An Assessment of the Macroeconomic Forecasts for the Maltese Economy prepared by the Ministry for Finance in October 2016

A report prepared by the
Malta Fiscal Advisory Council

October 2016

MALTA FISCAL ADVISORY COUNCIL

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Dear Minister

LETTER OF TRANSMITTAL

In terms of Article 13 of the Fiscal Responsibility Act, 2014 (Cap 534), I have the honour to transmit a report by the Malta Fiscal Advisory Council (MFAC) on the assessment of the macroeconomic forecasts for the Maltese economy prepared by the Ministry for Finance in October 2016 as part of the Draft Budgetary Plan for 2017.

The Council considers that on the basis of the information available to date, the official real GDP growth forecasts of 3.9% for 2016, and 3.5% for 2017, appear to be feasible and achievable. The Ministry's expectation of a moderate deceleration in the pace of economic expansion, which follows the exceptional 6.2% real GDP growth registered in 2015, is considered to be a prudent approach. Likewise, the nominal GDP growth forecasts of 5.7% for 2016 and 5.8% for 2017, following the 8.6% nominal expansion of 2015, lie within the Council's endorsable range.

The Council notes that the Ministry's projected growth rates are quite close to the forecasts prepared earlier this year by the European Commission as part of its spring forecast round, while somewhat lower than those published by the Central Bank of Malta in June. There is broad consensus between the three institutions with regard to the main drivers of growth and the general direction of the major components of GDP. The discrepancies between their respective projections are largely due to different assumptions underpinning the forecasts as well as the fact that they are based on information available at different points in time.

The Council observes that according to the Ministry's projections, real GDP growth is expected to be mainly driven by domestic demand throughout the forecast period, underpinned by buoyant consumption expenditure and investment. On the other hand, net exports are expected to contribute only marginally to GDP growth in 2016 and to dampen GDP growth in 2017 as the expansion rate of imports of goods and services is projected to outpace that of exports. The Council acknowledges that such pattern is consistent with the anticipated trajectory for investment spending, which in the case of Malta generally entails a high import content. At the same time, the projected export growth rate, which is expected to marginally decelerate in 2016 and pick up again in 2017, also appears to be achievable, as it is consistent with the profile for the international assumptions as well as being comparable with recent developments. On this basis the forecasted trajectory for the external sector appears to be plausible.

The exogenous assumptions embodied in the forecasts are considered to be valid as they are based on the latest forecasts by international reputable institutions. This practice maintains credibility in the official forecasts. The Council also welcomes the efforts made by the Ministry to strengthen the robustness of its forecasts through the development of supplementary economic models. In this respect, the Council encourages the Ministry to consider publishing details about its suit of economic models in due course, in order to contribute to greater transparency.

The Council views as adequate the documentation being compiled to support the investment forecasts, particularly through consultations with a wider range of key stakeholders. This is particularly important to justify the fact that notwithstanding the exceptionally high rate of real growth registered for gross fixed capital formation in 2015, which thus created a large base effect, investment growth is forecasted to be positive in 2016 and accelerate in 2017. The Council acknowledges that the forecast investment profile is based on the expected outlays related to specific large identifiable investment projects which have a high probability to take place during 2016 and 2017, thereby mitigating the possible downside risks to this forecast.

In turn, the anticipated labour market conditions and the expected developments in real disposable income sustain the plausibility of the forecast growth rates in real private consumption. The positive employment growth and a low unemployment rate forecasts appear to be consistent with the recent trends observed in the labour market and the government's active labour market policies implemented in this area.

The Council acknowledges that the forecasted path for general government final consumption expenditure reflects the latest information available to the Ministry. A thorough assessment of its plausibility will however be carried out when the detailed fiscal variables comprising this GDP component are forwarded to the Council, after the publication of the Draft Budgetary Plan.

The Council notes that as from this forecast round, the Ministry has moved away from the assumption of no contribution to forecast growth from inventory changes in 2016. Indeed, inventory accumulations are forecast to generate one fifth of the 2016 growth. In respect of 2017, the assumption of no contribution to growth is maintained. The Council understands that the 2016 estimate is based on national accounts data available up to the first half of 2016. It is appreciated that, by its nature, this GDP component is hard to pin down with certainty and that it is important that any changes to the forecast methodologies are undertaken when justifiable. In this case, the Council does not identify any specific reason which taints the validity of the Ministry's new approach. The Council, however, would like to stress the importance of retaining consistency in the treatment of the inventory component in future forecast rounds and of providing the relative explanations when any methodological changes are deemed to be warranted.

With regard to the deflator forecasts of the various GDP expenditure components and inflation, the Council considers them to be compatible with the anticipated lack of inflationary pressures across the euro area. The relatively faster growth in the investment deflator appears to mirror the more buoyant activity in this sector. The Council also positively notes that the patterns for the export and import deflators are similar, thereby exerting a neutral impact on the GDP forecasts, thus mitigating the risks to the overall GDP forecast.

While the Council considers the latest macroeconomic projections as generally cautious and achievable, they are still subject to possible risks, as is inevitable in any forecasting exercise. In particular, the actualisation of the projected GDP growth depends to a large extent on the ability of private consumption expenditure to maintain its strong momentum over the forecast period as well as the degree on implementation of the planned investment projects. Moreover, the external GDP components may be rather volatile and highly conditioned by evolving developments in Malta's main trading partners. However, the Council's assessment is that the upside and downside risks appear to be broadly balanced.

Finally, the Council expresses satisfaction at the ongoing constructive dialogue with the units within the Ministry responsible for the forecasting exercise. At the same time, the Council recommends more streamlining in the macroeconomic forecasting process as well as invites the Ministry to ensure that key fiscal projections necessary to support such macroeconomic forecasts are finalised reasonably ahead so that the macroeconomic forecasts can be provided to the Council within reasonable deadlines to allow for appropriate in-depth analysis without undue pressures.

Yours sincerely

Rene Saliba
Chairman

Table of Contents

Executive summary 3

1. Introduction 5
2. An assessment of the MFIN's methodologies used to prepare the macroeconomic projections 6
3. An assessment of the main assumptions underpinning the MFIN's macroeconomic forecast 7
4. An assessment of the MFIN's macroeconomic forecasts for 2016-2017 9
5. A comparative analysis of MFIN's macroeconomic projections presented in the DBP 2017 18
6. Conclusion 27

List of Tables

Table 1: Main macroeconomic forecast assumptions 8

Table 2: Macroeconomic variables for 2015-2017 11

Table 3: Comparison of macroeconomic projections 19

List of Charts

Chart 1: Growth rates (%) of selected macroeconomic variables 10

Chart 2: Contributions to real GDP growth 12

Chart 3: Individual macroeconomic variables 13

Chart 4: Comparison of % growth rates for selected macroeconomic variables for 2016 20

Chart 5: Comparison of % growth rates for selected macroeconomic variables for 2017 20

Abbreviations

CBM	Central Bank of Malta
CBM JUN	Forecast exercise undertaken by the Central Bank of Malta in June 2016
COM	European Commission
COM SPR	European Commission Spring Forecast 2016.
DBP	Draft Budgetary Plan 2017
EBU	Extra-Budgetary Unit
ECB	European Central Bank
EIA	U.S. Energy Information Administration
EPD	Economic Policy Department
ESA	European System of National and Regional Accounts
EU	European Union
GDP	Gross Domestic Product
HICP	Harmonized Index of Consumer Prices
IIP	Individual Investor Programme
IMF	International Monetary Fund
LFS	Labour Force Survey
MFAC	Malta Fiscal Advisory Council
MFIN	Ministry for Finance
MFIN APR	Forecast exercise undertaken by the Ministry for Finance in April 2016
MFIN OCT	Forecast exercise published by the Ministry for Finance in October 2016
NPISH	Non-Profit Institutions Serving Households
NSO	National Statistics Office
STG	British pound
USD	United States dollar
USP	Update of Stability Programme 2016-2019

Executive summary

This report evaluates the macroeconomic forecasts prepared by the Ministry for Finance for publication in the Draft Budget Plan 2017. To this effect, the macroeconomic forecasts for the years 2016 and 2017, together with the main external and internal assumptions which underpin the forecast estimates are assessed. It is the view of the Malta Fiscal Advisory Council that on the basis of the information available to date, the headline figures for nominal and real Gross Domestic Product (GDP) for years 2016 and 2017 are indeed feasible and achievable. The Ministry for Finance is projecting an increase in real GDP of 3.9% for year 2016 and a rate of growth of 3.5% for 2017. The forecasts presented by the Ministry for Finance are broadly similar to those provided by other institutions in terms of the fact that the exceptional rates recorded for GDP growth in 2015 are not expected to be repeated for 2016 and 2017 and that the economy will be expected to evolve at a more subdued real growth rate ranging between the three and the four per cent mark. It is the view of the Council that the economic position being taken by the Economic Policy Department in the current forecast round is for a cautious and prudent outlook which considers the most recent results achieved over the last few years.

The positive outlook for 2016 is expected to be primarily driven by developments in the domestic demand component of the economy coinciding with a marginal contribution expected from the external component. Whilst the forecast is still expecting a strong performance from the private consumption component, the extraordinary increase recorded within the investment category in 2015, is not expected to recur and this component of domestic demand is projected to grow at relatively more modest rates. The contribution from the external sector is based on a set of revised assumptions for the performance of the main trading partners to the Maltese economy. It is of importance to highlight that, unlike previous years when the inventory component was assumed to provide a zero contribution rate to GDP growth in line with the practice of other institutions, the forecasted growth for 2016 is also influenced by the inventory component which is expected to contribute positively to GDP growth in line with national accounts data available for the first half of 2016. Within this context, the Malta Fiscal Advisory Council would like to stress the importance of retaining consistency in the treatment of the inventory component in future forecast rounds. The volatile nature of the gross fixed capital formation component and the underlying risks which underpin the external sector, are factors which should be acknowledged as the main elements of risk surrounding the realization of the real GDP growth forecast over 2016. Overall, upside and downside risks appear to be broadly balanced.

Developments in real GDP growth for 2017 are expected to generally follow those for 2016. The main contributor to GDP growth is expected to remain the domestic demand component of the economy with a negative contribution expected from the external component for 2017. This view is similarly shared by the Central Bank of Malta and the European Commission in their most recent publications including estimates for 2017. In view of the small size and openness of the local economy, developments within particular components of GDP are expected to have a considerable effect on the macroeconomic projections. An element of risk particularly related to the outer year of the forecast is the ability of the economy to maintain the relatively strong increases expected within the domestic demand component of GDP.

The Malta Fiscal Advisory Council acknowledges the well documented and structured process used by the Economic Policy Department in the preparation of their macroeconomic forecast. It is positive to note that the Economic Policy Department is engaging in a continual process of updating and fine tuning of its econometric methodologies used to undertake the forecasting exercise. The use of the most recent ad-hoc information and the adoption and internalisation of projections by international reputable organisations within the forecasting assumptions serves to reduce the element of risk and volatility which surrounds the forecast for a small open economy like Malta. The forecasting exercise undertaken by the Economic Policy Department depends on the inputs and collaboration from a number of entities and departments within Government. Furthermore, the output of the forecasting exercise is used as an input to a number of agencies and entities, both on the local and on the international front. It is with this in mind that the Council recommends more streamlining in the process by which data is channelled between departments so that the forecasting outputs are provided to the users with enough lead time to ensure that the required data analysis could be carried out in line with agreed deadlines.

1. Introduction

This report provides an assessment of the macroeconomic forecasts presented by the Ministry for Finance (MFIN) for the years 2016-2017 within the Draft Budgetary Plan (DBP) 2017. This report is in fulfilment of the responsibilities set for the Malta Fiscal Advisory Council (MFAC) in terms of the Fiscal Responsibility Act, 2014 (Cap. 534) by virtue of which, the MFAC shall monitor the Government's compliance with the fiscal rules and shall assess both the macroeconomic and the fiscal forecasts prepared by the Government throughout the year.

The latest macroeconomic forecasts are based on a set of revised economic assumptions which are also assessed within this report. The cut-off date for this forecast has been set to include data available to the Economic Policy Department (EPD) within the MFIN up till 28 September 2016. A preliminary round of forecasts was provided by the EPD to the MFAC on 30 September 2016 whilst a full and final set of projections, incorporating various revisions, was presented to the MFAC on 12 October 2016. The forecasting exercise takes into account all the latest and published data provided by the National Statistics Office (NSO) and other relevant authorities. Furthermore, the forecasts have been prepared by the EPD following various discussions and meetings with a number of private entities and government agencies thus ensuring that all the ad-hoc information made available to the EPD by the set cut-off date is incorporated within the current forecast round.

The following sections will constitute this report:

i) An assessment of the MFIN's methodologies used to prepare the macroeconomic projections.

ii) A review of the main assumptions underlying the forecasts and an assessment of their plausibility in view of the latest information available.

iii) A detailed description and assessment of the main macroeconomic variables underpinning the forecast for years 2016 and 2017.

iv) A comparison of the current MFIN forecasts to those published by MFIN in the Update of Stability Programme (USP) of April 2016, as well as a comparison to the forecasts published by the European Commission (COM) and the Central Bank of Malta (CBM).

In preparation for this report, the MFAC held consultations with personnel from the MFIN responsible for the forecasting of macroeconomic data. A number of reports published by reputable international and local entities providing an assessment of the performance of the Maltese economy were also consulted. Furthermore, the MFAC meets and consults on a regular basis with a number of international and local entities who are also involved in the preparation of macroeconomic forecasts for the Maltese economy.

2. An assessment of the MFIN's methodologies used to prepare the macroeconomic projections

The forecasts presented by the MFIN are primarily based on a Keynesian structure type macroeconometric model based on quarterly data. This model is maintained by the EPD within the MFIN and this modelling structure has been the basis for the preparation of the macroeconomic forecast for the last few years. The model is mainly expenditure driven and comprises a set of structural equations which are updated regularly to reflect the latest trends observed from published data. This framework serves to provide a sound basis for the overall macroeconometric modelling exercise carried out by the MFIN. As is normal practice with most modelling structures, the structural equations are complemented by a number of identity and behavioural equations which are updated by ad-hoc information which is made available on a continuous basis to the experts working on the model. Such information is acquired through the continuous monitoring and feedback received by the EPD officials from various Government departments and other entities throughout the year. The forecast presented in this report for 2016 and 2017 also reflects the re-modelling and re-estimation of a number of variables within the model to capture changes in the variables of interest over the most recent data points.

It is positive to note from the discussions with the EPD that the macroeconomic forecasts presented in the DBP acknowledge a certain element of risk within a number of variables and in this regard a number of risk scenarios have been undertaken to assess the validity of the forecast estimates. The MFAC feels that this exercise in the quantification of risk helps to improve on the robustness of the latest macroeconomic forecasts as published in the DBP. Moreover, the MFAC positively notes that the EPD has now developed a number of alternative forecasting models which are meant to help in providing robustness checks to the outcome of the Keynesian model. The alternative models range from purely statistical to models of a more structural nature and provide a range of forecast values to indicate the likely forecast outcomes under the different modelling scenarios.

The model includes a number of exogenous variables to the system and such variables are populated with the latest available information to date. The inclusion of this exogenous component within the forecasting model is intended to deal primarily with the peculiarities arising from the smallness of the local economy and to incorporate within the system the dependence of the local activity to international market variations. In view of the expected volatility of the external sector and the resulting impact of such volatility for the local economy, the information pertinent to developments in such a sector is assumed to follow that provided by a number of international reputable organisations. This approach has been found, over various forecasting rounds, to serve as a good base for the external sector projection within the model. In particular, one notes that forecast assumptions are adopted from the International Monetary Fund (IMF), Consensus Economics[1] and the European Central Bank (ECB). The inclusion of these assumptions within the base structure of the

[1] Consensus Economics is a leading international economic survey organization which polls a vast number of forecasts to derive projections for a number of key macroeconomic variables.

forecasts is deemed as a good practice in view of the expected volatility inherent within such variables and its expected impact on the local economy.

The forecasts being assessed in this report represent an updated set of macroeconomic forecasts when compared to the forecast presented by MFIN in the USP 2016-2019 published in April 2016. Due to the timing requirements of this exercise, this forecasting run is based on data available up to the cut-off date of 28 September 2016. The base data within the modelling framework is thus the NSO News Release No.142/2016 published on 6 September 2016 covering and incorporating data for the first half of 2016. The MFAC acknowledges the commitment of the EPD to include within the forecast exercise all the published information available up to the set cut-off date.

As previously mentioned, the preparation of this forecast is also based on an element of expert judgement. It is positive to note that this process is very well documented by the EPD and reflects an internal structured exercise. The experience gained in economic modelling by the EPD ensures that the best possible use is made of all the ad-hoc information which becomes available prior to the start of the forecasting exercise. Moreover, the list of consultations with key stakeholders in the economy has been widened with a view to enhancing the forecast accuracy particularly of the more volatile variables such as gross fixed capital formation. The econometric model itself provides the necessary framework so that all information is translated into data which is relevant for the estimation process.

3. An assessment of the main assumptions underpinning the MFIN's macroeconomic forecasts

This section provides an overview and an analysis of the main exogenous assumptions adopted by the EPD within its macroeconomic modelling framework. These assumptions reflect those variables which are determined outside of the model and which are thus independent from the state of other variables in the system. Hence, they typically relate to internationally related variables which, given the relative openness and the small size of the Maltese economy, are not expected to be specifically influenced by local developments. The MFAC positively notes that, given the importance and the volatility of such assumptions, these are sourced from reputable international organisations, particularly the ECB, Eurostat, and Consensus Economics[2]. Table 1 provides a list of these variables and their assumed forecast values, together with the data source used for each variable in consideration. The MFAC understands that the data shown in Table 1 reflects the latest information available to the EPD, which data is assumed to have been fully taken on board in the preparation of the DBP 2017 macroeconomic forecast. The assumptions incorporated in the forecast have an earlier cut-off date of 12 September 2016.

[2] Data sourced from Consensus Economics in Table 1 refers to data published in September 2016.

Table 1: Main macroeconomic forecast assumptions

Main Forecast Assumptions	Data source	2015 (Actual)	2016	2017
Short-term interest rate (annual average)	ECB	0.05	0.00	0.00
Long-term interest rate (annual average)	ECB	1.49	1.03	0.99
USD/€ exchange rate (annual average)	ECB and Consensus Economics	1.10	1.12	1.09
STG/€ exchange rate (annual average)	ECB and Consensus Economics	0.73	0.83	0.86
Real GDP Growth of main trading partners	Eurostat and Consensus Economics	1.80	1.50	1.30
Oil Prices (Brent, USD/barrel) (annual average)	EIA and Consensus Economics	52.35	43.36	50.30

Sources: MFIN

Short-term interest rates are expected to decline from 0.05% in 2015 to a zero rate in 2016 and 2017. This follows the ECB's decision to cut-off short-term interest rates to zero, back in 16 March 2016, in its pursuit to avert deflation in the Euro-zone. Long-term interest rates are also projected to decline over the forecast horizon and are also expected to be below the rates that were projected at the time of the USP (April 2016). Indeed, these are expected to fall below the 1% level in 2017. The forecasted value for the euro with respect to the US dollar is projected to slightly appreciate over 2016, and to subsequently depreciate in 2017 to an exchange rate comparable to that recorded for 2015. One should also note that the USD/€ exchange rate is expected to still hover around 1.1, as in the previous forecast round. With respect to the British pound, the euro is expected to appreciate over both forecast dates, whereas in the USP forecast of April 2016 the euro was similarly expected to appreciate in 2016 but to depreciate in 2017 with respect to the British pound.

The developments within the main trading partners of Malta are of significant importance to the economic developments within the Maltese economy. The real GDP growth of these trading partners is expected to remain positive, albeit slowing down to a growth rate of 1.5% and 1.3% for 2016 and 2017 respectively, from the 1.8% registered growth in 2015. These growth rates differ from the anticipated trajectory of a stable growth in 2015 and 2016 of 1.6%, and an increase of 1.7% in 2017, as indicated in the previous forecast round. Moreover, the level of economic activity in the European Union (EU) is also of significant importance to the economic activity in Malta. The COM anticipates a moderate growth rate for economic output within the EU, with real GDP growth rates remaining rather stable around the 1.9% mark during the 2015-2017 period, albeit suggesting that the downside risks to the projections are considerable[3].

Recent world economic developments are reflected in the forecast for the international price of oil. The annual average price of oil per barrel in 2015 stood at $52.35. In 2016, the price of oil per barrel is expected to fall to $43.36, and is forecasted to rise again in 2017 to $50.30. The latest oil price projections for the period 2016-2017 are higher than those projected in the USP forecast of April 2016. Notwithstanding this, the direction of the movements in oil prices is the same as in the USP of April 2016.

One should acknowledge that with respect to the anticipated trajectory of the above mentioned variables, there still exists a certain element of risk and uncertainty, which could have an influence on the anticipated growth pattern of the main macroeconomic variables projected in the DBP 2017.

Apart from these internationally related assumptions, the EPD also takes into consideration a number of other exogenous policy related assumptions that are of a domestic nature. The MFAC considers that due to the possible volatility of certain components and the difficulty in modelling certain government policies on the economy, these exogenous treatments contribute to better stability within the modelling framework. It must be said that, as opposed to previous years, when the inventory component was assumed to have a zero contribution rate to GDP, the role of the inventory component in terms of its contribution to real GDP growth is now assumed by EPD to be positive for 2016. The MFAC acknowledges that this has been done since the inventory component[4] for the first 6 months of the year had a significant influence on GDP growth. On the other hand, for the second half of 2016, the level of inventories was assumed to be retained as fixed at the level recorded for the first half of 2016 within the national accounts data. Moreover, owing to the observed volatility of this component over time, this variable was treated as constant at the 2016 levels for 2017. The implication of this assumption is that no contribution to GDP growth is being forecasted for this component for 2017. In this regard, the MFAC would like to highlight the importance of retaining consistency in the treatment of this component over future forecast rounds.

4. An assessment of the MFIN's macroeconomic forecasts for 2016 – 2017

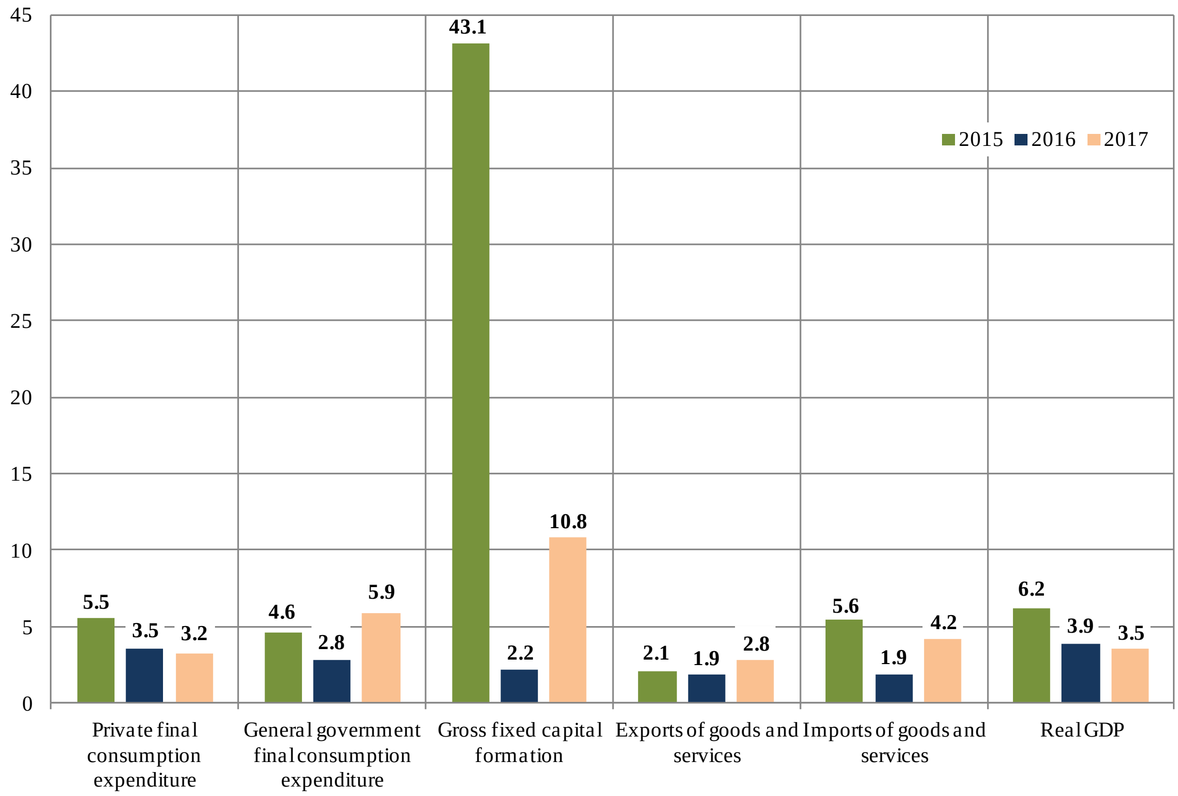
This section of the report provides an overview and description of the main macroeconomic variables forecasted for the period 2016 and 2017 by the EPD thus providing an assessment of the macroeconomic estimates over the short-term forecast horizon. Risks to the forecasts are identified within the context of the current domestic and international macroeconomic

[3] See the COM's spring forecast overview, available on:
http://ec.europa.eu/economy_finance/eu/forecasts/2016_spring/overview_en.pdf

[4] This is assumed to incorporate also an element of statistical discrepancy between the expenditure and output approaches used to measure GDP.

environment. The forecasted macroeconomic projections are presented for reference purposes within Table 2. This table also includes the actualized 2015 figures for the variables under consideration, which figures serve as a base for the modelling exercise carried out by the EPD. Chart 1 provides a graphical illustration of the various GDP aggregates, showing the growth rates within each of the components for the years 2015-2017.

Chart 1: Growth rates (%) of selected macroeconomic variables (chain linked volumes)[5]



Source: MFIN

The expected positive outlook for 2016, in terms of real GDP growth, has to be seen in the light of the relatively exceptional rate of growth registered in 2015. The economy is projected to retain its positive momentum, albeit growing at a slower pace, with real GDP growth in 2016 projected to increase by 3.9% compared to the 6.2% registered a year before. GDP in nominal terms is projected to increase by 5.7% in 2016 following the strong growth rate of 8.6% recorded in 2015 (see Table 2).

As recorded over the recent past years, the main contributor to GDP growth is expected to be the domestic demand sector of the economy, with a marginally positive contribution expected from the external component of GDP for 2016 (see Chart 2). Developments within the net exports sector of the economy for 2016 are underpinned by the expected investment path for 2016 and the growth developments in Malta's main trading partners. Following the extraordinary increase recorded within the investment category for 2015, this component of expenditure for the economy is expected to register relatively more modest rates of growth in the forecast years. The volatile nature of the gross fixed capital formation component and the

[5] Figures for 2015 are based on actual data, whilst the figures for 2016 and 2017 are forecasts.

underlying risks which underpin the external sector, are factors which should be acknowledged as the main elements of risk surrounding the realization of the real GDP growth forecast over 2016.

Table 2: Macroeconomic variables for 2015 – 2017[6]

	2015	2016	2017
At chain linked volumes by year (reference year 2010)	**Actual**		
Private final consumption expenditure[7]	5.5	3.5	3.2
General government final consumption expenditure	4.6	2.8	5.9
Gross fixed capital formation	43.1	2.2	10.8
Exports of goods and services	2.1	1.9	2.8
Imports of goods and services	5.6	1.9	4.2
Real GDP	**6.2**	**3.9**	**3.5**
Nominal GDP	**8.6**	**5.7**	**5.8**
Contributions to real growth (percentage points)[8]			
Final domestic demand	11.7	3.0	5.4
Inventories	-0.8	0.8	0.0
Net exports	-4.7	0.1	-2.0
Deflators			
Private final consumption expenditure	1.1	1.1	1.2
General government final consumption expenditure	1.0	1.1	1.2
Gross fixed capital formation	6.0	3.1	4.1
Exports of goods and services	1.5	1.0	1.2
Imports of goods and services	1.6	0.9	1.1
GDP Deflator	**2.3**	**1.8**	**2.3**
Inflation rate			
HICP	1.2	1.0	1.5
Labour market[9]			
Employment growth	3.4	3.3	2.7
Unemployment Rate	5.4	4.9	5.0
Compensation per Employee	2.8	2.8	2.8
Labour productivity, persons[10]	2.7	0.6	0.8
Potential output and Output gap			
Potential Output	4.7	4.5	4.6
Output Gap (% of potential output)	1.7	1.1	0.1

Source: MFIN

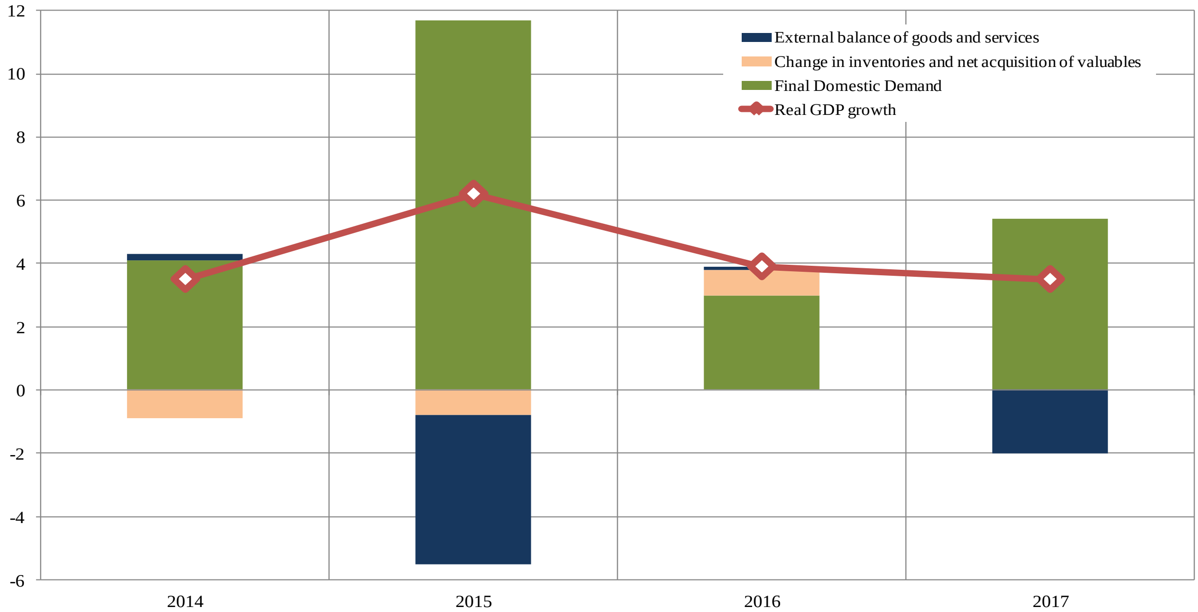
[6] The figures in the table represent growth rates unless otherwise stated. 2015 figures represent actualised data. 2016 and 2017 figures represent forecasts.
[7] Includes Non-Profit Institutions Serving Households (NPISH) final consumption expenditure.
[8] Chain-linking by volumes gives rise to the contributions of GDP not necessarily adding up to the aggregate real GDP growth.
[9] Data for the percentage change in employment growth, for compensation per employee and for labour productivity in the DBP are based upon the National Accounts definition of total employment.
[10] Represents real GDP per person employed.

A positive contribution towards GDP growth is now expected from the inventory component for 2016 as a result of a change in methodology of treatment by the EDP for this variable. The EPD assume a contribution to GDP growth for 2016 which is in line with the national accounts data available up to the first half of data for 2016. Of importance to the overall forecast values in real terms are the expected developments in both the import and export deflators. Variations within such deflators have a significant impact on GDP real growth rates and the risk of such variations have to be taken into consideration.

Developments for 2017 are expected to similarly follow those projected for 2016. GDP is being projected to increase by 5.8% in nominal terms, which translates into an increase of 3.5% in real terms. As expected for the year 2016, the main contributor to GDP growth is expected to remain the domestic demand component of the economy with a negative contribution from the external component being expected for year 2017.

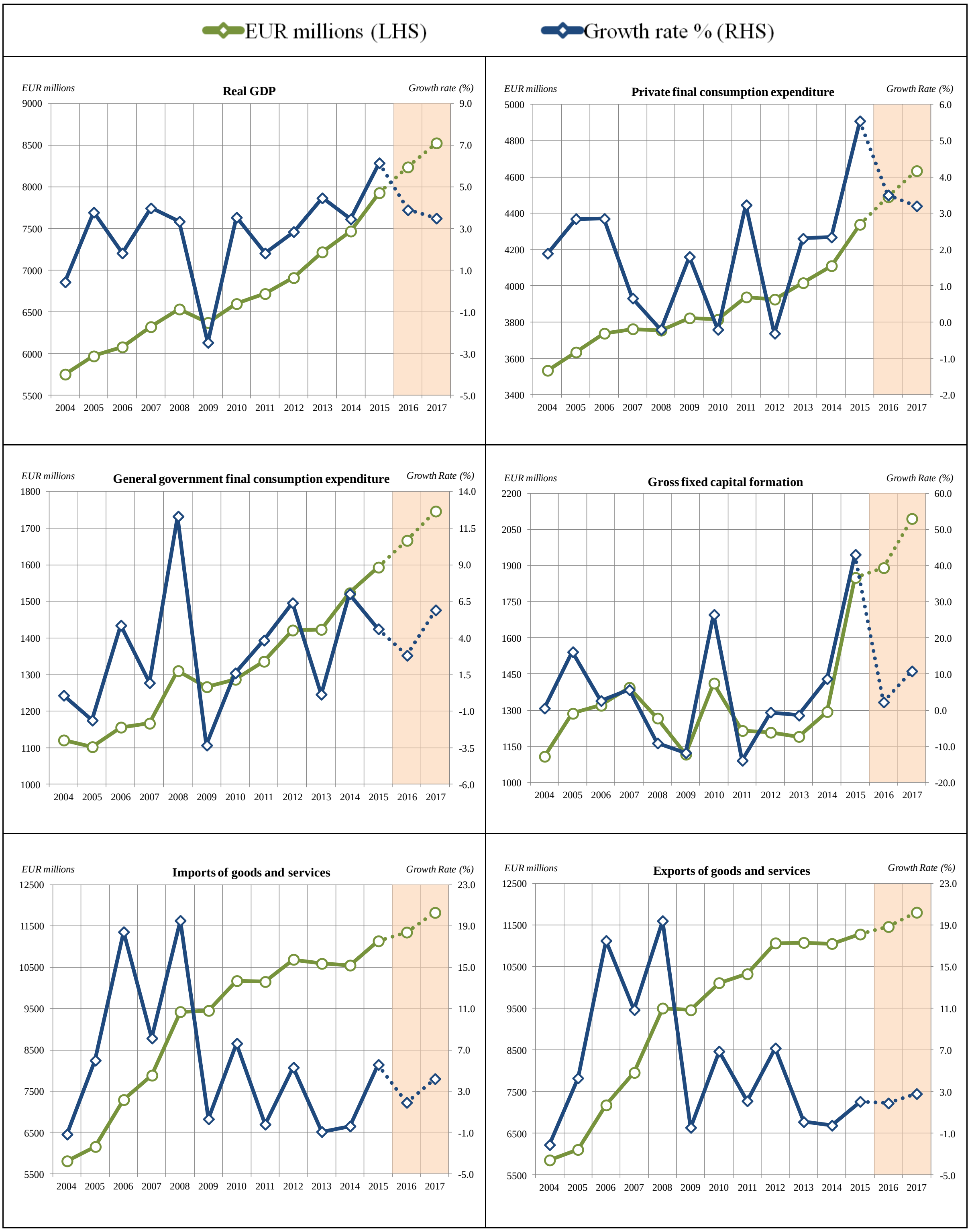
As shown by Chart 2 it is evident that the EPD is expecting no significant variations in the trajectory for the components of economic growth over the 2016 and 2017 years. Whilst recognising the high volatility within some of the major components of GDP and the likely impact which this could have on the overall targets for the economy, it is the view of the MFAC that the position being taken by the EPD in the current forecast round is for a cautious and prudent outlook which reflects the most recent results achieved for 2014 and 2015. This section of the report will now focus on each of the components which comprise aggregate demand in the economy. A definition based on the European System of National and Regional Accounts (ESA 2010) manual for each of the variables under consideration is also provided. The expected future developments within each of the components is analysed in terms of the most recent data available for the variables under study. To this effect and to better illustrate the time series trajectory of the variables under study, Chart 3 provides a graphical illustration for each of the components covering the period 2004-2017.

Chart 2: Contributions to real GDP growth (percentage points)



Source: MFIN

Chart 3: Individual macroeconomic variables (at chain linked volumes)



Source: Eurostat, MFIN

4.1. Private final consumption expenditure

<u>Definition</u>: Consists of the total outlay on individual goods and services by resident households, including those sold at below-market prices. It includes imputed expenditures or transactions which do not occur in monetary terms and can therefore not be measured directly.

Private final consumption expenditure,[11] measured in real terms, is expected in 2016 to maintain the growth momentum recorded in 2015, albeit at a somewhat slower pace. In fact, this important component of aggregate demand is being projected to grow by a further 3.5% in 2016 following the significant increase of 5.5% registered for 2015. As shown in Chart 3 the growth rate of this variable has been constantly above the 2% mark for the last few years, clearly reflecting its important contribution to developments in domestic demand. The positive growth rate for 2016 is expected to be primarily driven by the developments within the labour market, inflationary expectations and the expected estimates of the real disposable income. Developments within the labour market, both in terms of the generation of employment and the registered unemployment rate, are conducive towards further growth in private consumption expenditure. In addition, the projected positive increase in compensation per employee is expected to further provide the necessary stimulus to sustain the growth in private consumption expenditure. The underlying assumed deflator for private consumption expenditure is expected to grow in line with the Harmonised Index of Consumer Prices (HICP) for year 2016. Real private final consumption expenditure is expected to grow by a further 3.2% in 2017 to further consolidate the role of this variable within the domestic demand component of the economy. Indeed, the positive contribution from the domestic demand component to growth in GDP is primarily affected by the expected developments within the component representing private final consumption expenditure.

4.2. General government final consumption expenditure

<u>Definition</u>: Includes the value of goods and services purchased or produced by general government and directly supplied to private households for consumption purposes.

Real general government final consumption expenditure for 2016 is expected to grow at a relatively slow pace of 2.8% when compared to the rates of 7.0% and 4.6% recorded for 2014 and 2015 respectively. For 2017, a strong increase of 5.9% is being projected by MFIN. The growth rates for 2016 and 2017 are underpinned by the expected increases in both intermediate consumption and compensation of employees within the government sector. The MFAC notes that the forecasted trajectory of general government final consumption expenditure does reflect the latest information in line with the government's fiscal consolidation plan. It is important in this regard to stress that the actualisation of such rates of growth heavily depend on the ability and commitment of Government to respect its budgetary

[11] It should be noted that within this report the figures presented for private final consumption expenditure also include NPISH.

targets in the forecasted years. The projected growth rates also depend on the anticipated revenues from market output given that the latter is deducted for the purposes of computing government consumption.[12]

4.3. Gross fixed capital formation

<u>Definition</u>: *Consists of resident producers' acquisitions, less disposals, of fixed tangible or intangible assets. This covers in particular machinery and equipment, vehicles, dwellings and other buildings.*

Notwithstanding the exceptionally high rate of real growth of 43.1% registered for gross fixed capital formation in 2015, growth in this category of expenditure is still expected to be positive at 2.2% in 2016. For 2017, real gross fixed capital formation is projected to increase by a further 10.8% in view of the public and private projects envisaged to materialise during the course of 2017. Indeed, as shown in Chart 3 the investment component of GDP is characterised by significant fluctuations from year to year, reflecting the highly volatile nature of this variable. As a result, there is an element of risk associated to the actualisation of the forecasts for this category of expenditure, and the impact of such risks on the overall GDP forecast growth rates needs to be acknowledged. Underpinning the expected growth rates in gross fixed capital formation is the assumed materialisation of a number of one off public and private sector projects. Moreover, one notes that the forecast for this component embodies the continuation of the large investment undertaken within the aviation industry over recent years. The MFAC positively notes that within the current forecast estimates, the EPD has only incorporated investment streams from projects for which a considerable level of detail was available and where the risk for the non-materialisation of the project was deemed to be low. This serves to base the current forecast on a prudent footing thus lowering the risks associated with this important domestic demand component of GDP.

Driving the relatively low growth expectation for 2016 is the expectation of a level of investment within the public and private sector which is positive and also of substantial value, but nonetheless resulting in low growth rates as a result of the base effect due to the actualised investment levels of 2015. A number of projects planned for the recent years are getting to the end of their implementation process and this is having an effect on the projections for 2016 and beyond. It is to be positively noted that in view of the envisaged volatility within the gross fixed capital expenditure component from year to year, the econometric methodology adopted to forecast such a variable is augmented by ad-hoc information collected from different sources, particularly government entities, responsible for investment development.

[12] Market output includes revenues generated from streams such as sales made by Extra-Budgetary Units (EBUs) as well as from the proceeds resulting from the Individual Investor Programme (IIP).

4.4. Exports and Imports of goods and services

Definitions: Exports of goods and services consist of transactions of goods and services (sales, barter and gifts) from residents to non-residents. Imports of goods and services consist of transactions in goods and services (purchases, barter, and gifts) from non-residents to residents. Imports and exports of goods occur when economic ownership of goods changes between residents and non-residents. This applies irrespective of corresponding physical movements of goods across frontiers.

Following the significant negative contribution to GDP growth recorded for 2015, mainly due to the high imports of goods and services resulting from the recorded investment growth, a marginally positive contribution from net exports is being projected for 2016. Exports and imports of goods and services in real terms are both projected to grow by 1.9% in 2016. For 2017, the projected growth rate for real imports of goods and services is expected to exceed the rate for real exports, growing by 4.2% in comparison to the 2.8% export growth forecast.

One recognizes that there is an inherent element of risk associated with the realization of the projected growth in real exports and real imports over 2016 and 2017. The volatility of these components of expenditure, highlighted by the significant fluctuations in growth rates over the years in Chart 3, are a risk to the realisation of GDP growth within this forecast round. A number of uncertainties have to be acknowledged in this regard. In particular, an element of risk for export growth could stem from a scenario wherein growth within Malta's main trading partners turns out to be less favourable than what is being assumed in the current forecast. This may be due to variations with respect to the assumed path for the euro and the possible impact on trade and tourism which could be affected from possible changes in the international political scenario. The projected developments in imports of goods and services also very much depend on developments in private consumption expenditure and in the ability of the local economy to absorb the projected investment plans.

A number of factors are expected to contribute to the growth in exports over 2016 and 2017. This growth is anticipated to be supported by the performance of a number of sectors within the local economy and growth in world GDP[13] which although expected to be lower than in the previous forecast round, is still expected to leave its mark on the local export shares. In particular, at the sectoral level, MFIN is expecting growth in exports of goods and services to be driven by the expectation of a positive performance in the pharmaceuticals industry, financial services, other business, tourism and other services. The MFAC notes that similar patterns are being projected for the export and import deflators, thereby exerting a neutral impact on developments in GDP.

The projected patterns of growth for imports of goods and services for 2016 and 2017 are highly contingent on the assumed patterns of growth within the private consumption expenditure and investment components. In particular, the growth in imports for 2016 and

[13] Within the context of the forecast exercise world GDP growth is taken to be the weighted average GDP growth (based on export shares) of the main trading partners of the Maltese economy.

2017 is underpinned by the expected expansion within a number of export oriented industries and the expansion in private consumption expenditure which is being forecasted to persist over the years. In particular as illustrated in Chart 3 one notes the relative high volatility in the imports of goods and services component over the years. Developments within the imports of goods and services component heavily depend on the realisation of a number of planned public and private sector investment projects which contain a high element of import content.

4.5. Inflation as measured by the Harmonized Index of Consumer Prices

Definitions: Inflation is an increase in the general price level of goods and services. It is defined as the change in the prices of a basket of goods and services that are typically purchased by households. The HICP is the consumer price index as it is calculated in the European Union (EU) according to a harmonised approach and a single set of definitions.

The HICP in 2016 is expected to remain subdued and grow by 1.0%. This indicator is the main measure for inflation and price stability within the economy. The expected increase is marginally below that recorded for 2015 when an inflation rate of 1.2% was recorded. Inflationary pressures are forecasted to remain weak for year 2016 in view of the low inflation rate recorded for the first months of the year and developments recorded in energy prices. The acceleration in the inflation rate for 2017, reaching 1.5%, reflects the assumed developments in international oil prices and exchange rate movements over the forecast horizon.

4.6. Labour market statistics

Definitions: Employment growth refers to the increase in the number of people engaged in productive activities in an economy. The unemployment rate is the ratio of the unemployed to the active population (labour force) of the same age, that is, employed and unemployed persons. Compensation per employee is defined as the average remuneration, in cash or in kind, payable by an employer to an employee in return for work done by the latter during the accounting period. Labour productivity measures the amount of goods and services produced by each working person.[14]

The projected growth in employment and the unemployment rate are expected to reflect a number of recently introduced policies as well as developments arising from various ongoing active labour market policies. Following the positive employment growth rate registered for 2015, employment is expected to grow by 3.3% in 2016 and by a further 2.7% in 2017. The unemployment rate is expected to decline from the 5.4% recorded in 2015 to 4.9% in 2016

[14] The labour market data provided in Table 2 of this report is based on the National Accounts definition, which differs from the Eurostat definition which is based on the resident population concept used in the Labour Force Survey (LFS).

and to marginally increase to 5.0% in 2017. The MFAC notes that the unemployment rate being forecasted for years 2016 and 2017 are below the rates expected for the EU average.

Positive employment developments within all sectors of the economy are expected for both 2016 and 2017. In particular, encouraging rates of growth are projected for the other business services sector and the remote gaming sector. In general, the performance of the labour market is supported by a higher female employment rate which reflects the impact of the various active labour market policies undertaken by the Government in the last few years. The current policies aimed to further increase employment flexibility are also expected to have an impact on labour market indicators over the forecast years. The MFAC notes the stable increase projected for compensation per employee in 2016 (2.8%) when compared to the 2015 rate. The compensation per employee component in 2017 is expected to develop on the same lines of 2015 and 2016.

4.7. Potential output and the output gap

<u>Definitions</u>: *Potential output is the level of output that an economy can produce at a constant inflation rate. An output gap refers to the difference between actual and potential GDP as a per cent of potential GDP. A positive (negative) output gap means that actual output is above (below) the trend or potential level of output, and suggests the possible emergence (absence) of inflationary pressure.*

The estimates generated by the EPD for potential output and subsequently the output gap for the 2015 to 2017 period are based on a methodology commonly agreed upon with the COM, namely, the production function approach. The expected developments in potential output and subsequently the output gap for the 2016 and 2017 periods are presented within Table 2. Potential output is expected to be primarily affected by developments within the gross fixed capital formation component and activity levels within the labour market. The forecast for growth in potential output for 2016 is of 4.5% and of 4.6% in 2017. To this effect the output gap is expected to remain positive in 2016, albeit lower in magnitude when compared to that recorded for 2015. The output gap is projected to close even further in 2017 but still remain slightly positive.

5. A comparative analysis of MFIN's macroeconomic projections presented in the DBP 2017

This section includes an analysis of the updated forecasts presented in the DBP 2017 by the MFIN and compares such forecasts to those which had been presented by MFIN in the USP in April 2016. Divergences between the two sets of estimates are highlighted and discussed in this section of the report. Furthermore, the updated forecasts presented by MFIN in the DBP 2017 are also compared to the forecasts prepared by the COM and the CBM. In view of the fact that different institutions produce forecasts at different points in time, discrepancies between the respective estimates could also be influenced by the level of information available at the set cut-off date for the relative forecasts. Table 3 provides data for the macroeconomic estimates published by the different institutions. Furthermore, Chart 4 and Chart 5 provide a graphical illustration of the differences in the estimated individual components of real GDP which are projected by these institutions for 2016 and 2017, respectively.

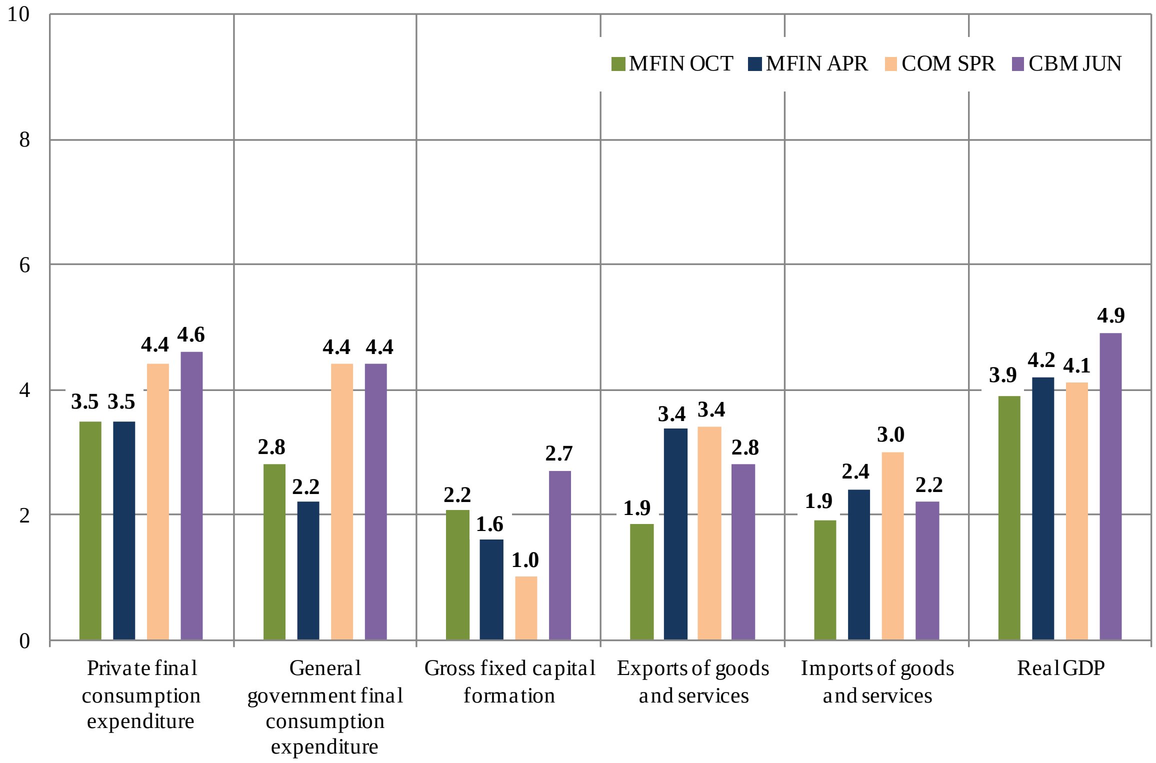
Table 3: Comparison of macroeconomic projections [15] (% Growth rates)

	2016				2017			
	MFIN OCT	MFIN APR	COM SPR	CBM JUN	MFIN OCT	MFIN APR	COM SPR	CBM JUN
At chain linked volumes by year (reference year 2010)								
Private final consumption expenditure	3.5	3.5	4.4	4.6	3.2	2.4	3.5	3.6
General government final consumption expenditure	2.8	2.2	4.4	4.4	5.9	5.1	7.2	6.2
Gross fixed capital formation	2.2	1.6	1.0	2.7	10.8	9.2	3.0	6.1
Exports of goods and services	1.9	3.4	3.4	2.8	2.8	3.0	4.0	3.0
Imports of goods and services	1.9	2.4	3.0	2.2	4.2	3.9	4.5	3.3
Real GDP	**3.9**	**4.2**	**4.1**	**4.9**	**3.5**	**3.1**	**3.5**	**4.2**
Contributions to real growth (percentage points) [16]								
Final domestic demand	3.0	2.6	3.4	3.9	5.4	4.0	3.9	4.4
Inventories	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net exports	0.1	1.6	0.8	1.0	-2.0	-0.9	-0.5	-0.1
Deflators								
Private final consumption expenditure	1.1	1.5	1.4	N/A	1.2	1.9	2.2	N/A
General government final consumption expenditure	1.1	1.8	N/A	N/A	1.2	2.0	N/A	N/A
Gross fixed capital formation	3.1	3.5	N/A	N/A	4.1	3.0	N/A	N/A
Exports of goods and services	1.0	0.1	N/A	N/A	1.2	1.3	N/A	N/A
Imports of goods and services	0.9	-0.2	N/A	N/A	1.1	1.2	N/A	N/A
GDP Deflator	**1.8**	**2.6**	**2.3**	**1.9**	**2.3**	**2.5**	**2.5**	**2.1**
Inflation rate								
Overall HICP	1.0	1.6	1.4	1.1	1.5	1.9	2.2	1.7
Labour market[17]								
Employment growth	3.3	2.7	2.9	3.4	2.7	2.7	2.7	2.9
Unemployment Rate	4.9	5.3	5.1	5.3	5.0	5.3	5.1	5.3
Compensation per employee	2.8	2.8	1.9	1.9	2.8	2.4	2.3	2.6

Sources: MFIN, CBM, COM

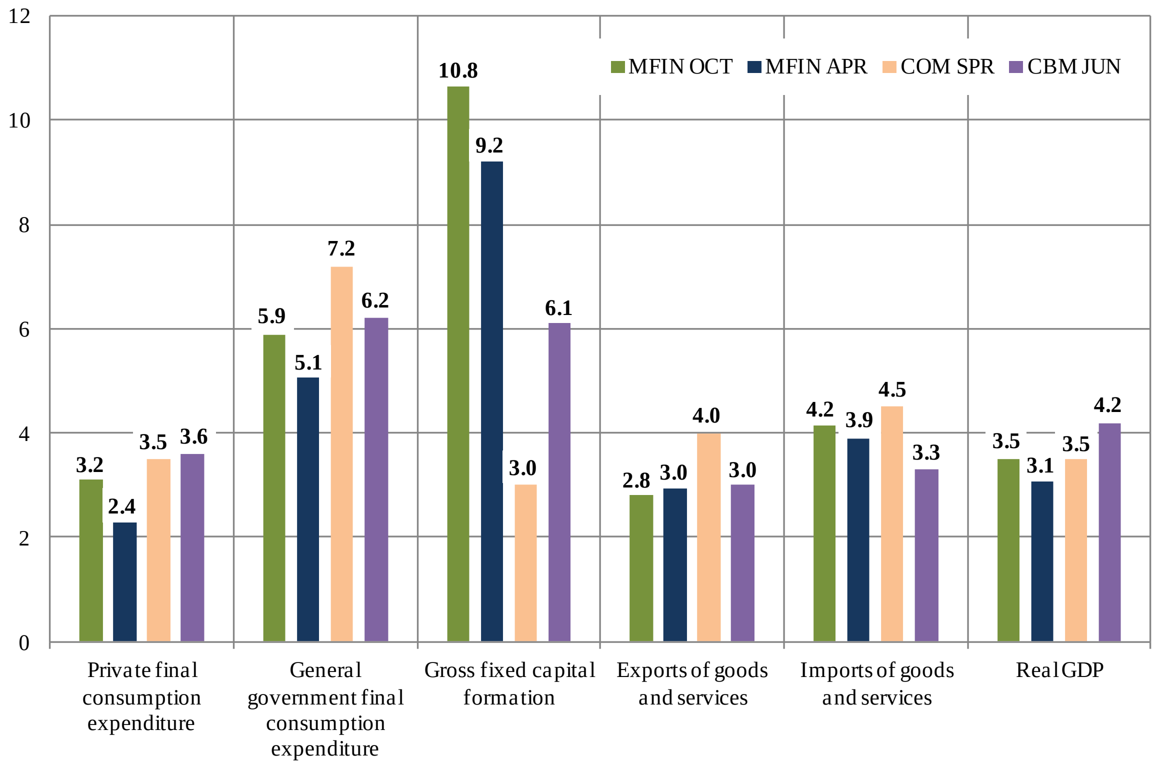
[15] Forecast estimates represent growth rates unless stated otherwise.
[16] Chain-linking by volumes gives rise to the contributions of GDP not adding up to the aggregate real GDP series.
[17] Figures for the labour market may not be directly comparable due to variation in definitions used by the particular institutions.

Chart 4: Comparison of % growth rates for selected macroeconomic variables for 2016 (chain linked volumes)



Sources: MFIN, CBM, COM

Chart 5: Comparison of % growth rates for selected macroeconomic variables for 2017 (chain linked volumes)



Sources: MFIN, CBM, COM

5.1 A comparison with the USP 2016-2019 (MFIN APR) macroeconomic forecasts

This section highlights differences between the macroeconomic forecasts prepared by the MFIN for years 2015 and 2016 in the USP (April 2016) and the updated estimates being provided in the DBP 2017. The main reasons underpinning such differences are also highlighted in this section. It is pertinent to note that the forecasts prepared by the MFIN within the USP 2016-2019 document prepared back in April 2016 do not include actualised data for the first half of 2016[18]. This contrasts to the DBP 2017 forecast which incorporates such actualised data. The following evaluation describes and assesses the main forecast revisions which were implemented by the MFIN since April 2016. The relevant MFIN projections for years 2016 and 2017 are also shown in Chart 4 and Chart 5 for ease of comparison.

The MFAC notes the downward revision in the headline real GDP figure between the two publications. The rate of growth of real GDP expected for 2016 has in fact been revised downwards from 4.2% to 3.9% indicating an overall less positive outlook for the year. This revision is mainly underpinned by a review of the expected performance of the external sector of the economy which is now being forecasted to barely contribute to GDP growth in comparison to the expected robust positive performance projected in the USP 2016-2019 document. In particular, the main diversion noted is within the real exports of goods and services component whereby the positive projection of 3.4% which had been projected in the USP of April 2016 has now been revised downwards to 1.9%, reflecting the slower pick up in the expected performance of Malta's main trading partners.

Assessing the individual expenditure components of GDP, one notes that notwithstanding the exceptionally high rate of real growth for 2015, an upward revision in the expected growth rate for gross fixed capital formation for 2016 is projected. General government consumption expenditure has also been marginally revised upwards within the current forecast, projecting a rate of growth for this variable at 2.8% in real terms compared to the expected increase of 2.2% projected in the USP 2016-2019[19]. The projected rate of growth for private consumption expenditure, which is expected to be the main driver of growth within the domestic demand component over 2016, has remained unchanged since the forecast of April 2016. In contrast, a slower rate of growth for the imports of goods and services component is now being projected for 2016 and this is to an extent explained by the expected slower 2016 growth rate in the exports of goods and services which have a high import content.

The revisions undertaken in the current forecast round reflect also the most recent available data for the various GDP aggregates for the first two quarters of 2016. The data shows that the contribution from the domestic demand sector of the economy remains strong and that variations within the external sector recorded over the course of the first six months of the year may indeed reflect the overall outcome for the full 2016 year. As is common in most revisions carried out, one notes significant variations in a number of deflators for the various

[18] The cut-off date for data used in the USP 2016-2019 (MFIN APR) document was of 23 March 2016.
[19] The budgetary implications of the general government consumption expenditure component will be assessed in a forthcoming report by the MFAC.

expenditure components. The structure of the forecasting methodology used by EPD implies that such revisions also partially condition the real expenditure components of GDP.

The MFAC notes little variation between the two forecast exercises in terms of the main variables leading to risks surrounding the actualization of the 2016 forecast estimates. One identifies risks associated to the materialization of the anticipated investments in both the private and the public sectors as well as risks related to the materialisation of the expected external sector developments in terms of its impact on the local economy.

The revisions undertaken in the forecasted values for 2017 are of a higher magnitude and for some of the variables reflect a change in direction to what was expected for 2017 in the MFIN USP 2016-2019 report. In particular, one notes an upward revision in real GDP growth from the 3.1% expected in April 2016 to the 3.5% projected in the DBP 2017. The higher GDP growth rate reflects a stronger domestic demand component in relation to the previous forecast. The revision in the domestic demand component more than offsets the larger negative contribution from the net exports sector to GDP growth. Thus, while still expecting domestic demand to be the prime contributor towards economic growth for 2017, the higher rates of growth expected for private consumption expenditure, general government consumption expenditure and gross fixed capital formation lead to an upward revision in the imports for goods and services component. The actualisation of the forecast for 2017 depends to a large extent on the ability of the private consumption expenditure variable to maintain its strong growth rate over the forecast years, as well as the degree of implementation of the planned investment projects. The developments in these two variables of expenditure are a main risk associated to the forecast for 2017.

The MFAC also notes a number of revisions in other variables of macroeconomic importance. In particular, the expected HICP value for 2016 is now projected to reach 1.0%, significantly lower from the 1.6% expected in April 2016. This revision partly reflects the expected fall in international oil prices for 2016 in relation to the values recorded for 2015. The forecast for the inflation measure for 2017 has also been revised downwards from the projected 1.9% in April 2016 to 1.5%. This view is more in line with the expectation of a fairly stable increase in overall prices over the full forecast horizon. The MFAC also notes some variations in the outlook for labour market indicators for both 2016 and 2017, with the main revisions occurring in year 2016. The variations for 2016 are mainly based on the most recent data available (second quarter of 2016) for some of the labour market indicators. Such data indicates a relatively strong performance of the labour market in general and thus the revisions in projections for years 2016 and 2017 are considered to be justified and in line with the most recent available data.

5.2 A comparison with the COM's latest macroeconomic forecasts

The official COM Spring 2016 forecast was presented in May 2016 and carries a cut-off date of 22 April 2016. In view of this, the data incorporated within the official Commission publication does not include data for the first two quarters of 2016. This contrast to the current MFIN forecast being presented in the DBP 2017 which includes actualised data for the first half of 2016. As a result, the two sets of forecasts are not strictly comparable given the differences in the databases used for forecasting purposes.

The latest COM publication projects a real GDP increase of 4.1% in 2016 and an increase of 3.5% for 2017. The rate projected for 2016 is below the actualised rate for 2015 of 6.2% implying an anticipated slight slowdown in the growth rate for economic activity for 2016. This is in line with the current MFIN projection for 2016, which also anticipates a positive rate of growth which is of a lower magnitude when compared to the rate recorded in 2015. Both institutions are projecting a rate of real GDP growth for 2017 at 3.5%. Data for the main components of the forecasts are presented in Table 3 of this report.

Both institutions expect the growth rate for 2016 to be positive but below the registered growth rate for 2015. A number of differences can be highlighted within the different categories which constitute real GDP. In particular, one notes that over 2016 the COM expects a marginally higher contribution to real GDP being generated from the domestic demand components. Further differences arise in the expected developments for 2016 in relation to the contribution of the external component to GDP, which is expected by the MFIN to still be positive, but to contribute significantly less to GDP growth than what the COM anticipates. Differences are also noted in the role of the inventory component. For 2017, one notes that both institutions expect the domestic demand component of the economy to be the main driver for growth. A negative contribution towards GDP growth is expected in 2017 from the net exports component by both institutions.

The data in Table 3 shows that whereas inventories are expected by MFIN to contribute a positive of 0.8 percentage point to GDP growth in 2016, the assumption of the COM is that there is no contribution from this component to GDP growth. It is important to note that this divergence arises from the variation in treatment between both institutions for the inventory component. The MFAC has been informed by the EPD that as from this forecast round the assumption taken for inventories for the current year is to hold the total figure for the year (2016 in this case) to the same level as provided by the published data to date. This implies that the inventory component level for the year 2016 is assumed to reach the level as at June 2016. The COM forecast does not include any data published for 2016 and thus the assumption in this case taken by the COM is to have an inventory component which does not contribute to GDP growth for 2016. The difference recorded between the expected contributions of the net export sector towards GDP growth arises from differences within the exports and imports of goods and services component. It is the view of the MFIN within the DBP 2017 that the growth in exports of goods and services will be less strong following the latest information available on Malta's main trading partners. Within this context, the lower growth rate in imports of goods and services also reflects the lower expectation for growth in exports of goods and services.

The COM projects a real GDP growth rate of 3.5% for 2017 and this is mainly attributable to the contribution from the domestic demand side of the economy. Domestic demand is forecasted to contribute 3.9 percentage points to GDP growth. The MFIN also project a positive and significant contribution from the domestic component of the economy which is higher at 5.4 percentage points when compared to the COM projection. The MFIN's higher contribution from the domestic demand component to GDP arises from a higher expectation for growth in gross fixed capital formation which more than offsets the lower expected growth for government consumption expenditure and private consumption expenditure.

The projection for investment and government consumption expenditure by MFIN is based on more recent information and this could partly explain the variation in the trajectory of the variables. The higher projection for investment growth in the MFIN figures also has an impact on the projection for imports of goods and services. In fact, the negative net exports contribution derived from the MFIN figures is larger in magnitude when compared to that expected by the COM. One also notes differences in the projected exports of goods and services category, whereby the MFIN projects a lower rate of growth in comparison to the COM forecasts. Such a lower growth rate is based on revised assumptions reflecting the performance of trading partners for the Maltese economy.

The forecast for inflation, as measured by the HICP, for 2016 by the COM stands at 1.4%. This is slightly higher when compared to the expected rate projected by MFIN (1.0%) and also reflects an increase from the previous year's actualized rate of 1.2%. Whereas the COM expects the inflation rate to pick up slightly in 2016 when compared to the 2015 rate, the MFIN is projecting the rate to fall slightly from the 2015 level. The MFIN's lower expectation for inflation is based on the latest available data for the first months of the year. For 2017, both institutions expect a pick up in the inflation rate, whereby the COM is forecasting the rate to hover around the 2.0% mark whilst the MFIN projects a rate of 1.5%.

The same sentiment is shared by both institutions in terms of the employment prospects for 2016 in comparison to 2015. Both institutions expect employment growth to increase by around 3% and to increase even further in 2017, by roughly the same percentage. It is important to highlight that due to the differences in the definitions used by the two institutions, the direct comparability of the two sets of numbers is not strictly possible and thus should be done with caution. The unemployment rates forecasted by both institutions also point to the same direction for 2016, with the rate being forecasted by the COM to fall from 5.4% in 2015 to 5.1% and by the MFIN to reach 4.9%. For 2017, whilst the unemployment rate is forecasted by the COM to be maintained at the 2016 level, the MFIN is projecting a slight pick up in the rate of unemployment from 4.9% to 5.0% as the labour force participation is expected to grow marginally in excess of the growth in employment. The trajectory for this important indicator of economic activity reflects recent and ongoing labour market policies of the Government.

5.3 A comparison with the CBM's latest macroeconomic forecasts

The forecast estimates prepared by the CBM, illustrated in Table 3, carry a cut-off date of 18 May 2016. This implies that the forecast exercise undertaken by the CBM does not include national accounts data published by the NSO for 2016. Discrepancies between the two sets of forecast estimates prepared by MFIN and by the CBM may thus be partly explained by the fact that they have been based on information available at different points in time. The relevant projections estimated by the CBM for 2016 and 2017 are illustrated in Chart 4 and Chart 5 respectively.

The CBM's latest macroeconomic forecasts, in parallel to the forecasts generated by the MFIN, expect the Maltese economy to continue to expand in real terms over 2016 and 2017, but at a more moderate pace than the exceptional growth registered for 2015. The CBM expects real GDP to increase by 4.9% over 2016 and subsequently grow at the marginally slower pace of 4.2% over 2017. Compared to the MFIN projections in its latest forecasting round, the CBM expects the economy to grow at a faster pace over both 2016 and 2017. Over the forecast horizon both institutions anticipate that the main driver of real GDP growth will be the final domestic demand component.

The CBM anticipates that private final consumption expenditure will maintain its strong positive contribution towards economic growth during the projection horizon, supported by a continued, but moderating, growth in real disposable income. Compared to the forecast estimates presented by MFIN, the CBM projects a moderately faster rate of expansion of private final consumption expenditure over both 2016 and 2017. In particular over 2016 the CBM expects this component to grow by 1.1 percentage points faster than the estimate projected by MFIN, at a rate of growth of 4.6%. The more subdued rate of growth of 3.6% projected by the CBM over 2017 follows the same path also expected by MFIN, which anticipates a growth rate of 3.2%. Both institutions therefore expect this component of aggregate demand to remain robust and continue to contribute significantly to real GDP growth.

The CBM expects real government consumption to marginally slow down, following the rise of 4.6% in 2015, and expand by 4.4% over 2016 and to thereafter accelerate by 6.2% in 2017. Both institutions are expecting a deceleration in growth for 2016 compared to the rates registered for 2015, with the MFIN projecting a much larger decelration to 2,8%. The projected acceleration in growth of this component over 2017 by both institutions is also relatively similar, with the MFIN anticipating a more moderate expansion of 5.9% compared to the 6.2% of the CBM. The discrepancies between the MFIN's and the CBM'S projections may be in part explained by the fact that the MFIN's estimates reflect more updated information which is in line with the government's fiscal consolidation plan within the DBP 2017.

Following the extraordinary growth in gross fixed capital formation observed over 2015 the CBM expects a sharp deceleration in growth over 2016 followed by a pick-up in 2017 brought about by positive expected developments in other components of final domestic demand. Over 2016 the CBM projects a faster rate of growth, at 2.7% compared to the 2.2% rate of growth expected by the MFIN, whilst over 2017 the CBM anticipates a positive, but nonetheless more moderate rate of growth of 6.1% in contrast to the 10.8% rate of growth forecasted by the MFIN. Differences in the developments for this component may in part be explained by the discrepancy in cut-off dates between the two forecast exercises which also implies divergences in terms of the latest available information incorporated within each forecast. In view of these developments, divergences emerge between the two institutions in relation to the expected contribution of the final domestic demand component to real GDP growth for both 2016 and 2017. Over 2016 the contribution of this component to real GDP growth by the CBM is anticipated to be greater, by 0.9 percentage point, than that projected by the MFIN. On the other hand, for 2017, it is the MFIN which is projecting a marginally higher contribution to real GDP growth by this component, at 5.4 percentage points, compared to the contribution to real GDP growth of 4.4 percentage points anticipated by the CBM.

The expected composition of final domestic demand by the two institutions also influences the anticipated developments in the overall net export sector contribution to GDP growth. Over 2016, the CBM is projecting a positive contribution to real GDP growth from the external sector of the economy amounting to 1.0 percentage point. The MFIN is also anticipating a positive contribution generated from this component, but one which is marginal, at 0.1 percentage point. This discrepancy is to an extent underpinned by the fact that although both institutions anticipate positive growth in the exports of goods and services, the CBM anticipates this expansion to be more robust. Over 2017, the CBM is projecting relatively no contribution to growth from the external sector, at -0.1 percentage point, whilst on the other hand the MFIN is anticipating a negative contribution amounting to -2.0 percentage points, which partly reflects the higher import content associated to the projected developments in gross fixed capital formation by the MFIN.

It should be noted that a discrepancy is also present in relation to the contribution to real GDP growth stemming from changes in inventories over 2016. The MFIN has estimated that this component will generate a positive contribution to real GDP growth amounting to 0.8 percentage point, whilst the CBM, as per their past forecast exercises, assume that this component does not contribute to real GDP growth over the forecast horizon. Over 2017, both institutions assume a zero contribution to real GDP growth materializing from this component.

Both institutions expect the inflation rate to accelerate at roughly the same pace over 2016, at approximately the 1.0% mark, and to subsequently marginally gain pace over 2017. The CBM projects the inflation rate to grow by 1.7% over 2017 whilst the MFIN anticipates the inflation rate to expand by a more subdued rate of 1.5%. Although developments within the labour market may not be directly comparable due to the different definitions used, one notes a very similar trajectory for employment growth and unemployment rates for both institutions. Over 2016, the MFIN as well as the CBM expect employment growth to roughly maintain the same momentum observed in 2015 and expand at around 3.3%. Both institutions also anticipate a marginal deceleration in employment growth over 2017. The unemployment rates forecasted by both institutions, for both 2016 and 2017, are expected to remain well below the expected overall EU average. Over the forecast horizon the CBM is anticipating a marginally higher unemployment rate of 5.3% compared to MFIN, which is projecting the unemployment rate to remain at 5.0%. This divergence may in part be explained by the more up to date labour market statistics incorporated in MFIN’s forecasting exercise.

6. Conclusion

This report recognizes that on the basis of the information available to date, the headline figures presented by the MFIN for nominal and real GDP for years 2016 and 2017 are indeed feasible and achievable. Whilst noting that there are differences between the expected growth rates for GDP and its components between different institutions providing forecast estimates for Malta, it is reassuring for the MFAC that a certain degree of similarity exits between the institutions for the expected trajectory of GDP growth over the years under consideration. It is recognised by all institutions that the exceptional rates recorded for GDP growth in 2015 will not be repeated for 2016 and 2017 and that the economy will evolve at more subdued real growth rates ranging between three and four per cent. Within this context, the MFAC's assessment acknowledges a number of risks to the current forecasts. Some components of GDP are more volatile than others, particularly the gross fixed capital formation component and the net exports component. Variations in the underpinnings of these components, particularly developments within the international economy, can lead to significant variations from the expected forecasts published in the DBP 2017.

The MFAC positively welcomes the structured and well documented process adopted by the EPD in the preparation of the forecast values. It is also welcome to note that the EPD is engaging in a continual process of updating and fine tuning of its current forecasting methodologies. Such improvement helps to ensure that the econometric methods applied within the modelling exercise produce more realistic forecasts which reflect the main interlinkages and developments occurring within the Maltese economy. As noted in previous assessments published by the MFAC, the practice adopted by the EPD to internalise within the modelling structure the view of international reputable organisations helps to reduce some of the uncertainly which inevitably surrounds the overall forecast estimate. It is within this context that the MFAC deems the forecasting framework and the methodology applied within this framework as sound and in line with the concepts of prudence and good practice.

As noted by the MFAC in the previous publication assessing Government's DBP for 2016, the alignment of the Government's Semester to the European Semester has resulted in shifting forward the DBP exercise by a number of weeks. Whilst appreciating the effort and dedication of the staff at the MFIN and of those entities which provide direct input to the forecasting exercise, the MFAC would like to encourage further improvement in the streamlining and overall coordination of the whole forecast exercise so as to cater more adequately for this alignment to the timeline. The macroeconomic forecasts prepared by the MFIN serve as very important inputs in the preparation of other government official documents and such forecasts are a base for a number of other documents prepared by various official entities. It is in this regard that the MFAC would like to stress the importance of ensuring that the final round of forecasts and all information pertinent to the relative analysis are made available to the users with enough lead time to enable the smooth undertaking of the required analysis. Better co-ordination between the various units responsible for the preparation of the forecasts would be desirable towards this end so as to avoid undue pressures to meet the deadlines set by the European Semester.

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