-year period, the debt ratio in the previous year is the actual debt ratio).

The change in the debt ratio can be decomposed as follows (assuming that the stock-flow adjustment is equal to zero):

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

where DEF is the government deficit and y represents nominal GDP growth.

Noting that 0.05*60 = 3, the formula for the rolling debt reduction benchmark describes the path for convergence of the debt ratio towards 60% of GDP, which would take place with the deficit at 3% of GDP and nominal GDP growth at 5%. For nominal GDP growth rates higher than 5%, the benchmark can be respected with deficits in excess of 3% of GDP; for nominal GDP growth rates lower than 5%, respect of the benchmark necessitates deficits lower than 3% of GDP.

Annex 6: Indicators of long-term sustainability

Table A1: Underlying assumptions compared

% of GDP	2010		2020		2030		2050	
	EPC	SCP	EPC	SCP	EPC	SCP	EPC	SCP
Labour productivity growth	**0.8**	**0.9**	**2.3**	**2.4**	**2.7**	**2.7**	**1.7**	**1.7**
Real GDP growth	**2.5**	**2.5**	**2.7**	**2.7**	**3.1**	**3.1**	**1.7**	**1.7**
Participation rate males (aged 15-64)	**79.8**	**85.8**	**81.5**	**86.3**	**82.4**	**86.4**	**80.1**	**86.4**
Participation rates females (aged 15-64)	**43.3**	**48.1**	**50.4**	**55.3**	**53.3**	**57.8**	**51.8**	**58.3**
Total participation rates (aged 15-64)	**61.8**	**66.7**	**66.1**	**70.4**	**68.0**	**71.6**	**66.0**	**71.7**
Unemployment rate	**8.3**	**9.4**	**7.0**	**9.0**	**7.0**	**8.8**	**7.0**	**8.6**
Population aged 65+ over total population	**14.2**	**18.9**	**19.4**	**23.8**	**22.4**	**26.0**	**24.7**	**29.6**

Note: the Maltese CP provides information on participation rates and the unemployment rate according to the age group 16-61. In the last row, the CP gives the population aged 61+ over the total population.

Table A2: Long-term projections

Main assumptions - programme scenario (as % GDP)	2008	2010	2020	2030	2040	2050	changes	Impact on S2
Total age-related spending	18.4	18.8	19.7	18.6	17.6	16.6	-1.8	-1.1
Pensions	8.6	9.1	10.5	9.3	8.3	7.2	-1.4	-0.7
Health care	4.7	4.8	5.0	5.1	5.2	5.2	0.5	0.5
Long-term care	:	:	:	:	:	:	:	:
Education	3.9	3.7	3.2	3.2	3.2	3.2	-0.7	-0.7
Unemployment benefits	1.2	1.2	1.0	1.0	1.0	1.0	-0.2	-0.2
Total primary non age-related spending	20.0	20.0	20.0	20.0	20.0	20.0	0.0	0.0
Total revenues	42.4	42.4	42.4	42.4	42.4	42.4	0.0	0.0

Table A3: The cost of a five-year delay in adjusting the budgetary position according to the S1 and S2

	S1	S2
2005 scenario	**0.1**	**0.0**
Programme scenario	**-0.5**	**-0.2**

Note: the cost of a delay shows the increase of the S1 and S2 indicators if they were calculated five years later.

Table A4: Debt development

Results (as % GDP)	2008	2010	2020	2030	2040	2050	changes
Programme scenario							
Gross debt	67.3	60.6	31.1	-1.8	-46.0	-106.3	-173.6
*Gross debt, i + 1**	*67.3*	*61.9*	*37.3*	*6.8*	*-38.4*	*-104.6*	*-171.9*
*Gross debt, i - 1**	*67.3*	*59.4*	*25.6*	*-8.3*	*-50.1*	*-103.5*	*-170.8*
Adjusted gross debt	67.3	60.6	31.1	-1.8	-46.0	-106.3	-173.6
2005 Scenario							
Gross debt	79.3	80.2	88.8	92.9	88.4	79.6	0.3
*Gross debt, i + 1**	*79.3*	*81.7*	*99.0*	*113.3*	*120.5*	*127.1*	*47.8*
*Gross debt, i - 1**	*79.3*	*78.7*	*79.7*	*76.2*	*64.4*	*47.5*	*-31.8*
Adjusted gross debt	79.3	80.2	88.8	92.9	88.4	79.6	0.3

* *i + 1* and *i + 1* represents the evolution of debt under the assumption of the nominal interest rate being 100 basis points higher or lower throughout the projection period.