

# Malta: Update of Stability Programme 2014 - 2017

Ministry for Finance April 2014

The following symbols have been used throughout this document:

- ... to indicate that data are not available;
- to indicate that the figure is negligible;
- 0 to indicate that the figure is zero;
- to indicate that data are not applicable or cannot be determined;
- n/c to indicate that there is no change in the data.
- f to indicate that it is a forecast

Figures may not add up due to rounding.

# Contents

Int	roduction	1
1.	Overall Policy Framework and Objectives	5
2.	Economic Outlook	9
2.1	Economic Conditions in 2013	9
2.2	The Medium-Term Scenario	9
	2.2.1 Assumptions for Projections	10
	2.2.2 Risks to Outlook	11
	2.2.3 Private Final Consumption Expenditure	11
	2.2.4 General Government Final Consumption Expenditure	11
	2.2.5 Gross Fixed Capital Formation	11
	2.2.6 External Balance of Goods and Services	12
	2.2.7 Productivity and Employment Prospects	12
	2.2.8 Inflation	13
	2.2.9 Comparison to Commission's Winter Forecast	13
2.3	Potential Output and the Output Gap	13
2.4	Potential Growth and Structural Reforms	14
3.	Fiscal Outlook and the Medium-Term Fiscal Strategy	19
3.1	Correction of the Excessive Deficit	19
3.2	Fiscal Developments in 2013	20
	3.2.1 General Government Revenue in 2013	20
	3.2.2 General Government Expenditure in 2013	21
3.3	Consolidating Budgetary Targets in 2014	22
	3.3.1 General Government Revenue in 2014	24
	3.3.2 General Government Expenditure in 2014	24
3.4	Medium-Term Fiscal Strategy	25
	3.4.1 Deficit Targets and the Medium-Term Budgetary Objective	25
	3.4.2 Revenue Forecasts	27
	3.4.3 Spending Targets	27
3.5	Debt levels and developments	28
	3.5.1 Projected Debt developments	29
	3.5.2 Comparison with the April 2013 Update of the Stability Programme	30
3.6	Budgetary Implications of Major Structural Reforms	31
4.	Sensitivity Analysis and Comparison with the 2013 Update of the Stability	
	Programme	35
4.1	Assessing past GDP forecast projections using forecast errors	35
	4.1.1 Backward Looking Approach	35
	4.1.2 Testing for Bias	38

4.1.3 Fan Charts	39
4.2 Comparison with the Projections in the 2013 Stability Programme	42
4.2.1 Economic Growth	42
4.2.2 Inflation and Employment Prospects	43
5. Sustainability of Public Finances	47
5.1 Long-term Budgetary Projection Results for Malta	47
5.1.1 Assumptions Applied	48
5.1.2 Demographic Developments	48
5.1.3 Age-related Public Expenditure	49
5.2 Focus on Pension Reforms	50
6. Quality of Public Finances	
6.1 Introduction	55
6.2 Policy Strategy	55
6.3 Composition, efficiency and effectiveness of expenditure	55
6.4 Structure and efficiency of revenue systems	57
6.4.1 Shifting from direct to indirect tax	57
6.4.2 Expanding the tax base	58
6.4.3 Efficiency of tax collection	58
7. Institutional Features of Public Finances	63

# Statistical Appendix

Table 1a	Macroeconomic Prospects	67
Table 1b	Price Developments	68
Table 1c	Labour Market Developments	69
Table 1d	Sectoral Balances	70
Table 2a	General Government Budgetary Prospects	71
Table 2b	No policy change projections	72
Table 2c	Amounts to be excluded from the expenditure benchmark	73
Table 3	General Government Expenditure by Function	74
Table 4	General Government Debt Developments	75
Table 5	Cyclical Developments	76
Table 6	Divergence from the April 2012 Stability Programme	77
Table 7	Long-term Sustainability of Public Finances	78
Table 7a	Contigent liabilities	79
Table 8	Basic Assumptions	80

#### Tables

2.1	Main Macroeconomic Indicators	10
3.1	Main Fiscal Projections	21
3.2	Discretionary Factors Underpinning Fiscal Consolidation	23
3.3	Analysis of the Adjustment in the Deficit-to-GDP Ratio	24
3.4	Fiscal Consolidation	26
3.5	The Dynamics of Government Debt	29
3.6	Quantification of NRP Thematic Measures	32
4.1	Forecast Errors for Real GDP - RMSE	36
4.2	Forecast errors for GDP and expenditure components - Tests for unbiasedness	38
4.3	Real GDP Scenarios	41
4.4	Nominal GDP	41
4.5	Deficit as a % of GDP	42
5.1	EUROPOP2010 and EUROPOP2013 Population Projections	47
5.2	Total Population by Selected Age Groups	49

### Charts

2.1	GDP Growth Rate	10
2.2	Malta's Potential Output Growth and Output Gap Estimates	14
3.1	Actual and Cyclically-Adjusted Budget Balances	26
3.2	Debt-to-GDP ratio and Debt Growth	30
4.1	Forecast (at time t) minus latest GDP release	35
4.2	Real GDP Forecast Estimates and latest GDP Vintage Data	37
4.3	Nominal GDP Forecast Estimates and latest GDP Vintage Data	37
4.4	Real GDP Growth Fan Chart (balanced risks)	40
4.5	Nominal GDP Growth Fan Chart (balanced risks)	40
5.1	Age-related Public Expenditure Projections	50
6.1	Functional Classification of General Government Expenditure	56
6.2	Share of Productive Spending in Total General Government Expenditure	57
6.3	General Government Revenue-to-GDP Ratio	58

# Introduction

This Programme constitutes the sixth update of Malta's Stability Programme, which was submitted in 2007. The first update was submitted in December 2008. It has been prepared in accordance with Council Regulation (EC) No. 1466/97 as amended by Council Regulation (EC) No. 1055/05 and Council Regulation (EC) No 1467/97 as amended by Council Regulation (EC) No. 1056/05.

This document is also in line with the new requirements of the Stability and Growth Pact (SGP) namely, the amendments to Council Regulation (EC) No. 1466/97 by Council Regulation (EU) No 1175/2011 of the European Parliament and of the Council of 16<sup>th</sup> November 2011 and the amendments to Council Regulation (EC) No 1467/97 by Council Regulation (EU) No 1177/2011 of 8 November 2011. The Stability Programme also takes into account Council Directive 2011/85/EU of 8<sup>th</sup> November 2011 on the requirements for budgetary frameworks of the Member States.

The document is in line with the '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 on 24<sup>th</sup> January 2012.

The Ministry for Finance compiled this document, with an important contribution from the National Statistics Office as well as from other Ministries and entities across Government. It was prepared on the basis of policies proposed in the November 2013 Budget Speech for 2014, and updated with the latest macroeconomic projections.

The Programme includes seven sections: Chapter 1 presents Government's objectives for economic policy. Chapter 2 presents the main macroeconomic projections for the medium-term as well as the potential impact of a selection of structural reform measures. Chapter 3 outlines the overall fiscal policy strategy and updated budgetary plans for the current year, followed by a presentation of the medium-term fiscal projections and debt developments. The budgetary implications of major structural reforms featuring in the National Reform Programme are also outlined. Chapter 4 contains an analysis of forecast errors, a forward looking analysis of risk, a sensitivity analysis of the macroeconomic and budgetary projections conditional on the risks identified as well as a comparison between the current forecasts and those presented in the April 2012 Update of the Stability Programme. Chapter 5 reviews the long-term sustainability of public finances. Chapter 6 analyses the quality of public finances, and finally Chapter 7 reviews the institutional features of public finances and the expected reforms currently taking place.

1. Overall Policy Framework and Objectives

# **1. Overall Policy Framework and Objectives**

Malta has complied with the Council Recommendation to bring the deficit below 3.0 per cent in 2013, a year ahead of what was recommended and on the back of a structural effort of 0.7 percentage points of GDP. The fiscal effort was in reality stronger when one considers that the deficit target was met despite a one-off deficit increasing impact of the equity injection in Air Malta.

Government considers this as an important achievement but there are still challenges ahead in order to ensure long-term public finance sustainability and recover the necessary fiscal space to allow fiscal policy to act in a countercyclical manner.

The resolve to continue consolidating public finances to reach a balanced structural budget balance will be the ultimate target of this Stability Programme. Indeed by the end of the Programme period, Government aims to achieve its targets.

In the context of the fiscal reforms that have taken place at an EU level and the ongoing fiscal reforms at a national level, the 2014 Stability Programme represents a higher degree of commitment than earlier Programmes presented by Malta. This is the first Stability Programme that has been submitted to an independent body for evaluation and endorsement. The endorsement of the Stability Programme elevates it to the status of a National Medium-Term Fiscal Plan within the meaning of the revised Stability and Growth Pact. This will form the basis of the medium-term budgetary framework which will establish a three-year budget complete with spending ceilings. Whilst the Fiscal Responsibility Act has not yet been enacted (it will be presented to Parliament for a first reading soon), this Programme has been prepared in compliance with the new requirements of the Stability and Growth Pact and also within the spirit of the Fiscal Responsibility Bill.

The Fiscal Responsibility Act will indeed strengthen the commitments contained in this Programme and provide the necessary tools and the enabling framework which will allow Government to meet its fiscal targets. It will do so by enshrining the fiscal rules contained in the SGP into national rules, the setting up a functionally independent fiscal council to act as a fiscal watchdog, the strengthening of the role of the Ministry for Finance in the budgetary process, further strengthening multi-annual fiscal planning, which was established as from the 2014 Budget, the introduction of flexibility instruments to support the credibility of fiscal rules and fiscal targets, the introduction of sanctions and individual responsibility in support of the budgetary targets, and increasing accountability and transparency in the fiscal process.

The fiscal targets presented in this Stability Programme shall also be supported by a range of structural economic policies as presented in this year's National Reform Programme. The new Government's economic and fiscal strategy rests on a number of policy objectives, primarily meant to address the country's main economic challenges, in particular:

- 1. Ensuring public finance sustainability in the short to medium-term, while also addressing the long-term dimension;
- 2. Raising potential output, in particular through increasing labour force participation, especially of women, raising skill and education levels, promoting lifelong learning, and increasing productive capital investment;
- 3. Enhancing the competitiveness and transparency of the products and services markets whilst strengthening consumer protection, including a holistic justice reform;
- 4. Effectively reducing bureaucracy especially the length of the public procurement process, and ensuring that the public service is efficient and cost effective;

- 5. Safeguarding the successes achieved by the Maltese financial sector by reducing macroeconomic imbalances related to the financial sector and ensuring efficient and rigorous regulatory and supervisory frameworks, and
- 6. Prioritising the promotion of a diversified and balanced economy.

In order to continue fulfilling these policy objectives, the Government, as outlined in the Economic Partnership Programme, is implementing a number of supply-side policies that are aimed at raising the country's potential growth whilst also ensuring responsible environmental management and social cohesion. Furthermore, the Maltese Government is also implementing a number of growth-friendly fiscal consolidation policies which are aimed at getting the economy out of the excessive deficit procedure permanently and achieving the sustainability of the country's public finances in the long-term.

By the end of 2014, Government is aiming to reach a deficit target of 2.1 per cent of GDP and achieve a structural effort of slightly more than 0.5 percentage points of GDP. The debt-to-GDP ratio is expected to decline to 69.5 per cent in 2014 partly as a result of the primary surplus being targeted, partly due to the strength of economic growth and also in view of the stock-flow element which includes the expected payment of arrears by Enemalta. Government believes that sound economic policies which address Malta's growth potential and competitiveness can also strengthen the sustainability of public finances. The reforms in the energy sector are to contribute to the attainment of both the economic and the fiscal objectives. Such reforms also have the potential of reducing Government guarantees and thus further bolster public finance sustainability and investor confidence in Malta's sovereign paper.

Over the medium-term, Government is aiming to reduce the structural budget deficit by an average of 0.6 percentage points of GDP per annum, and by the end of the Programme period it is targeting a structural deficit of 0.5 per cent of GDP. Thus, by the end of the Programme period, Malta would have almost practically reached the minimum Medium-Term Budgetary Objective stipulated for a Euro Area country which is signatory to the Treaty on Stability, Coordination and Governance (TSCG). Public debt is expected to embark on a downward trend and is projected to go below 64.0 per cent of GDP by 2017, thus converging to the 60.0 per cent threshold at a satisfactory pace. The challenge ahead is definitely formidable, but so is Government's resolve to attain its own targets.

2. Economic Outlook

# 2. Economic Outlook

# 2.1 Economic Conditions in 2013

During the course of 2012 and the first half of 2013, Europe's economy was still struggling to recover from the recession that hit the world economy and the global markets at the end of 2007. However, during the second half of 2013, growth in the European economy turned positive. Following this improved confidence in European markets, the latest forecasts issued by the European Commission are expecting the European economy to gain traction and register somewhat higher growth rates than those achieved in the past. Growth is expected to rise firmly as private consumption and investments strengthen, replacing net exports as the main growth driver. This growth is expected to strengthen in the coming years and to spread across countries. Moreover, economic growth is expected to be more balanced. However, as is typical, following deep financial and sovereign crises, the global economy is projected to grow at just a moderate pace.

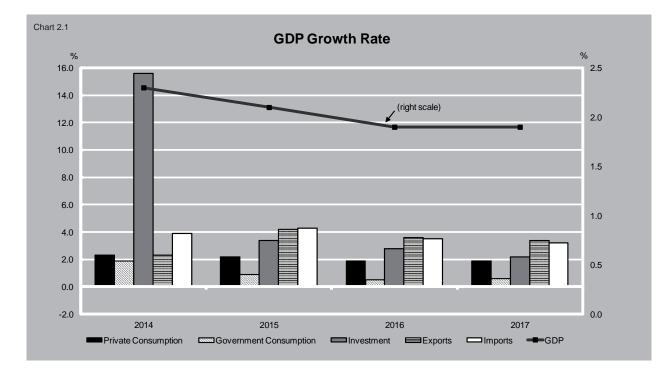
The Maltese economy registered strong positive growth during 2013 and outperformed growth in the European Union. Latest data released by the National Statistics Office (NSO) show that the economy expanded by 2.4 per cent in real terms during 2013. Growth in the domestic sector was underpinned by growth in private consumption which expanded by 1.8 per cent. On the other hand, there were contractions in both public consumption and in gross fixed capital formation which both registered declines of 0.2 per cent and 3.8 per cent respectively<sup>1</sup>. Furthermore, during the same period, although there was a decline in exports of goods and services which was marginally greater than the decline in imports, nominal exports remained higher than nominal imports thereby contributing to a positive balance on the external side equivalent to 5.6 per cent of GDP.

From the output side, the economy expanded by 4.3 per cent in 2013, largely driven by the growth in services which mitigated the decline in manufacturing and construction activity. Nevertheless, it is pertinent to point out that the decline in manufacturing gross value added was attributable primarily to the negative performance in the electronics sub-sector. This sector accounts for 23.0 per cent of manufacturing. On the other hand, a number of manufacturing sectors which together account for almost 45.0 per cent of manufacturing gross value added, registered very strong growth rates of between 7.0 per cent and 27.0 per cent. This includes sectors such as furniture, toys, food products, beverages, electrical equipment, rubber and plastics and the manufacture of metal as well as that of vehicles, trailers and semi-trailers. In the services sector robust growth rates were registered by the majority of sectors. Indeed, 45.0 per cent and 57.0 per cent, with seven service activities registering double digit growth rates. Hence, from a sectoral perspective it is evident that growth was relatively broad-based and if one excludes construction and electronics, the growth rate rises to 6.2 per cent, which is almost 2.0 percentage points higher than what was recorded.

# 2.2 The Medium-Term Scenario

In 2014, the Maltese economy is expected to grow by 2.3 per cent in real terms and to converge to its potential growth rate over the medium-term. Economic growth over the Programme period is expected to be supported primarily by positive developments in the domestic sector of the economy while the external sector is expected to act as a drag on economic growth in 2015 and not to contribute in 2015. Private consumption is expected to remain robust over the forecast horizon whilst investment is expected to increase substantially in 2014, largely attributed to the sizeable investment in the energy sector. The negative external contribution expected in 2014 is largely attributable to the growth in imports brought about by strong investment activity. Over the 2015-2017 period, export activity is expected to gain momentum.

Chart 2.1 illustrates the projected growth rate of GDP together with a detailed breakdown of the various expenditure aggregates. Table 2.1 presents the main macroeconomic indicators for the years 2013-2017.



	2013	2014f	2015f	2016f	20171
GDP growth at current market prices (%)	4.4	4.7	4.6	4.4	4.4
GDP growth at constant (2000) prices (%)	2.4	2.3	2.1	1.9	1.9
Expenditure Components of GDP					
at constant (2000) prices (% change)					
Private final consumption expenditure <sup>(1)</sup>	1.8	2.3	2.2	1.9	1.9
General government final consumption					
expenditure	-0.2	1.9	0.9	0.5	0.6
Gross fixed capital formation	-3.8	15.6	3.4	2.8	2.2
Exports of goods and services	-5.6	2.3	4.2	3.6	3.4
Imports of goods and services	-5.2	3.9	4.3	3.5	3.2
nflation rate (%)	1.0	1.3	1.8	1.8	1.7
Employment growth (%)	2.7	2.1	1.8	1.7	1.8
Unemployment rate (%)	6.5	6.5	6.5	6.5	6.5
Compensation per employee (% change)	1.6	1.1	2.0	2.0	2.0
Labour productivity (% change) (2)	-0.3	0.2	0.3	0.2	0.1
Unit Labour Cost (% change)	1.9	0.9	1.7	1.8	1.9
External Goods and Services Balance	5.6	4.1	4.4	4.9	5.4
(% of GDP)					

(2) Real GDP per person employed

The figures for 2013 have been published by the National Statistics Office (NSO), whilst figures from 2014 onwards are forecasts. The macroeconomic forecasts take into account the latest available data and are being provided in Tables 1a, 1b, 1c, and 1d of the Statistical Appendix.

# 2.2.1 Assumptions for Projections

The macroeconomic forecasts presented in this Stability report are based on the following assumptions:

- Economic activity in Malta's main trading partners is expected to increase by 1.7 per cent in 2014 followed by positive growth rates of 1.9 per cent in 2015 and by 1.8 per cent thereafter.
- Oil prices are assumed to remain relatively stable for 2014 at an average of US\$106.0 per barrel (€78.2 per barrel) and to increase marginally thereafter to US\$106.5 per barrel.
- Both short-term and long-term interest rates are assumed to remain stable during the forecast period. The real effective exchange rate is also assumed to remain broadly constant for the remaining forecast period.
- It is being assumed that, in line with Government policy, Government employment follows a downward trajectory as Government restricts recruitment in non-essential categories.
- Changes in inventory are assumed not to contribute materially to GDP growth.

# 2.2.2 Risks to Outlook

The medium-term outlook for the global economy is one of positive, yet moderate growth. Nevertheless, there are a number of factors that could either bolster or restrain growth prospects. These risk factors will be explored in more detail in Chapter 4 of this Programme. Nevertheless, it is worth noting at this stage that the upside risks are deemed to be stronger than the downside risks.

# 2.2.3 Private Final Consumption Expenditure

After recovering and registering a growth rate of 1.8 per cent in 2013, private consumption expenditure is set to remain strong in 2014. Indeed, it is forecast to increase by 2.3 per cent in real terms, sustained by a strong and resilient labour market and growth in disposable income. The latter is being driven by a moderate appreciation in wages which is expected to strengthen in the outer years of the forecast period and a robust growth in employment, which is marginally higher than the average registered in the last ten years. The forecasted increase in private consumption is also supported by the reduction in utility tariffs to households as from April 2014. Growth in private consumption expenditure is set to remain steady for the outer years of the forecast period with expected rates of 2.2 per cent in 2015 and 1.9 per cent in 2016 and 2017.

# 2.2.4 General Government Final Consumption Expenditure

After having contracted by 0.2 per cent in 2013, Government final consumption expenditure is projected to pick-up and rise by 1.9 per cent in 2014. It is set to remain positive over the forecast period amid at subdued growth rates in line with the Government policy of fiscal consolidation, rising by 0.9 per cent in 2015 and by 0.5 per cent and 0.6 per cent in 2016 and 2017, respectively.

# 2.2.5 Gross Fixed Capital Formation

The declining trend in gross fixed capital formation is expected to be reversed, increasing by a significant 15.6 per cent in real terms in 2014, largely on the back of a sizeable investment in the energy sector, which together with projects set out to reconstruct roads and infrastructure, are expected to be the main drivers of

this strong recovery. In addition, the budgetary measures announced for 2014 are expected to support private investment, particularly in tourism and non-dwelling construction. Investment activity in 2015 is influenced by the base effect of 2014, respectively. Furthermore, gross fixed capital formation is forecasted to grow by 3.4 per cent in 2015 and by 2.8 per cent in 2016<sup>2</sup>. It is set to further increase in 2017 by 2.2 per cent. The baseline scenario underpinning these forecasts does not consider the impact of a number of large scale projects which have a relatively high probability of materialising and is therefore considered a relatively prudent scenario particularly in the medium-term. These projects will be explored in more detail in Chapter 4.

# 2.2.6 External Balance of Goods and Services

For 2014, export growth is expected to pick up and increase by 2.3 per cent, in line with the gradual recovery in the international economy and also underpinned by a recovery in the electronics sub-sector. At the same time, stronger domestic demand, in particular investment is forecast to drive up imports by 3.9 per cent, resulting in a negative net trade contribution to growth. The negative trade gap is expected to persist in 2015 and to be reversed over the outer years of the forecast period.

In 2015, exports are projected to strengthen by 4.2 per cent while imports are projected to grow by 4.3 per cent in real terms, the result of which is a marginal negative contribution to overall economic growth. Net exports are expected to turn positive to 0.1 percentage points in 2016 as investment growth decelarates thus slowing down the rate of growth in imports. The contribution from net exports is however expected to increase to 0.3 percentage points in 2017.

# 2.2.7 Productivity and Employment Prospects

The labour force survey recorded a growth rate of 2.4 per cent in 2012 and a 2.6 per cent growth in 2013 in total employment. Growth in employment is expected to remain strong in 2014 and to increase by 2.1 per cent and by an average growth rate of 1.8 per cent over the outer years of the forecast period, in line with the expected improvements in the economic environment.

This positive performance is expected to be largely supported by a higher female employment rate, partly reflecting increased efforts from Government to increase female participation including the introduction of free child care centres, opening schools earlier through the 'Breakfast Club' programme, providing after-school care services within school structures for longer hours, extending the parents' income tax computation to parents with children under 23 who are still in tertiary education, extending tax deduction for parents sending their children to private child care centres and increasing employment flexibility with the promotion of other family-friendly measures including flexible hours, job sharing and telework.

In addition, wage moderation expected over the forecast period is also expected to support employment growth, particularly in the short-term. Average wages are expected to grow moderately, with compensation per employee forecasted to grow by 1.1 per cent in 2014 and then to increase by an average growth rate of 2.0 per cent over the remaining forecast period. Labour productivity growth is expected to be positive but to average 0.2 per cent over the forecasted period.

Growth in output is expected to be supported by both the traditional and the emerging growth sectors with the possibility of increased market shares in industries such as aviation, including aircraft maintenance, pharmaceuticals, accommodation, professional and other business related services, information and communication, financial and related services and wholesale and retail services. The loss in market share experienced in electronics is expected to be recovered in 2014 and 2015.

In 2013, the unemployment rate stood at 6.5 per cent. This is well below the EU average and reflects efforts to increase the participation of formerly unemployed persons through active labour market policies. The unemployment rate over the 2014-2017 period is expected to remain broadly stable at the 6.5 per cent level as the rise in participation in the labour market is expected to be absorbed by the demand for labour following

the strong growth expectations over the forecast period.

### 2.2.8 Inflation

During 2013, the HICP inflation rate declined to 1.0 per cent from 2.8 per cent recorded a year earlier. Significant price pressures were registered in alcoholic beverages and tobacco, food and non-alcoholic beverages, and in recreation and culture, whereas communications, transport and restaurants and hotels exerted disinflationary pressures. Inflationary pressures are expected to remain subdued during 2014, on the back of lower inflationary pressures in the energy sector stemming from the reduction in the electricity tariffs for households. With the output gap estimated to close down and turn positive from 2014 onwards, inflation is expected to rise moderately to 1.3 per cent in 2014 while for 2015 inflation is expected at 1.8 per cent, thus remaining below the average inflation rate. For the outer years, inflation is expected to remain stable at around 1.8 per cent.

# 2.2.9 Comparison with the Commission's Winter Forecast

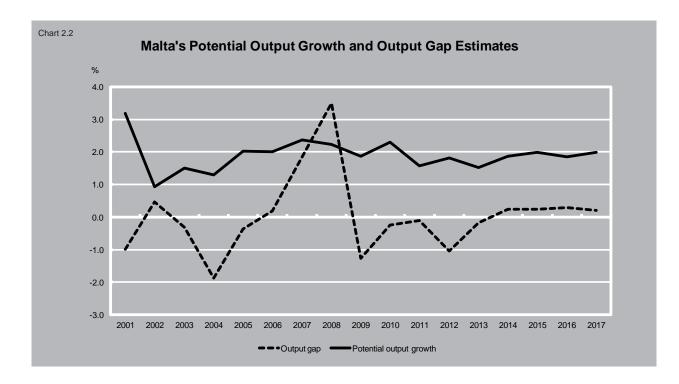
The winter forecasts published by the European Commission project a growth rate for Malta of 2.1 per cent in both 2014 and 2015, as domestic demand gradually strengthens to become the main driver of growth. Forecasts for real GDP growth in 2014 presented in this Programme are 0.2 percentage points higher than the rate forecasted by the European Commission. Both sets of forecasts are consistent with a domestically-led growth scenario, yet the forecast presented in this Programme assumes a higher expected net contribution from domestic demand underlined by stronger growth in gross fixed capital formation, reflecting the sizable investment in the energy sector. Growth forecasts for 2015 are consistent with those forecasted by the European Commission winter forecasts. Nominal GDP growth is expected to reach 4.7 per cent and 4.6 per cent for 2014 and 2015, respectively, compared to a growth rate of 3.8 per cent and 4.5 per cent in the European Commission's winter forecasts.

# 2.3 Potential Output and the Output Gap

The estimation of potential output and the output gap defined as actual output less potential output as a percentage of potential output within this update of the Stability Programme is based on the commonly-agreed Production Function method. The main differences between the European Commission forecasts and the Government's estimation pertain to differences in the macroeconomic forecasts. Developments in the potential output and output gap are presented in Chart 2.2.

The first half of the past decade was characterised by a low rate of economic growth compared to the average rate of economic growth that had been registered in preceding years. Indeed, during the period 2001-2005, economic growth averaged 1.3 per cent. The slowdown in economic growth from what the economy had registered previously was underpinned by a combination of international developments and domestic factors. Following EU accession, the Maltese economy exhibited a notable improvement in growth prospects and during the period between 2006 and 2008, annual economic growth increased notably to around 3.5 per cent. This strong performance was however curtailed with the advent of the financial crisis in 2008 and the subsequent global recession. As a result, during 2009, the domestic economy shrank by 2.8 per cent. On a positive note however, the Maltese economy exhibited a rather rapid recovery from the recession, and grew at a rate of 3.3 and 1.7 per cent during 2010 and 2011 respectively. The latter recovery was underpinned by a sustained strong performance in the external sector. However, during 2012, the recovery lost momentum as the economy grew by less than 1.0 per cent. In fact in 2012, economic growth declined significantly to 0.6 per cent. The economy recovered in 2013 as economic growth quadrupled and rose to 2.4 per cent, underpinned by a strong recovery in domestic demand and production.

Average potential output growth, which is a measure of the growth potential of the economy, stood at 2.0 per cent during the period 2006 - 2013. This rate of growth is marginally higher than the average potential growth rate pertaining to the period 2000 - 2005. It is pertinent to point out that the rate of growth of potential output



decelerated markedly during 2009 as a result of the financial crises. A similar deceleration was observed in 2011 and 2013. The deceleration in the growth rate of potential output in 2011 was underpinned by lower contributions from the capital factor as a result of significantly lower investment during this year while the deceleration in 2013 was underpinned by lower contributions from potential labour input. This deceleration in the labour contribution was partially attributable to a decline in the contribution of hours worked that has been registered in recent years. In addition, the increase in employment registered in 2013 was partly a result of an improvement in cyclical conditions. Overall, these dynamics would suggest that the observed employment growth following 2010, has been partly cyclical and partly structural in nature. However, over the forecast period 2014 - 2017, potential output growth is expected to exhibit a marginal gradual increase. In fact, average potential growth is expected to hover around the 1.9 per cent level, mainly underpinned by positive developments in the labour market, largely through a higher participation rate, and to a lesser extent improvements in investment and improvements in the total factor productivity.

The output gap, is defined as the difference between actual and potential output, expressed as a ratio of potential output. The gap is indicative of the cyclical developments prevailing in the Maltese economy. With the exception of 2002, the period 2001-2005 has been a period where the Maltese economy operated below its potential level. The output gap turned positive as from 2006 and actual output remained above the potential level up to 2008. However, following the international recession and the subsequent contraction of the domestic economy in 2009, the output gap turned negative yet again. Indeed, in 2009 the output gap is estimated to have been -1.3 per cent. In the subsequent four years, the gap between potential and actual output contracted, albeit still remaining negative. The output gap is expected to turn marginally positive in 2014 and is expected to remain positive during the forecast period with the Maltese economy registering a rate of economic growth that is in line with potential output growth.

# 2.4 Potential Growth and Structural Reforms

The structural reform agenda is one of the key policy planks through which the new Administration intends to raise potential output, create more jobs and sustain economic growth. Moreover, the implementation of structural reforms should boost confidence among households and economic operators as well as raise productivity and living standards. Specifically, Government is aiming to:

<sup>•</sup> Encourage higher labour participation rates by introducing free child care centres, implementing active

labour market policies and making work pay;

- Improve the education system by introducing a number of policy reforms such as the introduction of tablets in primary schools for teachers and students, giving higher priority to mathematics, ICT and science subjects, introducing new courses on aviation, providing stipends for students undertaking veterinary courses and for repeaters and assuring higher education quality;
- Strengthen efficiency in the use of energy by converting the Delimara power station from heavy fuel oil to gas as well as introducing a number of other measures such as an electric car incentive scheme, the auto-gas conversion scheme and a car scrappage scheme;
- Encourage greater investment in higher research and development primarily by setting up an ICT innovation accelerator;
- Target poverty reduction and social inclusion by introducing a number of measures such as offering full pension for employed widows, granting € 300 to elderly persons over the age of 75 years, increasing of the number of clients attending day centres and introducing social support workers within Agenzija Appogg.

A more detailed discussion on each of these measures and their potential socio-economic impact is presented in Malta's National Reform Programme 2014.

Footnotes:

<sup>1</sup> The expenditure components should be treated with caution in view that a statistical error is included with the inventories component (see Table 1a in Appendix).

<sup>2</sup> It is to be noted that energy investment is assumed to be front loaded in 2014 due to the combined investment in the energy interconnector and the power station. The investment in the interconnector is assumed to be completed in 2014.

3. General Government Balance and Debt

# 3. Fiscal Outlook and the Medium-Term Fiscal Strategy

Government's fiscal policy objective remains that of ensuring a sustainable fiscal position by gradually but consistently reducing the fiscal imbalance, to reach a balanced budget in the medium term. Fiscal consolidation is necessary to ensure the sustainability of Government's fiscal position, thus regaining the necessary fiscal flexibility that would spur long-term economic growth. In this context, the new Government has managed to reduce the general Government deficit-to-GDP ratio from 3.3 per cent in 2012 to 2.8 per cent in 2013. Furthermore, this decline is expected to be sustained such that the fiscal imbalance is projected to be reduced further from 2.8 per cent in 2013 to 0.3 per cent by 2017.

The envisaged fiscal consolidation will be primarily supported by a stable macroeconomic environment. It is imperative that the economy continues to diversify and increase its growth potential, driven by higher labour market participation and employment, higher productive investment and increases in productivity. Growth needs to continue to be supported by a sound financial sector which is prudent and which functions within a strongly regulated framework that inspires confidence.

As documented in the National Reform Programme (NRP) 2014, structural reforms are expected to sustain the economic growth prospects of the Maltese economy. The sustainability of public finances will also be aided by a strengthened national fiscal framework to be introduced this year as detailed in Chapter 7 of this Programme. Reviews of Government spending will continue so as to ensure, the achievement of improved efficiency in public spending, reduction of waste and value for money. In turn, this will ensure greater financial discipline and fiscal accountability in the public sector. Moreover, Government is also consolidating the various functions of Government revenue into one authority through the merger of the Inland Revenue Department (IRD), VAT and Customs departments, in support of its efforts towards curbing fiscal abuse and increasing efficiency in revenue collection.

An improvement in the primary surplus projected over the medium-term, together with positive growth prospects and the retention of sustained investor confidence, should ensure improvements in the underlying debt dynamics. Furthermore, this is being partly underpinned by an improvement in the stock-flow stemming from payments of arrears by Enemalta. In this respect, the debt-to-GDP ratio is expected to exhibit a downward trajectory to reach a level of 63.9 per cent of GDP by 2017. This is also being partly supported by payments of arrears by Enemalta, which is affecting the stock-flow. Over the Programme period, the proportion of short-term debt is expected to average 4.2 per cent and hence remain at relatively low levels, in line with the recent past. Moreover, during the period 2013-2017, the share of maturing stocks in total Government debt is expected to range between a maximum of 8.7 per cent in 2016 to a minimum of 6.5 per cent in 2015.

# 3.1 Correction of the Excessive Deficit

In 2012, Malta recorded a general Government deficit of 3.3 per cent of GDP, above the reference value of 3.0 per cent of GDP. Accordingly, the Council of the European Union decided on 6<sup>th</sup> June 2013 that an excessive deficit situation existed in Malta. The Council established a deadline of 1<sup>st</sup> October 2013 for Malta to take effective action and to report in detail the consolidation strategy that is envisaged to achieve the targets. In particular, Council recommended Malta should reach a headline general Government deficit target of 3.4 per cent of GDP in 2013 and 2.7 per cent of GDP in 2014.

On 1<sup>st</sup> October 2013, Malta submitted to the Commission a report on action taken in compliance with the above recommendations. The Commission reviewed the submitted Report on Effective Action and made an assessment of the budgetary situation and in particular on the action taken in compliance with the Council's recommendation. On 15<sup>th</sup> November 2013, the Commission communicated to the Council that it considered that Malta had taken effective action and that no further steps in the excessive deficit procedure were needed.

# 3.2 Fiscal Developments in 2013

Malta took effective action to bring down the general Government deficit below the 3.0 per cent threshold by the end of 2013, a year prior to the deadline set by the Commission but in line with the Programme's projections of last year. In fact, the general Government deficit-to-GDP ratio for 2013 improved by 0.5 percentage points to 2.8 per cent of GDP.

Furthermore in 2013, Government achieved an annual structural improvement of 0.7 per cent of GDP, consistent with the requirements of the corrective arm of the Stability and Growth Pact (SGP) and the Council Recommendation to correct the excessive deficit. Indeed Malta managed to reach the stipulated deficit targets in the absence of similar extraordinary receipts in 2013 and inspite a one-off equity injection of €40 million to Air Malta.

### 3.2.1 General Government Revenue in 2013

As observed in Table 3.1, the General Government revenue-to-GDP ratio in 2013 increased by 1.2 percentage points to 41.1 per cent primarily on account of a higher tax revenue ratio. The latter increased from 27.2 per cent in 2012 to 28.2 per cent in 2013.

The ratio to GDP of current taxes on income and wealth contributed to an increase of 0.9 percentage points in the revenue-to-GDP ratio, mainly underpinned by a higher ratio from income tax paid by companies and although to a lesser extent, a higher ratio to GDP from income tax paid by individuals. It is pertinent to note that fiscal projections for 2013 were based on a growth forecast of 2.1 per cent for wages and 2.2 per cent for profits. National accounts data suggest that in 2013 wages actually increased by 4.3 per cent and profits increased by 4.3 per cent. As a consequence, income tax projections contained in the Stability Programme of 2013 proved to be too conservative.

Social security contributions also turned out to be stronger than anticipated in last year's Stability Programme in absolute terms although marginally lower as a ratio to GDP. This outcome also reflects the stronger than anticipated increase in output and employment. Compared to 2012, while the ratios of social contributions and property income remained relatively unchanged in 2013, marginal increases of 0.2 percentage points of GDP were recorded in the ratio of 'other' revenue, mainly underpinned by higher receipts from Government market output related to public administration and defence.

Taxes on production and imports also contributed 0.2 percentage points to the increase in the revenue-to-GDP ratio. This was supported by a stronger than anticipated recovery in domestic demand conditions. Indeed, revenue from VAT was stronger than anticipated. Nevertheless, a weaker than anticipated property market and lower increases in new car registrations dampened the positive impact of the strong recovery in domestic demand on taxes on production and imports. Revenue from import duties was also weaker than anticipated reflecting the more subdued imports. Revenue increases were also supported by the impact of indirect tax revenue measures estimated at €0.9 million. An ex-post assessment of these measures calculates the impact of revenue measures at €10.3 million.

# Main Fiscal Projections

(percent of GDP)

	2013	2014	2015	2016	2017
Revenue	41.1	42.2	42.4	41.5	41.9
Components of revenue					
Taxes on production and imports	13.5	14.1	14.1	14.1	14.2
Current taxes on income and wealth	14.5	14.2	14.4	14.4	14.6
Capital taxes	0.2	0.2	0.2	0.2	0.2
Social contributions	7.3	7.4	7.5	7.4	7.3
Property income	1.3	1.2	1.2	1.2	1.1
Other revenue	4.3	5.0	5.1	4.3	4.5
Expenditure	43.9	44.2	44.0	42.3	42.2
Components of expenditure					
Compensation of employees	13.5	13.2	13.0	12.8	12.6
Intermediate consumption	6.3	6.5	6.5	6.3	6.2
Social benefits and social transfers in kind	13.5	13.5	13.6	13.5	13.6
Interest expenditure	3.0	3.0	2.9	2.9	2.8
Subsidies	1.1	1.5	1.2	1.1	1.2
Gross fixed capital formation	2.7	3.2	3.1	2.9	3.0
Capital Transfers Payable	1.3	0.9	1.4	0.7	0.8
Current Transfers Payable	2.3	2.2	2.1	2.0	1.9
Other expenditure	0.1	0.2	0.1	0.1	0.1
Deficit	-2.8	-2.1	-1.6	-0.7	-0.3
Primary Balance	0.2	0.9	1.3	2.1	2.5

### 3.2.2 General Government Expenditure in 2013

In 2013, the ratio of General Government expenditure increased by 0.8 percentage points of GDP from 43.1 per cent in 2012, reflecting higher ratios recorded for 'other' expenditure, capital transfers and compensation of employees. These were partly offset by lower expenditure ratios for intermediate consumption, gross fixed capital formation, and interest expenditure.

The ratio of 'other' expenditure to GDP increased by 0.9 percentage points to 2.4 per cent, mainly on account of a base effect stemming from the revenue accruing from the concession fee payable by the local lottery operator, which was recorded as negative expenditure in 2012. Furthermore, other current transfers also contributed to an increase in 'other' expenditure partly on account of higher EU Own Resources.

The ratio of capital transfers to GDP increased by 0.3 percentage points in 2013, mainly underpinned by the incremental impact of the equity acquisition in the national airline as part of the ongoing restructuring process. The ratio of compensation of employees to GDP increased by 0.2 percentage points in 2013, mainly on

account of higher expenditure on wages and salaries of public administration and Extra Budgetary Units (EBUs) mainly due to a temporary increase in employment in education and human health activities. The increase also includes the impact of the sectoral collective agreements which were concluded at the end of 2012 and early 2013.

A decrease in the ratio of intermediate consumption from 6.7 per cent of GDP in 2012 to 6.3 per cent in 2013 was mainly underpinned by decreases in capital expenditure classified under this component of expenditure. Furthermore, the ratio of expenditure related to programmes and initiatives also contributed to this decrease, as the increases in expenditure towards medicines and surgical materials were more than offset by lower expenditure on street and road lighting and a lower administrative fee towards the transport authority. Lower expenditure towards the Waste Water Directorate also contributed to a lower intermediate consumption ratio.

The decrease in the ratio of gross fixed capital formation from 3.0 per cent of GDP in 2012 to 2.7 per cent in 2013 was mainly underpinned by lower ratios for acquisitions of new and existing tangible fixed assets. This was partially offset by lower disposals of existing tangible fixed assets related to EBUs which had a positive effect on the ratio of gross fixed capital formation. Other notable increases were recorded in respect of the oncology centre.

# 3.3 Consolidating Budgetary Targets in 2014

In the context of improving economic conditions and positive output gap projections, Government is committed to further pursue a path of fiscal consolidation to reach a balanced budget position in structural terms. This will ensure a more sustainable fiscal position in the long term and also create the necessary fiscal space to be able to pursue a counter cyclical fiscal policy if economic conditions were to worsen in the future.

During the current fiscal year, the general Government balance is expected to decline further from 2.8 per cent of GDP to 2.1 per cent of GDP, suggesting an improvement in the fiscal position of 0.7 percentage points of GDP and a structural effort of 0.5 percentage points of GDP. Table 3.2 presents the measures supporting the fiscal consolidation envisaged over the medium-term.

# Discretionary Factors Underpinning Fiscal Consolidation

(Euro millions) Note: The impact of the measures is reported on accruals basis. The impact is recorded in incremental terms, as compared to the previous year's baseline projection. It also includes lagged incremental effects of previous budget measures. A positive represents a decline in the deficit.

		2014	2015	2016	2017
Main Mea	sures Impacting on Revenue				
Fiscal con	solidation measures	23.42	10.05	10.00	_
	Revision in excise duty on fuel	7.65	_	_	
	Revision in excise duty on cement	3.10	_	_	
	Revision in excise duty on cigarettes and tobacco	7.46		_	_
	Revision in excise duty on mobile telephony	0.05	0.05	_	_
	Revision in excise duty on beer and spirits	1.45		_	_
	Revision in the bunkering tax	0.61	-	-	-
	Cost recovery of current free banderoles	1.50	-	-	-
	A 5% increase in fees of office	1.60	-	-	-
	Structural measures (1)	-	10.00	10.00	-
Growth en	hancing measures	-16.31	-18.72	_	-
	Widening of the income tax rates	-13.20	-19.22	_	_
	Revision in Income Tax Bands for Family Compution	-1.80	-	-	_
	Tax Credit Extension for Child Care	-0.40	-	-	_
	Tax Exempt COLA on minimum wage and penisons	-0.20		-	
	Social Security Exemption for Carers	-0.21		-	
	Financial Support to First Time Buyers	-0.50	0.50	-	-
Measures	promoting a sustainable environment	2.87	_	_	-
	Revision in the registration tax of private vehicles	-	-	-	-
	Annual circulation licence fee	2.46		-	—
	Revision in the driver's licence fee coverage	0.45		-	
	Reduction in the registration tax for motor vehicles $\ensuremath{^{(2)}}$	-0.04	-	-	-
Social coh	esion measures	10.00	11.50	-	-
	Pension reform initiatives	11.50	11.50	-	-
	Tax incentive to take up private pension	-1.50	-	-	
Other mea	sures	-0.60	8.05	-1.20	-
	Efficiency in revenue collection	-5.60	-1.95	-1.20	-
	International Investor Programme (3)	5.00	10.00	-	-
	Removal of TV licences	-	-	-	
Total		19.38	10.88	8.80	_
Main Mea	sures Impacting on Expenditure				
Fiscal con:	solidation measures	4.74	11.41	12.10	7.83
	Restriction on Recruitment	4.74	11.41	12.10	7.83
Social coh	esion measures	-5.49	-5.18	0.92	0.98
	Pension reform initiatives	0.81	0.82	0.92	0.98
	Conditional Children's Allowance	-3.00	-6.00	-	-
	Revision in the minimum rate of children's allowance	—		-	
	Extension of maternity leave	-	-	-	-
	Assistance to help the Elderly	-3.30	-	-	-
Other mea		25.00	-28.00	43.00	
	Equity acquisition in Airmalta plc	25.00	-28.00	43.00	-
Total		24.25	-21.77	56.02	8.82

<sup>(1)</sup> Consolidation measures in both 2015 and 2016 are still to be specified in the respective budget, including the decision whether to resort to revenue and or expenditure or a mix of both.

(P) The recorded budgetary impact for all measures is the ex-ante impact, except for the budgetary impact marked in (2), which is the ex-post impact.
(P) The budgetary impact included in Budget 2014 was €15 million. However for the purpose of these projections, a prudent and conservative estimate of €5 million is being included.

Note: The impact is recorded in incremental terms - as opposed to levels - compared to the previous year's baseline projection. Simple permanent measures are recorded as having an effect of 4- $\times$  X in the year(s) they are introduced and zero otherwise (the overall impact on the level of revenues or expenditures does not cancel out). If the impact of a measure varies over time, only the incremental impact is recorded in the Table. By their nature, one-off measures are recorded as having an effect of 4- $\times$  X in the years of the first budgetary impact and 4- $\times$  X in the following year, i.e. the overall impact on the level of revenues or expenditures in two consecutive years is zero. The total figure is the total Impact on the budget balance, as a revenue increasing measure is listed as positive. The contrary applies for negative figures, such that a revenue decreasing measure is negative and an expenditure increasing measure is also negative.

Table 3.2

#### Analysis of the Adjustment in the Deficit-to-GDP Ratio

(percentage points of GDP)

	2013	2014	2015	2016	2017
Change in revenue ratio	1.19	1.10	0.27	-0.91	0.34
Discretionary factors underpinning fiscal consolidation	-0.28	0.27	0.15	0.12	0.00
Tax revenue buoyancy	1.24	0.34	0.30	-0.00	0.09
Other revenue	0.23	0.50	-0.18	-1.03	0.24
Change in expenditure ratio	-0.75	-0.34	0.22	1.74	0.09
Discretionary factors underpinning fiscal consolidation	0.11	-0.01	0.08	0.16	0.10
Incremental impact of the Equity Injection in the National Airline	-0.28	0.33	-0.36	0.52	0.00
Change in Gross Fixed Capital Formation	0.29	-0.50	0.08	0.29	-0.12
Other expenditure	-0.87	-0.16	0.42	0.77	0.11
Adjustment in deficit ratio	0.44	0.76	0.50	0.83	0.43

### 3.3.1 General Government Revenue in 2014

As indicated in Table 3.3, the revenue ratio which is expected to increase by 1.1 percentage points of GDP to 42.2 per cent in 2014, is mainly due to an increase in EU investment grants and tax revenue measures. Tax revenue is expected to continue to increase in 2014. Nevertheless, tax revenue buoyancy is expected to decline from 1.24 percentage points from last year to 0.34 percentage points of GDP in 2014. Contrary to last year's trends, the increase in tax revenue ratio is expected to result primarily from indirect tax revenue rather than direct tax revenue, since indirect tax revenue elasticities with respect to GDP are typically closer to unity than in the case of direct tax revenue. Discretionary revenue measures are expected to improve the budget balance by 0.27 percentage points of GDP. The additional revenue from social contributions as a result of the 2006 pension reform and the revenue generated from the International Investor Programme are expected to contribute positively by 0.16 and 0.07 percentage points, respectively, to the decline in the deficit-to-GDP ratio in 2014. Efforts to increase efficiency in revenue collection will be maintained.

The Asset Registration Scheme as announced in the Budget for 2014 has the potential to permanently improve the income tax base and the recovery of arrears by at least 0.2 per cent of GDP. Nevertheless, the positive potential impact of this measure has not been included in the budgetary projections for prudential purposes.

In the 2014 Budget, Government revised a number of revenue measures aimed at reducing the fiscal deficit, in particular the revisions to the excise duty on cigarettes and tobacco, fuel, cement, alcohol and beer and the tax rate on fuel bunkers. Collectively they are estimated to have a positive fiscal impact amounting to 0.3 per cent of GDP in 2014.

### 3.3.2 General Government Expenditure in 2014

The ratio of general Government expenditure to GDP is expected to increase from 43.9 per cent in 2013 to 44.2 per cent in 2014, mainly on account of higher public investment expenditure from 2.7 per cent of GDP to 3.2 per cent of GDP. Primarily it reflects higher expenditure related to capital projects financed from EU funds under the 2007-2013 Financial Framework. Further increases are also expected in projects financed from national sources.

Discretionary expenditure measures are expected to be relatively neutral on the deficit as the expenditure savings from restrictions in recruitment (0.06 percentage points of GDP) and the incremental impact of the

2006 pension reform initiative (0.01 percentage points of GDP) is expected to be offset by the assistance given to help the elderly (0.04 percentage points of GDP) and the introduction of a conditional children's allowance (0.04 percentage points of GDP). In 2014, the lower equity injection in Air Malta when compared to 2013 is expected to have a positive effect on the deficit-to-GDP ratio of 0.33 percentage points. In aggregate, these are expected to exert a positive effect of 0.32 percentage points of GDP on the fiscal deficit.

Meanwhile, changes in the other components of expenditure, net of the impact of the discretionary expenditure measures and of gross fixed capital formation, are expected to adversely affect the deficit ratio by 0.16 percentage points of GDP, mainly on account of higher subsidies and higher intermediate consumption. Higher expenditure on subsidies mainly reflects the temporary takeover of the Public Transport Services by the Government. Nevertheless, it is Government's firm commitment to divest itself of the operation in the near future and as such this allocation is not expected to take place in the outer years of the Programme period. It is worthy to note that subsidies' projections for 2015-2017 include the Public Service Obligation (PSO) towards land transport of €8.5 million. While negotiations on the respective PSO amounts are still ongoing, Government is committed to ensure that these outlays are sustainable and do not jeopardise the fiscal targets contained in this Programme.

# 3.4 Medium-Term Fiscal Strategy

This section deals primarily with the medium-term budget framework for Malta which will constitute the basis of Malta's national medium-term fiscal strategy. The structure of this sub-section differs from that presented in previous Stability Programmes in order to reflect the new fiscal framework yet to be enshrined in legislation in the Fiscal Responsibility Act. This follows a top down budgeting approach supported by fiscal rules consistent with the SGP. Essentially deficit targets are established in line with fiscal rules. Revenue projections are then established on the basis of macroeconomic projections. A spending ceiling is then established which is consistent with the fiscal rules and the revenue projections. This is then allocated into the various expenditure components to reflect Government's social, political and economic objectives and underlying social, demographic and economic conditions.

# 3.4.1 Deficit Targets and the Medium-Term Budgetary Objective

As the Maltese economy moves from the protracted negative output gap towards better economic times, Government will continue to pursue a medium-term fiscal strategy consistent with achieving its MTO of a balanced budget in structural terms. Based on (i) the macroeconomic projections, (ii) a target average annual structural effort of 0.58 per cent of GDP, and (iii) one-off revenue of around 0.1 per cent of GDP. Government is aiming for a deficit target of 2.1 per cent of GDP in 2014 which will decline further to a deficit of 0.3 per cent of GDP in 2017.

Based on the output gap projections, this translates into a structural deficit of 0.52 per cent of GDP in 2017 which is in line with the minimum MTO required by a Euro Area Member State which is a signatory of the Treaty on Stability, Coordination and Governance (TSCG). It is therefore plausible to foresee that this will be reached in 2018. Malta is committed to reach a balanced budget in structural terms and this will be achieved beyond the Programme period. Table 3.4 presents Malta's medium-term budgetary targets underlying its medium-term fiscal strategy in accordance with the requirements of the Stability and Growth Pact and the TSCG. The Table is being further illustrated in Chart 3.1.

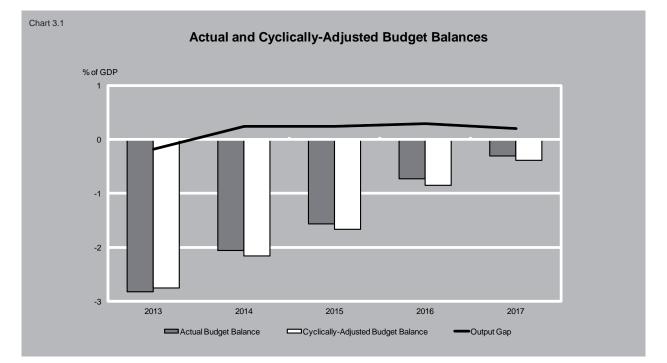
The primary surplus over the medium-term is set to rise from almost 1.0 per cent of GDP in 2014 to 2.5 per cent of GDP in 2017. Given a projected nominal GDP growth of around 4.5 per cent and an implicit interest rate on debt of around 4.5 per cent over the medium-term, a primary balance is enough to stabilise the debt-to-GDP ratio in the absence of stock-flow adjustments. Therefore, the primary surplus targets are consistent with a reduction in the debt-to-GDP ratio over the medium-term.

#### **Fiscal Consolidation**

(percentage points of GDP)

Table 3.4					
	2013	2014	2015	2016	2017
General Government Balance	-2.8	-2.1	-1.6	-0.7	-0.3
One-off and other temporary measures <sup>(1)</sup>	0.1	0.2	0.1	0.1	0.1
General Government Balance net of One-offs	-2.9	-2.2	-1.7	-0.9	-0.4
Output Gap Estimates	-0.2	0.2	0.2	0.3	0.2
Cyclically-Adjusted Budget Balance	-2.8	-2.2	-1.7	-0.8	-0.4
Structural Balance	-2.8	-2.3	-1.8	-1.0	-0.5
Structural Adjustment	0.7	0.5	0.5	0.8	0.5

 $^{\scriptscriptstyle (1)}$  A plus sign means deficit-reducing one-off measures



### 3.4.2 Revenue Forecasts

The Ministry for Finance prepares revenue forecasts for general Government based on the most plausible and prudent medium-term macroeconomic forecasts and assumptions.

Tax revenue is expected to rise from 28.2 per cent of GDP in 2013 to 28.5 per cent of GDP in 2014 on the back of a number of permanent indirect tax revenue measures. Between 2015 and 2017 tax revenue is set to strengthen further and grow faster than GDP. It is important to note that this is primarily attributable to the composition of growth. In particular, Malta is expected to enter a period of strong growth, where typically corporate profits rise faster than wages. Whereas corporate profits are expected to rise by 4.6 per cent in 2015, wages are set to rise by 3.9 per cent. Moreover, corporate income tax revenue elasticities with respect to corporate profits tend to be stronger than individual income tax revenue elasticities with respect to wages. As a result, the rise in tax revenue as a ratio to GDP is set to strengthen further due to the dynamics underlying current taxes on income and wealth.

On the other hand, in the absence of new measures, taxes on production and imports are forecasted to grow proportionately with GDP in the medium-term and thus to maintain a relatively stable ratio of around 14.1 per cent of GDP. The tax base underlying the different components of taxes on production and imports is set to rise at a slower pace than GDP. This includes an average annual combined growth of 3.8 per cent for private consumption and tourism earnings, an average annual growth of 1.7 per cent for gaming-related tax base, an average annual growth of 4.1 per cent for property related tax bases and an average annual increase of 4.8 per cent in the car registration tax base.

Social contributions are also expected to rise at a slower rate than GDP growth. This is partly attributable to a tax elasticity with respect to wages which is less than unitary and partly because growth is distributed asymmetrically towards profits rather than wages. As a result, social contributions are set to decline from 7.4 per cent of GDP in 2014 to 7.3 per cent of GDP in 2017.

Property income is expected to grow in line with GDP over the medium-term and maintain a share of around 1.2 per cent of GDP. Other revenue is set to strengthen from 5.0 per cent of GDP in 2014 to 5.1 per cent of GDP in 2015. In 2016 and 2017, the ratio of other revenue to GDP is expected to fall to around 4.4 per cent of GDP. The dynamics underlying other revenue is significantly influenced by the absorption of EU funds and reflects the corresponding patterns in gross fixed capital formation and capital transfers. These dynamics have a marginal impact on the deficit represented by the co-financing element.

Total revenue is thus set to rise marginally to 42.4 per cent of GDP in 2015 primarily due to increases from corporate tax income.

# 3.4.3 Spending Targets

In line with its strategy of pursuing sustainability of public finances, the Maltese Government is committed to keep expenditure in check. On the basis of this targeted structural effort and the revenue projections conditional on macroeconomic conditions and budgetary measures, expenditure targets have been set at 44.0 per cent of GDP in 2015. This figure is set to decline to 42.2 per cent of GDP by 2017 as a result of the expected decline in revenue from EU grants. This implies that over the medium-term, total expenditure should not rise by more than a compound annual average of 2.8 per cent in order to meet the targeted structural effort conditional on the revenue projections.

The expenditure targets underlying the medium-term budgetary outlook of this Programme comply with this benchmark. Nevertheless, expenditure growth on a yearly basis differs from this annual average in view of the expected reduction in EU funds projected in 2016. As a result, the expenditure ceiling is growing at a faster rate in 2015 and 2017 and at a slower rate of growth in 2016.

Out of this expenditure ceiling, gross fixed capital formation is targeted to average 3.0 per cent of GDP over the 2015-2017 period. Interest expenditure is expected to decline gradually from 3.0 per cent of GDP in 2014 to 2.8 per cent of GDP in 2017.

The major decline in the expenditure ratio to GDP is set to come from compensation of employees. The target is to reduce compensation of employees from 13.2 per cent of GDP in 2014, to 12.6 per cent of GDP in 2017. The reduction in compensation of employees as a proportion of GDP reflects Government's plans to revive past restrictions on recruitment which ensures a ratio 2:3 of new recruits to total retirements and resignations with such restrictions preserving the employment requirements in health and education.

Intermediate consumption is also set to decline from 6.5 per cent of GDP in 2015 to 6.2 per cent of GDP in 2017. The drop in intermediate consumption partly reflects the expected positive impact from the ongoing Ministerial Spending Review. While this exercise was initiated in 2013, the positive impacts are expected to appear over a number of years as Government Departments and Line Ministries slowly adopt more stringent efficiency requirements and the benefits of the exercise gradually kick in.

The impact of the pension reform initiative legislated in 2006 over the medium-term projections contained in this Programme will be marginal. Social benefits and social transfers are also expected to increase marginally in 2014 and 2015 as a result of the introduction of conditional child benefits. As a result of this, the target for social benefits and social transfers in kind is set to rise marginally from 13.5 per cent of GDP in 2014 to 13.6 per cent of GDP in 2017.

Subsidies are also expected to return to their ratio prior to the transport reform and hover around 1.2 per cent of GDP in the medium-term.

The evolution of capital transfers follows closely the impact of the restructuring of Air Malta which foresees a capital injection of  $\leq 15$  million in 2014 and a final capital injection  $\leq 43$  million in 2015. As a result, capital transfers are set to increase temporarily to 1.4 per cent of GDP in 2015 but fall back to 0.7 per cent of GDP and 0.8 per cent of GDP in 2016 and 2017, respectively.

# 3.5 Debt levels and developments

Government's core medium-term fiscal objective is that of restoring the trajectory of public finances to a sustainable path. This aim involves two main targets. Primarily this involves addressing the current imbalance in public finances, and secondly, the reduction of the debt-to-GDP ratio at a satisfactory pace. Sustained economic growth and primary surpluses are expected to put Government debt on a downward trajectory from 73.0 per cent of GDP in 2013 to 63.9 per cent of GDP in 2017, thereby approaching the 60.0 per cent debt-to-GDP target.

Meanwhile, Government's debt strategy remains that of ensuring that the financing needs of the public sector are met at the lowest possible cost while simultaneously minimising medium and long-term interest rate risk. The Government's reliance on short-term funding remains marginal, in line with the dynamics exhibited in recent years. During 2013, short-term debt accounted for 4.7 per cent of total Government debt. The latter is projected to decline notably to 2.5 per cent of aggregate debt during 2014, and then increase marginally thereafter.

Moreover, the share of maturing stocks in total Government debt is expected to remain rather stable over the forecast horizon. Whereas during 2013, the share of maturing stocks in aggregate Government debt amounted to 7.1 per cent, a downward trajectory is envisaged in the proportion of maturing stock until 2015, with the ratio reaching 6.5 per cent. In the outer year of the forecast horizon, the proportion is expected to increase, albeit at a marginal pace, such that in 2017, the proportion of maturing stock is estimated at 6.8 per cent of

the aggregate General Government debt.

#### 3.5.1 Projected Debt developments

The core items that underpin the projected debt dynamic and the extent to which the latter is sustainable are: Government's planned trajectory, interest and growth dynamics, and stock-flow adjustment items. Developments in the debt ratio for the Programme period and the contributors to the trajectory path of the debt-to-GDP ratio are presented in Table 3.5 and Statistical Appendix Table 4. In this regard the positive primary surpluses targeted in the coming years are expected to act as a downward drag on the debt-to-GDP ratio, with the latter expected to exhibit a downward trajectory during the entire forecast horizon. Such dynamics more than offset the marginal increase in the debt-to-GDP ratio registered during 2013, largely underpinned by an expansionary impact of the stock-flow adjustment. The latter consisted mainly of an increase in aggregate cash balances, European Financial Stability Facility (EFSF) re-routing and accruals payable to Government by Enemalta. During 2013, gross Government debt reached a level of 73.0 per cent of GDP. The ratio is expected to decline substantially to 69.4 per cent of GDP during 2014 partly due to a strong negative contribution attributable to stock-flow adjustment. The most significant factor underpinning the latter negative contribution pertains to the expected payment on the part of Enemalta, of the accumulated accruals of excise taxes that occurred over the past two years and an expected sizeable decrease in accumulated aggregate cash holdings. In the outer years of the forecast horizon, the debt-to-GDP ratio is expected to maintain a downward trajectory to reach an envisaged level of 63.9 per cent by 2017.

Beyond 2014, the projected reduction in the gross debt is mainly driven by a growing primary surplus and by nominal GDP growth, which are expected to more than compensate for the upward pressure that the interest burden is expected to have on the debt ratio. Meanwhile, stock flow adjustments are expected to have a rather muted impact on the underlying ratio in 2015 and in the outer years of the forecast horizon. The programme does not take into account proceeds from privatisation that may result from divestments of Government assets contributing to the decline in gross debt. Developments in gross Government debt are illustrated in Chart 3.2.

Table 3.5					
Percentages of GDP	2013	2014	2015	2016	2017
Gross debt	73.0	69.4	68.5	66.0	63.9
Change in gross debt	2.2	-3.5	-0.9	-2.5	-2.2
Contribution to change in gross debt					
Primary Balance	-0.2	-0.9	-1.3	-2.1	-2.5
Snowball Effect	0.0	-0.3	-0.2	0.0	0.0
Interest Expenditure	3.0	3.0	2.9	2.9	2.8
Real GDP growth	-1.6	-1.6	-1.4	-1.3	-1.2
Inflation Effect	-1.4	-1.6	-1.6	-1.6	-1.6
Stock-flow adjustment	2.4	-2.3	0.6	-0.3	0.3
p.m. implicit interest rate on debt	4.5	4.2	4.4	4.4	4.5

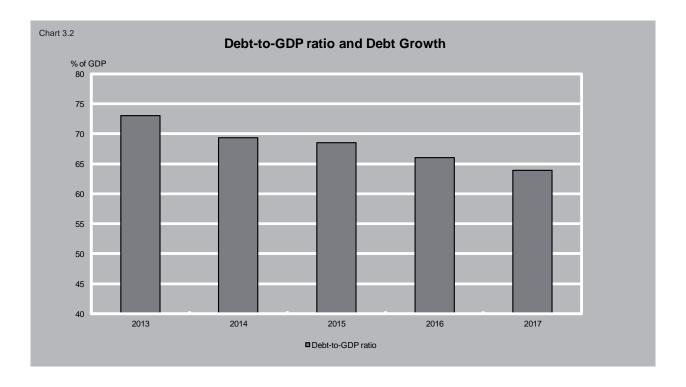
$$\overline{Y_{t-1}} = \overline{Y_t} + \left(\overline{Y_{t-1}}\right)$$

 $1 + y_{t}$ 

*Y*,

where t denotes a time subscript, D, PD\_Y and SFA are the government debt, primary deficit, nominal GDP and the stock-flow adjustment respectively, and i and y represent the average cost of debt and nominal GDP growth.

*Y*,



During 2013, the registered improvement in the primary balance resulted in a reduction in the debt ratio of 0.2 percentage points. Over the forecast period, the improving momentum in fiscal consolidation is expected to have a more pronounced contractionary impact on the debt-to-GDP ratio especially in the outer years of the forecast horizon. In this regard, the contractionary impact stemming from the contribution of the primary balance is expected to be 0.9 percentage points in 2014, increasing further to a contribution of 2.5 percentage points by 2017.

The 'snowball effect' contributed marginally to the underlying debt-to-GDP ratio during 2013. This situation is expected to prevail during 2014 and in the outer years of the forecast period. This is due to the fact that the envisaged economic growth trajectory is expected to largely offset the possible expansionary impact that interest expenditure has on the debt-to-GDP dynamics. Hence, during the outlook period, the expansionary contribution of interest expenditure on the debt ratio is expected at around 2.9 percentage point. Meanwhile, the contractionary contribution of real GDP growth is expected to decelerate marginally from a level of 1.6 percentage points in 2014 to a level of 1.2 percentage points in 2017. On the other hand, the contractionary contribution of inflationary pressures is expected to hover around 1.6 percentage points over the forecast horizon.

The other factors contributing to changes in the debt-to-GDP ratio are outlined by the estimated Stock Flow Adjustment (SFA). In 2013, the SFA had a notable expansionary impact on the debt ratio. The main stock flow transactions during 2013 related to a sizeable increase of cash holdings on the part of Government, further EFSF re-routing and an increase in the accruals owed to Government by Enemalta, which in conjunction with other items resulted in a positive contribution to the debt ratio of 2.4 percentage points. This is largely expected to be mostly offset in 2014, where a negative contribution of 2.3 percentage points is envisaged, largely underpinned by the full payment of the accruals accumulated by Enemalta (equivalent to 1.4 percentage points of GDP) over the past two years. Furthermore, the latter decline will be complemented by a sizeable decrease in aggregate cash holdings on the part of Government. Beyond 2015, stock flow transactions are expected to have a rather marginal impact on the debt ratio.

# 3.5.2 Comparison with the April 2013 Update of the Stability Programme

The ratios of general Government debt-to-GDP presented in this Programme are expected to be lower than those presented in the previous Stability Programme Update. The expected improvement is largely attributable

to a more benign macroeconomic outlook for the period 2013-2016 than that envisaged in the preceding Update and a more beneficial stock flow adjustment especially during 2014.

For 2013, the debt-to-GDP ratio was revised downward by 1.2 percentage points to 73.0 per cent of GDP. This revision reflects a more buoyant macro-environment than expected in the earlier Update, which more than offset the higher expansionary stock flow adjustment than initially envisaged. The debt-to-GDP ratios for 2014 and 2015 were revised downwards by 4.8 and 4.2 percentage points.

In the 2013 Update, the debt-to-GDP ratio was expected to follow a downward path from a level of 74.2 per cent in 2013 to a level of 70.0 per cent in 2016. In contrast, in this Update of the Stability programme, the debt-to-GDP ratio is estimated to decline to a level of 66.0 per cent by 2016.

# 3.6 Budgetary Implications of Major Structural Reforms

A number of ongoing and planned structural reforms are important contributors to potential economic growth. These include measures related to research and development, education, poverty reduction and social inclusion as well as measures aimed at improving the competitiveness of the Maltese economy. These measures (grouped by theme) are outlined in the Table 3.6 and a detailed description of each measure is presented in Malta's National Reform Programme 2014.

Importantly, each of these measures has significant budgetary implications. Indeed, Table 3.6 shows that expenditure related to these measures is estimated to amount to around C0 million for the period between 2014 and 2017. Of these, around C14 million are expected to be financed through EU funds such that the total net outlay by the Maltese Government during this four-year period amounts to around C5 million.

Table 3.6

#### Quantification of NRP Thematic Measures

lable 3.6						
		Net Cumu	ative Fiscal I	Impact (€mil	llion)	EU Funds
New Measures	Timeline	2014	2015	2016	2017	
Employment						
Free Childcare Centres (MEDE)	2014 - ongoing	3.800	7.000	9.000	10.000	Nil
Breakfast Club (MEDE)	2014 - ongoing	0.600	0.700	0.700	0.800	Nil
Youth Guarantee (MEDE)	Q2 2014 - ongoing	1.700	0.570	1	1	1.932 <sup>2</sup>
Setting Up a Skills Bank (MEDE)	2014 - ongoing	0.030	0.030	0.030	0.030	Nil
Employability Index (MEDE)	2014- ongoing	0.000	0.100	0.100	0.100	Nil
Helping Single Parents to Enrol into Education (MEDE)	2014- ongoing	0.050	0.050	0.050	0.050	Nil
Long Term Unemployed Persons will be awarded a Percentage of Social Assistance for 3 years once employed (MFSS)	Q1 2014 - Ongoing	3	3	3	3	Nil
Promote New Forms of Employment (Flexitime, Jobsharing, Teleworking, etc) (MEDE)	Q3 2014 - ongoing	0.030	0.030	0.030	0.030	Nil
Education						
Pilot Project for Tablets in Primary Schools for Teachers and Students (MEDE)	Q1 2014 - Q2 2015	0.080	0.000			
Alternative Learning Programme (MEDE) <sup>4</sup>	2014-ongoing	0.414	0.200	N/A	N/A	Nil
Design of Learning Outcomes Framework (MEDE)	Q4 2013 - Q3 2015	1.280	2.310	N/A	N/A	3.050
	2015	Budgetary allo	ation forms p			
Higher Priority to Mathematics, Science, ICT (MEDE)			Irning Outcom			
Stipends for Repeaters (MEDE) 56	2014 - ongoing	0.760	0.841	0.841	0.841	Nil
New Courses on Aviation (MEDE)	2014 - ongoing	0.100				Nil
Providing Stipends for Students undertaking Veterinary Courses (MEDE) 57	2014 - ongoing Q1 2014 - Q2	0.121	0.126	0.126	0.126	Nil
Further and Higher Education Quality Assurance Framework (MEDE)	2015	0.330	0.170			0.430
Energy						
Electric Car Incentive Scheme (MTI) Autogas Conversion Scheme (2014) (MTI)		0.200 0.150	0.100			
Scrappage Scheme (2014) (MTI) Renovating Public Buildings to increase Energy Efficiency and reduce GHG	Q2 2014 - Q2	0.300				
(Phase I) (MECW)	2015 Q2 2014 - Q2	2.213	2.094			3.660
Retrofitting Road and Street Lighting by Smart Lighting (MECW)	2015	3.224	2.767			5.092
Research and Development		0.400		0.400		
Set up an ICT Innovation Accelerator (MEIB)		0.160 Measure	0.190 to be implem	0.190	0.190	
Action Plan for R&I (MEDE) Analysis of the Internationalisation of Malta's R&I (MEDE)	2014 - 2020 2014		to be implement			Nil Nil
Evaluation of Malta's Participation in the 7th Framework Programme (MEDE)	2014		to be implem			Nil
Submission of a Proposal for a Knowledge and Innovation Community on Healthy Living (MEDE)		0.080				Nil
	2014	0.000				INI
Poverty Reduction and Social Inclusion A Holistic Strategy for Social Security Reform (MFSS)	Q4 2014	Nil	Nil	Nil	Nil	
Full Pension for Employed Widows (MFSS)	Q1 2014 - ongoing	2.200	8	8	8	
Grant of € 300 to Elderly Persons over the age of 75 years (MFSS)	Q1 2014 - ongoing	8.300	8	8	8	
Additional € 200 waiving off from Service Pension (MFSS)	2014 Q1 2014 -	1.500				
Introduction of Social Support Workers within Agenzija Appogg (MFSS)	ongoing	0.091	0.096	0.102	0.107	
Extension of the Home Help Service Scheme (MFSS)	Q3 2013 - ongoing	0.690	0.810	0.970	1.170	N/A
Increase of the Number of Clients attending Day Centres by 200 (MFSS)	Q1 2014 - ongoing	0.900	1.210	2.255	2.783	
CURE Programme to Upgrade Housing Estates (MFSS)	Q3 2013 - Q3 2016		0.655 <sup>9</sup>			
Developing a Culture of Rights through Capacity Building (MSDC)	Q3 2013 - Q3 2015	0.188	0.133			0.272
TOTAL*		29.491	19.527	14.394	16.227	14.436
as % of GDP		0.39	0.25	0.18	0.19	

\*Total excludes expenses for CURE Programme to Upgrade Housing Estates

<sup>[1]</sup> N/A until funds are approved

<sup>[2]</sup> Approved EU funds till now

<sup>[3]</sup> Total amount will depend on amount of applications

<sup>4</sup> Jan14 – Sept14 = € 0.314M, Oct14 – Dec14 = € 0.100M, Jan15 – Jun15 = € 0.200M. From then on the programme will take a different form.

A Values cover the Scholastic period Jan – Jun 2014 / Oct - Dec 2014. Students are always paid a month in arrears and are not paid a stipend between July and September.

The values include the applicable 2014 COLA increases announced in the 2014 Budget but do not include any future COLA or other possible incre

<sup>(8)</sup> Assuming a constant repeater count of 600 post-secondary students, 450 MCAST students, 137 University students and a constant distribution of repeaters throughout future years.

Assuming a constant Veterinary Student count of 33 veterinary students throughout future years.
 For Future budget allocations 2015 – 2018 will depend on the take up of the measure by potential applicants

<sup>(P)</sup> This figure represents the total funds allocated for the implementation of this measure for the period 2013 - 2016

4. Sensitivity Analysis and Comparison with the 2013 Update of the Stability Programme

# 4. Sensitivity Analysis and Comparison with the 2013 Update of the Stability Programme

In line with Council directive  $2011/85/EU^1$ , this chapter presents a sensitivity analysis for macro-economic and budgetary forecasts by taking into account the performance of past forecasts and other relevant risk scenarios<sup>2</sup>.

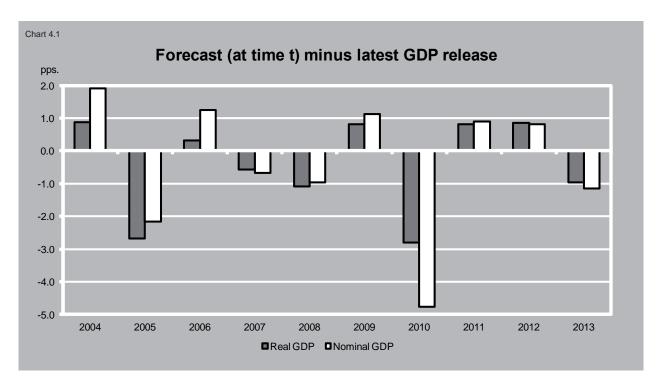
# 4.1 Assessing past GDP forecast projections using forecast errors

The analysis of forecast errors is based on two main principles: (i) errors should be unbiased such that their average should be equal to zero over time; and (ii) errors should be efficient in the sense that they should be small as possible. Data for assessing past GDP forecasts produced by the Ministry of Finance was collected for the 2004-2012 period from published Stability/Convergence Programmes. It is pertinent to note that whereas macroeconomic forecasts produced before the 2011-2014 Stability Programme were typically produced in autumn of the previous year or during the first weeks of the same year, later forecasts were produced earlier, that is in spring. This could affect forecast accuracy for current year.

Forecast errors are defined as the forecast minus the actual such that a positive forecast error implies overestimation of growth and vice versa. Forecast errors depend partly on the accuracy of model forecasts, the reliability of the assumptions and also the accuracy of the statistics used at the time a forecast is produced.

### 4.1.1 Backward Looking Approach

In light of the forecast accuracy criterion, this section takes a backward looking approach to examine the forecasting performance of the projections as produced by the Ministry for Finance for real and nominal GDP. As can be noted from Chart 4.1, real GDP growth forecast estimates were on average 0.4 percentage points lower than the rates published in the latest vintage of data for year t with a standard deviation of 1.4 percentage points. It is nevertheless pertinent to note a significant deviation of -2.7 percentage points in 2005 while in 2011 GDP forecast was overestimated by around 0.8 percentage points. Overall, data does not suggest any systematic bias in GDP forecast when measured in real terms. Moreover, whilst the standard deviation suggests that forecast accuracy remains a source of concern, these results compare well with those



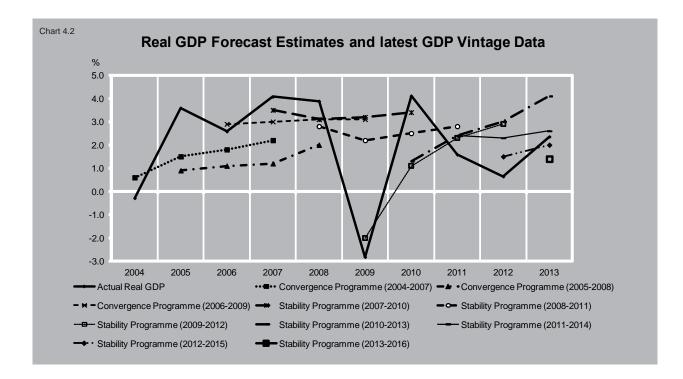
of other member states, the Commission and other independent institutions.

Forecast estimates for nominal GDP were on average 0.4 percentage points lower than the rates published in the latest vintage of data for year t with a standard deviation of 2.0 percentage points. There was a deviation of around -2.2 percentage points in 2005 while in 2010 the deviation was -4.8 percentage points. More rigorous statistical tests are presented in section 4.1.2.

Since the mean error as a summary statistic is an average, it limits the size of the forecast error as negative forecast errors offset positive forecast errors. As a result, literature suggests the mean absolute error (MAE) and the root mean squared error (RMSE) as better forecast accuracy measures since they address the limitation of the mean error. However, the latter is more preferred than the former as it gives greater weight to the large but infrequent errors than the mean. For years t and t+1, the MAE for real GDP stood at 1.2 percentage points and at 1.8 percentage points, respectively, while the MAE for nominal GDP stood at 1.6 percentage points and 1.9 percentage points, respectively. Interpreting the RMSE result, this means that our forecast error follows a normal distribution, a RMSE value of 1.4 percentage points indicates that approximately 68.0 per cent of the computed forecast errors are within one standard deviations, 95.0 per cent are within two standard deviations (2.7 percentage points), and 99.0 per cent are within three standard deviations (3.6 percentage points). Similarly, an RMSE value of 2.0 percentage points for nominal GDP indicates that approximately 68.0 per cent of nominal GDP forecast errors (assuming that these also follow a normal distribution) are within one standard deviation (2.0 percentage points), 95.0 per cent are within two standard deviations (3.9 percentage points), and 99.0 per cent are within three standard deviations (5.2 percentage points). The RMSE for year t stood at 1.4 percentage points for real GDP and at 2.0 percentage points for nominal GDP, respectively. For year t+1, the RMSE stood at 2.3 percentage points for real GDP and at 2.4 percentage points for nominal GDP, respectively.

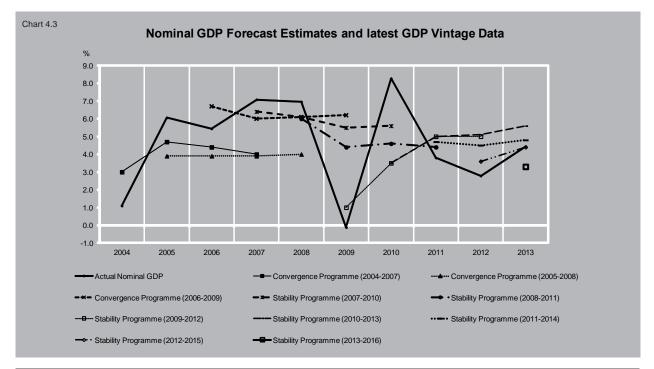
Table 4.1			
pps.	Sample	current year	year ahead
Malta	04/13	1.4	2.3
Belgium	69/11	0.8	1.5
Denmark	73/11	1.0	1.5
Germany	69/11	1.1	1.8
Ireland	73/11	2.0	2.9
Greece	81/11	1.1	1.7
Spain	86/11	0.7	1.3
France	69/11	0.7	1.2
Italy	69/11	1.2	1.8
Luxembourg	69/11	2.0	2.8
Netherlands	69/11	0.9	1.5
Austria	95/11	0.7	1.4
Portugal	86/11	0.9	1.3
Finland	95/11	1.6	2.8
Sweden	95/11	1.3	2.0
United Kingdom	73/11	0.9	1.5
European Union	69/11	0.7	1.4
Euro Area	98/11	0.6	1.5

Putting these figures in perspective, comparing these results to the results derived by a similar study produced



by the European Commission for a number of countries within the European Union, the RMSE measure as indicative of forecast accuracy compares well with those of other countries as indicated by Table 4.1 which summarizes the RMSE measure for real GDP for the current year and the year ahead<sup>3</sup>. It is noteworthy that the sample size for Malta is much smaller when compared to those of other countries. This partly explains the higher RMSE measures when compared to countries such as the United Kingdom, Netherlands, France, and Belgium. Theory indicates that forecast errors are more likely to achieve asymptotic properties as the sample size increases, ceteris paribus. Moreover, given the high degree of openness of the Maltese economy and its reliance on external assumptions, it is usually deemed to be more difficult to forecast economic growth of small and open economies.

In Charts 4.2 and 4.3, the analysis is extended to cover a longer forecast period up to the three-year ahead forecasts as published in the annual Update of the Stability Report. Charts 4.2 and 4.3 show that during



Malta: Update of Stability Programme 2014 - 2017

the 2005-2008 period, forecasts for real and nominal GDP tended to underestimate growth when compared to the latest data release. Forecasts published in 2008 predicted a slowdown in economic growth in 2009 which turned out to be a recession due to the global economic and financial crisis that took place during that period. Whilst forecasts published in 2009 had foreseen a quick recovery for the following year but the economy performed much better than expected. Amid signs of continued uncertainty and fragility in the global economy, forecasts presented in 2010 and 2011 did not predict the weakening of growth in 2011 and 2012 and in that sense proved to be optimistic. Early in 2013 growth was predicted to recover more gradually but actual data presented a stronger than anticipated recovery from the slowdown of a year earlier.

#### 4.1.2 Testing for Bias

Forecast bias has been tested by running the following regressions:<sup>4</sup>

 $\begin{array}{l} e_{(t,t)} = \alpha + \epsilon_{t} & \text{for the current year (1)} \\ e_{(t^{+n},t)} = \alpha + \epsilon_{(t^{+n})} & \text{for the n-year ahead (2)} \end{array}$ 

where et+n is the residual error term from the variable we are forecasting at time t (Yt) and the mean projection of Yt (Ytt) while  $\varepsilon_{1}$  is assumed to be a zero-mean error term. Unbiasedness requires that the constant represented by ' $\alpha$ ' in Table 4.2 below is equal to 0. Detailed results for the constant ( $\alpha$ ) values and their respective p-values can be found in Table 4.2.

As regards real and nominal GDP, there appears to be no systemic bias in the projections for both year t and the outer forecast horizon.<sup>5</sup> This is primarily because the tendency to under-predict export growth is cancelled by the tendency to under-predict imports. No systematic biases for real private consumption and real gross fixed capital formation could be identified. This is an important finding in view of the relevance of the former in the forecast of indirect tax revenue components.

On the other hand, although the p-value is not indicating any significant bias in year t, t+1, and t+3 for real public consumption, the results are showing a tendency to over-predict public consumption for year t+2. With regards to real exports and imports, results are clearly pointing towards bias in year t as the p-value stand at 0.05 for exports and at 0.04 imports, respectively. However, results for net exports, which unlike individual estimates for imports and exports influence projections for GDP, do not indicate any bias. Moreover, over the outer forecast horizon results are not pointing towards any bias in both imports and exports. The symmetry in the current year bias of external trade suggests that this is primarily due to exports of goods which is the

nne	curron	t year (t)	voaral	nead (t+1)		+2	t+3		
pps.	α	Signif α=0	α	Signif α=0	α	Signif α=0	α	Signif α=0	
Real GDP	-0.44	0.29	-0.14	0.87	0.41	0.68	0.95	0.42	
Nominal GDP	-0.37	0.57	-0.25	0.79	0.09	0.93	0.22	0.88	
Real Private Consumption	-0.57	0.27	-0.17	0.78	0.16	0.84	0.66	0.35	
Real Public Consumption	-1.82	0.15	-2.99	0.13	-3.78**	0.05	-2.61	0.26	
Real Gross Fixed Capital Formation	4.21	0.37	7.04	0.23	7.49	0.25	7.36	0.27	
Real Exports	-4.78**	0.05	-2.45	0.30	-1.51	0.68	-0.23	0.95	
Real Imports	-4.58**	0.04	-1.58	0.43	-1.25	0.72	0.12	0.97	
Real Net Exports	-0.20	0.80	-0.87	0.22	-0.27	0.74	-0.36	0.57	

(Summary statistics for the p-values)

\*\* A p-value of less than or equal to 0.05 indicates the presence of bias.

main driver of imports of industrial supplies. This suggests that the impact on fiscal projections is likely to be marginal given that imports of industrial supplies do not constitute a relevant tax base for taxes on imports. Indeed as from this year projections for taxes on imports are based on imports net of industrial supplies, thus completely eliminating any possible influence from such bias on fiscal projections.

# 4.1.3 Fan Charts

Point estimates – such as the ones analysed above – make it highly improbable that the actual outcome coincides exactly with the forecasted figures, if not by pure chance. Consequently, it is useful to assess both in a qualitative and more importantly in a quantitative manner the uncertainty surrounding the baseline set of forecasts to inform the policymaker about the risks to the economic outlook and the likelihood of possible economic scenarios. This is done using fan charts for real and nominal GDP growth for the period 2013-2016.<sup>6</sup> Specifically, historical forecast errors of the growth projections are used to estimate the standard deviation of the distribution of possible outcomes for the projected future real and nominal GDP growth.<sup>7</sup>

Under the assumptions that current forecasts are not biased and that the distribution of possible future outcomes for growth can be represented by the normal distribution, there is a 68.0 per cent level of confidence that the current and the one-year ahead forecast for real GDP based on the mean standard error, are projected to lie plus or minus 0.5 percentage points from the 2.3 per cent point estimate and plus or minus 0.8 percentage points from the 2.1 per cent point estimate. Alternatively, real GDP forecasts are projected to lie between 1.8 and 2.8 per cent, for the current year andbetween 1.3 and 2.9 per cent, for one-year ahead.<sup>8</sup>

Likewise, at the 68.0 per cent level of confidence, nominal GDP forecasts for the current year and one-year ahead will lie within plus or minus one standard error, or between 4.1 and 5.3 per cent for the current year and between 3.7 and 5.5 per cent for one-year ahead forecasts.

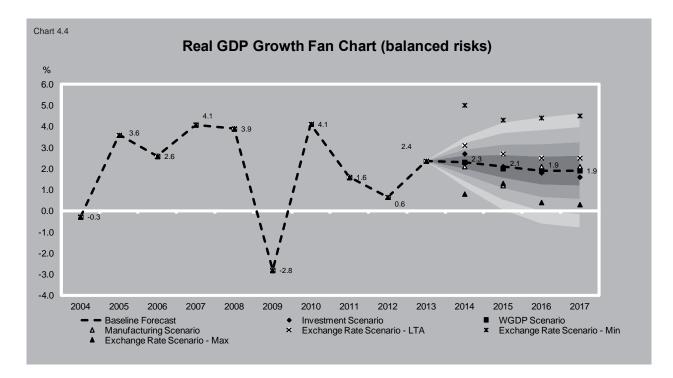
Using point estimates as the central projection, Charts 4.4 and 4.5 below illustrates the fan charts for real and nominal GDP growth, respectively for the 2013-2016 period. These are based on the above standard forecast deviations and errors of the Ministry for Finance for the 2004-2013 period and under the assumption that future risks are broadly balanced.

The fan charts show both the point estimates as well as the relative likelihood of possible growth outcomes. The shaded area on both sides of the fan chart begins with the darkest band, followed by three successive pairs of bands in increasingly lighter colours. The darkest band represents the most probable range of outcomes in each successive forecast period, covering 50.0 per cent of the probability. In other words, the interpretation of the central band is that there is 50.0 per cent chance that GDP growth will be within that band. The next deepest shade takes the distribution out to 80.0 per cent whereas the next two shades covers 95.0 per cent and 99.0 per cent, respectively.<sup>9</sup>

The shape of the fan chart reflects three main views about the future path of GDP:

- 1. The baseline forecasts for current and future years (the central projection) which determines the profile of the central darkest band.
- 2. The degree of uncertainty surrounding the forecasts, outlined by the width of the fan charts.
- 3. Where the balances of risks lie according to whether the fans are skewed or symmetrical, which in turn determines as to whether the central projection is in line with the mean.

The fan charts presented in Charts 4.4 and 4.5 below have been augmented to incorporate relevant risk scenarios for the Maltese economy over the forecast horizon. There are four different scenarios highlighted



which are mainly:

- 1. Investment Scenario: There are a number of investment projects which are due to materialize over the 2014-2016 period. Although these are not included in our baseline scenario, a risk scenario is presented hereunder to quantify what the effects on GDP will be.<sup>10</sup> It is notable that this scenario includes an investment in nominal terms of 125 million each year over the 2014-2016 periods.
- 2. World GDP Scenario: One of the main external assumptions behind the projections produced by the Ministry for Finance is the growth for world GDP weighted by the main trading partners of Malta over the forecast horizon. Individual country forecasts for the forecast horizon are taken from the Consensus Forecast. This scenario presents the impact on real and nominal GDP based on alternative forecasts for the main trading partners of Malta as produced by the IMF.

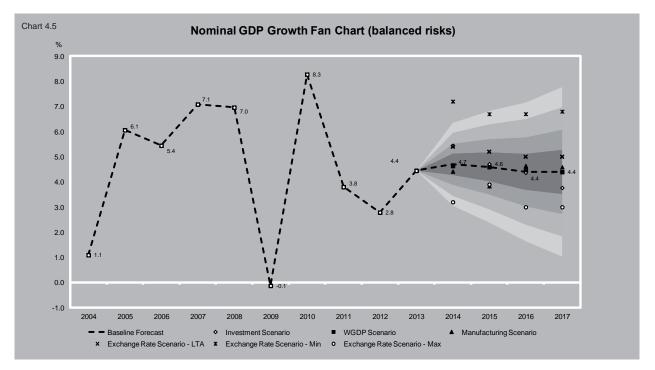


Table 4.3					
Real GDP (% change)	2013	2014	2015	2016	2017
Baseline Forecast	2.4	2.3	2.1	1.9	1.9
Investment Scenarios	2.4	2.7	2.1	1.8	1.6
WGDP Scenario	2.4	2.3	2.0	1.9	1.9
Exchange Rate Scenario					
LTA	2.4	3.1	2.7	2.5	2.5
Min	2.4	5.0	4.3	4.4	4.5
Max	2.4	0.8	1.3	0.4	0.3
Manufacturing Scenario	2.4	2.1	1.2	2.1	2.1

- 3. Manufacturing Scenario: The manufacturing sector accounts for over 11.0 per cent of total gross value added and consequently, it is regarded as one of main sectors of the Maltese economy. One of the main sub-sectors within the aggregate manufacturing sector is the manufacture of computer, electronic and optical products which accounts for over 1.4 per cent of total gross value added. During the last months, this sub-sector reported declines when compared to the same period last year and is expected to continue doing so for the first quarter of 2014. However, it is then expected to recover during the remaining quarters and expected to grow in line with the market. This scenario explores the risk of a delayed recovery reflecting a more permanent loss in export market shares.
- 4. Exchange Rate Scenario: Given the high degree of openness of the Maltese economy and its reliance on external trade, economic conditions are particularly sensitive to exchange rate movements. This scenario can be further sub-divided into three sub-scenarios which are:
  - a) Long-term average This scenario explores the effects on GDP if both the dollar and the sterling bilateral exchange rate had to return back to their ten-year average. The long-term average for the dollar exchange rate taken is 1.3310 whereas the long-term average for the sterling exchange rate taken is 0.7802.

able 4.4					
Nominal GDP (% change)	2013	2014	2015	2016	2017
Baseline Forecast	4.4	4.7	4.6	4.4	4.4
Investment Scenarios	4.4	5.4	4.7	4.4	3.8
WGDP Scenario	4.4	4.6	4.6	4.5	4.4
Exchange Rate Scenario					
LTA	4.4	5.4	5.2	5.0	5.0
Min	4.4	7.2	6.7	6.7	6.8
Max	4.4	3.2	3.9	3.0	3.0
Manufacturing Scenario	4.4	4.4	3.8	4.6	4.6

Table 4.5					
Deficit as a % of GDP	2013	2014	2015	2016	2017
aseline Forecast	-2.8	-2.1	-1.6	-0.7	-0.3
Investment Scenarios	-2.8	-1.9	-1.3	-0.4	-0.1
WGDP Scenario	-2.8	-2.1	-1.6	-0.8	-0.4
Exchange Rate Scenario					
LTA	-2.8	-1.9	-1.3	-0.3	0.3
Min	-2.8	-1.6	-0.4	1.1	1.9
Max	-2.8	-2.4	-2.2	-1.7	-1.5
Manufacturing Scenario	-2.8	-2.1	-1.8		-0.6

- b) Minimum Scenario The minimum scenario explores the tail event of the dollar and the sterling exchange rate returning back to the annual minimum value reached during the last ten years. The minimum value for the sterling exchange rate taken is 0.6787 (which was reached in 2004) whereas the minimum value for the dollar exchange rate taken is 1.2439 (which was also reached in 2004).
- c) Maximum Scenario The maximum scenario explores the tail event of the dollar and the sterling exchange rate returning back to their annual maximum level reported during the last ten years. The maximum value for the sterling exchange rate taken is 0.8909 (which was reached in 2009) whereas the minimum value for the dollar exchange rate taken is 1.4708 (which was reached in 2008).

Tables 4.3 and 4.4 present the effects on real and nominal GDP emanating from the above scenarios. These results are also superimposed on the fan charts suggesting that the forward looking risk scenarios are in line with the range of past forecast errors. The macroeconomic inputs from these scenarios are then used to quantify the effect on the fiscal deficit highlighted in Table 4.5.

It is also important to point out that the high and low exchange rate scenario represents a tail event with a low, even if not insignificant, probability of materializing. The other scenarios have a higher probability of materializing. When one excludes the exchange rate scenarios it is clear that according to our judgment the risks are not symmetrical but are on the high side.

# 4.2 Comparison with the Projections in the 2013 Stability Programme

## 4.2.1 Economic Growth

Real GDP is estimated to have increased by 2.4 per cent in 2013, 1.0 percentage point higher than that forecasted. In nominal terms, the actual growth rate for 2013 was 4.4 per cent compared to 3.3 per cent which was forecasted in the last Update. The Stability Programme for the 2014-2017 period revises upwards the GDP growth forecasts formulated in April 2013 due to relatively more favourable domestic demand conditions as well as more favourable external demand conditions.

The recovery in private consumption was 0.9 percentage points stronger than anticipated, rising by 1.8 per cent in real terms in 2013. This was sustained by the positive performance of the labour market, a moderate

growth in wages and improvements in consumer confidence, all of which are expected to persist in the coming years.

The actual growth in Government consumption for 2013 was 0.8 percentage points lower than the rate projected in the previous Programme. Public expenditure is however projected to pick-up in the coming years.

The forecast for gross fixed capital formation in the previous programme was 4.3 percentage points higher than the outturn. This was primarily due to a weaker than expected performance in residential construction activity. For 2014 investment is expected to increase by a significant 15.4 per cent, reflecting a revision of 12.2 percentage points over that forecasted in the previous update. This is largely on the back of a sizable investment in the energy sector, which together with projects set out to reconstruct roads and infrastructure, are expected to be the main driver of growth.

Exports contracted by 5.6 per cent in 2013 against the forecasted growth rates of 2.1 per cent. The decline was primarily attributed to a major operator in the electronics sub-sector of the economy. However, following the gradual recovery in the international economic outlook and the improved confidence in the European markets, export growth is projected to pick up in 2014 and the outer years of the forecast period. Consequently, growth in exports was revised by 0.7 percentage points, 3.5 percentage points and 2.9 percentage points for 2014, 2015 and 2016, respectively. Meanwhile, growth in imports was revised by 2.7 percentage points, 3.7 percentage points and 2.6 percentage points for the said years, attributed to expectations of stronger demand.

#### 4.2.2 Inflation and Employment Prospects

The inflation rate in 2013 was 1.0 per cent, 1.0 percentage points lower than expected in the last Update. This was primarily due to disinflationary pressures exerted by communications, transport and restaurants and hotels. For 2014, the inflation rate is forecasted to be lower than expected during the last Update, from 1.6 per cent to 1.3 per cent also reflecting the anticipated decline in utility prices. For 2015, there is a minimal upward revision of 0.1 percentage points, while for 2016 inflation is forecasted to rise to 1.8 per cent.

Employment growth turned out better than anticipated in 2013. Indeed, growth in employment was 1.7 percentage points higher than forecasted. Similarly, the outlook for employment growth for 2014 and 2015 was revised upwards by 1.2 percentage points and 0.1 percentage points, respectively. The unemployment rate for 2014 and 2015 has been revised upwards by 0.1 percentage points and by 0.4 percentage points, respectively. Furthermore, for 2014 and 2015, labour productivity has been revised downwards by 0.6 percentage points and 1.0 percentage points, respectively.

#### Footnotes:

<sup>1</sup> European Union Council Regulations- Council Regulation (EC) 1466/97 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies, as amended by Council Regulation (EC) 1055/2005 of 27<sup>th</sup> June 2005 and Regulation (EU) No 1175/2011 - the preventive arm of the Stability and Growth Pact.

<sup>2</sup> The analysis presented in this chapter is based on internal estimates produced by the Economic Policy Department within the Ministry for Finance. They are intended to be published in the form of a working paper by Camilleri Gilmour entitled Interpolating forecast errors for assessing uncertainty in GDP growth forecasts: an Analysis for Malta.

<sup>3</sup> Gonzáles Cabanillas, L., and Terzi, A. 2012. "The accuracy of the European Commission's forecasts re-examine". European Commission Economic Papers No. 476.

<sup>4</sup> Gonzáles Cabanillas, L., and Terzi, A. 2012. "The accuracy of the European Commission's forecasts re-examine". European Commission Economic Papers No. 476.

<sup>5</sup> This is also in line with the conclusions derived for Malta in a similar study produced by the European Commission (Gonzáles Cabanillas and Terzi, 2012).

<sup>6</sup> See Britton, E., Fisher, P., and Whitley, J. 1998. "The Inflation Report projections: understanding the fan chart". Bank of England Quarterly Bulletin; and Elder, E., Kapetanios, G., Taylor, T., and Yates, T. 2005. "Assessing the MPC's fan charts". Bank of England Quarterly Bulletin – Autumn 2005.

<sup>7</sup> Elekdag and Kannan (2009) and the Office for Budget Responsibility (2010) argue that this approach is limited by the fact that past forecast errors may be an imperfect guide to the future. Nevertheless, it is still one of the mostly employed methodologies in forecasting literature as it provides a "clear, transparent, and objective method for quantifying the degree of uncertainty", (OBR, 2010).

<sup>8</sup> Figures may not necessarily add up due to rounding.

<sup>9</sup> A different way to understand the fan chart is by interpreting it as highlighting different GDP growth outcomes if today's economic climate and circumstances are repeated on for infinite trials. For example, if the current economic conditions had to occur 100 times, then GDP growth would lie 50 times in the darkest shaded area, 80 times in the darkest shaded area or in the next successive area, 95 times in the preceding areas plus the next lighter area, and 99 times in the preceding areas while including also the lightest band area. The remaining 1.0 per cent can be interpreted as the probability that growth will lie outside the shaded bands of the fan chart. It is noteworthy that the further one goes into the distant forecast horizon, the higher the degree of uncertainty surrounding the forecasts and thus, the wider the bands are.

<sup>10</sup> It is noteworthy that the only investment projects included are those that have a high probability of commencing in the coming months. Thus, there may be other projects in the pipeline but have not been taken into account in this scenario since they are still at their infancy stage. Thus, this positive upward risk scenario might turn out to be even stronger than expected provided that these projects do materialize.

5. Sustainability of Public Finances

# 5. Sustainability of Public Finances

This Chapter provides an assessment of Malta's long-term sustainability of public finances for the period 2010-2060 on the basis of the projections of the Ageing Working Group (AWG) within the Economic Policy Committee (EPC) and the population projections EUROPOP2010 carried out by Eurostat. It provides an overview of the pension system in Malta, and an analysis of the expenditure projections. Besides pensions, the projections cover other age-related expenditure items including health care, long-term care, education and unemployment benefits for the period 2010-2060. The long-term projections that result from this exercise provide an indication of the timing and scale of economic changes that would result from an ageing population in a 'no-policy change' scenario. The projections show where, when, and to what extent, ageing pressures will accelerate as the baby-boom generation retires and the average life span continues to increase. Hence, the projections are helpful in highlighting the immediate and future policy challenges posed for governments by demographic trends.

Eurostat have recently published the results of the updated population projection exercise, EUROPOP2013, which will be used as a primary input in the forthcoming long-term age-related expenditure projections that are used by the European Commission in the assessment of the sustainability of public finances, to be published in 2015. For Malta, this new set of population projections led to significant differences in terms of the trajectory as well as the dynamics of population changes. As shown in Table 5.1, total population

	2013	2020	2030	2040	2050	2060
EUROPOP2010						
Total population	412,637	415,664	416,631	407,057	396,649	386,935
Old-age dependency ratio (65+ yrs/15-64 yrs)	25.3	32.2	39.3	40.4	46.9	55.9
EUROPOP2013						
Total population	421,364	438,166	456,212	462,760	468,119	476,006
Old-age dependency ratio (65+ yrs/15-64 yrs)	25.1	32.7	40.5	40.7	44.8	50.7

is estimated to increase to around 476,000 by 2060, under the new projection, compared to an absolute decline to around 387,000 in the previous round of projections. Furthermore, the old-age dependency ratio is expected to reach 50.7 per cent in 2060, around 5 percentage points lower than projected in EUROPOP 2010. These results are expected to have significant implications for potential output and public expenditure on age-related expenditure in Malta over the projection period.

# 5.1 Long-term Budgetary Projection Results for Malta

This section provides an analysis of the long-term sustainability of public finances for Malta for the period 2010-2060 on the basis of commonly agreed assumptions for the EU Member States. In particular, the pension outlay projections incorporate the latest changes to the Social Security System, in particular the reform law enacted during December 2006. The model used in projecting pension expenditure was the World Bank's Pension Reform Options Simulation Toolkit (PROST) 12. Statistical Appendix Table 7 shows the expenditure

components of the long-term budgetary projections as a percentage of GDP for the period 2010-2060 and the assumptions used.

# 5.1.1 Assumptions applied

In modelling pensions, the PROST input files were updated in order to incorporate the AWG-EPC assumptions. These assumptions included the real GDP growth rate, labour productivity (growth rate per hour), inflation rate, labour participation rate by age and gender, unemployment rate by age and gender, population (EUROPOP2010), fertility rate by age, mortality rate by age and gender, and net migration by age and gender. A number of variables included in the assumptions as provided by the AWG-EPC were not incorporated in the PROST workings for the pension projections, primarily due to the fact that such variables are not required as PROST inputs. Accordingly, the budgetary projections for Malta covering the period up to 2060 include the following two main sets of assumptions:

As regards the **demographic** evolution, the fertility rate for Malta is projected to increase slightly from 1.4 children in 2010 to around 1.6 children in 2060. Life expectancy at birth for men is projected to increase from 77.6 years in 2010 to 84.9 years in 2060, whilst in the case of women it is expected to rise from 82.3 years in 2010 to 88.9 years in 2060. This implies that despite some convergence, female life expectancy at 65 years for both males and females is projected to increase by 5.2 years between 2010 and 2060. Net migration inflows as a share of total population are projected to remain relatively stable as from 2019 at around 0.1 per cent.

With respect to **macroeconomic** assumptions, the potential GDP growth rate is assumed to increase from 1.4 per cent in 2010 to around 2.0 per cent by 2020, thereby declining to 1.4 per cent by 2040. It is assumed to decline further to 0.8 per cent by 2050 and increase slightly to 0.9 per cent by 2060. The unemployment rate (15-64 years) is assumed to record marginal declines along the projection period decreasing from 7.0 per cent in 2015 to 6.6 per cent in 2060. The female participation rate (15-64 years) is assumed to increase from 43.0 per cent in 2010 to 57.0 per cent by 2035, remaining relatively stable at around that level thereafter. The male participation rate (15-64 years) is assumed to increase from 77.7 per cent in 2010 to 83.4 per cent by 2030 and to decline gradually to 82.4 per cent by 2060.

## 5.1.2 Demographic Developments

Population projections (EUROPOP2010) indicate that population in Malta by 2060 will be both smaller and older.<sup>1</sup> Total population is projected to rise from around 413,000 in 2010 to around 417,000 in 2030, and to decline thereafter to around 387,000 by 2060. As shown in Table 5.2, the age structure of the Maltese population is projected to change significantly. The share of the very young people (aged 0-14 years) in the total population is projected to decline. From an economic perspective, the most significant change concerns the working-age population (aged 15-64 years), which reflects the share of the population that will bear the financial 'burden' of the elderly. From a share of 69.4 per cent in 2010, this ratio will subsequently fall to 61.7 per cent by 2030 and reach 55.8 per cent in 2060. By contrast, the share of the elderly population (aged 65+ years) in total population will increase steeply from 15.1 per cent in 2010 to 31.2 per cent by 2060.

The dynamics of the ageing process could be better appreciated by analysing the developments in the relative share of the elderly to the working-age population. These dependency ratios relate the number of individuals that are likely to be "dependent" on the support of others for their daily living – youths and the elderly – to the number of those individuals who are capable of providing such support. The key indicator of age dependency in Table 5.2 relates the number of individuals aged less than 15 years and of those aged 65 and over to the population aged 15-64 years. Two other indicators are presented in Table 5.2: the youth-dependency ratio (for individuals aged less than 15 years) and the old-age-dependency ratio (for persons aged 65 years and more), both calculated relative to the number of individuals aged 15-64 years.

The youth dependency ratio (0-14 year bracket as a percentage of the 15-64 year bracket) is expected to

Table	5.2

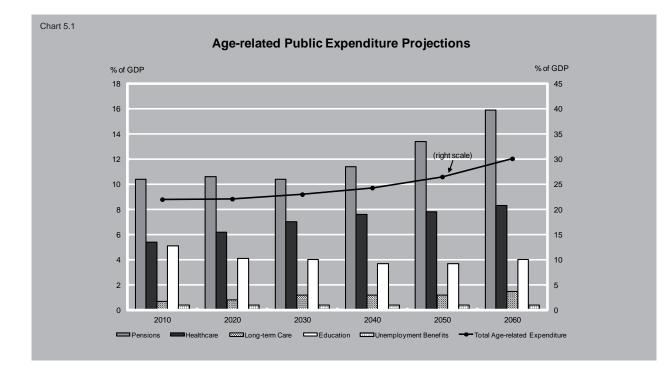
Age	2010	2013	2020	2030	2040	2050	2060
0-14 yrs	64,127	62,111	62,191	58,738	52,605	51,516	50,501
15-64 yrs	286,364	279,799	267,385	256,901	252,370	235,020	215,813
65+ yrs	62,379	70,727	86,088	100,992	102,082	110,113	120,621
Total	412,870	412,637	415,664	416,631	407,057	396,649	386,935
0-14 yrs	15.5	15.1	15.0	14.1	12.9	13.0	13.1
15-64 yrs	69.4	67.8	64.3	61.7	62.0	59.3	55.8
65+ yrs	15.1	17.1	20.7	24.2	25.1	27.8	31.2
Youth dependency ratio (0-14 yrs/15-64 yrs) Old-age dependency ratio (65+ yrs/15-64	22.4	22.2	23.3	22.9	20.8	21.9	23.4
yrs)	21.8	25.3	32.2	39.3	40.4	46.9	55.9
Total dependency ratio	44.2	47.5	55.5	62.2	61.3	68.8	79.3
Support ratio (15-64 yrs/65+ yrs)	4.6	4.0	3.1	2.5	2.5	2.1	1.8
Note: Figures may not add up due to the rounding							

increase marginally during the 2010-2020 period and to decline from 22.9 per cent in 2030 to 20.8 per cent in 2040, thereby increasing to 23.4 per cent by 2060. The old-age dependency ratio (65+ year bracket as a percentage of the 15-64 year bracket) is projected to increase consistently from 21.8 per cent in 2010 to 55.9 per cent in 2060, an increase of 34.1 percentage points. Thus, by 2060, the total dependency ratio, which is the combined burden of these two components of the economically active population, will amount to 79.3 per cent, which means that every person in the working-age population will have to support around 0.8 non-active persons compared to 0.4 non-active persons in 2010. As a result of these demographic developments, the support ratio (persons in the 15-64 years bracket as a proportion of persons aged 65+) declines from 4.6 in 2010 to 1.8 in 2060. This means that while in 2010 there were around 5 persons of working-age for every person that reached pension age, by 2060 this ratio will decrease to around 2 persons of working-age for every person of pensionable age.

### 5.1.3 Age-related Public Expenditure

Age-related spending including pensions, health care, long-term care, education and unemployment benefits in Malta is projected to increase by 8.2 percentage points of GDP over the period 2010-2060. Chart 5.1 shows the age-related public expenditure as a share of GDP for this projection period.

Public expenditure on pensions is presently the most important age-related government expenditure item, and is projected to remain so also in the future. Pension projections cover the contributory pension benefits (mainly including pensions related to retirement pension, survivorship and invalidity), the non-contributory old-age pension paid under the Social Security Scheme and Treasury Pensions. At present, private pensions play a rather minor role as regards pension provision for the old-aged persons. The coverage of pension schemes is different from the previous round of budgetary projections, since in this round the pension projections also include the expenditure on non-contributory old-age pension, the payment of bonuses<sup>2</sup> to pensioners, as well as the Treasury Pensions<sup>3</sup>. Over the projection period 2010-2060, pension expenditure in Malta is projected to rise from 10.4 per cent of GDP in 2010 to 15.9 per cent of GDP by 2060. The increase in old-age



pension expenditure is driven by the ageing process, in reflection of projected demographic developments. At the same time, one notes that the parametric changes introduced in the pension reform also contribute to raise expenditure, especially after 2030. The increase in the pension age, the increase in the contribution period for full pension eligibility and the changes to the benefit formula contribute to lower the projected increase in pension expenditure. However, at the same time the more dynamic indexation of the ceiling on pensionable income, the statutory changes to indexation for old-age pensions and the introduction of the guaranteed national minimum pension for persons retiring from 2026 onwards contribute to increase expenditure pressure.

Another important contributor to the increase in age-related spending is healthcare. Projections indicate that Malta is projected to record an increase of 2.9 percentage points of GDP in health care and an increase of 0.8 percentage points of GDP in long-term care during the period 2010-2060. This increased spending on health care and long-term care is primarily due to an ageing society and an increase in life-expectancy at birth over the projection period. Government is aware of the challenges posed by these demographic developments on health care and hence it is actively working on implementing a holistic strategy that will ensure the long-term sustainability of the health sector.

On the other hand, public spending on unemployment benefits as a share of GDP is projected to remain relatively unchanged at 0.4 per cent between 2010 and 2060. Additionally, education spending is projected to decrease by 1.1 percentage points of GDP during the projection period in light of the projected changes in the population of persons in education.

# 5.2 Focus on Pension Reforms

As a result of the demographic developments, the outlays on pensions paid by Government will rise over the coming decades leading to a worsening in the balance of the current system. In light of these developments in December 2006, the House of Representatives adopted a series of parametric reforms (Act No. XIX of 2006) to the definition of pension age, retirement before pension age, the full rate of two-thirds pension, calculation formula, the maximum pensionable income and the crediting of contributions as provided for under the preceding legislative framework, aiming at enhancing the sustainability of the pension system whilst improving the adequacy of the pension enjoyed by retirees in the future.

As a continuation of the pension reform process, in 2010, the Pensions Working Group (PWG) was tasked with the responsibility to carry out a Report "reviewing Part V of [the Social Security Act] with a view of achieving further adequacy, sustainability and social solidarity" as required by Article 64B of the Social Security Act. The PWG submitted its report to the House of Representatives during December 2010. A public consultation process followed during May and June 2011. Following discussions in the House of Representatives, public consultation was held during May and July 2011. During 2012, the Post-Consultation Report on the Pensions Reform was discussed at the Malta Council for Economic and Social Development (MCESD) with a further consultation process with all interested social partners. Following the feedback received from the social partners, the PWG submitted its final report to Government for consideration in August 2012.

During 2013, the Government of Malta has expressed its commitment for the continuation of the pension reform process in Malta. A Joint Pensions Working Group (PWG) – the Pensions Strategy Group (PSG) – between the Ministry for the Family and Social Solidarity (MFSS) and the Ministry for Finance, was set up to review the work carried out by the PWG, in particular the recommendations outlined in the Post-Consultation Report submitted to Government in August 2012. Furthermore, it has been tasked to draw up a holistic strategy aimed at addressing the adequacy and sustainability of pensions in Malta and develop a communications strategy directed towards raising the level of public awareness on pensions issues in Malta and the need to ensure that future pension incomes are adequate in order to sustain a high standard of living in retirement.

Furthermore, upon the request of the Minister for Finance, the Advisory Group on Third Pillar Pensions submitted to the Minister for Finance its report on options for incentives for private pensions on the 30th August 2013. This included a proposed set of eligibility criteria for private pension schemes that would qualify for incentives and a number of possible fiscal incentives. It also included a proposal for tax-favoured deposit account schemes. The Minister for Finance announced in the Budget for 2014 that there would be €1.5 million allocated for this purpose. Upon receiving the report, the Minister for Finance initiated a consultation exercise on the private pension incentive proposals with the main financial sector representative organisations including the Malta Insurance Association (MIA), the Malta Association of Retirement Scheme Practitioners (MARSP) and the Malta Funds Industry Association (MFIA). Following this exercise, the options paper was finalised on the 20th January 2014.

#### Footnotes:

<sup>1</sup> Demographic assumptions based on EUROPOP2010 do not necessarily fully reflect the views of the AWG neither as a group nor of individual Member States or national statistical offices. The Maltese authorities have expressed reservations on EUROPOP2010.

 $^{2}$  The bonuses covered in the projections include the full Cost Of Living Adjustment (COLA) granted to all employees and pensions – a flat-rate compensation for inflation computed on the basis of a base wage that in 2010 stood at around 63 per cent of the average wage. Other bonuses covered in the projections include flat-rate amounts granted to employees and pensioners at the end of each quarter.

<sup>3</sup> Treasury Pensions cover principally pensions and allowances to Public officers who joined the Public Service of Malta prior to 15th January 1979, thereby making it a closed pension scheme. This category covers also pensions and allowances under the Widows' and Orphan's Pensions Act, the Personal Injuries (Emergency Provisions) (Cap. 111), and pensions specially authorised.

6. Quality of Public Finances

# 6. Quality of Public Finances

# 6.1 Introduction

According to a 2007 report on the Quality of Public Finances prepared by the Economic and Policy Committee (EPC), Quality of Public Finances is a broad concept referring to "the conduct and organisation of budgetary policy and its potential positive impact on the long-term growth of the economy".<sup>1</sup>

Enhanced fiscal rules, increased efforts to rein in public spending, and a combination of economic and political constraints on both the expenditure and revenue sides have necessitated a paradigm shift of budgetary policy from one focused on simply balancing the levels of revenue and expenditure towards one based on improved quality of public finances. As the EPC concluded in its 2007 report: "good value for money, i.e. maximising output with the input available, is essential because of the increased challenges on public finances stemming from globalisation and ageing."

# 6.2 Policy Strategy

In the interest of efficiently reaching its policy objectives Government continues to pursue improved quality in public finances. In the preparation of this Stability Programme any necessary reprioritisation of spending areas has been carried out while in some cases a reconsideration of the appropriate policy instruments was necessary in order to maximize efficiency.

Government is committed to continue freeing up resources to better handle upward pressures from age-related expenditures (such as through pensions and health) while avoiding further increases of the tax burden with the negative implications on growth that this may have. Government is also committed to continue spurring on economic growth by fine-tuning revenue systems to reduce disincentives that may act as a drag on growth and that may exert downward pressures on revenue collection.

Afonso et al.<sup>2</sup> identify five requirements which fiscal policy must fulfil in order to be considered of a high quality and to support growth. In pursuing the stated policy objectives these requirements are used as a benchmark to fine-tune policy instruments and maximize the quality of public finances:

- Requirement 1: provide for an institutional environment that is supportive to growth and sound public finances,
- Requirement 2: limit government commitments to the essential provision of goods and services,
- Requirement 3: pursue growth promoting incentives for the private sector and make efficient use of public resources,
- Requirement 4: finance government activities and where appropriate private sector activities with an efficient and stable tax system,
- Requirement 5: support macroeconomic stability through sustainable public accounts.

## 6.3 Composition, efficiency and effectiveness of expenditure

Although there is general agreement in literature that both the level and composition of public spending have a significant impact on economic growth, conflicting empirical results have sullied the salience of this relationship. Bayraktar and Moreno-Dodson<sup>3</sup> attempt to explain conflicting empirical results with a focus on expenditure classification. Public spending can be a significant determinant of growth if governments are able to use expenditures for productive purposes.

In this regard Bayraktar and Moreno-Dodson separate total spending into productive and unproductive

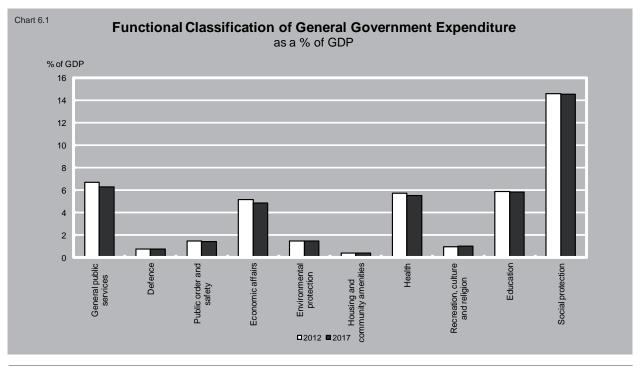
expenditure on the basis of its expected impact on the private sector production function. The impact on the private sector production function is determined according to the relevance that a spending item is expected to have a-priori on the economic behaviour of rational private individuals. The research identifies general public services; defence; education; health; housing; transportation and communication as productive components of government expenditure. These components are generally expected to have a positive impact on the production function thereby positively impacting long-term growth. Conversely, unproductive expenditure is defined by the following categories: social security and welfare; recreation; fuel and energy; agriculture, forestry, fishing and hunting; mining and mineral resources; manufacturing and construction; and other economic affairs and services.

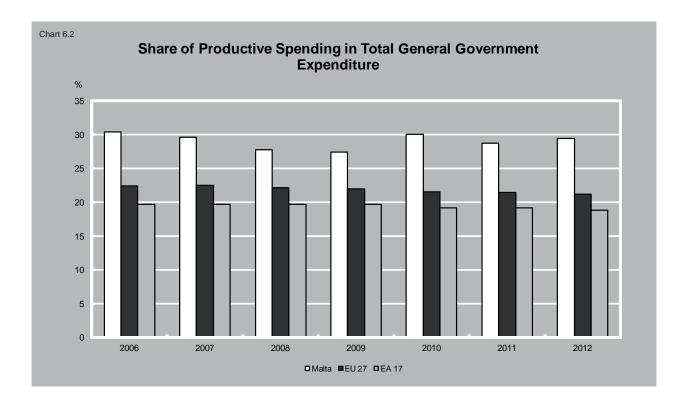
While Bayraktar and Moreno-Dodson's work provides a convenient point of departure, a more accurate definition should be tailored to country-specific characteristics in order to ensure the correct identification of productive factors. In Malta's case the following items are classified as productive public expenditure categories: education, health, housing and community amenities, and environmental protection. Social benefits and social transfers in kind have been excluded, in line with Bayraktar and Moreno-Dodson's approach, given that these are not deemed to contribute to economic growth.

Malta Government expenditure as a proportion of GDP is expected to decrease from 43.1 per cent of GDP in 2012 to 42.2 per cent of GDP in 2017. This reflects economic growth which is outpacing expenditure growth. In this respect Chart 6.1 presents the changing ratios of expenditure categories relative to GDP showing how these ratios are expected to vary till 2017. The ratios for general public services and economic affairs are expected to decrease, by 0.4 and 0.3 percentage points respectively. These constitute the largest changes in ratios among all spending categories. The ratios for health, education, environmental protection and housing are expected to be affected marginally or remain constant.

Chart 6.2 provides a comparison of Malta's share of productive spending in total government expenditure against average productive spending for the Euro Area and the European Union as a whole.<sup>4</sup>

The Chart shows how Malta continues to pursue a high rate of productive spending as a share of total general government expenditure. Malta's rate of productive spending continues to be significantly higher than the European Union and Euro Area averages, by about 8 and 11 percentage points respectively.





# 6.4 Structure and efficiency of revenue systems

Enhancing efficiency of revenue sources enables the Maltese Government to reduce the negative impact of taxation on growth. The Maltese Government pursues a three-pronged strategy to stimulate growth and productivity through its revenue systems:

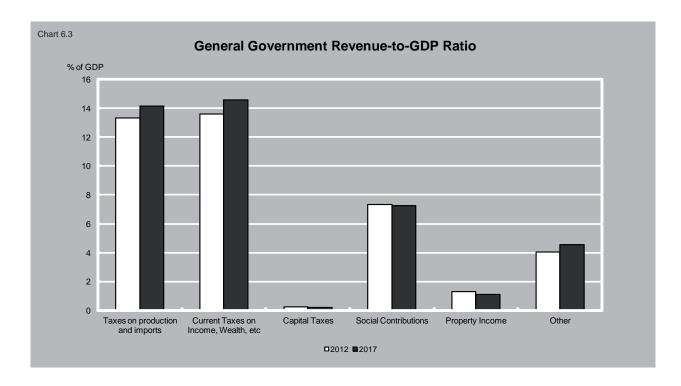
- Shifting the focus of the tax system from direct to indirect tax
- Expanding the tax base with new sources of revenue that have a positive or negligible negative impact on growth
- Improving efficiency of tax collection and stepping up the fight against evasion

Chart 6.3 shows how the major increases in revenue are expected to come from taxes on production and imports and current taxes on income and wealth. As a result government revenue is expected to increase from 39.9 per cent of GDP in 2012 to 41.9 per cent of GDP in 2017.

### 6.4.1 Shifting from direct to indirect tax

The 2013 Tax Reforms Report<sup>5</sup> acknowledges a general trend for shifting from direct to indirect taxation in EU Member States. Reduced disincentives from a relatively high tax burden on labour may be offset by increases in indirect taxation with positive impacts on growth. As summarized by Myles<sup>6</sup> "a move from income taxation to consumption taxation will raise the rate of growth".

Malta has undertaken such shift of the tax burden from labour towards consumption expenditure. In this regard revisions in the income tax regime implemented in the 2012, 2013 and 2014 budgets sought to reduce the disincentive brought about by increased tax rates, as earners quickly shifted to higher tax brackets. The full impact on growth stemming from these revisions will continue to emerge over the medium term.



### 6.4.2 Expanding the tax base

In the 2014 budget Government announced the International Investor Programme which has since been implemented in legislation. Following its launch this programme was fine-tuned in consultation with the European Commission and it has since entered into operation. This scheme is expected to expand the tax base of the Maltese Government, as individuals relocate residency to Malta, while also introducing new revenue sources via the administrative fees incurred by applicants. The residency requirement ensures that this revenue source only targets individuals with an affiliation to the country thereby also ensuring the long-term protection of this new tax base.

Another initiative targeted at expanding the tax base has been the Asset Registration Scheme. Through this scheme residents of Malta may register any assets held by them and which were not previously disclosed or regularised. Beyond the one-off revenue injection due in penalties, this scheme will permit a widening of the tax base by expanding the level of taxable revenue from those previously undeclared assets.

## 6.4.3 Efficiency of tax collection

Government remains committed to the pursuit of tax justice by fighting tax evasion and increasing the efficiency in tax collection. The merger of revenue departments, the Inland Revenue Department (IRD), VAT and Customs is resulting in a more effective use of resources thereby allowing for improved oversight and vetting.

Other measures targeting efficiency in tax collection were unveiled in the 2014 budget and are in the process of being implemented. The Government shall be introducing a system whereby whoever purchases a service in the property industry, for instance construction works, will be liable to a penalty unless the purchaser is able to substantiate the work performed with documentary evidence. Further measures include tax awareness campaigns and efforts to target evasion in rental property income. A task force has also been established to address fraud in social welfare benefits.

#### Endnotes:

<sup>1</sup> Economic Policy Committee and European Commission (2007) Report on "quality of public finances" issues – Work accomplished and way forward

<sup>2</sup> Afonso, A.; Ebert, W.; Schuknecht, L. and Thöne, M. (2005). "Quality of public finances and growth," European Central Bank, Working Paper n. 438

<sup>3</sup> Nihal Bayraktar and Blanca Moreno-Dodson (2010), 'How can public spending help you grow? - An empirical analysis for developing countries', Policy Research Working Paper 5367 (The World Bank, Poverty Reduction and Economic Management Network, Office of the Vice President)

<sup>4</sup> Due to data restrictions the EU27 average productive spending was used since a comparable average for EU28 was not available.

<sup>5</sup> European Commission (2013) Tax reforms in EU Member States 2013, European Economy No. 5

<sup>6</sup> Myles, G. D. (2009), "Economic Growth and the Role of Taxation-Theory", OECD Economics Department Working Papers, No. 713, OECD Publishing.

7. Institutional Features of Public Finances

# 7. Institutional Features of Public Finances

Government is in the process of introducing a set of major reforms in the fiscal framework aimed at aligning Malta's fiscal architecture with the legal obligations in the Fiscal Compact and the relevant EU Regulations and Directives on economic governance. The Fiscal Responsibility Bill has just been endorsed by Cabinet and will now go through the Parliamentary process. In this context, the Fiscal Responsibility Bill establishes the Medium-Term Budgetary Objective as defined in Council Regulation (EC) No. 1466/97, Article 2. What follows is an overview of the main provision of the Fiscal Responsibility Bill. The Bill is divided into five parts.

**Part I** highlights the main principles of fiscal responsibility, objectives of fiscal policy and definitions. These principles and objectives should guide the interpretation of this Act. Among the most important definitions one finds the various references to the EU Regulations and Directives which this Act must satisfy. The definition of "exceptional circumstances" is also provided here. This is of crucial importance to this act because it defines clearly the conditions on the basis of which fiscal policy can be allowed to deviate from the fiscal rules. The definition is fully compliant with the requirements of the Stability and Growth Pact (Council Regulation (EC) No. 1466/97, Article 5) and the Fiscal Compact (Treaty on Stability, Coordination and Governance in the Economic and Monetary Union, Article 3(3)). Furthermore, Medium-Term Budgetary Objective is also defined in accordance with the SGP (Council Regulation (EC) No. 1466/97, Article 2).

**Part II** deals with the fiscal rules which would ensure that the main principles of fiscal responsibility are adhered to also in full respect of the commitments with the EU and the responsibilities as a Euro Area Member.

**The Budget Rule** – requires that unless "exceptional circumstances" prevail, the budget should be in balance or in surplus in structural terms OR the structural budget is converging towards the Medium-Term Budgetary Objective (MTO) in line with the time frame set in accordance with the SGP.

**The Debt Rule** – stipulates that, in accordance with Council Regulation (EC) No.1467/97 Article 2, when the debt-to-GDP ratio exceeds 60 per cent of GDP, it shall be reduced "at a satisfactory pace in accordance with point (b) of Article 126(2) TFEU if the differential with respect to the reference value has decreased over the previous three years at an average rate of one twentieth per year as a benchmark, based on changes over the last three years for which the data is available". However, even if this backward looking condition is not satisfied the same Directive specifies that the debt rule can be satisfied if "the required reduction in the differential will occur over the three-year period encompassing the two years following the final year for which the data is available".

Part III sets out the main tasks of the Fiscal Council, primarily:

- 1. The endorsement of official forecasts;
- 2. The ex-ante analysis of compliance with the provisions of the Fiscal Responsibility Act (including the fiscal rules) of the fiscal strategy and, the issuing opinions and recommendations as necessary;
- 3. To ensure that the Medium-Term Budgetary Framework is consistent with the Stability and Growth Pact;
- 4. The assessment and monitoring of the current fiscal stance by determining the compliance with targets and fiscal rules, the determination of exceptional circumstances when relevant and progress in corrective action plan implementation where relevant;
- 5. To determine the existence or otherwise of exceptional circumstances, and thus independently judge Government fiscal policy on the application of escape clauses when relevant;
- 6. The ex-post assessment of the budgetary performance against the fiscal rules and targets. This is to include the analysis and the issue of opinions and recommendations on the Half-Yearly and Annual Report to be published by the Ministry for Finance;

- 7. To provide information and advice to Government and the Public Accounts Committee on legislative proposals to maintain fiscal discipline;
- 8. To disseminate information to the general public in a user friendly manner aimed at simplifying the budget and the budgetary process to the general public and thus strengthen the democratic conduct of fiscal policy.

All assessments by the Fiscal Council would be made public ten days after their submission to the Minister for Finance. The Minister for Finance is required to prepare a statement to Parliament if it disagrees with the opinion and recommendations of the Fiscal Council, ensuring greater democratic legitimacy.

**Part IV** defines the budgetary process in its various stages and contemplates new requirements to ensure strong compliance with the requirements of the Stability and Growth Pact. The institutional set up underlying the budgetary process contemplated in the Fiscal Responsibility Act strengthens the credibility of fiscal rules. A multi-annual budgetary perspective strengthens the budgetary process allowing for greater budgetary planning. The contemplation of flexibility instruments such as the contingency reserve also reduce the risk of non-compliance with this act and thus strengthen the provisions of this act whilst promoting efficiency in budget execution. In particular Part IV of the Fiscal Responsibility Act contemplates:

- 1. the provision of business and financial plans;
- 2. the setting up a rolling medium-term (3-year) fiscal strategy and establishes the top-down budget approach through a spending ceiling consistent with the independently endorsed macroeconomic and fiscal projections for revenue and the fiscal rules embodied by this Act;
- 3. the publication of a draft budgetary plan before the actual budget;
- 4. the regulation of the annual budget to ensure conformity with the provisions of this act;
- 5. the regular monitoring of the budgetary performance to allow more scrutiny by Parliament, the Fiscal Council and the wider public.

**Part V** sets up the Fiscal Council as the main watchdog of this Act, defines its composition, delineates its powers and provides for its functional independence.

**Composition** – the members of the Fiscal Council are to be appointed by the Minister for Finance. They are required to be competent and experienced in macroeconomic and fiscal matters to ensure that they perform their functions as defined by this Act in the pursuit of sound economic judgement.

**Independence** – the Council enjoys functional independence. Although the members of the Fiscal Council are appointed by the Minister for Finance, the staff involved in its operations is appointed by the Council. Members can be removed only on specifically limited and defined grounds and subject to Parliamentary approval. The Fiscal Council cannot seek or receive instructions from public authorities.

**Powers** – the Fiscal Council is given all powers to conduct its functions under this act, specifically the power to request information, documents, data from any Ministry, Department, Public Entity, Authority or Agency or Local Council.

The Fiscal Responsibility Act foresees the gradual set up of a functionally independent fiscal Council whilst tasking the National Audit Office to undertake the functions of the Fiscal Council until the Fiscal Council is fully set up.

Statistical Appendix

### Macroeconomic Prospects

	Macroeconomic I	Tospecia					
Table 1a							
	ESA Code	Level	Percen	tages unle	ess otherw	vise indica	ted
		2013	2013	2014f	2015f	2016f	2017f
GDP							
1. Real GDP	B.1g	5,156.1	2.4	2.3	2.1	1.9	1.9
2. Nominal GDP	B.1g	7,186.4	4.4	4.7	4.6	4.4	4.4
Components of real GDP							
3. Private consumption expenditure <sup>(1)</sup>	P.3	3,241.1	1.8	2.3	2.2	1.9	1.9
4. Government consumption expenditure	P.3	1,025.6	-0.2	1.9	0.9	0.5	0.6
5. Gross fixed capital formation	P.51	646.3	-3.8	15.6	3.4	2.8	2.2
6. Changes in inventories and net acquisition							
of valuables (% of GDP)	P.52+P.53	45.2	0.9	0.9	0.8	0.8	0.8
<ol><li>Exports of goods and services</li></ol>	P.6	5,182.3	-5.6	2.3	4.2	3.6	3.4
8. Imports of goods and services	P.7	4,984.4	-5.2	3.9	4.3	3.5	3.2
Contribution to real GDP growth							
9. Final domestic demand		4,913.0	0.6	3.8	2.0	1.7	1.6
10. Change in inventories and net acquisition							
of valuables	P.52+P.53	45.2	2.4	0.0	0.0	0.0	0.0
11. External balance of goods and services	B.11	197.9	-0.7	-1.4	0.0	0.2	0.3

(1) Includes NPISH final consumption expenditure

## **Price Developments**

ESA Code	Index (base 2005)	Percenta	ges unle	ss other	wise ind	licated
	2013	2013	2014f	2015f	2016f	2017f
	123.9	2.0	2.4	2.6	2.5	2.5
	117.6	0.8	1.3	1.8	1.8	1.7
	120.1	1.0	1.3	1.8	1.8	1.7
	122.1	2.9	3.0	1.9	1.8	2.0
	155.1	4.4	4.6	4.0	3.7	4.3
	129.2	-0.6	2.4	0.7	0.8	0.9
	128.4	-1.2	2.7	0.3	0.4	0.5
	ESA Code	<b>2013</b> 123.9 117.6 120.1 122.1 155.1 129.2	2013         2013           123.9         2.0           117.6         0.8           120.1         1.0           122.1         2.9           155.1         4.4           129.2         -0.6	2013         2013         2014f           123.9         2.0         2.4           117.6         0.8         1.3           120.1         1.0         1.3           122.1         2.9         3.0           155.1         4.4         4.6           129.2         -0.6         2.4	2013         2013         2014f         2015f           123.9         2.0         2.4         2.6           117.6         0.8         1.3         1.8           120.1         1.0         1.3         1.8           122.1         2.9         3.0         1.9           155.1         4.4         4.6         4.0           129.2         -0.6         2.4         0.7	2013         2013         2014f         2015f         2016f           123.9         2.0         2.4         2.6         2.5           117.6         0.8         1.3         1.8         1.8           120.1         1.0         1.3         1.8         1.8           122.1         2.9         3.0         1.9         1.8           155.1         4.4         4.6         4.0         3.7           129.2         -0.6         2.4         0.7         0.8

### Labour Market Developments

	ESA Code	Code Level Percentages unless otherwise i					ndicated
		2013	2013	2014f	2015f	2016f	2017f
1. Employment, persons (Resident population concept, LFS definition)		177,200	2.7	2.1	1.8	1.7	1.8
2. Employment, hours worked (Annual actual hours, LFS Data)		368,597	2.7	2.1	1.8	1.7	1.8
<ol><li>Unemployment rate (Harmonised definition)</li></ol>		12,300	6.5	6.5	6.5	6.5	6.5
4. Labour Productivity, persons (Real GDP per person employed)		29,096	-0.3	0.2	0.3	0.2	0.1
5. Labour Productivity, hours worked (Real GDP per hour worked)		14.0	0.3	0.2	0.3	0.2	0.1
<ol><li>Compensation of employees (€ million)</li></ol>	D1	3,224.2	4.3	3.2	3.9	3.8	3.8
<ol> <li>Compensation per employee (€)</li> </ol>		18,193	1.6	1.1	2.0	2.0	2.0

## **Sectoral Balances**

Table 1d							
Percentages of GDP	ESA Code	2012	2013	2014f	2015f	2016f	2017f
1. Net lending/ borrowing		3.9	3.4	2.6	2.3	0.9	2.1
vis-à-vis the rest of the world	B.9						
of which:							
Balance on goods and services		7.2	6.3	4.1	4.6	5.4	5.8
Balance of primary incomes and transfers		-5.2	-4.9	-5.3	-5.2	-5.3	-5.3
Capital account		2.0	2.0	3.8	2.9	0.8	1.6
2. Net lending/ borrowing of the private sector	B.9	2.6	10.6	1.3	0.6	-1.4	-0.5
3. Net lending/ borrowing of general Government	EDP B.9	-3.3	-2.8	-2.1	-1.6	-0.7	-0.3
4. Statistical discrepancy		4.6	-4.3	3.3	3.2	3.1	2.9

## General Government Budgetary Prospects

Table 2			ent Budgeta					
Percen	tages of GDP	ESA code	2013(1)	2013	2014	2015	2016	2017
		25776046	2010	2015	2011	2015	2010	2017
Net Ler	nding (EDP B9) by sub-sector							
1.	General Government	S13	-203.0	-2.8	-2.1	-1.6	-0.7	-0.3
2.	Central Government	S1311	-201.8	-2.8	-2.1	-1.6	-0.7	-0.3
3.	State Government	S1312	-	-	-	-	-	
4.	Local Government	S1313	-1.1	-0.0	0.0	0.0	0.0	0.0
5.	Social security funds	S1314	-	-	-	-	-	-
Genera	l Government							
6.	Total revenue	TR	2,950.5	41.1	42.2	42.4	41.5	41.9
7.	Total expenditure	TE <sup>(2)</sup>	3,153.5	43.9	44.2	44.0	42.3	42.2
8.	Net lending / borrowing	EDP B9	-203.0	-2.8	-2.1	-1.6	-0.7	-0.3
9.	Interest expenditure	EDP D41	217.2	3.0	3.0	2.9	2.9	2.8
10.	Primary balance <sup>(3)</sup>		14.2	0.2	0.9	1.3	2.1	2.5
11.	One-off and other temporary measures <sup>(4)</sup>		6.2	0.1	0.2	0.1	0.1	0.1
Selecte	ed Components of Revenue							
12.	Total Taxes (12=12a+12b+12c)		2,023.7	28.2	28.5	28.7	28.8	28.9
12a.	Taxes on production and imports	D2	967.7	13.5	14.1	14.1	14.1	14.2
12b.	Current Taxes on Income, Wealth, etc.	D5	1,043.3	14.5	14.2	14.4	14.4	14.6
12c.	Capital Taxes	D91	12.7	0.2	0.2	0.2	0.2	0.2
13.	Social Contributions	D61	524.8	7.3	7.4	7.5	7.4	7.3
14.	Property Income	D4	96.1	1.3	1.2	1.2	1.2	1.1
15.	Other <sup>(5)</sup>		305.9	4.3	5.0	5.1	4.3	4.5
16=6.	Total Revenue	TR	2,950.5	41.1	42.2	42.4	41.5	41.9
p.m.:	Tax Burden (D2+D5+D61+D91-D995) <sup>(6)</sup>		2,570.4	35.8	36.3	36.4	36.4	36.5
Selecte	ed Components of Expenditure							
	Compensation of employees + intermediate							
17.	consumption	D1+P2	1,424.9	19.8	19.7	19.5	19.1	18.8
17a.	Compensation of employees	D1	970.9	13.5	13.2	13.0	12.8	12.6
17b.	Intermediate consumption	P2	454.0	6.3	6.5	6.5	6.3	6.2
18.	Social payments (18=18a+18b)		972.6	13.5	13.5	13.6	13.5	13.6
	of which Unemployment benefits <sup>(7)</sup>		35.1	0.5	0.4	0.4	0.4	0.4
		D6311,						
	Social transfers in kind supplied via market	D63121,						
18a.	producers	D63131	49.9	0.7	0.9	1.0	1.0	0.9
18b.	Social transfers other than in kind	D62	922.7	12.8	12.6	12.6	12.5	12.6
19=9.	Interest expenditure	EDP D41	217.2	3.0	3.0	2.9	2.9	2.8
20.	Subsidies	D3	79.5	1.1	1.5	1.2	1.1	1.2
21.	Gross fixed capital formation	P51	195.6	2.7	3.2	3.1	2.9	3.0
22.	Capital transfers		92.8	1.3	0.9	1.4	0.7	0.8
23.	Other <sup>(8)</sup>		170.9	2.4	2.4	2.2	2.1	2.1
24=7.	Total Expenditure	TE <sup>(2)</sup>	3,153.5	43.9	44.2	44.0	42.3	42.2
p.m.:	Government consumption (nominal)	P3	1,491.9	20.8	20.8	20.4	20.0	21.0

<sup>(1)</sup> € million

No policy change projections

Table	2 2b	, , , ,					
Perce	entages of GDP	2013(1)	2013	2014	2015	2016	2017
1.	Total revenue at unchanged policies	2,970.5	41.3	41.9	42.3	41.4	41.9
2.	Total expenditure at unchanged policies	3,141.5	43.7	44.6	43.8	42.9	42.3
(1) € m	illion						

#### Amounts to be excluded from the expenditure benchmark

Table	2c						
Perce	ntages of GDP	2013(1)	2013	2014	2015	2016	2017
1.	Expenditure on EU programmes fully matched by EU funds revenue	99.48	1.38	2.44	2.20	2.02	2.40
2.	Cyclical unemployment benefit expenditure	5.97	0.08	-0.11	-0.11	-0.13	-0.09
3.	Effect of discretionary revenue measures	2.68	0.04	0.16	0.15	0.28	0.28
4.	Revenue increases mandated by law <sup>(2)</sup>	23.00	0.34	0.52	0.69	0.69	0.69

<sup>(2)</sup> Revenue increases mandated by law are assumed to equal the pension reform initiatives. Item (3) and (4) equals the total impact of revenue measures

# General Government Expenditure by Function

## Table 3

	Percentages of GDP	COFOG Code	2012	2017
1.	General public services	1	6.7	6.3
2.	Defence	2	0.7	0.8
3.	Public order and safety	3	1.5	1.4
4.	Economic affairs	4	5.2	4.9
5.	Environmental protection	5	1.5	1.5
6.	Housing and community amenities	6	0.4	0.4
7.	Health	7	5.7	5.5
8.	Recreation, culture and religion	8	1.0	1.0
9.	Education	9	5.9	5.8
10.	Social protection	10	14.6	14.5
11.	Total Expenditure	TE	43.1	42.2

### General Government Debt Developments

Table 4						
Percentages of GDP	ESA Code	2013	2014	2015	2016	2017
1. Gross debt		73.0	69.4	68.5	66.0	63.9
2. Change in gross debt ratio		2.2	-3.5	-0.9	-2.5	-2.2
Contributions to changes in gross debt						
3. Primary balance		-0.2	-0.9	-1.3	-2.1	-2.5
4. Interest expenditure	EDP D.41	3.0	3.0	2.9	2.9	2.8
5. Stock-flow adjustment		2.4	-2.3	0.6	-0.3	0.3
p.m. implicit interest rate on debt <sup>(1)</sup>		4.5	4.2	4.4	4.4	4.5

 $^{\scriptscriptstyle (1)}$  Proxied by interest expenditure divided by the debt level of the previous year.

## Cyclical Developments

Percentages of GDP	ESA Code	2013	2014	2015	2016	2017
1. Real GDP growth (%)		2.4	2.3	2.1	1.9	1.9
2. Net lending of General Government	EDP B.9	-2.8	-2.1	-1.6	-0.7	-0.3
3. Interest expenditure	EDP D.41	3.0	3.0	2.9	2.9	2.8
4. One-off and other temporary measures <sup>(1)</sup>		0.1	0.2	0.1	0.1	0.1
5. Potential GDP growth (%)		1.5	1.9	2.0	1.9	2.0
contributions:						
- labour (hours)		1.7	1.5	1.5	1.2	1.2
- capital		0.1	0.4	0.5	0.5	0.5
- total factor productivity		-0.2	-0.1	0.0	0.1	0.2
6. Output Gap		-0.2	0.2	0.2	0.3	0.2
7. Cyclical Budgetary Component		-0.1	0.1	0.1	0.1	0.1
8. Cyclically-Adjusted Balance (2-7)		-2.8	-2.2	-1.7	-0.8	-0.4
9. Cyclically-Adjusted Primary Balance (8+3)		0.3	0.8	1.2	2.0	2.4
10. Structural Balance (8-4)		-2.8	-2.3	-1.8	-1.0	-0.5

<sup>(1)</sup> A plus sign means deficit-reducing one-off measures

Table 5

## Divergence from the April 2012 Stability Programme

Table 6						
Percentages of GDP	ESA Code	2013	2014	2015	2016	2017
Real GDP growth						
Previous update		1.4	1.6	1.9	1.9	
Current update		2.4	2.3	2.1	1.9	1.9
Difference		1.0	0.7	0.2	0.0	-
General Government net lending	EDP B.9					
Previous update		-2.7	-2.1	-1.6	-0.8	
Current update		-2.8	-2.1	-1.6	-0.7	-0.3
Difference		-0.1	0.0	0.0	0.1	-
General Government gross debt						
Previous update		74.2	74.2	72.7	70.0	
Current update		73.0	69.4	68.5	66.0	63.9
Difference		-1.2	-4.8	-4.2	-4.0	-

### Long-term Sustainability of Public Finances

Table 7						
Percentages of GDP	2010	2020	2030	2040	2050	2060
Total Expenditure	-	-	-	-	-	-
of which: age-related expenditures	21.9	22.1	22.9	24.3	26.5	30.1
Pension expenditure*	10.4	10.6	10.4	11.4	13.4	15.9
Social security pensions**	-	-	-	-	-	-
Old-age and early pensions	5.8	6.7	7.2	8.5	10.8	13.3
Other pensions (disability, survivors)	4.6	4.0	3.3	2.9	2.6	2.7
Occupational pensions	-	-	-	-	-	-
Health care	5.4	6.2	7.0	7.6	7.8	8.3
Long-term care	0.7	0.8	1.2	1.2	1.2	1.5
Educational expenditure	5.1	4.1	4.0	3.7	3.7	4.0
Other age-related expenditures: (Unemployment benefits)	0.4	0.4	0.4	0.4	0.4	0.4
Interest expenditure	-	-	-	-	-	-
Total revenue	-	-	-	-	-	-
of which: property income	2.2	2.2	2.1	2.0	2.0	2.0
of which: from pensions contributions	8.8	8.9	8.9	8.6	8.5	8.3
Pension reserve fund assets	-	-	-	-	-	-
of which: consolidated public pension						
fund assets	-	-	-	-	-	-
Labour productivity growth	1.0	1.7	1.8	1.8	1.7	1.5
Real GDP growth	1.4	1.9	1.9	1.4	0.8	0.9
Participation rate males (aged 20-64)	83.0	85.4	88.5	87.5	87.0	87.3
Participation rate females (aged 20-64)	44.9	53.3	59.3	59.9	59.7	60.2
Total participation rates (aged 20-64)	64.3	69.7	74.3	74.1	73.9	74.3
Unemployment rate (aged 15-64)	6.9	6.8	6.7	6.6	6.6	6.6
Population aged 65+ over total population	15.1	20.7	24.2	25.1	27.8	31.2

\* The coverage of pensions in Malta has been widened in this round compared to the 2009 Ageing Report. Alongside the pensions covered in the Ageing Report 2009, this round covered also Treasury pensions, the non-contributory old-age pension and the bonus associated

with respective contributory and non-contributory benefits.

\*\* Malta's two-thirds pension included under the pension expenditure category

Note: Figures may not add up due to rounding

Contingent habilities						
Table 7a	% of GDP					
	2012	2013				
Public guarantees	17.2	16.6				

## **Contingent liabilities**

## **Basic Assumptions**

Table 8	•				
	2013	2014f	2015f	2016f	2017f
Short-term interest rate (annual average)	0.25	0.25	0.25	0.25	0.25
USD/EUR exchange rate (value at end of period) GBP/EUR exchange rate (value at end of	1.379	1.362	1.362	1.362	1.362
period)	0.834	0.830	0.830	0.830	0.830
Malta's main trading partners growth	0.5	1.7	1.9	1.8	1.8
Oil prices, (Brent, USD/barrel)	108.6	106.0	106.5	106.5	106.5