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ECONOMIC ASSESSMENT OF THE CONVERGENCE PROGRAMME OF MALTA (UPDATE OF DECEMBER 2006)

The Stability and Growth Pact requires each EU Member State to present an annual update of its medium-term fiscal programme, called "stability programme" for countries that have adopted the euro as their currency and "convergence programme" for those that have not. The most recent update of Malta's convergence programme was submitted on 7 December 2006.

The attached technical analysis of the programme, prepared by the staff of, and under the responsibility of, the Directorate-General for Economic and Financial Affairs of the European Commission, was finalised on 29 January 2007. Comments should be sent to Ivan Ebejer (ivan.ebejer@ec.europa.eu). The main aim of the technical analysis is to assess the realism of the budgetary strategy presented in the programme as well as its compliance with the requirements of the Stability and Growth Pact. However, the analysis also looks at the overall macro-economic performance of the country and highlights relevant policy challenges.

Based on this technical analysis, the European Commission adopted a recommendation for a Council opinion on the programme on 7 February 2007. The ECOFIN Council is expected to adopt its opinion on the programme on 27 February 2007.

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

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

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SUMMARY AND CONCLUSIONS[1]

As part of the preventive arm of the Stability and Growth Pact, each Member State that does not use the single currency, such as Malta, has to submit a convergence programme and annual updates thereof. The most recent programme, covering the period 2006-2009, was submitted on 7 December 2006. Under the corrective arm of the Pact, Malta was placed in excessive deficit by the Council in July 2004. The deadline for correcting the excessive deficit is 2006.

Following a period of strong economic growth in the second half of the nineties, the performance of the Maltese economy slowed down appreciably between 2001 and 2005. Although unfavourable cyclical developments contributed to this outcome, domestic structural weaknesses - magnified by sectoral concentration in manufacturing - have progressively led to a loss in Malta's external competitiveness. This resulted in a fall in exports and a worsening external deficit which in 2005 stood at around 11% of GDP. While estimates for TFP growth may capture 'quality' aspect of factor inputs, the low total factor productivity in recent years appears to be another reason behind Malta's weak economic growth. Although various attempts have led to a decline in the deficit-to-GDP ratio since 1998, the adjustment was not always durable. For most years the adjustment was achieved through higher revenue, however recently adjustment is being attained through expenditure control which should contribute to a more lasting consolidation. However, despite the success in restraining overall spending in recent years, certain expenditure items - such as those related to healthcare and social protection - have followed an upward trend between 1998 and 2004.

Against this background, Malta faces the following challenges in the area of public finances. First, the challenge of stabilising the economy is exacerbated by the small size and high degree of openness of the Maltese economy. In a setting whereby monetary policy is determined by a fixed exchange rate regime as a way to achieve price stability, the scope for autonomous discretionary fiscal policy is reduced. Pursuing consolidation and adopting a counter-cyclical fiscal policy would increase the effectiveness of automatic stabilisers in dampening the impact of external shocks. This entails pursuing further budgetary consolidation especially during upswings, while avoiding pro-cyclical policies in 'good times' which would lead to a reduction in debt levels. Second, notwithstanding the good progress made by Malta in reducing the general government deficit in the past two years, the durability of fiscal consolidation in the medium to long-term remains a challenge. In particular, reversing past spending trends in healthcare costs and social entitlements would improve long-term fiscal sustainability. Moreover, failing to contain such expenditure, would mean higher taxation, which may lead to a further worsening of Malta's external competitiveness. Finally, enhancing the allocative efficiency of public expenditure should contribute to unleashing Malta's growth potential. This requires a redirection of public expenditure towards growth-enhancing spending. Fiscal consolidation would contribute to release resources which may be re-directed to fund productive spending including R&D, human capital and innovation which would increase TFP, an essential element in tackling the growth challenge.

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

The macroeconomic scenario underlying the updated convergence programme envisages that real GDP growth will hover around 3% over the programme period. Assessed against currently available information, this scenario appears to be based on favourable growth assumptions for 2007 and markedly favourable ones thereafter, especially due to the optimistic medium-term evolution of the external sector. Less favourable net exports in the medium term than foreseen in the programme could heighten the external imbalance recorded in recent years. The macroeconomic outlook would qualify for economic 'good' times, especially after 2007.

For 2006, the general government deficit is estimated at 2.9% of GDP in the Commission services' autumn 2006 forecast, against a target of 2.7% of GDP set in the previous update of the convergence programme. The estimated outturn for 2006 in the new update (2.6% of GDP) is below that projected in the Commission services' autumn 2006 forecast and seems plausible in the light of recent information on GDP growth and government finance cash data.

The budgetary strategy outlined in the update aims at reducing the deficit below the 3% of GDP reference value in 2006 and at pursuing fiscal consolidation thereafter. The update foresees a gradual reduction in the general government deficit leading to a broadly balanced budget by 2009. With a projected decline in the interest burden, the primary surplus is expected to reach 3¼% of GDP by 2009. The adjustment is to be achieved through a cut in the primary expenditure ratio by almost 5¾ percentage points of GDP, which more than offsets a decline in the revenue ratio by almost 3¾ percentage points of GDP. Despite the success in restraining overall spending, healthcare expenditure followed an upward trend in the past years. Lower recourse will be made to deficit-reducing one-off measures than in the recent past. According to the update, government gross debt is estimated to have reached 68¼% of GDP in 2006 and to decline throughout the programme period reaching 59½% of GDP by 2009.

The structural deficit (i.e. the cyclically-adjusted deficit net of one-off and other temporary measures) calculated according to the commonly agreed methodology is planned to improve from around 3% of GDP in 2006 to ½% of GDP at the end of the programme period. As in the previous update of the convergence programme, the medium-term objective (MTO) for the budgetary position presented in the update is a balanced position in structural terms which is in line with the Pact but which is targeted to be reached only beyond the programme horizon.

The risks to the budgetary projections in the programme appear broadly balanced for 2007 but the budgetary outcomes could be worse than projected in the programme thereafter. This is due to a favourable GDP growth projected for 2007 and a markedly favourable macroeconomic scenario in 2008-9 underlying the update's projections (although tax projections for these years seem cautious). In addition, after 2007 no details are given on the adjustment strategy, increasing the risks attached to the planned fiscal consolidation.

In view of this risk assessment, the budgetary stance in the programme seems consistent with a correction of the excessive deficit by 2006 as recommended by the Council. In addition, it seems to provide a sufficient safety margin against breaching the 3% of GDP deficit threshold with normal macroeconomic fluctuations from 2008 onwards. In the years following the correction of the excessive deficit, the pace of the adjustment towards the MTO implied by the programme is broadly in line with the Stability and Growth Pact, which specifies that, for euro-area and ERM II Member States, the annual

improvement in the structural balance should be 0.5% of GDP as a benchmark and that the adjustment should be higher in good economic times and could be lower in bad economic times. In view of the risks to the budgetary targets mentioned above, the evolution of the debt ratio is likely to be less favourable than projected in the programme. Nevertheless, the debt ratio seems to be sufficiently diminishing towards the reference value over the programme period.

Malta has recently enacted a pension reform aimed at both increasing the effective retirement age and raising the level of pensions. As a result estimates in the programme suggest that pension expenditures will be higher, leading to a higher increase in age-related expenditure, close to the EU average. Although at a somewhat slower pace than historical trends, projections for healthcare spending show an increase of around 1¾ percentage points of GDP in the long term, if current trends persist. The current budgetary position would not ensure a steady reduction of debt to below the Treaty reference value. Therefore, improving the budgetary position, as projected in the programme, would contribute to reducing the risks to the sustainability of public finances. Overall, Malta appears to be at medium risk with regard to the sustainability of public finances.

The implementation report of the national reform programme (NRP) of Malta, provided in the context of the renewed Lisbon strategy for growth and jobs, was submitted on 15 October 2006. The NRP identifies as key challenges/priorities: sustainability of public finances, competitiveness, the environment, employment and education and training. The Commission's assessment of this programme (adopted as part of its December 2006 Annual Progress Report[2]) showed that Malta is making good progress in the implementation of its NRP. Implementation is advancing strongly in the area of fiscal sustainability, considered by the authorities to be a crucial element for achieving more growth and jobs and adopting the euro. The implementation efforts in the micro-economic and employment area are more moderate. Against the background of strengths and weaknesses identified, Malta was recommended to take action in the areas of: strengthening competition and reduce and redirect state aid; attracting more people into the labour market, tackle undeclared work and implement changes to the tax and benefit system.

The convergence programme and the NRP are to some extent integrated. Both programmes envisage the implementation of the pension reform while the convergence programme provides details of the tax reform announced in the national reform programme. However, the update does not spell out Malta's plans to ensure the sustainability of the health sector.

The overall conclusion is that the updated convergence programme is consistent with a correction of the excessive deficit by 2006 and, in a context of strong growth prospects, envisages adequate progress towards the MTO thereafter. Moreover, the debt ratio as envisaged by the programme seems to be diminishing at a satisfactory pace towards the 60% of GDP reference value. However, there are risks to the achievement of the budgetary targets and maintaining a budgetary position that is robust to possible reversals of the projected strong growth pattern is important especially in light of the recent build-up of external imbalances.

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

Comparison of key macroeconomic and budgetary projections

		2005	2006	2007	2008	2009
Real GDP (% change)	**CP Dec 2006**	**2.2**	**2.9**	**3.0**	**3.1**	**3.1**
	COM Nov 2006	2.2	2.3	2.1	2.2	n.a.
	CP Jan 2006	*0.9*	*1.1*	*1.2*	*2.0*	*n.a.*
HICP inflation (%)	**CP Dec 2006**	**2.5**	**3.1**	**2.2**	**2.1**	**2.0**
	COM Nov 2006	2.5	3.0	2.6	2.4	n.a.
	CP Jan 2006[6]	*2.8*	*3.1*	*2.5*	*1.9*	*n.a.*
Output gap (% of potential GDP)	**CP Dec 2006**[1]	**-2.8**	**-2.1**	**-1.3**	**-0.3**	**0.9**
	COM Nov 2006[5]	-2.1	-1.4	-1.1	-0.5	n.a.
	CP Jan 2006[1]	*-2.9*	*-3.7*	*-4.2*	*-4.4*	*n.a.*
General government balance (% of GDP)	**CP Dec 2006**	**-3.2**	**-2.6**	**-2.3**	**-0.9**	**0.1**
	COM Nov 2006	-3.2	-2.9	-2.7	-2.9	n.a.
	CP Jan 2006	*-3.9*	*-2.7*	*-2.3*	*-1.2*	*n.a.*
Primary balance (% of GDP)	**CP Dec 2006**	**0.8**	**1.1**	**1.1**	**2.5**	**3.2**
	COM Nov 2006	0.8	0.9	0.7	0.6	n.a.
	CP Jan 2006	*0.3*	*1.4*	*1.5*	*2.4*	*n.a.*
Cyclically-adjusted balance (% of GDP)	**CP Dec 2006**[1]	**-2.2**	**-1.8**	**-1.8**	**-0.8**	**-0.2**
	COM Nov 2006	-2.4	-2.3	-2.3	-2.7	n.a.
	CP Jan 2006[1]	*-2.8*	*-1.3*	*-0.7*	*0.4*	*n.a.*
Structural balance[2] (% of GDP)	**CP Dec 2006**[3]	**-3.8**	**-2.9**	**-2.0**	**-1.0**	**-0.4**
	COM Nov 2006[4]	-4.0	-3.5	-2.5	-2.7	n.a.
	CP Jan 2006	*-3.8*	*-2.3*	*-1.4*	*0.3*	*n.a.*
Government gross debt (% of GDP)	**CP Dec 2006**	**74.2**	**68.3**	**66.7**	**63.2**	**59.4**
	COM Nov 2006	74.2	69.6	69.0	68.6	n.a.
	CP Jan 2006	*76.7*	*70.8*	*68.9*	*67.3*	*n.a.*

Notes:
[1]Commission services calculations on the basis of the information in the programme.
[2]Cyclically-adjusted balance (as in the previous rows) excluding one-off and other temporary measures.
[3]One-off and other temporary measures taken from the programme (1.6% of GDP in 2005, 1.1% of GDP in 2006, 0.2% of GDP in 2007, 0.2% of GDP in 2008 and 0.2% of GDP in 2009; all deficit-reducing).
[4]One-off and other temporary measures taken from the Commission services' autumn 2006 forecast (1.6% of GDP in 2005, 1.1% of GDP in 2006, 0.2%of GDP in 2007, 0% of GDP in 2008; all deficit-reducing).
[5]Based on estimated potential growth of 2.2%, 1.7%, 1.7% and 1.6% respectively in the period 2005-2008.
[6] The January 2006 CP figures correspond to the Retail Price Index.

Source:
Convergence programme (CP); Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations

1. INTRODUCTION

Malta submitted its update convergence programme of December 2006 covering the period 2006 to 2009 on 7th December 2006, one week later than the deadline of 1 December specified in the code of conduct. The programme fully reflects the budget for 2007 as approved by Parliament on 17th November 2006. The programme is a government document and will not be discussed in Parliament.

The programme broadly follows the model structure and data provision requirements for stability and convergence programmes specified in the new code of conduct. The programme shows gaps in the compulsory[3] and in the optional data[4] prescribed by the

[3] Data on sectoral balances in particular forecasts for net lending/borrowing vis-à-vis the rest of the world, and statistical discrepancy for 2006-2009 are not provided.

code of conduct. Annex 2 provides a detailed overview of all aspects of compliance with the code of conduct.

2. ECONOMIC TRENDS AND POLICY CHALLENGES

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

2.1. Economic performance

Real GDP growth averaged 2¼% per year between 1996 and 2005[5]. This figure hides striking differences between two distinct phases which represent a major shift in Malta's economic performance[6]. Between 1996 and 2000, GDP growth averaged 4½%, while in the subsequent 5 years economic growth amounted to ¼% (see Table 1 and Figures 1 and 2). The contribution of net exports to growth declined in the past five years compared to the previous phase, reflecting a negative balance of goods and services since 2003. On top of unfavourable cyclical developments since 2001, longstanding domestic structural weaknesses – including labour market constraints in terms of both participation and skills, a lack of effective competition in key sectors and a relatively high level of resources absorbed by government - which led to a loss of external competitiveness, contributed to this outcome. In line with these developments, per capita GDP in purchasing power standards declined from 76½% of the EU25 in 1996 to 70½% in 2005, mainly reflecting a substantial deterioration in labour productivity. Between 1998[7] and 2005, Malta reported a general government deficit reaching a peak of 10% of GDP in 2003, owing to a one-off transaction connected with the debt restructuring of the shipyards. Since then, the deficit-to-GDP ratio has been brought down and in 2005 stood

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[4] Forecasts for employment and labour productivity in hours worked; balance on primary incomes, capital account net/lending and borrowing of the private sector; social transfers in kind and social transfers other than in kind; differences between cash and accruals, valuation effects and other, liquid financial assets and net financial debt in gross debt; contributions to potential GDP growth of labour, capital and total factor productivity; total expenditure, social security pension, occupational pension, interest expenditure, total revenue for the long-term sustainability of public finances.

[5] On 7 December 2006, the Maltese authorities transmitted to Eurostat new GDP data since 1995, showing - with respect to figures published in September 2006 - downward revisions in nominal GDP levels up to around 1% between 1996 and 2003. For 2004 and 2005, nominal GDP has been revised upwards by 0.4% and 0.9%, respectively, and for the first half of 2006 the revision corresponds to 1.1%. These revisions were carried out within the regular assessment process of compliance with Eurostat's statistical practices. The latest figures have been used by the Commission in its assessment of the updated programme.

[6] see Ebejer, I. (2006), "Malta's growth predicament: from frontrunner to laggard…and back?" *ECFIN Country Focus*, Vol. 3, Issue 14, available from: http://ec.europa.eu/economy_finance/publications/country_focus/2006/cf14_2006en.pdf

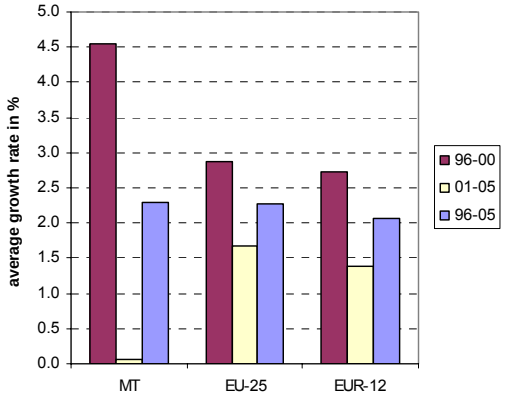
[7] ESA95 public finance data for Malta are available only from 1998 onwards

at 3¼% of GDP. The deterioration in the deficit was reflected in higher general government debt, which stood at 74¼% of GDP in 2005.

Weak job creation coupled with higher working age population growth led to an increase of around a percentage point in the unemployment rate from an average of 6½% in the period 1996-2000 to 7½% in the subsequent 5 years. Notwithstanding looser labour market conditions, nominal unit labour costs in the 2000's increased above the average of the last ten years as the deceleration in nominal wages was overshadowed by a decline in productivity. Against this background of weak economic performance, inflationary pressures have somewhat diminished. Compared to 3¼% recorded between 1997 and 2000, HICP inflation averaged 2½% between 2001 and 2005. However, in the recent two years, inflation has moved out of line with the EU25 mainly reflecting the specific impact of rising energy prices.

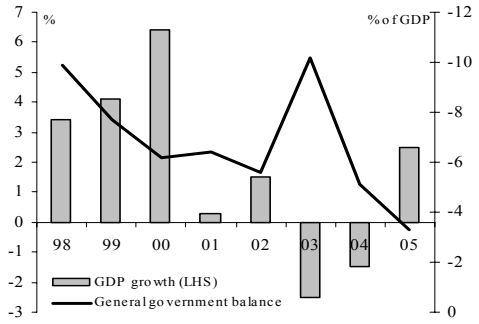
The disappointing economic performance since 2001 owes much to a deterioration of the external sector. The combination of a loss in external competitiveness, unfavourable cyclical developments and a higher fuel import bill gave rise to a worsening external imbalance especially since 2003. The current external deficit in 2005 stood at 11% of GDP. Malta's weak export performance is underlined by the continuous loss in its share of world trade by some 40% over the last ten years.

Figure 1: Average GDP growth: Malta vs. Euro area and EU25



Source: Commission services

Figure 2: Real GDP growth and general government deficit



Source: Commission services

Box 1: Monetary policy and exchange rate regimes of MALTA

Basket peg *(until April 2005)*	Malta has followed basket pegs since the early 1970s. Currency baskets were adjusted on several occasions in order to reflect Malta's trade structure. The only devaluation within the system occurred in 1992, in response to the ERM crisis that had affected major trade partners. The currency basket was last revised in August 2002, raising the share of the euro to 70 percent (with 20 and 10 percent accounting for the GBP and USD, respectively). The Central Bank of Malta is obliged to hold at least 60 percent of currency and deposit liabilities as reserves; in practice, the reserve cover has well exceeded this limit.
Re-peg to euro and *ERM II entry* *(May 2005)*	On 2 May 2005, the Maltese lira was re-pegged to the euro, without changing its external value. Since that date, the lira participates in ERM II with its pegging rate as central rate, and a standard fluctuation band of ±15 percent. Malta has unilaterally committed to maintaining the lira exchange rate at the central rate. In line with this commitment, the lira has been stable against the euro within ERM II.

Evidence of the erosion in competitiveness since 2001 is also provided by the appreciation of the real effective exchange rate. The appreciation of the real effective exchange rate against a group of 34 industrial countries averaged around 3½% annually in the 2000s compared to a depreciation of 1¼% in the second half of the 1990s. Underlying this outcome is the unfavourable developments in unit labour costs. For Malta, this may be critical as firms, especially in the exposed sector, are price-takers on the international market implying that they would have to absorb higher unit labour cost by reducing margins, limit capital spending or lay-off workers.

Table 2: Degree of specialisation, Balassa Index

	1997-2000	2001-2004	1997-2004
High-technology manufactures[1]	2.1	2.1	2.1
Medium-high technology manufactures[2]	0.2	0.3	0.2
Medium-low technology manufactures[3]	1.0	1.1	1.0
Low technology manufactures[4]	1.3	1.2	1.3
ICT manufactures[5]	2.8	3.3	3.1
Source: OECD STAN Bilateral Trade Database *Notes:* 1: ISIC Rev.3: 2423, 30, 32, 33, 353, 30, 32, 33, 353 2: ISIC Rev.3: 34, 352+359 3: ISIC Rev.3: 23, 25, 26, 27-28, 351 4: ISIC Rev.3: 24, 29-33, 35 5: ISIC Rev.3: 30, 32, 33			

The degree of product and market specialisation is another dimension of a country's competitiveness position. In general, a concentrated of a country's exports in less dynamic economic sectors and displaying a slow change in the product mix over time, is an indication of unfavourable specialisation. A common indicator highlighting the pattern and degree of specialisation is the Balassa index, defined as the ratio of a country's share in global exports of a given sector and the country's share in global

exports of the economy as a whole[8]. A ratio above 1 indicates a revealed comparative advantage of a sector. When measuring trade specialisation by means of the Balassa index, Malta seems to enjoy a comparative advantage in the high and, although to a lesser extent, in the low technology sectors although the index of the latter has declined along the years. In particular, the revealed indicator is strong for ICT manufactures. As to the evolution of specialisation, there is an apparent upward shift in the technology "ladder" as the share of low and medium-low technology sectors in Malta's total exports progressively declined faster than the comparable share for OECD countries. Indeed, around three-fifths of merchandise exports are concentrated in the high-technology category, reflecting the composition of Malta's manufacturing sector characterised by an over-representation of a single electronics firm which dominates industry. This situation presents a challenge in itself as it exposes the economy to the perils brought about by strong fluctuations experienced by this sector[9]. Since the manufacturing sector is being superseded by a growing services sector, the preceding analysis provides only a partial picture and hence should be viewed with caution. Nevertheless, the performance of tourism, which accounts for a substantial proportion of the services industry, has suffered from heightened competitive pressures exerted from emerging destinations as well as domestic structural weaknesses.

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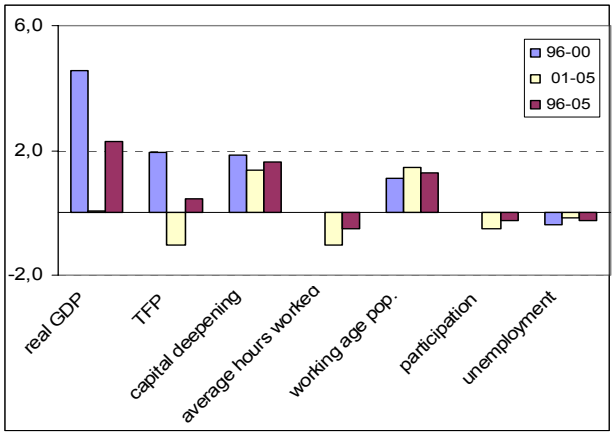
[8] $B = \frac{X_{cj}}{X_{ct}} \cdot \frac{X_{gt}}{X_{gj}}$

where X stands for the value of exports in a given period, c indicates the country, g the world as a whole, j the sector and t the economy as a whole (all sectors).

[9] To some extent, the decline in exports since 2001 reflects the slowdown of the global semi-conductors industry which is still reeling from the capacity overhang created in the aftermath of the technology bubble in 2000.

2.2. Anatomy of medium-term growth

Figure 3: Real GDP growth and its components



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

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

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

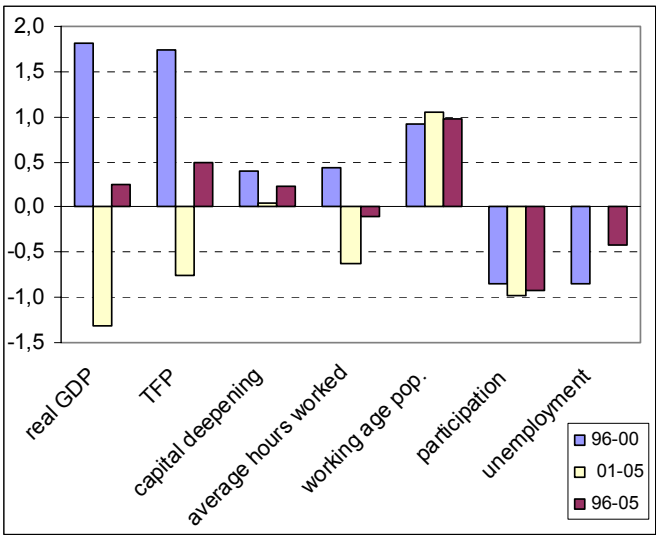
Source: Commission services

This section applies a traditional growth accounting exercise to provide a better understanding of the three supply-side sources - labour, capital and total factor productivity (TFP) – which underlie the evolution of GDP growth in Malta as well as possible differences in growth vis-à-vis the euro area in the past ten years (see Figures 3 and 4).

Throughout the last decade, three-fifths of output growth was explained by the increase in capital deepening, while only another fifth was due to growth in TFP. The contribution of labour was somewhat less than 10% as the positive effect of a growing working age population was almost offset by the negative contribution of working hours, participation and unemployment.

Malta's economic performance between 1996 and 2005 was slightly better compared to the euro area (see Figure 4). On average, aggregate output grew by about ¼ percentage points more than the euro area. This difference was mainly a response to more favourable demographics as the differential of the growth in the Maltese working age population vis-à-vis the euro area amounted on average to around 1 percentage point. The difference is also explained by capital deepening and TFP growth. The latter was above that of the euro area between 1996 and 2000 - accounting for almost half of real GDP growth during this period - but was below that of the euro area in the subsequent five-year period. The positive outcome of these components was partly offset by the diminishing average hours worked and lower labour participation.

Figure 4: Real GDP growth and its components: difference vis-à-vis Euro area average



Note: See note of Figure 3
Source: Commission services

Box 2. Explaining the factors affecting TFP growth in Malta

The substantial drop in the contribution of TFP growth between 2001 and 2005 may reflect the 'quality' dimension not captured in the labour and capital components by the conventional growth accounting exercise. The low-skill content and the typically low productivity of jobs in services shows up in a lower contribution of TFP growth implying that the contribution of labour to GDP growth may be overstated. Similarly, the sizeable decline in TFP during the latter period may be capturing shifts in the different categories of capital. In general, machinery and equipment are considered to be more productive than building and construction. The share of construction spending in total capital increased on average to more than 60% between 2001 and 2005 when compared to below 50% in the previous 5 years. Most of this increase is attributed to the higher government spending related to the building of the *Mater Dei* hospital. Other dimensions of 'quality' of capital that may overstate the decline in the contribution of TFP growth include changes in capacity utilisation and depreciation of capital. The latter can be approximated by the net capital stock to gross capital stock ratio, which factors in the effects of depreciation, ageing and possible quality losses. In Malta, the ratio of net capital stock to gross capital stock has decreased between 1996 and 2005 suggesting that the contribution of capital to GDP growth may be overestimated.

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

Over the last decade, the Maltese economy displayed a relatively stronger output volatility well above that of the euro area (see Table 3). Looking at the two sub-periods, it appears that the standard deviation of real GDP between 2001 and 2005 was almost one-third higher than the one recorded in the previous 5 years. However, in the case of employment and inflation, volatility has decreased over the decade.

Table 3: Volatility in output and other macroeconomic variables

	Standard deviation of:				
	Real GDP	**Employment**	**Productivity**	**Inflation**	**Terms-of-trade**
1996-2005	2.80	1.01	2.74	0.65	1.74
1996-2000	1.16	1.13	1.10	0.73	1.61
2001-2005	1.98	1.02	2.08	0.31	2.05

Source: AMECO
Notes:
[1]defined as the change in the cyclically-adjusted primary balance-to-GDP ratio
[2]covers period 1999 to 2005

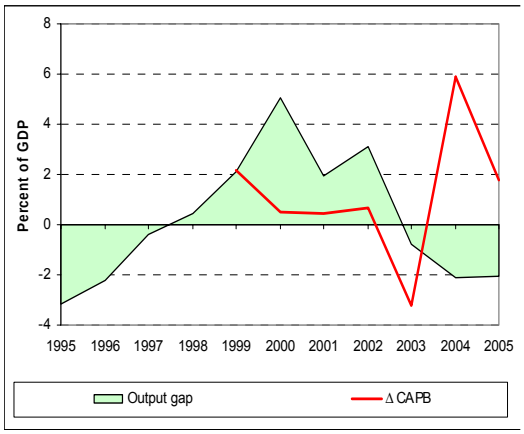
Since small and open economies like Malta are typically less diversified, both in terms of products exported and in terms of export markets, they are more affected by external shocks, especially terms-of-trade shocks. For Malta, fluctuations in changes in the terms-of-trade have increased throughout the last ten years and appear to partly explain the higher output volatility. Malta's over-reliance on the electronics industry in manufacturing and tourism in services and the adverse external shocks that hit both sectors may have led to the higher output volatility experienced between 2001 and 2005.

The conduct of economic policy is also considered to influence the degree of output volatility. The various dimensions of policy can be grouped into two broad categories; those on the demand side and those on the supply side. Malta's higher output volatility between 2001 and 2005 may also partly reflect short-run costs associated with the reforms (e.g. trade liberalisation, restructuring of public entities, liberalisation of services and privatisation) which were implemented during those years in the product market.

On the demand side, fiscal and monetary policies occupy a prominent role in determining cyclical fluctuations. The volatility of discretionary fiscal policy, measured by the standard deviation of the change in the cyclically-adjusted primary budgetary balance as a ratio to GDP[10] in Malta between 2001 and 2005 was substantially larger than that recorded in the euro area. A look at the profile of the output gap and changes in the cyclically-adjusted primary deficit (see Figure 5) shows that between 1999 and 2002 the fiscal policy stance was countercyclical. In 2003, the cyclically-adjusted primary deficit increased appreciably, owing to a one-off transaction connected with the debt restructuring of the shipyards, but with no appreciable effect on aggregate demand. Against a backdrop of a negative output gap between 2003 and 2005, the fiscal stance since 2004 was pro-cyclical. As for monetary policy, the narrowing negative output gap between the years 1995 and 1998 was accompanied by tighter monetary conditions as a result of higher real interest rates (see Figure 6). As the output gap turned positive in the period 1999-2002, monetary conditions became looser as real interest rates dropped, while the real effective exchange rate remained practically unchanged. Monetary conditions became tighter again in 2004 and 2005 during which the output gap turned negative.

[10] Kent C., et. al. (2005) "Declining output volatility: what role for structural change?" Reserve Bank of Australia

Figure 5: Output gap and fiscal stance

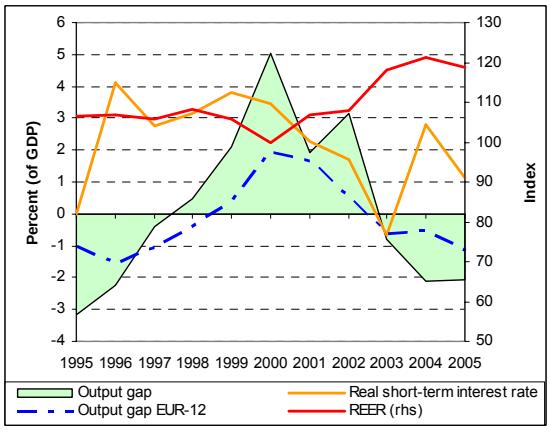


Note:

Public finance data for Malta is available only from 1998 onwards
ΔCAPB denotes the change in the cyclically-adjusted primary budget balance

Source: Commission services

Figure 6: Output gap and monetary stance



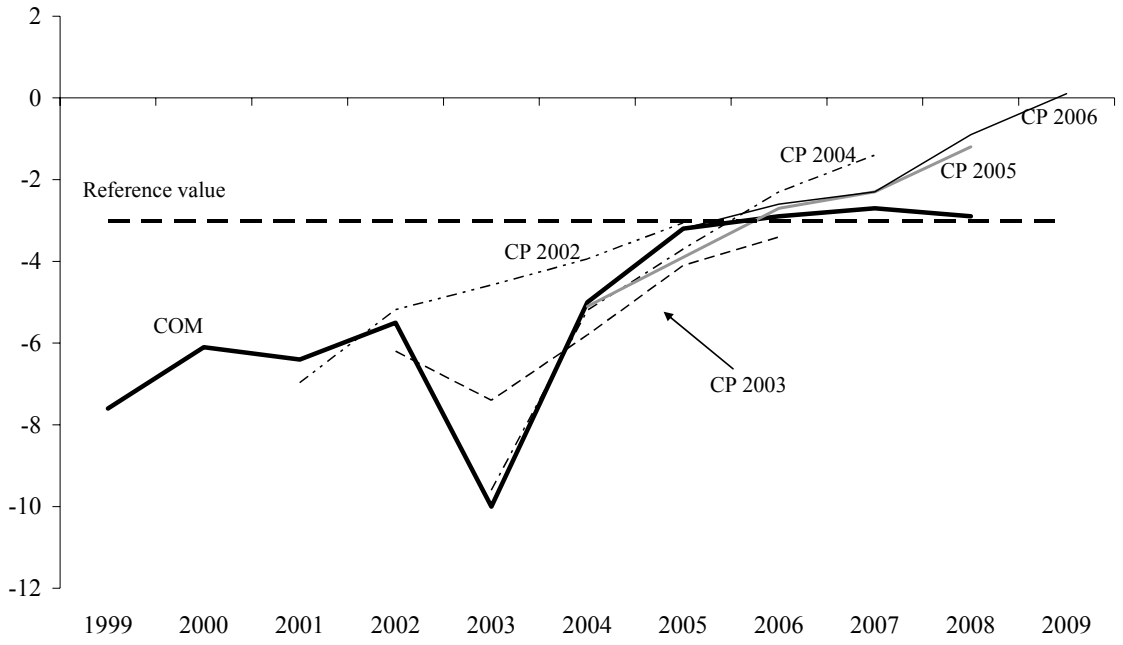
Source: Commission services

2.4. Public finances

In 1998, the general government deficit stood at almost 9¾% of GDP and, on the back of growing domestic demand, declined to 6% of GDP by 2000. The consolidation was achieved both through higher revenue and lower expenditure. However, the reduction of the fiscal deficit was not always durable. By 2001, the general government expenditure reached around 42¾% of GDP, while total revenues stood at 36½% of GDP. Although some improvement was registered in 2002, the budgetary deficit widened markedly to 10% of GDP in the following year. In 2004, the Council required Malta to correct the excessive deficit by 2006. In 2004 and 2005, the fiscal deficit was brought down to around 5% of GDP and to 3¼% of GDP, respectively. The significant fiscal adjustment in the last two years was mainly revenue-based with the revenue-to-GDP ratio increasing by around 5½ percentage points of GDP of which around a third was by way of one-off measures. Between 1998 and 2003, expenditure generally followed an upward trend increasing by around 6¼ percentage points of GDP but declining thereafter. A look at general government expenditure by function shows that the highest increases between 1998 and 2004 were in respect of general public services, health and social protection.

Malta's budgetary strategy aims at reducing the general government deficit below the 3% of GDP reference value in 2006 and to achieve a balanced budget in structural terms (i.e. in cyclically-adjusted terms and net of one-off and other temporary measures) over the cycle. In the last two years both revenue and expenditure targets in successive convergence programmes have been higher than the outturns (see Figure 7). The difference between the revenue and expenditure targets and outturns was broadly of the same magnitude implying a neutral effect on the general government deficit. The deterioration in the deficit was reflected in higher general government debt which increased substantially from around 38¾% of GDP in 1996 to just under 75% of GDP in 2004. In 2005, the debt ratio declined to 74¼% of GDP.

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



Source: Commission services and national convergence programmes

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

Following a period of strong economic growth in the second half of the nineties, the performance of the Maltese economy slowed down appreciably between 2001 and 2005. Although unfavourable cyclical developments contributed to this outcome, domestic structural weaknesses - magnified by sectoral concentration in manufacturing - have progressively led to a loss in Malta's external competitiveness. This resulted in a fall in exports and a worsening external deficit which in 2005 stood at around 11% of GDP. While estimates for TFP growth may capture 'quality' aspect of factor inputs, the low total factor productivity in recent years appears to be another reason behind Malta's weak economic growth. In the past years, Malta recorded a general government deficit. Although various attempts have led to a decline in the deficit-to-GDP ratio since 1998, the adjustment was not always durable. For most years the adjustment was achieved through higher revenue, however recently adjustment is being attained through expenditure control which should contribute to a more lasting consolidation. Despite the success in restraining overall spending in recent years, certain expenditure items - such as those related to healthcare and social protection - have followed an upward trend between 1998 and 2004.

Stabilisation: The small size and openness of the Maltese economy and the ensuing vulnerability exacerbate the challenges faced by macroeconomic policy in stabilising the economy. In a setting whereby monetary policy is determined by a fixed exchange rate regime as a way to achieve price stability, the scope for autonomous discretionary fiscal policy is reduced. Pursuing consolidation and adopting a counter-cyclical fiscal policy would increase the effectiveness of automatic stabilisers in dampening the impact of external shocks. This entails pursuing further budgetary consolidation especially during

upswings, while avoiding pro-cyclical policies in 'good times' which would lead to a reduction in debt levels.

Sustainability: Notwithstanding the good progress made by Malta in reducing the general government deficit in the past two years, the durability of fiscal consolidation in the medium to long-term remains a challenge. In particular, reversing past spending trends in healthcare costs and social entitlements would improve long-term fiscal sustainability. Moreover, failing to contain such expenditure, would mean higher taxation, which may lead to a further worsening of Malta's external competitiveness.

Efficiency: Apart from ensuring a sound budgetary position in terms of achieving aggregate fiscal discipline, enhancing the allocative efficiency of public expenditure should contribute to unleash Malta’s growth potential. This requires a redirection of public expenditure towards growth-enhancing spending. Fiscal consolidation would contribute to release resources which may be re-directed to fund productive spending including R&D, human capital and innovation which would increase TFP, an essential element in tackling the growth challenge.

Table 1: Key economic indicators

	Malta						Euro area					
	Averages			2003	2004	2005	Averages			2003	2004	2005
	'96 - '05	'96 - '00	'01 - '05				'96 - '05	'96 - '00	'01 - '05			
Economic activity												
Real GDP (% change)	2.4	4.5	0.3	-2.4	0.0	2.2	2.1	2.7	1.4	0.8	2.0	1.4
Contributions to real GDP growth:												
Domestic demand	2.0	3.8	0.1	5.4	0.4	6.3	2.0	2.7	1.3	1.4	1.8	1.6
Net exports	0.5	0.7	0.2	-7.8	-0.4	-4.1	0.1	0.1	0.1	-0.7	0.2	-0.2
Prices, costs and labour market												
HICP inflation (% change)	n.a.	n.a.	2.5	1.9	2.7	2.5	1.9	1.7	2.2	2.1	2.1	2.2
Labour productivity (% change)	1.6	3.8	-0.5	-3.4	0.8	0.7	1.2	1.5	0.8	0.8	1.6	0.9
Real unit labour costs (% change)	0.3	-0.8	1.4	3.3	1.0	-2.2	-0.5	-0.6	-0.5	-0.1	-1.0	-0.8
Employment (% change)	0.8	0.8	0.8	1.0	-0.8	1.5	1.2	1.5	0.9	0.7	0.7	0.8
Unemployment rate (% of labour force)	6.9	6.4	7.5	7.6	7.4	7.3	9.1	9.8	8.5	8.7	8.9	8.6
Competitiveness and external position												
Real effective exchange rate (% change) (1)	1.1	-1.4	3.6	9.6	3.1	-2.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Export performance (% change) (2)	-3.9	-3.9	-3.9	-5.5	-3.4	-11.6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
External balance (% of GDP)	-5.5	-6.7	-4.2	-4.7	-6.0	-7.8	1.9	1.7	2.0	2.1	2.1	1.5
Public finances												
General government balance (% of GDP)	n.a.	n.a.	-6.0	-10.0	-5.0	-3.2	-2.3	-2.1	-2.5	-3.1	-2.8	-2.4
General government debt (% of GDP)	58.8	49.5	68.1	70.2	74.9	74.2	70.9	72.5	69.3	69.3	69.8	70.8
Structural budget balance (% of GDP) (3)	n.a.	n.a.	n.a.	-6.5	-5.0	-4.0	n.a.	n.a.	n.a.	-3.2	-2.9	-2.0
Financial indicators (4)												
Long term real interest rate (%) (5)	n.a.	n.a.	3.0	1.0	4.6	2.5	3.1	4.1	2.1	2.0	2.2	1.5
Household debt (% of GDP) (6)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corporate sector debt (% of GDP) (7)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Notes:

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

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

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

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

(4) Data available up to 2004.
(5) Using GDP deflator.
(6) Households' and non-profit institutions serving households' debt, defined as loans and securities other than shares.
(7) Non-financial corporate sector debt, defined as loans and securities other than shares.
Source:
Commission services

3. MACROECONOMIC OUTLOOK

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

3.1. External assumptions

The external assumptions underpinning the update's macroeconomic scenario are broadly in line with those used in the Commission services' autumn 2006 forecast. World GDP is estimated to grow by about 5¾% in 2006 and ease somewhat to 5¼% in 2007-2008. According to the update, economic growth in the EU is projected to reach 2¾% in 2006 and slow to slightly below 2½% in the remaining years. However, the programme's growth projections for Malta's main trading partners is even lower than that for EU25. The exchange rate of the euro against the dollar and the nominal effective exchange rate of the Maltese lira are projected to remain constant between 2006-2009. Oil prices are projected to be slightly higher than those underlying the Commission services' autumn 2006 forecasts for the period 2006-2008. The update assumes that short- and long-term interest rates remain unchanged during the outlook period, almost in line with those of the euro area by 2008.

3.2. Economic activity

According to the update, real GDP growth is estimated to hover around 3% per year between 2006 and 2009 (see Table 4). The negative output gap (as recalculated by the Commission services according to the commonly agreed methodology, based on the information provided in the programme) which developed in 2003 and widened until 2005 is expected to progressively close between 2006-2008 and to turn positive in 2009.

The update foresees economic growth in 2006 being underpinned by domestic demand, mainly on the back of strong investment. Despite sustained private consumption expenditure throughout the outlook period, a sharp drop in investment from 2007 onwards, mainly linked with the completion of the *Mater Dei* hospital, is expected to lead to a fall in the contribution of domestic demand to GDP growth, giving way to a more balanced growth. The average GDP growth between 2006 and 2009 projected in the update (3%) assumes a marked acceleration vis-à-vis the average economic performance of the past 5 years (¼%). The higher pace of growth compared to the past five years is mostly explained by higher projected domestic demand, particularly private consumption expenditure and investment. The update does not provide any explanation of the reasons underlying the change between the weak economic performance in recent years and the projected recovery in the years 2006 and 2009.

The external sector is expected to detract from GDP growth in 2006, as the turnaround in exports is outweighed by substantial imports. In 2007, the negative contribution of the external sector to economic growth is projected to decline and to turn positive in the subsequent two years, mostly on account of an acceleration in exports.

During 2006, the official interest rate was tightened to 3¾%. This gave rise to an increase in the short-term interest rate differentials in favour of the Maltese lira to a level, which, according to the monetary authorities is expected to provide stronger support for the exchange rate peg, while at the same time help to dampen the relatively strong demand for credit by the personal sector and encourage savings. The update emphasises the importance of a successful conduct of monetary policy as a facilitator of Malta's entry into the euro area.

Table 4: Comparison of macroeconomic developments and forecasts

	2006		2007		2008		2009
	COM	CP	COM	CP	COM	CP	CP
Real GDP (% change)	2.3	2.9	2.1	3.0	2.2	3.1	3.1
Private consumption (% change)	2.3	2.6	2.5	2.7	2.6	2.8	2.7
Gross fixed capital formation (% change)	7.5	10.3	4.6	6.8	2.4	0.8	1.3
Exports of goods and services (% change)	0.6	1.9	2.1	2.3	2.4	4.1	4.6
Imports of goods and services (% change)	2.7	4.5	2.6	2.4	2.5	2.6	3.2
Contributions:							
- Final domestic demand	3.4	4.0	2.8	3.4	2.5	2.1	2.2
- Change in inventories	1.0	1.5	0.0	-	0.0	0.1	0.1
- External balance on g&s	-2.1	-2.7	-0.7	-0.4	-0.3	0.9	0.8
Output gap[1]	-1.4	-2.1	-1.1	-1.3	-0.5	-0.3	0.9
Employment (% change)	1.0	0.9	0.8	1.1	0.9	0.9	0.9
Unemployment rate (%)	7.0	7.0	7.0	6.5	6.9	6.4	6.2
Labour productivity growth (%)	1.3	2.0	1.2	1.9	1.3	2.2	2.2
HICP inflation (%)	3.0	3.1	2.6	2.2	2.4	2.1	2.0
GDP deflator (% change)	3.1	3.7	2.9	2.9	2.7	2.8	3.0
Comp. of employees (% change)	2.9	2.2	2.8	2.6	3.0	2.5	2.5
Real unit labour costs (% change)	-2.5	-4.5	-2.1	-3.4	-1.9	-3.6	-3.7
External balance (% of GDP)	-10.9	-	-10.9	-	-11.2	-	-

Note:

[1]In percent of potential GDP, with potential GDP growth as reported in Table 2 below.

Source:

Commission services' autumn 2006 economic forecasts (COM); Convergence programme

In 2006, GDP is estimated to grow by 2.9% which is higher than the Commission services' autumn 2006 forecast of 2.3%. For 2007, the update foresees GDP to grow by 3.0%. This seems favourable when compared to the corresponding Commission projections of 2.1%. According to the update, and real GDP is projected to grow by 3.1% in 2008, which seems markedly favourable in comparison to the Commission services forecast of 2.2%. Similarly, the update foresees GDP to grow by 3.1% in 2009 which also appears markedly favourable when compared to the potential growth projected in the Commission services' autumn 2006 forecast. With the contribution of domestic demand projected in the update broadly in line with the Commission services' autumn 2006 forecast, although somewhat stronger, the difference in the growth path is mainly due to the improved performance of the external sector, especially in 2008. In view of the somewhat subdued GDP growth in Malta's trading partners assumed by the update, this implicitly suggests that the higher GDP growth in the outer years assumed by the programme is due to increased productivity/competitiveness gains.

According to the update, cyclical conditions as measured by the output gap, are projected to improve over the forecast horizon. The negative output gap for 2006 and 2007 as recalculated by the Commission services on the basis of the data presented in the programme is higher than that projected by the Commission services' forecasts. However, as the pace at which the negative output gap closes is faster than that projected by the Commission forecast, the situation is reversed in 2008. In 2009, the output gap turns positive. A comparison across the latest three programmes and Commission services' forecast rounds shows a high degree of variability of output gap estimates underlining the uncertainty surrounding such real-time estimates (see Table 5).

Table 5: Output gap estimates in successive Commission services' forecasts and convergence programmes

(% of potential GDP)	2006		2007		2008	
	COM	CP[1]	COM	CP[1]	COM	CP[1]
December 2006 CP 2006	-	-2.1	-	-1.3	-	-0.3
Autumn 2006	-1.4	-	-1.1	-	-0.5	-
Spring 2006	-2.1	-	-1.6	-	0.0	-
January 2006 CP 2005	-	-3.7	-	-4.2	-	-4.4
Autumn 2005	-4.3	-	-5.1	-	0.0	-
Spring 2005	-2.2	-	0.0	-	0.0	-
December CP 2004	-	-2.4	-	-2.2	-	-

Note:

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

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

3.3. Potential growth and its determinants

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) show some differences when compared to the Commission services' autumn 2006 forecasts (see Table 6). This is mainly because the programme projects TFP to contribute around ¼% to potential growth, whereas the Commission services forecasts no contribution from TFP. The update's projections of the contribution of capital accumulation and labour input to potential output growth largely coincide with those of the Commission services' forecast. The Commission services calculations of potential GDP growth between 2006 and 2008 also show some differences with historical trends. In particular, estimates of potential GDP growth for the forecast horizon are below the average GDP growth in the past ten years but much higher than the average GDP growth in the past five years further suggesting that the programme's macroeconomic outlook is favourable.

Table 6: Sources of potential output growth

	2006		2007		2008		2009
	COM	CP[2]	COM	CP[2]	COM	CP[2]	CP[2]
Potential GDP growth (%)[1]	1.7	2.1	1.7	2.2	1.6	2.1	1.8
Contributions:							
- Labour	0.2	0.3	0.2	0.3	0.2	0.3	0.1
- Capital accumulation	1.4	1.5	1.5	1.6	1.4	1.5	1.4
- TFP	0.0	0.3	0.0	0.3	0.0	0.3	0.3

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 convergence programme (CP).

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

3.4. Labour market developments

According to the update, labour market conditions are expected to tighten throughout the programme period. Employment growth is expected to pick up, leading to a fall in unemployment. This is in line with the Commission services' autumn 2006 forecast, although for 2007 the update foresees an acceleration in job creation, which would lead to a sharp fall in unemployment explained by both improved economic prospects and demographic changes. Throughout the programme period, gains in productivity explain the bulk of growth in GDP, whereas the projected average labour content of GDP growth is in line with historical values. Employment is anticipated to grow by around 1% per year during the programme horizon which is slightly higher than the average recorded in the previous ten years. However, this is in line with the Commission services' autumn 2006 forecast, and is explained by the composition of growth significantly based on services and construction which are labour-intensive.

3.5. Costs and price developments

In line with the Commission services' autumn 2006 forecast, the update expects HICP inflation to follow a downward path during the programme period. According to the update, after reaching an estimated 3.1% in 2006, inflation is expected to fall to 2.2% as the effects of the high oil prices continue to recede. The corresponding figure in the Commission services forecast for 2007 is 2.6%. When compared to the Commission forecast, the update's estimate of inflation for 2007 appears to be on the low side. However, the fall in inflation in the last three months of 2006 seems to suggest that the programme's inflation for 2007 is plausible. The programme projects marginal declines in 2008 and 2009 when HICP inflation is projected at 2.1% and 2%, respectively. For 2008, the Commission services projects inflation to fall to 2.4%.

Despite a tightening labour market, the programme envisages a marginal rise in wages from 1.3% in 2006 to 1.6% in 2009. This may be explained by the wage discipline underlying the recently signed multi-annual collective agreement for the public service which is considered to act as a price-setter in the Maltese labour market. At an average annual growth rate of around 2%, labour productivity is expected to exceed the rise in wages. Consequently, nominal unit labour costs are projected to contract suggesting that the update expects no inflationary pressures from labour costs during the programme's period.

The evolution of unit labour costs and its components as presented in the update show some differences with the Commission services' autumn 2006 forecast. The divergence is mainly explained by productivity which in the Commission services' forecast is projected

to grow by an annual average of 1¼% between 2006 and 2009, against 2% in the update. To a lesser extent the difference in unit labour costs is also due to higher wage growth, reflecting the assumption underlying the Commission services' forecast that pay rises in the public service collective agreement are expected to increase at a faster pace, particularly in the outer years.

3.6. Sectoral balances

The update projects an improvement in the goods and services balance, from a deficit of around 12% of GDP in 2006 to 11% of GDP in 2007. Further declines are projected in 2008 to 9¼% of GDP and to 7% of GDP in 2009. In contrast, the Commission services' autumn 2006 forecast projects an unchanged goods and services imbalance standing at around 11¼% of GDP over the outlook period. The difference is due to a stronger turnaround in exports of goods and services projected by the update for 2008 and 2009 (see section 3.2).

3.7. Assessment

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

3.7.1. Plausibility of the macroeconomic scenario

The update foresees an acceleration in Malta's economic activity in the medium-term, especially when compared to the weak GDP growth recorded in the last 5 years. Although when compared to the Commission forecast, the update's estimate of GDP growth for 2006 appears favourable, a recent upward revision of real GDP for the first half of 2006 and strong GDP growth for the third quarter of 2006 seem to suggest that the update's growth projection for 2006 is plausible. However, the macroeconomic outlook for 2007 appears favourable and markedly favourable for 2008 when compared to the Commission services' autumn 2006 real GDP forecast. Similarly, economic growth for 2009 is markedly favourable when compared to the estimate of potential output growth, as recalculated by Commission services on the basis of the information provided in the programme according to the agreed methodology.

There are also some differences with respect to the composition of growth, particularly regarding the update's somewhat more optimistic contribution of net exports to GDP growth in the outer years. The reliance on the external sector, especially in 2008 and 2009, as a driver of growth poses some risks to the macroeconomic scenario given the characteristics of export activity in Malta. As noted in section 2, Malta's manufacturing industry is to a large extent influenced by the presence of a semi-conductor firm which accounts for a high proportion of the country's exports (for instance, the turnaround of export during 2006 is almost fully due to increases reported by the electronics industry). The specialised operation of this firm is such that its performance is not always directly linked to that of the global electronics industry, much less to developments in the international economy. Tourism - the other main export sector - has been facing a number of challenges in recent years, mainly related to declining competitiveness, much of which have not been resolved. Furthermore, the tourism industry is characterised by its sensitivity to geopolitical developments as witnessed in recent years. These considerations, together with the fact that the high proportion in GDP accounted for by these two sectors tends to magnify the impact of any small changes in their output, introduce an element of uncertainty to the outlook. True, recent announcements of new

or expanding significant export-oriented projects may reveal ex-post to be a boost to export growth. However, as concrete evidence on the exact impact of these projects has until now been missing and given the above considerations, it is considered to be more prudent to adopt an approach which limits the contribution of exports to GDP growth in line with the Commission forecasts.

3.7.2. Economic good vs. bad times

The output gap for Malta, as estimated in the Commission services' autumn 2006 forecast, is projected to remain negative up to 2008. Indeed, the negative output gap - which developed between 2003 and 2005 - is expected to close somewhat rapidly from 1½% in 2006 to ½% in 2008 (the update's recalculated output gap turns positive by 2009). A comparison across successive forecast rounds shows that, although estimates are unstable, there is a clear downward trend in the negative output gap in line with upward revisions of GDP data. Consequently, the macroeconomic outlook would qualify for economic 'good' times, especially after 2007.

4. GENERAL GOVERNMENT BALANCE

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

4.1. Budgetary implementation in 2006

For 2006, the programme estimates the deficit to decline to 2.6% of GDP from 3.2% in 2005 (see Table 7). This target represents a marginal improvement on what was planned in the January 2006 update, which however was based on a much worse estimated outturn for 2005. The new update's estimated outcome for 2006 is below that projected in the Commission services' autumn 2006 forecast. An upward revision of real GDP for the first half of 2006 and strong GDP growth for the third quarter of 2006 together with recent government finance cash data suggest that the estimate for 2006 in the new update seems plausible. This may have a carry-over effect in 2007 and could partly explain the differences between the projections for that year in the update and the Commission services forecasts.

At 43¾% of GDP, total revenue is expected to decline rather than increase as foreseen in the previous programme, mostly owing to a lower tax intake despite much higher nominal GDP growth projected in the recent update. Specifically, the difference is mainly due to taxes on production and imports which is foreseen to be around 1¾ percentage points lower in the recent update. This appears to be at odds with the stronger growth in nominal private consumption projected in the recent update (around 5½% vs. 3% in the previous programme). In addition, taxes on income and wealth are estimated to be around ¾ of a percentage point lower in the new update. The Commission services' autumn 2006 forecast projected general government revenue to remain unchanged in 2006 at 44¼% of GDP as tax revenues were expected to grow in line with nominal GDP. Revenues from one-off operations are estimated to amount to around 1% of GDP in 2006 (sale of land), broadly the same as projected in the previous update.

The new update estimates total expenditure in 2006 at 46½% of GDP, a full percentage point lower than in 2005, and against a more prudent projection by the Commission services' autumn 2006 forecast. The decline in the expenditure ratio, as also projected in the previous update, mainly reflects lower primary expenditure specifically lower total social transfers (down by almost 1 percentage point of GDP). Other expenditure components estimated to decline include subsidies and interest expenditure (by ¼ percentage points of GDP each).

Table 7: Evolution of budgetary targets in successive programmes

		2005	2006	2007	2008	2009
General government balance (% of GDP)	**CP Dec 2006**	**-3.2**	**-2.6**	**-2.3**	**-0.9**	**0.1**
	CP Jan 2006	-3.9	-2.7	-2.3	-1.2	n.a.
	CP Dec 2004	*-3.7*	*-2.3*	*-1.4*	-	-
	COM Nov 2006	-3.2	-2.9	-2.7	-2.9	n.a.
General government expenditure (% of GDP)	**CP Dec 2006**	**47.4**	**46.4**	**46.2**	**42.7**	**40.1**
	CP Jan 2006	49.6	48.6	44.9	42.1	-
	CP Dec 2004	*49.7*	*46.8*	*44.3*	-	-
	COM Nov 2006	47.4	47.0	47.1	47.3	n.a.
General government revenues (% of GDP)	**CP Dec 2006**	**44.2**	**43.8**	**43.9**	**41.8**	**40.1**
	CP Jan 2006	45.7	45.9	42.7	40.9	-
	CP Dec 2004	*45.9*	*44.5*	*42.9*	-	-
	COM Nov 2006	44.2	44.2	44.4	44.4	n.a.
Real GDP (% change)	**CP Dec 2006**	**2.2**	**2.9**	**3.0**	**3.1**	**3.1**
	CP Jan 2006	0.9	1.1	1.2	2.0	-
	CP Dec 2004	*1.5*	*1.8*	*2.2*	-	-
	COM Nov 2006	2.2	2.3	2.1	2.2	n.a.

Source:
Convergence programmes (CP) and Commission services' autumn 2006 economic forecasts (COM)

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 below the 3% of GDP reference value in 2006 and at pursuing fiscal consolidation over the rest of the programme period. The update confirms the commitment taken in the previous programme of ultimately reaching a balanced position in structural terms (i.e. in cyclically-adjusted budget net of one-off and temporary measures). The budgetary strategy also aims at gradually reducing the debt ratio to slightly below 60% of GDP by the end of the programme period.

After falling to 3.2% of GDP in 2005, the update foresees a gradual reduction in the general government deficit throughout the programme period, which would lead to a broadly balanced budget in nominal terms by 2009. This translates into an average annual improvement in the nominal deficit-to-GDP ratio of almost 1 percentage point. The adjustment over the 2006-2008 period is broadly the same as in the previous

programme against a much more favourable macroeconomic scenario. The adjustment takes place especially from 2008 (1½ percentage points of GDP) onwards. Around one-fifth of the reduction in the headline deficit over the programme period is accounted for by a decline in the interest burden. The primary surplus is thus expected to continue to increase (but less pronounced than the nominal balance) and is projected to reach 3¼% of GDP by 2009 with most of the improvement concentrated in 2008.

Box 1: The excessive deficit procedure for Malta

According to the excessive deficit procedure (EDP), the Commission and the Council monitor the development of the budgetary position in each Member State, notably in relation to the reference values of 3% of GDP for the deficit and 60% of GDP for the debt, in order to assess the existence (or risk) of an excessive deficit and to ensure its correction. The EDP is laid down in Article 104 of the Treaty and further clarified in the Stability and Growth Pact.

On 5 July 2004 the Council adopted a decision stating that Malta had an excessive deficit in accordance with Article 104(6). At the same time, the Council addressed a recommendation under Article 104(7) specifying that the excessive deficit had to be corrected by 2006. In particular, Malta was recommended to implement with vigour measures, particularly those of a structural nature, aimed at rationalising and reducing expenditure. The Council also recommended Malta end the rise in the debt ratio in 2005 and reduce it thereafter.

4.2.2. The composition of the budgetary adjustment

The update foresees an adjustment which is to be achieved through spending restraint with a cut OF more than 6 percentage points of GDP in the expenditure ratio being less than offset by a decline of around 4 percentage points in the revenue ratio. Lower recourse will be made to deficit-reducing one-off measures which are planned to fall to levels below those recorded in recent years (typically around 1% of GDP annually). For 2007, the update foresees one-off measures to amount to 0.2% of GDP (sale of land), against the ¾% of GDP in the previous programme. For 2008 and 2009, one-off operations also amount to 0.2% of GDP and also consist of sale of land. While the programme provides information on the policy measures for 2007 which is consistent with the 2007 Budget Law (see Box 2 for details), the measures underpinning the consolidation process are not disclosed for 2008 and 2009, making an overall assessment of the plausibility of the budgetary targets difficult to carry out.

Table 8: Composition of the budgetary adjustment

(% of GDP)	**2005**	**2006**	**2007**	**2008**	**2009**	**Change: 2009-2006**
Revenues *of which:*	**44.2**	**43.8**	**43.9**	**41.8**	**40.1**	**-3.7**

- Taxes & social contributions	36.8	36.5	36.9	36.1	35.1	**-1.4**
- Other (residual)	7.4	7.3	7.0	5.7	5.0	**-2.3**
Expenditure	**47.4**	**46.4**	**46.2**	**42.7**	**40.1**	**-6.3**
of which:						
- Primary expenditure	43.5	42.7	42.8	39.3	37.0	**-5.7**
of which:						
Collective consumption	9.9	10.3	9.8	9.3	8.9	**-1.4**
Total social transfers	25.2	24.3	23.5	22.8	22.2	**-2.1**
Subsidies	2.1	1.9	1.9	1.6	1.3	**-0.6**
Gross fixed capital formation	5.4	5.6	6.1	4.0	3.2	**-2.4**
Other (residual)	0.9	0.6	1.5	1.6	1.4	**0.8**
- Interest expenditure	3.9	3.7	3.4	3.4	3.1	**-0.6**
General government balance (GGB)	**-3.2**	**-2.6**	**-2.3**	**-0.9**	**0.1**	**2.7**
Primary balance	**0.8**	**1.1**	**1.1**	**2.5**	**3.2**	**2.1**
One-offs[1]	1.6	1.1	0.2	0.2	0.2	n.a.
GGB excl. one-offs	**-4.8**	**-3.7**	**-2.5**	**-1.1**	**-0.1**	**3.4**

Note:
[1]One-off and other temporary measures.

Source:
Convergence programme update; Commission services' calculations

According to the update, the nominal budgetary adjustment during the programme period is expected to reflect lower expenditure amounting to 6¼ percentage points of GDP. For 2007, the primary expenditure ratio is projected to remain broadly constant. An increase in the public investment ratio is financed by a cut in collective consumption and transfers. The 'other' spending category is projected to increase by almost 1 percentage point of GDP in 2007 on account of lower one-off operations which are recorded as negative expenditure. For 2008, the reduction in the primary expenditure ratio by some 3.5 percentage points is planned to be concentrated in lower investment spending (2 percentage points) reflecting the completion of the *Mater Dei* hospital; the remainder is accounted for by a cut in collective consumption and transfers (as well as subsidies) as a percent of GDP. The adjustment in 2009 is driven by the same items as in 2008 but less pronounced as the fall in the public investment ratio is smaller. Control on the growth in compensation to public service employees and intermediate consumption below nominal GDP growth underlie the decline in current spending.

The fall in expenditure is expected to be partially offset by lower revenues of around 3¾ percentage points of GDP, mainly on account of an anticipated fall in proceeds from EU Funds and the Italian Financial Protocol[11] (captured in "other revenues"). Tax revenue is also projected to decline over the outlook period, while social contributions are expected to remain almost unchanged. For 2007, tax revenue as a ratio of GDP is anticipated to increase by around ½ a percentage point of GDP. This mainly reflects higher revenue from taxes on production and imports on the back of sustained private consumption expenditure. As announced in the 2007 Budget law, a review of the personal income tax regime will come into force in 2007 at an estimated budgetary cost of around ½% of

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

GDP in the same year. However, the update projects a marginal increase in revenue from current taxes on income and wealth in 2007 as the lower revenue caused by the income tax reform is expected to be more than compensated for by way of higher GDP growth and tax efficiency. For 2008 and 2009, the programme projects a decline in revenue from direct taxes by almost ½ a percentage point of GDP per year. Revenue from taxes on production and imports is also expected to fall by ½ a percentage point of GDP each year. The latter appears to be at odds with the relatively strong pace of private consumption expenditure projected for these years. Net of the above-mentioned one-offs, the general government deficit would amount to 3¾% of GDP in 2006 and fall to 2½% of GDP in 2007, 1% of GDP in 2008 and to almost a balance in 2009.

Box 2: The budget for 2007

The draft Budget for 2007 was presented in Parliament on 18 October 2006 and was approved by Parliament on 17 November 2006. The 2007 Budget law targets a general government deficit of 2.3% of GDP in 2007. The main measures presented in the 2007 draft Budget include a reform of the personal income tax regime (more favourable personal income tax bands effective next year), a new licensing system for gaming machines, lower social contributions for certain categories of part-time employment, tax deductions for parents employing the services of childcare facilities, a reduction in the airport tax, an energy benefit aimed at alleviating the cost of energy to low-income households and improvements in certain social benefits. The Budget also announced the securitisation of certain government property (estimated at 1% of GDP) to finance payment for expropriated land. According to the assessment by national authorities -which is pending a final decision by Eurostat - this securitisation would be deficit-neutral. The budgetary cost of the main measures are presented in the table below.

Table: Main measures in the budget for 2007

Revenue measures*	Expenditure measures**
o Income tax reform (-0.5% of GDP) o Gaming machines licensing (0.2% of GDP) o Revision in social contr. (-0.05% of GDP) o Reduction in airport tax (-0.02% of GDP)	o Restraint on public service wages*** (-0.7% of GDP) o Control of benefit fraud*** (-0.2% of GDP)

* Estimated impact on general government revenues.
** Estimated impact on general government expenditure.
*** On-going measure, not specific to 2007 Budget
Sources: Commission services, convergence programme and the Budget for 2007

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

The update clearly identifies the MTO as being a balanced position in structural terms (i.e. general government balance in cyclically-adjusted terms and net of one-off and other temporary measures), which is the same as in the previous update. However, in contrast to the previous programme, which targeted the achievement of the MTO by 2008, the recent update announces that the MTO will be reached beyond the programme period without specifying in which year. The structural deficit (as calculated by the Commission services on the basis of the information in the programme) is projected at around ½% of GDP in 2009.

Achieving a structural balanced budget should fulfil the aim of providing a safety margin against the occurrence of an excessive deficit since the MTO is more demanding than the minimum benchmark (estimated at a deficit of around 1¾% of GDP. The minimum

benchmark is the estimated budgetary position in cyclically-adjusted terms that provides a sufficient safety margin for automatic stabilisers to operate freely during normal economic downturns without breaching the 3% of GDP deficit reference value. The 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.

Box 3: The medium-term objective (MTO) for the budgetary position

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

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

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

The structural deficit (as calculated by the Commission services' on the basis of the programme according to the commonly agreed methodology) is projected to improve by 2½% of GDP in the programme period. Specifically, from around 3% of GDP in 2006 the structural deficit is projected to decline to 2% of GDP in 2007 and continue to fall to 1% of GDP in 2008 and ½% of GDP in 2009. The consolidation effort is evenly distributed along the outlook period with an annual average improvement in the structural deficit of around ¾ of a percentage point of GDP.

However, excluding the decline in the interest burden, the consolidation effort falls to around 0.6 percentage point of GDP on average per year. The fiscal stance should be characterised as restrictive in both 2007 and 2008 and broadly neutral in 2009.

Table 9: Output gaps and cyclically-adjusted and structural balances

% of GDP	**2005**		**2006**		**2007**		**2008**		**2009**	**Change: 2009-2006**
	COM	**CP[1]**	**COM**	**CP[1]**	**COM**	**CP[1]**	**COM**	**CP[1]**	**CP[1]**	**CP[1]**
Gen. gov't balance	-3.2	-3.2	-2.9	-2.6	-2.7	-2.3	-2.9	-0.9	0.1	2.7

One-offs[2]	1.6	1.6	1.1	1.1	0.2	0.2	0.0	0.2	0.2	-
Output gap[3]	-2.1	-2.8	-1.4	-2.1	-1.1	-1.3	-0.5	-0.3	0.9	-
CAB[4]	-2.4	-2.2	-2.3	-1.8	-2.3	-1.8	-2.7	-0.8	-0.2	1.6
change in CAB	*1.8*	*1.9*	*0.1*	*0.3*	*0.0*	*0.0*	*-0.4*	*1.0*	*0.1*	-
CAPB[4]	1.5	1.7	1.5	1.9	1.1	1.6	0.7	2.6	2.9	1.0
Structural balance[5]	-4.0	-3.8	-3.5	-2.9	-2.5	-2.0	-2.7	-1.0	-0.4	2.5
change in struct. bal.	*0.9*	*1.0*	*0.6*	*0.8*	*0.9*	*0.9*	*-0.2*	*1.0*	*0.6*	-
Struct. prim. bal.[5]	-0.1	0.1	0.3	0.8	1.0	1.4	0.7	2.4	2.7	1.9

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-offs and other temporary measures.

[3]In percent of potential GDP. See Table 6 above.

[4]CA(P)B = cyclically-adjusted (primary) balance.

[5]Structural (primary) balance = CA(P)B excluding one-offs and other temporary measures.

Source:

Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations

4.3. Risk assessment

This section discusses the plausibility of the programme's budgetary projections by analysing various risk factors. For the period until 2008, Table 10 compares the detailed revenue and expenditure projections in the Commission services' autumn 2006 forecast, which are derived under a no-policy change scenario, with those in the updated programme.

The budgetary projections as presented in the update are optimistic when compared to the Commission services' 2006 autumn forecast. However, as mentioned in Section 4.1 above, the estimated outturn for 2006 in the new programme seems plausible in view of the most recent information, with a possible carry-over into 2007. The difference of around a ¼ of a percentage point of GDP in 2006 and 2007 widens to 2 percentage points in 2008 and is partially explained by the customary no-policy change scenario used in the Commission forecast. While the update provides information about the budget targets and the composition of the adjustment over the outlook period, the policy measures underpinning the consolidation process are not disclosed for 2008 and 2009.

The risks stemming from the macroeconomic outlook entailed in achieving the budgetary targets projected by the update pertain mainly to the performance of the external sector (where the main differences reside), especially in the outer years. Given the high degree of openness of the Maltese economy, a lower-than-projected recovery of exports would result in slower growth with consequences on fiscal adjustments. Commission services' simulations of the cyclically-adjusted balance under the assumptions of (i) a sustained 0.5 percentage point below from the real GDP growth projections in the programme over the 2006-2009 period; (ii) trend output based on the HP-filter and (iii) no policy response, reveal that, by 2009, the cyclically-adjusted balance is 0.9 percentage point of GDP above the central scenario. Hence, in the case of persistently lower real growth, additional measures of around 0.9 percentage point of GDP would be necessary to keep the public finances on the path targeted in the central scenario.

Table 10: Comparison of budgetary developments and projections

(% of GDP)	2005	2006		2007		2008		2009
		COM	CP	COM	CP	COM[1]	CP	CP
Revenues	**44.2**	**44.2**	**43.8**	**44.4**	**43.9**	**44.4**	**41.8**	**40.1**
of which:								
- Taxes & social contributions	36.8	36.8	36.5	37.1	36.9	37.1	36.1	35.1
- Other (residual)	7.4	7.4	7.3	7.3	7.0	7.3	5.7	5.0
Expenditure	**47.4**	**47.0**	**46.4**	**47.1**	**46.2**	**47.3**	**42.7**	**40.1**
of which:								
- Primary expenditure	43.5	43.2	42.7	43.6	42.8	43.8	39.3	37.0
of which:								
Collective consumption	9.9	9.9	10.3	9.6	9.8	9.6	9.3	8.9
Total social transfers	25.2	25.1	24.3	24.6	23.5	24.6	22.8	22.2
Subsidies	2.1	1.9	1.9	1.7	1.9	1.7	1.6	1.3
Gross fixed capital formation	5.4	5.7	5.6	6.3	6.1	6.3	4.0	3.2
Other (residual)	0.9	0.6	0.6	1.4	1.5	1.6	1.6	1.4
- Interest expenditure	3.9	3.8	3.7	3.5	3.4	3.5	3.4	3.1
GGB[2]	**-3.2**	**-2.9**	**-2.6**	**-2.7**	**-2.3**	**-2.9**	**-0.9**	**0.1**
Primary balance	**0.8**	**0.9**	**1.1**	**0.7**	**1.1**	**0.6**	**2.5**	**3.2**
One-offs	1.6	1.1	1.1	0.2	0.2	0.0	0.2	0.2
GGB[2] excl. one-off	**-4.8**	**-4.0**	**-3.7**	**-2.9**	**-2.5**	**-2.9**	**-1.1**	**-0.1**

Notes:
[1]On a no-policy change basis.
[2]One-off and other temporary measures.
Source:
Commission services' autumn 2006 economic forecast (COM); Convergence programme update (CP); Commission services' calculations

Changes in the tax-to-GDP ratio envisaged in the update appear to be broadly in line with those in the Commission services' autumn 2006 forecast for 2007 (see Table 11). However, some divergences emerge in respect of the split between the discretionary/elasticity and the composition of GDP components underlying the change in tax-to-GDP ratio. For 2007, the programme assumes a more pessimistic composition of GDP growth with respect to tax revenue than the Commission services' autumn 2006 forecast. On the other hand, the programme's estimate of the overall impact of discretionary measures is substantially more optimistic mainly due to the Commission services more prudent estimates of yield expected from income tax and taxes on production and imports. This could represent a downside risk to the budgetary targets. For 2008, the recent update projects a decline in the tax-to-GDP ratio which is equally explained by an assumed drop in the tax elasticity and composition effects of GDP owing to the programme's favourable performance of the external sector. Similarly, the tax-to-GDP ratio is projected to decline by around 1¼ percentage points of GDP in 2009 which appears to reflect a shift to a more tax-poor composition of GDP brought about by the higher contribution of net exports to economic growth projected by the update.

The envisaged fiscal consolidation relies to a large extent on expenditure restraint. As discussed earlier, the budgetary adjustment in 2006 and 2007 depends on keeping current spending below nominal GDP growth, while for 2008 and 2009 the consolidation will also be supported by lower capital outlays. However, the envisaged decline in the current primary expenditure ratio planned for these years, is not backed up by specific measures. According to the update, spending restraint is supported by written instructions from the

Prime Minister and Minister of Finance to Cabinet Ministers to ensure that requests for extra funds are accepted only in unforeseen circumstances and even in such cases these must be neutralised either by reducing expenditure or through improved revenue collection. Moreover, the programme states that the authorities stand ready to introduce additional corrective measures, should this be warranted by unforeseen circumstances which affect the targets. A comparison of spending plans in successive convergence programmes shows that when compared to outturns, expenditure ratios have been overestimated in the past years. Moreover, Malta's track record of achieving its targets for the general government deficit has been good, as outcomes have usually been better than planned.

Table 11: Assessment of tax projections

	2007			2008			2009
	CP	COM	OECD[3]	CP	COM[1]	OECD[3]	CP
Change in tax-to-GDP ratio (total taxes)	0.5	0.3	0.4	-1.0	0.0	0.0	-1.2
Difference (CP – COM)	0.2		/	-1.0		/	/
of which[2]:							
- discretionary and elasticity component	0.7		/	-0.4		/	/
- composition component	-0.4		/	-0.4		/	/
Difference (COM - OECD)	/	-0.1		/	-0.4		/
of which[2]*:*							
- discretionary and elasticity component	/	-0.1		/	-0.3		/
- composition component	/	-0.2		/	-0.2		/
p.m.: Elasticity to GDP	1.2	1.2	1.0	0.6	1.0	1.0	0.5

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

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

The overall balance of risks attached to the budgetary adjustment outlined in the programme seems to be broadly balanced for 2006 and 2007 but could be worse than targeted in the programme for the outer years. This is due to the markedly favourable macroeconomic scenario for 2008 and 2009 underlying the update's projections (although tax projections for these years seem cautious) and also to the lack of information on measures underpinning the consolidation process beyond 2007.

4.4. Assessment of the fiscal stance and budgetary strategy

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

Table 12: Overview of compliance with the Stability and Growth Pact

	Based on programme[3] (with targets taken at face value)	**Assessment** (taking into account risks to targets)
a. Consistency with correction of excessive deficit by 2006 deadline	yes	yes
b. Safety margin against breaching 3% of GDP deficit limit[1]	from 2008 onwards	from 2008 onwards
c. Achievement of the MTO	not within programme period	not within programme period
d. Adjustment towards MTO in line with the Pact[2]? (after the correction of the excessive deficit)	fully in line	broadly in line

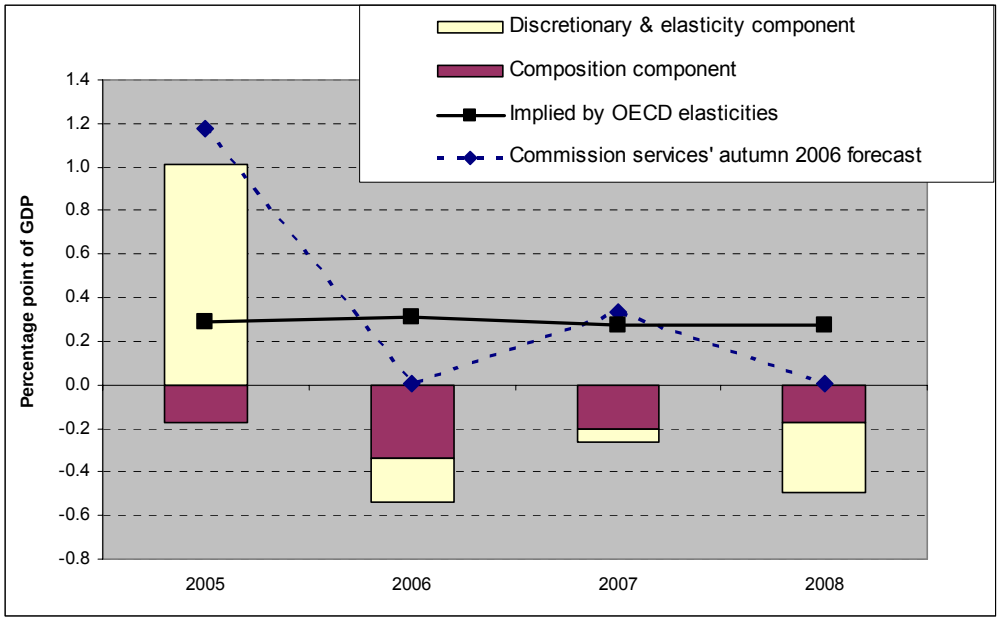
Notes:
[1]The risk of breaching the 3% of GDP deficit threshold with normal cyclical fluctuations, i.e. the existence of a safety margin, is assessed by comparing the cyclically-adjusted balance with the above mentioned minimum benchmark (estimated as a deficit of around 1¾% of GDP for Malta). These benchmarks represent estimates and as such need to be interpreted with caution.
[2]The Stability and Growth Pact requires Member States to make progress towards their MTO (for countries in the euro area or in ERM II, this has been quantified as an annual improvement in the structural balance of at least 0.5% of GDP as a benchmark). In addition, the structural adjustment should be higher in good times, whereas it may be more limited in bad times.
[3]Targets in structural terms as recalculated by Commission services on the basis of the information in the programme.
Source:
Commission services

The update foresees the correction of the excessive deficit in 2006 in line with the Council recommendation under Article 104(7). Taking account of the estimated deficit outcome for 2006, which seems plausible in view of the most recent information, a reduction of the deficit below the 3% of GDP reference value, seems attainable.

The structural deficit based on the Commission services' calculations on the basis of the programme is estimated at 3% of GDP in 2006 and improving thereafter. With the above-mentioned minimum benchmark estimated at a cyclically-adjusted deficit of about 1¾% of GDP, a safety margin against breaching 3% of GDP deficit reference value appears to be provided from 2008 onwards, even taking into account the risks to the budgetary target for 2008.

The planned cumulative structural adjustment towards the MTO is around 2½ percentage point of GDP over the programme horizon, which amounts to an average annual adjustment of around ¾% of GDP. While there are risks to the budgetary targets for 2008 and 2009, the adjustment over the entire period is still likely to be broadly in line with the 0.5% of GDP benchmark for euro area and ERM II countries. The MTO would not be achieved within the programme horizon.

Figure 8: Changes in the tax-to-GDP ratio: actual/projected changes vs. changes implied by OECD elasticity



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

Source:
Commission services

5. GOVERNMENT DEBT AND LONG-TERM SUSTAINABILITY

Government debt is the result of the financing needs of government over the years. It corresponds primarily to an accumulation of deficits, although the build-up of financial assets and other adjustments may also play a role.[12] The reform of the Stability and Growth Pact has raised attention to the crucial importance of government debt and of sustainability in fiscal surveillance.

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

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

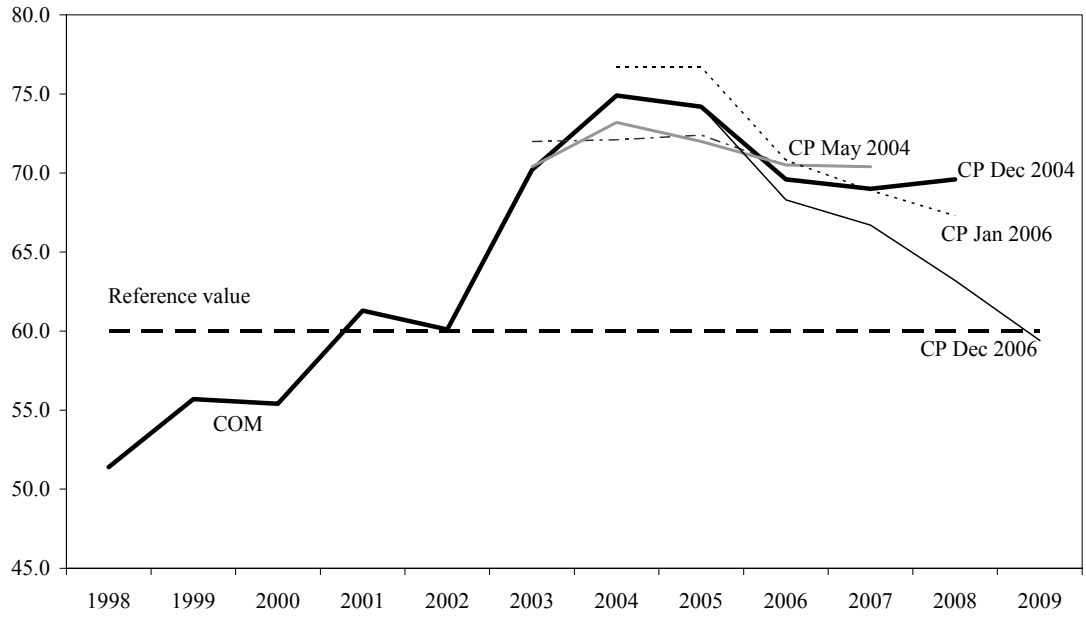
5.1. Recent debt developments and medium-term prospects

5.1.1. Debt projections in the programme

According to the update, the general government debt is projected to progressively decline over the outlook period. From 74¼% of GDP in 2005, the debt-to-GDP ratio is set to decline by almost 6 percentage points of GDP in 2006 to 68¼% of GDP largely due to proceeds from privatisation. This transaction reflects the sale by government of the remaining 60% stake in a major telecommunications company to a foreign private investor which amounted to around 3¾% of GDP. Thereafter, gross debt is planned to continue on a declining path reaching around 59½% of GDP by 2009. These targets are optimistic when compared to the targets of the previous programme and much more favourable than the projections of the Commission services' 2006 autumn forecast.

Leaving aside the decline in 2006, the reduction in the gross debt is back-loaded with a growing positive primary balance and nominal GDP growth being the main contributors to the decline. Falling interest expenditure as a ratio of GDP also contributes to the reduction in debt. Beyond 2006, the update does not foresee proceeds from privatisation to contribute to the decline in gross debt.

Figure 9: Debt projections in successive convergence programmes (% of GDP)



Source : Commission services' autumn 2006 forecast (COM) and successive convergence programmes

Table 13: Debt dynamics

(% of GDP)	average 2000-04	2005	2006		2007		2008		2009
			COM	CP	COM	CP	COM	CP	CP

Gross debt ratio[1]	**74.9**	**74.2**	**69.6**	**68.3**	**69.0**	**66.7**	**68.6**	**63.2**	**59.4**
Change in the ratio	4.9	-0.7	-4.6	-5.9	-0.6	-1.6	-0.4	-3.5	-3.8
Contributions[2]*:*									
Primary balance	3.0	-0.8	-0.9	-1.1	-0.7	-1.1	-0.6	-2.5	-3.2
"Snow-ball" effect	2.5	0.9	-0.1	-1.0	0.2	-0.5	0.2	-0.4	-0.6
Of which:									
Interest expenditure	3.7	3.9	3.8	3.7	3.5	3.4	3.5	3.4	3.1
Growth effect	0.1	-1.6	-1.6	-2.0	-1.4	-1.9	-1.5	-1.9	-1.8
Inflation effect	-1.3	-1.5	-2.2	-2.6	-2.0	-1.9	-1.8	-1.9	-1.8
Stock-flow adjustment	-0.6	-0.8	-3.6	-3.8	0.0	0.0	0.0	-0.6	0.0
Of which:									
Cash/accruals diff.	-0.3	-1.3	-	-	-	-	-	-	-
Acc. financial assets									
Privatisation	-0.5	-1.1	-3.6	-3.6	0.0	0.0	0.0	0.0	0.0
Val. effect & residual	-0.6	-0.1	-	-	-	-	-	-	-

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

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

where *t* is a time subscript; *D, PD, Y* and *SF* are the stock of government debt, the primary deficit, nominal GDP and the stock-flow adjustment respectively, and *i* and *y* represent the average cost of debt and nominal GDP growth (in the table, the latter is decomposed into the growth effect, capturing real GDP growth, and the inflation effect, measured by the GDP deflator). The term in parentheses represents the "snow-ball" effect. The stock-flow adjustment includes differences in cash and accrual accounting, accumulation of financial assets and valuation and other residual effects.

Source:
Convergence programme update (CP); Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations

5.1.2. Assessment

The Commission services' autumn 2006 forecast projects a slower decline in the general government debt between 2006 and 2008. For 2006, the difference is mainly due to a more favourable nominal economic growth and, to a lesser extent, due to a higher primary balance underlying the update's projections. The difference in 2007 reflects the update's more optimistic projections of nominal GDP growth and higher primary surplus. For 2008 the difference is mainly explained by the update's more favourable projection of the primary balance[13], projected to reach 2½% of GDP, against ½% of GDP in the Commission services' autumn 2006 forecasts. However, the more prudent GDP growth projected by the Commission services also accounts for the lower decline in the debt ratio in 2008.

The risks associated with the reduction in the general government debt are similar to those referred to earlier relating to the budgetary adjustment. A lower GDP growth would pose downside risks to fiscal adjustment and hence to the downward path of the gross debt envisaged in the programme. The programme provides a sensitivity analysis of gross debt to an increase in the interest rate, external demand and real GDP. In the case of a 1% rise in market interest rates over the whole programme period, the general government debt at the end of 2009 would be around ¾ of a percentage point higher than the baseline scenario as interest expenditure on new or rolled-over debt increases. An increase of 1% in external demand over the programme period would translate into a

[13] It should be noted that the Commission services autumn 2006 forecast for 2008 is based on the customary no-policy change scenario.

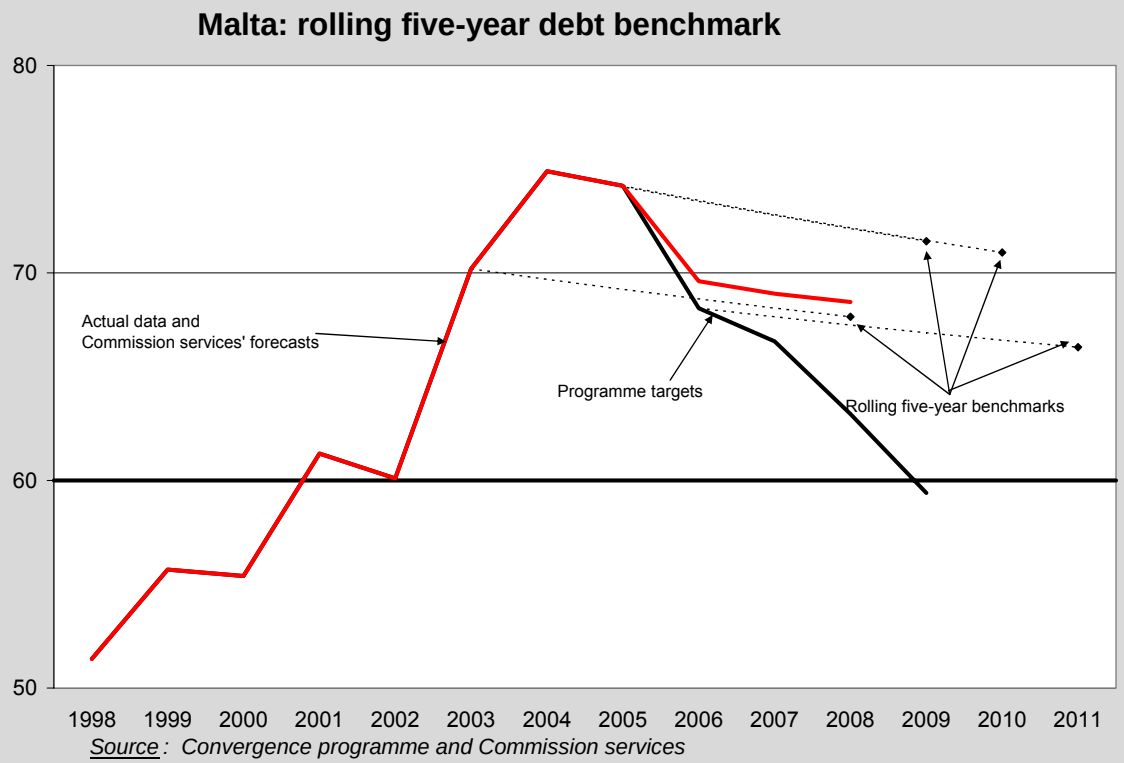
drop in the debt-to-GDP ratio of around 1½ percentage point from the baseline scenario by 2009. This underlines further the downside risks attached to the debt reduction path envisaged by the update in the event of surprise developments in the external sector. Similarly, the update projects a decline of the debt-to-GDP ratio of ¾ of a percentage point of GDP by 2009 above that in the baseline in response to a 1% increase in real GDP growth.

The debt–to-GDP ratio in the programme is projected to develop in accordance with the budgetary targets and the favourable economic growth. No debt-increasing below-the-line operations are planned, which is in line with the experience in the past years. In light of these considerations and bearing in mind that the rising trend in general government debt has been reversed in 2005, the debt projections in the programme – provided that they materialise – can be considered as sufficiently diminishing.

Box 4: The rolling debt reduction benchmark

Upon EU membership, Malta's debt ratio exceeded 60% of GDP; it had increased by more than 36 percentage points of GDP since 1996. 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 2006 forecasts until 2008 (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" (*). 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 2008 is compared with the value obtained for the same year by applying the formula starting in 2003. 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.



Source: Convergence programme and Commission services

(*) The rolling debt reduction benchmark for successive five-year periods is defined as a reduction in the difference between the debt ratio and the 60% of GDP reference value of 5 percent per year:
$\left(\frac{D_t}{Y_t}\right)_{benchmark} = \left(\frac{D_t}{Y_t}\right)_{benchmark} - 5\% \times \left[\left(\frac{D_t}{Y_t}\right)_{benchmark} - 60\right]$, where t is a time subscript and D and Y are the stock of government debt and nominal GDP, respectively. In the first year of the five-year period, the debt ratio in the previous year is the actual debt ratio. Given the usual approximation of the change in the debt ratio $\frac{D_t}{Y_t} - \frac{D_{t-1}}{Y_{t-1}} = \frac{DEF_t}{Y_t} - \frac{y_t}{1+y_t} \times \frac{D_{t-1}}{Y_{t-1}} \cong \frac{DEF_t}{Y_t} - y_t \times \frac{D_{t-1}}{Y_{t-1}}$ and assuming that the stock-flow adjustment is zero, it is easy to show that 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%. In other words, the 5 percent per year benchmark is the value that makes consistent a continuous respect of the 3% of GDP deficit threshold and an asymptotic respect of the 60% of GDP debt reference value.

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

The issue of long-term sustainability is a multi-faceted one. It involves avoiding imposing an excessive burden on future generations and ensuring the country's capacity to appropriately adjust budgetary policy in the medium and long run.[14]

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

The approach adopted by the Commission services and the Ageing Working Group of the Economic Policy Committee (EPC) is to project the debt, and to calculate the associated sustainability indicators (see Box 5), on the basis of two different scenarios. The first scenario assumes that the structural primary balance will remain unchanged from 2006 through 2009, the final year of the convergence programme; it is called the "2006 scenario". Debt projections in this scenario start in 2007. The second scenario assumes that the macroeconomic and budgetary plans until 2009 provided in the convergence programme will be fully respected. This is the "programme scenario". Debt and primary balance projections in this scenario start in 2010. Both projections assume zero stock-flow adjustments. In addition to this quantitative analysis, other relevant factors are taken into account which allows to better qualify the assessment with regard to where the main risks are likely to stem from and to reach an overall assessment.

5.2.1. Sustainability indicators and long-term debt projections

Table 14 shows the evolution of government spending on pensions, healthcare, long-term care for the elderly, education and unemployment benefits according to the EPC's projections[15]. Non age-related primary expenditure and revenue is assumed to remain constant as a share of GDP.

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

[15] These assumptions cover labour productivity growth, real GDP growth, participation rates, unemployment rate, demographic developments, government spending in pensions, healthcare, long-term care for the elderly, education and unemployment benefits. See Economic Policy Committee and

Table 14: Long-term age-related expenditure: main projections

(% of GDP)	2004	2010	2020	2030	2040	2050	changes
Total age-related spending	18.2	19.1	20.4	20.0	19.2	18.5	0.3
Pensions	7.4	8.8	10.2	9.1	7.9	7.0	-0.4
Healthcare	4.2	4.5	5.0	5.5	5.9	6.1	1.8
Long-term care	0.9	0.9	0.9	1.0	1.1	1.1	0.2
Education	4.4	3.7	3.2	3.3	3.3	3.3	-1.2
Unemployment benefits	1.2	1.2	1.0	1.0	1.0	1.0	-0.2
Source: Economic Policy Committee and Commission services.							

The projected increase in age-related spending in Malta is among the five lowest increases in the EU, rising by 0.3 percentage points of GDP between 2004 and 2050. This is particularly due to pension expenditure being projected to decrease by around 0.4 percentage points of GDP. This reflected notably the specific design of the Maltese pension system, which, in effect puts a cap on the level of both pensions and contributions. As a result, pensions were projected to decrease as a share of GDP between the 2020s and 2050. The increase in health-care expenditure is projected to be 1.8 percentage points of GDP, higher than on average in the EU. For long-term care, the projected increase of 0.2 percentage points of GDP up to 2050, is slightly below the average in the EU. Note however that those projections do not include the impact of the pension reforms enacted at the end of 2006. According to the programme, such a reform will lead to smaller pensions expenditure as a ratio of GDP for several decades, but to higher pensions expenditure in the long run (see below section 5.2.2).

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

Table 15: Sustainability indicators and the required primary balance

	2006 scenario			Programme scenario		
	S1	S2	RPB	S1	S2	RPB
Value	0.4	-0.1	0.2	-1.6	-2.0	0.2
of which:						
Initial budgetary position	-0.4	-0.1	-	-2.4	-2.1	-
Debt requirement in 2050	0.1	-	-	0.0	-	-
Future changes in budgetary position	0.8	0.1	-	0.8	0.1	-
Source: Commission services.						

European Commission (DG ECFIN) (2006), "The impact of ageing on public expenditure: projections for the EU25 Member States on pensions, health-care, long-term care, education and unemployment transfers (2004-2050)", European Economy, Special Report No 1, 2006.

Box 5 – Sustainability indicators*

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

Summarizing the sustainability indicators

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

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

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

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

Table 15 shows the sustainability indicators for the two scenarios. In the "2006 scenario", the sustainability gap (S1) that assures reaching the debt ratio of 60% of GDP by 2050 would be 0.4% of GDP. The sustainability gap (S2) which satisfies the intertemporal budget constraint would be -0.1% of GDP. The sustainability gaps in the present assessment are very close to those of the Commission's Sustainability Report.

The initial budgetary position is not sufficiently strong to ensure a steady reduction of the debt/GDP ratio. The programme update plans a structural budgetary consolidation of 2½ percentage points of GDP between 2006 and 2009. If achieved, such a consolidation would reduce risks to long-term sustainability of public finances ("programme scenario"), notably in view of the more dynamic pension expenditure over the long-term after the reform enacted in 2006 (see section 5.2.2). The difference between the initial budgetary position in the 2006 scenario and the programme scenario illustrates how the full respect of the convergence programme targets will contribute to tackling the budgetary challenges raised by the demographic developments.

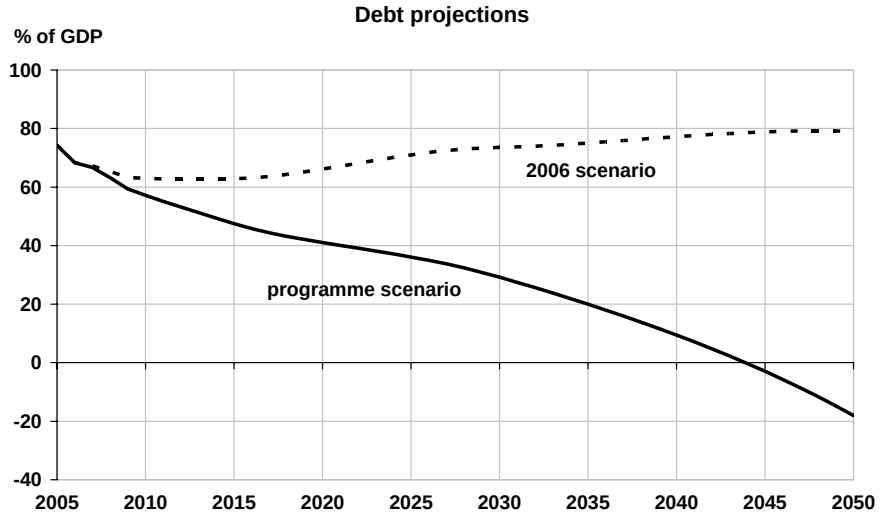
The impact of ageing is also limited, notably due to the decrease in pensions as a share of GDP before considering the recent reform.

The required primary balance (RPB) is about 0.2% of GDP, close to the structural primary balance of about 0.8% of GDP in 2006 and significantly lower than the structural balance at the end of the programme.

Another way to look at the prospects for long-term public finance sustainability is to project the debt/GDP ratio over the long-term using the same assumptions as for the calculations of S1 and S2. The long-term projections for government debt under the two scenarios are shown in Figure 10.

The gross debt ratio is currently above the Treaty reference value at 68¼% of GDP in 2006. According to the "2006 scenario", the debt ratio would stay above 60% of GDP over the projection period, although the increase in the debt ratio, from around 2015 onwards, would be limited. In the "programme scenario", the debt would decrease over the projections period thanks to the consolidation of public finances over the programme period.[16]

Figure 10: Long-term projections for the government debt ratio



Source: Commission's services
Note: The government debt ratio is usually compiled in gross terms, that is assets are not netted from government liabilities. Therefore, the gross debt can never be negative. In this chart, the negative values for the debt ratio – under the "programme scenario" closer to the end of the projection horizon – should be understood as accumulation of financial assets. This issue has no implications on the conclusions drawn from the sustainability assessment.

5.2.2. Additional factors

To reach an overall assessment of the sustainability of public finances, other relevant issues are taken into account which in addition allows to better qualify the assessment with regard to where the main risks are likely to stem from.

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

First, Malta has enacted a pension reform at the end of 2006. This reform includes several important measures, notably:[17]

- the pension age (currently 60 years for women and 61 years for men) will progressively increase to 65 years;

- the pensionable income will be calculated on the basis of the best 10 wages of the past 40 years (compared to the best 3 consecutive year of the last 10 years in the previous legislation);

- the maximum pensionable income will be indexed partly on wages (70%) and partly on prices (30%). This is in sharp contrast with the pre-reform projection, which was indexed close to prices[18] and would have led to a significant decrease in the benefit ratio (see the Sustainability Report Section III-2);

The addendum to the programme update provides new long-term projections for pension expenditure following the reform adopted in December 2006. Compared to the projections of the Ageing report – which are the basis for the debt projections and the sustainability gaps reported above – these new projections point to less dynamic pension expenditure up to 2030, but higher in 2050. On the one hand, the increase in the pension age, as well as the increase of the number of wages (contribution years) over which the pension is calculated, will curb pension expenditure. On the other hand, those effects will be offset in the long run by the fact that the maximum pensionable income will be, from now on, significantly more dynamic compared with the previous legislation. This should lead to a more dynamic average pension, and therefore higher pension expenditure, over the long run.[19]

If those projections were included in the calculations of the indicators[20], they would leave the S1 indicator unchanged but would increase the S2 indicator by around 2% of GDP, thus reaching 1.9% of GDP in the '2006 scenario' and 0% of GDP in the 'programme scenario'. The RPB would also increase to 2.6% of GDP[21]. Therefore, taking into account the effects of the pension reform on expenditure, the reform would deteriorate the situation of Malta in terms of long-term sustainability[22].

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17 See Section 6 for more details

18 Under the previous legislation, pensions were indexed to wage growth but, *importantly,* they were subject to a maximum which in turn increased more slowly than prices (the Cost of Living Adjustment (COLA)). As a result, this would eventually entail very slow growth of individual pensions and pension expenditure would fall as a share of GDP after 2020 when the maximum would be reached, despite an increasing number of pensioners.

19 This would imply a higher benefit ratio (i.e. average pension relative to GDP per worker) in the period to 2050. The Ageing Report had projected a fall in the benefit ratio by 45%.

20 The new long-term projections have not yet been submitted to a peer review by the Ageing Working Group of the EPC.

21 It should be recalled that sustainability indicators are calculated assuming no change in the revenue-to-GDP ratio.

22 In the pre-reform scenario, the pension contributions ratio was projected to fall significantly over the long-term (by about 4 p.p. of GDP between 2005 and 2050), being subject to a ceiling. As part of the reform, the projected fall in the pension contributions ratio is smaller (1.7 p.p. of GDP between 2005

Table 16: Pension expenditure projections before and after reform (% of GDP)

	2004	2010	2020	2030	2050
Pre reform	7.4	8.8	10.2	9.0	7.0
Post reform	7.4	8.9	8.9	8.0	10.5

Source: Addendum to the December 2006 update of the Maltese convergence programme

Note: The new long-term projections have not yet been submitted to a peer review by the Ageing Working Group of the EPC.

Second, the update projects a decrease in the revenue/GDP ratio, which amounts to 1.7% of GDP between 2005 and 2050. This is in contrast with the analysis above, which was based on unchanged revenue. On the assumption that this reduction in revenue materialises, it will imply higher sustainability risks. This reduction in revenue is mainly because of the ceiling on social contributions paid to the public pension schemes. As this ceiling does not grow as fast as wages and GDP over the long run, contributions as a share of GDP will decline.

Third, the current level of debt is above the Treaty reference value at 68¼% of GDP. A reduction in the debt to below the reference value, as projected in the convergence programme, would strengthen the resilience of public finances to adverse shocks and reduce the risks to public finance sustainability.

5.2.3. Assessment

Malta has recently enacted a pension reform aimed at increasing the effective retirement age, while improving the level of pension, compared to previous legislation. Following the reform, estimates in the programme suggest that the overall increase in age-related expenditure at the horizon of 2050 would be higher and close to the EU average than previously projected.

The current budgetary position would not ensure a steady reduction of debt to below the Treaty reference value. Therefore, improving the budgetary position, as projected in the programme, would contribute to reduce the risks to the sustainability of public finances.

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

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

The update presents a number of reform measures that are planned to be implemented in the course of 2007 and which are intended to improve the quality of public finances and enhance the economy's growth potential in the context of the renewed Lisbon strategy.

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and 2050). As noted in section 5.2.1 above, the time profile of revenues (and expenditures) is also modified as a result of the reform. Therefore, the addendum to the update, taking account of the impact of the reform, projects *the deficit in the pension system* to be smaller over the coming three decades, while it is projected to be larger in 2050 compared with the pre-reform scenario.

However, the update does not provide detailed information on the reforms envisaged for 2008 and 2009.

According to the programme, while the primary objective of fiscal policy will remain consolidation, more emphasis will be laid on job creation and investment. This will be achieved through expenditure restraint, while on the revenue side the emphasis will be shifting the tax burden from direct to indirect taxation and continuing tax enforcement. Moreover, the completion of the *Mater Dei* hospital in 2007 is expected to release additional funds which would support fiscal consolidation while allowing more scope for growth-enhancing measures.

Two major reforms spelled out in the update relate to the personal income tax reform and the pension reform. The reform of personal income consists of a revision of the tax bands and is effective from 1st January 2007. The objective of the reform is to increase the incentive to work by lowering the marginal rate of taxation of wage income. The new tax bands have been revised for both single individuals and married couples. The tax-free threshold has been raised by around 5% for both married couples and single taxpayers. For both married couples and the single computation, the reform streamlines the tax bands by extending the income taxable at 15% and 25% and removes the 20% and 30% bands. Although this measure will reduce the tax burden on labour, it appears insufficient to achieve the authorities' stated objective of attracting more people to the labour market, especially women and older workers.

The legislative provisions implementing the first phase of the pension reform were approved by the Parliament on 6 December 2006. Although the reform entered in force on 1st January 2007, its effects will be felt only from 2014, since only those aged 55 or under in 2007 will be subject to the changes. The main parameters of the pension systems affected by the changes are the retirement age, the contribution period and the pensionable income[23]. The amended legislation provides that the retirement age for those 45 years old or under in 2007 is increased to 65 years (currently 61 for males and 60 for females). For those between 46 and 55 years old the retirement age has been increased according to a sliding scale. The contribution period for those aged 45 or under has increased to 40 years (from the current 30 years' contribution), while those aged 46 and 55 years will contribute for 35 years. As regards the pensionable income, two important changes were introduced. The ceiling on the pensionable income will be raised by around 33% for those aged 55 years and under and by around 10% for those aged 56 years and over. Following the reform, pensions for those aged 46 and over in 2007 will remain unchanged and will be determined by a formula based on the average of the best three consecutive years in the last 10 years. For the remaining age categories, the pension will be determined according to the average of the best 10 years in the last 40 years. Other changes affecting those aged 45 and under include a new guaranteed national minimum income, which provides a safety net for people in retirement. Moreover, the reformed pension system provides that future increases in pensions will be based on 70% of wage increases and 30% of inflation.

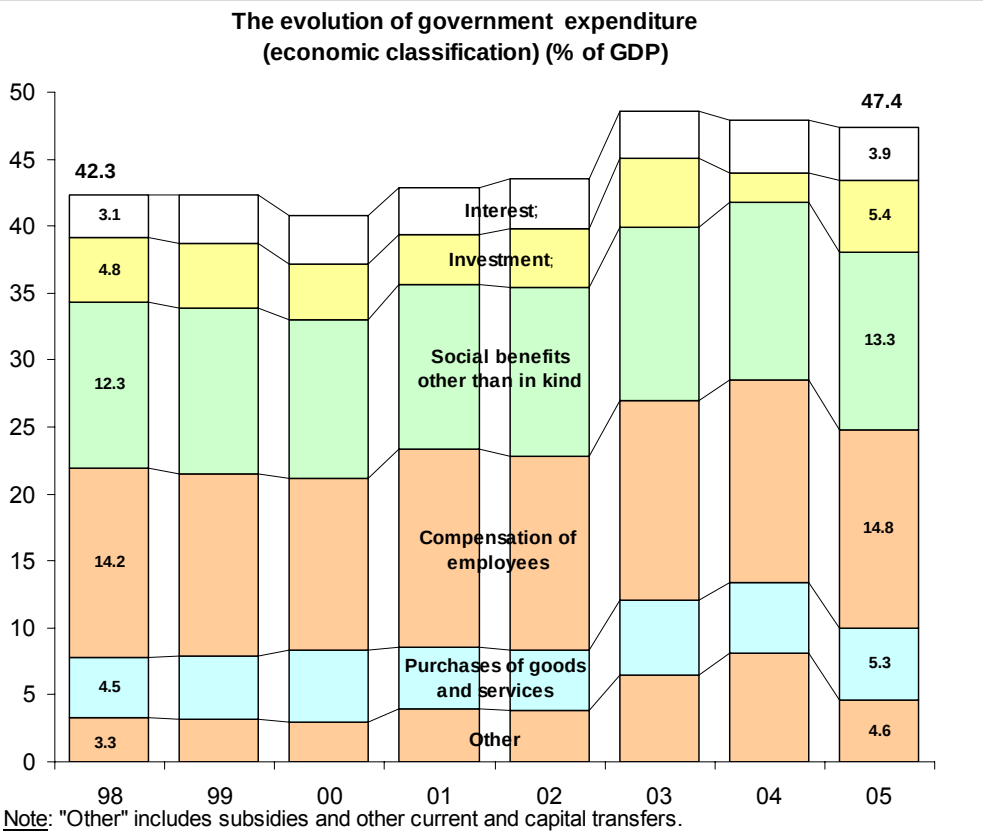
On tax enforcement, the update provides information on a proposed new legislative framework which will update and improve tax enforcement by local authorities. The draft law is designed to allow a higher degree of information sharing between

[23] The annual income earned by a pensionable person which under the old pension system was capped at Lm6,750

government departments, gives more powers to the tax authorities to retrieve relevant information, and steps-up sanctions.

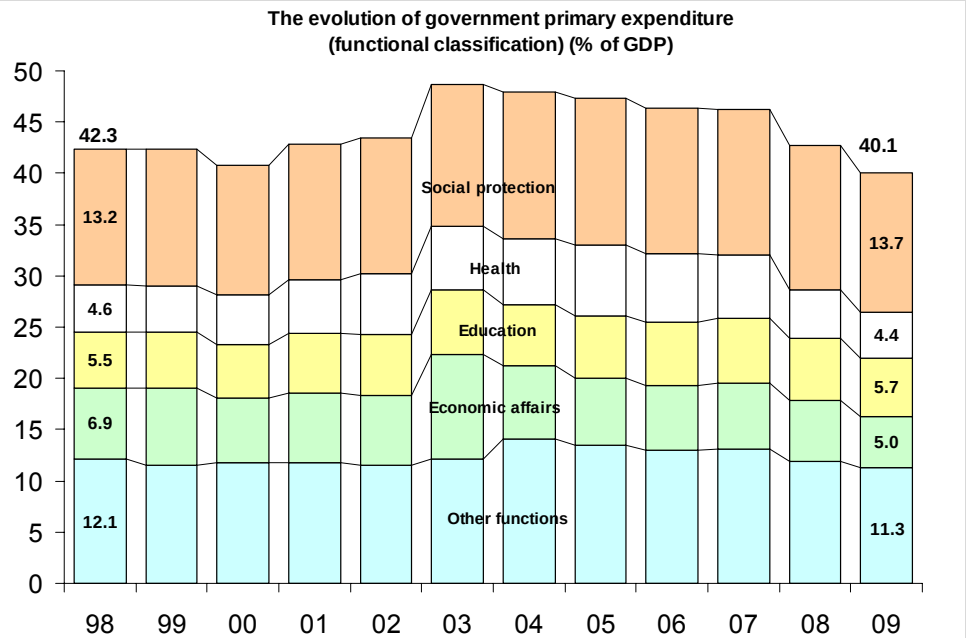
Box 6: The level and composition of government expenditure in Malta since 1998

Over the last years, general government expenditure in Malta has grown in terms of size but the composition has remained broadly unchanged. In 1998, total government expenditure amounted to 42¼% of GDP, significantly below that of most of the euro are. By 2005, general government expenditure increased by slightly more than 5 percentage points of GDP and stood at 47½% of GDP (see Chart below) which is slightly above the EU25 average. However, the rise in total government expenditure has been reversed since 2004.



Note: "Other" includes subsidies and other current and capital transfers.

Source: Commission services



Note: "Other functions" include general services, defence, environment, culture, public order, housing and, recreation, culture and religion

Source : Commission service; forecasts from update convergence programme

During the seven years to 2005, primary expenditure as a ratio of GDP increased by 4½ percentage points. While increases were registered across all expenditure items, those categories were legal commitments limit the scope for restraint such as social benefits, purchases of goods and services and compensation of employees experienced the highest rises. This increase in primary expenditure is in contrast with a rather stable trend in the EU25 in recent years. Interest expenditure increased by ¾ of a percentage points of GDP reflecting the buildup in debt along the years.

Developments in the general government expenditure can also be assessed by looking at the functional classification of spending. The Chart above shows that the increase of 5 percentage points of GDP in total expenditure was mainly due to the upward trend in welfare entitlements and general public services. In 2005, health spending was 2¼ percentage points of GDP higher than in 1998, reflecting outlays connected with the construction of the Mater Dei hospital. Social protection which includes unemployment benefits, pensions, family allowances and social assistance increased by 1 percentage point of GDP driven by demographic changes. The general public services category was also dynamic; since 1998 this item increased by 2¼ percentage points of GDP on account of rising compensation of employees and interest expenditure.

According to the latest update, lower total expenditure over the medium term will be achieved through declines in the spending ratios of economic affairs, other functions and to a lesser extent of health, whilst social protection expenditure is projected to decrease by ½ a percentage point between 2006 and 2009.

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

The macroeconomic and economic policy focus in the NRP and the progress recorded in the Implementation Report is on fiscal consolidation and debt reduction. This is planned to be achieved mainly through expenditure restraint.

The measures spelled out in the update to address the sustainability of public finances, including the pension reform, improving tax compliance and enhancing incentives to work, are in line with the NRP. Financing of the measures envisaged in the NRP are planned to be through both domestic and EU sources. The update's budgetary projections seem to take into account, although not explicitly, the public finance implications of the measures identified in the NRP. The programme does not contain a qualitative assessment of the overall impact of the national reform programme within the medium-term fiscal strategy. However, the update provides information on the direct budgetary costs for most of the measures envisaged in the NRP. The direct budgetary costs related to sustainability of public finances are not provided. For those measures for which information on the direct budgetary costs is provided, the impact will amount to around 1½% of GDP in 2006 and 2007 and 1% of GDP in 2008.

Box 7: The Commission assessment of the implementation report of the National Reform Programme

The implementation report of the National Reform Programme of Malta, provided in the context of the renewed Lisbon strategy for growth and jobs, was submitted on 15 October 2006. The Commission's assessment of this report, which was adopted on 12 December 2006 as part of its Annual Progress Report, can be summarised as follows.

The key challenges identified by the Maltese 2005-2008 National Reform Programme (NRP) include the sustainability of public finances, competitiveness, the environment, employment and education and training. Malta is making good progress overall in implementing its NRP in most key areas. It is on the right track concerning the sustainability of public finances and implementing significant measures in the environmental and education and training areas. However, more modest progress has been made in the business environment and on R&D and innovation. In those policy areas which, according to the Commission's 2006 APR, require further attention - competition issues and measures to make work more attractive – progress has been limited.

The approach of extensive consultation with stakeholders used during the formulation of Malta's NRP was reinforced during the implementation phase. The Implementation Report makes appropriate reference to the use of Structural Funds, while consistency between the National Strategic Reference Framework 2007-2013 and the reforms under the Lisbon Growth and Jobs Strategy seems guaranteed.

Among the strengths of the Maltese National Reform Programme and its implementation are: the ongoing development of essential R&D and innovation strategies; a new scheme to foster entrepreneurial skills; and a promising set of comprehensive initiatives in the field of training. The policy areas in the National Reform Programme where weaknesses need to be tackled with the highest priority are: improving competition in several sectors, including professional services; reduction and redirection of state aids; and boosting investment in R&D; and improve labour supply.

On the basis of the Integrated Guidelines for Jobs and Growth and in the light of the analysis presented in the IR-NRP, it is recommended that Malta:

• take further measures, including reinforcing the competition authority, to strengthen competition, notably in professional services; reduce state aids and redirect them towards horizontal objectives, especially R&D;
• step up efforts to attract more people into the labour market, particularly women, intensify efforts to tackle undeclared work and implement changes to the tax and benefit system to make working more attractive.

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

Overall, the budgetary strategy in the convergence programme is consistent with the broad economic policy guidelines for the period 2005-2008.

Table 17: Consistency with the broad economic policy guidelines

Broad economic policy guidelines	Yes	Steps in right direction	No	Not applicable
1. To secure economic stability				
– Member States should respect their medium-term budgetary objectives. As long as this objective has not yet been achieved, they should take all the necessary corrective measures to achieve it[1].		X		
– Member States should avoid pro-cyclical fiscal policies[2].				X
– Member States in excessive deficit should take effective action in order to ensure a prompt correction of excessive deficits[3].		X		
– Member States posting current account deficits that risk being unsustainable should work towards (…), where appropriate, contributing to their correction via fiscal policies.		X		
2. To safeguard economic and fiscal sustainability In view of the projected costs of ageing populations,				
– Member States should undertake a satisfactory pace of government debt reduction to strengthen public finances.		X		
– Member States should reform and re-enforce pension, social insurance and health care systems to ensure that they are financially viable, socially adequate and accessible (…)		X		
3. To promote a growth- and employment-orientated and efficient allocation of resources				
Member States should, without prejudice to guidelines on economic stability and sustainability, re-direct the composition of public expenditure towards growth-enhancing categories in line with the Lisbon strategy, adapt tax structures to strengthen growth potential, ensure that mechanisms are in place to assess the relationship between public spending and the achievement of policy objectives and ensure the overall coherence of reform packages.		X		

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

Source:
Commission services

* * *

Annex 1: Glossary

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

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

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

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

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

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

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

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

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

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

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

EDP notification See *notification of deficit and debt*.

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

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

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

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

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

Government debt See *public debt*.

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

Government net lending/borrowing See *budget balance*.

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

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

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

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

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

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

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

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

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

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

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

Output gap The difference between actual GDP and potential GDP in any given year, usually expressed as a percent of potential GDP. Potential GDP is an unobserved variable and needs to be estimated from actual data. It is the level of real GDP in a given year that is consistent with a stable rate of inflation. If actual output rises above its potential level, then constraints on capacity begin to bind and inflationary

pressures build; if output falls below potential, then resources are lying idle and inflationary pressures abate. See also *production function method*.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Annex 2: Summary tables from the programme update

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

Table 1a. Macroeconomic prospects

	ESA Code	2005	2005	2006	2007	2008	2009
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
1. Real GDP	B1*g	1741	2.2	2.9	3.0	3.1	3.1
2. Nominal GDP	B1*g	1941.1	4.3	6.7	6.0	6.1	6.2
Components of real GDP							
3. Private consumption expenditure	P.3	1178.6	2.8	2.6	2.7	2.8	2.7
4. Government consumption expenditure	P.3	357.9	0.6	0.4	0.2	0.3	0.5
5. Gross fixed capital formation	P.51	366.3	7.4	10.3	6.8	0.8	1.3
6. Changes in inventories and net acquisition of valuables (% of GDP)	P.52 + P.53		0.2	1.7	1.6	1.7	1.7
7. Exports of goods and services	P.6	1539.3	-6.2	1.9	2.3	4.1	4.6
8. Imports of goods and services	P.7	1704.9	-1.8	4.5	2.4	2.6	3.2
Contributions to real GDP growth							
9. Final domestic demand			3.5	4.0	3.4	2.1	2.2
10. Changes in inventories and net acquisition of valuables	P.52 + P.53		2.8	1.5	-	0.1	0.1
11. External balance of goods and services	B.11		-4.1	-2.7	-0.4	0.9	0.8

Table 1b. Price developments

	ESA Code	2005	2005	2006	2007	2008	2009
		level	rate of change	rate of change	rate of change	rate of change	rate of change
1. GDP deflator		111.5	2.0	3.7	2.9	2.8	3.0
2. Private consumption deflator		110.4	2.5	2.8	2.3	2.2	2.0
3. HICP[1]		100.0	2.5	3.1	2.2	2.1	2.0
4. Public consumption deflator		118.9	1.6	1.9	2.1	1.9	1.8
5. Investment deflator		111.0	1.6	4.3	3.3	1.6	3.6
6. Export price deflator (goods and services)		91.4	2.1	6.1	3.8	2.2	1.5
7. Import price deflator (goods and services)		94.0	3.2	5.8	2.8	1.0	0.3

Optional for Stability programmes.

Table 1c. Labour market developments

	ESA Code	2005	2005	2006	2007	2008	2009
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
1. Employment, persons[1]		152.4	1.5	0.9	1.1	0.9	0.9
2. Employment, hours worked[2]							
3. Unemployment rate (%)[3]			7.3	7.0	6.5	6.4	6.2
4. Labour productivity, persons [4]		11422.5	0.7	2.0	1.9	2.2	2.2
5. Labour productivity, hours worked[5]							
6. Compensation of employees	D.1	899.8	2.0	2.2	2.6	2.5	2.5

Occupied population, domestic concept national accounts definition.

[2] National accounts definition.

[3] Harmonised definition, Eurostat; levels.

[4] Real GDP per person employed.

[5] Real GDP per hour worked.

Table 1d. Sectoral balances

% of GDP	ESA Code	2005	2006	2007	2008	2009
1. Net lending/borrowing vis-à-vis the rest of the world	B.9	-10.6				
of which: - Balance on goods and services		-10.1	-12.1	-11.3	-9.2	-7.1
- Balance of primary incomes and transfers		-0.5				
- Capital account		3.5				
2. Net lending/borrowing of the private sector	B.9	-7.4				
3. Net lending/borrowing of general government	B.9/EDP B.9	-3.2	-2.6	-2.3	-0.9	0.1
4. Statistical discrepancy		-2.9				

Table 2. General government budgetary prospects

	ESA code	2005	2005	2006	2007	2008	2009
		Level	% of GDP	% of GDP	% of GDP	% of GDP	% of GDP
Net lending (EDP B.9) by sub-sector							
1. General government	S.13	-61.8	-3.2	-2.6	-2.3	-0.9	0.1
2. Central government	S.1311	-62.3	-3.2	-2.7	-2.3	-0.9	0.1
3. State government	S.1312						
4. Local government	S.1313	0.5					
5. Social security funds	S.1314						
General government (S13)							
6. Total revenue	TR	858.4	44.2	43.8	43.9	41.8	40.1
7. Total expenditure	TE[1]	920.2	47.4	46.4	46.2	42.7	40.1
8. Net lending/borrowing	EDP B.9	-61.8	-3.2	-2.6	-2.3	-0.9	0.1
9. Interest expenditure (incl. FISIM)	EDP D.41 incl. FISIM	76.5	3.9	3.7	3.4	3.4	3.1
pm: 9a. FISIM		1.3	0.1	0.1	0.1	0.1	0.1
10. Primary balance		14.7	0.8	1.1	1.1	2.5	3.2
Selected components of revenue							
11. Total taxes (11=11a+11b+11c)		542.9	28.0	28.2	28.7	27.9	26.9
11a. Taxes on production and imports	D.2	305.4	15.7	15.6	16.1	15.6	14.9
11b. Current taxes on income, wealth, etc	D.5	229.9	11.8	12.2	12.3	11.9	11.6
11c. Capital taxes	D.91	7.5	0.4	0.4	0.4	0.4	0.3
12. Social contributions	D.61	171.5	8.8	8.3	8.2	8.2	8.2
13. Property income	D.4	29.7	1.5	1.1	1.0	0.9	0.8
14. Other (14=15-(11+12+13))		114.4	5.9	6.2	6.0	4.7	4.2
15=6. Total revenue	TR	858.4	44.2	43.8	43.9	41.8	40.1
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995) [3]		714.4	36.8	36.5	36.9	36.1	35.1
Selected components of expenditure							
16. Collective consumption	P.32	192.3	9.9	10.3	9.8	9.3	8.9
17. Total social transfers	D.62 + D.63	270.1	13.9	13.6	13.4	13.2	13.0

17a. Social transfers in kind	P.31 =D.63						
17b. Social transfers other than in kind	D.62						
18.=9. Interest expenditure (incl. FISIM)	EDP D.41 incl. FISIM	76.5	3.9	3.7	3.4	3.4	3.1
19. Subsidies	D.3	40.0	2.1	1.9	1.9	1.6	1.3
20. Gross fixed capital formation	P.51	104.9	5.4	5.6	6.1	4.0	3.2
21. Other (21=22-(16+17+18+19+20))		236.4	12.2	11.3	11.7	11.3	10.5
22=7. Total expenditure	TE[4]	920.2	47.4	46.4	46.2	42.7	40.1
Pm: compensation of employees	D.1	286.7	14.8	14.2	13.5	12.9	12.5

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

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

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

[4] 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	2004	2005	2006	2007	2008	2009
1. General public services	1	8.5	7.8	8	7.5	7.0	6.8
2. Defence	2	1.0	1.0	0.8	0.7	0.7	0.7
3. Public order and safety	3	1.7	1.7	1.6	1.5	1.4	1.3
4. Economic affairs	4	7.1	6.5	6.3	6.4	6.0	5.0
5. Environmental protection	5	1.0	1.1	1.3	1.6	1.2	1.1
6. Housing and community amenities	6	1.1	1.2	0.6	1.1	0.9	0.8
7. Health	7	6.4	6.9	6.7	6.2	4.8	4.4
8. Recreation, culture and religion	8	0.6	0.7	0.7	0.6	0.6	0.5
9. Education	9	6.0	6.1	6.2	6.3	6.0	5.7
10. Social protection	10	14.3	14.3	14.2	14.2	14	13.7
11. Total expenditure (= item 7=26 in Table 2)	TE[1]	**47.9**	**47.4**	**46.4**	**46.2**	**42.7**	**40.1**

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

Table 4. General government debt developments

% of GDP	ESA Code	2005	2006	2007	2008	2009
1. Gross debt[1]		74.2	68.3	66.7	63.2	59.4
2. Change in gross debt ratio		-0.7	-5.9	-1.6	-3.5	-3.8
Contributions to changes in gross debt						
3. Primary balance[2]		-0.8	-1.1	-1.1	-2.5	-3.2
4. Interest expenditure (incl. FISIM) [3]		0.9	-0.9	-0.5	-0.5	-0.5
5. Stock-flow adjustment		-0.8	-3.9		-0.6	-0.1
of which: - Differences between cash and accruals[4]						
- Net accumulation of financial assets[5] *of which:* *- privatisation proceeds*		-1.2	-3.8	0.0	0.0	0.0
- Valuation effects and other[6]						
p.m. implicit interest rate on debt[7]		5.3	5.5	5.1	5.3	5.3
Other relevant variables						
6. Liquid financial assets[8]						
7. Net financial debt (7=1-6)						

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

[2] Cf. item 10 in Table 2.

[3] Cf. item 9 in Table 2.

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

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

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

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

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

Table 5. Cyclical developments

% of GDP	ESA Code	2005	2006	2007	2008	2009
1. Real GDP growth (%)		2.2	2.9	3.0	3.1	3.1
2. Net lending of general government	EDP B.9	-3.2	-2.6	-2.3	-0.9	0.1
3. Interest expenditure (incl. FISIM recorded as consumption)	EDPD .41+FISIM	3.9	3.7	3.4	3.4	3.1
4. Potential GDP growth (%)[1]		2.0	2.3	2.4	2.0	1.9
contributions: - labour - capital - total factor productivity						
5. Output gap		-2.5	-1.9	-1.4	-0.3	0.9
6. Cyclical budgetary component		-0.9	-0.7	-0.5	-0.1	0.3
7. Cyclically-adjusted balance (2-6)		-2.3	-1.9	-1.8	-0.8	-0.3
8. Cyclically-adjusted primary balance (7-3)		1.7	1.8	1.6	2.6	2.8

[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	2005	2006	2007	2008	2009
Real GDP growth (%)						
Previous update		0.9	1.1	1.2	2.0	-
Current update		2.2	2.9	3.0	3.1	3.1
Difference		1.3	1.8	1.8	1.1	-
General government net lending (% of GDP)	EDP B.9					
Previous update		-3.9	-2.7	-2.3	-1.2	-
Current update		-3.2	-2.6	-2.3	-0.9	0.1
Difference		0.7	0.1	0.0	0.3	-
General government gross debt (% of GDP)						
Previous update		76.7	70.8	68.9	67.3	-
Current update		74.2	68.3	66.7	63.2	59.4
Difference		-2.5	-2.5	-2.2	-4.1	-

Table 7. Long-term sustainability of public finances

% of GDP	2000	2004	2010	2020	2030	2050
Total expenditure						
Of which: age-related expenditures		18.2	19.1	20.4	20.0	18.5
Pension expenditure		7.4	8.8	10.2	9.1	7.0
Social security pension						
Old-age and early pensions		3.8	5.2	7.0	6.9	6.5
Other pensions (disability, survivors)		3.6	3.6	3.2	2.2	0.5
Occupational pensions (if in general government)						
Health care		4.2	4.5	5.0	5.5	6.1
Long-term care *(this was earlier included in the health care)*		0.9	0.9	0.9	1.0	1.1
Education expenditure		4.4	3.7	3.2	3.3	3.3
Other age-related expenditures		1.2	1.2	1.0	1.0	1.0
Interest expenditure						
Total revenue						
Of which: property income		2.8	1.2	1.1	0.7	0.3
of which: from pensions contributions (or social contributions if appropriate)		7.1	6.8	5.9	4.7	3.3
Pension reserve fund assets						
Of which: consolidated public pension fund assets (assets other than government liabilities)						
Assumptions						
Labour productivity growth		1.4	0.9	2.4	2.7	1.7
Real GDP growth		1.9	2.5	2.7	3.1	1.7
Participation rate males (aged 20-64)		84.2	85.8	86.3	86.4	86.4
Participation rates females (aged 20-64)		40.9	48.1	55.3	57.8	58.3
Total participation rates (aged 20-64)		62.6	66.7	70.4	71.6	71.7
Unemployment rate		9.0	9.4	9.0	8.8	8.6
Population aged 65+ over total population		15.9	18.9	23.8	26.0	29.6

Table 8. Basic assumptions

	2005	2006	2007	2008	2009
Short-term interest rate[1] (annual average)	3.3	3.5	3.5	3.5	3.5
Long-term interest rate (annual average)	4.4	4.3	4.3	4.3	4.3
USD/€ exchange rate (annual average) (euro area and ERM II countries)	1.20	1.30	1.30	1.30	1.30
Nominal effective exchange rate	1.1	1.1	1.1	1.1	1.1
(for countries not in euro area or ERM II) exchange rate vis-à-vis the € (annual average)					
World excluding EU, GDP growth	5.1	5.7	5.2	5.2	5.2
EU GDP growth	1.7	2.8	2.4	2.4	2.4
Growth of relevant foreign markets	1.1	2.3	1.9	2.1	2.1
World import volumes, excluding EU	7.3	8.8	8.2	7.7	7.7
Oil prices, (Brent, USD/barrel)	53.4	66.5	67.2	68.8	68.8

If necessary, purely technical assumptions.

Annex 3: Compliance with the code of conduct

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

Guidelines in the code of conduct	Yes	No	Comments
1. Submission of the programme			
Programme was submitted not earlier than mid-October and not later than 1 December[1].		X	4 working days later
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 shows continuity with respect to the budgetary targets endorsed by the Council.			Not applicable
When applicable, the programme explains the reasons for possible deviations from previous targets and, in case of substantial deviations, whether measures are taken to rectify the situation, and provide information on them.	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 2007
Information is provided on one-off and other temporary measures.	X		
The state of implementation of the measures (enacted versus	X		

Guidelines in the code of conduct	Yes	No	Comments
planned) presented in the programme is specified.			
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 "major structural reforms", the programme provides an analysis of how changes in the assumptions would affect the effects on the budget and potential growth.			Not applicable
g. Broad economic policy guidelines			
The programme provides information on the consistency with the broad economic policy guidelines of the budgetary objectives and the measures to achieve them.	X		
h. Quality of public finances			
The programme describes measures aimed at improving the quality of public finances on both the revenue and expenditure side (e.g. tax reform, value-for-money initiatives, measures to improve tax collection efficiency and expenditure control).	X		
i. Long-term sustainability			
The programme outlines the country's strategies to ensure the sustainability of public finances, especially in light of the economic and budgetary impact of ageing populations.	X		
Common budgetary projections by the AWG are included in the programme. The programme includes all the necessary additional information. (…) To this end, information included in programmes should focus on new relevant information that is not fully reflected in the latest common EPC projections.	X		
j. Other information (optional)			
The programme includes information on the implementation of existing national budgetary rules (expenditure rules, etc.), as well as on other institutional features of the public finances, in particular budgetary procedures and public finance statistical governance.	X		

Notes:
[1]The code of conduct allows for the following exceptions: (i) Ireland should be regarded as complying with the deadline in case of submission on "budget day", i.e. traditionally the first Wednesday of December, (ii) the UK should submit as close as possible to its autumn pre-budget report; and (iii) Austria and Portugal cannot comply with the deadline but will submit no later than 15 December.
[2]To the extent possible, bearing in mind the typically short time period between the publication of the Commission services' autumn forecast and the submission of the programme.

Source:
Commission services

Annex 4: Key economic indicators of past economic performance

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

Malta - Key economic indicators

	Averages			2003	2004	2005
	1996–2005	1996–2000	2001–2005			
Economic activity						
Real GDP (% change)	2.3	4.5	0.1	-2.6	-0.5	2.4
Private consumption (% change)	2.9	4.9	0.9	23.2	0.8	2.2
Government consumption (% change)	1.8	1.5	2.0	3.0	2.3	0.6
Investment (% change)	0.0	0.6	-0.7	28.8	-0.9	8.5
Exports (% change)	1.4	3.9	-1.1	-2.4	0.3	-6.2
Imports (% change)	1.1	2.9	-0.8	6.2	2.2	-1.0
Contributions to real GDP growth:						
Domestic demand	2.1	3.8	0.3	5.3	1.4	7.1
Net exports	0.3	0.7	-0.2	-7.9	-1.9	-4.8
Output gap (% of potential GDP)	0.5	0.8	0.1	-0.4	-3.1	-2.3
Prices and costs						
HICP inflation (% change)	:	:	2.5	1.9	2.7	2.5
Unit labour costs (% change)	2.1	0.6	3.7	7.4	1.8	-0.5
Labour productivity (% change)	1.5	3.8	-0.7	-3.6	0.3	0.8
Real unit labour costs (% change)	0.1	-1.1	1.3	3.3	1.1	-2.3
Comparative price levels (EUR25=100)	:	:	69.0	68.2	67.9	68.6
Labour market						
Employment (% change)	0.8	0.8	0.8	1.0	-0.8	1.5
Employment (% of working age population)	55.9	56.7	55.0	55.4	54.3	54.3
Unemployment rate (% of labour force)	6.9	6.4	7.5	7.6	7.3	7.3
NAIRU (% of labour force)	0.2	0.4	0.1	0.0	0.0	0.0
Participation rate (% of working age population)	59.9	60.5	59.4	59.8	58.5	58.5
Working age population (% change)	1.3	1.1	1.5	1.1	1.1	1.6
Competitiveness and external position						
Real effective exchange rate (% change) (1)	1.1	-1.4	3.6	9.6	3.1	-2.1
Export performance (% change) (2)	-4.2	-4.0	-4.5	-5.3	-6.8	-9.2
External balance of g & s (% of GDP)	-7.0	-8.8	-5.2	-3.5	-7.0	-11.4
External balance (% of GDP)	-5.5	-6.8	-4.3	-4.8	-6.1	-7.8
FDI inflow (% of GDP)	:	:	7.5	18.2	9.5	12.5
Public finances						
Total expenditure (% of GDP)	:	:	46.6	49.4	48.5	47.5
Total revenue (% of GDP)	:	:	40.5	39.2	43.4	44.2
General government balance (% of GDP)	:	:	-6.1	-10.2	-5.1	-3.3
General government debt (% of GDP)	59.7	50.3	69.0	71.3	76.2	74.7
Structural budget balance (% of GDP) (3)	:	:	:	-10.0	-4.6	-3.4
Financial indicators (4)						
Short term real interest rate (%) (5)	2.3	3.3	1.3	-0.7	2.2	0.9
Long term real interest rate (%) (5)	:	:	2.8	1.0	4.0	2.3
Household debt (% change) (6)	:	:	:	:	:	:
Corporate sector debt (% change) (7)	:	:	:	:	:	:
Household debt (% of GDP) (6)	:	:	:	:	:	:
Corporate sector debt (% of GDP) (7)	:	:	:	:	:	:

Notes:

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

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

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

(4) Data available up to 2004.

(5) Using GDP deflator.
(6) Households' and non-profit institutions serving households' debt, defined as loans and securities other than shares.
(7) Non-financial corporate sector debt, defined as loans and securities other than shares.
Source:
Commission services

Euroarea - Key economic indicators

	Averages			2003	2004	2005
	1996 – 2005	1996 – 2000	2001 - 2005			
Economic activity						
Real GDP (% change)	2.1	2.7	1.4	0.8	2.0	1.4
Private consumption (% change)	2.0	2.6	1.4	1.2	1.5	1.3
Government consumption (% change)	1.7	1.7	1.7	1.8	1.2	1.4
Investment (% change)	2.6	4.3	1.0	1.0	2.2	2.5
Exports (% change)	5.8	8.1	3.5	1.1	6.8	4.3
Imports (% change)	5.9	8.4	3.4	3.1	6.7	5.3
Contributions to real GDP growth (percentage						
Domestic demand	2.0	2.7	1.3	1.4	1.8	1.6
Net exports	0.1	0.1	0.1	-0.7	0.2	-0.2
Output gap	-0.1	-0.1	0.0	-0.6	-0.5	-1.1
Prices and costs						
HICP inflation (% change)	1.9	1.7	2.2	2.1	2.1	2.2
Unit labour costs (% change)	1.3	0.8	1.7	2.0	0.9	1.0
Labour productivity (% change)	1.2	1.5	0.8	0.8	1.6	0.9
Real unit labour costs (% change)	-0.5	-0.6	-0.5	-0.1	-1.0	-0.8
Comparative price levels (EUR25=100)	73.6	73.9	73.2	73.2	72.9	72.7
Labour market						
Employment (% change)	1.2	1.5	0.9	0.7	0.7	0.8
Employment (in % of working age population)	63.7	62.0	65.4	65.4	65.6	65.8
Unemployment rate (in % of labour force)	9.1	9.8	8.5	8.7	8.9	8.6
NAIRU (in % of labour force)	8.7	9.0	8.5	8.5	8.4	8.3
Participation rate (in % of working age	69.9	68.5	71.2	71.4	71.7	71.8
Working age population (% change)	0.3	0.2	0.4	0.5	0.5	0.5
Competitiveness and external position						
Real effective exchange rate (% change) (1)	:	:	:	:	:	:
Export performance (% change) (2)	:	:	:	:	:	:
External balance of g & s (in % of GDP)	1.9	1.7	2.0	2.1	2.1	1.5
Net borrowing v-à-v RoW (in % of GDP)	:	:	:	:	:	:
FDI inflow (in % of GDP)	:	:	:	:	:	:
Public finances						
Total expenditure (in % of GDP)	48.2	48.7	47.7	48.2	47.6	47.6
Total revenue (in % of GDP)	45.8	46.5	45.1	45.1	44.8	45.1
General government balance (in % of GDP)	-2.3	-2.1	-2.5	-3.1	-2.8	-2.4
General government debt (in % of GDP)	70.9	72.5	69.3	69.3	69.8	70.8
Structural budget balance (in % of GDP)	:	:	:	-3.2	-2.9	-2.0
Financial indicators (4)						
Short term real interest rate (in %) (5)	1.7	2.7	0.7	0.2	0.2	0.3
Long term real interest rate (in %) (5)	3.1	4.1	2.1	2.0	2.2	1.5
Household debt (% change) (6)	:	:	:	:	:	:
Corporate sector debt (% change) (7)	:	:	:	:	:	:
Household debt (in % of GDP) (6)	:	:	:	:	:	:
Corporate sector debt (in % of GDP) (7)	:	:	:	:	:	:

Notes:
(1) Unit labour costs relative to rest of a group of industrialised countries (usd): EUR24 (excl. LU), BG, RO, TR, CH, NR,
(2) Market performance of exports of goods and services on export weighted imports of goods and services of 35 industrial
(3) Cyclically-adjusted budget balance net of one-off and other temprary measures.
(4) Data available up to 2004.
(5) Using GDP deflator.

(6) Households' and non-profit institutions serving households' debt defined as loans and securities other than
(7) Non-financial corporate sector debt, defined as loans and securities other than
Source: Commission services

Annex 5: Assessment of tax projections

Table 11 in the main text compares the tax projections of the programme with those of the Commission services' autumn 2006 forecast and those obtained by using standard ex-ante elasticities, as estimated by the OECD. It summarises the results for the total tax-to-GDP ratio. The underlying analysis exploits information for the four major tax categories, i.e. indirect taxes, corporate and private income taxes and social contributions (see results in the table below)[24].

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[25]. 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:

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

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

[25]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: $\frac{\Delta T_i}{T_i} = \varepsilon_{T_i,B_i ex ante}\frac{dB_i}{B_i} + \frac{OF_i}{T_i} = \varepsilon_{T_i,B_i ex\ post}\frac{dB_i}{B_i}$.

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

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

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

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

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

Assessment of tax projections by major tax category

	2007			2008			2009
	CP	**COM**	**OECD[1]**	**CP**	**COM[2]**	**OECD[1]**	**CP**
Taxes on production and imports:							
Change in tax-to-GDP ratio	0.5	0.6	0.0	-0.5	0.0	0.0	-0.7
Difference CP – COM	-0.1			-0.5			/
of which[3]:							
- discretionary & elasticity component	0.2			-0.4			/
- composition component	-0.3			-0.2			/
Difference COM – OECD	/	0.6		/	0.0		/
of which[3]:							
- discretionary & elasticity component	/	0.5		/	0.0		/
- composition component	/	0.1		/	0.0		/
p.m.: Elasticity							
- of taxes to tax base[4]	1.9	1.6	1.0	0.6	1.0	1.0	0.3
- of tax base[4] to GDP	0.8	1.1	1.0	0.8	1.0	1.0	0.8
Social contributions:							
Change in tax-to-GDP ratio	-0.1	-0.1	-0.3	0.0	0.0	-0.3	0.0
Difference CP – COM	0.0		/	0.0		/	/
of which[3]:							
- discretionary & elasticity component	0.1		/	0.2		/	/
- composition component	-0.1		/	-0.1		/	/
Difference COM – OECD	/	0.2		/	0.3		/
of which[3]:							
- discretionary & elasticity component	/	0.3		/	0.4		/
- composition component	/	0.0		/	0.0		/
p.m.: Elasticity							
- of taxes to tax base[5]	1.8	1.3	0.5	2.4	1.7	0.5	2.5
- of tax base[5] to GDP	0.4	0.6	0.7	0.4	0.6	0.7	0.4
Personal income tax[6]:							
Change in tax-to-GDP ratio	0.1	-0.1	0.6	-0.3	0.0	0.6	-0.3
Difference CP – COM	0.2		/	-0.3		/	/
of which[3]:							
- discretionary & elasticity component	0.3		/	-0.1		/	/
- composition component	-0.1		/	-0.1		/	/
Difference COM – OECD	/	-0.7		/	-0.6		/

of which[3]:							
- discretionary & elasticity component	/	-0.7		/	-0.6		/
- composition component	/	-0.2		/	-0.1		/
p.m.: Elasticity							
- of taxes to tax base[5]	2.6	1.3	3.7	1.1	1.7	3.7	1.1
- of tax base[5] to GDP	0.4	0.6	0.7	0.4	0.6	0.7	0.4
Corporate income tax[6]:							
Change in tax-to-GDP ratio	0.0	0.0	-0.3	-0.1	0.0	-0.3	-0.1
Difference CP – COM	0.1		/	-0.1		/	/
of which[3]:							
- discretionary & elasticity component	0.0		/	-0.1		/	/
- composition component	0.0		/	0.0		/	/
Difference COM – OECD	/	0.2		/	0.3		/
of which[3]:							
- discretionary & elasticity component	/	0.3		/	0.4		/
- composition component	/	0.0		/	0.0		/
p.m.: Elasticity							
- of taxes to tax base[7]	0.8	0.6	0.5	0.3	0.8	0.5	0.3
- of tax base[7] to GDP	1.5	1.4	0.7	1.4	1.3	0.7	1.4

Notes:
[1]Based on OECD ex-ante elasticity relative to GDP.
[2]On a no-policy change basis.
[3]The decomposition is explained in the text above.
[4]Tax base = private consumption expenditure.
[5]Tax base = compensation of employees.
[6]Taxes on income and wealth are split into private and corporate income tax using the average tax share over the past ten years, i.e. the share is assumed to be constant over the programme period.
[7]Tax base = gross operating surplus.
Source:
Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations and OECD (N. Girouard and C. André (2005), "Measuring Cyclically-Adjusted Budget Balances for the OECD Countries", OECD Working Paper No. 434)