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**PRODUCTIVITY AND STABILITY FOR SUSTAINABLE GROWTH**  68

*Dr Mario Vella*

*Governor of the Central Bank of Malta*

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**ABBREVIATIONS**

ECB European Central Bank
EONIA Euro OverNight Index Average
ESA 95 European System of Accounts 1995
ESA 2010 European System of Accounts 2010
ESCB European System of Central Banks
EU European Union
EURIBOR Euro Interbank Offered Rate
FTSE Financial Times Stock Exchange
GDP gross domestic product
HCI harmonised competitiveness indicator
HICP Harmonised Index of Consumer Prices
IBRD International Bank for Reconstruction and Development
IC insurance corporation
IF investment fund
IMF International Monetary Fund
LFS Labour Force Survey
LTRO longer-term refinancing operation
MFI monetary financial institution
MFSA Malta Financial Services Authority
MGS Malta Government Stocks
MIGA Multilateral Investment Guarantee Agency
MRO main refinancing operation
MSE Malta Stock Exchange
NACE statistical classification of economic activities in the European Community
NCB national central bank
NPISH Non-Profit Institutions Serving Households
NSO National Statistics Office
OECD Organisation for Economic Co-operation and Development
OMFI other monetary financial institution
OMT Outright Monetary Transaction
RPI Retail Price Index
SPE Special Purpose Entity
ULC unit labour cost
FOREWORD

During the third quarter of 2016, the Maltese economy was one of the fastest growing countries amongst the euro area member states, with real gross domestic product (GDP) increasing by 3.0% on an annual basis, following a 3.4% increase in the previous quarter. Economic growth in Malta, which was almost double the rate observed in the euro area, was primarily supported by net exports. Labour market conditions remained dynamic, reflecting government efforts to increase labour market participation as well as the robust pace of expansion of the domestic economy. This in turn contributed to faster growth in private consumption.

While still above the euro area’s 0.4%, inflation in Malta remains low from a historical perspective. Inflation, measured by the Harmonised Index of Consumer Prices (HICP) stood at 0.9% in September, down from 1.0% in June. The marginal drop in inflation reflected developments in the prices of services as well as those of non-energy industrial goods (NEIG) and processed food. Downward pressures on domestic costs eased, with the producer price index (PPI) in September unchanged from a year earlier. On the other hand, Malta’s competitiveness declined on the basis of the Harmonised Competitiveness Indicators (HCI) and unit labour costs, with the latter rising at a faster pace during the quarter under review.

Monetary dynamics remained robust. Residents’ deposits with monetary financial institutions (MFIs) operating in Malta continued to grow steadily on an annual basis. In an environment of low interest rates and a preference for liquid assets, the shift to overnight deposits persisted.

Against a background of moderate growth and subdued price pressures, the Governing Council of the European Central Bank (ECB) maintained an accommodative monetary policy stance. During the quarter under review, the interest rate on main refinancing operations (MRO), marginal lending facility and marginal deposit facility were kept at 0.00%, 0.25% and -0.40%, respectively. Additionally, the ECB confirmed that the monthly asset purchases of €80 billion under the asset purchases programme (APP) will run until the end of March 2017, or beyond, if necessary.1

Against this backdrop, interest rates on deposits and loans to Maltese residents continued to fall during the period. Treasury bill yields and longer-term government bond yields also declined further. In the equity market, domestic share prices remained relatively stable, following a decline during the previous quarter.

In terms of public finances, during the third quarter of 2016, the general government deficit narrowed on the same period of 2015, as higher revenues and lower capital expenditure offset an increase in recurrent expenditure. When measured on a four-quarter moving sum basis, the balance showed a surplus equivalent to 0.6% of GDP, up from 0.4% in the second quarter. The debt-to-GDP ratio reached a low of 60.4% of GDP during the review period.

According to the latest Bank’s projections, which were published in December, the Maltese economy is set to maintain a robust pace of expansion, although growth is set to moderate over the forecast horizon. On the other hand, in line with higher expected international oil prices as well as

1 In December, the Governing Council announced that these purchases will subsequently proceed at a reduced monthly pace of €60 billion, and will continue at least until December 2017.
the expected evolution of domestic cost pressures, the inflation rate is expected to pick-up over the forecast horizon.

According to the Eurosystem staff projections published in December, the euro area recovery is set to continue and to be broad-based across all Member States, with growth remaining stable in 2017, before dipping slightly in 2018 and 2019, while inflation is expected to rise gradually to 1.7% by 2019.
1. THE EURO AREA AND THE EXTERNAL ENVIRONMENT

In the third quarter, growth in real Gross Domestic Product (GDP) in the United States accelerated, while it stabilised in the euro area and in the United Kingdom. Unemployment rates in these economies were broadly stable or edged down marginally.

Price pressures remained moderate, with annual consumer price inflation in the euro area remaining low at 0.4% in September, while the United Kingdom and the United States registered rates of 1.0% and 1.5%, respectively. In this environment, the Federal Reserve and the European Central Bank (ECB) maintained their accommodative monetary policy stance unchanged during the quarter reviewed. On the other hand, the Bank of England approved a package of measures to stimulate economic activity as a response to the referendum vote to leave the European Union.

Meanwhile, Brent oil prices rose between June and September, driven by the possibility of an agreement among oil-producing countries to restrict supply.

Key advanced economies

US economic growth picks up in the third quarter
The US economy grew at a robust pace in the third quarter of 2016. Real GDP rose by 0.9% on a quarter-on-quarter basis, broadly twice as fast as in the previous quarter (see Table 1.1). This growth rate is the highest recorded since 2014.

The faster rate of economic expansion during the third quarter partly reflected increases in private sector inventories. At the same time, export growth accelerated strongly, while government spending, which had contracted in the second quarter, rose marginally. In contrast, personal consumption expenditure grew at a slower rate when compared to the second quarter. Import growth picked up slightly, and thus had a stronger dampening effect on activity.

US labour market conditions improved slightly during the third quarter. The participation rate edged up, from 62.7% in the second quarter to 62.8%. At the same time, the year-on-year rate of employment growth improved by 0.2 percentage points, to reach 1.8%. The unemployment rate remained broadly unchanged at 4.9% during the quarter reviewed (see Chart 1.1).

<table>
<thead>
<tr>
<th>Table 1.1</th>
<th>REAL GDP GROWTH IN SELECTED ADVANCED ECONOMIES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quarterly percentage changes; seasonally and working day adjusted</td>
</tr>
<tr>
<td></td>
<td>Q1</td>
</tr>
<tr>
<td>United States</td>
<td>0.5</td>
</tr>
<tr>
<td>Euro area</td>
<td>0.8</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Sources: Bureau of Economic Analysis, US; Eurostat; Office for National Statistics, UK.
Payroll data indicate that the acceleration in employment was driven by faster growth in the number of government employees. In contrast, the number of employees in private services and construction grew at a slower pace when compared to the second quarter, while those in manufacturing declined at a faster pace.

The annual rate of change of the US consumer price index (CPI) increased from 1.0% in June to 1.5% in September (see Chart 1.2). This pick-up in inflation was driven by energy prices, which declined at a much slower rate than before, broadly reflecting movements in international oil prices. This offset movements in food price inflation, which turned negative at the end of the quarter. Inflation excluding food and energy, at 2.2%, was unchanged from June.

The Federal Reserve maintained its accommodative monetary policy stance in the third quarter, keeping the target range of the federal funds rate unchanged between 0.25% and 0.50% (see Chart 1.3). It also decided to maintain its policy of reinvesting principal payments from its agency debt and agency mortgage-backed security holdings acquired through its quantitative easing programmes in agency mortgage-backed securities. The Federal Reserve also continued rolling over maturing Treasury securities at auction.

In September, the Federal Open Market Committee (FOMC)
indicated that the labour market and the pace of economic activity continued to strengthen compared with the first half of the year. On the other hand, inflation remained below the 2% target, held down in part by lower non-energy import prices and the pass-through of earlier declines in energy prices to prices of goods and services. While inflation was expected to remain low in the near term, it was still expected to rise to 2% over the medium term. Although the case for an increase in the federal funds rate strengthened, the FOMC preferred to wait for firmer signs of continued progress towards its objectives of maximum employment and 2% inflation. The Committee added that any increases in the federal funds rate were expected to be gradual.¹

**UK economic growth slows down**

In the third quarter, GDP growth in the United Kingdom, at 0.6%, remained unchanged compared with the previous three months (see Table 1.1). Faster growth in the services sector was offset by a steeper contraction in construction while the production sector, which had expanded in the second quarter, also recorded a decline in activity. The UK’s unemployment rate averaged 5.0% between July and September, unchanged from the average of the second quarter (see Chart 1.1).

Consumer price inflation increased in the third quarter. The annual rate of change of the CPI reached 1.0% in September, up from 0.5% in June (see Chart 1.2). This was because the prices of food, energy and non-energy industrial goods fell at a slower annual rate than before. In contrast, the rate of increase in the prices of services slowed down. Inflation excluding energy and food rose marginally over the quarter, standing at 1.5% in September.

In August, the Bank of England’s Monetary Policy Committee approved a package of measures as a response to the weaker economic outlook resulting from the UK electorate’s vote to leave the EU. The package included a cut in the Bank rate, to 0.25% (see Chart 1.3). It also included a new Term Funding Scheme, to provide funding to banks at interest rates close to the Bank rate, with the aim of ensuring that the cut in the Bank rate is transmitted to households and businesses. In addition, the Committee announced purchases of £60 billion worth of government bonds and up to £10 billion worth of UK corporate bonds, taking the total stock of these asset purchases to £435 billion. During its September meeting, the MPC kept the Bank rate unchanged and affirmed the continuation of the aforementioned purchases, adding that their initial impact was encouraging.

**The euro area**

**Economic activity in the euro area continues to grow moderately**

In the third quarter, the euro area economy expanded at a pace that was similar to that recorded during the second quarter, extending the recovery that began in 2013. Quarter-on-quarter real GDP growth remained constant at 0.3% during the quarter under review (see Table 1.2).

Domestic demand was the main driver behind growth in the third quarter, led by private consumption expenditure, which pushed up real GDP growth by 0.2 percentage point, as well as by government expenditure and changes in inventories, which together contributed a further 0.2 points (see Table 1.2). On the other hand, higher spending on gross fixed capital formation had a negligible impact on economic activity.

¹ This assessment was broadly confirmed at the FOMC’s November meeting. In December, given the positive signals from the labour market and economic activity in general, as well as the pick-up in inflation, the FOMC agreed to increase the target range of the federal funds rate from 0.5% to 0.75%.
Net exports contributed negatively to real GDP growth, as imports grew at a marginally faster pace than exports. In fact, imports reduced GDP growth by 0.1 percentage point off economic activity, while exports had a broadly neutral effect.

**Inflation picks up**

The annual rate of inflation in the euro area, measured on the basis of the Harmonised Index of Consumer Prices (HICP), picked-up during the third quarter of 2016. The inflation rate, which stood at 0.1% in June, rose to 0.4% in September.

This increase was driven by a smaller annual drop in energy prices, following the rebound in international oil prices (see Chart 1.4). The prices of unprocessed food and services continued to increase at the same rate recorded in June. On the other hand, in September prices of processed food and non-energy industrial goods increased at a slower pace when compared to three months previously.

Indeed, HICP inflation excluding food and energy slowed down marginally over the third quarter. In September, annual inflation on this basis stood at 0.8%, down from 0.9% in June, reflecting developments in the prices of non-energy industrial goods.

**Labour market recovers further**

Labour market conditions continued to improve over the third quarter of 2016, with the unemployment rate in the euro area decreasing to 9.9% in September, from 10.1% in June and from 10.6% a year earlier (see Chart 1.1).
Eurosystem staff projections show recovery is expected to continue

According to the Eurosystem staff’s macroeconomic projections published in December, economic activity in the euro area is expected to continue with its recovery. The expansion should be supported by the ECB’s very accommodative monetary policy stance, improving labour market conditions as well as recent progress with deleveraging. Real GDP is set to grow by 1.7% in 2016 and 2017, with growth moderating slightly to 1.6% in 2018 and 2019 (see Table 1.3).

Compared to the ECB staff projections released in September, GDP growth is expected to remain unchanged in 2016 and 2018, but has been revised up by 0.1 percentage point in 2017.

The projected recovery in the euro area is expected to be driven by domestic demand. Private consumption is projected to increase at a slightly more moderate pace than that expected for 2016. This growth should be supported by improved labour market conditions, especially wages and salaries. Additionally, easier bank lending conditions should support lending to the private sector. Private consumption is also set to benefit from the recovery in house prices and progress achieved with deleveraging.

Investment is also expected to contribute to euro area growth. Housing investment is expected to benefit from an expected acceleration in nominal disposable income, low mortgage interest rates and limited other investment opportunities. Business investment is projected to grow steadily, as it responds to supportive financial conditions, strong demand, an expected increase in profit mark-ups and relatively high capacity utilisation. With regards to the external side, exports are projected to accelerate over the forecasted period, broadly in line with foreign demand, leading to a gradual improvement in the contribution of net exports.

The recovery in economic activity is expected to remain broad-based across the euro area, with real GDP expanding across all Member States (see Chart 1.5). However, the average growth rates over the 2016 and 2019 are projected to be quite diverse, ranging from a low of 1.0% in Italy to 3.9% in Malta.

HICP inflation is expected to average 0.2% in 2016 and to accelerate to 1.3%, 1.5% and 1.7% in 2017, 2018 and 2019, respectively. The acceleration in inflation between 2016 and 2017 largely reflects the expected increase in international oil prices. Inflation should also be supported by

![Table 1.3](#)

**MACROECONOMIC PROJECTIONS FOR THE EURO AREA**

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>1.7</td>
<td>1.7</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Private consumption</td>
<td>1.7</td>
<td>1.5</td>
<td>1.5</td>
<td>1.4</td>
</tr>
<tr>
<td>Government consumption</td>
<td>2.0</td>
<td>1.3</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Gross fixed capital formation</td>
<td>3.0</td>
<td>3.1</td>
<td>3.1</td>
<td>2.7</td>
</tr>
<tr>
<td>Exports</td>
<td>2.7</td>
<td>3.7</td>
<td>3.9</td>
<td>4.0</td>
</tr>
<tr>
<td>Imports</td>
<td>3.3</td>
<td>4.1</td>
<td>4.3</td>
<td>4.1</td>
</tr>
<tr>
<td>HICP</td>
<td>0.2</td>
<td>1.3</td>
<td>1.5</td>
<td>1.7</td>
</tr>
</tbody>
</table>

(1) Eurosystem staff macroeconomic projections (December 2016).
Source: ECB.

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Information on euro area country projections was updated on 30 December 2016.
improving labour market conditions, higher profit margins and further economic growth. Compared with the previous projection exercise, the inflation outlook has been left unchanged for 2016, revised slightly upwards for 2017 and revised slightly downwards in 2018.

From a cross-country perspective, inflation is expected to accelerate in all euro area countries over the projection horizon (see Chart 1.6). Estonia is expected to record the highest average annual inflation rate, at 2.2%, while the lowest average inflation rate over the projection horizon is expected in Cyprus, with 0.7%. Inflation in Malta is set to average 1.5% over the same period, slightly above the average of 1.2% for the euro area as a whole.

**ECB maintains its accommodative monetary policy stance**

The ECB’s Governing Council maintained an accommodative monetary policy during the third quarter of 2016. The key interest rates were kept constant during the quarter, with the interest rate on main refinancing operations (MRO), marginal lending facility and deposit facility standing at 0.00%, 0.25% and -0.40%, respectively (see Chart 1.3). The Council expects these rates to remain at current or lower levels for an extended period of time, and well past the horizon of the net asset purchases.

During the quarter under review, the ECB continued with the implementation of the comprehensive package of non-standard measures. The Governing Council also confirmed that the monthly asset purchases under the asset purchase programme (APP), which started in April and which reach €80 billion, are intended to run until the end of March 2017, or beyond, if necessary.³

³ The Governing Council kept the key interest rates unchanged during its October and December meetings. In December, the Council announced that asset purchases will continue with the current pace up to March 2017, but will then proceed with a reduced monthly pace to €60 billion until at least December 2017.
Money market rates at historical lows

In the light of the accommodative monetary policy by the ECB during the third quarter of 2016, money market rates declined further in negative territory, with all benchmark rates attaining new historic lows. The EONIA deposit rate stood at -0.34% in September, down from -0.33% in June (see Chart 1.7).\(^4\) Meanwhile, the three-month and twelve-month EURIBOR lost 3 basis points each during the third quarter and stood at -0.30% and -0.06%, respectively, in September.

Bond yield spreads narrow

Yields on ten-year benchmark government bonds in the euro area generally declined in the third quarter of 2016. These declines were particularly pronounced in Spain and Ireland (around 40 basis points). Yields also fell in Italy and France (by around 20 basis points), although yields remained positive in all four countries. Yields also fell in Germany, where the ten-year yield stood at -0.09% in September, down from -0.02% in June. In contrast, the ten-year yield rose in Greece and Portugal.

The spreads between yields on ten-year German bonds and those issued by most other euro area sovereign narrowed over the review period, particularly for Spanish and Irish government bonds (see Chart 1.8). In contrast, the increase in the Portuguese and Greek yields resulted in their spreads against German bonds to widen.

The euro appreciates

The euro exchange rate appreciated over the third quarter with the nominal effective

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\(^4\) EURIBOR is an interest rate benchmark indicating the average rate at which principal European banks lend unsecured funds on the interbank market in euro for a given period. The EONIA (Euro OverNight Index Average) is an effective overnight interest rate, measured as the weighted average of all overnight unsecured lending transactions on the euro area interbank market.
The exchange rate against the EER-19 group of countries rising by 0.4% between end-June and end-September.\footnote{This measure, the effective exchange rate (EER), is based on the weighted averages of the euro exchange rate against the currencies of Australia, Bulgaria, Canada, China, Croatia, Czech Republic, Denmark, Hong Kong, Hungary, Japan, Norway, Poland, Romania, Singapore, South Korea, Sweden, Switzerland, the United Kingdom and the United States.}

The euro’s developments in nominal effective terms mask some heterogeneity in bilateral movements against major currencies (see Chart 1.9). The euro appreciated strongly against the pound sterling over the third quarter, standing 4.2% higher at the end of September when compared to the end of June. This increase reflected heightened uncertainty after the outcome of the UK’s referendum. Conversely, the euro depreciated slightly against the US dollar as it declined by 0.2%. It also weakened against a number of emerging economy currencies.

**Commodities**

*Oil prices increased while non-energy commodities fell*

The price of Brent crude oil edged up slightly in the third quarter. Although the price of oil dropped during July, amid fears of an oversupplied market, this decline was reversed in August in anticipation of cuts in production by the world’s largest oil producing countries, including those which form part of the Organization of the Petroleum Exporting Countries (OPEC). At the end of the quarter, the price stood at USD 48.64 per barrel, marking a 2.4% gain since the end of June (see Chart 1.10).

As regards non-energy commodity prices, World Bank data show that these decreased during the third quarter. This was mainly driven by a fall in food prices and, to a lesser extent, in the prices of agricultural raw materials. These movements offset an increase in the cost of metals and minerals (including precious metals).
2. OUTPUT AND EMPLOYMENT

Economic activity in Malta continued to grow strongly during the third quarter of 2016, although the rate of expansion eased compared with the second quarter. Growth in real gross domestic product (GDP) was supported entirely by net exports, as domestic demand declined on a year earlier. In nominal terms, sectoral data show that services remained the main driver of growth, though the sector comprising manufacturing and utilities also contributed. On the other hand, gross value added (GVA) in construction and in agriculture fell when compared with the same quarter of 2015. Employment continued to increase, while the unemployment rate decreased further.

GDP and industrial production

Economic growth moderated, but remained robust

The Maltese economy continued to grow robustly during the third quarter of 2016, with real GDP rising by 3.0% on a year earlier, compared to a slightly stronger rise of 3.4% in the previous quarter. Economic growth was primarily driven by net exports (see Table 2.1). On the other hand, domestic demand pushed down real GDP considerably, as declines in investment and government consumption offset increases in private consumption expenditure and changes in inventories.

Private consumption growth accelerated to 3.1% in the quarter under review, from 2.2% in the previous quarter, reflecting faster growth in estimated disposable income. This component

Table 2.1
GROSS DOMESTIC PRODUCT(1)

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>Private final consumption expenditure</td>
<td>6.9</td>
<td>7.2</td>
</tr>
<tr>
<td>Government final consumption expenditure</td>
<td>-0.8</td>
<td>11.2</td>
</tr>
<tr>
<td>Gross fixed capital formation</td>
<td>78.9</td>
<td>37.0</td>
</tr>
<tr>
<td>Domestic demand</td>
<td>21.1</td>
<td>9.4</td>
</tr>
<tr>
<td>Exports of goods and services</td>
<td>5.4</td>
<td>5.5</td>
</tr>
<tr>
<td>Imports of goods and services</td>
<td>13.4</td>
<td>7.0</td>
</tr>
<tr>
<td>Gross domestic product</td>
<td>7.3</td>
<td>7.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Annual percentage changes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>Private final consumption expenditure</td>
<td>3.4</td>
</tr>
<tr>
<td>Government final consumption expenditure</td>
<td>-0.1</td>
</tr>
<tr>
<td>Gross fixed capital formation</td>
<td>11.8</td>
</tr>
<tr>
<td>Changes in inventories</td>
<td>1.4</td>
</tr>
<tr>
<td>Domestic demand</td>
<td>16.5</td>
</tr>
<tr>
<td>Exports of goods and services</td>
<td>8.0</td>
</tr>
<tr>
<td>Imports of goods and services</td>
<td>-17.2</td>
</tr>
<tr>
<td>Net exports</td>
<td>-9.2</td>
</tr>
<tr>
<td>Gross domestic product</td>
<td>7.3</td>
</tr>
</tbody>
</table>

(1) Chain-linked volumes, reference year 2010.
Sources: NSO; Central Bank of Malta calculations.

1 The analysis of GDP in this Chapter of the Quarterly Review is based on data in NSO News Release 199/2016, released on 7 December 2016.
contributed 1.5 percentage points to real GDP growth. In nominal terms, consumption expenditure rose across most categories. Spending on clothing and footwear, housing and utilities, as well as health, recorded the strongest increases in annual terms. Developments in these expenditure categories also explain the faster growth in private consumption in the third quarter.

Gross fixed capital formation contracted sharply during the review period, falling by 22.3% on an annual basis, from extremely high levels a year earlier. This followed a decline of 2.7% in the previous quarter. The contraction was driven by a strong decline in investment in machinery and equipment as well as in non-residential construction. On the other hand, investment in dwellings and in intellectual property increased further. Nominal data suggest that the annual decline in investment stemmed from both the private and public sector. Investment in the private sector continued to be affected by the timing of capital outlays in energy and aviation, which were substantial in the third quarter of 2015. At the same time, government investment was partly held down by the initially low uptake of EU funds under the current financial programme. In contrast, a year earlier, government investment was extremely strong, as projects part-financed by the EU 2007-2013 programme reached completion.

In the third quarter, government consumption decreased by 7.3% compared with the same period of 2015, lowering real GDP growth by 1.1 percentage points. In nominal terms, the two principal components of government consumption – intermediate consumption and compensation of employees – both went up on an annual basis. These increases were outweighed by higher sales, which are netted against expenditure in the national accounts. In turn, this increase in sales was largely propelled by inflows under the Individual Investor Programme (IIP).

Exports resumed growth during the third quarter of 2016, rising by 0.3% after having declined by 0.4% in the previous quarter. The recovery reflected faster growth in services and a slower decline in goods.

Imports continued to decline, shedding 5.7% in annual terms, following a contraction of 1.6% in the second quarter. The decline was driven by trade in goods, which contracted at a sharper pace compared with the second quarter, partly reflecting the steep fall in investment, which has high import content. Conversely, imports of services increased at a faster pace compared with the second quarter.

As exports increased and imports declined, the net trade component added 7.9 percentage points to GDP growth.

**Nominal GDP growth moderates further**
In nominal terms, GDP rose at an annual rate of 4.7% in the third quarter, down from 5.1% in the second (see Table 2.2).

This deceleration mirrored that in GVA, which increased by 4.7% on the corresponding quarter of 2015, a slight decrease from 4.9% in the second quarter.²

Services remained the main driver behind this expansion, contributing 3.9 percentage points to nominal GDP growth. In turn, there were major contributions to growth from the sector containing

² The difference between nominal GDP and GVA is made up of taxes on production, net of subsidies.
public administration, followed by the sector incorporating arts and entertainment as well as that including the professional and scientific sectors. Together these sectors contributed 2.7 percentage points to nominal GDP growth.

While services remained the main driver of economic activity, their contribution decreased compared with the previous quarter, largely reflecting developments in the sector incorporating wholesale and retail trade and in the sector comprising financial and insurance activities. Most other services sectors maintained a similar rate of expansion to that in the second quarter or rose at an even faster pace.

GVA in the manufacturing sector also grew at a faster rate when compared to the previous period. As a result, its contribution to nominal GDP growth increased from a marginal 0.1 percentage points to 0.4 percentage points. Similarly, mining and quarrying added 0.4 percentage points to GDP growth, up from 0.1 points in the second quarter. In construction, however, GVA declined further, albeit at a slightly slower pace than in the previous two quarters.

Looking at the distribution of GDP by factor income, the rapid growth in gross operating surplus and mixed income continued during the third quarter. This rose by 5.0% on a year earlier, marginally faster than in the previous quarter (see Chart 2.1).

In absolute terms, most sectors continued to record increases in their gross operating surplus. The biggest gains were registered in the sectors that include information and communication, arts and entertainment, administration and support services as well as manufacturing. On the other
hand, the construction sector, along with wholesale and retail activities, recorded a decline in gross operating surplus when compared with the same quarter of the previous year.

Compensation of employees continued to increase at a solid pace during the third quarter, although its annual rate of growth slowed down to 5.4% from 6.0% in the previous quarter. In absolute terms, the strongest increases were recorded in the sector comprising public administration and the sector comprising wholesale and retail activities. Notable increases were also recorded in the sector incorporating arts and entertainment as well as that including professional, scientific and technical activities. On the other hand, compensation in manufacturing fell slightly in annual terms while that in construction rose marginally.

**Industrial production declines further**

During the third quarter of 2016, industrial production fell by 3.0% when compared with the same quarter a year earlier. This followed a 4.2% decline during the preceding quarter (see Table 2.3). Companies operating in the pharmaceutical sector, in the clothing and textiles sectors and those

<table>
<thead>
<tr>
<th>Table 2.3</th>
<th>INDUSTRIAL PRODUCTION(1)</th>
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<tr>
<td>Percentages; annual percentage changes</td>
<td></td>
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<tr>
<td>Shares</td>
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<td>Q3</td>
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<td>Industrial production</td>
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<tr>
<td>Manufacturing</td>
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<td>of which:</td>
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<td>Basic pharmaceutical products and pharmaceutical preparations</td>
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<tr>
<td>Food products</td>
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</tr>
<tr>
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</tr>
<tr>
<td>Rubber and plastic products</td>
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<tr>
<td>Beverages</td>
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<td>16.3</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>0.4</td>
</tr>
</tbody>
</table>

(1) The annual growth rates of the industrial production index are averages for the quarter based on working-day adjusted data. The annual growth rates of the components are based on unadjusted data. Sources: NSO; Eurostat.

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3 Methodological differences may account for divergences between developments in GVA in the manufacturing sector and industrial production. GVA nets input costs from output to arrive at value added and is expressed in nominal terms. Industrial production is a measure of the volume of output that takes no account of input costs. The sectorial coverage between the two measures also differs, since industrial production data also capture the output of the energy, and water collection, treatment and supply sectors.
involved in the food industry registered the largest drops in production. Lower production was also observed among manufacturers of computer, electronic and optical products and, to a lesser extent, in the beverages and energy sectors.

On the other hand, firms involved in the printing and reproduction of recorded media as well as producers of rubber and plastics and fabricated metals saw their output rise when compared with the same quarter of 2015. Production also increased in the mining and quarrying sector, although this sector has a small share in overall industrial production.

**BOX 1: BUSINESS AND CONSUMER SURVEYS**

During the third quarter of 2016, the economic sentiment indicator (ESI) rose further, increasing to 112, from 108 in the second quarter. Therefore, it remained above its long-term average of 101 (see Chart 1). Sentiment improved among firms in industry and construction, while it deteriorated in the retail and services sectors. Confidence was broadly unchanged among consumers.

**Industrial confidence turns positive**

Confidence in the industrial sector swung to 4 in the third quarter, from -6 in the preceding quarter, thereby increasing above its long-term average (see Chart 2).

Positive sentiment in the third quarter of 2016 was entirely due to a favourable assessment of production expectations. This was partly offset by persistently weak order books and above-normal stocks of finished goods.

The increase in sentiment in industry during the quarter under review was driven by all sub-components of the indicator. Production expectations rose and order book levels improved.

1. The ESI summarises developments in confidence in five surveyed sectors (industry, services, construction, retail and consumers). Quarterly data in this Box are three-month averages.
2. Long-term averages are calculated over the entire period for which data are available. For the consumer and industrial confidence indicators, data became available in November 2002, while the services and construction confidence indicator data became available in May 2007 and May 2008, respectively. Since the retail confidence indicator began to be published as from May 2011, its long-term average is calculated since then. The long-term average of the ESI is computed from November 2002.
3. The industrial confidence indicator is the arithmetic average of the seasonally adjusted balances (in percentage points) of replies to a subset of survey questions relating to expectations about production over the subsequent three months, to current levels of order books and to stocks of finished goods.
4. Above-normal stock levels indicate lower turnover and affect the overall indicator in a negative way. Such levels are thus represented by negative bars in Chart 2.
significantly compared with the second quarter, while stocks of finished goods were perceived to be smaller. The largest gains in confidence were registered among manufacturers of computer, electronic and optical products and within the repair and installation of machinery and equipment sub-sector.

Additional survey data suggest that, compared to the previous quarter, in the third quarter more respondents expected to increase their labour complement in the subsequent three months. Meanwhile, fewer respondents expected to decrease their selling prices.

Confidence in the construction sector less negative

Sentiment in the construction sector improved significantly during the third quarter of 2016 (see Chart 3). Indeed, the construction confidence indicator stood at -4, compared with -12 in the preceding quarter.

While well above its long-term average of -24, the overall construction confidence indicator has been negative for three consecutive quarters, with firms’ assessment of order books being the main contributor to this result.

The rise in confidence during the third quarter of 2016 was largely driven by an increase in firms’ employment expectations for the subsequent three months, as the assessment of order book levels improved only marginally.

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The construction confidence indicator is the arithmetic average of the seasonally adjusted balances (in percentage points) of replies to two survey questions, namely those relating to order books and employment expectations over the subsequent three months.
Additional survey data indicate that in the third quarter, on balance, respondents reported positive building activity developments during the preceding three months. Firms also expected selling prices to rise in the subsequent three months.

Confidence in the retail sector declines
Sentiment in the retail sector extended its downward trend, while remaining positive. The retail confidence indicator fell from 10 in the second quarter to 6 in the quarter reviewed, though it still exceeded its long-term average (see Chart 4).

Firms in this sector continued to express a favourable assessment regarding past and expected business activity. However, both of these assessments were less positive in the third quarter of 2016. The fall in confidence this quarter was also driven by a small increase in the share of respondents reporting higher stock levels.

Additional survey data indicate that selling price expectations were unchanged compared to the second quarter. On the other hand, a significantly smaller share of respondents expected employment and orders to increase in the following three months.

Confidence in the services sector falls marginally
Confidence among firms in the services sector remained high, though it deteriorated marginally over the previous quarter. The services confidence indicator edged down to 24 in the third quarter, from 26. This still compares favourably with a long-term average of 21 (see Chart 5).

The fall in confidence in the third quarter within the services sector was mainly driven by a decrease in both past and expected demand. In contrast, firms’ assessment of their business situation was unchanged between the two quarters.

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6 The retail confidence indicator is the arithmetic average of the seasonally adjusted balances (in percentage points) of replies to survey questions relating to the present and future business situation and on stocks.

7 The services confidence indicator is the arithmetic average of the seasonally adjusted balances (in percentage points) of replies to survey questions relating to the business climate, the evolution of demand in the previous three months and demand expectations in the subsequent three months.
Additional survey data indicate that, overall, in the third quarter a smaller share of firms reported past and expected employment growth. Moreover, a larger net share of respondents expected to charge higher prices in the following three months.

**Consumer confidence unchanged in the third quarter**

The consumer confidence indicator averaged 2 in the third quarter, unchanged from the preceding three-month period. The indicator thus remained well above its long-term average of -21 (see Chart 6). Consumer sentiment continued to benefit from a favourable economic situation and buoyant labour market conditions.

Indeed, on balance, the share of respondents expecting an improved general economic situation and lower unemployment in the subsequent 12 months increased during the quarter under the review.\(^8\) These were offset by slightly less favourable expectations of consumers’ financial situation as well as lower savings expectations.

Additional survey data suggest that, compared to the previous quarter, the share of consumers intending to reduce major purchases over the subsequent 12 months fell slightly. The survey also indicates that, on balance, consumers’ inflation expectations for the following year decreased marginally.

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\(^8\) The consumer confidence indicator is the arithmetic average of the seasonally adjusted balances (in percentage points) of replies to a subset of survey questions relating to households’ financial situation, their ability to save, the general economic situation and unemployment expectations over the subsequent 12 months.

\(^9\) A fall in unemployment expectations affects the overall indicator in a positive way. Such falls are thus represented by positive bars in Chart 6.
In 2014, the Central Bank of Malta conducted the second wave of the Household Finance and Consumption Survey (HFCS) in Malta. The Survey provides detailed information on households’ income and savings, net wealth as well as financing patterns. It makes use of granular, household-level data collected during 2013, is part of a coordinated research project led by the European Central Bank (ECB) and involved central banks and statistical institutes within the euro area and some non-euro area countries. The first wave of the Survey was undertaken in 2010. A net sample of 999 households participated in the 2013 survey, 608 of which consisted of a panel, that is, households that also participated in the 2010 survey. The remaining 391 households accepted to participate for the first time from the refreshment systematic sample of new households. The overall response rate was 51.0%. This article summarises the main findings for Malta, focusing on the characteristics of households, income and savings, their balance sheet and developments in net wealth. The data refer to the households’ assets and debt position as at end-2013, whereas data on income and consumption pertains to January to December 2013.

**Household characteristics**

According to the Survey, there were almost 160,000 households in Malta in 2013, with an average of 2.6 members in each household. The distribution of households showed that more than half of the households consisted of two members or less while two-fifths included between three and four members. The remaining 7.5% of households were made up of five or more individuals. The average size of the household was smaller in 2013 compared to 2010, with an increase in the share of one and two person households and a decline in those with four members or more (see Table 1).

The survey shows an increase in the home ownership rate from 77.7% in 2010 to 80.2% in 2013. The increase was mostly driven by home owners with a mortgage loan. In terms of age composition, the Survey points towards an increase in the share of households with a younger reference person, defined as those between the age of 16 and 34, as well as those in the older age cohort (65+).

With regards to the work status of the reference person, increases were witnessed in the proportion of employees, self-employed and retired persons between the two waves. In terms of education attainment, the latest wave points to an increase in the share of people having a tertiary level of education compared to those with a secondary level of education.

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1 Prepared by Juergen Attard, Daniel Gaskin and Karen Caruana (Statistics Department). The views expressed are those of the authors and do not necessarily reflect those of the Central Bank of Malta.

2 More information on the salient findings of the first wave of the Survey is available in the Central Bank of Malta’s website at https://www.centralbankmalta.org/file.aspx?f=883. The Report provides a brief overview of the questionnaire structure, the statistical methodology employed in the collection of data, inter-country comparison between Malta and other participating euro area countries, and detailed statistical tables. The 2010 results in this article may not coincide precisely with the previously published results due to an update of data obtained in the latest survey.

3 The ‘reference person’ is the person who replied to the questionnaire on behalf of the household.
The share of households with the reference person having only a primary level of education remained broadly unchanged between the two waves, at around 23%.

Household income and savings
For the purpose of the Survey, household income is measured in gross terms, that is, before tax and is defined as the sum of both labour and non-labour income for all household members.

According to the survey, 61.2% of total gross income was from employee income, while 13.3% was generated from self-employment activity. Income from transfer payments such as public pensions, widows’ and disability pensions and other regular social transfers amounted to 15.9% of total household gross income. Income from financial investment was estimated at 3.1%, other household income stood at 3.9% and regular social transfers excluding transfer payments accounted to 2.7%.

The median income of Maltese households was €23,021 in 2013 while the average income was €28,966. When compared to the 2010 results, both median and average income
increased by 10.6% and 12.9%, respectively. Chart 1 indicates that the rise in the median income is apparent in all income brackets, although it is more pronounced in the higher income brackets.

In 2013, 36.6% of households reported having expenses lower than their income, an increase of 12.9% over 2010. For these households, the median and mean savings to gross income in 2013 stood at 9.0% and 11.9%, respectively, down from 9.7% and 13.4% in 2010.

The median annual savings amounted to €2,501 in 2013, down from €3,000 in 2010. On the other hand, the average annual savings of these households saw an increase to €5,527 in 2013 from €4,444 in 2010. The average household savings increases with income, net wealth and level of education. Moreover, average savings by age cohort of the reference person indicate an increase until the age bracket 45-54, followed by a subsequent decline at ages 55 and over.

**Assets**

Most Maltese households own both real and financial assets. Real assets include the value of the household main residence, other real estate property as well as the value of vehicles, valuables and self-employment businesses of household members. Financial assets consist of deposits, mutual funds, bonds, equities, private pension plans as well as money owed to households as private loans.

**Housing and other real assets**

The number of households holding real assets rose from 138,775 in 2010 to 148,767 in 2013, an increase of 7.2%. Around 80% of households were owner-occupiers of their home, with the median value of their main residence estimated at €180,595. This ratio was up marginally over 2010 figures which had shown an owner-occupier ratio of 77.7%. However, the median value of household’s main residence remained relatively stable over the two waves with a value of €180,638 in 2010.

The Survey once again confirmed that the largest proportion of the real assets is predominantly made up of real estate property, composing around three-fourths of the total (see
Chart 2). Similarly, the self-employment business remained the second largest component of total real assets, which accounted for around 23%.

Financial assets
In 2013, financial assets represented 13.8% of household total assets with 95.4% of households owning at least one financial asset. Bank deposits were the most widely held financial assets, accounting for 50.3% of total household financial assets. The share of mutual funds (including listed shares) and debt securities in total financial assets amounted to 16.6% and 15.6% respectively (see Chart 3). Furthermore, the Survey indicated that 26.0% of all households were covered by a life insurance or participated in a voluntary pension scheme.

The overall median value of holdings in financial assets was estimated at €22,150, a decrease of 5.6% when compared to the median figure of 2010. On the contrary, average financial assets were estimated at €53,140, an increase of 13.4% over 2010.

Household debt
According to the Survey, 37.1% of households had some form of debt liabilities, an increase of 2.4% over 2010. The overall median debt liabilities per household, which includes mortgage and non-mortgage debt such as credit cards, was estimated at €19,273 in 2013, an increase of 12.6% compared to 2010.

Mortgage debt amounted to 82.7% of total debt in 2013 with a median value of €61,200. In total, 19.1% of households had debt related to mortgages, up from 16.8% in 2010. The results suggest that the proportion of households with mortgage debt increases as the number of household members increase. Moreover, households which have two household
members in employment are shown to have the highest proportion of total mortgage debt in both 2010 and 2013 results. The median amount of debt outstanding related to the purchase of the household main residence was €54,610, a nominal increase of €17,754 over 2010.

The availability of micro-level data is also important to better understand households’ financial vulnerability. For instance, when analysing standard measures of debt burden, the aggregate figures can mask emerging risks depending on how financial vulnerability is distributed across individual households.

Debt servicing as a proportion of gross households’ income was estimated at 13.4% in 2013, an increase of 1.1% over 2010. This debt servicing ratio was below the euro area average which was calculated at 14.0% in 2013. Similarly, when the ratio was calculated for those households having solely mortgage debt, the median ratio was estimated at 14.0% in 2013, down marginally from 14.4% in 2010 and still below the euro area average calculated at 16.0% in 2013.

**Net wealth**

Household net wealth, defined as the sum of real and financial assets net of debt, was estimated at a median value of €209,911 in 2013. Compared to the 2010 wave, net median wealth increased by €8,662 or 4.3%. The average net wealth was calculated at €350,403, an increase of 8.8% over 2010.

As can be seen in Chart 4, median net wealth consistently increased until the 45-54 age cohort at a median of around €280,000. This trend is subsequently reversed as the reference persons get older and median wealth is seen to fall to €240,000 for the 55-64 age group and fall further to €200,000 for ages 65+.

**Way forward**

The Central Bank of Malta will be publishing on its website more detailed results comparing the results of the two waves of the Survey, including a report on the methodology used to collect the data. Meanwhile, the ECB will also be publishing the results of euro area and all participating countries, including the results for Malta, therefore allowing for cross-country comparability. The Bank is currently making the necessary preparations for the collection of data for the third wave of the Survey which is scheduled to take place in 2017.

![Chart 4](chart4)
The labour market

Labour market data show continued growth in employment and a further decline in unemployment in the third quarter of 2016. The favourable developments seen in recent quarters partly reflect government efforts to increase labour market participation, but also the strong pace of expansion of the Maltese economy.

Labour force continues to grow, though at a slower rate

Labour Force Survey (LFS) data show that in the third quarter of 2016 the labour force grew by 1.9% over the same quarter of 2015 (see Chart 2.2).\(^4\) The increase in the labour force thus was weaker compared with the 2.2% recorded in the corresponding quarter of 2015 and the 2.9% rise in the preceding quarter. The more moderate growth in the labour force was driven by slower employment growth.

Meanwhile, the activity rate extended its upward trend, reaching 70.0% in the third quarter of 2016 from 68.9% in the same quarter a year earlier.\(^5\) This increase reflected increased activity among both males and females. The male participation rate edged up 1.3 percentage points, to reach 82.9%, while that of females increased by 1.0 percentage points to 56.6% (see Table 2.4).

Employment grows further

Although employment continued to increase at a strong pace, the annual rate of change eased to 2.3% from 3.5% in the second quarter. The increase in employment during the third quarter reflected further growth in the number of persons employed on a full-time basis (see Table 2.4). These increased by 6,143, or 3.9% on the same quarter of 2015. On the other hand, the number of part-timers, which includes those employed full-time on reduced hours, fell by 1,815, or 5.9%, following an increase of 1.7% in the preceding quarter.

During the third quarter of 2016 the total employment rate stood at 66.5%, with a year-on-year increase of 1.3 percentage points.\(^6\) This reflects developments in both the male and female employment rates, with the largest increase being registered among the former. Indeed, the male employment rate rose by 1.9 percentage points compared with the third quarter of 2015, to 79.0%. Over this period the female employment rate rose by 0.8 percentage points to 53.6%. These gains were especially pronounced among workers aged between 15 and 24 and those aged between 55 and 64.

\(^4\) This Section draws mainly on labour market statistics from two sources: the LFS, which is a household survey conducted by the National Statistics Office (NSO) on the basis of definitions set by the International Labour Organization and Eurostat, and administrative records compiled by Jobsplus according to definitions established by domestic legislation on employment and social security benefits.

\(^5\) The LFS defines the labour force as all persons aged 15 and over active in the labour market. This includes those in employment, whether full-time or part-time, and the unemployed, defined as those persons without work but who are actively seeking a job and available for work.

\(^6\) The activity rate measures the number of persons in the labour force aged between 15 and 64, as a proportion of the working age population, which is defined as all those aged 15 to 64 years.

\(^7\) The employment rate measures the number of persons aged between 15 and 64 employed on a full-time or part-time basis as a proportion of the working-age population.
The recent development in both activity and employment rates is in line with the Government’s target of increasing the employment rate to 70.0% by 2020.8

The unemployment rate declines further
In the third quarter, the unemployment rate based on the LFS stood at 4.8%. This was 0.1 percentage point lower than in the preceding quarter, and 0.5 percentage point less than a year earlier.9 The jobless rate for males declined by 0.8 percentage points to 4.7%, while that of females rose by 0.3 percentage point to 5.2% compared with the third quarter of 2015 (see Table 2.4).

Eurostat’s seasonally adjusted unemployment rate shows a similar development. The unemployment rate in Malta remains well below the average rate for the euro area, though the latter also continued to decline (see Chart 2.3).

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9 In the LFS the unemployed comprise persons between 15 and 74 years who are without work, available for work and who have actively sought work during the four weeks preceding the survey. In contrast, the number of unemployed on the basis of Jobsplus data includes only those persons registering for work under Part 1 and Part 2 of the unemployment register.
The administrative records of Jobsplus also show favourable labour market developments. Indeed, the average number of registered unemployed stood at 3,276 in the third quarter of 2016, 1,691 lower than in the same quarter of 2015 (see Chart 2.4).

Apart from a growing demand for labour, the drop in the number of registered unemployed since the beginning of 2014 was also influenced by a range of measures aimed at reducing reliance on social benefits and taking up employment as well as the extension of schemes which encourage training and re-skilling.

### BOX 3: A REAL-TIME MEASURE OF BUSINESS CONDITIONS IN MALTA

This Box summarises the method adopted to develop a business conditions index (BCI) for Malta. The index is constructed using high frequency indicators to provide timely information about the pace of economic activity close to real time, given the time lags involved in the publication of the National Accounts statistics. The BCI covers the period between 2000 and 2015.

The approach is an extension of a dynamic factor model. Eight different variables are considered in the economic indicator. These are the number of registered unemployed, industrial production, tax revenues, the European Commission’s ESI, private sector credit, a variable for the services industry, the term-structure of interest rates, as well as quarterly real GDP.

The index is constructed such that its average value over the sample is zero. A value of zero indicates average business conditions. Positive values imply better-than-average conditions and vice versa. The underlying seasonally adjusted economic indicators mix high and low frequency information, as well as stock and flow data. The index is updated as new data in the underlying components are released.

1 Prepared by Reuben Ellul. The author is a senior economist in the Economic Analysis Office of the Central Bank of Malta. The author would like to thank Dr Valentina Aprigliano (Banca d’Italia) for her comments and suggestions in this study, as well as Dr Aaron G. Grech, Mr Brian Micallef, Mr Silvio Attard, and Mr John Farrugia at the Central Bank of Malta for their helpful comments. The views expressed are those of the author and do not necessarily reflect those of the Central Bank of Malta.


3 The index has to be interpreted with caution due to the mean reversal dynamics built within the model. Thus, for example, if the index is high above its mean of zero, its unconditional forecasts will always indicate that it is headed back down. In that case, a more meaningful signal would be if the index were to fall into negative territory.
The BCI is intended to provide a quantitative summary statistic of the latest available economic data. It can also assist policy makers and analysts to filter out the underlying trend in economic activity from the ‘noise’ inherent in high frequency statistics. As expected, the BCI follows the estimates of the output gap in Malta, as well as a business climate indicator published by the European Commission. It also captures the main turning points of the Maltese business cycle, identified using the Bry-Boschan algorithm (marked as shaded bars in Chart 1).

The three turning points are identified in 2001, 2004 and 2008Q4-2009Q1. The BCI captures these effectively, with the 2001 and 2008/9 crises being identified clearly. The 2004 episode also translates as a decrease in economic activity although in this case, business conditions remain close to the average.

In 2001 adverse external shocks hit the electronics industry and tourism, leading to worse-than-average business conditions. In 2004 major restructuring was occurring in a number of sectors in the run up to Malta’s accession into the European Union. In late 2008 and early 2009, the global economic and financial crisis caused a severe shock to multiple sectors in the local economy.

Taking the 2008/9 episode as an example, the BCI begins to turn negative in the second quarter of 2008, indicating worsening business conditions. This is confirmed by glancing at GDP figures published in that period. The first GDP vintage for the whole of 2008 indicated a very sudden and sharp slowdown in seasonally adjusted quarter-on-quarter growth rates from late 2007 to 2008.\footnote{The quarter-on-quarter growth rate of GDP in the first full vintage of 2008 slowed down from 1.1% in 2007Q4 to 0.2% in 2008Q1. It turned negative in 2008Q3 and worsened further in 2008Q4.}

\footnote{Further periods of lower-than-average conditions are identified by the BCI, but not by the Bry-Boschan routine. This is due to the restrictive assumptions behind the algorithm.}

The performance of the BCI is assessed using various stability tests over different specifications and vintages. A sub-set of pseudo real-time assessments indicate that the index was successful in leading GDP developments over 2015. In this subset of assessments, comparison is made between the quarter-on-quarter change in the same vintage of GDP
growth and the BCI – with all its variables updated with the corresponding available vintage.\footnote{For example, 2015Q3 GDP data became available in early December 2015, towards the end of 2015Q4. In the pseudo real-time test, the BCI is first updated with available 2015Q3 GDP data, while all other indicators are updated with their respective vintages right up to the month being targeted. Estimates of business conditions in October, November and December 2015 are then calculated. The output is then compared with the GDP estimates of 2015Q4, eventually published in March 2016.} With successive vintages, the model updates its estimate of activity in the economy. Chart 2 shows that the resulting estimates are quite stable, while the historical revisions are moderate.

The BCI is, however, not intended to forecast GDP growth. It aims to measure the latent business conditions implied by the economic statistics. However, in so far as both GDP growth and the BCI move with business conditions, one can observe co-movement between the two variables.

This indicator is thus considered to adequately characterise business conditions in Malta, with the ability to assess turning-points in real time. In addition, its stability and timeliness provides analysts and policy makers with an early indication on the current state of the Maltese economy.

\begin{figure}
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\caption{BCI - SUCCESSIVE MONTHLY VINTAGES (standardised)}
\end{figure}

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\addplot[blue,mark=x,mark options={solid},line width=1pt] table[x expr=
\thisrowno{0}+300, y index=1] {data/BCI_monthly_vintages_2016Q11.csv};
\addplot[red,mark=*,mark options={solid},line width=1pt] table[x expr=
\thisrowno{0}+330, y index=1] {data/BCI_monthly_vintages_2016Q12.csv};
\end{axis}
\end{tikzpicture}

\begin{table}
\centering
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline
\textbf{Year} & \textbf{Month} & \textbf{BCI} & \textbf{Year} & \textbf{Month} & \textbf{BCI} & \textbf{Year} & \textbf{Month} & \textbf{BCI} \\
\hline
2015 & 1 & 1.8 & 2016 & 1 & 1.6 & 2017 & 1 & 1.4 \\
\hline
\end{tabular}
\caption{Chart 2: BCI - SUCCESSIVE MONTHLY VINTAGES (standardised)}
\end{table}

\section*{Box 4: Macroeconomic and Fiscal Projections at the Central Bank of Malta\footnote{Prepared by Ian Borg and John Farrugia. Mr Borg and Mr Farrugia are senior economists in the Economic Analysis Office of the Central Bank of Malta. They would like to thank Dr Aaron G. Grech and Ms Rita Schembri for their helpful comments and suggestions. The views expressed are those of the author and do not necessarily reflect those of the Central Bank of Malta.}}

This Box provides a general overview of the forecasting process followed by the Central Bank of Malta to generate medium-term macroeconomic and fiscal projections. The forecasting process is designed to produce consistent, transparent, and plausible forecasts as input to the Eurosystem’s Broad Macroeconomic Projection Exercise (BMPE) and the Bank’s regular publications. These forecasts are also referred to in discussions with external institutions on the outlook for the Maltese economy.
Both the macroeconomic and fiscal forecasts are produced independently from official government estimates and are available at annual frequency.

**Common assumptions and guidelines**

Macroeconomic forecasts are conditioned on a set of technical assumptions which the ECB transmits to all euro area national central banks in the context of the BMPE. These assumptions, which enter the models used by the Central Bank of Malta exogenously, include the future path of foreign demand for Malta, exchange rates, competitors’ prices, the international oil price, international food prices, long-term yields and banks’ interest rates.

Fiscal projections are subject to common guidelines as adopted by the ECB’s Working Group on Public Finance (WGPF), which oversees the ESCB fiscal forecast exercise. The guidelines state that projections should only incorporate fiscal measures that have been approved by the national parliament, or that have already been defined in sufficient detail and are likely to pass the legislative process. If policies fail to meet these criteria, the projections follow a no policy change norm. The guidelines do not allow fiscal projections to be produced under the assumption that general rules concerning the overall fiscal position, such as balanced budget rules, operate automatically. Consequently, the Bank’s forecasts do not entertain the possibility that unspecified measures will be adopted in the future, such that government budgetary targets are met.

**The macroeconomic forecasting process**

The macroeconomic forecasting process can be split in three main parts: the preparation stage, the projection stage and the evaluation stage. The preparation stage includes the maintenance and updating of a database of variables used for model and off-model projections, a forecast error evaluation, and an assessment of one-off factors (hereby called news) and other conjunctural analyses. The projections are generated using the in-house macro-econometric model (STREAM), whose main function is to ensure a consistent and efficient tool to generate projections, while making use of all information collected in the preparation stage. The projection stage of the forecasting process also relies on a suite of satellite models used to generate inflation and fiscal projections among others. In the evaluation stage, risk scenarios are generated using the core model to assess the risks surrounding the point forecasts.

Chart 1 provides a simple illustration of the interrelationships between the different stages of the forecasting process.

The forecasts are conditioned on the aforementioned technical assumptions, which enter the models exogenously.

Especially in a small open economy one-off events that cannot be fully captured by historical relationships are very important and need to be allowed for in the context of a model. For this reason, the forecasting process relies also on expert analysis which is designed to take advantage of the knowledge and intuition of economists following specific areas.

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expert analysis takes three forms: determining which news should be catered for explicitly in the baseline projections, quantifying this news and incorporating information on its timing by means of communication with industry and other institutions, and specific conjunctural analysis of official data releases.

News is hereby defined as information about one-off factors that are unrelated to the business cycle. News events are often policy-driven rather than market driven. To include these in the baseline projections, sufficient and reliable information needs to be available, and the amounts should be material. For example, private investment has recently been driven by large outlays related to projects in the energy sector, such as the interconnector project and a new gas power station. These are included explicitly in the core model and other satellite frameworks, and also form part of the information criteria utilised to judge the forward path of specific variables in expert analysis. Moreover, certain policy events such as the extension of hotel height limitations also enter explicitly in baseline projections.

Additionally, qualitative information obtained from industry and official bodies are taken into account. In this regard, the Bank is regularly in touch with the main non-financial companies in Malta primarily to understand industry-specific issues but also to get the industry’s view of what it expects in the immediate future and over the medium-term. This provides additional intelligence when preparing projections and informs the extent of judgement applied.

A number of economists in the Bank’s Economic and Research Department focus on specific areas such as international trade and the labour market. Their role is to monitor and assess anything related to the variables in their area and conduct conjunctural analyses of specific issues outside the forecasting process. The economists would then peer-review the forecasts by providing their expert opinion to the forecasting team.
STREAM is used to generate disaggregated forecasts, with projections for overall economic activity and prices depending on the interactions and projections of the individual components. The model is built around the neo-classical synthesis, with output determined by supply in the long-run, while the sluggish adjustment in prices and quantities allow for short-run deviations from long-run equilibrium. The equations are estimated in in error-correction form.

A number of satellite models are utilised in conjunction with the core framework to forecast certain variables and/or provide additional disaggregation. In particular, short-term forecasts of inflation are prepared separately as part of the Eurosystem’s Narrow Inflation Projection Exercise (NIPE). Moreover, fiscal variables are projected using a satellite model that takes advantage of a larger set of information when compared with the core model (see below). Separate models are used to generate credit forecasts, house price projections, and estimates of potential output. Satellite models and the core model interact continuously to ensure consistency throughout the forecasting process.

Given that the core model is composed primarily of error-correction mechanisms, projections for the first few quarters generated by the models may entail a significant degree of correction that could be unrealistic. The model is thus complemented with a suite of near-term projection models that utilise high-frequency data to establish a path for the first few quarters of the projection horizon. Such high-frequency data include data on industrial production, tourism and sentiment indicators.

The fiscal forecasting process
The Bank carries out a detailed set of projections for various budgetary revenue and expenditure items, to estimate the level of general government deficit and debt. Fiscal projections simultaneously help determine and are influenced by macroeconomic forecasts. For this reason, the process starts with the forecaster estimating the path of budgetary items not primarily affected by the economic cycle. The path of these items is fed into the macroeconomic forecast exercise, to generate an initial estimate of key macroeconomic variables. In turn, the resulting GDP determines the growth path of other fiscal items affected by the business cycle.

Macroeconomic projections directly affect the forecast path of tax revenue, income from government holdings and investments, and other forms of government output. Moreover, GDP growth indirectly determines the scale of government expenditure on maintenance and upkeep and financial support to entities outside the government sector.

Macroeconomic projections are particularly relevant for determining growth in tax revenue and unemployment benefits, as owing to the nature of the Maltese tax and social welfare system, these items are more responsive to changes in GDP. For instance, households may end up paying a higher effective rate of income tax if, as a result of earning higher wages, they

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4 The term ‘general government’ is used to represent activity by central government and extra-budgetary units, in accordance with ESA 2010 methodology. It is a narrower definition of government activity than the term ‘public sector’, which consists of the general government and public corporations. In this note, the private sector comprises all economic activity net of general government.
are pushed into a higher tax bracket. Similarly, Government spends less on social assistance in times of low unemployment and vice versa. The responsiveness of these fiscal items to macroeconomic developments is referred to as their ‘elasticity’. Various institutions, including the Central Bank of Malta, Government and the European Commission, have their own estimates for the magnitude of fiscal elasticities of the Maltese economy.\(^5\)

The main spending items – i.e. most of government consumption, investment and most transfer payments – are not directly determined by developments in Malta’s GDP. For instance, the annual wage increase of government sector employees is set according to the terms of collective agreements between the Government and the relevant social partners. Likewise, the annual rate of increase for different types of social benefits is set in law.

Fiscal projections are also significantly affected by discretionary measures, as presented in the Budget or formulated as part of government policy. The nature of these measures can be permanent (such as the introduction of a new tax) or temporary (such as one-time payments to low-income households). In addition, ‘special’ factors may arise, such as a concerted effort to speed up the implementation of large-scale infrastructural projects co-financed by the EU. These measures can affect private sector activity in a number of ways. For instance, reduced tax rates increase household incomes and hence lead to higher consumption and GDP. Similarly, higher absorption rates of EU funds can boost investment and overall GDP.\(^6\)

The impact of discretionary measures on public finances is estimated on the basis of official government statements, as well as confidential information supplied by various government entities, past performance and expert judgement.

In general, estimates for revenue variables depend on the level of income in the previous period net of any temporary measures in that period, the projected growth rate of macro-economic items and their elasticity, and the forecast impact of new discretionary measures. This can be expressed as:

\[
R = [R(-1) - D_t(-1)] * (1 + g_b * e_b) + D
\]

Where \(R\) stands for any revenue variable, \(D\) and \(D_t\) represent total and temporary government measures respectively, \(g_b\) stands for growth in the macro base and \(e_b\) represents the elasticity of the revenue item with respect to changes in the macro base. The terms in parentheses represent lags.

Expenditure variable projections are subject to the level of spending in the previous period net of any temporary measures, the forecast growth of known determining factors (such

\(^5\) For instance, the value of fiscal elasticities as used by the Commission is based on a methodology developed by the OECD and is publicly available. For further details, refer to Price, R. W., Dang, T. and Guillemette, Y. (2014), “New Tax and Expenditure Elasticity Estimates for EU Budget Surveillance”, OECD Economics Department Working Papers No. 1174.

\(^6\) A study on fiscal multipliers for Malta can be found in the Central Bank of Malta’s research publication “Understanding the Maltese economy”, https://www.centralbankmalta.org/file.aspx?f=31385.
as GDP or pension beneficiaries) and the estimated impact of new measures. This is expressed as:

\[ E = [E(-1) - D_t(-1)] \times (1 + g_f) + D \]

Where \( E \) stands for any expenditure variable, \( D \) and \( D_t \) represent total and temporary government measures respectively and \( g_f \) stands for growth in a determining factor.

Chart 2 shows a simplified outline of the fiscal forecast process. Private sector activity and overall GDP are affected by government measures and current and capital expenditure. Growth in GDP tax revenue and other budgetary items is determined through various iterations between forecast vintages. Total revenue and expenditure projections determine the general government deficit or surplus. In turn, the government balance, the stock of debt in the previous year as well as the stock-flow adjustment\(^7\) (also estimated in this exercise) determine the amount of debt outstanding.

**Forecast error evaluation**

A forecast error evaluation can help uncover whether systematic errors have been made in the recent past, and provide insight about the reasons behind such errors.

This section discusses the outcome of two separate forecast error evaluation exercises produced for the Bank’s macro and fiscal projections. The macro assessment focuses on assessing the projection accuracy in recent years, in light of the rapid pace of economic

\(^7\) The stock-flow or deficit-debt adjustment is the difference between the change in debt and the government balance. It captures the impact of transactions in government assets and differences in the statistical recording of the value and volume of debt.
growth and structural reforms enacted in this period. Given that fiscal policy is shaped in response to changing macroeconomic conditions, while maintaining adherence with the medium-term targets in accordance with the Stability and Growth Pact, the forecast error evaluation for fiscal projections takes place over a longer time period.

**Forecast evaluation – macroeconomic forecasts**

In this section we compute the forecast errors of real GDP growth and the GDP deflator for the period 2013-2015 as a gauge of overall accuracy. The Central Bank of Malta typically publishes projections for a given variable multiple times, as the first projection for a given year is produced years in advance of the first release. The projections are updated with every new vintage of data that becomes available. In this exercise, we take the latest forecast available and compare it with the actual full year of real GDP and GDP deflator growth. Moreover, since statistical revisions play a substantial role in forecast errors the forecast is compared firstly with the first full year outcome following the last forecast, and then with the latest available vintage.

Table 1 shows that forecast errors for real GDP growth in the last few years have been negative, meaning that outcomes exceeded the forecast. Statistical revisions played an important part in the underestimation of GDP growth, which was revised upwards by 4.9 percentage points in 2014 between the first full year vintage and the latest vintage. Nevertheless, other factors have clearly contributed to the underestimation of real GDP growth in recent years. Indeed, the average real GDP growth between 2013 and 2015 stands at 5.8% on the basis of the latest vintage of data, compared with an average 3.0% growth in the longer period 2000 to 2015. Real GDP growth has therefore been extraordinarily higher than usual and the projections were unable to satisfactorily predict it. This is especially apparent in 2014, where projections were far off the 8.4% actual growth reported in the latest vintage of data. Errors are less systematic and smaller in the case of the GDP deflator, although there was underestimation in 2015.

The downward bias in the Bank’s projection for real GDP growth can be partly explained by a number of structural reforms that took place during the last few years and boosted potential output and domestic demand. Structural reforms in the labour market such as

| Table 1 | MACROECONOMIC FORECAST ERROR EVALUATION |
|-----------------|-----------------|-----------------|-----------------|
|                | **GDP**         | **GDP Deflator** |
| Deviation - last forecast with first vintage\(^{(1)}\) | -0.6 | -0.5 | -2.2 | 0.4 | 0.1 | -0.8 |
| Deviation - last forecast with latest vintage\(^{(2)}\) | -2.8 | -5.4 | -3.3 | 0.5 | 0.5 | -0.6 |
| Revisions in the official data | 1.9 | 4.9 | 1.1 | -0.1 | -0.1 | -0.1 |

\(^{(1)}\) ‘Last forecast’ means the last projections that were published for a particular year. ‘First vintage’ refers to the first time.


Sources: Central Bank of Malta; NSO.
those related to increasing female participation; the lowering of the highest income tax rate; and the inflow of foreign workers have increased employment growth significantly above its historical average, boosting real private consumption growth.\textsuperscript{8,9,10} Moreover, new projects such as those related to the energy sector have brought about a significant recovery in investment, and subsequently boosted capital stock, while also enhancing the economy’s efficiency.

\textit{Forecast evaluation – fiscal forecasts}

Table 2 compares the final deficit and debt-to-GDP estimates produced for the years 2011 to 2015 with the first actual outcome. Estimates are also compared with the latest available fiscal and GDP vintages (third quarter of 2016).

When compared with the actual outcome from the first vintage, it appears that forecast errors for the general government balance ratio to GDP have been mostly negative (see Table 2). This indicates that, in accordance with the WGPF guidelines, an element of prudence has been applied when it comes to forecasting the extent to which the budget shortfall can be corrected. In fact, on average, the share of revenue variables in GDP was underpredicted for most of the years under review. This is only partly offset by negative errors for expenditure variables, which reflects an element of volatility induced by discretionary measures which is not fully captured by expert judgement.

Chart 3 provides additional breakdowns of the forecast error compared with the first available vintage. The ‘fiscal variables’ component captures the difference between the actual and forecast numerator (deficit level), as a share of identical (forecast GDP) denominators. In contrast, the ‘GDP’ component measures forecast errors in the GDP value, by keeping the numerator constant. On average, forecast errors have been largely due to under/over

<table>
<thead>
<tr>
<th>Table 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FISCAL FORECAST ERROR EVALUATION: GENERAL GOVERNMENT BALANCE</strong></td>
</tr>
<tr>
<td><strong>Percentage points</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Balance/GDP ratio</td>
</tr>
<tr>
<td>2011</td>
</tr>
<tr>
<td>Deviation - last forecast with following vintage</td>
</tr>
<tr>
<td>Deviation - last forecast with latest vintage</td>
</tr>
<tr>
<td>Revenue/GDP ratio</td>
</tr>
<tr>
<td>2011</td>
</tr>
<tr>
<td>Deviation - last forecast with following vintage</td>
</tr>
<tr>
<td>Deviation - last forecast with latest vintage</td>
</tr>
<tr>
<td>Expenditure/GDP ratio</td>
</tr>
<tr>
<td>2011</td>
</tr>
<tr>
<td>Deviation - last forecast with following vintage</td>
</tr>
<tr>
<td>Deviation - last forecast with latest vintage</td>
</tr>
</tbody>
</table>

Sources: NSO; Central Bank of Malta projections.

\textsuperscript{8} Micallef, B., “Estimating the impact on potential output of structural reforms to increase the female participation rate”, Policy Note, Central Bank of Malta, November 2015.


estimation of fiscal variables, rather than GDP.\textsuperscript{11}

Since the publication of the first actual vintage, data for fiscal variables as well as GDP are subject to significant revisions. However, as shown in Table 1, these do not materially affect the forecast bias in the budget balance, as revisions in revenue and expenditure ratios were of a similar magnitude.

Overall, when compared with the following vintage, there has been no systemic bias in the debt-to-GDP ratio estimates (see Table 3). On average, it appears that the main source of forecast errors is due to inaccurate GDP estimation (see Chart 4). However, the size of forecast errors varies widely depending on the choice of vintage used. For instance, the introduction of the ESA 2010 methodology in 2014 brought

\begin{table}[h]
\centering
\caption{FISCAL FORECAST ERROR EVALUATION: GENERAL GOVERNMENT DEBT}
\begin{tabular}{lrrrrr}
\hline
\multicolumn{1}{l}{\textit{Debt/GDP ratio}} & 2011 & 2012 & 2013 & 2014 & 2015 \\
\hline
Deviation - last forecast with following vintage & -2.7 & 0.1 & -0.9 & 1.4 & 2.7 \\
Deviation - last forecast with latest vintage & -1.1 & 4.2 & 3.3 & 5.1 & 5.8 \\
\hline
\end{tabular}
\small{Sources: NSO; Central Bank of Malta projections.}
\end{table}

\textsuperscript{11} This analysis does not cater for the indirect effect of GDP forecast errors on the numerator (the degree to which individual revenue and expenditure items were affected by GDP projection errors), as this is difficult to determine in practice.
about large revisions to debt and GDP levels. In addition, the release of GDP statistics up to 2016Q3 introduced significant revisions to the GDP level from 2011 onwards.

The Central Bank of Malta continues to assess the reasons behind systematic forecast errors. A higher reliance on conjunctural analysis and increased contacts with industry assist in predicting economic shocks that are unlikely to be captured by standard macro-economic models. Additional work is also focusing on better integrating the results of near-term models in the forecasting process.
3. PRICES, COSTS AND COMPETITIVENESS

The annual rate of consumer price inflation in Malta, as measured by the Harmonised Index of Consumer Prices (HICP), fell from 1.0% in June to 0.9% in September. On the other hand, downward pressures on domestic costs eased, as, following a sequence of declines, the Producer Price Index (PPI) was unchanged on a year earlier. As regards measures of competitiveness, Malta’s Harmonised Competitiveness Indicators (HCI) and unit labour costs (ULC) continued to rise during the third quarter.

Inflation

HICP inflation edges down

Annual HICP inflation in Malta edged down to 0.9% at the end of the third quarter, from 1.0% in the previous three-month period (see Chart 3.1). Inflation in Malta thus remained above that in the euro area, where inflation edged up to 0.4% in September. This differential partly reflects the more buoyant pace of economic activity in Malta.

HICP inflation in Malta has fluctuated in a narrow range between 0.8% and 1.0% since the beginning of the year. The marginal drop in the annual rate of inflation between June and September reflected developments in prices for services, non-energy industrial goods (NEIG) and processed food (see Table 3.1 and Chart 3.2).

Table 3.1

<table>
<thead>
<tr>
<th>HICP INFLATION</th>
<th>Annual percentage change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unprocessed food</td>
<td></td>
</tr>
<tr>
<td>Processed food including alcohol and tobacco</td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td></td>
</tr>
<tr>
<td>Non-energy industrial goods</td>
<td></td>
</tr>
<tr>
<td>Services (overall index excluding goods)</td>
<td></td>
</tr>
<tr>
<td>All Items HICP</td>
<td></td>
</tr>
</tbody>
</table>

Source: Eurostat.

1 The HICP weights are revised on an annual basis to reflect changes in household consumption patterns. In 2016 the weight allocated to energy stands at 7.2%, while that of NEIG is 28.7%. Services account for 43.7% of the index, while the share allocated to food stands at 20.4%.
Annual growth in services prices – the largest component in the overall index – decelerated from 1.2% to 0.9% over the three months to September, reflecting developments in prices of accommodation, communication, and miscellaneous services (see Chart 3.3). As a result, the contribution of services to overall HICP inflation dropped by 0.1 point to 0.5 over the third quarter.

NEIG inflation also edged down as a slower rate of increase in prices of clothing and footwear offset faster growth in durable goods prices. Consequently, the contribution of the NEIG component to overall inflation dropped by 0.1 point to 0.2 percentage points.

Prices of processed food, including alcohol and tobacco, rose at an annual rate of 1.9% in September, down from 2.2% in June. Consequently, their contribution to the headline index decreased marginally to 0.2 point over the quarter. This deceleration was spread across most subcomponents. On the other hand, unprocessed food inflation accelerated sharply, going from 2.9% in June to 4.0% three months later, with the contribution of this component edging up to 0.3 points. This reflected faster increases in the prices of fish and seafood, fruit, and vegetables, partly on account of dry weather conditions.

Meanwhile, energy prices continued to fall, shedding 3.9% on an annual basis, though September’s rate of decline was slightly less pronounced compared with June. The weaker rate of decline mainly reflected developments in gas prices, which were lowered between June and September 2015, but were unchanged during the corresponding period of 2016. Nonetheless, the contribution of energy to the headline index remained largely unchanged at -0.3 (see Chart 3.2).
Core HICP inflation falls
Core inflation in Malta, which is based on a trimmed-mean measure of the HICP that excludes the more volatile components, dipped to 1.1% at the end of the third quarter, from 1.4% in June (see Chart 3.4). While core inflation remains above the overall inflation rate, suggesting that underlying inflationary pressures are somewhat stronger than the headline rate shows, the difference between the two rates narrowed in September. Both headline and core inflation measures suggest that price pressures are contained.

RPI inflation unchanged
In September, annual inflation as measured by the Retail Price Index (RPI) was unchanged from June, at 0.8% (see Table 3.2). Lower contributions from clothing and footwear and from beverages and tobacco were offset by a higher contribution from the transport and communication category. Developments in RPI inflation thus diverged slightly from those of HICP inflation. This mainly reflects the slower rate of growth of accommodation prices, which affect HICP inflation but are not included in the RPI.

### Table 3.2
CONTRIBUTIONS TO YEAR-ON-YEAR RPI INFLATION

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>0.0</td>
<td>-0.2</td>
<td>0.0</td>
<td>0.2</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Beverages and tobacco</td>
<td>0.2</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Clothing and footwear</td>
<td>0.2</td>
<td>-0.1</td>
<td>-0.1</td>
<td>-0.2</td>
<td>-0.1</td>
<td>0.0</td>
<td>-0.1</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Housing</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Water, electricity, gas and fuels</td>
<td>-0.1</td>
<td>-0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Household equipment and house maintenance costs</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Transport and communications</td>
<td>-0.7</td>
<td>-0.5</td>
<td>-0.5</td>
<td>-0.5</td>
<td>-0.7</td>
<td>-0.6</td>
<td>-0.6</td>
<td>-0.5</td>
<td>-0.5</td>
</tr>
<tr>
<td>Personal care and health</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Recreation and culture</td>
<td>0.3</td>
<td>0.3</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Other goods and services</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>RPI (annual percentage change)</strong></td>
<td><strong>0.5</strong></td>
<td><strong>0.3</strong></td>
<td><strong>0.5</strong></td>
<td><strong>0.4</strong></td>
<td><strong>0.7</strong></td>
<td><strong>0.8</strong></td>
<td><strong>0.7</strong></td>
<td><strong>0.8</strong></td>
<td><strong>0.8</strong></td>
</tr>
</tbody>
</table>

Source: NSO.

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2 The Central Bank of Malta uses a “trimmed mean” approach to measuring core inflation, whereby the more volatile components of the index are removed from the basket of consumer goods to exclude extreme movements from the headline inflation rate. See “An Evaluation of Core Inflation Measures for Malta”, Quarterly Review 2014:3, Central Bank of Malta, pp. 39-45.

3 The RPI index differs from the HICP index in that RPI weights are based on expenditure by Maltese households, while HICP weights also reflect expenditure patterns by tourists in Malta.
BOX 5: RESIDENTIAL PROPERTY PRICES

Residential property prices rise further

In the third quarter of 2016, the Property Price Index published by the National Statistics Office, which is based on actual transactions involving apartments, maisonettes and terraced houses, gained 4.9% on the corresponding quarter of 2015. On this basis, house price inflation moderated from the 6.4% registered in the second quarter (see Chart 1).

Residential property prices in Malta are being supported by a number of factors. The scheme for first-time buyers and a low interest rate environment make property more attractive to purchase. Demand for property is also being supported by growth in disposable income, which continues to benefit from favourable labour market conditions. These factors in turn are contributing to robust growth in lending for house purchases. The rise in foreign workers in Malta and the Individual Investor Programme, have also been supporting residential property prices.

1 This scheme, which was introduced in 2013 and subsequently extended, provides relief from the duty on documents due on the first €150,000 of the total value paid for the purchase of eligible property.

<table>
<thead>
<tr>
<th>Chart 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOVEMENTS IN RESIDENTIAL PROPERTY PRICES</td>
</tr>
<tr>
<td>(annual percentage changes)</td>
</tr>
</tbody>
</table>

Sources: Eurostat; NSO.

BOX 6: RESIDENTIAL PROPERTY PRICE MISALIGNMENT WITH FUNDAMENTALS

The housing sector affects the business cycle through three main channels. First, house prices affect private consumption through their impact on household wealth. Second, developments in real estate prices affect housing investment and the construction industry, which tend to have a relatively high multiplier effect. Finally, these channels tend to be reinforced via the financial accelerator effect, given the role of real estate as collateral, thereby also affecting the banks’ balance sheet and their willingness to extend credit to the real economy. The latter implies that the state of the house price cycle is also important from

1 Prepared by Brian Micallef. Mr Micallef is the manager of the Research Office of the Central Bank of Malta. He would like to thank Dr Aaron G. Grech for helpful comments and suggestions. The views expressed are those of the author and do not necessarily reflect those of the Central Bank of Malta.
a financial stability perspective. In addition, excessive growth in house prices may lead to additional distortions in the economy, such as a misallocation of resources from productive sectors to the non-tradable sector, which in part explains the weak productivity growth experienced by some countries after the crisis.

**A misalignment indicator based on fundamentals**

Against this background, Micallef (2016) developed a fundamental misalignment index using a multiple indicator approach to identify under or over-valuation of house prices in Malta for the period between 2000 and 2015. This Box updates the index using data for the first half of 2016.

Misalignment indices have become increasingly popular in recent years, being used both by private sector institutions as well as policy institutions. The domestic indicator is made up of five sub-indices that capture demand, supply and banking system factors.

The house price-to-RPI ratio and the price-to-income per capita ratio represent the demand side. The real residential property price index, deflated by the RPI, is the indicator that most clearly summarizes inflation-adjusted housing market developments in Malta. On the other hand, the house price-to-disposable income per capita ratio gives a better insight of the households’ purchasing power needed to buy a residence and hence, is considered as a measure of affordability. In the absence of official data, internal estimates of households’ disposable income by the Central Bank of Malta are used as the measure of income. Furthermore, the latter is divided by the population to account for demographic changes.

The two indicators on the supply side refer to house price-to-construction costs ratio and the dwelling investment-to-GDP ratio. The former applies Tobin’s q, defined as the ratio of the market value of a firm to its replacement cost, to housing. This cost measure is calculated as the house price index divided by the construction cost. The latter includes both labour and materials costs in construction. An important limitation of this index, however, is that it fails to consider land prices. The rationale for including dwelling investment is that a housing sector that accounts for a high percentage of GDP implies a state of overheating, which can be interpreted as a sign of a housing bubble.

The banking system perspective is captured by the loan-to-income ratio, defined as bank loans to households for mortgages relative to household income. When this ratio gets too high, households may become increasingly dependent on rising house prices to service their debt.

The five sub-indices enter the index in ‘gap’ form, that is, as a deviation from their trends or long-run averages. The weight for each component is derived by applying a principal

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3 UBS (2012), UBS Swiss Real Estate Bubble Index, Schweizer Immobilien, 2012Q3. This study applies a multiple indicator approach for the housing market in Switzerland, with the same methodology being subsequently used to assess real estate prices in the largest global cities. Lenarcic, C. and Damjanovic, M. (2015), Slovene residential property prices misalignment with fundamentals, Banca Slovenije Working Paper 2015 apply a similar methodology for Slovenia.

component analysis (PCA) on the basis of the cyclical co-movement of the separate indicators. The weights are derived using the factor ‘loadings’ from the first principal component, which explains 74% of the variance between these indicators. The sub-indicator weights are shown in Table 1.

Chart 1 plots the misalignment indicator updated until 2016Q2, as well as the contributions made by each sub-index.\(^5\)

The index shows a period of overvaluation in house prices starting from around the time of EU membership in 2004 that peaked in 2006-2007. During this period, the misalignment indicator clearly shows significant overvaluation of house prices in Malta.

The boom in house prices in the mid-2000s was due to a combination of demand and supply factors. Malta’s membership in the European Union in 2004 may have influenced expectations about future economic prospects, while the entry in the ERM II mechanism, two years prior to the adoption of the euro, led to a gradual convergence of domestic interest rates to those set by the European Central Bank.

\(^5\) The resulting index is also in line with other measures of misalignment derived from econometric analysis. For further details on the latter, see Gatt, W. and Grech, O. (2016), An assessment of the Maltese housing market, Central Bank of Malta Policy Note, October 2016.
Bank. Low interest rates had a positive effect on property prices, with residential mortgage debt increasing from only 14.5% of GDP in 2000 to 35.0% of GDP in 2007. In addition, property prices were also supported by the Investment Registration Scheme, a tax amnesty for Maltese residents with overseas assets that was effective between 2001 and 2005. Property development was further encouraged by the rationalization exercise in 2006 by the Malta Environment and Planning Authority (MEPA).

The combination of these policies encouraged construction. The number of development permits for new dwellings units, mostly apartments, almost doubled between 2003 and their peak in 2007. Similarly, the share of dwelling investment in GDP peaked at 7.4% in 2007, up from 4.0% in 2000. The increase in supply co-existed with a sharp increase in the number of vacant dwellings.

The disequilibrium started to be corrected from around 2008 following the slowdown in house prices. All the sub-indices contributed to the correction, although the banking system-wide indicator, the loan-to-income gap, lagged behind the other indices. The misalignment index reached a trough in 2013, with all the sub-components contributing negatively.

The decline in house prices during the crisis was a global phenomenon caused by over-investment in construction in the pre-crisis years. However, compared to other European economies which had experienced excessive increases in house prices before the crisis, such as Ireland and Spain, the correction in domestic property prices was moderate in Malta.

Following a correction that lasted around five to six years, the housing market started to recover in 2013, with property prices registering healthy growth rates in 2014 and 2015. In addition to the robust economic growth and the drop in unemployment to historical lows, the increase in house prices is also attributable to targeted government policies aimed at stimulating the property market. These include another investment registration scheme in 2014, the exemption of stamp duty for first-time buyers on the first €150,000 of their new property value and the reform of the capital gains tax (CGT) in 2015, with the introduction of a final withholding tax system based on the value of the property. Portfolio rebalancing by investors into the housing market could also have played an increasingly important role.

By the second quarter of 2016, the overall indicator was back to its equilibrium level. Among the individual sub-indices, the house price-to-RPI ratio and the house price-to-construction costs have moved into positive territory since the end of 2015, as the increase in house prices outweighed both inflation and cost developments. In 2016, the gap in house price-to-income per capita has also closed down. On the contrary, the other two sub-indices – the loan-to-income gap and the housing investment-to-GDP gap – are still contributing negatively, though their dynamics are different. Since 2014, the housing investment-to-GDP gap has been gradually closing down as dwelling investment started to recover following its sharp decline before the crisis. As a share of GDP, housing investment recovered from 2.5% in mid-2014 to 3.9% in 2016Q2, although it remains below than the long-run average of 4.8%. On the contrary, the loan-to-income gap remained firmly into negative territory, especially following the deceleration in mortgage credit growth in the first half of 2016.
Conclusion
This Box presents a multiple indicator approach to identify house price valuation in Malta based on fundamentals. The misalignment indicator shows a period of overvaluation in house prices that peaked in 2006-2007. This disequilibrium started to be corrected following the decline in house prices, reaching a trough in 2013. Starting in 2014, however, the index started to recover such that, by mid-2016, house prices were broadly in equilibrium.

More generally, the indicator presented in this paper is intended to provide a broad guide to the current momentum in house prices. The actual numerical results should not be overstated given the limitations in the construction of this index. Among the latter, the level of the variables, necessary for international comparison of property price levels, as well as other important determinants, such as foreign capital inflows, are not factored in the analysis due to lack of data. Perhaps more importantly, data on rents are limited and hence, the price-to-rent ratio, which compares the costs of owning a property to renting it, could not be computed. Rental costs are likely to play an increasingly important role in light of the influx of foreign workers, which increased demand for housing, especially in certain areas. Going forward, statistics on rents, once they become available, should definitely form part of the fundamental sub-indicators of the misalignment index.

Costs and competitiveness

Producer prices unchanged
The PPI was unchanged from a year earlier at the end of the third quarter, extending a period of stable or falling prices that has been observed for almost four years. Nonetheless, the reading in September signified an easing of downward pressures compared with the annual rate of change of -0.8% observed in June.

The uptick in producer price inflation during the third quarter was mainly driven by developments in intermediate goods prices, where the annual rate of change turned positive. At the same time, the contribution of consumer goods prices was slightly less negative on account of developments in non-durable goods prices. Contributions from the other components of the index, namely capital goods and energy, remained unchanged over the third quarter.

Harmonised competitiveness indices continue to rise
Malta’s HCI rose once more during the third quarter, gaining 0.3% in nominal terms when compared to the previous three month period (see Chart 3.5). This implies a continued deterioration in Malta’s international competitiveness in terms of trade-weighted exchange rates, mainly reflecting the recent strong appreciation of the euro against the pound sterling.

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4 The Industrial PPI measures the prices of goods at the factory gate and is commonly used to monitor inflationary pressures at the production stage.
5 The nominal HCI tracks movements in the country’s exchange rate against the currencies of its main trading partners, weighted according to the direction of trade in manufactured goods. The real HCI incorporates both exchange rate changes and the relative inflation of a country vis-à-vis its main trading partners. A higher (or lower) score in the HCI indicates a deterioration (or improvement) in a country’s international price competitiveness.
The real HCI, which also takes into account consumer prices in Malta and its international trading partners, gained 0.7% during the period. The faster increase in the real HCI over the nominal HCI indicates that the loss in competitiveness due to exchange rate movements was amplified by changes in inflation differentials.

HCIs in Malta have generally followed an upward trend since mid-2015, reflecting the gradual appreciation of the euro exchange rate and the widening inflation gap between Malta and its trading partners, partly driven by Malta’s robust economic growth. The nominal and real HCI stood 0.6% and 0.5%, respectively, above their September 2015 level.

Unit labour costs continue to rise
The ULC index, which gauges the labour cost per unit of output and is measured as the ratio of compensation per employee to labour productivity, continued to rise during the third quarter of 2016. Measured on a four-quarter moving average basis, the annual growth rate of Malta’s ULC stood at 1.8% during the period under review, up from 1.0% in the previous quarter (see Chart 3.6). Annual ULC growth in Malta turned positive at the start of 2016, and has been accelerating since.

The recent increase in Malta’s ULC reflects continued robust annual growth in compensation per employee, which stood at 3.1% in the third quarter when measured as a four-quarter moving average. This outweighed annual growth in labour productivity, which slowed down to 1.2% during the period under review.

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4. THE BALANCE OF PAYMENTS

During the third quarter of 2016 the current account of the balance of payments posted a higher surplus than in the comparable quarter of 2015. This was mostly attributable to a rise in net services receipts and a narrowing in the merchandise trade gap. Higher net outflows related to primary income and marginally lower net inflows from secondary income partly countered these developments. Meanwhile, net inflows on the capital account declined on a year earlier, while the financial account swung to a net lending position.

The current account

The current account surplus rises

Between July and September of 2016, the current account recorded a surplus of €339.1 million, up from €120.0 million a year earlier. This improvement was driven by favourable developments on the services balance and a lower deficit on trade in goods. When expressed as a four-quarter moving sum, the balance on the current account stood at €620.0 million, €145.9 million more than in the year to September 2015 (see Chart 4.1). This improvement was largely driven by favourable developments on the services balance (see Table 4.1).

As a result, over the four quarters ending in September 2016, the current account surplus increased to 6.4% of gross domestic product (GDP), from 5.2% a year earlier.

The merchandise trade deficit narrows

During the third quarter of 2016, the merchandise trade deficit narrowed by €108.8 million on the corresponding period of 2015, standing at €503.5 million.

<table>
<thead>
<tr>
<th>Table 4.1</th>
<th>BALANCE OF PAYMENTS</th>
<th>EUR millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current account</td>
<td>474.1</td>
<td>484.9</td>
</tr>
<tr>
<td>Goods</td>
<td>-1,748.2</td>
<td>-1,853.6</td>
</tr>
<tr>
<td>Services</td>
<td>2,494.0</td>
<td>2,584.3</td>
</tr>
<tr>
<td>Primary income</td>
<td>-490.8</td>
<td>-488.8</td>
</tr>
<tr>
<td>Secondary income</td>
<td>219.2</td>
<td>243.0</td>
</tr>
<tr>
<td>Capital account</td>
<td>168.3</td>
<td>166.5</td>
</tr>
<tr>
<td>Financial account</td>
<td>-708.9</td>
<td>-657.1</td>
</tr>
<tr>
<td>Errors and omissions</td>
<td>-1,351.3</td>
<td>-1,308.5</td>
</tr>
</tbody>
</table>

Source: NSO.
This was attributable to a contraction of €235.7 million in imports, which outweighed a decrease of €126.9 million in exports.

When measured on a four-quarter cumulative basis, the visible trade gap widened to €1,868.8 million, from €1,748.2 million a year earlier. This widening arose as exports contracted faster than imports; the former declined by €252.1 million whilst the latter decreased by €131.6 million (see Chart 4.2).

**The surplus on services increases**

Between July and September 2016, the positive balance on services stood at €944.0 million, a rise of €121.7 million on the same period of 2015. Higher net receipts were spurred by a significant increase in exports, which offset a rise in imports. More specifically, this improvement was predominantly driven by increased remote gaming receipts. Increases in net transport receipts also contributed significantly, reflecting an expanding aviation services industry. Meanwhile, net travel exports increased by €2.7 million, as increased expenditure by tourists in Malta was partly dampened by higher spending by Maltese residents abroad. At the same time, net payments relating to ‘other business’ services were lower in annual terms.

These developments were accompanied by a decline in net receipts on financial services and higher net payments related to telecommunication services.

Partly reflecting developments in the quarter under review, the overall surplus on services in the four quarters to September 2016 went up by €351.8 million from the level registered a year earlier, to €2,845.8 million (see Chart 4.3).
BOX 7: TOURISM ACTIVITY

The tourism industry expands at a slower pace
Data for the three months to September show that inbound visitors increased by 6.2% when compared with the third quarter of 2015, reaching 685,589 (see Chart 1). This growth was driven by leisure travellers and, to a lesser extent, by business tourists. In contrast, the number of tourists visiting for educational, religious and health motives decreased on the same period of a year earlier.

During the third quarter, tourists spent over 5.9 million nights in Malta, a 1.9% increase on 2015. This growth was entirely driven by nights stayed in private accommodation, which rose at an annual rate of 9.1%, whereas the number of nights spent in collective accommodation declined by 3.7% on a year earlier.\(^1\)

At the same time, tourism spending edged up by 1.0%, to reach €698.9 million.\(^2\) This was driven by higher non-package expenditure, particularly spending on accommodation as well as increases in the “other” component of tourism spending. On the other hand, expenditure on package holidays fell when compared with the third quarter of 2015.\(^3\)

In the first nine months of the year, the number of inbound tourism rose by 8.2%, while tourist spending and night stayed in Malta grew by 3.2% and 5.1%, respectively. As tourism expenditure grew at a slower rate than tourist arrivals, expenditure per capita decreased to €894, €43 less than in the same period a year earlier. At the same time, at 7.8 nights, the average stay was slightly shorter than in the first three quarters of 2015.

\(^1\) Private accommodation includes self-catering apartments, farmhouses, and private residences. As per Eurostat recommendation, timeshare accommodation is classified as “private accommodation”. Collective accommodation comprises hotels, apartment houses, guesthouses, hostels and tourist villages.
\(^2\) Total expenditure is split into package, non-package and “other”.
\(^3\) Non-package holiday expenditure is subdivided into spending on accommodation and travel fares, while the “other” component captures any additional expenditure by tourists during their stay in Malta.
The number of nights spent in collective accommodation establishments totalled 489,563 nights, a decline of 11,167 nights than in the corresponding quarter of 2015. As a result, the total occupancy rate for such establishments decreased by 1.9 percentage points in annual terms, to reach 79.3%. A fall in occupancy rates was registered in almost all hotel categories, with five star hotels being the only exception. Three star hotels recorded the largest percentage point decrease (see Chart 2).

The number of cruise liner calls between July and September was 106, up from 102 in the third quarter of 2015. Concurrently, the number of foreign cruise liner passengers reached 202,234, up from the 192,570 passengers in the third quarter of 2015 (see Chart 3). Cruise liner passengers thus increased by 5.0% in annual terms during the quarter under review.

**Primary income account records higher net outflows**¹

During the third quarter of 2016, the primary income account posted net outflows of €164.3 million, compared with net outflows of €154.0 million in the corresponding period of 2015. Movements on this component of the current account continued to be strongly influenced by internationally-oriented firms which transact predominantly with non-residents.

When measured on a four-quarter cumulative basis, net outflows on this account reached €599.6 million; €108.8 million more than in the four-quarters to September 2015.

¹ The primary income account shows income flows related mainly to cross-border investment and compensation of employees.
Inflows on the secondary income account decreased slightly\(^2\)

In the third quarter of 2016, net inflows on the secondary income account declined by €1.1 million on a year earlier, to stand at €62.9 million.

Over the four quarters to September 2016, these net inflows amounted to €242.6 million; €23.4 million more than in the corresponding period a year earlier.

The capital account

Between July and September 2016, net inflows on the capital account amounted to €0.8 million, €1.5 million less than in the same period of 2015 (see Table 4.1). This change was mostly propelled by the timing of funds received under EU financing programmes. Due to similar motives, on a four-quarter cumulative basis, capital inflows decreased by €43.3 million on the twelve months to September 2015, to stand at €125.0 million (see Chart 4.1).

\(^2\) The secondary income account shows current transfers between residents and non-residents.
5. GOVERNMENT FINANCE

During the third quarter of 2016, the general government deficit narrowed on the same period of 2015, as higher revenues and lower capital expenditure offset an increase in recurrent expenditure. When measured on the basis of four-quarter moving sums, the balance showed a surplus equivalent to 0.6% of gross domestic product (GDP), up from 0.4% in the second quarter. General government debt as a share of GDP decreased to 60.4% at the end of September, down from 61.4% at the end of June.

General government

General government balance to-GDP ratio improves

During the third quarter of 2016, the general government balance continued to improve. Its ratio to GDP, measured as a four-quarter moving sum, increased from a surplus of 0.4% in the second quarter, to 0.6% (see Chart 5.1). These developments were largely due to an improvement in the primary balance, which excludes interest payments from total government expenditure. The primary-balance-to-GDP ratio, measured on the same basis, increased by 0.1 percentage points, to 2.9%, thereby retaining the positive momentum observed in recent quarters. The share of interest payments in GDP remained unchanged from the previous quarter, at 2.3%.

Current revenue was the largest contributor to the 0.2 percentage point improvement in the general government surplus (see Chart 5.2). The current revenue-to-GDP ratio, measured as a four-quarter moving sum, grew by 0.8 percentage points in the third quarter. A decrease in capital expenditure also had a positive impact on the general government balance.

On the other hand lower capital revenues and higher recurrent outflows had a negative effect...

\[1\] The analysis of general government finance items in this Chapter of the Quarterly Review is based on data in NSO News Release 008/2017, released on 13 January 2017.
on the overall balance-to-GDP ratio. The former contributed a negative 0.5 percentage points, while current expenditure took down the balance-to-GDP ratio by a further 0.3 points. Previously this component had a positive contribution to the ratio, as current spending grew at a slower pace than nominal GDP.

In level terms, the general government deficit narrowed, from €20.5 million in the third quarter of 2015, to only €2.4 million in the three months leading to September 2016 (see Table 5.1). This was the result of the increase in revenue outweighing the increase in expenditure net of interest payments, which led the primary surplus to increase from €36.8 million to €53.6 million.

**Revenue benefits from positive economic developments**

General government revenue grew by 7.5% when compared with the same quarter a year earlier, reaching €950.8 million during the third quarter of 2016. Increases in income tax revenue were a major contributor towards the increase. In fact in the period under review the composition of tax revenue changed in favour of a higher share of current taxes on income and wealth. In contrast, the share of taxes on production and imports, and social contributions decreased compared with the third quarter of 2015 (see Table 5.2).

### Table 5.1
**GENERAL GOVERNMENT BALANCE**

<table>
<thead>
<tr>
<th>EUR millions</th>
<th>2015</th>
<th>2016</th>
<th>Change 2016Q3-2015Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td>884.1</td>
<td>1,157.4</td>
<td>837.4</td>
</tr>
<tr>
<td>Taxes on production and imports</td>
<td>305.3</td>
<td>347.0</td>
<td>294.8</td>
</tr>
<tr>
<td>Current taxes on income and wealth</td>
<td>284.8</td>
<td>385.4</td>
<td>267.0</td>
</tr>
<tr>
<td>Social contributions</td>
<td>144.1</td>
<td>172.0</td>
<td>152.9</td>
</tr>
<tr>
<td>Capital and current transfers receivable</td>
<td>64.1</td>
<td>153.0</td>
<td>20.2</td>
</tr>
<tr>
<td>Other(1)</td>
<td>85.8</td>
<td>100.0</td>
<td>102.6</td>
</tr>
<tr>
<td><strong>Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compensation of employees</td>
<td>280.8</td>
<td>281.1</td>
<td>292.0</td>
</tr>
<tr>
<td>Intermediate consumption</td>
<td>127.9</td>
<td>209.4</td>
<td>133.4</td>
</tr>
<tr>
<td>Social benefits</td>
<td>254.0</td>
<td>262.7</td>
<td>269.7</td>
</tr>
<tr>
<td>Subsidies</td>
<td>29.7</td>
<td>27.0</td>
<td>31.6</td>
</tr>
<tr>
<td>Interest</td>
<td>57.3</td>
<td>58.2</td>
<td>52.8</td>
</tr>
<tr>
<td>Other current transfers payable</td>
<td>45.9</td>
<td>51.0</td>
<td>34.5</td>
</tr>
<tr>
<td>Gross fixed capital formation</td>
<td>91.7</td>
<td>128.4</td>
<td>62.3</td>
</tr>
<tr>
<td>Capital transfers payable</td>
<td>19.4</td>
<td>50.0</td>
<td>17.3</td>
</tr>
<tr>
<td>Other(2)</td>
<td>-1.9</td>
<td>-10.3</td>
<td>3.9</td>
</tr>
<tr>
<td><strong>Primary balance</strong></td>
<td>36.8</td>
<td>158.0</td>
<td>-7.3</td>
</tr>
<tr>
<td><strong>General government balance</strong></td>
<td>-20.5</td>
<td>99.9</td>
<td>-60.1</td>
</tr>
</tbody>
</table>

(1) “Other” revenue includes market output as well as income derived from property and investments.

(2) “Other” expenditure principally reflects changes in the value of inventories and in the net acquisition of valuables and other assets.

Source: NSO.
In addition, owing to the strong increase recorded in the quarter under review, the share of “other” income in total revenue rose by 6.1 percentage points, the highest gain out of all the main components. This offset a decline in the share of capital and current transfers, reflecting the receipt of lower inflows in the quarter under review.

Between July and September 2016, the “other” component of general government revenue registered the highest overall increase in annual terms. It rose by €64.7 million, largely reflecting higher intakes from the Individual Investor Programme.

During the period under review, current taxes on income and wealth increased by €39.9 million, corresponding to a 14.0% rise, when compared to a year earlier. Favourable economic conditions leading to higher income taxes received accounted for most of the growth in this category, with the increase in income tax collected from companies being the main contributor to this increase. Taxes on production and imports rose by €9.8 million, or 3.2%, on a year earlier. This was mainly due to higher value added tax receipts and duties on documents, corresponding to buoyant consumption and property market conditions respectively. Positive developments in the labour market contributed to a €8.4 million growth in social contributions compared to the corresponding period in 2015.

In contrast, inflows from capital and current transfers receivable declined by €56.3 million, to €7.9 million. By far the largest driver of this fall were the lower grants received from the European

| Table 5.2 COMPOSITION OF GOVERNMENT FINANCE ITEMS |
| Percentage points |
| 2015 Q3 | 2016 Q3 | Change |
| Share in total revenue |
| Taxes on production and imports | 34.5 | 33.1 | -1.4 |
| Current taxes on income and wealth | 32.2 | 34.2 | 1.9 |
| Social contributions | 16.3 | 16.0 | -0.3 |
| Capital and current transfers receivable | 7.3 | 0.8 | -6.4 |
| Other(1) | 9.7 | 15.8 | 6.1 |
| Share in total expenditure |
| Compensation of employees | 31.0 | 31.4 | 0.3 |
| Intermediate consumption | 14.1 | 16.0 | 1.8 |
| Social benefits | 28.1 | 26.8 | -1.2 |
| Subsidies | 3.3 | 4.2 | 0.9 |
| Interest | 6.3 | 5.9 | -0.5 |
| Other current transfers payable | 5.1 | 6.5 | 1.4 |
| Gross fixed capital formation | 10.1 | 6.2 | -3.9 |
| Capital transfers payable | 2.1 | 3.0 | 0.9 |
| Other(2) | -0.2 | 0.0 | 0.2 |

(1) “Other” revenue includes market output as well as income derived from property and investments.
(2) “Other” expenditure principally reflects changes in the value of inventories and in the net acquisition of valuables and other assets.
Source: NSO.
Union. The uptake of EU grants was very high in 2015, when projects financed by the 2007-13 EU Financial Framework were being finalized. In contrast, following the switchover to the new Multiannual Financial Framework, the absorption rate of EU funds was very low in the third quarter of 2016.

**Expenditure rises due to higher recurrent expenditure**

During the third quarter, total general government expenditure increased by 5.4% to €953.2 million. The composition of government expenditure shifted towards recurrent spending, mostly in the form of intermediate consumption and current transfers, whose share grew by 1.8 percentage points and 1.4 percentage points, respectively (see Table 5.2). On the other hand, the share of capital expenditure declined considerably, due to a 3.9 percentage point decline in the ratio of spending on gross fixed capital formation in total expenditure.

In the three months up to September, intermediate consumption registered the largest growth among all the recurrent expenditure components. It grew by €24.3 million, or 19.0%, partly due to higher spending in preparation for the Maltese presidency of the EU Council in 2017. Compensation of employees also contributed strongly to the growth in recurrent expenditure, as it grew by €18.3 million, mainly due to higher staff costs in the health and education sectors. On the other hand, the increases in social benefits were limited to €1.9 million, as higher retirement pensions were mostly offset by the non-recurrence of a one-off child supplementary benefit which was handed out in 2015.

Meanwhile, spending on other recurrent expenditure components also rose. Other current transfers payable grew by €16.1 million, while spending on subsidies increased by €10.3 million. Interest payments were the only recurrent expenditure component to decrease down on a year-on-year basis. These fell by €1.3 million due to the prevailing low interest rate environment, which ensures lower refinancing costs.

Capital expenditure fell considerably, driven by lower spending on gross fixed capital formation. The latter decreased by €32.7 million, or 35.6%, partly owing to a low level of spending on EU-funded projects. These declines were partly offset by a €9.3 million increase in capital transfers, in part due to higher outlays by extra-budgetary units.

**General government debt ratio declines**

In September 2016, the stock of general government debt amounted to €5,823.2 million, €34.1 million lower when compared to the end of June. As a consequence, the debt-to-GDP ratio fell to 60.4%, marking a 1.1 percentage point improvement over the second quarter (see Chart 5.3).
Government debt declined even though general government reported a small deficit (see Chart 5.4). This is due to a negative deficit-debt adjustment mostly because of large drawdowns of government deposits held with the Central Bank of Malta. Transactions affecting government deposits were only partly offset by net trade receivables.

During the third quarter the stock of long-term securities (composed of Malta Government Stocks), increased marginally, while the stock of short-term securities (composed of Treasury Bills) declined (see Chart 5.3). Consequently, the share of long-term debt securities in total debt increased by 0.6 percentage points, to 88.7%, when compared to the previous quarter. At the same time, the share of short-term debt securities decreased by 0.7 percentage points and now makes up 4.6% of total debt. Meanwhile the share of loans increased marginally to 5.5% while the share of government liabilities in the form of currency remained unchanged at 1.2%.
6. MONETARY AND FINANCIAL DEVELOPMENTS

Monetary dynamics in Malta remained robust during the third quarter of 2016. Between June and September, residents’ deposits with monetary financial institutions (MFIs) operating in Malta continued to grow steadily in annual terms. The shift to overnight deposits persisted, reinforcing indications of a preference for liquidity in an environment of low interest rates. Credit to residents of Malta also grew further, although the annual rate of change eased between June and September. This reflected slower growth in credit to both general government and to the private sector.

Against a backdrop of an accommodative monetary policy stance, interest rates on deposits and loans to Maltese residents continued to fall during the period. Treasury bill yields declined further, as did longer-term government bond yields. In the equity market, domestic share prices remained relatively stable, following a decline during the previous quarter.

Monetary aggregates and their counterparts

Total assets pertaining to the Maltese banking system declined by €2.7 billion between June and September, to €50.6 billion. This decline largely reflected developments in the assets held by international banks, which contracted by €2.6 billion. Assets pertaining to core domestic banks also decreased, partly reversing the increase registered during the second quarter of the year. Conversely, assets held by non-core domestic banks rose marginally, after having fallen during the two previous quarters.

Further growth in residents’ deposits

Total deposits held by Maltese residents with MFIs in Malta continued to grow, going up by 6.7% in annual terms in September, following a 5.9% increase in June (see Table 6.1). Both deposits to households and those to non-financial corporations (NFCs) grew at a faster pace, when compared with the end of the second quarter of 2016.

Despite a slight acceleration from the previous quarter, annual growth in total deposits remains significantly below its July 2015 peak. This is mostly due to movements in overnight deposits, the largest category of residents’ deposits. Over the third quarter of 2016, overnight deposits grew at an annual rate of 13.3%. This represented a slight pick-up from 11.9% in June, yet was still significantly lower than the 33.3% annual growth registered a year earlier.

Deposits with an agreed maturity above two years also accelerated, growing at an annual rate of 8.0% in September, up from 5.7% at the end of the previous quarter. Conversely, deposits with an agreed maturity of up to two years as well as deposits redeemable at notice of up to three months, contracted further. These went down by 11.2% and 16.9%, respectively, in annual terms.

The shift away from term deposits towards overnight deposits continued, with the share of overnight deposits in total residents’ deposits standing at 69.6% in September, up from 65.6% a

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1 Monetary data analysed in this Chapter are compiled on the basis of statistical standards found in the General Notes of the Statistical Tables in this Quarterly Review. They are consistent with the relevant ECB Regulation and with ESA 2010.

2 As from January 2016, the domestically relevant banks or “core” domestic banks are APS Bank Ltd, Banif Bank (Malta) plc, Bank of Valletta plc, HSBC Bank Malta plc, Lombard Bank Malta plc, Mediterranean Bank plc and Mediterranean Corporate Bank.
year earlier (see Chart 6.1). In contrast, the share of deposits with an agreed maturity of up to two years declined to 19.8% from 23.8% over the year. The share of deposits with an agreed maturity of over two years edged up slightly, reaching 10.0% from 9.8% a year earlier. Deposits redeemable at notice of up to three months continued to account for a very small proportion of the total.

**Interest rates on deposits continue to decline**

Interest rates on residents’ deposits continued to decline during the third quarter of 2016, with the composite rate offered to households and NFCs going down by 6 basis points from June, to 0.52% (see Table 6.2).③ Rates

③ Data on MFI interest rates on outstanding amounts shown in Table 6.2 cover euro-denominated deposits belonging to households and NFCs resident in Malta. The household sector includes non-profit institutions serving households.
edged down across all deposit categories, save for the interest rate offered on NFC deposits with a maturity of over two years, which increased by 9 basis points from the previous quarter.

When compared with a year earlier, the composite deposit rate lost 24 basis points, mainly as a result of lower time deposit rates. This downward trend in deposit rates reflects the ongoing accommodative monetary policy of the euro area.

**Growth in credit to residents expands at a slower pace**

Credit to Maltese residents continued to grow during the third quarter of 2016, although at a slower pace. The annual rate of change fell to 2.2% in September from 5.4% in June (see Chart 6.2).

This slower growth in credit to Maltese residents reflected developments in credit to both government and other residents. Credit to general government grew at annual rate of 4.2% in September, from 12.1% in June. This slowdown partly reflects the redemption of a Malta Government Stock issue in August. Moreover, the volume of Central Bank of Malta purchases under the Eurosystem’s Public Sector Purchase Programme diminished compared to the same period of 2015.

Credit to other residents, which mostly consists of credit to the private sector, grew at a more moderate annual rate of 1.6%, down from 3.4% at the close of the previous quarter. This slowdown was partly driven by a faster contraction in credit to NFCs in the public sector.
The annual rate of change of credit to the private sector eased from 3.5% in June, to 2.7% in September. This movement was largely driven by changes in banks' holdings of shares and other equity issued by the private sector, which although small, show a considerable degree of short-term volatility. Growth in loans, which are the major component of credit to the private sector, eased to a much lesser extent. These rose by 2.3% in the year to September, only marginally lower than the 2.4% annual rate registered in June.

Loans to households, which rose at an annual rate of 5.6% in June, increased by a more moderate 4.6% in September (see Chart 6.3). Lending for house purchases remained the main driver of increases in this component, growing by an annual 6.2% at the end of the quarter. Consumer credit and other lending, on the other hand, continued to contract.

Meanwhile, loans to NFCs contracted at an annual rate of 1.8% in September, following zero growth in June, as loans to public sector corporations (which are classified outside the general government sector) decreased at a faster rate than before. At the same time, loans to private sector NFCs rose at a slower annual rate, in part because firms resorted to the corporate bond market for their funding needs. Loans to non-bank financial intermediaries contracted in the year to September, making it the fourth consecutive month of negative growth.

A sectoral breakdown of loans extended to NFCs shows that the construction sector accounted for a significant share of the overall contraction during the year to September (see Table 6.3). Smaller declines were also recorded in manufacturing, in transportation and storage, in the wholesale and retail trade activity.
trade sector and in the sector comprising accommodation and food service activities. These declines were somewhat offset by increases in lending to firms in the “other” category and in real estate.

**Interest rates on loans fall**

Interest rates on loans to Maltese residents declined slightly during the quarter under review, with the composite rate paid by households and NFCs edging down by 6 basis points over the three months to September, to 3.69% (see Chart 6.4). When compared with a year earlier, the composite rate was down by 17 basis points.

The rate on loans to NFCs declined more rapidly than that on loans to households during the quarter under review. Consequently, although the rate on NFC loans remains above that charged to households, possibly reflecting different assessments of risk, the spread between the two rates continued to narrow.

The spread between the composite lending rate and the deposit rate edged down marginally during the quarter. However, it widened when compared with a year earlier, suggesting that the transmission of the ECB’s monetary policy easing measures to retail lending rates was weaker than that to deposit rates (Chart 6.5).

**Bank Lending Survey indicates increased demand for home loans**

The Bank Lending Survey (BLS), last conducted in October 2016, surveyed four core domestic banks on credit conditions in Malta during the third quarter of 2016.

Overall, credit standards and credit terms and conditions for businesses remained generally unchanged during the period. On the other hand, half the respondents reported a slight increase in credit demand, with only one bank seeing a slight decrease. Looking forward, enterprise credit demand was expected to remain stable over the final quarter of 2016.
With regard to household credit, credit standards and credit terms and conditions on loans for house purchases were also left unchanged across the respondent banks. The demand for house loans was stable over the third quarter of 2016, with only one bank reporting a slight increase. The latter stated that it expected another increase in the fourth quarter of 2016, whereas the remaining respondents did not anticipate changes in demand.

During the period under review, credit standards and terms and conditions for consumer credit were also broadly stable, as only one bank claimed to have eased standards for this type of lending. Demand was generally assessed to have hovered around previous levels, with only one respondent reporting a slight increase. Moving forward, consumer credit demand was not expected to change for the remainder of the year.

The October BLS also featured questions on the direct and indirect effects of the ECB’s expanded asset purchase programme (APP). The effects on the banks’ capital position and market financing conditions were considered to be neutral. One bank stated that the ECB’s APP had a negative effect on its assets, while two respondents reported positive effects on liquidity due to an increase in deposits. The programme appears to be having adverse effects on profitability, with three of the four respondents claiming declines in their net interest margin. The negative effects on profitability were expected to persist over the next six months.

When asked whether the additional liquidity resulting from the APP was having any spill over effects on the banks’ lending patterns, three of the four respondents stated these effects were negligible. Only one respondent claimed to have increased its lending to enterprises and improved lending terms and conditions as a result of the ECB’s programme.

The money market

*Domestic money market interest rates fall*

Against a backdrop of strong excess liquidity, the yield on three-month Treasury Bills in the primary market declined by 11 basis points over the quarter, standing at -0.39% at the end of September (see Chart 6.6). At this level, the yield is very close to the -0.4% rate being offered on the Eurosystem’s overnight deposit facility. Over the same period, yields on three-month German government securities, which act as a benchmark for euro area yields, also dropped, shedding 10 basis points, to -0.81%. As a result, the spread between the short-term Malta government yield and the corresponding euro area benchmark was 42 basis points as at end-September. The amount of Treasury Bills issued by the...
Government decreased slightly from the previous quarter, with €206.2 million issued between July and September, down from €226.75 million.

The capital market
Between July and September 2016, the Government issued three MGS with a total value of €159.7 million. Over the same period, Plaza Centres plc., Dizz Finance, Gap Group and Mediterranean Maritime Hub Finance also issued new bonds. In total, these private sector issues had a value of €71.5 million. All issues were heavily oversubscribed.

As regards the secondary market, during the third quarter of 2016, turnover in government bonds stood at €160.8 million, up from €118.3 million in the previous quarter. Meanwhile, corporate bond turnover also increased, going up to €14.2 million from €13.8 million during the previous three-month period.

Maltese government bond yields declined further during the third quarter of 2016 (see Chart 6.7). The yield on five-year government bonds decreased by 13 basis points, to 0.11% as at end-September, while that on ten-year bonds shed 31 basis points, to 0.55%. These movements were more pronounced than those in the euro area, where the comparable five-year yield dropped by 1 basis point, while the ten-year yield rose by 1 basis point. Thus the ten-year euro-area benchmark yield was still in negative territory in September, standing at -0.12% at the end of the month.

MSE share index returns to June levels
Share prices in Malta, as measured by the Malta Stock Exchange (MSE) index, declined in August but returned to June levels by the end of the following month (see Chart 6.8). Turnover in equity declined further over the period, going down to €14.3 million from €18.6 million in the second quarter of the year.
PRODUCTIVITY AND STABILITY FOR SUSTAINABLE GROWTH

Dr Mario Vella
Governor of the Central Bank of Malta

Dear President and Members of the Committee of Institute of Financial Services (IFS) Malta, personally and on behalf of the Board of Directors of the Central Bank of Malta and of its Senior Management, I thank you for the opportunity to address this distinguished audience.

Dear Minister, Ladies and gentlemen.

This annual event brings together key stakeholders in this country’s economic development and growth, and in the development of the social, educational and cultural conditions without which economic development and growth are not possible. It is now an established tradition that the Governor of the Central Bank of Malta seizes the opportunity of the Annual Dinner of IFS Malta to make a number of factually grounded remarks about some matters in the remit of the Central Bank.

The traditional presence of the Minister for Finance at this event is of vital importance because it provides the stakeholders present with a more dynamic view of the whole, in the light of the statutorily distinct roles of the Ministry for Finance and the Central Bank of Malta.

Before sharing some thoughts with you, I would like to commend IFS for its ongoing commitment to responding to the changing needs of the marketplace and its pursuit of excellence in the provision of financial services education.

It is encouraging to hear that the Institute has had a successful year and that you are working on new initiatives to promote even higher professional standards. This is most welcome, as education and professional development are fundamental to the sustainability of our financial sector and its continued success.

Your strategic partnerships with the University of Malta and overseas professional bodies such as the European Banking & Financial Services Training Association (EBTN), the London Institute of Banking and Finance, and the Global Association of Risk Professionals (GARP) – whose representatives are with us tonight – reflects the Institute’s excellent reputation. That a Committee member of IFS-Malta has been elected to the highest decision making body of a European association for a third consecutive term confirms the Institute’s integrity and professionalism.

The Central Bank of Malta has always worked closely with IFS and will continue to support its activities. This year, we also cooperated with the IFS during the European Money Week to promote financial literacy to underprivileged youths and participated in the successful IFS Malta Annual Seminar on pension reform. I look forward to even more cooperation in the future.

Mr President, well done and thank you for taking a proactive stance towards raising the standards of financial services education. I wish you and your Committee every success in your future endeavours.

1 Speech given at the Annual Dinner of the IFS Malta on 18 November 2016.
Malta’s recent economic performance:
Against a backdrop of weak growth in Europe as a whole, economic activity in Malta remains robust. Following an exceptional increase of 6.2% last year, real gross domestic product (GDP) expanded at a more than respectable average annual rate of just over 4% during the first half of 2016.

The expansion in output is being driven by domestic demand, especially by strong growth in private consumption and investment. Exports of services are also performing well, indeed significantly better than the export of goods.

Growth is being driven by private market services, encompassing a mix of traditional and new sectors, including tourism and distribution, aviation and professional services. The utilities, which were formerly loss-making, have now returned to profit, reflecting the use of cheaper energy sources and efficiency gains.

Manufacturing is holding its own, with some sectors and niches performing very successfully and others continuing to face strong competitive pressures. At the same time, following vigorous growth last year, growth in value-added in construction has eased.

Growth in output depends upon and feeds into a dynamic labour market. According to administrative records, which are available up to April 2016, annual employment growth consistently exceeded 4% in recent quarters. The Labour Force Survey paints a similar picture, with employment gains averaging around 3% during the first half of the year. More recently, registered unemployment has continued to fall to record low levels over the summer.

Notwithstanding such a dynamic economic performance, price pressures remain contained, with inflation fluctuating in a narrow range around 1% since the beginning of the year.

The external balance, traditionally in deficit, has now been in surplus for a number of years, reflecting growth in services exports. The fiscal deficit narrowed to 1.4% of GDP in 2015 and should continue to decrease further this year. Indeed, in the foreseeable future the budget deficit is planned to fall to zero, while the government debt to GDP ratio should decrease to less than 60% of GDP.

This healthy economic performance and fiscal consolidation efforts have been well noted by the credit rating agencies. Indeed, last month, Standard & Poor’s raised Malta’s long-term sovereign rating to ‘A-’ with stable outlook. Earlier, Fitch had raised their outlook from neutral to positive.

In sum, the Maltese economy is going through an unprecedented period of strong growth, low unemployment, restrained inflation, a positive external balance and diminishing budget deficit and debt ratios.

Over the medium term, this performance has resulted in the convergence of Malta’s real per capita income with the EU average. Real GDP per head went up from 81% of the EU average in 2004 to 89% in 2015.

The conditions that determine performance:
It is worth examining the conditions that have made this performance possible to ascertain the extent to which it is sustainable or otherwise.
Some of the growth can be attributed to cyclical factors. For example, Malta is benefiting from the European Central Bank’s accommodative monetary policy stance. For reasons unrelated to the domestic situation, but reflecting a prolonged period of low inflation in the euro area, the ECB is using both conventional and unconventional measures to stimulate aggregate demand.

Hence interest rates are extremely low: consider that the domestic 10-year bond yield is now below 1%. Such low rates stimulate aggregate demand. One could also argue that, in the absence of the ECB’s monetary policy measures, the euro would also be much stronger than it is today. This would have had adverse implications for external competitiveness and, hence, Maltese exports.

Over the last two years, the economy also benefited from exceptionally strong government investment – with a key role played by EU funds – as the administration made sure that available entitlements were absorbed to the fullest extent possible.

This capital spending has both a temporary and a permanent effect. While the projects themselves are under way, investment boosts aggregate demand as seen in the levels of activity in the construction sector. Once the projects are completed, the additional capital stock that has been put in place enhances efficiency and allows the economy to continue growing into the future.

This brings me to a crucial concept in the analysis of Malta’s underlying economic performance: potential output. Potential output can be understood in many ways. Intuitively it can be seen as the maximum output an economy can produce without generating imbalances that show up in inflation. Potential output is a conceptual measure. It can be estimated, but not observed.

The Central Bank of Malta devotes much effort to estimating Malta’s potential output growth and its underlying determinants. Growth in potential output can be largely ascribed to structural reform measures that bring about changes in the factors of production, namely labour and capital, and the way they are combined, or productivity. We estimate that the potential growth rate of the Maltese economy has more than doubled from below 2% at the time of the global financial crisis to over 4% today.

This partly reflects a steady increase in the labour supply, coming from higher female participation in the workforce, measures to increase the effective retirement age and the influx of foreign workers, mainly from EU countries. Apart from the increase in labour supply, the quality of human capital has also improved. At the same time, a pick-up in investment, partly driven by developments in the energy sector, has boosted the capital stock. However, there is ample scope for improvement of labour productivity in the coming years. Indeed it is critical that it must improve.

A sound and stable financial system is an essential pre-condition for strong and sustainable economic performance. The performance of the domestic financial system, especially the core domestic banks, which have the strongest linkages to the domestic economy, remained sound with strong capital ratios, high liquidity and remained very profitable despite the challenges of a prolonged low interest rate environment.

Asset quality continued to improve, as non-performing loans, especially to the non-financial corporate sector declined by almost 12%, mostly reflecting improved creditworthiness and an increased commitment by borrowers to honour their loan commitments. As a result the Non-performing Loan ratio declined to 6.5% by mid-year and is expected to decline further to below 6%
later on this year. While banks have continued to adopt a prudent stance by increasing provisions, and while such loans are generally covered to a significant extent by collateral, nevertheless they need to build further coverage and exercise restraint in dividend distribution to shareholders to preserve further the soundness of the banking system.

In this regard, the authorities, namely the Central Bank of Malta and the Malta Financial Services Authority through the Joint Financial Stability Board, have taken policy measures to ensure that by preserving its soundness, the overall banking system remains supportive of economic growth. During 2016, the authorities introduced the Other Systemically Important Institutions capital buffer, to preserve capital in those banks that are the most systemically important for the domestic economy. We have also launched the Countercyclical Capital Buffer, although this has been currently set at 0% as credit growth has not been excessive relative to economic growth or contributing to asset price inflation.

Other decisions to maintain the soundness of the banking system relate to addressing the stock of NPLs, which is incidentally also high on the agenda of the Single Supervisory Mechanism. In this regard the authorities launched a consultation process with the stakeholders involved, to amend Banking Rule 9 which involves measures addressing credit risks arising from the assessment of the quality of asset portfolios of credit institutions.

In a nutshell, the proposal aims to establish a concrete plan with those banks with NPLs higher than 6% to reduce such NPLs below that level over a period of 5 years, where failure to adhere to this plan will require the institution to shore up its resilience through the accumulation of an additional capital reserve.

Meanwhile, on a European level, the European authorities are pushing for the establishment of a European Deposit Insurance Scheme (EDIS), which is a necessary ingredient to complete the architecture of the Banking Union project. This is because a common deposit insurance fund inspires the same level of confidence to depositors throughout the entire Banking Union, creating a consistent and common framework for supervision, resolution and depositor protection.

Moreover, this joint safety net within the Banking Union is expected to prevent the creation of competitive distortions, thus facilitating cross-border banking and hence strengthen financial integration. However, in this regard, there is still some way to go for agreement among all Member States, as risk reduction measures, particularly through asset quality reviews of the less significant institutions and addressing the banking-sovereign debt loop, need to be also implemented. Malta is committed to taking the EDIS file forward during its presidency.

**Risks:**

Going forward, we expect economic growth to moderate, while remaining robust and well above the euro area average. We consider that risks around this scenario are balanced. On the upside, there is the potential for private consumption to grow even more rapidly in a low interest rate environment especially if labour productivity increases to permit higher wage settlements.

The downside risks relate mostly to the external situation. Malta is one of the most open economies in Europe, heavily dependent on international trade for its long-term prosperity. Slower than expected growth in key trading partners, geopolitical tensions in our immediate neighbourhood and a resurgence of protectionism threaten this prosperity.
Another dimension of risk relates to inflation. I have already explained that the Bank believes that Malta’s potential economic growth rate has risen in recent years, implying that the economy can grow more rapidly than it used to without fuelling inflation. Nevertheless, output currently exceeds potential.

Should such a situation persist, we would normally expect to see upward pressures on prices and costs. We have not observed them yet, as wage growth has remained largely contained and foreign inflation is subdued.

The labour market situation, however, is tightening, which could lead to an intensification of wage pressures. This underlines the need to achieve better results in labour productivity growth to support wage demands without loss of competitiveness. In addition, global oil prices are now rising after having reached a trough towards the beginning of this year.

**Challenges ahead:**
The Central Bank of Malta’s prime responsibility is to ensure price stability. From this perspective the challenge is to ensure that the Maltese economy continues to expand at a sustainable pace, without overheating.

It is vital that we avoid the formation of asset price bubbles. The recent global financial crisis has shown the huge costs that can arise when asset prices depart from their fundamental values, eventually jeopardising the financial system and the economy as a whole.

At the Central Bank of Malta we are keeping a very watchful eye on the price developments in the property market. Earlier this year, we have published work by our Economic Research Department exploring property price misalignment with fundamentals based on an index of 5 separate indicators. It shows that at the end of 2015 house prices were still below their equilibrium fundamental value but nevertheless price trends in this regard will continue to be closely monitored.

There are, however, other asset classes which need close observation to avoid formation of asset bubbles. In the current low interest rate environment investors’ search for yield may stimulate excessive risk-taking behaviour. More investors’ education is needed to ensure that there is better appreciation of the risks of unrated corporate debt, especially where markets are somewhat thin.

At the same time, we have to recognise that, as members of the euro area, the monetary policy tool is no longer available at the national level. This means that action needs to be taken in those policy domains where we do enjoy some freedom of manoeuvre, that is, fiscal policy, macro-prudential policy and structural reforms.

**Policy recommendations:**
On the fiscal front, the recent developments I have just highlighted are encouraging. I would stress the importance of meeting our fiscal targets in terms of structural adjustment and reduction in the debt ratio.

Apart from compliance with domestic and European fiscal rules, it is important for Malta to build up sufficient fiscal buffers to allow us to counter eventual adverse economic shocks with fiscal policy if needed. In this regard, judicious control of government expenditure is essential, bearing
in mind that some important government revenue streams may be past their peak and need to be replaced through new initiatives.

Enhancing labour productivity is critical. This requires ongoing investment in our labour force, in our people.

In terms of the general business environment, it is important to ensure that Malta remains an attractive location for investment, especially foreign direct investment. We need to keep costs competitive, not only labour costs but also the costs of ancillary services including energy, transport and finance, as well as transaction costs generally.

Permit me, at this point, to stress the importance of containing the asymmetries of knowledge facing investors, especially foreign direct investors. The Central Bank is doing its utmost and intends to boost its efforts and the quality of these efforts by providing top quality and highly reliable public domain quantitative and qualitative information. Our research capability is one of our top priorities. This enhancement of our capability to produce reliable knowledge will benefit all discerning stakeholders including the policy maker (who we are statutorily committed to advise) and the potential investor (who abhors any vacuum of knowledge concerning the target location).

Promoting a healthy business environment also requires action to reduce excessive bureaucracy, to increase the efficiency of our judicial system and to ensure that our legal and regulatory frameworks remain appropriately flexible.

At the Central Bank of Malta we have taken initiatives to help the business environment by launching the Credit Register and by promoting the setting up of the Development Bank to give better access to credit for SME’s and to infrastructure investments on the Public Private Partnership (PPP) model.

We are also piloting changes to pre-insolvency procedures in an effort to curb unnecessary liquidations and save businesses that deserve a second chance through financial restructuring. We are also leading efforts to amend legislation to achieve more efficient contract enforcement procedures to address the long duration of NPL’s on bank balance sheets. These initiatives will help us climb the admittedly steep ladder of international rankings measuring business efficiency.

The great efforts of other public sector organisations, led by the Office of the Principal Permanent Secretary and Malta Enterprise, to radically streamline business enabling procedures across the board, are critical if we are to succeed to radically upgrade the business environment. I insist on the word “radical” because only a radical upgrade (an upgrade from the very roots of the system) will make a difference.

We need to enhance competition. It is essential to ensure that consumers and businesses can acquire the goods and services they need at fair prices. Within the banking system, we believe that there remains scope for payment services charges to respond to more competition and for further pass-through of the current low interest rates to customers although it is encouraging that we have seen reductions in recent months.

Fast economic growth does not come without some pain and costs. Infrastructure development has not kept up the pace and translates into practical problems. There are no easy solutions to
such problems. Building infrastructure takes time and adopting urban development policies is inevitably complex, especially in a very small island where every space is somebody’s back yard. At an international level, as an extremely open economy, we need to take a resolute stand against policies that close borders to trade and to international flows. As a small open economy we need to defend open borders and globalisation.

However we need to acknowledge that the benefits of globalisation have been very unevenly distributed, even in the most developed economies where many wage earners have not seen a real increase in wages for decades and have lost their jobs and security. This is what populism feeds on whilst certainly not offering solutions intended to ensure social justice.

Economic growth is only a means to the ultimate end of providing a higher standard of living and confidence about the future for all citizens. But it is an absolutely necessary means.
Monetary policy measures of the Eurosystem

ECB monetary policy decisions
The Governing Council of the European Central Bank (ECB) met to discuss monetary policy on 8 September and 20 October. On both occasions, the Council decided to keep interest rates on the main refinancing operations, the marginal lending facility and the deposit facility unchanged at 0.00%, 0.25% and -0.40%, respectively.

The Governing Council confirmed that the Eurosystem’s asset purchases are intended to run until the end of March 2017 or beyond if the Council deems it necessary, and in any case until it sees a sustained adjustment in the path of inflation consistent with its inflation aim.

European policy and supervisory announcements
On 22 September the European Systematic Risk Board (ESRB) met to discuss financial stability issues. The ESRB highlighted the further weakening of financial institutions’ balance sheets as the main risk to financial stability in the European Union. Short-term risks related to the United Kingdom’s EU referendum had materialised, yet the related volatility was short-lived and financial markets had quickly recovered. As in previous meetings, the ESRB discussed potential vulnerabilities and risks in the EU financial system related to the low interest rate environment, as well as other risks related to the residential real estate sector. The Board endorsed the publication of a report, which outlines its assessment of potential risks to EU financial stability and proposes options for macroprudential policy responses. The ESRB also released the seventeenth issue of its systemic risk dashboard for the EU financial system.

Central Bank of Malta announcements
Public Sector Purchase Programme (PSPP)
On 7 September the Central Bank of Malta held, on a trial basis, its first reverse auction under the Public Sector Purchase Programme (PSPP). Two subsequent auctions were also held. However, as no bids were received, the auction programme was temporarily suspended.

Issue of numismatic coins
On 6 August the Bank and Malta Post issued a joint numismatic coin and foil stamp replica in silver to celebrate the 100th Anniversary of the birth of former Prime Minister of Malta, Dom Mintoff. The coin, which was minted at the Royal Dutch Mint and struck in proof quality, has a face value of €10. Its obverse features the Maltese emblem as well as the year of issue 2016, while the reverse shows a portrait of Mr Mintoff. The silver foil replica stamp depicts the €3.00 postage stamp featuring Mr Mintoff’s portrait.

These News Notes refer to the period from 1 August until 31 October 2016.
On 22 August the Bank issued a new coin set dated 2016 incorporating the eight Maltese euro coins, as well as a €2 coin depicting the prehistoric temples of Ggantija. All coins in this set were struck at the Monnaie de Paris in France. The national sides and the commemorative €2 coin were designed by Noel Galea Bason. The commemorative €2 coin featuring the Ggantija temples was also issued separately on 22 September in circulation quality in rolls of 25 coins each as well as in coin cards. It is the first of a series of seven that will be issued by the Bank depicting Malta’s prehistoric monuments.

On 16 September the Bank issued a numismatic coin in gold representing the “patakka”, a copper four tari coin issued during the reign of Grand Master Jean de Valette. The obverse illustrates the emblem of Malta and the year of issue, while the reverse features a representation of a “patakka” and depicts a Maltese cross. The coin, having a face value of €5, was struck at the Royal Dutch mint in 0.999 gold and is of proof quality. It was designed and engraved by Noel Galea Bason.

**Fiscal and economic policy developments**

On 24 August the European Commission approved the setting up of the Malta Development Bank, noting that this is in line with EU state aid rules. The bank will facilitate access to funding for Small and Medium Enterprises (SMEs) that have difficulty accessing market financing, as well as support infrastructure investment. The Bank will have an authorised share capital of €200 million and will carry out non-commercial activities to avoid unduly distorting competition. A Bill setting up and regulating the Malta Development Bank was earlier presented for debate in Parliament.

On 17 October the Minister for Finance presented the Budget for 2017 to Parliament. The general government deficit is expected to fall to 0.7% of GDP in 2016, from 1.4% in 2015. The deficit is targeted to narrow further in the coming years, with a small surplus targeted for 2019. Meanwhile, the general government debt is expected to have reached 63.3% of GDP this year, falling below 60% in 2018. Revenue measures included an increase in the income tax-exempt band for pensioners and a rise in excise duties. On the expenditure side, a number of pensions and other social benefits were increased.

**International assessments of the Maltese economy**

On 28 September 2016 The World Economic Forum published the *Global Competitiveness Report 2016-2017*, ranking Malta in the 40th place (out of 140 countries) in the Global Competitiveness Index, an improvement from 48th place in the previous report. Malta ranked high in factors such as health, primary education, technological readiness and the general macroeconomic environment, yet it was held back by low scores in relation to market size and innovation, as well as an inadequately trained workforce. Government bureaucracy, access to finance and capacity constraints were also deemed problematic.

**Credit ratings**

On 19 August Fitch affirmed Malta’s long-term foreign and local currency issuer default ratings at A and revised the outlook to positive from stable. The revision of Malta’s outlook reflects the fact that government debt fell to 63.8% of GDP and is forecast to fall further
in the next two years. Fitch also commended Malta for its strong nominal GDP growth, which continued to outperform the euro area average, and for on-going fiscal consolidation. Meanwhile, Fitch noted that the Government had implemented a number of structural reforms supporting the economy’s potential and that the external position compared well with that of Malta’s peers. The impact of ‘Brexit’, Fitch cautioned, is likely to impact the country negatively but in a limited way.

On 2 September Moody’s affirmed Malta’s A3 long-term issuer, senior secured and senior unsecured debt ratings. This evaluation reflects a resilient economy supported by high competitiveness and recent structural reforms increasing potential growth. It also mentioned the decreasing government debt ratio as well as the resilience of the Maltese banking system. The agency nonetheless cautioned about contingent liability risks and the challenge of reducing government debt given recent strong growth in expenditure and the expected moderation in GDP growth.

On 10 September DBRS affirmed Malta’s ‘A’ rating with a stable outlook. This reflected the country’s economic resilience. In its assessment, DBRS also pointed out the rise in national income, as well as the Government’s strengthening of fiscal, monetary and financial policy institutions. It also referred to resilient private consumption growth and an overall strong economic performance.

On 14 October Standard and Poor’s (S&P Global) raised Malta’s long-term rating to ‘A-’ and confirmed the stable outlook for Malta, noting that this assessment is supported by favourable growth prospects, a continued amelioration in the country’s fiscal performance as well as an improved external position, which in turn is reflected in a persistent current account surplus.

Financial sector developments

Family Business Act
Act No. XLVIII of 2016, dated 9 September 2016 encourages the regulation of family businesses, their governance and the transfer of the family business from one generation to the next. It also encourages and assists family businesses to enhance their internal organisation and structure.

Trust and Trustees Act (Protected Disability Trusts)
Legal Notice 324 of 2016, dated 7 October 2016, regulates the establishment and administration of trusts formed for the benefit of beneficiaries at least one of whom is a person with disability.

Capital market developments

Issue of Malta Government Stocks
On 7 October the Government, through Legal Notice 318 of 2016, announced the issuance of two new Malta Government Stocks maturing in 2022 and 2039, with coupon rates
of 1.50% and 2.10%, respectively. The total amount to be issued was set at €100 million subject to an over-allotment option of up to €60 million. The over-allotment option was exercised and the Government issued €159.2 million worth of bonds, entirely to retail investors and predominantly in the 2039 issue.

Private sector issues
On 11 August Plaza Centres plc announced the issue of €8.5 million unsecured bonds maturing in 2026. The bonds were issued at par and carry a coupon rate of 3.9%.

On 16 September Dizz Finance plc announced the issue of €8 million unsecured bonds maturing in 2026. The bonds were issued at par and carry a coupon rate of 5.0%.

On 16 September Gap Group plc announced the issue of €40 million secured bonds maturing in 2023 at par. The bonds carry a coupon rate of 4.25%.

On 16 September Mediterranean Maritime Hub Finance plc announced the issuance of €15 million unsecured bonds maturing in 2026. The bonds carry a coupon rate of 4.8% and were issued at par.

On 21 October Premier Capital plc announced the issue of €65 million unsecured bonds maturing in 2026. The bonds, which were issued at par, carry a coupon rate of 3.75%.

International economic and financial news

Council of the European Union (ECOFIN)
On 12 September the ECOFIN Council adopted its position on the draft EU Budget for 2017. The Council’s main objective is to ensure that the financial resources available are directed towards the Union’s top priorities, which include the migration crisis and its root causes, the European economy and ways to boost it, and job creation. Overall, the Council’s aim is to secure a sustainable and effective budget at a time of budgetary constraints.

On 11 October the ECOFIN Council published its conclusions on Tax transparency. The Council recognised the progress made in pursuing fairer, more transparent and more effective taxation systems and the need for cooperation between the fiscal authorities across the European Union. It also noted that recent EU legislation on the automatic exchange of information on tax rulings and related country reports about multinationals between Member States is a step in the right direction.

European Council
On 20 and 21 October the European Council discussed the ongoing migration and refugee crisis, with a focus on improving co-operation with third countries to stem the flows, strengthening the protection of the European Union’s external borders, and Europe’s response to the current influx of refugees. Other important items discussed included developments with Syria, as well as Russia’s relations with this country, trade and other global economic issues.
International Monetary and Financial Committee

On 6 October the International Monetary and Financial Committee met in Washington D.C. for the Annual Meetings of the IMF and the World Bank Group. The Committee noted that the global economic recovery continues slowly and unevenly, yet growth is expected to increase slightly next year as a result of emerging market economies.

The IMFC encouraged countries hit by persistent declines in their terms of trade to pursue structural reforms and resist all forms of protectionism. It also outlined a number of policy priorities, including growth friendly fiscal policies, a continuation of accommodative monetary policies and effective policies to deal with legacy issues arising from the financial crisis.