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CONTENTS

ABBREVIATIONS

APP	Asset Purchase Programme
ECB	European Central Bank
EONIA	Euro OverNight Index Average
ESA 2010	European System of Accounts 2010
ESRB	European Systemic Risk Board
EU	European Union
EURIBOR	Euro Interbank Offered Rate
GDP	gross domestic product
HCI	harmonised competitiveness indicator
HICP	Harmonised Index of Consumer Prices
IMF	International Monetary Fund
LFS	Labour Force Survey
MFI	monetary financial institution
MGS	Malta Government Stocks
MRO	main refinancing operation
MSE	Malta Stock Exchange
NACE	statistical classification of economic activities in the European Community
NFC	non-financial corporation
NPISH	Non-Profit Institutions Serving Households
NSO	National Statistics Office
PPI	Producer Price Index
RPI	Retail Price Index
TLTRO	targeted longer-term refinancing operation
ULC	unit labour cost

FOREWORD

The strong pace of economic growth in Malta continued in the fourth quarter of 2016, with real gross domestic product (GDP) expanding by 5.1% on an annual basis, following a 4.5% increase in the preceding quarter. Economic growth in Malta, which was three times the rate observed in the euro area, was once again driven by net exports, although private consumption and investment also expanded on the corresponding quarter of 2015.

Upbeat labour market conditions carried on in the last quarter of the year, reflecting government efforts to increase labour market participation and job matching in the context of a buoyant economy. These measures, along with a favourable cyclical position, supported a further expansion in employment and a continued decline in the unemployment rate.

The annual inflation rate as measured by the Harmonised Index of Consumer Prices (HICP) increased marginally to 1.0% in December, from 0.9% in September, driven by faster growth in prices of unprocessed food. Inflation in Malta remained low from a historical perspective and for the first time in over two years was also below that registered in the euro area. Downward pressures on domestic costs persisted in December, with the Producer Price Index (PPI) contracting by almost 2% on a year earlier. As regards measures of competitiveness, Malta's Harmonised Competitiveness Indicators (HCI) fell during the fourth quarter, suggesting an improvement in price competitiveness.

Monetary dynamics remained robust during the fourth quarter of 2016. Residents' deposits with monetary financial institutions operating in Malta continued to expand in annual terms, driven by strong growth in overnight deposits. The annual rate of change of credit to residents of Malta accelerated, driven by faster growth in credit to residents outside the general government sector.

Against a background of moderate economic growth and limited price pressures in the euro area, the Governing Council of the European Central Bank (ECB) maintained an accommodative monetary policy stance. During the last quarter of 2017, the interest rate on main refinancing operations (MRO), the marginal lending facility and the marginal deposit facility were kept at 0.00%, 0.25% and -0.40%, respectively. In addition, the ECB announced that its Asset Purchase Programme (APP) would run at least until the end of 2017. In December, the Governing Council also announced further changes to the parameters of the APP, with a view to ensure its smooth operation.

Reflecting these accommodative monetary conditions, interest rates on deposits held by Maltese residents fell further between September and December. Interest rates on loans however, showed mixed developments, with the interest rate on household loans edging down marginally, and that on loans to non-financial corporations (NFC) increasing slightly over this period. Meanwhile, Treasury bill yields were broadly stable, while longer-term government bond yields edged up, the latter mirroring similar developments in corresponding euro area yields.

As regards public finances, in the final quarter of 2016, the general government surplus increased on the comparable period in 2015, as expenditure fell faster than revenue. When measured as a four-quarter moving sum, the general government balance reached a surplus of 1.0% of GDP, up from 0.8% in the third quarter of 2016. Meanwhile, general government debt, as a share of GDP, declined from 59.7% at the end of September, to 58.3% at the end of December.

According to the ECB staff macroeconomic projections, published in March 2017, the euro area recovery is expected to continue, supported by the ongoing global economic recovery, the ECB's accommodative monetary policy stance, improved labour market conditions as well as progress with deleveraging. Euro area real GDP growth is projected to edge up slightly from 1.7% in 2016, to 1.8% in 2017, but is set to ease to 1.6% by 2019. Inflation is expected to accelerate from 0.2% in 2016 to 1.7% in 2017 and remain around this level in the following two years.

ECONOMIC SURVEY

1. THE EURO AREA AND THE EXTERNAL ENVIRONMENT

In the fourth quarter of 2016, real gross domestic product (GDP) growth in the United States decelerated, while the United Kingdom and the euro area recorded faster growth. Unemployment rates in these economies edged down slightly or stabilised.

Annual consumer price inflation rose from low levels. In the euro area, it edged up to 1.1% in December. The United States and the United Kingdom recorded rates of 2.1% and 1.6%, respectively. Against this backdrop, the Federal Reserve raised the official federal fund target rate in December. On the other hand, the European Central Bank (ECB) and the Bank of England maintained their key policy rates on hold. However, the ECB announced that its Asset Purchase Programme (APP) would run at least until the end of 2017. In December, the Governing Council also announced further changes to the parameters of the APP, with a view to ensure its smooth operation.

Meanwhile, Brent crude prices rose during the quarter reviewed, as oil-producing countries agreed to restrict supply.

Key advanced economies

US economy grows at a slower pace
The US economy grew at a slower pace in the fourth quarter of 2016. Real GDP rose by 0.5% during the quarter, following 0.9% growth in the third quarter (see Table 1.1).

The deceleration was attributable to a downturn in net exports. After having increased in the third quarter, exports decreased during the fourth quarter. Meanwhile, imports accelerated. Government expenditure also contributed to the deceleration in overall GDP growth, as it grew at a slower pace, driven by lower federal government spending. On the other hand, residential fixed investment recovered from the previous quarter's decline, as did state and local government spending, while private consumption increased at a faster pace.

Labour market conditions remained largely unchanged during the final quarter of 2016. The participation rate decreased marginally by 0.1 percentage point, to 62.7%, while the annual rate of employment growth decelerated to 1.6%, from 1.8% in the previous quarter. The unemployment rate fell from 4.9% in the September quarter to 4.7% in the last quarter of 2016, as the number of

Table 1.1
REAL GDP GROWTH IN SELECTED ADVANCED ECONOMIES
Quarter-on-quarter percentage changes; seasonally and working day adjusted

|	2015			2016			
	Q2	Q3	Q4	Q1	Q2	Q3	Q4
United States	0.6	0.5	0.2	0.2	0.4	0.9	0.5
Euro area	0.4	0.3	0.4	0.6	0.3	0.4	0.5
United Kingdom	0.5	0.3	0.7	0.2	0.6	0.5	0.7

Sources: Bureau of Economic Analysis, US; Eurostat; Office for National Statistics, UK.

unemployed fell faster in annual terms (see Chart 1.1). Payroll data indicate that on an annual basis the number of employees in construction, in private services and in the public sector grew at a slower pace compared with the third quarter, while the number of those working in manufacturing declined.

The annual rate of inflation based on the consumer price index (CPI) edged up and stood higher than the 2% target of the Federal Reserve. In December, CPI inflation reached 2.1% against 1.5% registered in September (see Chart 1.2). The rise in inflation was mainly attributable to higher energy prices which increased following a period in which energy prices were declining. Meanwhile, food price inflation remained negative. Inflation excluding food and energy, stood at 2.2%, unchanged from September.

In October, the Federal Open Market Committee (FOMC) decided to maintain the target range for the federal funds rate unchanged, but acknowledged that the case for an increase in this rate had continued to strengthen (see Chart 1.3). In fact, in December the FOMC increased the federal fund target rate to a range between 0.50% and 0.75%, from a range of between 0.25% and 0.50% previously. The Committee took this decision as the US labour market continued to strengthen and inflation continued its progress towards the target of 2% in the medium term. The

Chart 1.1
UNEMPLOYMENT RATE
(percentage of the labour force; quarterly average; seasonally adjusted)
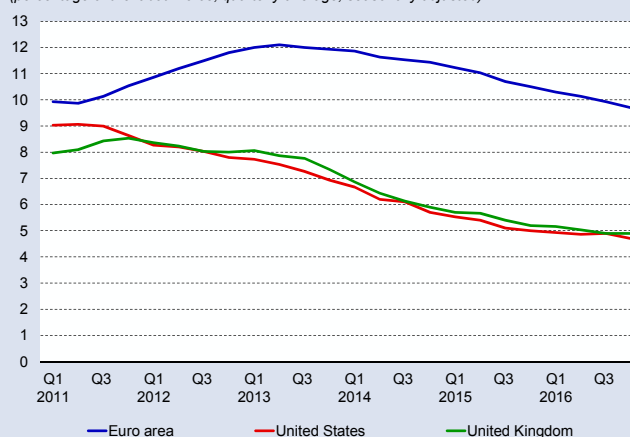
Sources: Eurostat; US Bureau of Labor Statistics; Office for National Statistics, UK.

Chart 1.2
CONSUMER PRICE INFLATION
(annual percentage changes)
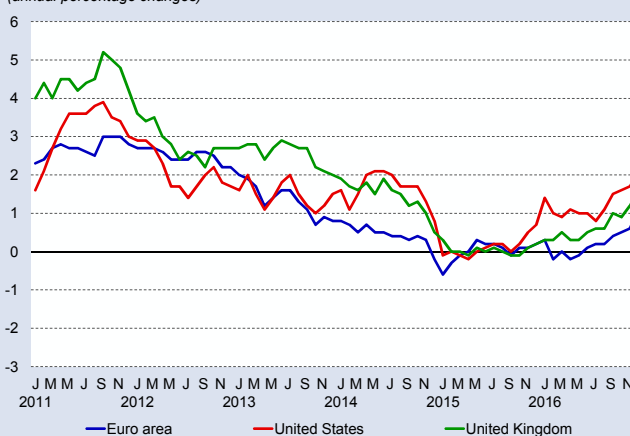
Sources: Eurostat; US Bureau of Labor Statistics; UK Office for National Statistics.

Chart 1.3
OFFICIAL INTEREST RATES
(percentages per annum; end of month)

Sources: ECB; Federal Reserve; Bank of England.

Committee also maintained its policy of reinvesting principal payments from its agency debt and agency mortgage-backed security holdings in agency mortgage-backed securities, and rolling over maturing Treasury securities at auction.[1]
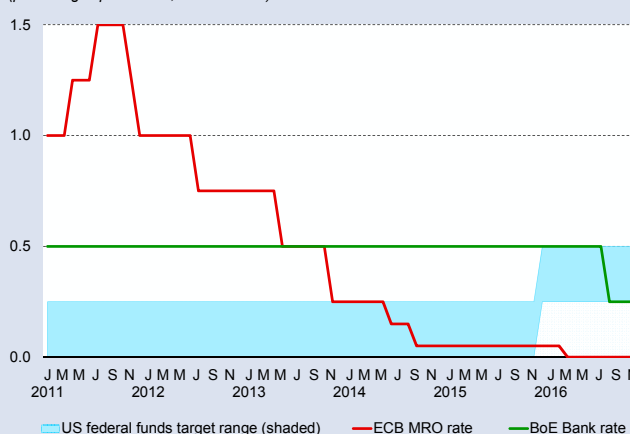
UK economic growth rises marginally

Quarter-on-quarter GDP growth in the United Kingdom rose by 0.2 percentage point to 0.7% in the final quarter of 2016 (see Table 1.1). This marginal rise was partly attributable to an increase in net exports, as exports recovered and imports fell during the quarter. Consumer spending remained strong. On the other hand, investment growth decelerated. Unemployment in the United Kingdom averaged 4.9% in the three months to December, unchanged from the preceding quarter (see Chart 1.1).

As in the United States, inflation in the United Kingdom rebounded, with the annual rate of change in the CPI reaching 1.6% in December from 1.0% in September (see Chart 1.2). Food prices fell at a slower rate while the rate of increase in the prices of non-energy industrial goods and energy turned positive. On the other hand, the rate of increase of services prices fell marginally. Inflation excluding energy and food rose to 1.7% in December from 1.5% three months earlier.

During the meetings held in November and December, the Bank of England's Monetary Policy Committee voted unanimously to maintain the Bank Rate at 0.25% (see Chart 1.3). The Committee agreed to continue with the programme of sterling non-financial investment-grade corporate bond purchases totalling up to GBP 10 billion and financed by the issuance of central bank reserves. It also maintained its programme of GBP 60 billion of UK government bond purchases to take the total stock of these purchases to GBP 435 billion, financed by the issuance of central bank reserves.[2]

The euro area

Euro area economy growth remains moderate

In the last quarter of 2016, the euro area economy continued to recover. Quarter-on-quarter real GDP rose by 0.5% during the quarter under review, marginally higher than the rate registered in the third quarter (see Table 1.2).

Domestic demand was the sole driver behind economic growth during the December quarter. Private consumption and government consumption increased at a faster pace when compared with the previous quarter, and together contributed 0.4 percentage point to GDP growth (see Table 1.2). Additionally, investment recovered from the previous quarter's decline, and together with changes in inventories, added a further 1.0 percentage point to economic growth.

On the other hand, as imports increased at a faster pace than exports, net exports contributed negatively to real GDP growth.

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[1] This assessment was broadly confirmed at the FOMC's January/February meeting. In March 2017, given the further strengthening of the labour market and economic activity, together with a pick-up in inflation, the FOMC increased the target range of the federal funds rate to between 0.75% and 1.00%.

[2] The Bank of England's Monetary Policy Committee maintained the Bank Rate unchanged during its February and March 2017 monetary policy meetings.

Table 1.2

CONTRIBUTIONS TO QUARTERLY REAL GDP GROWTH IN THE EURO AREA[1]

Seasonally and working day adjusted

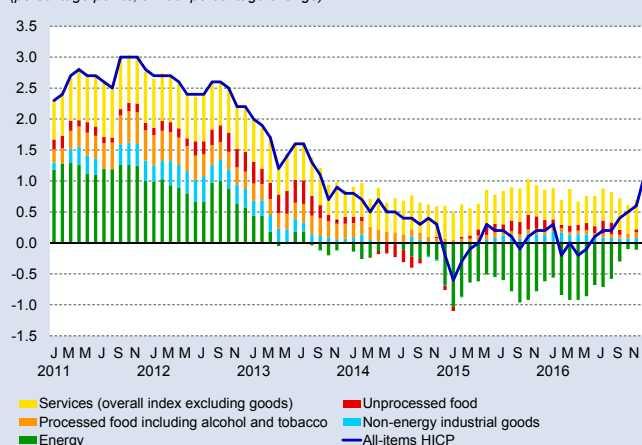|	2015	2016			
	Q4	Q1	Q2	Q3	Q4
	Percentage point contributions				
Private consumption	0.2	0.4	0.2	0.2	0.3
Government consumption	0.1	0.1	0.1	0.0	0.1
Gross fixed capital formation	0.1	0.2	0.2	0.0	0.7
Change in inventories	0.3	-0.3	-0.1	0.1	0.3
Exports	0.3	0.1	0.6	0.2	0.8
Imports	-0.6	0.1	-0.6	0.0	-1.7
GDP	**0.4**	**0.6**	**0.3**	**0.4**	**0.5**

[1] Figures may not add up due to rounding.
Source: Eurostat.

Inflation picks up

The annual rate of inflation in the euro area, measured on the basis of the Harmonised Index of Consumer Prices (HICP), accelerated during the last quarter of 2016. It rose from 0.4% in September to 1.1% in December.

The strong pick-up primarily reflected developments in energy component (see Chart 1.4). In December, energy prices increased in annual terms, after having fallen in preceding months, with the rebound reflecting the recent recovery in international oil prices (see Chart 1.8).

Chart 1.4
CONTRIBUTIONS TO YEAR-ON-YEAR HICP INFLATION IN THE EURO AREA
(percentage points; annual percentage change)

Services (overall index excluding goods)
Processed food including alcohol and tobacco
Energy
Unprocessed food
Non-energy industrial goods
All-items HICP

Source: Eurostat.

The prices of processed and unprocessed food, as well as those of services, also increased at a faster rate, when compared with September. On the other hand, in December, prices of non-energy industrial goods rose at the same pace as that recorded three months previously.

The annual rate of change of HICP excluding food and energy edged up marginally over the quarter under review. In December this measure of inflation stood at 0.9%, up from 0.8% in September.

Labour market improves further

Labour market conditions in the euro area improved further over the last three months of 2016, with the unemployment rate standing at 9.6% in December, down from 9.9% three months previously and from 10.4% a year earlier (see Chart 1.1). Progress was also seen in employment, where the number of employed continued to increase, growing by 1.1% on an annual basis.

ECB staff projections show recovery is expected to firm

The latest ECB staff macroeconomic projections, published in March 2017, expect the euro area recovery to firm further. Economic activity in the euro area is set to be supported by the expected global economic recovery, resilient domestic demand and an accommodative monetary policy stance by the ECB. Improving labour conditions as well as progress with deleveraging across sectors should sustain the recovery over the forecast horizon. Following an increase of 1.7% in 2016, real GDP growth is set to edge up to 1.8% in 2017. It is then expected to moderate slightly to 1.7% and 1.6% in the 2018 and 2019, respectively (see Table 1.3).

The projected recovery is expected to be mainly driven by domestic demand. Private consumption growth is expected to remain robust, supported by improving labour conditions and increasing nominal disposable income. Private consumption is also set to benefit from the recent high level of consumer confidence together with the low interest rate environment, past deleveraging as well as the projected rise in household net worth.

Residential investment is projected to grow further, while business investment is expected to recover. Housing investment is expected to be supported by disposable income growth, very low mortgage rates and limited other investment opportunities. Business investment is set to benefit from improved business confidence, favourable financial conditions as well as strengthening domestic and external demand. Additionally, higher capacity utilisation and the need to modernise the capital stock after years of subdued investment, together with the expected pick up in profit margins shall also boost investment. Government consumption growth is set to moderate in 2017 and then keep a relatively stable growth rate over the rest of the forecast period.

On the external side, exports are set to increase strongly in response to the recovery in global demand as well as a small depreciation in the euro exchange rate. Foreign demand is expected to remain robust, although subdued import growth from the United Kingdom is expected to have a dampening effect. Imports are set to outpace exports over the forecast horizon, with net exports making a very small positive contribution to GDP growth over the forecast horizon.

Compared with the Eurosystem staff projections published in December 2016, euro area GDP growth was revised upwards by 0.1 percentage point in 2017 and 2018, mainly reflecting stronger growth in exports, a weaker euro and more favourable economic sentiment. These factors more than offset the negative impact of higher international oil prices.

Table 1.3

MACROECONOMIC PROJECTIONS FOR THE EURO AREA[1]

Average annual percentage changes

	2016	2017	2018	2019
GDP	**1.7**	**1.8**	**1.7**	**1.6**
Private consumption	1.9	1.4	1.4	1.4
Government consumption	2.0	1.1	1.0	1.1
Gross fixed capital formation	2.5	2.8	3.2	2.8
Exports	2.9	4.3	4.1	4.0
Imports	3.5	4.6	4.4	4.2
HICP	**0.2**	**1.7**	**1.6**	**1.7**

[1] ECB staff macroeconomic projections (March 2017).
Source: ECB.

According to the March 2017 projections, HICP is set to accelerate from 0.2% in 2016 to 1.7% in 2017. It is expected to stay around this level in 2018 and 2019. Compared with the December projections, inflation was revised strongly upwards in 2017 and to a lesser extent in 2018, primarily due to the recent rise in oil prices. The latter is also the main factor driving the pick-up in HICP from 2016. Inflation projections were revised upwards by 0.4 percentage point in 2017 and by 0.1 percentage point in 2018. The forecast for 2019 remains unchanged from that published in December.

HICP excluding food and energy is also set to pick up over the forecast horizon, reflecting higher expected unit labour costs, as well as higher production costs and strong increases in profit margins.
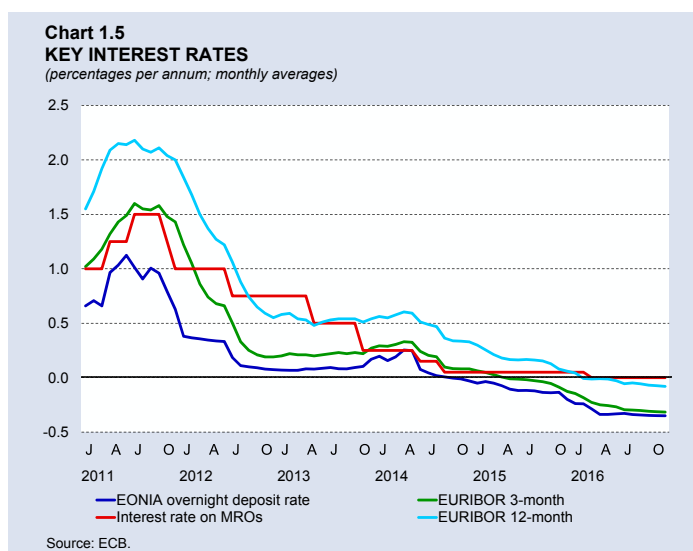
ECB maintains its accommodative monetary policy stance

The ECB's Governing Council kept an accommodative monetary policy stance during the last quarter of 2016. The interest rate on main refinancing operations (MRO), marginal lending facility and deposit facility were maintained at 0.00%, 0.25% and -0.40%, respectively (see Chart 1.3). The Council announced that it continues to expect these rates to remain at present or lower levels for an extended period of time, and well past the horizon of the net asset purchases.

The Council also maintained the comprehensive package of non-standard measures. This includes purchases under the asset purchase programme, which were conducted at a monthly pace of €80 billion. In December 2016, the Governing Council confirmed that these purchases would carry on at this pace until the end of March. Subsequently, APP purchases would be undertaken at a monthly pace of €60 billion. Such purchases are intended to run until the end of 2017, or beyond, if necessary, and in any case until the Governing Council sees a sustained adjustment in the path of inflation.[3] In December, the Governing Council also announced further changes to the parameters of the APP, with a view to ensure its smooth operation. These include a broadening of the maturity range of the public sector purchase programme (PSPP), with the minimum remaining maturity for eligible securities cut from two years to one year. Moreover, purchases of securities under the APP with a yield to maturity below the interest rate on the ECB's deposit facility will be permitted to the extent necessary.

Money market rates at historical lows

Against a backdrop of an accommodative monetary policy by the ECB, money market rates in the euro area continued to fall during the last three months of 2016, reaching new historical lows. The EONIA deposit rate declined by 1 basis point and stood at -0.35% in December (see Chart 1.5).[4] Meanwhile,

Chart 1.5
KEY INTEREST RATES
(percentages per annum; monthly averages)

Legend:
— EONIA overnight deposit rate
— Interest rate on MROs
— EURIBOR 3-month
— EURIBOR 12-month

Source: ECB.

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[3]   The Governing Council kept the key interest rates unchanged during its January and March 2017 monetary policy meetings.

[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 three-month and twelve-month EURIBOR fell to -0.32% and -0.08% , from -0.30% and -0.06%, respectively, in September.
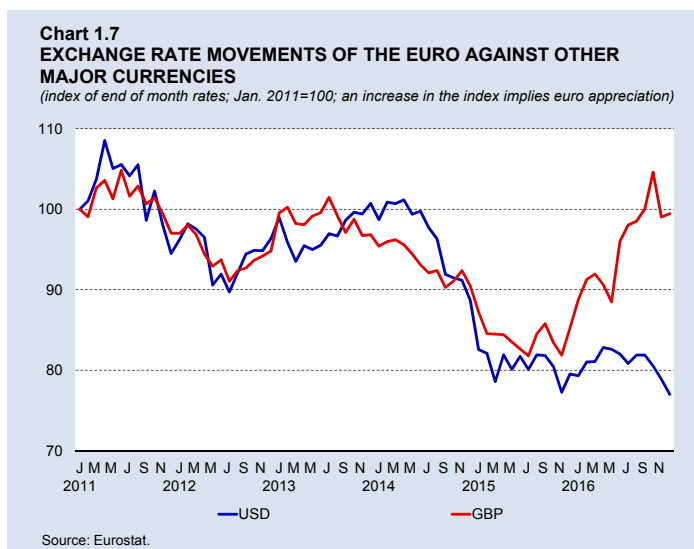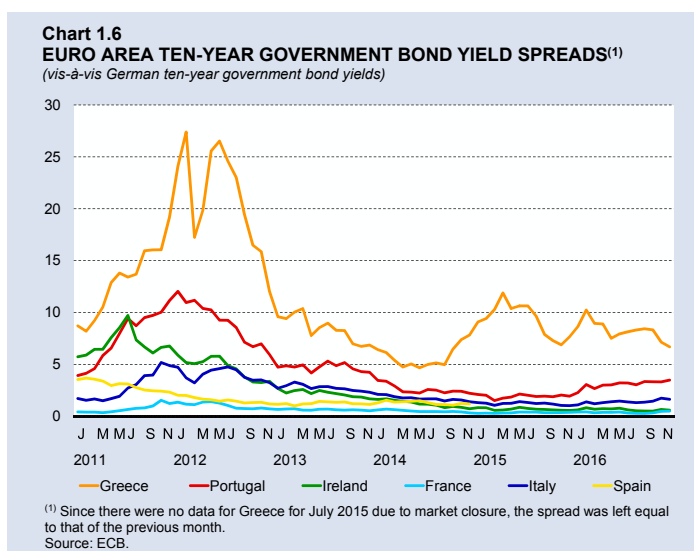
Bond yield spreads widen as yields increase

In December, yields on ten-year benchmark government bonds in the euro area were generally higher compared with September. The strongest increases were recorded in Italy and France, where yields rose by 62 and 57 basis points, respectively. These increases were driven by concerns about the health of Italy's banking sector as well as political uncertainty in Italy and France. Yields also rose in Portugal (by 48 basis points), Ireland (by 42 basis points) and Spain (by 40 basis points). Bond yields in Germany turned positive in October and stood at an average of 0.25% in December, 34 basis points higher than the September average. In contrast, ten-year yields declined strongly in Greece, falling to 6.9% in December from 8.3% in September. This decline reflected efforts by the Eurogroup to agree on short-term measures aimed at improving debt sustainability in Greece.

The spreads between yields on ten-year German bonds and those issued by most other euro area sovereign widened over the review period, particularly for Italian and French bonds (see Chart 1.6). In contrast, the decline in the Greek yields resulted in their spreads against German bonds to narrow.

Chart 1.6
EURO AREA TEN-YEAR GOVERNMENT BOND YIELD SPREADS[1]
(vis-à-vis German ten-year government bond yields)

[1] Since there were no data for Greece for July 2015 due to market closure, the spread was left equal to that of the previous month.
Source: ECB.

The euro depreciates

The euro exchange rate lost value over the last quarter of 2016, with the nominal effective exchange rate against the EER-19 group of countries falling by 0.7% between end-September and end-December.[5]

During the quarter under review, the euro fell against the majority of currencies within the EER-19 group of countries. The euro lost 0.6% of its value against the pound sterling, and weakened by 5.6% against the US dollar (see Chart 1.7). The

Chart 1.7
EXCHANGE RATE MOVEMENTS OF THE EURO AGAINST OTHER MAJOR CURRENCIES
(index of end of month rates; Jan. 2011=100; an increase in the index implies euro appreciation)

Source: Eurostat.

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[5]   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.

strong decline against the US dollar reflected the disparity in the monetary policy stance between the ECB and the Federal Reserve. On the other hand, the euro strengthened against a number of emerging economy currencies.

Commodities

The price of Brent crude oil hovered between USD 40.0 and USD 50.0 between October and November before rising above USD 50.0 in the beginning of December (see Chart 1.8). This rise followed an announcement

Chart 1.8
PRICE OF OIL
(end of week; US dollars per barrel)

Source: Reuters.

by the Organization of the Petroleum Exporting Countries (OPEC) that members had agreed to restrict supply. At the end of 2016, the price of Brent crude stood at USD 54.7 per barrel, a rise of 12.4% compared with the price at the end of September.

As regards non-energy commodity prices, World Bank data show that these generally increased in the final quarter of 2016. This was mainly a result of higher prices for metals and minerals. On the other hand, prices of agricultural products decreased marginally.
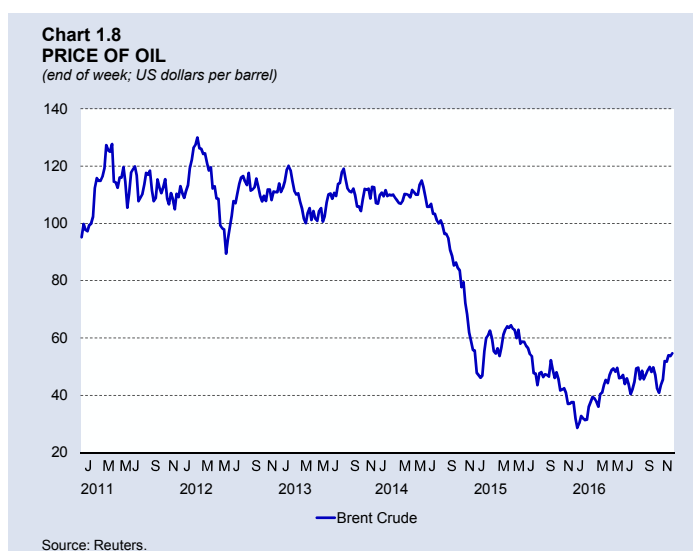
2. OUTPUT AND EMPLOYMENT

Economic activity in Malta remained robust during the last quarter of 2016. Growth in real gross domestic product (GDP) was faster when compared with the third quarter. The expansion during the quarter under review was supported by net exports. In contrast, domestic demand declined on a year earlier as decreases in government consumption and changes in inventories offset increases in private consumption and investment. Nominal sectoral data show that services remained the main driver of growth, although the agriculture sector also registered an increase in its gross value added (GVA). Conversely, GVA in construction, manufacturing and utilities declined on the corresponding quarter of 2015.

Positive labour market developments continued in the fourth quarter of 2016, as employment grew further and unemployment continued to decline. The favourable developments observed in recent quarters partly reflect government efforts to increase labour market participation and job matching in the context of a buoyant economy.

GDP and industrial production

Economic growth picks up in the fourth quarter
During the last quarter of 2016, real GDP rose by 5.1% on a year earlier, up from 4.5% in the September quarter.[1]

The latest expansion was driven by net exports (see Table 2.1). On the other hand, domestic demand acted as a drag on real GDP growth, as higher private consumption and investment were offset by falls in government expenditure and changes in inventories.

Exports of goods and services grew at a faster pace over the review period, increasing by 8.6% on a year earlier. However, imports of goods and services also rose, by 3.7%, after contracting in the previous quarter. As exports outpaced imports, net exports pushed up annual real GDP growth by 7.1 percentage points. The positive contribution of net exports reflected trade in services.

Following a rise of 1.3% in the third quarter, private consumption growth accelerated to 3.9% in the following quarter, and contributed 1.9 percentage points to real GDP growth. In nominal terms, consumption expenditure rose across most categories, with the exception of clothing and footwear, as well as furnishing and household equipment.

After having contracted in two consecutive quarters, growth in gross fixed capital formation resumed. In the last quarter of 2016, investment increased by 2.4% on an annual basis and contributed half a percentage point to economic growth. The return to positive investment growth partly reflected the timing of outlays in the energy and aviation sector, which was mirrored in a rebound in capital outlays on machinery and transport equipment. At the same time investment in dwellings increased at a faster pace compared with the third quarter. These increases offset falls in investment in non-residential construction and in expenditure related to cultivated biological resources. Nominal data show that the increase in investment in the quarter under review emanated totally from the private sector. In contrast, government investment declined on

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[1] The analysis of GDP in this Chapter of the *Quarterly Review* is based on data in NSO *News Release* 041/2017, released on 8 March 2017.

Table 2.1
GROSS DOMESTIC PRODUCT[(1)]

	2015	2016			
	Q4	Q1	Q2	Q3	Q4
	Annual percentage changes				
Private final consumption expenditure	5.9	6.7	3.5	1.3	3.9
Government final consumption expenditure	7.5	5.7	2.8	-4.3	-15.7
Gross fixed capital formation	36.5	18.3	-0.4	-18.9	2.4
Domestic demand	**9.5**	**9.8**	**3.9**	**-6.7**	**-2.1**
Exports of goods and services	6.1	5.1	-0.2	2.6	8.6
Imports of goods and services	7.8	7.3	-0.6	-5.1	3.7
Gross domestic product	**6.9**	**6.3**	**4.4**	**4.5**	**5.1**
	Percentage point contributions				
Private final consumption expenditure	3.0	3.5	1.7	0.7	1.9
Government final consumption expenditure	1.4	1.1	0.5	-0.6	-3.0
Gross fixed capital formation	6.4	3.7	0.0	-4.8	0.5
Changes in inventories	-2.4	0.7	1.4	-1.1	-1.4
Domestic demand	**8.5**	**9.0**	**3.7**	**-6.0**	**-2.0**
Exports of goods and services	8.9	7.5	-0.2	3.7	12.0
Imports of goods and services	-10.5	-10.3	0.9	6.8	-5.0
Net exports	**-1.6**	**-2.8**	**0.7**	**10.5**	**7.1**
Gross domestic product	**6.9**	**6.3**	**4.4**	**4.5**	**5.1**

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

an annual basis following an exceptional level of expenditure a year earlier, when projects part-financed by the EU 2007-2013 programme reached completion.

Government consumption contracted further in the quarter under review, falling by 15.7% on the same period of 2015 and shedding 3.0 percentage points from real GDP growth. In nominal terms, the two principal components of government consumption moved in opposite directions, with an increase in compensation of employees being offset by lower intermediate consumption. Additionally, sales, which are netted against expenditure in the national accounts, increased significantly during the review period. This increase in sales was largely propelled by inflows under the Individual Investor Programme (IIP).

Nominal GDP grows at a faster pace, services remain the main driver of growth
In nominal terms, GDP rose at an annual rate of 6.3% in the fourth quarter. This followed a 6.0% increase in the third quarter of 2016 (see Table 2.2).

GVA increased by 6.2% in the last quarter of 2016, the same annual rate of growth registered in the previous quarter, and contributed 5.3 percentage points to GDP growth.[2] Meanwhile, net taxes on products increased at a faster pace.

Services continued to drive the expansion in GVA, pushing up nominal GDP growth by 5.3 percentage points, a stronger contribution than that recorded in the previuos quarter. The largest contributions to growth came from the sector comprising of professional and scientific activities, as well as that incorporating arts and entertainment. Together these sectors contributed

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[2]   The difference between nominal GDP and GVA is made up of taxes on production, net of subsidies.

Table 2.2

CONTRIBUTION OF SECTORAL GROSS VALUE ADDED TO NOMINAL GDP GROWTH

Percentage points

	2015	2016			
	Q4	Q1	Q2	Q3	Q4
Agriculture, forestry and fishing	0.1	0.1	0.1	0.0	0.4
Mining and quarrying; utilities	0.3	0.2	0.2	0.2	-0.1
Manufacturing	0.1	0.4	0.0	0.4	-0.1
Construction	0.6	-0.3	-0.3	-0.2	-0.1
Services	6.8	6.8	5.2	5.0	5.3
of which:					
Wholesale and retail trade; repair of motor vehicles; transportation; accommodation and related activities	1.9	1.6	0.6	0.3	0.2
Information and communication	0.8	0.6	0.7	0.7	0.7
Financial and insurance activities	0.3	0.6	0.7	0.5	0.5
Real estate activities	0.7	0.4	0.4	0.4	0.4
Professional, scientific, administrative and related activities	1.0	1.3	0.9	1.2	1.6
Public administration and defence; education; health and related activities	0.8	1.0	1.0	1.2	0.7
Arts, entertainment; household repair and related services	1.2	1.3	0.9	0.8	1.3
Gross value added	**7.9**	**7.2**	**5.3**	**5.4**	**5.3**
Taxes less subsidies on products	**1.8**	**1.4**	**0.8**	**0.6**	**1.0**
Annual nominal GDP growth (%)	**9.7**	**8.5**	**6.1**	**6.0**	**6.3**

Source: NSO.

2.9 percentage points to nominal GDP growth. The sector incorporating public administration and the financial and insurance activities sector, together generated a further 1.1 percentage points.

GVA in the agricultural sector also supported the expansion in the period under review, raising nominal GDP growth by 0.4 percentage point. Conversely, GVA in the sectors of mining and utilities, manufacturing and construction contracted, each shedding 0.1 percentage point from nominal growth.

Data on GDP by income distrubtion show that the rapid growth in gross operating surplus and mixed income extended into the last quarter of 2016. This component increased by 7.0% on an annual basis, following a 6.0% increase in the third quarter and contributed 3.1 percentage points to nominal GDP growth (see Chart 2.1).

Chart 2.1
NOMINAL GDP AND ITS MAIN COMPONENTS
(percentage point contribution)

Source: NSO.
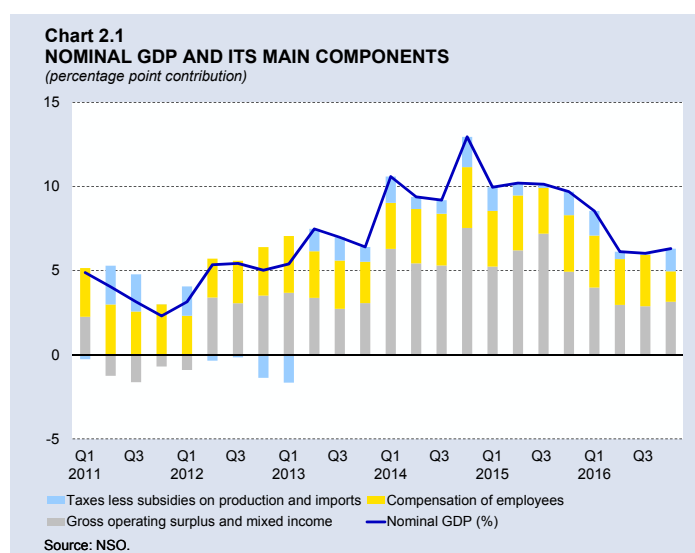
In absolute terms, the majority of sectors recorded higher gross operating surplus. The biggest gains were registered in the sectors consisting of financial and insurance activities, arts, entertainment and recreation, information and communication, as well as administration and support services. On the other hand, the agricultural sector, along with the wholesale and retail, construction, utilities and manufacturing recorded falls in their gross operating surplus on a year earlier.

In contrast to gross operating surplus and mixed income, compensation of employees decerlerated during the quarter under review. Its annual rate of growth moderated to 4.3%, from 7.6% in the previous quarter. Consequently, its contribution to nominal GDP growth almost halved, to 1.8 percentage points.

In absolute terms, the strongest increases in compensation were noted in the sectors of arts, entertainment and recreation, in professional and scientific activities, as well as in public administration.

Industrial production declines at a slower rate

During the fourth quarter of 2016, industrial production fell by 1.5% when compared with the same quarter a year earlier.[3] This followed a 2.9% decline during the preceding quarter (see Table 2.3). Companies operating in the printing and reproduction of recorded media and in the pharmaceutical sector registered the largest year-on-year drops in production. Lower production was also observed among manufacturers of food and beverages.

On the other hand, firms involved in the production of rubber and plastics as well as computer, electronics and optical products saw their output rise when compared with the same quarter of 2015. Output also rose within the energy sector and in the mining and quarrying sector, although the latter has a small share in overall industrial production.

Table 2.3
INDUSTRIAL PRODUCTION[1]
Percentages; annual percentage changes

	Shares	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
Industrial production	**100.0**	**5.1**	**-4.5**	**-4.0**	**-2.9**	**-1.5**
Manufacturing	**83.3**	**5.4**	**-5.2**	**-4.7**	**-3.8**	**-3.3**
of which:						
Computer, electronic and optical products	18.4	-3.1	-8.8	-33.0	-5.3	5.8
Basic pharmaceutical products and pharmaceutical preparations	10.4	4.2	-20.6	14.6	-28.3	-23.6
Food products	8.1	7.0	-6.0	-5.9	-16.2	-3.1
Printing and reproduction of recorded media	5.9	-13.9	-26.4	-7.5	17.8	-28.7
Rubber and plastic products	4.4	8.8	4.7	2.5	15.5	9.9
Beverages	3.9	2.7	19.6	5.3	-2.9	-3.4
Energy	**16.3**	**3.7**	**-0.4**	**2.6**	**-3.1**	**3.6**
Mining and quarrying	**0.4**	**-3.0**	**49.8**	**11.3**	**11.5**	**2.6**

[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 include the output of the energy and, water collection, treatment and supply sectors.

BOX 1: ESTIMATES OF INDUSTRY SPECIFIC MULTIPLIERS[1]

A symmetric input-output table (SIOT) records the economy's inter-industry transactions via the disaggregation of economic activity in a number of sectors. This modelling technique allows to study inter-industry linkages as well as changes in the structure of an economy. This Box derives a set of industry specific multipliers computed on the basis of the demand driven input-output framework put forward by Wassily Leontief in 1941 using the SIOTs published by the National Statistics Office (NSO) for the year 2010.[2] This article updates a study conducted by the Central Bank of Malta in 2015 with the results obtained from an updated set of SIOTs.[3,4]

Data and methodology

There are a number of recent studies on the Maltese economy conducted via the application of input-output techniques. However, these either utilise input-output tables which are not highly disaggregated,[5] or which do not comply with the latest Eurostat System of National and Regional Accounts published in 2010 (ESA 2010).[6] The results derived here are based on SIOTs for 2010 published by NSO in 2013 that is compliant with ESA 2010 and that has a 40-industry level of disaggregation which follows an industry classification in line with the European Statistical Classification of Economic Activities (NACE) Rev.2.

The analysis focuses on ten key sectors. Two sectors, the electronics and pharmaceutical industries, are key for the manufacturing industry while the construction and retail sectors are important, domestically-oriented industries. The public sector is proxied by the administration and health industries while the services industry is represented by four services sectors that are also mostly export oriented – the financial services, the information technology services (which also includes publishing activities), accommodation and food services activities and creative arts and betting activities. Together, all these sectors make up almost 70% of total output and almost 54% of value added and labour income.

The Leontief demand driven model is a fixed price static general equilibrium model describing the amount of input i needed by sector j to undertake its production. At its most basic level, this information is useful to study the direct effects of an increase in final demand of any given sector on the different industries of an economy. In reality, however, increases in the final demand have a larger impact on overall production than those relating to direct effects. In order for each sector to increase its supply it will need to increase the demand for its own intermediate inputs. Furthermore the production of these intermediate inputs would require subsequent increased rounds of production in all suppliers leading to a ripple effect,

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[1] Prepared by Noel Rapa. The author is a Senior Research Economist in the Economics and Research Department. The views expressed in this Box are the author's own and do not necessarily represent the views of the Bank.

[2] See Leontief, W. (1941). *The structure of the American Economy, 1919-1929*. Cambridge: Harvard University Press. (Second Ed., 1951, New York: Oxford University Press).

[3] This study was published in Cassar, I. (2015). Estimates of output, income, value added and employment multipliers for the Maltese economy. *Quarterly Review*, 2015(1), 38-42, Central Bank of Malta.

[4] Both this study and the one published in 2015 are undertaken using the NACE Rev. 2 classification of industries and focus on largely the same industries. However, since these studies are consistent with different versions of ESA methodology and use a different level of disaggregation, their results might not be directly comparable.

[5] See Gravino, D. (2012). Economic and policy implications of industry interdependence: An input output approach, *International Journal of Economics and Finance*, *4*(6).

[6] See Cassar, I. (2015). Estimates of output income, value added and employment multipliers for the Maltese economy. Working Paper WP/03/2015, Central Bank of Malta.

or an indirect effect. Moreover increases in output lead to a rise in household income that increases demand for every sector through consumption. The latter is commonly referred to as 'induced effects'. These results can be derived by solving the Leontief demand model giving rise to Type I (capturing direct and indirect effects) and Type II (including direct, indirect and induced effects) multipliers.

The main factor affecting the magnitude of Type I multipliers is the relative share of primary inputs in the total output of each sector. The higher the share of imports, labour compensation and gross operating surplus for each sector, the higher are the leakages from the domestic inter-industry system implying a lower Type I multiplier. Given the open nature of the Maltese economy, the main determinant for the size of the Type I multiplier is the extent of import use in the input mix required by each sector. The higher the import content required by each sector, the lower will the Type I multiplier be. In addition, Type II multipliers will also be affected by the consumption pattern of households. The larger the share of household income that is spent on consumption rather than being leaked out of the system via savings or taxation, the larger will the induced effects, and therefore Type II multipliers be. A realistic estimate of the true direct and indirect effects of an increase in final demand on output, value added, income and employment is generally regarded to lie half way between Type I and Type II multipliers.[7]

Multipliers of selected industries in Malta

Table 1 shows a set of Type I and Type II output, value added, income and employment multipliers for ten key Maltese sectors.[8] A multiplier for a given industry captures the sum of direct, indirect and in the case of Type II also the induced input requirements needed to satisfy a €1 worth of increase in the final demand of the same sector. In the case of an

Table 1
INDUSTRY MULTIPLIERS FOR MALTA: SELECTED INDUSTRIES

	Output		Income		Value Added		Employment	
	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II
Manufacture of chemical products and pharmaceuticals	1.24	1.73	0.23	0.32	0.50	0.71	11.06	16.44
Manufacture of electronics and transport equipment	1.21	1.51	0.14	0.19	0.32	0.45	7.45	10.70
Quarrying and construction	1.75	2.34	0.28	0.39	0.59	0.84	17.28	23.78
Retail trade, except of motor vehicles	1.52	2.29	0.36	0.50	0.78	1.10	26.04	34.48
Accommodation & food services	1.70	2.42	0.34	0.47	0.63	0.94	24.75	32.62
Financial service activities, except insurance	1.04	1.13	0.04	0.06	0.08	0.12	1.73	2.77
Information technology services and broadcasting activities	1.42	1.92	0.23	0.32	0.58	0.79	9.97	15.42
Creative arts, gambling & betting	1.12	1.27	0.07	0.10	0.34	0.40	2.60	4.26
Public administration	1.39	2.70	0.62	0.86	0.78	1.34	26.42	40.85
Human health	1.27	2.40	0.53	0.74	0.81	1.29	22.09	34.52

Source: Author's calculations.

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[7] See Osterhaven, J., Piek, G., & Stedler, D. (1986). Theory and practice of updating regional versus interregional inter-industry tables. *Papers in Regional Science, 59*(1), 57-72.

[8] Note that in input-output terminology, output is defined as the sum of intermediate production and final inputs and is therefore not consistent with the definition of an economy's GDP. In this respect, value added multipliers are generally regarded to be a better measure of the change in GDP brought about by a marginal change in final demand.

output multiplier this translates into the increase in output brought about by an increase in the final demand of a given sector. Analogous interpretations apply for income, value added and employment multipliers. Thus, for instance for every €1 million increase in the final demand for the manufacturing of electronics and transport equipment, overall output increases by €1.21 million due to direct and indirect effects. When considering also induced effects output increases by an additional €0.3 million, such that the overall Type II multiplier for this sector leads to a €1.51 million increase in output. Similarly, the Type I value added multiplier for the manufacturing of electronics and transport equipment implies that a €1 million euro increase in the final demand for this sector generates a €0.32 million increase in Maltese GDP via direct and indirect effects. Endogenising household behaviour leads to induced effects that amount to €0.13 million, implying that the overall increase in Maltese GDP rises to €0.45 million.

The two manufacturing sectors consistently score relatively low multipliers out of the ten industries under consideration. The low output and value added multipliers might be expected considering the high import content of this sector, while low income and employment multipliers might be due to the high capital intensity of this sector. Quite unexpectedly, the three fast growing export oriented services sectors − financial services, information technology and betting industries − also score relatively low multipliers. The low output and value added multipliers are driven by relatively high import leakages of these sectors. Despite being labour intensive industries, the income and employment multipliers for these sectors are also relatively low. This result may be driven by the relatively high labour productivity enjoyed by these sectors implying that for a given increase in output, the required increase in labour input is quite low.

Driven mainly by low direct import requirements, quarrying and construction, and accommodation and food and services sectors score the highest Type I output multipliers out of the industries considered in this analysis. Estimates also show that sectors that are traditionally regarded as labour intensive, such as public administration, health, retail trade and tourism tend to have the highest value added, income and employment multipliers.

The multipliers pertaining to the financial services (excluding insurance) sector are the lowest across the industries under consideration in this exercise. This result contrasts sharply with that obtained from the input-output tables of 2008. Indeed, according to the SIOT for 2008, the financial sector scores considerably higher multipliers with the Type II output and income multipliers ranking first and second respectively out of the ten industries under consideration. The low multipliers derived for the new input-output tables may be driven by the inclusion of Special Purpose Vehicles (SPE) within ESA 2010 data. Since SPEs contain a very high import content, their inclusion reduces the relative magnitude of the local intermediate input requirements of the sector, resulting in artificially low multipliers.

It should be noted that while the industries under consideration in this box make up a substantial part of Malta's total GVA, they do not necessarily feature as having the highest multipliers amongst the 40 sectors considered in the 2010 SIOT. For instance, the highest Type I output multiplier stands at 2.1 and is registered by the sector covering other professional, scientific and technical activities including advertising and research.

Quarrying and construction, which has the highest Type I output multiplier out of the ten key industries identified in this exercise, ranks only sixth out of the 40 industries covered by the SIOT. While the employment activities sector makes up only 0.8% of the share in total GVA, it scores very high Type I and Type II multipliers, ranking first in terms of output and value added Type II multipliers, and second in terms of Type I and Type II employment multipliers.

Another important point relates to the fact that the Type I value added multiplier for all sectors under consideration is less than one. This implies that an additional euro of final demand in any of the 40 sectors included within the input-output table will generate a total impact in Malta's GDP of less than €1 when considering direct and indirect effects. When considering induced effects, the value added multiplier of some industries rises above one, implying that when considering household consumption patterns the ripple effects created by a €1 increase in the final demand of those industries will cause a larger increase in value added. Most notably, the public administration and health sectors have Type II value added multipliers which roughly equal 1.3. This implies that an increase in government expenditure of €1 million in terms of public administration or health will increase Maltese GDP by €1.3 million.[9]

The multipliers derived and discussed up till now are often defined as *modelling multipliers* which specifically measure the resultant effect on output, value added, income and employment due to a *marginal* change in final demand. Thus these multipliers do not account either for the relative size of the industry or for the amount of final demand each industry is driving throughout the economy via its multipliers. For this reason, an analysis based solely on these results may give only a partial overview of the importance of the sectors under consideration. Table 2 shows a set of *accounting multipliers* which are equivalent to modelling multipliers that are adjusted to account for the size of the sector as well as for the activity supported by its final demand.[10]

Table 2
INDUSTRY ACCOUNTING MULTIPLIERS FOR MALTA: SELECTED INDUSTRIES
Per cent of total

	Output	Income	Value Added	Employment
Manufacture of chemical products and pharmaceuticals	2.74	3.16	3.37	2.91
Manufacture of electronics and transport equipment	8.38	5.98	6.81	6.14
Quarrying and construction	5.30	5.23	5.46	6.23
Retail trade, except of motor vehicles	3.15	4.64	4.89	6.41
Accommodation & food services	6.23	7.67	7.05	10.80
Financial service activities, except insurance	24.39	6.50	5.89	4.84
Information technology services and broadcasting activities	3.97	4.04	4.94	3.31
Creative arts, gambling & betting	10.03	3.92	9.20	2.77
Public administration	4.20	11.61	7.22	9.52
Human health	2.67	6.95	5.20	5.54

Source: Author's calculations.

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[9] For a more detailed analysis of fiscal multipliers in Malta see: Micallef, B., Grech, O., & Borg, I. (2016). Fiscal multipliers in the Maltese economy. In *Understanding the Maltese Economy*. Edited by Grech A. G. (Ed.), Valletta: Central Bank of Malta.
[10] Accounting multipliers are derived as the product of each industry's output, value added, income and employment Type I multipliers with its respective final demand.

Results in Table 2 show the percentage of total output, value added, income and employment needed by the economy in order to satisfy both direct and indirect activities brought about by each industry's final demand. These results are somewhat different from those shown earlier in Table 1. For instance, the financial sector has fared poorly in terms of modelling multipliers, ranking second from last out of 40 industries included in the 2010 SIOT. When considering the size of its final demand, the financial sector has the fifth highest value added and income accounting multipliers with results showing that this sector directly and indirectly contributes to around 6% and 6.5% of total value added and income generated in Malta.[11] Similarly while the creative arts and betting sector fares poorly in terms of modelling multipliers, it scores highly in terms of output and value added accounting multipliers, ranking first and second respectively out of 40 industries. Estimates also show that in line with the results pertaining to the modelling multipliers, accommodation and food services and public administration have the highest value added, income and employment accounting multipliers.

Conclusion

The input-output analysis presented above helps to identify the strength of the inter-industry relations and how these can impact the generation of output, value added, income and employment in the Maltese economy. The results discussed in this Box provide policy makers with a range of estimates with which to evaluate the importance of each industry. Labour intensive industries such as public administration and the tourism industry tend to possess the highest value added, income and employment multipliers both when considering only the inter-industry linkages as well as when accounting for the size of the sector and of its final demand. Despite their growing share in overall value added, financial services, information technology and the betting sector rank consistently among the bottom quartile with regards to the size of their Type I and Type II multipliers, implying relatively low additional output, value added, income and employment generated per one euro of final demand. However when accounting for their relative size, these sectors score considerably high accounting multipliers with creative arts, gambling and betting accounting for almost 10% of overall value added when considering both direct and indirect production needed to sustain its final demand.

The measures described above can be of crucial aid to policy makers for identifying industry specific policies aimed at improving Malta's competitiveness. However a correct use of such estimates necessitates a complete understanding of the limitations that lie behind the methodology used in this exercise. As implied by the name of the model used in this analysis, the multipliers derived here focus exclusively on the demand side and completely ignore capacity constraints. Moreover, since the Leontief demand driven model is based on a fixed price assumption, an increase in the final demand of one sector (no matter how large) will neither be constrained by the supply of labour or of intermediate goods and services, nor will it result in a change in relative prices. Thus the multipliers derived here are likely to overestimate the true impact following a change in final demand. While industry specific multipliers need to be interpreted with caution, they are still considered to be a very important tool designed to identify key sectors within an economy as well as to estimate sectoral impacts.

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[11]   The high output multiplier for the financial services sector is affected by its relatively large final demand component. The latter might be driven by the inclusion of SPEs within ESA 2010 data resulting in an artificially high accounting multiplier.

Business and consumer surveys

During the fourth quarter of 2016, the economic sentiment indicator (ESI) rose to 114, from 111 in the third quarter,[4] and thus remained above its long-term average of 100 (see Chart 2.2).[5] Sentiment improved among firms in the services, industrial and construction sectors as well as among consumers, while it deteriorated in the retail sector.

Confidence in the services sector improves[6]

In the fourth quarter of 2016, the services confidence indicator rose to 29, after it had fallen to 24 in the third quarter. It thus compared favourably with a long-term average of 21 (see Chart 2.3).

In the fourth quarter, the rise in confidence in the services sector was driven by all its subcomponents. Additional survey data indicate that, overall a larger net share of respondents reported higher employment in the preceding three months. However, a smaller share of firms expected employment to increase in

Chart 2.2
ECONOMIC SENTIMENT INDICATOR
(seasonally adjusted; percentage points)
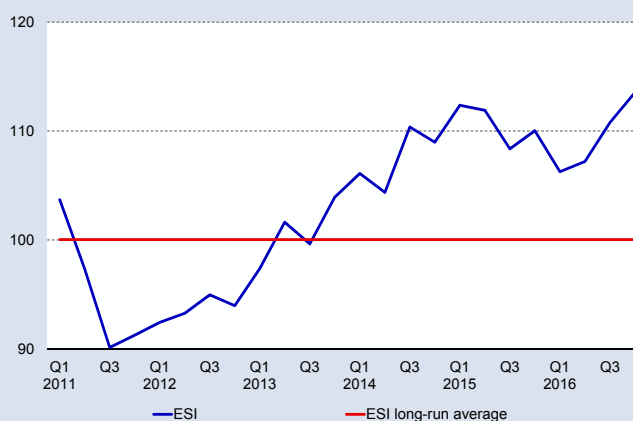
Source: European Commission.

Chart 2.3
SERVICES CONFIDENCE INDICATOR
(seasonally adjusted; percentage points)

Source: European Commission.

the following three months. On balance, firms expected prices to fall in the following three months.
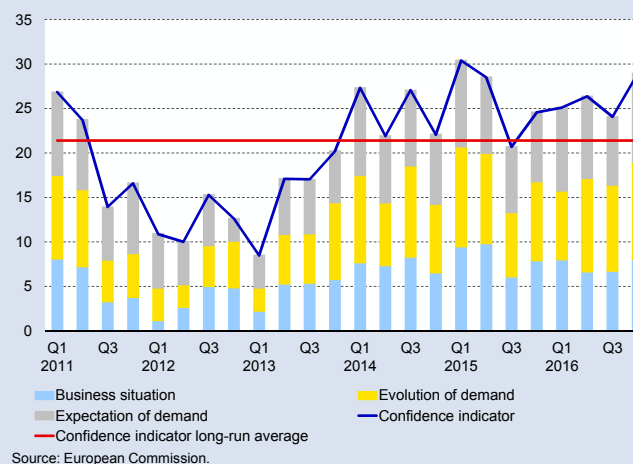
Industrial confidence increases further[7]

Confidence in the industrial sector remained above it long-term average, as it rose to 8 in the fourth quarter, from 4 in the preceding quarter (see Chart 2.4).

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[4] The ESI summarises developments in confidence in five surveyed sectors (industry, services, construction, retail and consumers). Quarterly data in this Box represent three-month averages.

[5] 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.

[6] 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.

[7] 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.

Positive sentiment in the fourth 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.[8]

The improved sentiment in industry during the quarter under review was driven by firms' assessment of order books, which improved significantly when compared with the third quarter. Meanwhile, stocks of finished goods were perceived to be larger. Production expectations within the industry remained broadly unchanged between the two quarters.

Chart 2.4
INDUSTRIAL CONFIDENCE INDICATOR
(seasonally adjusted; percentage points)

Source: European Commission.

Additional survey data suggest that, compared with the previous quarter, in the fourth quarter of 2016 fewer respondents expected to increase their labour complement in the subsequent three months. At the same time, more respondents expected to decrease their selling prices.

Confidence in the construction sector less negative[9]
Sentiment in the construction sector improved further during the fourth quarter of 2016 (see Chart 2.5). Indeed, the construction confidence indicator stood at -2, compared with -4 in the preceding quarter.

While well above its long-term average of -23, the overall construction confidence indicator has been negative for four consecutive quarters, with firms' assessment of order books being the main contributor to this result.

However, the rise in confidence during the fourth quarter of 2016 was solely driven by the latter component, as employment expectations for the subsequent three months were less optimistic.

Additional survey data indicate that in the fourth quarter, fewer respondents have on balance, reported positive building activity

Chart 2.5
CONSTRUCTION CONFIDENCE INDICATOR
(seasonally adjusted; percentage points)

Source: European Commission.

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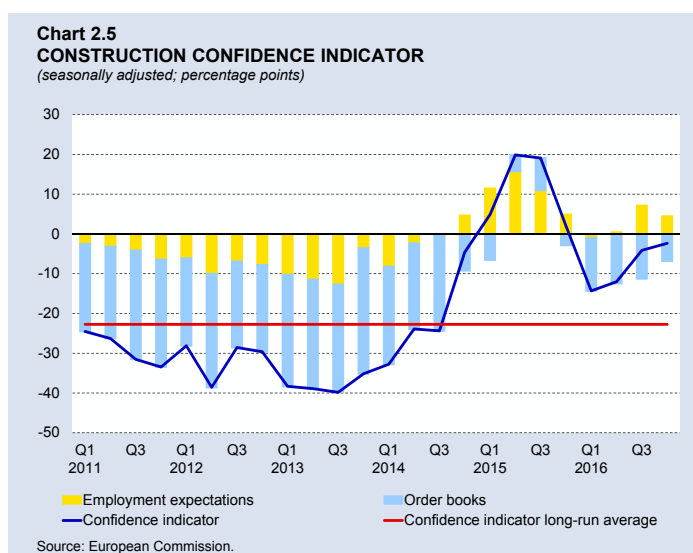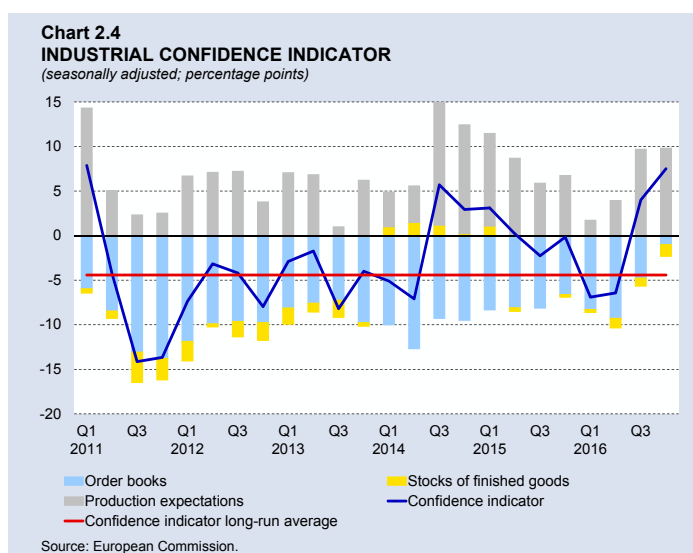
[8]   Above-normal stock levels indicate lower turnover and affect the overall indicator in a negative way. Such levels are thus represented by negative bars in Chart 2.4.
[9]   The construction confidence indicator is the arithmetic average of the seasonally adjusted balances (in percentage points) of replies to two survey questions, namely those relating to order books and employment expectations over the subsequent three months.

developments during the preceding three months. Also, firms expected selling prices to fall in the subsequent three months.

Consumer confidence improved marginally in the third quarter[10]

The consumer confidence indicator edged up to 3 in the fourth quarter, from 2 in the preceding three-month period. The indicator thus remained well above its long-term average of -20 (see Chart 2.6). Consumer sentiment continued to benefit from a favourable economic situation and buoyant labour market conditions.

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.[11] These offset slightly less favourable expectations about their financial situation. Meanwhile, savings expectations remained unchanged between the two quarters.

Additional survey data suggest that, compared to the previous quarter, the share of consumers intending to reduce major purchases over the subsequent 12 months increased. The survey also indicates that, on balance, consumers' inflation expectations were unchanged in the quarter under review.

Confidence in the retail sector declines further[12]

Sentiment in the retail sector extended its downward trend in the last quarter of 2016. The retail confidence indicator fell from 6 in the third quarter to its long-term average of 0 (see Chart 2.7).

Firms in this sector continued to express a favourable
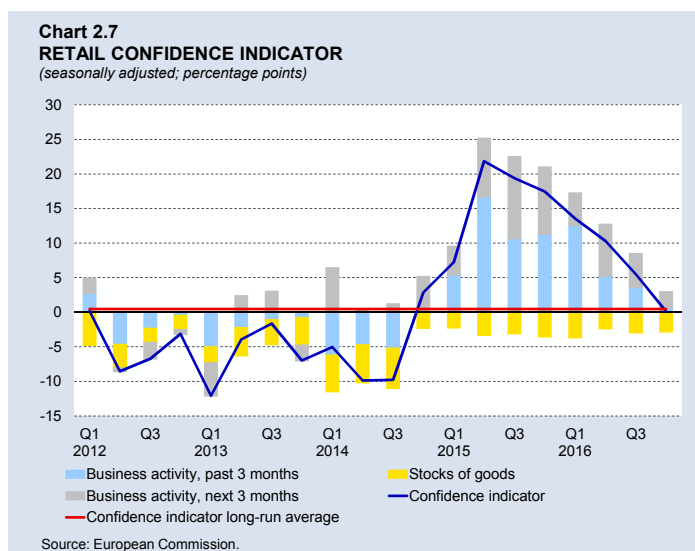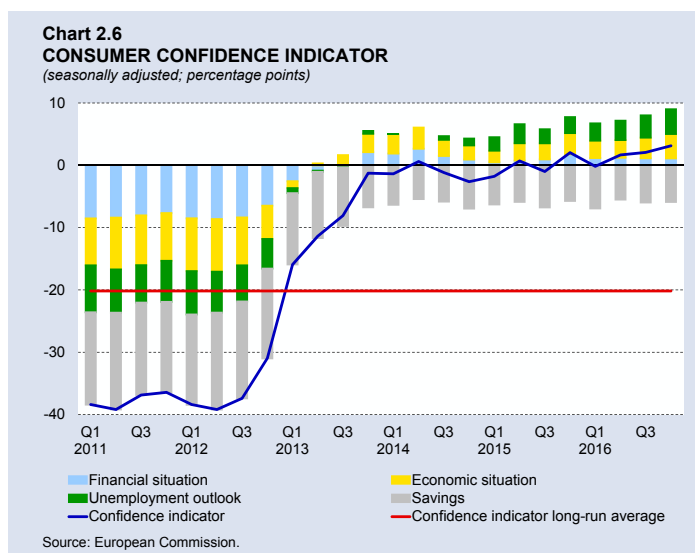
Chart 2.6
CONSUMER CONFIDENCE INDICATOR
(seasonally adjusted; percentage points)

Financial situation
Unemployment outlook
Confidence indicator
Economic situation
Savings
Confidence indicator long-run average

Source: European Commission.

Chart 2.7
RETAIL CONFIDENCE INDICATOR
(seasonally adjusted; percentage points)

Business activity, past 3 months
Business activity, next 3 months
Confidence indicator long-run average
Stocks of goods
Confidence indicator

Source: European Commission.

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[10]   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.

[11]   A fall in unemployment expectations affects the overall indicator in a positive way. Such falls are thus represented by positive bars in Chart 2.6.

[12]   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 stock levels.

assessment regarding past and expected business activity. However, both of these assessments were less positive in the fourth quarter of 2016, while the share of respondents reporting above normal stock levels was broadly unchanged from that in the third quarter.

Additional survey data indicate that selling prices are expected to remain unchanged during the three months ahead. On balance, a significantly smaller share of respondents expected employment to increase.

BOX 2: HOUSEHOLD FINANCE AND CONSUMPTION SURVEY: A COMPARISON OF THE MAIN RESULTS FOR MALTA WITH THE EURO AREA AND OTHER PARTICIPATING COUNTRIES[1]

In 2014 the Central Bank of Malta conducted the second wave of the Household Finance and Consumption Survey (HFCS, or henceforth interchangeably referred to as the Survey) among Maltese households with the aim of collecting detailed information on households' real and financial assets, liabilities, net wealth, income and consumption. The Survey is part of a coordinated statistics and research project led by the European Central Bank (ECB), involving national central banks and national statistical institutions within the euro area and some non-euro area countries.[2,3] The first wave of the Survey was conducted in 2010.[4]

This note compares the salient findings of the HFCS for Malta with those of other euro area and other participating countries.[5] The overall sample for all the participating countries consisted of over 84,000 households, with the sample size varying between countries from 999 households in Malta to 12,035 households in France. The participating countries conducted their surveys between mid-2010 and mid-2015.[6,7]

Households' demographic characteristics

Survey results show that the average household size in the euro area stood at 2.27 persons. The countries reporting the lowest size were Germany and Finland, with 2.01 and 2.02 persons per household, respectively. Conversely, Poland and Slovakia had the largest household size, with 2.70 and 2.74 persons respectively. In Malta, the average household consisted of 2.58 persons (see Table 1).

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[1]   Prepared by Alida Borg and Karen Caruana. Ms Karen Caruana is the Manager of the External, Payments and Securities Statistics Office within the Statistics Department and Ms Alida Borg is an Economist Statistician in the same office. The views expressed are those of the authors and do not necessarily reflect the views of the Central Bank of Malta. Any remaining errors are the sole responsibility of the authors.

[2]   Euro area countries include Belgium (BE), Germany (DE), Estonia (EE), Ireland (IE), Greece (GR), Spain (ES), France (FR), Italy (IT), Cyprus (CY), Latvia (LV), Luxembourg (LU), Malta (MT), Netherlands (NL), Austria (AT), Portugal (PT), Slovenia (SI), Slovakia (SK) and Finland (FI).

[3]   Hungary (HU) and Poland (PL).

[4]   More information on the salient findings of the first wave of the Survey is available on 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. A detailed explanation of the methodology on the non-collected data or data that was reported by them in the form of monetary ranges is given in Annex 1 of the Report. The methodology used in the first wave was applied in the second wave as well.

[5]   In December 2016, the ECB published the results of the second wave of the Household Finance and Consumption Survey. See European Central Bank. Household Finance and Consumption Survey: results from the second wave. Statistics Paper Series No. 18. In this publication the data from the previous wave is inflated by the HICP.

[6]   For more information on the methodology used by the participating countries, refer to European Central Bank. Household Finance and Consumption Survey: methodology used from the second wave. Statistics Paper Series No. 17.

[7]   Data collection for the third wave of the Survey, which is expected to have 2016 as the reference year, will take place in the first months of 2017.

Table 1
HOUSEHOLD STRUCTURE BY COUNTRY[1]
Percentage

Country	EA	BE	DE	EE	IE	GR	ES	FR	IT	CY	LV	LU	HU	MT	NL	AT	PL	PT	SI	SK	FI
									Household size												
Average	2.3	2.3	2.0	2.2	2.7	2.5	2.6	2.2	2.4	2.7	2.3	2.4	2.3	2.6	2.2	2.1	2.7	2.6	2.5	2.7	2.0
1	32.9	33.8	40.3	35.8	22.6	25.7	19.8	35.1	29.3	20.8	31.7	33.3	33.4	23.6	36.9	38.3	24.0	20.0	32.6	25.7	40.9
2	31.7	31.7	34.6	29.8	30.3	29.5	29.8	32.9	27.3	30.9	30.3	27.4	29.6	28.8	34.0	33.6	25.7	32.0	25.1	21.9	34.9
3	16.1	15.1	12.5	16.3	17.9	19.9	24.3	13.6	19.4	18.2	18.2	15.9	17.2	21.5	10.6	11.6	20.2	24.6	18.6	19.5	10.1
4	13.9	12.6	9.2	12.7	16.9	19.1	20.6	13.2	17.8	17.5	12.4	15.0	12.7	18.6	12.7	10.4	16.2	16.3	11.7	18.7	9.4
5+	5.4	6.8	3.4	5.4	12.4	5.9	5.4	5.2	6.3	12.6	7.5	8.4	7.1	7.5	5.8	6.1	13.9	7.1	12.0	14.3	4.7
									Housing status[2]												
Owners - outright	41.5	38.4	27.8	57.8	36.6	60.7	55.3	39.8	58.6	39.2	62.6	38.5	65.5	64.3	16.9	32.2	65.4	42.0	65.6	70.2	34.9
Owners - with mortgage	19.7	31.9	16.5	18.7	33.9	11.4	27.8	19.0	9.6	34.3	13.5	29.1	18.8	15.9	40.6	15.5	12.1	32.7	8.2	15.2	32.8
Renters/other	38.8	29.7	55.7	23.5	29.5	27.9	16.9	41.3	31.8	26.5	24.0	32.4	15.8	19.8	42.5	52.3	22.6	25.3	26.3	14.6	32.3
									Age of reference person												
16-34	14.8	13.6	18.4	20.0	19.7	12.5	12.0	17.8	7.2	14.5	15.1	17.6	13.0	13.7	16.0	15.8	16.1	11.2	11.3	9.8	21.6
35-44	17.9	18.6	15.5	17.6	23.7	18.0	22.3	17.4	17.6	23.9	17.7	20.5	19.8	18.0	20.1	14.9	19.5	20.8	16.3	24.7	14.8
45-54	20.0	19.1	20.8	18.0	19.4	19.9	20.6	17.8	22.1	22.2	19.0	22.7	18.7	19.3	18.2	20.2	20.1	20.1	20.8	20.1	17.8
55-64	17.9	18.5	16.8	17.5	16.6	18.0	16.7	18.8	18.1	16.7	19.8	17.3	20.7	20.1	20.3	19.0	21.8	18.0	23.0	21.8	18.4
65-74	14.4	13.5	13.4	13.5	11.1	16.1	14.2	13.4	16.4	14.6	14.0	11.9	16.4	16.7	16.0	17.6	12.2	15.2	14.7	14.8	14.5
75+	15.0	16.6	15.1	13.5	9.6	15.4	14.2	14.9	18.7	8.2	14.4	9.9	11.5	12.2	9.4	12.5	9.7	14.7	13.9	8.7	12.9
									Work status of reference person[3]												
Employee	48.9	50.1	56.1	57.4	52.4	36.5	44.5	46.0	44.5	48.2	52.2	58.7	50.9	48.8	53.2	48.3	51.3	45.5	43.7	51.4	47.1
Self-employed	8.6	5.9	8.1	5.1	11.4	14.4	10.4	6.4	11.7	13.0	6.6	5.0	6.4	10.2	4.0	7.1	11.2	10.8	6.4	12.3	6.3
Retired	30.7	33.3	28.4	26.8	18.1	39.3	27.9	35.8	30.7	23.9	31.1	27.3	34.2	30.2	21.1	39.6	26.4	31.2	41.6	28.7	29.6
Other not working	11.8	10.7	7.5	10.7	18.1	9.8	17.2	11.8	13.1	15.0	10.2	9.1	8.5	10.8	21.7	5.0	11.2	12.6	8.3	7.6	17.0
									Education of reference person[4]												
Basic education	32.0	26.5	11.0	16.5	31.3	39.3	53.6	31.2	52.1	31.4	18.8	29.8	20.8	55.8	28.1	14.6	14.4	69.4	22.1	12.5	25.0
Secondary	41.6	33.1	57.9	49.5	34.7	42.4	17.5	41.4	34.5	42.5	48.8	38.4	48.9	26.5	36.2	65.0	61.0	13.7	56.5	68.0	39.9
Tertiary	26.4	40.4	31.1	34.0	34.0	18.3	28.6	27.4	13.4	26.1	32.4	31.8	30.3	17.6	35.7	20.4	24.6	16.9	21.5	19.5	35.1

[1] The table shows the weighted structure of the households of the HFCS samples.

[2] "Owners" refer to households owning their main residence; "Owners outright" are owners without mortgage collateralised on the household's main residence; "Owners with mortgage" are owners with mortgage collateralised on the household's main residence.

[3] The category "Other not working" under the work status panel includes households where the reference person is unemployed, a student, permanently disabled, doing compulsory military service, fulfilling domestic tasks or not working for pay in other ways.

[4] Education is measured in the questionnaire on the basis of the ISCED-97 scale, ranging from zero to six. "Basic education" comprises the classes ISCED0, ISCED1 and ISCED2, "Secondary" refers to ISCED3 and ISCED4, "Tertiary" includes individuals with level ISCED5 and ISCED6.

Source: ECB-HFCS (Wave 2) Statistical Tables.

In the euro area, the distribution of households by size shows that almost two-thirds of households consisted of two members or less. In Germany and Finland, around three-fourths of the households were made up of two or fewer members, while less than half the households in Spain and Slovakia were of this size. In Malta, around 52% of the households had two or less members. On the other hand, Slovakia and Poland had the largest number of households, whereby households with five or more members made up around 14% of the households. While in the euro area 5.4% of households consisted of more than four members, in Malta 7.5% of the households comprised five or more members.

Survey results show that 61.2% of the households in the euro area are homeowners. This proportion ranges from 44.3% in Germany to 85.4% in Slovakia. According to the Survey, the homeownership rate in Malta was 80.2%, the fourth largest rate of all participating countries.

With regards to the age of the reference persons,[8] 43.4% of respondents in Ireland were under 45 years of age, as opposed to 24.8% of respondents in Italy. Meanwhile, at 35.1%, Italy had the highest share of respondents over the age of 65, whereas 20.7% of participating

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[8] For the purposes of inter-country comparisons, the reference person is chosen using the analogy of the Canberra Group Handbook on Household Income Statistics (UN 2011) by sequential application of the following criteria: (1) One of the partners in a registered or de-facto marriage, with dependent children; (2) One of the partners in a registered or de-facto marriage, without dependent children; (3) A lone parent with dependent children; (4) The person with the highest income, or if there is more than one such person; (5) The eldest person among them.

households in Ireland fell within this age group. In the euro area, 32.7% of respondents were under 45 years of age, while 29.4% were over 65 years old. Similarly, 31.7% of the reference persons in Malta were under 45 years of age and 28.9% were over 65 years old.
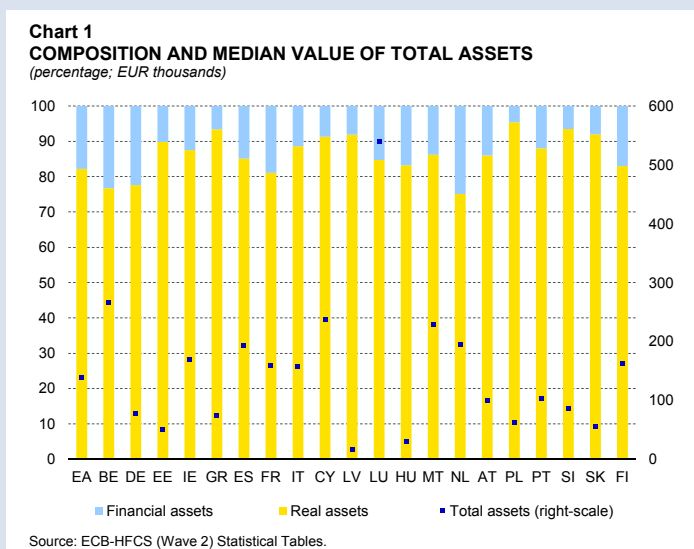
Indicators relating to the work status of the reference person show that 58.7% of the reference persons in Luxembourg were employees. This contrasts with 36.5% of respondents in Greece and the euro area average of 48.9%. In Greece, 14.4% of the reference persons were self-employed, as opposed to 4% in the Netherlands. On average, 8.6% of the reference persons in the euro area were self-employed. The rate in Malta stood slightly higher, with around 10.2% of respondents in self-employment. Domestically, 48.8% of reference persons were employees.

In terms of the level of education attained by the reference persons, 69.4% and 55.8% of respondents in Portugal and Malta respectively, declared that they had only a basic level of education. In contrast, in Slovakia and Germany, the corresponding ratios were significantly lower, standing at 12.5% and 10.9% respectively. The euro area average was 31.5%. The highest number of reference persons with a tertiary level of education was recorded in Belgium and the Netherlands, at 40.4% and 35.7% respectively. Conversely, in Italy and Portugal only 13.4% and 16.9% of respondents respectively, had completed this level of education. In Malta, this ratio stood at 17.6%.

Households' assets

The HFCS also collects information about the assets that households hold. Households' assets consist of both real[9] and financial[10] assets. In the euro area, the median value of the households' total assets was estimated to be €138,900 (see Chart 1). At €538,700, Luxembourg had the highest estimated median value of total assets, 3.8 times as much that in the euro area. Conversely, households in Latvia had a median value of only €17,000, the lowest median value of households' assets in the euro area. In Malta, Survey results show that the households' median value of assets, which also includes the value of real estate, stood at €229,000, well above the euro area median.

Overall, Survey results from all participating countries show that more than 75% of households' assets consisted of real

Chart 1
COMPOSITION AND MEDIAN VALUE OF TOTAL ASSETS
(percentage; EUR thousands)

Legend: ■ Financial assets ■ Real assets ■ Total assets (right-scale)

Source: ECB-HFCS (Wave 2) Statistical Tables.

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[9] Real assets comprise the main residence, other real estate properties, self-employment business, vehicle and valuables.
[10] Financial assets comprise bank deposits, collective investment funds, securities, private pension voluntary schemes, life insurance schemes and other financial assets.
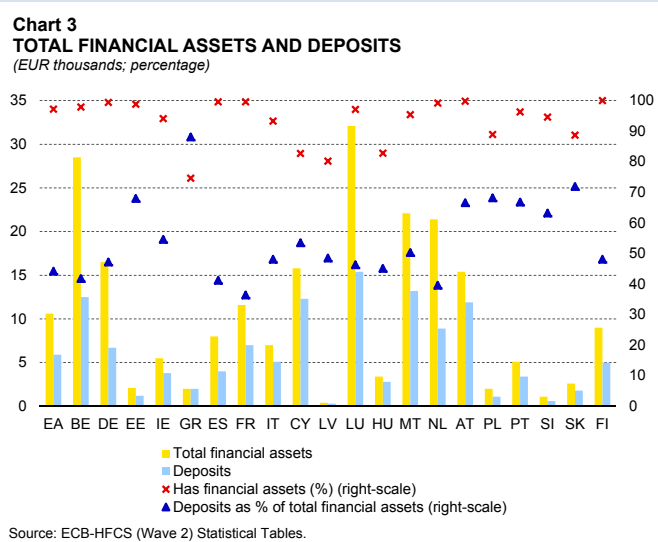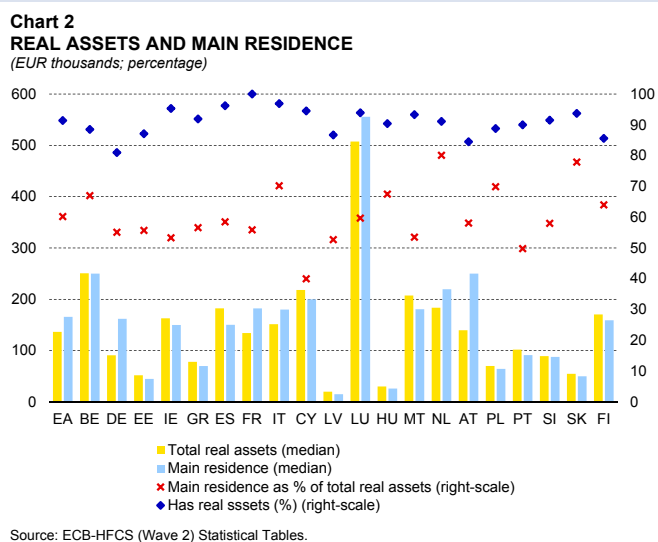
assets. While their share in total assets averaged 82.2% in the euro area, the ratio ranged from 75.1% in the Netherlands to more than 90% in Slovakia, Slovenia, Poland, Latvia and Cyprus. In Malta, 86.2% of households' assets consisted of real assets.

Households' real assets

The median value of real assets in the euro area was estimated at €136,600. Cross-country heterogeneity however, prevails. In Luxembourg and Belgium, the highest median values were recorded at €507,400 and €250,700 respectively, while in Hungary and Latvia, the lowest median values were reported at €30,100 and €20,000 respectively. The median value of real assets for Maltese households was estimated at €207,400. Survey results indicate that in the euro area more than 60.2% of households' total real assets were taken up by their main residential property. At 80.1%, the percentage was highest in the Netherlands and lowest in Cyprus, at 40.0%. In Malta, households' main residence accounted for 53.5% of the total real assets (see Chart 2).

Households' financial assets

Survey results show that 97.2% of all euro area households hold some type of financial asset, with bank deposits being the predominant option. The median value of total financial assets held by euro area households was estimated to be €10,600. However, this value varied across participating countries, from €32,100 in Luxembourg to €1,100 in Slovenia. In Malta, the median value of financial assets stood at €22,100. Meanwhile, in the euro area the median value of deposits for households was €5,900. At €13,200, the median value of deposit holdings in Malta was more than double that of the euro area (see Chart 3).

Chart 2
REAL ASSETS AND MAIN RESIDENCE
(EUR thousands; percentage)

Total real assets (median)
Main residence (median)
Main residence as % of total real assets (right-scale)
Has real sssets (%) (right-scale)

Source: ECB-HFCS (Wave 2) Statistical Tables.

Chart 3
TOTAL FINANCIAL ASSETS AND DEPOSITS
(EUR thousands; percentage)

Total financial assets
Deposits
Has financial assets (%) (right-scale)
Deposits as % of total financial assets (right-scale)

Source: ECB-HFCS (Wave 2) Statistical Tables.
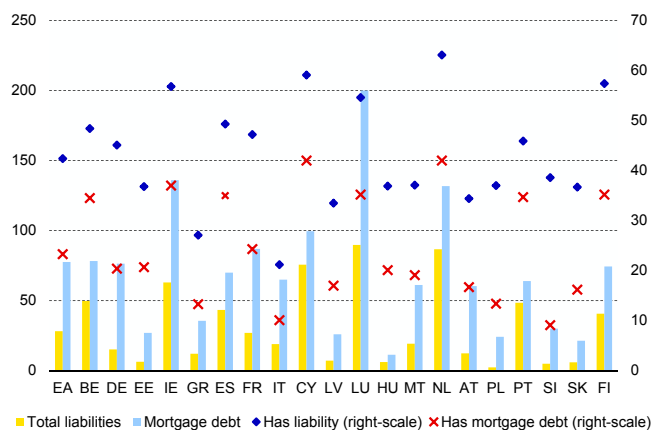
Households' liabilities

The percentage of indebted households also varied significantly across countries. This ranged from around 20% of households in Italy, with a median level of indebtedness at €19,000, to more than 60% of households in the Netherlands, whose median value stood at €86,700. In the euro area, 42.4% of households were indebted with a median level of debt of €28,200. In Malta, the ratio of indebted households stood at 37.1%, while the median debt level amounted to €19,300, lower than the euro area median (see Chart 4).

The debt burden ratio, which measures the ratio of debt to assets, was 25.7% in the euro area (see Chart 5). The ratio for Ireland was the highest at 38.5%, while that for Maltese households stood at the lower end of the scale, at 9.1%. Meanwhile, the debt-to-income ratio in the euro area stood at 71.8%. This ratio exceeded 100% in Cyprus, Portugal, the Netherlands, Spain, Luxembourg and Ireland whereas in Latvia, Slovakia, Estonia, Germany, Austria, Slovenia and Poland, it was below 40%. In Malta the debt-to-income ratio was 55.3%. Furthermore, the debt service-to-income ratio of all indebted households ranged from 30.4% in Cyprus to 2.1% in Austria. The euro area average stood at 11.0%, while that in Malta was estimated at 9.8%.

Chart 4
LIABILITIES AND MORTGAGE
(EUR thousands; percentage)

Total liabilities ■ Mortgage debt ◆ Has liability (right-scale) ✕ Has mortgage debt (right-scale)

Source: ECB-HFCS (Wave 2) Statistical Tables.

Chart 5
FINANCIAL BURDEN INDICATORS (ALL INDEBTED HOUSEHOLDS)
(percentage)

■ Debt to asset ratio of indebted households
■ Debt service to income ratio, all indebted households
✕ Debt to income ratio of indebted households (right-scale)

Source: ECB-HFCS (Wave 2) Statistical Tables.
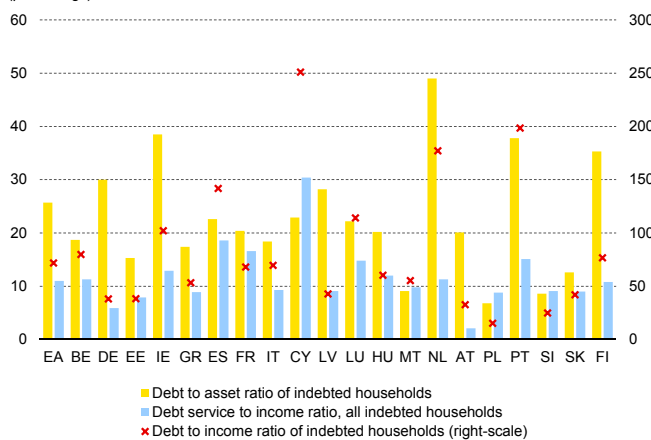
Households' net wealth

Overall, Maltese households' net wealth, defined as the sum of households' real and financial assets net of liabilities, was estimated at a median value of €209,900. This is double the euro area median value of €104,100. Country specific estimations show significant

heterogeneity, with the median value ranging from €14,200 in Latvia to €437,500 in Luxembourg and €217,900 in Belgium (see Chart 6). Survey results show the importance of residential property in net wealth, since in the euro area, households who were owners of their main residence had a higher net wealth when compared with those tenants who did not own their property. In the former case, the median

Chart 6
NET WEALTH BY HOMEOWNERSHIP OF MAIN RESIDENCE
(EUR thousands; percentage)

Net wealth
Net wealth (non-homeowners)
Net wealth (homeowners)
Per cent of homeowners (right-scale)

Source: ECB-HFCS (Wave 2) Statistical Tables.

value stood at €201,500, whereas in the latter case, the median value of net wealth was substantially lower at €38,800. Similarly, the median net wealth of Maltese households who owned their main residence amounted to €255,700, whereas tenants' median net wealth was only €19,800. On average, Maltese households were larger than other countries and consequently tended to have higher wealth accumulation. In fact, larger households, particularly those with a higher number of adults tend to accumulate more wealth.

Households' income and consumption

The annual household gross median income for the euro area was estimated at €29,500. Cross-country comparisons revealed once again pronounced differences in median income. The countries with the highest household income were Luxembourg and the Netherlands,

with their median income standing at €64,600 and €43,900 respectively. At the lower end of the spectrum, Hungary and Latvia had the lowest median income, at only €7,900 and €8,700 respectively. In Malta, the median gross income for Maltese households was below that in the euro area, at just over €23,000 (see Chart 7).

With regards to consumption, the HFCS indicated

Chart 7
MEDIAN GROSS INCOME
(EUR thousands)
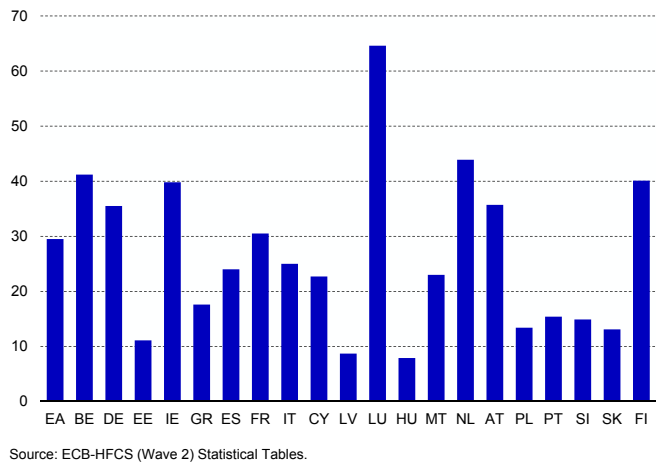
Source: ECB-HFCS (Wave 2) Statistical Tables.

that in the euro area, the annual median value of households' consumption of goods and services was €9,600. While Malta's median value was the same as the euro area average, it ranged from €19,700 in Luxembourg to €4,800 in Latvia.

Conclusion

The HFCS provides valuable micro data on households' consumption and finances, including information on their assets and liabilities. Consequently, it enables a deeper understanding of individual behaviour and provides insight into the transmission mechanism of monetary policy as well as issues related to financial stability in the euro area.

Results from the Survey however, need to be interpreted with caution owing to a number of caveats. The last Survey round was carried out across participating countries at different points in time between mid-2010 and mid-2015, with the majority of participating countries conducting the Survey in 2014. Given that the Survey took place while the impact of the sovereign debt crisis on the euro area was still evolving, the time gap that elapsed between data collection and the emerging effects of the crisis is likely to have varied between the participating countries.

Another caveat is that Survey statistics were not adjusted for price differences that arose from the use of different reference years. Furthermore, the valuation of real assets, such as property prices was based on self-assessment by respondent households. In terms of wealth, differences across countries may have also stemmed from the size and composition of households participating in the Survey. In fact, rather than conducting the Survey on a per capita basis, the unit of measurement was taken to be the household. This may explain why Maltese households scored highly in terms of household wealth, which is predominantly in the form of real estate, but not in income.

Nevertheless, despite these limitations, the HFCS remains an important source of harmonised data on households' consumption and wealth that enables analytical and comparative studies of behavioural patterns in the euro area.

The labour market[13]

Labour force continues to grow strongly

Labour Force Survey (LFS) data show that in the fourth quarter of 2016 the labour force grew by 2.1% over the same quarter of 2015, up from 1.9% in the third quarter (see Chart 2.8).[14] As employment grew at a faster pace, the unemployment rate reached an all-time low.

The activity rate stood at 69.1% in the fourth quarter of 2016, up from 67.5% in the same quarter a year earlier.[15] This reflected increased activity among both males and females. The female

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[13]   This section draws mainly on labour market statistics from two sources: the LFS, which is a household survey conducted by the 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.

[14]   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.

[15]   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.

participation rate edged up 2.2 percentage points, to reach 55.7%, while that of males increased by 1.0 percentage point to 81.9% (see Table 2.4).

Employment grows further

The annual rate of change in employment reached 3.2%, from 2.3% in the third quarter and from 3.0% in the last quarter of 2015. The increase in employment during the fourth quarter reflected further growth in the number of persons employed on a full-time basis (see Table 2.4). These increased by 6,565, or 4.2% on the same quarter of 2015. Conversely, the number of part-timers, which includes those employed on a full-time with reduced hours basis, fell by 655, or 2.3%, following a fall of 5.9% in the preceding quarter.

Chart 2.8
LABOUR FORCE AND EMPLOYMENT BASED ON THE LFS
(annual percentage changes)

Source: NSO.

During the fourth quarter of 2016 the total employment rate rose to 66.1% and registered a year-on-year increase of 2.2 percentage points.[16] This reflects developments in both the male and female employment rates, with both rates recording an increase of 2.2 percentage points. Indeed,
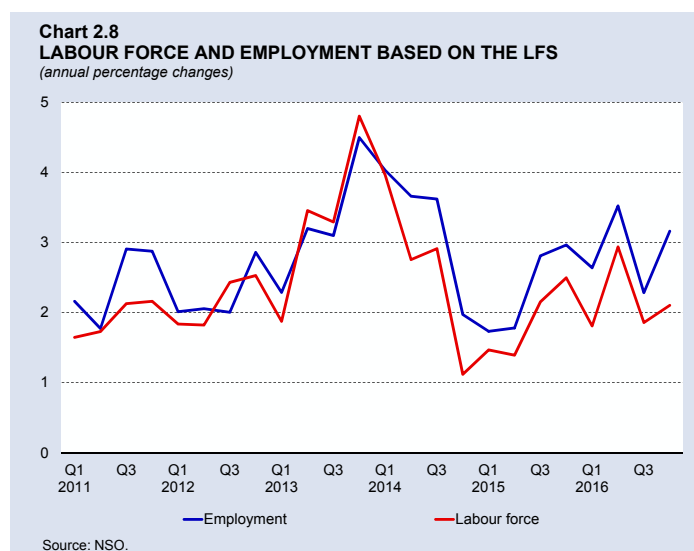
Table 2.4
LABOUR MARKET INDICATORS BASED ON THE LFS
Persons; annual percentage changes

	2015	2016				Annual change
	Q4	Q1	Q2	Q3	Q4	%
Labour force	**197,182**	**196,869**	**201,206**	**203,763**	**201,329**	**2.1**
Employed	186,897	187,171	191,384	193,893	192,807	**3.2**
By type of employment:						
Full-time	158,176	160,160	162,641	164,904	164,741	4.2
Part-time	28,721	27,011	28,743	28,989	28,066	-2.3
Unemployed	10,285	9,698	9,822	9,870	8,522	-17.1
Activity rate (%)	**67.5**	**67.7**	**69.1**	**70.0**	**69.1**	
Male	80.9	80.9	81.9	82.9	81.9	
Female	53.5	54.0	55.6	56.6	55.7	
Employment rate (%)	**63.9**	**64.3**	**65.7**	**66.5**	**66.1**	
Male	76.6	76.9	78.3	79.0	78.8	
Female	50.7	51.2	52.5	53.6	52.9	
Unemployment rate (%)	**5.2**	**4.9**	**4.9**	**4.8**	**4.2**	
Male	5.2	4.8	4.4	4.7	3.7	
Female	5.3	5.1	5.6	5.2	5.1	

Source: NSO.

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[16]   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 male employment rate reached 78.8%, from 76.6% a year earlier, while that of females rose to 52.9% from 50.7% in the preceding year. These gains were especially pronounced among male workers aged between 15 and 24 and among females aged between 55 and 64.

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.[17]
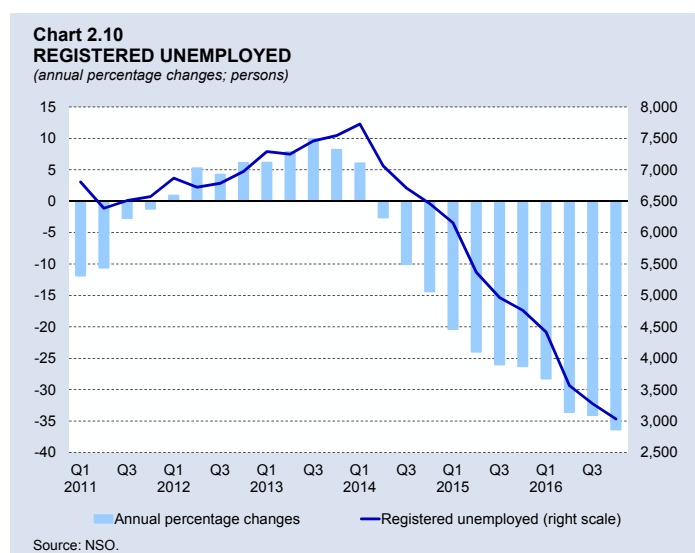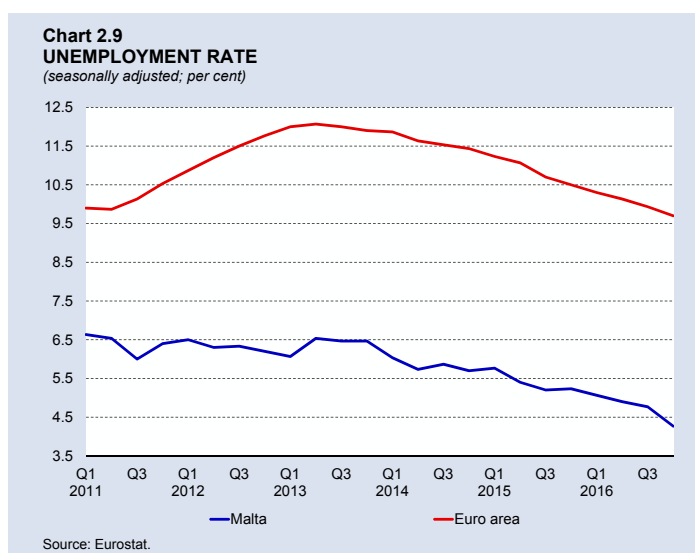
The unemployment rate declines further

In the fourth quarter of 2016, the unemployment rate based on the LFS stood at 4.2%. This was 0.6 percentage point lower than in the preceding quarter, and 1.0 percentage point less than a year earlier.[18] The jobless rate for males declined by 1.5 percentage points to 3.7%, while that of females fell by 0.2 percentage point to 5.1% compared with the fourth quarter of 2015 (see Table 2.4).

Eurostat's seasonally adjusted unemployment rate followed 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 2.9).

Jobsplus data also show favourable labour market developments. Indeed, the average number of registered unemployed stood at 3,033 in the fourth quarter of 2016, 1,731 unemployed persons less than in the same quarter of 2015 (see Chart 2.10).

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, as well as the extension of schemes which encourage employment, training and re-skilling.

Chart 2.9
UNEMPLOYMENT RATE
(seasonally adjusted; per cent)

Source: Eurostat.

Chart 2.10
REGISTERED UNEMPLOYED
(annual percentage changes; persons)

Source: NSO.

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[17]   See "The National Employment Policy", Ministry for Education and Employment, May 2014, p. 13 and "Malta: National Reform Programme 2017", Ministry for Finance, April 2017, p. 33.

[18]   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.

BOX 3: MEDSEA: A SMALL OPEN ECONOMY DSGE MODEL FOR MALTA[1,2]

The popularity of traditional large scale macro-econometric models as tools for policy analysis among central banks has been eroding rapidly, especially in the light of the several critiques aimed at these types of models. Most notably, Lucas (1976)[3,4] criticized the policy recommendations derived from traditional models on the basis that the latters' estimated coefficients are not policy-invariant, leading to potentially misleading policy conclusions. As an answer to these criticisms, Kydland and Prescott (1982) proposed a new paradigm based on private optimizing agents that benefit from rational expectations whilst behaving in a general equilibrium environment. This gave rise to the Real Business Cycle (RBC) models. With time these models have been augmented with monopolistic market structures and nominal rigidities leading to the New Keynesian Dynamic Stochastic General Equilibrium (DSGE) Model.

As part of its general modelling strategy, the Central Bank of Malta has embarked on a project aimed at constructing a DSGE model for the Maltese economy. At their core, DSGE models are built around three interrelated blocks: a demand block, a supply block and a monetary policy equation. The demand block determines real activity by explaining how much households choose to consume and invest. The supply and demand blocks are jointly responsible for the formation of wages and prices, which are then used as an input in the monetary policy equation. The latter explains how the central bank sets the nominal interest rate in response to deviations of inflation and output from their targets or equilibrium levels. The equations that derive these blocks are based on micro-foundations, implying that they are theoretically consistent while explicitly setting out all assumptions about the behaviour of the main agents in the economy. The agents within these blocks interact in markets that clear in every period, thus leading to the "general equilibrium" feature of this class of models. Contrary to traditional macro-econometric models, New Keynesian DSGE models include an explicit treatment of expectations allowing the study of anticipatory or precautionary behaviour of agents in response to expected shocks – hence the "dynamic" aspect of the DSGE label. This feature, together with the fact that all equations are rigorously micro-founded, makes this class of models especially suited for counterfactual simulations and policy evaluations that are immune to the Lucas' critique. The "stochastic" component of DSGE models is captured by the presence of random shocks that perturb the equilibrium in every block, injecting uncertainty in the economy and creating economic fluctuations.

MEDSEA, the DSGE model developed by the Central Bank of Malta, benefitted from a three-year technical co-operation agreement with experts from the Banca d'Italia. It is intended to be a first step in this modelling strategy and will serve as a basis for future extensions that will allow for a more detailed treatment of policy relevant questions.

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[1]   Prepared by Noel Rapa. The author is a Senior Research Economist in the Economic and Research Department of the Central Bank of Malta. The views expressed in this Box are the author's own and do not necessarily represent the views of the Bank.
[2]   A detailed discussion of MEDSEA is available in Rapa, N. (2016). MEDSEA: A small open economy DSGE model for Malta. *Working Paper* WP/05/2016, Central Bank of Malta.
[3]   Lucas, R.E. (1976). The Phillips Curve and Labor Markets. *Carnegie-Rochester Conference Series on Public Policy*, 19-46.
[4]   Kydland, F.E., & Prescott, E.C. (2016). Time to Build and Aggregate Fluctuations. *Econometrica*, *Vol. 50, No. 6*, 1345-1370.

The core features of MEDSEA are similar to those found in similar small open economy models. The model contains five types of agents: households, intermediate good producers, final good firms, aggregators and the government. Households maximize a lifetime utility over an infinite life horizon. Labour is differentiated over a continuum of households introducing some degree of monopoly power over wages, which in turn allows the introduction of sticky wages. Intermediate goods firms are of three types namely, those producing tradable and non-tradable output, and those responsible for importing foreign production. All firms in the intermediate sector optimise prices subject to some nominal rigidities. The economy produces three final goods: consumption, investment and exports. These are produced by final good firms that combine a continuum of heterogeneous products, produced by the tradable and non-tradable intermediate firms, with imports. Producers of final export goods require distribution services produced by perfectly competitive producers that purchase a basket of non-tradables to deliver the final export goods to the rest of the world. The treatment of government is fairly simplistic and is aimed at making the calibration of the great ratios implied by the model easier. At this stage, the government is assumed to pursue a balanced budget and to finance public spending through a lump-sum tax. The model allows for habit persistence, price and wage indexation, as well as investment adjustment costs in an effort to capture the persistence and dynamics usually found in the data. MEDSEA also allows for deviations in the law of one price by introducing a sluggish pass-through of foreign to import prices.

The DSGE model for Malta also contains key modifications designed to account for the country's specific characteristics. The Maltese economy is modelled within a monetary union, thereby lacking an independent inflation targeting rule. Furthermore, the model features a modified export sector specifically designed to account for the characteristics of the Maltese export sector. Unlike similar models in its class, the tradable production of the model is explicitly targeted to be exported and is therefore not complementary to other production meant for local household consumption, investment or government expenditure. This reflects the fact that the goods and services meant for Maltese consumption and investment are intrinsically different from those that are exported. Also, through its export production process the model is able to reflect the reliance of Maltese exports on imported content. The model also assumes that the capital input of the tradable sector is decided exogenously, reflecting the fact that in small open economies, capital input decisions of export-oriented firms are not necessarily made domestically. This provides a role for exogenous changes in foreign direct investment. Finally, the model features goods market separation through the presence of distribution costs in the tradable sector. This implies that price changes in the non-tradable sector are transmitted, with an imperfect degree of pass-through, to the tradable sector.

The model is calibrated to replicate the specific features of the Maltese economy. The parameters meant to pin down the values for the steady-state ratios were calibrated so as to replicate the long-run average (2000-2015) observed from the national accounts statistics. The parameters governing the dynamics of the model were calibrated consistently with existing DSGE literature on the euro area and in line with the Maltese economy calibration

of the EAGLE model, described in Micallef (2013).[5] Parameters related to the frequency of price and wage re-optimisation were set in line with the findings of the Wage Dynamic Network.[6]

In order to illustrate the transmission channels operating in MEDSEA, Chart 1 presents the results of an unanticipated temporary shock to the technology level of both tradable and non-tradable sectors. The chart shows the impulse responses of a number of key variables to a 1 standard deviation positive shock, which temporarily raises the productivity of the tradable and non-tradable sectors by 1%.

The impulse responses show that one year after the productivity shock, GDP increases by almost 0.8%, driven by both the domestic and foreign sectors. Following the shock, the increased level of efficiency with which factors of production are used, leads to an immediate fall in the marginal cost of both tradable and non-tradable sectors, leading to lower price pressures. Efficiency gains in the non-tradable sector have an indirect effect on export price inflation via the distribution channel, thereby amplifying the depreciation of

Chart 1
COMMON TECHNOLOGY SHOCK
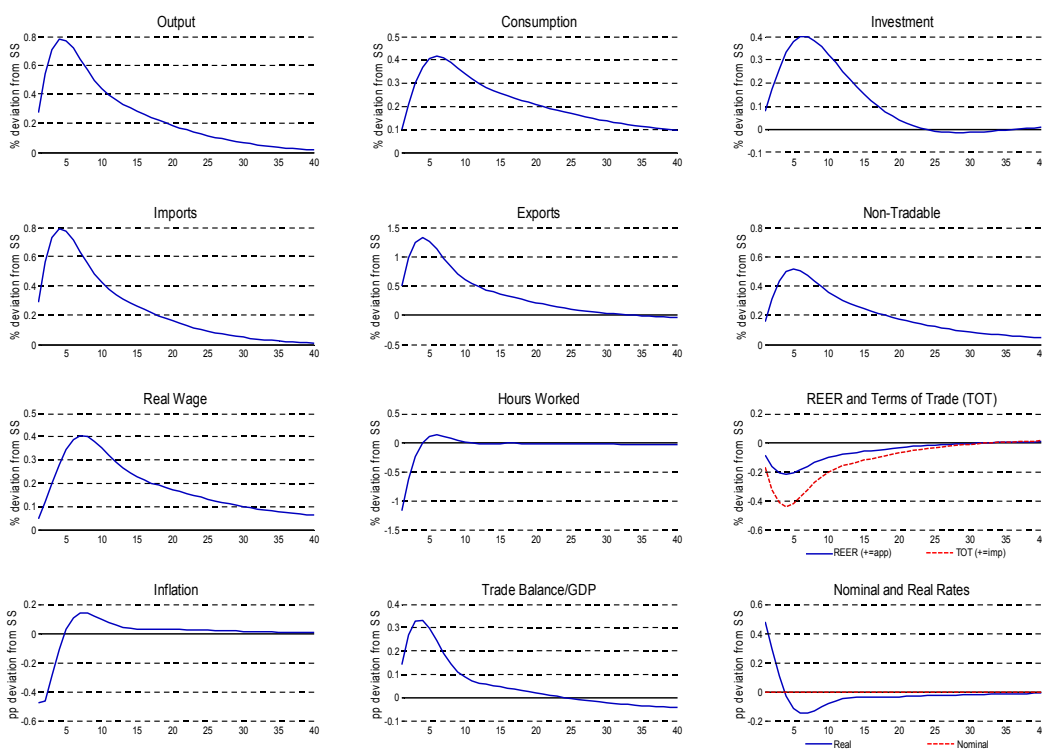
Source: Author's calculations.

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5   Micallef, B. (2013). Measuring the Effects of Structural Reforms in Malta: an Analysis Using the EAGLE Model. *Working Paper* WP/01/2013, Central Bank of Malta.
6   See Central Bank of Malta Annual Report (2014).

the real exchange rate. This improves the competitiveness of the Maltese economy leading to an increase in exports. Higher efficiency results in a downward shift of the labour demand curve, implying a fall in the hours worked.[7] Despite lower labour demand, real wages increase, driven by lower levels of domestic inflation.

The small country assumption implies that euro area inflation, and therefore, nominal interest rates in the euro area are unaffected by the decline in Malta's inflation. Still, lower domestic inflation leads to an increase in Malta's real interest rate. Despite a negative inter-temporal substitution effect, higher real labour income pushes up domestic consumption. In view of the lower domestic inflation, domestic non-tradable goods are perceived as cheaper than imported alternatives, thereby discouraging imports and increasing the production of non-tradables. This, together with a stronger export performance leads to an improved trade balance on impact. Strong economic performance leads to some inflationary pressures to start building up between the second and third years after the initial shock. This starts to gradually erode the country's competitiveness leading to a progressive return to the initial steady-state.

In addition to the above simulation, the model includes a number of shocks such as wage and goods mark-up shocks that are very relevant from a policy perspective. For instance, MEDSEA can be used to quantitatively assess, in a theoretically consistent way, a number of policy reforms aimed at improving the competitiveness of the labour and goods markets in Malta.

Going forward, the model will be further developed to increase the number of policy questions that can be addressed. For instance, at this current juncture MEDSEA completely abstracts from search and matching frictions and is thus unable to explain the existence of involuntary unemployment. Moreover, the treatment of fiscal policy in this model is very stylised and MEDSEA would definitely benefit from a richer modelling of government taxes and revenue components. A further step would be the estimation of the model, which would help to empirically uncover the structural shocks driving the Maltese business cycle as well as some of the parameters governing the dynamics of the model. Eventually, estimation would also allow the model to be used to forecast key economic variables, potentially helping in the generation of macroeconomic forecasts.

Finally, it is important to note that the model presented here together with its future extensions is meant to be used as a complement to the existing policy toolkit available at the Central Bank of Malta. While the Bank's traditional econometric model, STREAM,[8] is envisaged to remain the main tool that assists in the production of forecasts and in other routine applications at the Bank, MEDSEA is expected to aid in answering research questions that require a more theoretically consistent framework that is immune to the Lucas critique.

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[7]   This is in line with the empirical findings of Gali, J. (1999). Technology, Employment and the Business Cycle: Do Technology Shocks Explain Aggregate Fluctuations? *American Economic Review*, 89(1), 249-271.

[8]   Grech, O., & Rapa, N. (2016). STREAM: A Structural Model of the Maltese Economy. *Working Paper* WP/01/2016, Central Bank of Malta.

3. PRICES, COSTS AND COMPETITIVENESS

The annual rate of consumer price inflation in Malta, as measured by the Harmonised Index of Consumer Prices (HICP), rose from 0.9% in September to 1.0% in December. On the other hand, downward pressures on domestic costs persisted, as the Producer Price Index (PPI) contracted on a year earlier. As regards measures of competitiveness, Malta's Harmonised Competitiveness Indicators (HCI) fell during the fourth quarter.

Inflation

HICP inflation edges up

Annual HICP inflation in Malta edged up to 1.0% in December 2016, from 0.9% in September (see Chart 3.1).[1] HICP inflation in the euro area reached 1.1% in December. As a result,

the inflation rate in Malta stood below that registered in the euro area for the first time in over two years.

HICP inflation in Malta fluctuated within the narrow range of 0.8% and 1.0% throughout 2016, with the exception of a dip in October, when inflation fell to 0.5%. The marginal increase in the annual rate of inflation between September and December was driven by developments in prices for unprocessed food (see Table 3.1 and Chart 3.2).

Chart 3.1
INFLATION RATES IN MALTA AND IN THE EURO AREA
(annual percentage changes)

Sources: NSO; Eurostat.
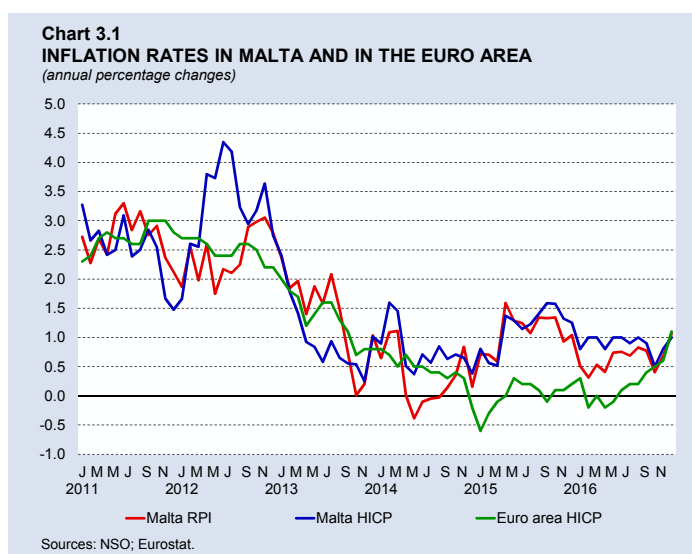
Table 3.1
HICP INFLATION
Annual percentage change

	2016								
	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Unprocessed food	1.6	3.5	2.9	2.9	4.1	4.0	3.3	4.0	6.3
Processed food including alcohol and tobacco	2.2	2.2	2.2	2.3	2.2	1.9	2.0	1.8	1.9
Energy	-4.3	-4.3	-4.3	-4.3	-3.9	-3.9	-4.6	-4.6	-4.6
Non-energy industrial goods	0.9	0.9	1.0	1.0	0.8	0.9	0.2	0.6	0.8
Services (overall index excluding goods)	1.0	1.0	1.2	0.9	1.0	0.9	0.7	0.9	0.8
All Items HICP	**0.8**	**1.0**	**1.0**	**0.9**	**1.0**	**0.9**	**0.5**	**0.8**	**1.0**
Source: Eurostat.									

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[1] The HICP weights are revised on an annual basis to reflect changes in household consumption patterns. In 2016 the weight allocated to energy stood at 7.2%, while that of non-energy industrial goods (NEIG) was 28.7%. Services accounted for 43.7% of the index, while the share allocated to food stood at 20.4%.
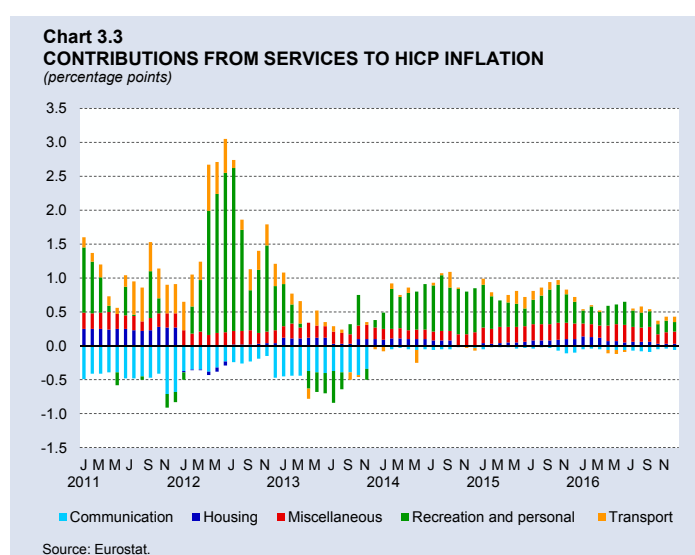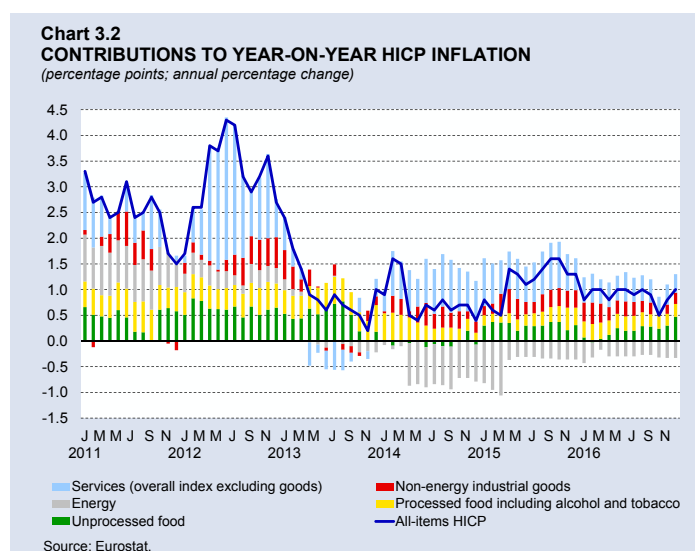
Prices for unprocessed food accelerated sharply during the period under review, with the annual rate of inflation reaching 6.3% in December, from 4.0% in September. This reflected faster growth in vegetable and fruit prices, which could be a result of dry weather conditions earlier in 2016. As a result, the contribution of the unprocessed food component to the headline HICP inflation rate rose from 0.3 to 0.5 during the review period. On the other hand, at 1.9%, inflation on processed food (including alcohol and tobacco), remained unchanged when compared with the end of the third quarter. The contribution of this component to the headline figure thus stood at 0.3 in December. Overall, food inflation accelerated from 2.4% to 3.5% over the review period.

The annual rate of growth of services prices – the largest component in the overall HICP index – decelerated slightly at the end of the fourth quarter, going to 0.8% from 0.9% three months earlier. This deceleration was mainly driven by the

Chart 3.2
CONTRIBUTIONS TO YEAR-ON-YEAR HICP INFLATION
(percentage points; annual percentage change)

Services (overall index excluding goods)   Non-energy industrial goods
Energy   Processed food including alcohol and tobacco
Unprocessed food   All-items HICP

Source: Eurostat.

Chart 3.3
CONTRIBUTIONS FROM SERVICES TO HICP INFLATION
(percentage points)

Communication   Housing   Miscellaneous   Recreation and personal   Transport

Source: Eurostat.

services related to recreation and personal care (see Chart 3.3). The contribution of the services component to the overall HICP figure thus edged down by 0.1 percentage point between September and December, to 0.4 percentage point.

NEIG inflation also eased during the fourth quarter, reflecting developments in prices of clothing and household appliances. The annual inflation rate of this component stood at 0.8% in December, compared with 0.9% three months earlier, though the contribution to the headline figure remained unchanged.
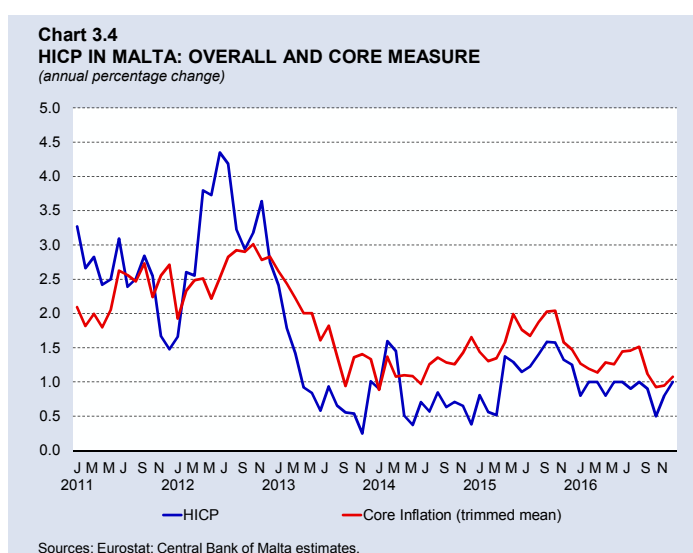
Meanwhile, energy prices continued to fall, shedding 4.6% on an annual basis in December. This signifies a faster contraction when compared with the fall of 3.9% registered in Septem-

ber, on account of a drop in prices for transport fuel during the quarter under review. Nonetheless, the contribution of energy to the headline index remained largely unchanged at -0.3 point.

Core HICP inflation unchanged

In December, core inflation in Malta stood unchanged from September, at 1.1% (see Chart 3.4).[2] Nonetheless, core inflation held above the headline index, indicating that the more volatile components of the index weighed down on inflation during the quarter.

Chart 3.4
HICP IN MALTA: OVERALL AND CORE MEASURE
(annual percentage change)

Sources: Eurostat; Central Bank of Malta estimates.

Retail Price Index inflation accelerates

Retail Price Index (RPI) inflation accelerated during the fourth quarter, rising from 0.8% in September to 1.1% in December (see Table 3.2).[3] As with HICP inflation, this acceleration was driven by faster growth in food prices.

Table 3.2
CONTRIBUTIONS TO YEAR-ON-YEAR RPI INFLATION
Percentage points

	2016								
	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Food	0.2	0.6	0.6	0.6	0.7	0.6	0.6	0.7	1.0
Beverages and tobacco	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
Clothing and footwear	-0.2	-0.1	0.0	-0.1	-0.2	-0.2	-0.3	-0.2	-0.3
Housing	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Water, electricity, gas and fuels	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household equipment and house maintenance costs	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Transport and communications	-0.5	-0.7	-0.6	-0.6	-0.5	-0.5	-0.5	-0.5	-0.4
Personal care and health	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Recreation and culture	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
Other goods and services	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
RPI (annual percentage change)	0.4	0.7	0.8	0.7	0.8	0.8	0.4	0.7	1.1

Source: NSO.

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[2]   The Central Bank of Malta uses a "trimmed mean" approach to measure core inflation, whereby the more volatile components of the index are removed from the basket of consumer goods so as 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 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.

Residential property prices

During the fourth quarter of 2016, the PPI published by the National Statistics Office, which is based on actual transactions involving apartments, maisonettes and terraced houses, rose by 8.4% when compared with the corresponding quarter of 2015.[4] This increase was faster than the 5.5% recorded in the third quarter (see Chart 3.5).

Robust growth in residential property prices in Malta is being supported by a number of factors. These range from the government scheme for first-time buyers and a low interest rate environment which makes property more attractive to purchase.[5] Buoyant labour market conditions and growth in disposable income, together with the rise in foreign workers and the Individual Investor Programme, also continue to lift property prices.

Chart 3.5
MOVEMENTS IN RESIDENTIAL PROPERTY PRICES
(annual percentage changes)

Source: NSO.
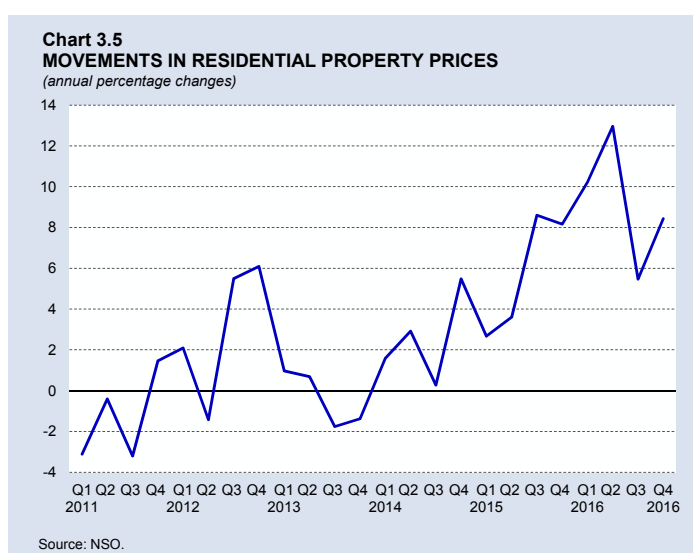
Costs and competitiveness

Producer prices contract

The PPI contracted at an annual rate of 1.9% in December, following a 0.1% increase in September, extending a pattern of stable or falling prices that has been observed for almost four years.[6] The recent annual drop in prices was driven by intermediate goods, which make up the largest component of the index and include semiconductors and pharmaceutical products, and by consumer goods. Contributions from the other components of the index, namely capital goods and energy, remained unchanged during the period under review.

Harmonised competitiveness indices continue to rise

Malta's HCI dropped during the fourth quarter, following three consecutive quarters of growth. In nominal terms, the HCI fell by 0.8% between September and December (see Chart 3.6).[7] This implies an improvement in Malta's international competitiveness in terms of trade-weighted exchange rates, partly reflecting the recent depreciation of the euro against the US dollar.

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[4]   'Apartments' are defined as dwellings with self-contained rooms or a suite of rooms that have a separate entrance accessible from a common passage way, landing or stairway. 'Maisonettes' have a separate entrance that is accessible from the street and are either at ground-floor level with overlying habitation, or at first-floor level with underlying habitation. 'Terraced houses' are dwellings with at least two floors, own access at street level and airspace and with no underlying structures that are not part of the house itself. They are attached to other structures on both sides. Further information is available in NSO *Release* 089/2016.

[5]   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.

[6]   The Industrial PPI measures the prices of goods at the factory gate and is commonly used to monitor inflationary pressures at the production stage.

[7]   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.
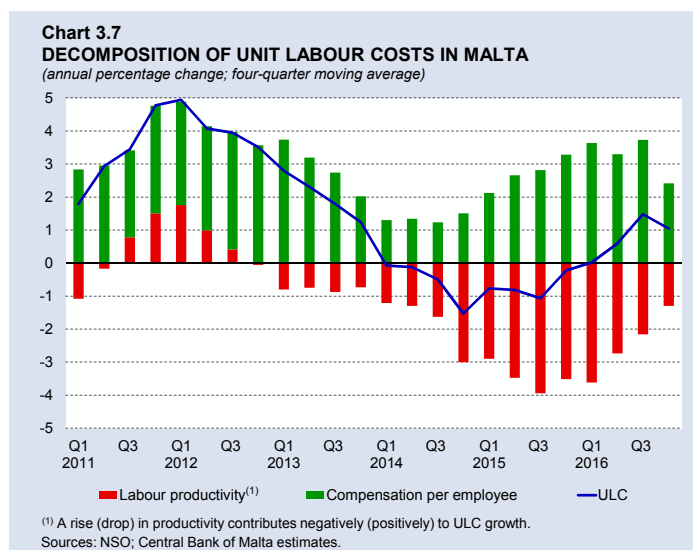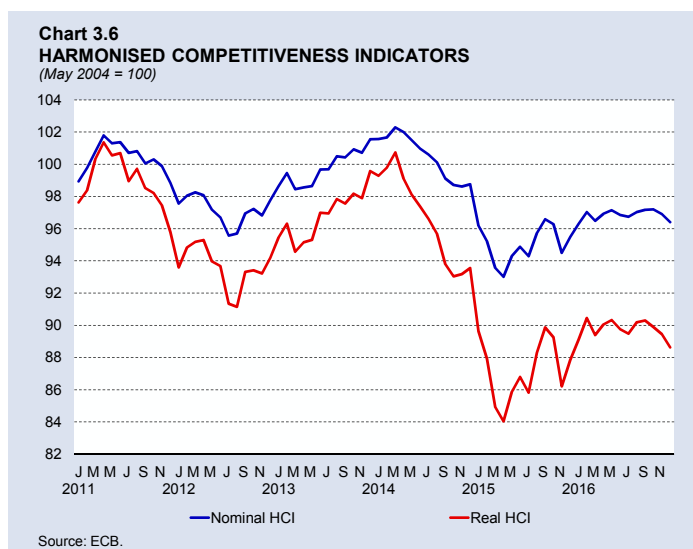
The real HCI, which also takes into account consumer prices in Malta and its international trading partners, contracted by 1.9% during the period. The faster drop in the real HCI relative to the nominal HCI indicates that the improvement in competitiveness due to exchange rate movements was amplified by changes in inflation differentials.

Prior to the recent drop, HCIs in Malta generally followed an upward trend since mid-2015, reflecting the appreciation of the euro against the pound sterling over the past quarters and a positive inflation gap between Malta and its main trading partners. Notwithstanding the drop during the last quarter of 2016, the nominal and real HCI stood 1.0% and 0.9%, respectively, above their level twelve months earlier.

Chart 3.6
HARMONISED COMPETITIVENESS INDICATORS
(May 2004 = 100)

— Nominal HCI   — Real HCI

Source: ECB.

Unit labour costs continue to grow

The Unit Labour Cost (ULC) index, which is measured as the ratio of compensation per employee to labour productivity, continued to grow during the fourth quarter of 2016. Measured on a four-quarter moving average basis, the annual growth rate of Malta's ULC stood at 1.1% during the period under review, down from 1.5% in the previous quarter (see Chart 3.7).[8] Annual ULC growth in Malta turned positive at the start of 2016, and has been accelerating since, although it remains relatively contained from a historical perspective.

The recent deceleration in Malta's ULC was driven by slower growth in compensation per employee, which eased from 3.7% in the third quarter to 2.4% in the fourth. Growth in labour productivity also decelerated during the review period, though to a smaller extent than compensation per employee. Its annual rate of change stood at 1.3% in the fourth quarter, down from 2.2% previously.

Chart 3.7
DECOMPOSITION OF UNIT LABOUR COSTS IN MALTA
(annual percentage change; four-quarter moving average)

■ Labour productivity[(1)]   ■ Compensation per employee   — ULC

[(1)] A rise (drop) in productivity contributes negatively (positively) to ULC growth.
Sources: NSO; Central Bank of Malta estimates.

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[8]   A degree of caution is required in the interpretation of ULC in view of contemporaneous structural shifts in the composition and factor-intensity of production, notably the shift to labour-intensive services. See Micallef, B. "Unit labour costs, wages and productivity in Malta: a sectoral and cross-country analysis" *Policy Note*, August 2015, available at https://www.centralbankmalta.org/en/policy-notes-2015, and Rapa, N. "Measuring international competitiveness" in *Quarterly Review* 2016:1, Central Bank of Malta, pp. 53–63.
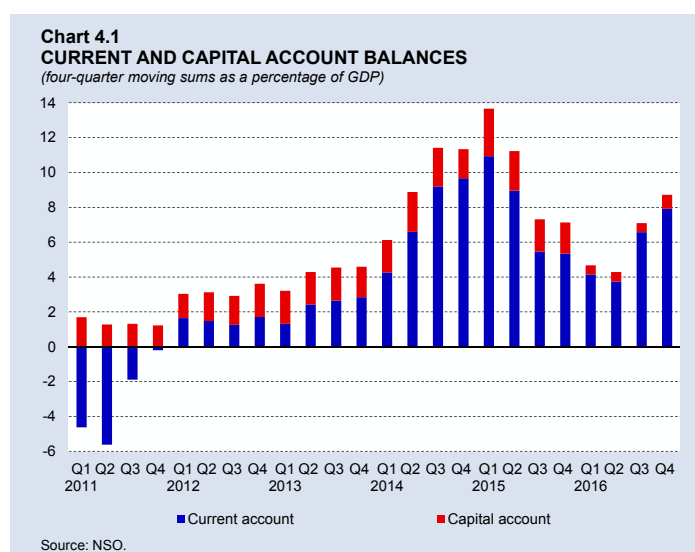
4. THE BALANCE OF PAYMENTS

During the last quarter of 2016 the surplus on the current account of the balance of payments more than doubled when compared with the corresponding quarter of 2015. This was mainly attributable to higher net services receipts. Nonetheless, a narrowing in the merchandise trade gap and increases in net inflows related to secondary income also contributed. These movements offset a rise in net outflows on the primary income account. At the same time, net inflows on the capital account rose markedly on a year earlier, while higher net lending was posted on the financial account.

The current account

The current account surplus widens

In the last quarter of 2016, the current account registered a surplus of €256.2 million, up from €113.3 million a year earlier. This improvement was largely driven by favourable developments on the services account and a lower deficit on trade in goods. During 2016 as a whole, the surplus on the current account stood at €783.4 million, up from €495.1 million in 2015. This improvement was predominantly on account of a rise in net services receipts (see Table 4.1). As a result, over 2016, the current account surplus increased to 7.9% of gross domestic product (GDP), up from 5.3% in 2015 (see Chart 4.1).

Chart 4.1
CURRENT AND CAPITAL ACCOUNT BALANCES
(four-quarter moving sums as a percentage of GDP)

Source: NSO.

Table 4.1
BALANCE OF PAYMENTS
EUR millions

|	Four-quarter moving sums						
	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2015 Q4	2016 Q4
Current account	**495.1**	**391.9**	**359.3**	**640.6**	**783.4**	**113.3**	**256.2**
Goods	-1,876.8	-1,997.0	-2,054.7	-1,902.6	-1,871.9	-417.4	-386.8
Services	2,607.6	2,682.8	2,766.3	2,906.5	3,056.8	583.1	733.5
Primary income	-478.7	-533.5	-593.2	-603.2	-660.7	-115.0	-172.4
Secondary income	243.0	239.6	240.9	240.0	259.3	62.6	81.9
Capital account	**166.5**	**50.1**	**52.2**	**50.8**	**79.1**	**8.2**	**36.5**
Financial account[1]	**310.5**	**409.3**	**383.7**	**1,510.7**	**1,976.4**	**170.6**	**636.3**
Errors and omissions	**-351.1**	**-32.6**	**-27.8**	**819.3**	**1,113.9**	**49.0**	**343.6**

[1] Net lending (+) / net borrowing (-).
Source: NSO.

The merchandise trade deficit narrows

During the last quarter of 2016, the merchandise trade deficit stood at €386.8 million, narrowing by €30.7 million on the corresponding period of 2015. This improvement reflected an expansion of €38.7 million in exports, which outweighed a rise of €8.0 million in imports.

When measured on a four-quarter cumulative basis, the visible trade gap narrowed to €1,871.9 million in 2016, or 18.9% of GDP, from 20.2% of GDP a year earlier (see Chart 4.2). This improvement arose as imports contracted at a faster pace than exports; the former declined by €211.0 million whilst the latter dropped by €206.2 million on 2015.

Chart 4.2
GOODS DEFICIT
(four-quarter moving sums as a percentage of GDP)

Source: NSO.
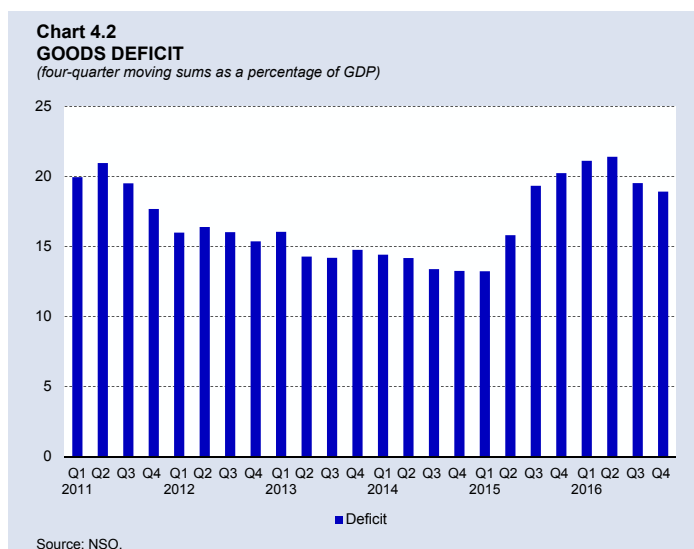
The surplus on services increases significantly

Between October and December 2016, transactions in services generated a surplus of €733.5 million, an increase of €150.4 million on the corresponding quarter of 2015. Higher net receipts were stimulated by a significant rise in exports, which offset that in imports. The widening in this surplus was driven by the "other services component", largely mirroring higher net receipts from personal and recreational services, including remote gaming. However, an increase of €42.3 million in net receipts related to transport also contributed, partly reflecting the continued expansion of the aviation services industry. Concurrently, net travel exports increased by €18.2 million, as a rise in inbound tourists' spending offset higher expenditure by Maltese residents abroad.

These positive developments were partly dampened by a year-on-year rise in net payments relating to telecommunication services and lower net receipts on financial services.

Partially reflecting developments in the quarter under review, the overall surplus on the services balance in 2016 rose to €3,056.8 million, from €2,607.6 million in 2015, with its share in GDP reaching 30.9% (see Chart 4.3).

Chart 4.3
SERVICES BALANCE
(four-quarter moving sums as a percentage of GDP)

Source: NSO.
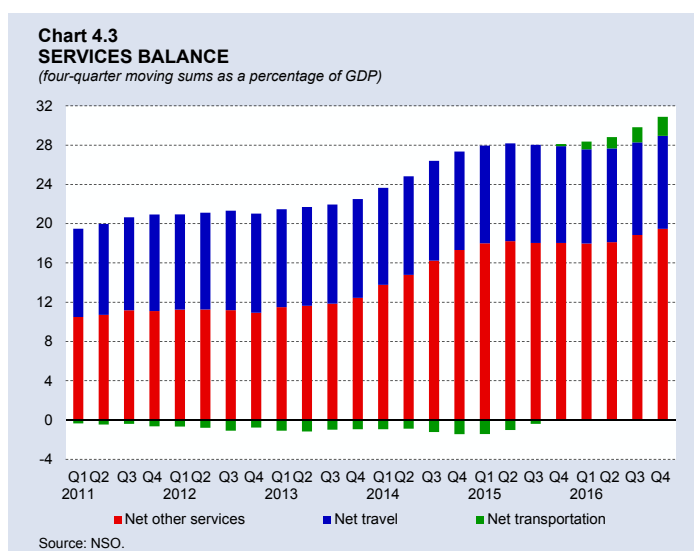
Primary income account records higher net outflows[1]

In the last quarter of 2016, net outflows on the primary income account stood at €172.4 million, compared with net outflows of €115.0 million in the same period of a year earlier. When measured on a four-quarter sum basis, net outflows on this account reached €660.7 million in 2016; €182.0 million more than in 2015. Larger net outflows were predominantly driven by a rise in dividends distributed to foreign owned firms operating in Malta. Movements on this component of the current account continued to be strongly influenced by internationally-oriented firms which transact predominantly with non-residents.

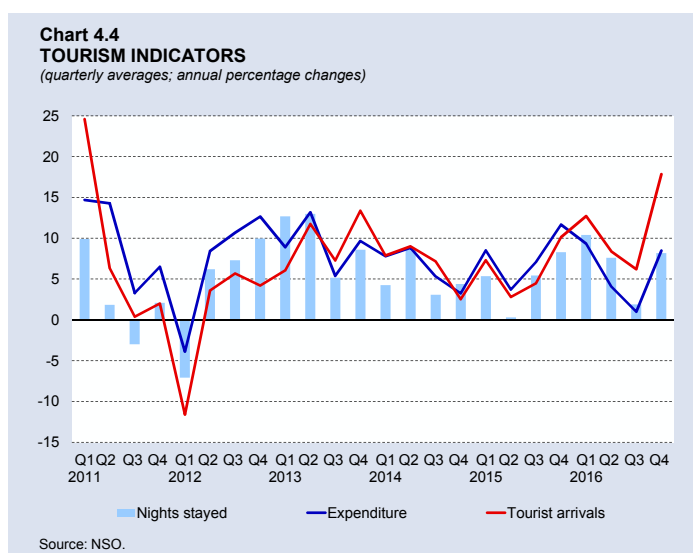*Inflows on the secondary income account increased[2]*

In the final quarter of 2016, net inflows on the secondary income account increased by €19.3 million on a year earlier, to stand at €81.9 million. In 2016 as a whole, net inward flows on the secondary income reached €259.3 million, or 2.6% of GDP. This increase was principally in the form of higher net government receipts.

The tourism industry continues to expand

In the fourth quarter of 2016 the number of inbound visitors reached 450,489, an increase of 17.8% compared with the same period a year earlier (see Chart 4.4). This substantial rise was largely driven by a higher number of tourists that visited Malta for leisure purposes, although the number of business tourists also increased. On the other hand, the number of tourists visiting for educational, religious and health motives decreased compared with the corresponding quarter of 2015.

Over the period under review, tourists spent over 3.1 million nights in Malta, an increase of 8.2% on a year earlier. This reflected increases in both the number of nights stayed in collective accommodation, which rose at an annual rate of 5.9% and also in the nights spent in private accommodation which rose by 11.9% on a year earlier.[3]

Meanwhile, tourist spending in Malta rose at an annual rate of 8.5%, reaching €353.6 million.[4] Higher expenditure on non-package holidays, particularly on accommodation as well as increases in the "other" component of tourism spending led to this rise. In contrast, package expenditure continued to fall.[5]

Chart 4.4
TOURISM INDICATORS
(quarterly averages; annual percentage changes)

Nights stayed —— Expenditure —— Tourist arrivals

Source: NSO.

_____

[1]   The primary income account shows income flows related mainly to cross-border investment and compensation of employees.
[2]   The secondary income account shows current transfers between residents and non-residents.
[3]   Private accommodation includes self-catering apartments, farmhouses, and private residences. As per Eurostat recommendation, time-share accommodation is classified as "private accommodation". Collective accommodation comprises hotels, aparthotels, guesthouses, hostels and tourist villages.
[4]   Total expenditure is split into package, non-package and "other".
[5]   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.

In the last quarter of 2016, tourist spending and nights stayed grew by 8.5% and 8.2% respectively. As tourist expenditure increased at a slower pace when compared with arrivals, expenditure per capita decreased to €785, from €853 in the last quarter of 2015. This decline partly reflected a shorter average length of stay, from 7.7 nights in the quarter under review to 7.1 nights in the same period a year earlier.

During the quarter under review the total occupancy rate in collective accommodation establishment increased by 3.7 percentage points compared to a year earlier, to 56.8%. All hotel categories as well as the "other" establishments category experienced higher occupancy rates. However, the largest additions were registered in the five-star, followed by the three-star category (see Chart 4.5).

In the final quarter of 2016, the number of cruise liner calls fell to 85, three less compared with a year earlier. Nonetheless, the number of foreign cruise liner passengers reached 175,819 up from 175,355 a year earlier (see Chart 4.6). Thus in the quarter reviewed, cruise liner passengers increased marginally by 0.3% in annual terms, following a 15.2% increase in the corresponding quarter of 2015.

Chart 4.5
AVERAGE OCCUPANCY RATES IN THE FOURTH QUARTER
(per cent)
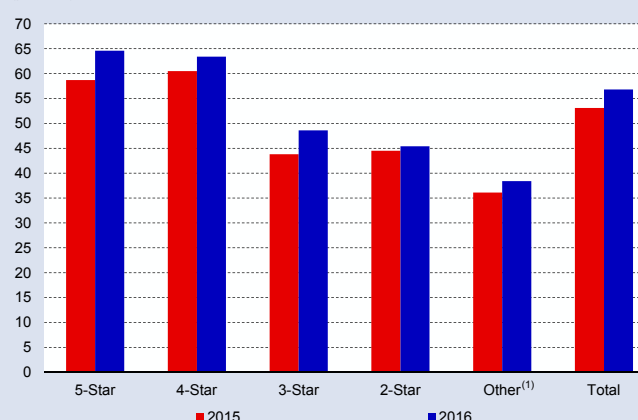
(1) Includes guest houses, hostels and holiday complexes.
Source: NSO.

Chart 4.6
CRUISE LINER PASSENGERS
(thousands)

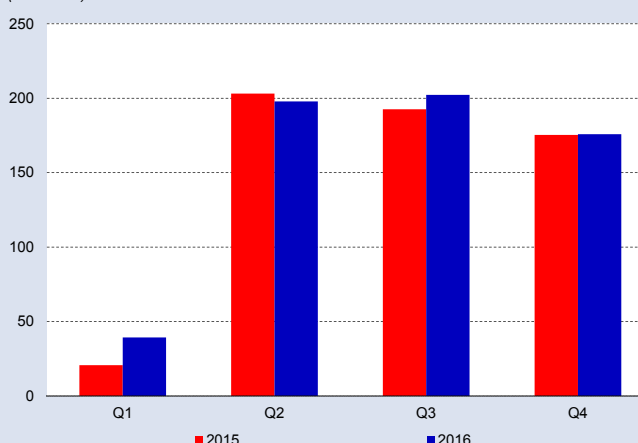Source: NSO.

The capital account

Net inflows on the capital account amounted to €36.5 million during the quarter under review; €28.3 million more than in the same quarter of 2015 (see Table 4.1). This was mostly attributable to higher transfers to government, which in turn was propelled by the timing of funds received under EU financing programmes. Nonetheless, capital inflows in 2016 totalled €79.1 million, down by €87.4 million on a year earlier (see Chart 4.1), reflecting the exceptionally high level of EU funded projects in 2015.

5. GOVERNMENT FINANCE

During the fourth quarter of 2016, the general government surplus increased when compared with the corresponding period a year earlier. This was due to a fall in total expenditure offsetting that in general government revenue.[1] When measured as a four-quarter moving sum, the general government balance reached a surplus of 1.0% of gross domestic product (GDP), up from 0.8% in the third quarter of 2016. Meanwhile, general government debt, as a share of GDP, declined from 59.7% at the end of September, to 58.3% at the end of December.
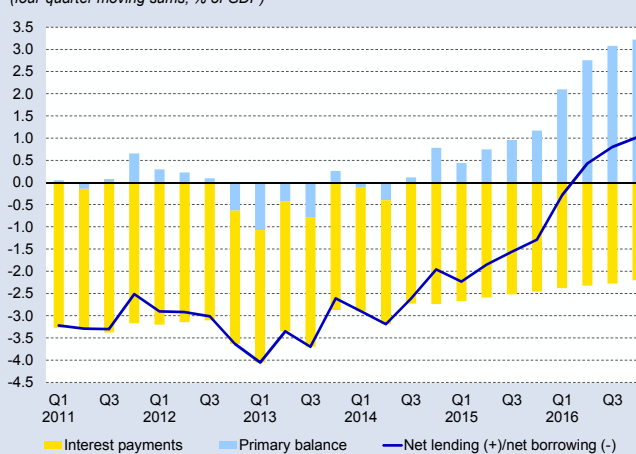
General Government

General government balance-to-GDP ratio improves

During the last quarter of 2016, the general government balance continued to improve, as its ratio to GDP, measured as a four-quarter moving sum, reached a surplus of 1.0% (see Chart 5.1). This marks a 0.2 percentage point improvement over the surplus recorded in the third quarter. These developments can be explained by both the improvement in the primary balance ratio, which excludes interest payments from total government expenditure, as well as the decline in interest payments. In fact the former improved by 0.1 percentage point over the third quarter, reaching 3.2% of GDP, while interest payments declined by another 0.1 percentage point, amounting to 2.2% of GDP.

Capital expenditure was the largest contributor towards the improvement in the overall general government balance (see Chart 5.2). The capital expenditure-to-GDP ratio, measured as a four quarter moving sum, fell by 0.8 percentage point during the last quarter of the year. This reduction, which partly reflected

Chart 5.1
GENERAL GOVERNMENT BALANCE
(four-quarter moving sums; % of GDP)

Source: NSO.

Chart 5.2
IMPACT ON GENERAL GOVERNMENT BALANCE[1]
(percentage point)
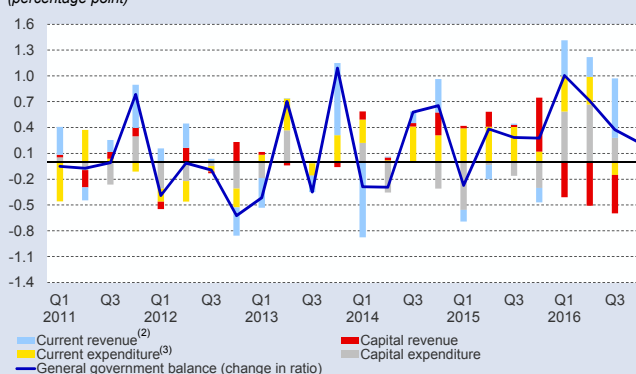
[1] Revenue items: +ve sign represents higher revenue and vice versa. Expenditure items: +ve sign represents lower expenditure and vice versa.
[2] The term 'current revenue' represents most tax revenue as well as income from investments and sales. 'Capital revenue' mainly represents capital taxes and grants received.
[3] The term 'current expenditure' mainly represents spending on wages, social benefits and operational and maintenance expenses. 'Capital expenditure' mainly represents spending on investment and capital transfers.
Sources: NSO; Central Bank of Malta.

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[1] The analysis of general government finance items in this Chapter of the *Quarterly Review* is based on data in NSO *News Release* 068/2017, released on 24 April 2017.

Table 5.1
GENERAL GOVERNMENT BALANCE
EUR millions

	2015	2016				Change 2016Q4-2015Q4	
	Q4	Q1	Q2	Q3	Q4	Amount	%
Revenue	**1,168.7**	**842.0**	**910.9**	**967.4**	**1,150.9**	**-17.8**	**-1.5**
Taxes on production and imports	344.9	296.8	278.4	315.2	374.3	29.3	8.5
Current taxes on income and wealth	385.3	267.1	382.2	324.7	401.9	16.6	4.3
Social contributions	172.0	152.9	155.1	152.5	178.8	6.8	4.0
Capital and current transfers receivable	151.4	22.5	23.8	18.8	32.0	-119.4	-78.8
Other[1]	115.1	102.8	71.5	156.2	163.9	48.8	42.4
Expenditure	**1,068.5**	**910.3**	**884.5**	**947.6**	**1,027.8**	**-40.7**	**-3.8**
Compensation of employees	280.0	292.2	298.4	301.8	293.3	13.3	4.8
Intermediate consumption	212.3	139.5	148.3	151.6	196.5	-15.8	-7.4
Social benefits	262.7	269.7	270.4	256.1	282.7	20.0	7.6
Subsidies	27.0	30.9	25.6	39.9	32.9	5.9	21.9
Interest	58.3	52.8	54.8	56.0	54.2	-4.1	-7.0
Other current transfers payable	55.7	29.1	40.0	55.6	68.8	13.1	23.4
Gross fixed capital formation	131.3	63.3	38.9	61.6	88.1	-43.3	-33.0
Capital transfers payable	50.8	30.3	8.2	26.3	12.5	-38.3	-75.4
Other[2]	-9.7	2.5	0.0	-1.2	-1.2	8.5	-
Primary balance	**158.5**	**-15.5**	**81.2**	**75.8**	**177.3**	**18.8**	**-**
General government balance	**100.2**	**-68.3**	**26.4**	**19.8**	**123.1**	**22.8**	**-**

[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.

developments in EU-funded capital projects, was also mirrored in the capital revenue-to-GDP ratio which recorded an even larger reduction of 1.3 percentage points.

Current revenue and current expenditure also contributed to the increase in the surplus. The current revenue-to-GDP ratio improved by 0.5 percentage point while the current expenditure-to-GDP ratio contributed a further 0.2 percentage point.

In level terms, the general government surplus improved to €123.1 million in the fourth quarter of 2016, up from the €100.2 million registered in the corresponding period of 2015 (see Table 5.1). This was mainly the result of primary expenditure falling faster than revenue. As a result, the primary surplus widened from €158.5 million to €177.3 million.

Revenue declines off the back of lower capital transfers received

Government revenue fell by €17.8 million, or 1.5%, when comparing the fourth quarters of 2015 and 2016, standing at €1,150.9 million in the quarter under review. This decrease was due to lower capital and current transfers receivable. In fact, their share of total revenue fell by 10.2 percentage points in annual terms (see Table 5.2). This decline offset increases in the other revenue components, with the most significant increase recorded in "other" revenue, whose share in total revenue grew by 4.4 percentage points. The shares of taxes on production and imports, as well

Table 5.2
COMPOSITION OF GOVERNMENT FINANCE ITEMS
Percentage points

	2015 Q4	2016 Q4	Change
Share in total revenue			
Taxes on production and imports	29.5	32.5	3.0
Current taxes on income and wealth	33.0	34.9	2.0
Social contributions	14.7	15.5	0.8
Capital and current transfers receivable	13.0	2.8	-10.2
Other[1]	9.8	14.2	4.4
Share in total expenditure			
Compensation of employees	26.2	28.5	2.3
Intermediate consumption	19.9	19.1	-0.7
Social benefits	24.6	27.5	2.9
Subsidies	2.5	3.2	0.7
Interest	5.5	5.3	-0.2
Other current transfers payable	5.2	6.7	1.5
Gross fixed capital formation	12.3	8.6	-3.7
Capital transfers payable	4.8	1.2	-3.5
Other[2]	-0.9	-0.1	0.8

[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.

as taxes on income and wealth, also increased by 3.0 and 2.0 percentage points, respectively. The share of social contributions in the fourth quarter also rose slightly.

In level terms, capital and current transfers receivable fell from a high base in 2015, as projects financed by the 2007-13 EU financial framework were finalized. On the other hand, in the last quarter of 2016 the uptake of grants from the new Multiannual Financial Framework was low and as a result, capital and current transfers were just €32.0 million, down from €151.4 million a year earlier.

The large fall in the absorption rate of EU funds received was mostly offset by increases in other sources of revenue. Taxes on production and imports maintained their upward trend, registering a €29.3 million increase, corresponding to 8.5% growth. This increase reflected higher revenue from value added tax and, to a lesser extent, duty on documents, in line with buoyant consumption and property market, respectively. An increase in revenue from motor vehicle registration fees also contributed. Current taxes on income and wealth rose by €16.6 million, or 4.3%, as income tax collected from households grew. Positive developments in the labour market resulted in €6.8 million higher social security contributions received. Income from "other" sources also increased in the last quarter of the year. These rose by €48.8 million, equivalent to 42.4%. This was driven by growth in inflows from the Individual Investor Programme.

Expenditure falls due to lower capital expenditure
Total government expenditure fell by €40.7 million, or 3.8%, in the last quarter of 2016, when compared with the corresponding quarter a year earlier. The composition of government expenditure

shifted towards recurrent expenditure. Social benefits and compensation of employees recorded the strongest gains, with their shares in total expenditure rising by 2.9 percentage points and 2.3 percentage points, respectively (Table 5.2). This was slightly offset by a fall in intermediate consumption, whose share fell by 0.7 points. The share of capital spending fell considerably, as gross fixed capital formation and capital transfers payable shares fell by 3.7 percentage points and 3.5 percentage points, respectively.

In the three months to December, outlays on social benefits grew the largest when compared with the same period a year earlier. These increased by €20.0 million, equivalent to 7.6%, mainly due to higher spending on pensions as well as social transfers in kind. Compensation of employees rose by €13.3 million, or 4.8%, driven by higher outlays in the public administration and education sectors. On the other hand, intermediate consumption fell by €15.8 million. Despite increased spending related to the 2017 Presidency of the EU Council and in the health sector, other outlays within the public administration sector declined.

Other items of recurrent expenditure, including subsidies paid and other current transfers payable, grew. The former increased by €5.9 million in annual terms, while other current transfers payable rose by €13.1 million. Meanwhile, interest payments maintained their downward trend, decreasing by €4.1 million due to the prevailing low interest rate environment, which ensures lower refinancing costs.
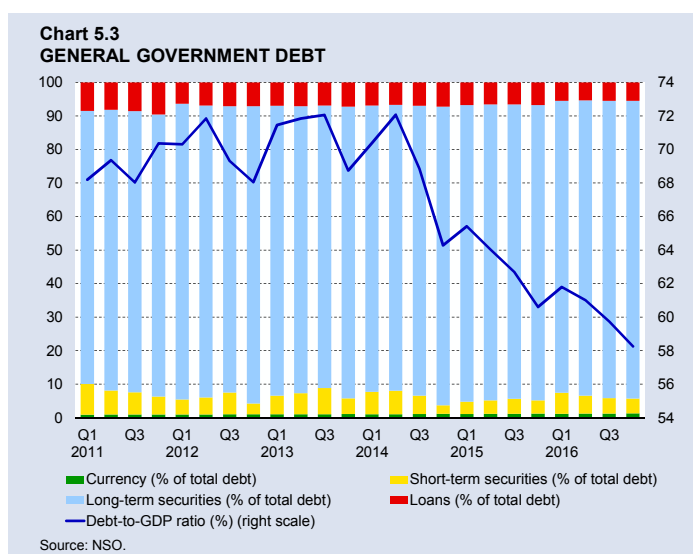
Capital expenditure fell considerably in the fourth quarter. Gross fixed capital formation declined by €43.3 million, or 33.0%, mostly due to lower spending on EU funded projects. Capital transfers payable were €38.3 million lower than a year earlier, again due to a significantly lower absorption of EU funds when compared to the exceptionally high uptake in the last quarter of 2015.

General government debt ratio decline

In December, the stock of general government debt totalled €5,766.5 million. This was €56.9 million lower when compared with September 2016. Consequently, the debt-to-GDP ratio declined, from 59.7% to 58.3% over this period (see Chart 5.3).
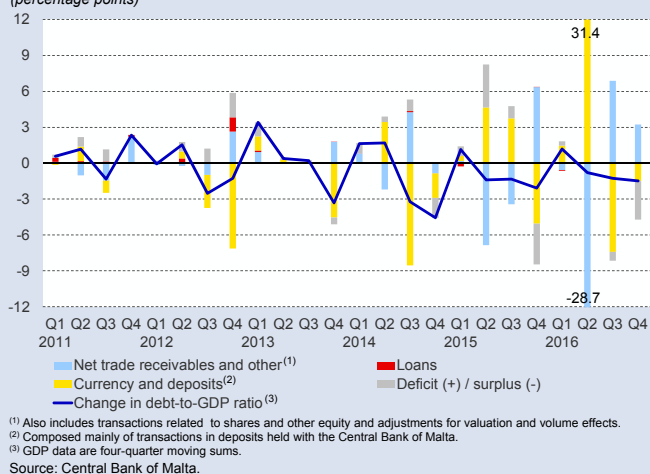
The fall in general government debt was more contained than would have been expected based on the fiscal surplus alone (see Chart 5.4). The difference was due to a positive debt-deficit adjustment, as decreases in the currency and deposits held by the government were offset by increases in the amount of net receivables.

During the last three months of 2016, the stock of long-term securities (composed mainly

Chart 5.3
GENERAL GOVERNMENT DEBT

Currency (% of total debt)
Long-term securities (% of total debt)
Debt-to-GDP ratio (%) (right scale)
Short-term securities (% of total debt)
Loans (% of total debt)

Source: NSO.

of Malta Government Stocks) grew again when compared with the previous quarter. The share of long-term securities within total debt thus increased by 0.2 percentage points to 88.9%. On the other hand, the share of short-term securities (composed of Treasury Bills) fell by 0.2 percentage points, to 4.4%. Meanwhile, the shares of government liabilities in the form of currency, as well as loans, remained broadly unchanged, ending the year at 1.3% and 5.5%, respectively.

Chart 5.4
CONTRIBUTION TO CHANGE IN DEBT
(percentage points)

Net trade receivables and other[1]
Currency and deposits[2]
Change in debt-to-GDP ratio[3]
Loans
Deficit (+) / surplus (-)

[1] Also includes transactions related to shares and other equity and adjustments for valuation and volume effects.
[2] Composed mainly of transactions in deposits held with the Central Bank of Malta.
[3] GDP data are four-quarter moving sums.
Source: Central Bank of Malta.

6. MONETARY AND FINANCIAL DEVELOPMENTS

Monetary dynamics in Malta remained robust during the fourth quarter of 2016.[1] Between September and December, residents' deposits with monetary financial institutions (MFI) 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, driven by loans to households.

Against a backdrop of an accommodative monetary policy stance, the composite interest rate on deposits held by Maltese residents continued to fall during the period. However, the interest rate on loans to Maltese residents was broadly unchanged from September, as was the three-month Treasury bill yield. On the other hand, long-term government bond yields rose. In the equity market, domestic share prices also registered an increase over the three months to December 2016.

Monetary aggregates and their counterparts

Total assets pertaining to the Maltese banking system rose by €1.0 billion between September and December 2016, to €46.2 billion. This increase was driven by the core banks, although non-core domestic banks and international banks also recorded increases.[2]

Maltese residents' deposits continue to expand

Total deposits held by Maltese residents with MFIs in Malta continued to grow during the final quarter of 2016, though the annual pace of growth in December remained unchanged from September, at 6.7% (see Table 6.1).

Table 6.1
DEPOSITS OF MALTESE RESIDENTS

	EUR millions	Annual percentage changes				
	2016	2015		2016		
	Dec.	Dec.	Mar.	June	Sep.	Dec.
Overnight deposits	**11,919,632**	**24.9**	**17.8**	**12.6**	**13.3**	**13.4**
of which						
Households	6,563,034	23.9	17.9	15.7	15.4	17.0
Non-financial corporations	2,908,634	25.5	19.4	6.2	11.1	3.7
Deposits redeemable at notice of up to three months	**103,261**	**-2.2**	**-7.3**	**-12.2**	**-16.9**	**-15.2**
of which						
Households	80,087	-7.4	-4.8	-7.4	-17.3	-16.4
Non-financial corporations	10,227	15.0	-20.7	-45.2	-40.9	-49.2
Deposits with an agreed maturity of up to two years	**3,161,986**	**-10.9**	**-6.2**	**-10.5**	**-11.2**	**-9.3**
of which						
Households	2,515,244	-9.4	-9.3	-11.9	-12.9	-8.7
Non-financial corporations	229,638	-14.7	29.9	-9.8	-17.8	-20.6
Deposits with an agreed maturity above two years	**1,629,303**	**9.2**	**5.3**	**5.6**	**8.0**	**-0.4**
of which						
Households	1,490,711	10.4	7.3	7.2	7.3	-2.4
Non-financial corporations	88,708	0.2	-23.2	-24.4	4.8	18.2
Total residents' deposits[(1)]	**16,814,182**	**12.9**	**10.0**	**6.0**	**6.7**	**6.7**

[(1)] Total residents' deposits exclude deposits belonging to central government.

Source: Central Bank of Malta.

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[1]   Monetary data analysed in this Chapter are compiled on the basis of statistical standards found in the Statistics section on the Central Bank of Malta website.
[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.

Growth in total deposits remained driven by overnight deposits, with annual growth accelerating marginally from 13.3% to 13.4% in the three months to December. Demand for overnight deposits was particularly strong among households, with the low interest rate environment sustaining a preference for liquidity.

On the other hand, longer-term time deposits continued to contract. In particular, deposits with an agreed maturity of up to two years, the second largest cat-

Chart 6.1
DISTRIBUTION OF TOTAL RESIDENT DEPOSITS[(1)]
(percentage points)

■ Deposits outside M3
■ Deposits with agreed maturity of up to two years
■ Deposits redeemable at notice of up to three months
■ Overnight deposits

[(1)] Deposits exclude those belonging to central government.
Source: Central Bank of Malta.

egory, declined further, going down by an annual 9.3% in December. This followed an 11.2% decrease in September. Deposits with an agreed maturity of over two years contracted at an annual rate of 0.4% in December, after having grown throughout the rest of the year. The smallest component of residents' deposits, namely deposits redeemable at notice of up to three months, also continued to shrink.

As a result, the shift away from term deposits towards overnight deposits persisted, with the share of overnight deposits in total residents' deposits rising to 70.9% in December 2016, from 66.7% at the end of 2015 (see Chart 6.1). The share of overnight deposits in total residents' deposits has been growing almost continuously since 2012. In contrast, the share of deposits with an agreed maturity of up to two years declined to 18.8%, from 22.1% a year earlier, while the share of deposits with an agreed maturity of over two years edged down to 9.7%, from 10.4%. Deposits redeemable at notice of up to three months make up a very small proportion of the total.

Interest rates on deposits continue to decline

Interest rates on residents' deposits declined further during the fourth quarter of 2016, with the composite rate offered to households and non-financial corporations (NFC) going down by 4 basis points to 0.48% (see Table 6.2).[3] Rates edged down across most deposit categories. When compared with a year earlier, the composite deposit rate lost 21 basis points, mainly as a result of lower rates on time deposits. This downward trend in deposit rates reflects the ongoing accommodative monetary policy of the euro area.

Credit to residents expands at a faster pace

Credit to Maltese residents accelerated during the final quarter of 2016, with the annual rate of change going to 2.5% in December, from 2.2% in September (see Chart 6.2).

This faster growth reflected developments in credit to other residents, as credit to general government grew at a slower pace compared with September. Indeed, after peaking in January, credit

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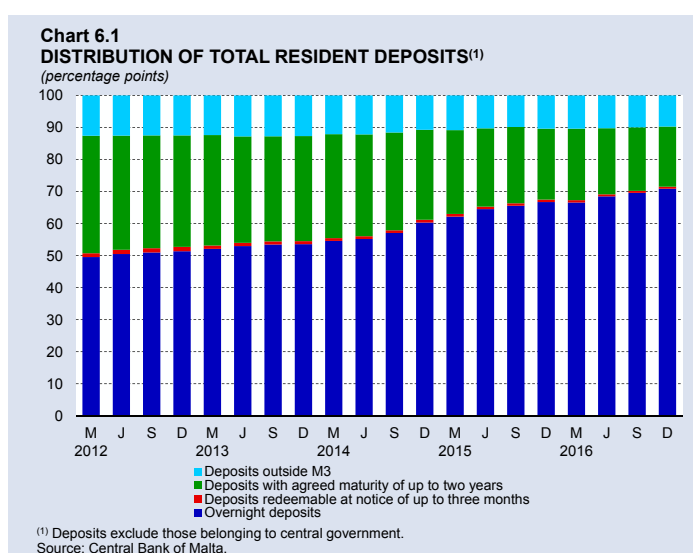
[3]   MFI interest rate data on outstanding amounts shown in Table 6.2 cover euro-denominated deposits belonging to households and NFCs residents in Malta. The household sector includes non-profit institutions serving households.

Table 6.2
INTEREST RATES ON DEPOSITS AND LOANS
Percentages per annum to residents of Malta; weighted average rates as at end of period

	2013	2014	2015	2016	2016			
	Dec.	Dec.	Dec.	Dec.	Mar.	June	Sep.	Dec.
Total deposits[1]	**1.41**	**1.03**	**0.69**	**0.48**	**0.64**	**0.58**	**0.52**	**0.48**
of which								
Overnight deposits								
Households	0.35	0.17	0.12	0.06	0.11	0.11	0.07	0.06
Non-financial corporations	0.30	0.18	0.11	0.03	0.09	0.08	0.08	0.03
Time deposits (less than 2 years)								
Households	2.07	1.73	1.11	0.79	0.98	0.88	0.79	0.79
Non-financial corporations	1.91	1.45	0.85	0.65	0.80	0.75	0.71	0.65
Time deposits (more than 2 years)								
Households	3.55	3.44	2.99	2.64	2.90	2.85	2.76	2.64
Non-financial corporations	3.12	2.84	2.26	2.03	2.13	1.97	2.06	2.03
Total Loans[1]	**4.24**	**4.02**	**3.81**	**3.68**	**3.78**	**3.75**	**3.69**	**3.68**
of which								
Households and NPISH	3.86	3.70	3.60	3.52	3.58	3.57	3.53	3.52
Non-financial corporations	4.70	4.41	4.10	3.93	4.06	4.02	3.92	3.93
Spread[2]	**2.83**	**2.99**	**3.12**	**3.20**	**3.14**	**3.17**	**3.17**	**3.20**
ECB main refinancing operations rate	0.25	0.05	0.05	0.00	0.00	0.00	0.00	0.00

[1] Annualised agreed rates on outstanding euro-denominated amounts belonging to households and non-financial corporations.
[2] Difference between composite lending rate and composite deposit rate.
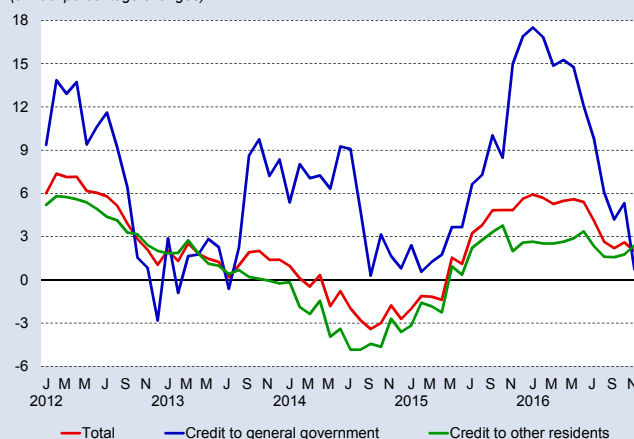Source: Central Bank of Malta.

to general government decelerated during most of 2016, registering an annual growth rate of 1.4% in December. This deceleration was influenced by the timing of Malta Government Stock issuances and redemptions.

Credit to other residents, which mostly consists of credit to the private sector, picked up to 2.9% at the end of the fourth quarter, from 1.6% three months earlier. This reflected developments in private sector loans, the largest component. Their annual rate of

Chart 6.2
CREDIT TO RESIDENTS OF MALTA
(annual percentage changes)

Source: Central Bank of Malta.

change rose from 1.2% in September to 2.7% in December. The pick-up in loans reflected continued robust growth in loans to households, as well as an acceleration in loans to other financial institutions. On the other hand, loans to NFCs contracted at a faster annual pace.

Loans to households rose at an annual rate of 5.8% in December, up from 4.6% in September (see Chart 6.3). Lending for house purchases remained the main driver of growth in this component. These were up by 7.7% in annual terms. In contrast, consumer credit and other lending

Table 6.3

SECTORAL CONTRIBUTIONS TO YEAR-ON-YEAR GROWTH IN LOANS TO NFCs

Percentage points; annual percentage changes

	Total NFCs				
	2015	2016			
	Dec.	Mar.	June	Sep.	Dec.
Accommodation and food service activities	-0.8	0.6	1.4	-0.7	-1.6
Construction	-7.0	-3.2	-2.0	-2.5	-0.8
Manufacturing	-0.3	-0.5	-0.4	-0.3	-0.4
Real estate activities	5.1	0.0	1.0	1.4	1.3
Transportation and storage	-1.7	0.4	-0.1	-0.6	-1.3
Wholesale and retail trade	-0.9	0.1	-0.1	-0.4	-0.9
Other	-1.9	-3.0	0.2	1.3	-0.9
Total	**-7.4**	**-5.5**	**0.0**	**-1.8**	**-4.5**

Source: Central Bank of Malta.

contracted by 5.5%, the same rate as that recorded three months earlier.

Meanwhile, loans to NFCs fell at an annual rate of 4.5% in December, following a contraction of 1.8% in September. This reflected developments in loans to private sector NFCs. A sectoral breakdown of loans extended to NFCs shows that loans to the real estate continued to increase in annual terms, while loans to other sectors decreased (see Table 6.3).

Chart 6.3
LOANS TO HOUSEHOLDS
(annual percentage changes)

House purchases — Consumer credit and other lending — Total
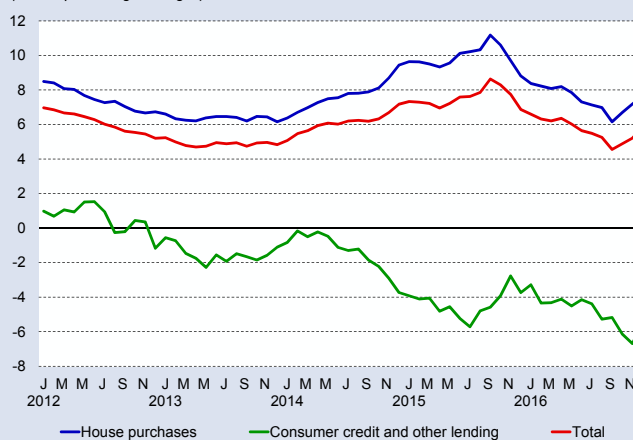
Source: Central Bank of Malta.

Interest rates on loans broadly unchanged

Interest rates on loans to Maltese residents declined only marginally during the quarter under review, with the composite rate paid by households and NFCs edging down by 1 basis point over the three months to December, to 3.68% (see Table 6.2). When compared with a year earlier, this signifies a drop of 13 basis points. The rate on loans to NFCs rose marginally, while that on loans to households decreased slightly during the quarter under review. Consequently, the rate on NFC loans remains above that charged to households, possibly reflecting different assessments of credit risk.

The spread between the composite lending rate and the deposit rate edged up by 3 basis points during the quarter under review, to reach 320 basis points. When compared with a year earlier, the spread widened by 8 basis points, suggesting that the transmission of the European Central Bank's (ECB) monetary policy easing measures to retail lending rates was weaker than that to deposit rates (see Table 6.2).

Bank Lending Survey indicates unchanged credit standards and demand for credit

Results from the Bank Lending Survey (BLS), which was conducted in December 2016 show that credit standards and credit terms and conditions on loans to NFCs remained unchanged during

the period under review. The assessment of demand was mixed. One respondent bank reported an unchanged demand for credit while, two banks reported a slight increase and the remaining bank experienced a considerable decrease in demand. Credit demand expectations for the first quarter of 2017 are expected to remain stable.

During the last quarter of 2016 respondent banks participating in the BLS generally reported unchanged standards and terms and conditions on loans for house purchases and consumer credit. Likewise, the demand for these forms of credit was mostly assessed to have remained unchanged, with only one bank reporting a small decrease in demand for consumer credit. Going forward, respondent banks did not expect changes in demand for house loans and consumer credit in the first quarter of 2017.
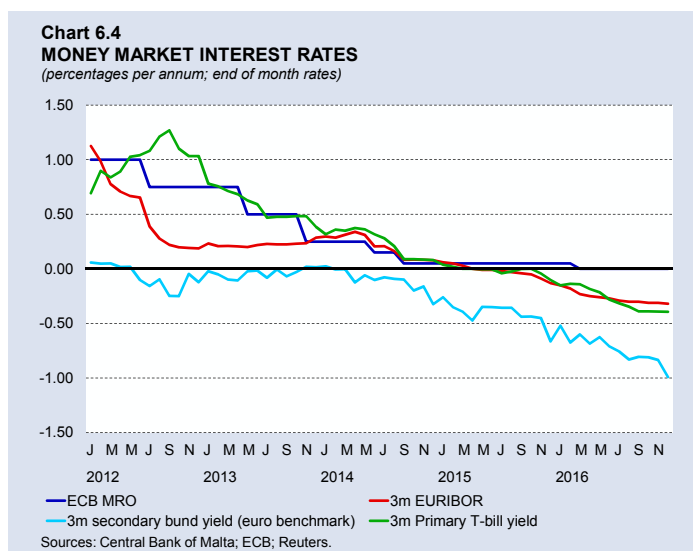
The December BLS posed ad hoc questions on any changes in market access of wholesale and retail funding and in their risk transfer capability as a result of the prevailing situation in financial markets. In this regard, all respondent banks reported largely unchanged market access to funding. Other questions were also directed towards the extent to which the new regulatory capital requirements set out in the Capital Requirements Regulation/Capital Requirements Directive IV (CRR/CRD IV), and other specific regulatory or supervisory actions, have had, or else whether respondent banks think, these will impact their lending policies.[4] Most banks replied that in the light of the new regulatory or supervisory actions, they made no changes to total and risk-weighted assets, or their capital positions. Funding conditions were also assessed to be broadly unchanged.

When asked whether banks participated in the most recent targeted longer-term refinancing operations (TLTRO), all reporting banks said that they did not participate, largely because they had no funding constraints or else enjoyed a comfortable liquidity position. Only one of them considered future participation in such operations.

The money market

Domestic money market interest rates remained unchanged
During the fourth quarter of 2016 the ECB maintained its key interest rates unchanged. In particular, the rate on its main refinancing operations stood at 0.00%. In euro area money markets, the three-month EURIBOR fell only slightly by 2 basis points, to -0.32%, while the yield on three-month Treasury Bills in the primary market remained unchanged at -0.39%. Meanwhile, yields on three-month German government securities, which act as a benchmark for euro area yields, shed 19 basis points to stand at -0.99% as at end-December 2016 (see Chart 6.4). As the yield on three-month Treasury bills in Malta was broadly stable over

Chart 6.4
MONEY MARKET INTEREST RATES
(percentages per annum; end of month rates)

ECB MRO — 3m EURIBOR — 3m secondary bund yield (euro benchmark) — 3m Primary T-bill yield
Sources: Central Bank of Malta; ECB; Reuters.

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4   The impact on lending policies will depend on the actions taken by the bank to adjust its capital, leverage or liquidity position, as a result of which it may potentially impact funding conditions.

this period, the spread between this rate and the corresponding euro area benchmark, widened to 60 basis points at the end of the fourth quarter of 2016.

During the last quarter of 2016, the Government issued €290.5 million in Treasury bills, up from the €206.2 million issued between July and September.

The capital market

During the fourth quarter of 2016, the Government issued two Malta Government Stocks (MGS) with a total value of €159.2 million. Meanwhile, over the same period, International Hotel Investments plc issued €40.0 million unsecured bonds.

In the secondary market, turnover in government bonds during the fourth quarter of 2016 rose to €168.7 million, from €160.8 million in the previous quarter, while corporate bond turnover went up from €14.2 million, to €17.8 million over the same period.

Maltese government bond yields rose during the last quarter of 2016 (see Chart 6.5). The yield on five-year government bonds increased by 4 basis points from the end of September, to close December at 0.15%. Meanwhile, the yield on ten-year bonds rose by 18 basis points, to 0.73%. In the euro area, the increase in the comparable five-year yield was less pronounced, rising by 2 basis points to -0.54% at end-December, while the ten-year yield rose much faster, gaining 33 basis points since September. Thus, the ten-year euro-area benchmark yield moved out of negative territory to stand at 0.21% at the end of the year.

Chart 6.5
GOVERNMENT BOND YIELDS
*(percentages per annum; end of month)*

5-year (MT) — 10-year (MT) — 5-year (EA) — 10-year (EA)
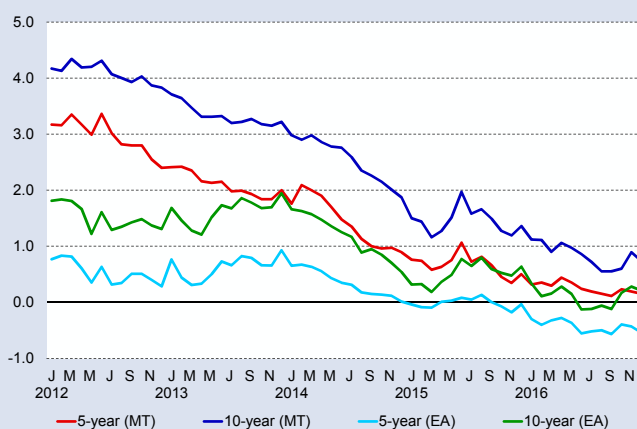
Sources: Central Bank of Malta; ECB.

MSE share index rose by the end of 2016

The Malta Stock Exchange (MSE) index, which measures share prices in Malta, increased in October, before falling in November. The index rose again subsequently ending December 3.7% higher than its end-September level and 4.5% above the level registered a year earlier (see Chart 6.6). Turnover in equity amounted to €15.2 million during the fourth quarter of 2016, up from €14.3 million in the preceding quarter.

Chart 6.6
MALTA STOCK EXCHANGE SHARE INDEX
(end of month)
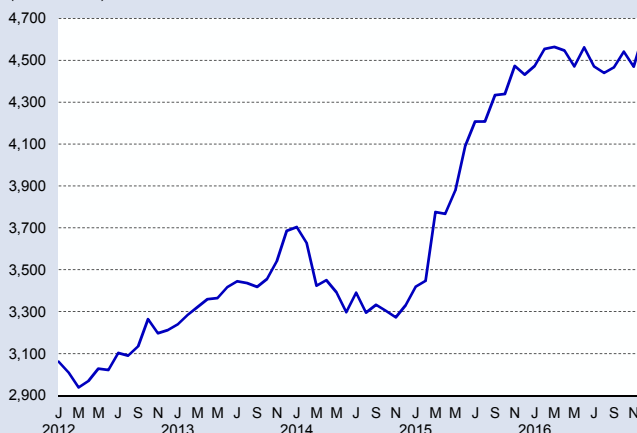
Source: MSE.

NEWS NOTES[1]

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 December. 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 ECB confirmed that the Eurosystem's asset purchases will continue at a monthly pace of €80 billion until the end of March 2017. From April 2017, such purchases would be carried out at a monthly pace of €60 billion and would continue until the end of December 2017, or beyond if necessary. The Governing Council also announced further changes to the parameters of the Asset Purchase Programme (APP), with a view to ensure its smooth operation.

European policy and supervisory announcements

On 28 November the European Systemic Risk Board (ESRB) published a report which analyses potential macro-prudential issues arising from a prolonged period of low interest rates and structural changes in the financial system of the European Union (EU), while discussing the impact that these may have on financial markets and the economy in the long run. Three main areas of risks to financial stability were identified by the Board, which are the sustainability of certain financial institutions' business models, broad-based risk taking and the move towards a market-based financial system. The Report also proposes for consideration a series of policy options to mitigate and prevent the emergence of the risks identified.

On 2 December the European Banking Authority (EBA) published its ninth report on risks and vulnerabilities in the EU banking sector. According to the EBA, the banks had further strengthened their capital position, thus being able to continue progressing further. The report, however, also identified high levels of non-performing loans, sustained low profitability, operational risks and volatility in funding markets as key challenges to the banking sector. Information and communication technology related risks were also increasing, according to the EBA whilst litigation and conduct risk-related concerns remained. The Authority also noticed that Cyber-attacks are on the rise and encouraged the banks to upgrade their IT systems. The report was accompanied by the EBA's 2016 transparency exercise, which provides essential data on capital positions, risk exposure amounts and asset quality for 131 banks across the EU and the European Economic Area.

On 15 December, in its regular discussion of financial stability risks, the General Board of the ESRB highlighted the re-pricing of risk premia in global financial markets and the weaknesses in financial institutions' balance sheets as the main risks to financial stability in the EU. It endorsed the publication of a report on the macro-prudential use of margins and

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[1] These News Notes refer to the period from 1 November until 31 December 2016.

haircuts and approved adverse scenarios prepared jointly with ECB staff for the 2017 EU-wide stress test of central counterparties by the European Securities and Markets Authority. The ESRB also released the 18th issue of its risk dashboard.

Central Bank of Malta announcements

Issue of commemorative coin
On 5 December the Central Bank of Malta issued a €2 commemorative coin under a new programme entitled 'From Children in Solidarity', with the first theme being 'Solidarity through Love'. This is an initiative between the Central Bank of Malta, the Ministry for Education and Employment, and the Malta Community Chest Fund. The coin reverse shows the common €2 side while the obverse (national side) shows two hands forming a heart shape, framing a representation of the Maltese flag. The coin obverse was engraved by Noel Galea Bason and bears a representation of a design created by Ms Sarah Cilia, a secondary school student. The coin, which was struck at the Monnaie de Paris, was issued in circulation-quality rolls of 25 coins each as well as in coin cards. The profits from the sale of the coin cards will be channeled in aid of the Malta Community Chest Fund Foundation.

Fiscal and economic policy developments
On 9 November the European Commission issued its Autumn Forecast for 2016. In its projections for Malta, the Commission forecasts GDP growth to moderate to 4.1% in 2016 and to 3.7% in 2017 and 2018. Growth was said to continue being supported by strong labour market fundamentals. The Commission also noticed that fiscal consolidation is set to help reduce the government debt ratio to below 60% of the GDP.

On 16 November the European Commission issued its Alert Mechanism Report 2017, restarting the annual cycle of the Macroeconomic Imbalance Procedure (MIP), which aims to identify and address economic imbalances in the Member States. As in previous rounds, the Report identified a number of countries where an in-depth analysis was warranted. As regards Malta, the Report recalled that no macroeconomic imbalances had been identified in the previous MIP round. While a number of MIP indicators had meanwhile fallen outside the indicative thresholds, the external position remains robust and deleveraging had continued in the context of relatively strong growth. Further in-depth analysis in the context of the MIP, therefore, did not seem necessary.

The European Commission also published an opinion stating that Malta's Draft Budgetary Plan submitted in October 2016 was broadly compliant with the provisions of the Stability and Growth Pact.

International assessments of the Maltese economy
On 16 December the International Monetary Fund (IMF) concluded its 2016 Article IV mission to Malta. In their Concluding Statement, IMF staff highlighted that the Maltese economy was growing strongly and remained resilient to external shocks, aided in part by sound policy initiatives. The outlook was favourable yet a number of downside external risks prevail. Challenges included external uncertainty and improved competitiveness in the euro area neighbouring countries. The Fund noted that fiscal consolidation was expected to

continue, which should help lower the debt ratio further. At the same time it emphasized the need to underpin the fiscal consolidation strategy by well-specified measures and to improve the health of state-owned enterprises. The Statement also noted that while the banking system appeared sound and resilient, challenges remain and on-going vigilance is therefore needed to contain risks to the integrity of the financial system.

Credit ratings
On 28 November Creditreform reviewed Malta for the first time, assigning it a rating of A+ with a stable outlook. Creditreform pointed out that Malta has great economic potential and a solid institutional base and has improved its public finances. Malta's potential growth was among the highest in the euro area. This dynamic growth, aided by a resilient and flexible labour market, has supported income convergence towards the EU28 average. Creditreform added that Malta's high level of credit worthiness was due to its strong macroeconomic performance and strong fiscal sustainability. It predicted that Malta will lower its debt to below 60 per cent of GDP by 2018.

Financial sector developments
Legal Notice 371 of 2016, dated 1 November amended the Investment Services Act (Fees) Regulations.

ACT No. XLIX of 2016, dated 11 November amended and deleted specific articles of the Central Bank of Malta Act, consequently adding Sub-title III on Counterfeiting of Currency to the Criminal Code.

Legal Notice 383 of 2016, dated 22 November amended the definition of investment schemes under Part 2 of the Fifth Schedule to the Value Added Tax Act to allow for additional coverage of services provided to securitisation vehicles and authorised reinsurance special purpose vehicles, to be classified as VAT exempt (without credit).

Legal Notice 387 of 2016, dated 22 November established the 1st of January 2017 as the date for the coming into force of all the provisions of the Family Business Act.

Act LIII of 2016, dated 2 December amended the Prevention of Financial Markets Abuse Act and provides for matters ancillary or incidental thereto.

Act LIV of 2016, dated 2 December introduces amendments to the Companies Act and to other Laws and to implement Directive 2014/95/EU.

Legal Notice 411 of 2016, dated 7 December entitled "Credit Institutions and Financial Institutions (Payment Accounts) Regulations, 2016" introduced provisions implementing the Payment Accounts Directive. These Regulations lay down rules concerning the transparency and comparability of fees charged to consumers on their payment accounts held in Malta, rules concerning the switching of payment accounts within Malta and other Member States and rules to facilitate cross-border payment account-opening for consumers. These Regulations also define a framework for the rules and conditions to which Malta is required

to guarantee a right for consumers to open and use payment accounts with basic features in Malta.

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 €100.0 million subject to an over-allotment option of up to €60.0 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. The Stocks were listed on the MSE on 2 and 7 November, respectively.

Private sector issues
On 21 November International Hotel Investments plc announced the issuance of €40.0 million unsecured bonds maturing in 2026. The bonds carry a coupon rate of 4.0% and were listed on the Malta Stock Exchange on 28 December.

International economic and financial news

Council of the EU and other EU institutions
On 8 November the ECOFIN Council agreed on the criteria and process for the establishment of an EU list of non-cooperative jurisdictions in taxation matters. The Council stated that screening of the said jurisdictions is to be completed by September 2017 and the list endorsed by the end of that year. ECOFIN ministers also held their annual meeting with EFTA counterparts to discuss economic, financial and political items of common interest.

On 16 November the ECOFIN Council and the European Parliament reach agreement on the 2017 EU budget.

On 8 December the ECOFIN Council adopted a directive on institutions for occupational retirement provision (IORP), aimed at facilitating their development and better protecting pension scheme members and beneficiaries. The Directive revises directive 2003/41/EC on the activities and supervision of IORPs.

On 15 December the European Council discussed the migration crises, security across the Member States, as well as the Economic and Social developments in youth programmes. Throughout the meeting, the Council also debated on the Ukrainian territorial integrity and international law, as well as, the problems in Syria.

On 15 December the 27 Heads of Member States of the EU met to discuss the invocation of Article 50 by the United Kingdom, the implications and the way forward.