## CONTENTS

**FOREWORD**  
5

**ECONOMIC SURVEY**  
7

1. **The External Environment and the Euro Area**  
7  
   - Key advanced economies  
   - The euro area  
   - Commodities

2. **Output and Employment**  
16  
   - Potential output and Business Conditions Index  
   - Box 1: An unobserved components model for potential output in Malta  
   - GDP and industrial production  
   - Business and consumer surveys  
   - Box 2: Business investment and investment finance in Malta – Evidence from the EIBIS Survey  
   - The labour market  
   - Box 3: The length of stay of foreign workers in Malta

3. **Prices, Costs and Competitiveness**  
43  
   - Inflation  
   - Residential property prices  
   - Costs and competitiveness

4. **The Balance of Payments**  
48  
   - The current account  
   - Tourism activity  
   - The capital account

5. **Government Finance**  
53  
   - Quarterly developments  
   - Headline and cyclically-adjusted developments

6. **Monetary and Financial Developments**  
58  
   - Monetary and financial conditions  
   - The money market  
   - The capital market
ABBREVIATIONS

APP  asset purchase programme
BCI  Business Conditions Index
BLS  Bank Lending Survey
CPI  consumer price index
EC  European Commission
ECB  European Central Bank
EER  effective exchange rate
EIB  European Investment Bank
EIBIS  European Investment Bank Group Survey on Investment and Investment Finance
EONIA  Euro OverNight Index Average
ESI  economic sentiment indicator
EU  European Union
EURIBOR  Euro Interbank Offered Rate
FCI  Financial Conditions Index
FOMC  Federal Open Market Committee
GDP  gross domestic product
GVA  gross value added
HCI  harmonised competitiveness indicator
HICP  Harmonised Index of Consumer Prices
HP  Hodrick-Prescott
IIP  Individual Investor Programme
IMF  International Monetary Fund
LFS  Labour Force Survey
MFI  monetary financial institution
MFN  Ministry for Finance
MFSA  Malta Financial Services Authority
MGS  Malta Government Stocks
MIA  Malta International Airport
MRO  main refinancing operation
MSE  Malta Stock Exchange
NACE  statistical classification of economic activities in the European Community
NEIG  non-energy industrial goods
NFC  non-financial corporation
NPISH  non-profit institutions serving households
NSO  National Statistics Office
OECD  Organisation for Economic Co-operation and Development
PF  production function
PPI  Property Price Index
ROW  Rest of World
R&D  research and development
RPI  Retail Price Index
SME  small and medium-sized enterprise
TCN  third country national
TFP  total factor productivity
TLTRO  Targeted longer-term refinancing operation
UCM-PF  unobserved components model-production function
ULC  unit labour cost
UK  United Kingdom
US  United States
FOREWORD

In the fourth quarter of 2018, real gross domestic product (GDP) accelerated slightly, rising by 7.2% in annual terms, following a 7.1% increase in the preceding quarter. Growth was driven by domestic demand, as the contribution from net exports was slightly negative.

In contrast to GDP growth, potential output growth eased, although it remained relatively elevated from a historical perspective. As a result, the output gap, measured as a four-quarter moving average, widened compared with the third quarter. Although the degree of overutilisation of the economy’s productive capacity increased compared with the third quarter of the year, it remained well below 2015 and 2016 levels.

Meanwhile, the Bank’s Business Conditions Index (BCI) remained stable, reflecting further decreases in unemployment and an increase in tourism activity, while continuing to show above-average conditions.

Labour market conditions remained favourable in the fourth quarter of 2018, as employment grew strongly. Notwithstanding a further increase in labour market participation rates and rising foreign employment, the unemployment rate fell compared with the previous year. At 3.5%, the unemployment rate remained below the structural measure of 4.1%, and thus continued to suggest a degree of tightness in the labour market.

Annual inflation based on the Harmonised Index of Consumer Prices (HICP) decelerated to 1.2% in December from 2.5% in September. This moderation was driven by services inflation, particularly services related to tourism. Inflation based on the Retail Price Index (RPI), which only takes into account purchases by Maltese households, stood at 1.5% in December, marginally down from 1.6% three months earlier.

Cost pressures for producers continued to increase, with annual growth in industrial producer price index standing at 3.8% in December. Cost inflation is being supported by developments in the intermediate goods subcomponent. Malta’s unit labour cost (ULC) index, measured on a four-quarter moving average basis, also continued to grow during the last quarter of 2018, albeit at a slower pace than before. With regard to international competitiveness, Malta’s harmonised competitiveness indicators (HCIs) indicated a further loss in competitiveness in annual terms, owing to both unfavourable exchange rate and relative price movements. Nonetheless, the loss in competitiveness signalled by these indicators moderated significantly compared with recent quarters. In fact, while still higher in annual terms, both the nominal and real HCIs stood below their September levels.

In the last quarter of 2018, the surplus on the current account of the balance of payments decreased when compared with the corresponding quarter of 2017. The lower surplus was entirely a result of a wider merchandise trade gap. During 2018 as a whole, the current account balance was equivalent to 11.2% of GDP, up from 10.4% in 2017. The cyclically-adjusted measure was estimated at 11.0% of GDP. The cyclically-adjusted and the unadjusted current account balances for the Maltese economy tracked each other closely in recent quarters, suggesting that movements in Malta’s current account are being driven largely by structural, rather than cyclical factors.
When measured as a four-quarter moving sum, the general government surplus narrowed to 2.0% of GDP, from 3.4% a year earlier. The cyclically-adjusted surplus-to-GDP ratio broadly mirrored developments in the headline balance. Meanwhile, although general government debt as a share of GDP was unchanged from September 2018, it continued to decline on an annual basis, and ended the year at 46.0%.

During the final quarter of 2018 Maltese residents’ deposits with monetary and financial institutions (MFIs) in Malta expanded at a faster pace. Similarly, credit growth picked up further, reflecting faster growth in credit to residents outside general government. Growth in mortgage loans to households remained strong, while loans to non-financial corporations (NFCs) continued to accelerate. Meanwhile, the Bank’s Financial Conditions Index (FCI), remained tight from a historical perspective.

The Governing Council of the European Central Bank (ECB) maintained an accommodative monetary policy stance during the December quarter. The interest rates on the main refinancing operations (MRO), on the marginal lending facility and on the deposit facility were kept unchanged at 0.00%, 0.25% and -0.40%, respectively. The Council reiterated that it expected key ECB interest rates to remain at their present levels at least through the summer of 2019 and in any case for as long as necessary to ensure the continued sustained convergence of inflation at levels below but close to 2% over the medium term. Nonetheless, on 7 March 2019 the Governing Council announced that key ECB interest rates are expected to remain on hold until at least the end of 2019.

As of October 2018, net purchases under the asset purchase programme (APP) were carried out at an average monthly pace of €15 billion. Net purchases continued at this pace until the end of December and then ended.

In October, the Council also reaffirmed its intention to reinvest in full the principal payments from maturing securities under the Programme for an extended period of time after the end of the net asset purchases. However, in December it clarified that reinvestment will continue for an extended period past the date when it starts raising key ECB interest rates, and in any case for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation.

The weighted average interest rate on deposits held by Maltese residents with domestic banks fell further in the fourth quarter of 2018. Similarly, the weighted average lending rate paid to resident MFIs by households and NFCs also decreased. Hence, the spread between the two narrowed marginally and remained elevated from a historic perspective. In December 2018, the primary market yield on Treasury bills was stable when compared with the rate at the end of September. Meanwhile, the secondary market yield on Malta Government Stocks (MGS) fell. In the equity market, domestic share prices rose compared with their September level.
ECONOMIC SURVEY

THE EXTERNAL ENVIRONMENT AND THE EURO AREA

In the fourth quarter of 2018, economic growth as measured by real GDP moderated in the United States and the United Kingdom but edged up marginally in the euro area. The three-month average unemployment rate fell slightly in the euro area and the United Kingdom, but was stable in the United States.

Annual consumer price inflation decreased in the three economies. Inflation in the euro area decelerated to 1.5% in December from 2.1% in September. In the United States inflation stood at 1.9% in December from 2.3%. Meanwhile, at 2.1%, inflation in the United Kingdom was 0.3 percentage point lower in December compared with September. While the ECB and the Bank of England kept their key interest rates unchanged, the Federal Reserve announced an increase in the target range for the federal funds rate in December.

Brent oil prices generally decreased in the last quarter of 2018, on positive news regarding supply, the announcement by the United States that it would allow some large countries to keep importing oil from Iran and expectations of lower global demand for oil as the international environment softened. They ended the quarter 39.3% lower than the level prevailing at end-September. Meanwhile, non-energy commodity prices also fell, albeit marginally.

Key advanced economies

US economy slows down further
Economic activity in the United States slowed down further in the fourth quarter of 2018, with quarter-on-quarter real GDP growth standing at 0.5%, down from 0.8% in the preceding quarter (see Table 1.1).

The slowdown in real GDP growth mainly reflected weaker growth in personal consumption expenditure and private investment. Furthermore, the contribution of changes in inventories decreased compared with the third quarter, while government spending contracted for the first time in over a year. However, the widening in the trade gap was much less pronounced compared with the third quarter.

In the labour market, the participation rate averaged 63.0% in the fourth quarter of 2018, from 62.8% in the previous quarter. Meanwhile, employment grew at a faster pace, with the annual rate

<table>
<thead>
<tr>
<th>Table 1.1 REAL GDP GROWTH IN SELECTED ADVANCED ECONOMIES</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1</td>
<td>Q2</td>
</tr>
<tr>
<td>United States</td>
<td>0.4</td>
<td>0.7</td>
</tr>
<tr>
<td>Euro area</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.4</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Sources: Bureau of Economic Analysis, US; Eurostat; Office for National Statistics, UK.
of increase edging up to 1.8% from 1.3% in the third quarter. Non-farm payroll data suggest that this pick-up was driven by job creation in the mining and logging, leisure and hospitality, and professional and business services sectors. The average unemployment rate over the three months to December stood at 3.8%, unchanged compared with the previous quarter (see Chart 1.1).

The annual rate of change of the US consumer price index (CPI) moderated to 1.9% in December, from 2.3% in September (see Chart 1.2). The fall in the inflation rate was mainly attributable to energy inflation, as the latter turned negative in December. In contrast, food inflation picked up while inflation excluding food and energy remained unchanged at 2.2%.

In November, the Federal Open Market Committee (FOMC) maintained the target range for the federal funds rate between 2.00% and 2.25% (see Chart 1.3). In December, though the Committee increased the range for the federal funds rate to between 2.25% and 2.50%, as the labour market had continued to strengthen and economic activity had been rising at a strong pace. The FOMC judged that “some further gradual increases in the target range for the federal funds rate will be consistent with the sustained expansion of economic activity, strong labour market conditions, and inflation near the Committee’s symmetric 2%
"objective over the medium term." The Committee also decided to maintain its existing policy of reinvesting principal payments from its agency debt and mortgage-backed security holdings, and rolling over at auction principal payments from maturing Treasury securities, when these exceed specified caps.¹

**UK economic growth moderates**

Quarter-on-quarter GDP growth in the United Kingdom moderated to 0.2% in the final quarter of 2018, from 0.7% in the third quarter (see Table 1.1). The recent moderation in the pace of growth partly reflects the fact that investment growth turned negative. At the same time, the contribution of net exports turned negative. On the other hand, growth in government consumption turned positive after contracting in the preceding quarter. Meanwhile, private consumption grew at the same annual pace as before.

Despite the slowdown in economic activity, employment rose by 1.3% in the quarter under review, a slightly faster rate than the 1.1% registered in the previous quarter. Unemployment averaged 4.0% in the last quarter of 2018, marginally down from 4.1% in the third (see Chart 1.1).

Consumer price inflation in the United Kingdom eased during the fourth quarter, standing at 2.1% in December, down from 2.4% in September (see Chart 1.2). This fall was primarily propelled by developments in the prices of energy and food & beverages and non-energy industrial goods (NEIG). On the other hand services price inflation increased marginally. The annual rate of inflation based on the CPI excluding energy, food, alcohol and tobacco remained unchanged at 1.9%.

In its meetings held in October and December, the Bank of England’s Monetary Policy Committee maintained the Bank Rate unchanged at 0.75% (see Chart 1.3). The Committee noted that the outlook for global growth had softened and downside risks to growth had increased. At the same time Brexit uncertainties were intensifying. On the other hand, a fiscal loosening in the United Kingdom was expected to provide some support to the economy and inflationary pressures had continued to build in the context of a tight labour market, as reflected in recent data on regular pay increases. The Committee also highlighted that inflation expectations of households and professional forecasters remained broadly unchanged. In this context, the Committee judged that the stance of monetary policy remained appropriate.

The economic outlook will depend significantly on the nature of EU withdrawal, in particular: the form of new trading arrangements between the European Union and the United Kingdom; whether the transition to them is abrupt or smooth; and how households, businesses and financial markets respond. The appropriate path of monetary policy will depend on the balance of the effects on demand, supply and the exchange rate. The monetary policy response to Brexit, whatever form it takes, will not be automatic and could be in either direction.

Meanwhile, the Committee also said that it will maintain the stock of sterling non-financial investment-grade corporate bond purchases, and the stock of UK government bond purchases, financed by the issuance of central bank reserves, at GBP10 billion and GBP 435 billion, respectively.²

¹ This assessment was broadly confirmed at the FOMC’s meetings held in January and March.
² The Bank of England’s Monetary Policy Committee kept the Bank Rate unchanged in the first quarter of 2019 and confirmed its policy as regards the stock of asset purchases financed by the issuance of central bank reserves.
The euro area

GDP growth in the euro area remains subdued

The rate of economic expansion in the euro area edged up marginally during the fourth quarter of 2018, with real GDP rising by 0.2% on a quarterly basis, following a 0.1% increase in the third quarter (see Table 1.2).

The small increase in real GDP during the fourth quarter of 2018 reflected marginal positive contributions from both domestic demand and net exports. As regards domestic demand, the main contribution stemmed from gross fixed capital formation. The contributions from private consumption and government expenditure remained marginal and broadly unchanged compared with the third quarter. On the other hand, changes in inventories shed off 0.4 percentage point from real economic growth, offsetting most of the positive contribution from the other domestic demand components. The contribution of net exports was modest, as the increase in imports almost fully offset higher exports. Nonetheless it turned positive during the quarter under review, and was the key factor behind the marginal uptick in GDP growth.

Euro area inflation edged down below 2%

The annual rate of inflation in the euro area, measured on the basis of the HICP, eased to 1.5% in December from 2.1% in September (see Chart 1.4). Slower growth was registered across all sub-components except NEIG, with the latter remaining broadly unchanged during the fourth quarter. HICP excluding energy and food declined marginally, standing at 0.9% in December from 1.0% in September, reflecting slightly weaker growth in the price of services.

<table>
<thead>
<tr>
<th>Table 1.2</th>
<th>CONTRIBUTIONS TO QUARTERLY REAL GDP GROWTH IN THE EURO AREA&lt;sup&gt;(1)&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Seasonally and working day adjusted</td>
</tr>
<tr>
<td></td>
<td>2017</td>
</tr>
<tr>
<td>Private consumption</td>
<td>0.3</td>
</tr>
<tr>
<td>Government consumption</td>
<td>0.1</td>
</tr>
<tr>
<td>Gross fixed capital formation</td>
<td>0.0</td>
</tr>
<tr>
<td>Changes in inventories</td>
<td>-0.1</td>
</tr>
<tr>
<td>Exports</td>
<td>0.6</td>
</tr>
<tr>
<td>Imports</td>
<td>-0.2</td>
</tr>
<tr>
<td>GDP</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Source: Eurostat.

<sup>(1)</sup> Figures may not add up due to rounding.
Labour market conditions improve further

Labour market conditions in the euro area continued to improve over the quarter under review. The seasonally-adjusted unemployment rates fell to 7.9% in December from 8.0% in September and from 8.6% a year earlier (see Chart 1.1). The three-month average rate also moderated from 8.0% in the third quarter of 2018 to 7.9% in the fourth quarter. Meanwhile, employment continued to grow, although in the quarter under review, the annual rate of change remained unchanged from the previous quarter at 1.4%.

Euro area recovery to continue

According to the latest ECB staff macroeconomic projections, published in March 2019, growth in real GDP has remained surprisingly sluggish in the quarter under review, mainly due to adverse domestic factors and global uncertainty, which dampened economic activity. These headwinds are set to gradually fade out over the medium-term allowing fundamental factors supporting activity to gain traction. In the medium-term, the euro area economy should also benefit from a very accommodative monetary policy stance, rising wages, higher net worth, a recovery in foreign demand and some degree of fiscal loosening.

The private sector should also benefit from resilient growth in lending in the context of favourable interest rates and lending conditions as well as lower deleveraging needs. The ongoing recovery in euro area foreign demand and competitiveness gains should meanwhile benefit foreign demand for euro area exports.

Nonetheless, the fading out of some supportive factors are bound to restrain economic growth in the outer years of the projection horizon, mainly reflecting less favourable financing conditions and increasing labour supply constraints. Real GDP growth is projected to stand at 1.1% in 2019 as a whole, before accelerating to 1.6% in the following year and moderating to 1.5% in 2021 (see Table 1.3).

Although private consumption growth moderated over the course of 2018, it is projected to continue growing strongly in the near term, supported by still favourable consumer confidence, a further enhancement in labour market conditions and rising real wages. In some countries, private consumption should also benefit from fiscal loosening. At the same time, uncertainty is expected to weigh on private consumption in the short-term. Over the medium-term, private consumption should benefit from favourable bank lending conditions and rising household net worth.

| Table 1.3 | MACROECONOMIC PROJECTIONS FOR THE EURO AREA(1) |  |
|---|---|---|---|---|
| | Annual percentage changes | 2018 | 2019 | 2020 | 2021 |
| GDP | 1.9 | 1.1 | 1.6 | 1.5 |
| Private consumption | 1.3 | 1.3 | 1.6 | 1.4 |
| Government consumption | 1.1 | 1.7 | 1.6 | 1.4 |
| Gross fixed capital formation | 3.3 | 2.1 | 2.4 | 2.0 |
| Exports | 2.8 | 2.8 | 3.6 | 3.2 |
| Imports | 2.7 | 3.7 | 4.1 | 3.5 |
| HICP | 1.7 | 1.2 | 1.5 | 1.6 |

Source: ECB.

(1) ECB staff macroeconomic projections (March 2019).
Residential investment is forecasted to expand further. Nonetheless, the pace of this expansion is expected to moderate gradually along the projected horizon. This reflects increasing binding capacity constraints in the construction sector, tightening financing conditions and adverse demographic trends in some countries.

Business investment is also expected to continue to recover but at a subdued pace. The anticipated slowdown in 2019 is mainly due to persistent concerns about global trade policies, a no-deal Brexit and a hard landing in China, all of which have adverse effects on business confidence. Nonetheless, growth is expected to be supported by a number of favourable fundamentals; high rates of capacity utilisation; supportive (if gradually tightening) financing conditions; increasing profitability and the use of business investment to compensate for labour supply constraints.

Government consumption is expected to increase by 1.7% in 2019, but growth is expected to moderate thereafter.

On the external side, extra-euro area exports are forecasted to slightly outpace foreign demand in 2019 and grow in line thereafter. Extra-euro area exports are set to benefit from some gains in export market shares and a further normalisation of car exports from recent lows. Meanwhile, extra-euro area imports are anticipated to grow in line with aggregate demand (domestic demand plus exports). As imports are estimated to outpace exports, the contribution of net exports is expected to turn negative in 2019 and remain broadly neutral over the projected horizon.

Compared with the ECB staff projections published in December 2018, euro area real GDP growth was revised downwards by 0.6 percentage point and 0.1 percentage point in 2019 and 2020, respectively.

HICP inflation is set to fall from 1.7% in 2018 to 1.2% in 2019, before picking up in 2020. It is set to reach 1.6% by 2021. The decline in 2019 reflects the fall in energy inflation following the recent strong drop in oil prices. The profile of energy inflation is expected to remain subdued in the last two years of the projection horizon, consistent with the relatively flat oil price futures curve over the projection horizon. Meanwhile, food inflation is projected to hover around the rates of 1.9%.

In contrast, HICP inflation excluding energy and food is set to rise progressively over the forecast horizon, reaching 1.6% in 2021, from 1.0% in 2018. The gradual upward path is expected to be supported by continued economic expansion. Additionally, tighter conditions in the labour market should push up wage growth, while rising non-energy commodity prices should increase domestic cost pressures.

Compared with the December 2018 projections, overall inflation was revised downwards across the entire projection horizon, mainly reflecting weaker data outturns, a weaker outlook for GDP growth and a downward revision in oil price assumptions. The projections for inflation excluding energy and food were also revised down throughout the projection horizon.

**ECB maintained its accommodative monetary policy stance**

The ECB’s Governing Council continued with its accommodative monetary policy stance during the fourth quarter of 2018. The interest rates on the MROs, the marginal lending facility and the deposit facility remained at 0.00%, 0.25% and -0.40%, respectively (see Chart 1.3). The Council reiterated that it expected key ECB interest rates to remain at their present levels at least through
the summer of 2019 and in any case for as long as necessary to ensure the continued sustained convergence of inflation at levels below but close to 2% over the medium term.3

The Council also recalled that it will continue to make net asset purchases under the APP. As of October 2018, net purchases under the programme were carried out at an average monthly pace of €15 billion. Net purchases continued as this pace until end of December and then ended.

In October, the Governing Council also reaffirmed its intention to reinvest in full the principal payments from maturing securities under the Programme for an extended period of time after the end of the net asset purchases. However in December it clarified that reinvestment will continue for an extended period time past the date when it starts raising key ECB interest rates, and in any case for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation.

Money market rates remain around historical lows
Money market rates in the euro area remained close to historical lows during the third quarter of 2018, reflecting the accommodative monetary policy stance of the ECB. The EONIA overnight deposit rate close the year unchanged from its September level, at -0.36% (see Chart 1.5), whilst the three-month EURIBOR edged up marginally to -0.31% in December from -0.32% in September. At the same time, the 12-month EURIBOR rate rose to -0.13% in December from -0.17% in September.4

Euro area bond yields fall
Ten-year benchmark government bond yields in the euro area generally fell during the last quarter of 2018. The strongest decline was registered in German bond yields which fell by 18 basis points to 0.19%, as stumbling equity markets and the drop in oil prices boosted demand for lower risk assets. Portuguese, French and Spanish bond yields followed, declining by 15, 7 and 4 basis points to 1.73%, 0.70% and 1.42%, respectively. On the other hand, Greek and Italian bond yields rose by 11 and 2 basis points, to 4.28% and 2.98%, respectively. The rise in Greek bonds partly reflects the volatility in Italian government debt markets, which pushed up borrowing costs for most Southern European countries.

---

3 On 7 March 2019, the Governing Council announced that key ECB interest rates are expected to remain on hold until at least the end of 2019 and that it will also launch a new series of quarterly targeted longer-term refinancing operations (TLTRO-III) starting in September 2019 and ending in March 2021. It also extended the full allotment procedure for its lending operations at least until the end of the reserve maintenance period starting in March 2021.

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 Over Night Index Average) is an effective overnight interest rate, measured as the weighted average of the interest rates on unsecured overnight lending transactions, in euro denomination, as reported by a panel of contributing banks.
As in most countries, government bond yields rose to a lesser extent than in Germany, spreads over the ten-year German bond yields generally widened during the fourth quarter, with the largest increase recorded in Greece (see Chart 1.6).

The euro depreciates

The euro weakened against a number of major currencies during the fourth quarter of 2018, with the nominal effective exchange rate against 19 trading partners (EER-19) falling by 0.6%.5

The euro fell by 1.1% against the US dollar (see Chart 1.7). It also weakened against a number of other currencies, including the Japanese yen and the Chinese yuan renminbi. On the other hand, the euro strengthened by 0.8% against the pound sterling and a number of other European currencies.

Commodities

Energy prices end the quarter at a lower level

Between October and December, the price of Brent crude oil generally fell on positive news regarding supply, the announcement by the United States that it would allow some large countries to keep importing oil from Iran and expectations of lower global demand for oil as the international environment softened. While in December key oil producers agreed to reduce production further, the proposed cuts were at the lower end of the market’s expectations and thus

5 The EER-19 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.
did not have a lasting impact on prices. At the end of the December, the price of Brent crude oil stood at USD 50.5 per barrel, a 39.3% decrease over the price prevailing at the end of September (see Chart 1.8).

As regards non-energy commodity prices, World Bank data show that these declined marginally during the fourth quarter. Between September and December, non-energy commodity prices fell by 0.4%.
2. OUTPUT AND EMPLOYMENT

GDP growth accelerated slightly during the fourth quarter of 2018. Real GDP rose by 7.2% in annual terms, following a 7.1% increase in the third quarter of the year. Growth was driven by domestic demand, as the contribution from net exports was negative. Nominal data on gross value added (GVA) indicate that the expansion continued to be largely supported by services, although GVA also rose in the manufacturing and construction sectors.

The Bank’s Business Conditions Index (BCI) was unchanged from its value in the third quarter of 2018 and in the last quarter of 2017.

The output surplus, measured as a four-quarter moving average, widened marginally compared with the third quarter. It was also higher than the level estimated for the same quarter of 2017, but well below 2015 and 2016 levels.

Labour market conditions remained favourable in the fourth quarter of 2018, as employment grew strongly. The unemployment rate based on the Labour Force Survey (LFS) fell compared with the preceding year, notwithstanding a further increase in labour market participation rates and rising foreign employment. In part, this reflects the robust pace of economic expansion and improved job matching in the context of a buoyant economy. The unemployment rate remained below the Bank’s structural measure and thus continued to suggest a degree of tightness in the labour market during the quarter under review.

Potential output and BCI

Positive output gap widens\(^1\),\(^2\)

In the fourth quarter of 2018, potential output growth eased, although it remained relatively elevated from a historical perspective (see Chart 2.1). Potential output growth is estimated to have moderated to 5.3%, from 5.8% in the third quarter of 2018. Meanwhile, GDP growth edged up to 7.2% from 7.1%.

The positive output gap, measured as a four-quarter moving average, is estimated at 0.8% in the fourth quarter, above the small surplus of 0.3% recorded in the third quarter and in the

---

\(^1\) Potential output measures the medium-to-long-term level of real output which is sustainable in an economy. The estimates presented here are derived using a production function approach. For further details on the methodology adopted see Micallef, B. and Ellul, R. (2017), “Medium-term Estimates of Potential Output Growth in Malta”, in Grech, A. G. and Zerafa, S. (Eds.), Challenges and Opportunities of Sustainable Economic Growth: the Case of Malta, Central Bank of Malta.

\(^2\) Real GDP and potential output are reported as annual growth rates in the respective quarter. The output gap/surplus is expressed as a percentage of potential output on the basis of four-quarter moving averages.
corresponding quarter of 2017.\(^3\) Although the degree of overutilisation of the economy’s productive capacity increased compared with the third quarter of the year, it remained well below levels seen in 2015 and 2016. Potential growth continues to be boosted by an increasing number of foreign workers and higher labour participation, with the labour contribution remaining close to its historical highs.

**BCI remains unchanged\(^4\)**

The BCI remained stable (see Chart 2.2). The index stood at 1.0 in the last quarter of 2018, remaining unchanged when compared with both the previous quarter’s reading and its value a year earlier. The BCI continued to show above-average conditions, reflecting further decreases in unemployment and an increase in tourism activity. The latest estimates suggest that economic conditions remained solid in the last quarter of 2018, although less buoyant than in 2015.

![](chart2.2.png)

**Chart 2.2 BCI (standardised)**

Source: Central Bank of Malta.

**BOX 1: AN UNOBSERVED COMPONENTS MODEL FOR POTENTIAL OUTPUT IN MALTA\(^1\)**

This box introduces a multivariate filter approach to estimate potential output, combined with a Cobb-Douglas production function (PF) in an unobserved components model (UCM-PF).\(^2\) The concept of potential output can be defined from different angles.\(^3\) Using a purely statistical approach, it can be seen as the trend component of actual output. This ignores underlying economic reasons for the divergence between trend and actual output. Alternatively, and allowing for economic reasoning, potential output can be seen to characterise the sustainable aggregate supply abilities of an economy. This is determined by the structure of factors input, technology, and the stance of the demand side. Following the conceptual framework presented by Fatas and Mihov (2004), potential output in Malta is computed using an unobserved components model with business cycle deviations. The model is estimated using quarterly data from 1991:Q2 to 2016:Q4.

---

\(^1\) Prepared by Reuben Ellul. The author is a Principal Economist within the Economic Analysis Department at the Central Bank of Malta. The views expressed are those of the author and do not necessarily reflect those of the Central Bank of Malta. The author thanks Mr Brian Micalef for his comments and suggestions. Any errors are the author’s own.

\(^2\) The model was developed by Mr. Máté Tóth at the ECB Directorate General Economics (Supply Side, Labour and Surveillance Division), with feedback and suggestions from a Task Force on Potential Output made up of Eurosystem economists. The specification for Malta, and its modelling were carried out by the author of this Box. For an overview of the methodology, see Andersson, M., Szőrő, B., Tóth, M. and Zorell, N. (2018), “Potential output in the post crisis-period,” ECB Economic Bulletin, Issue 7/2018.


---

\(^3\) The output gap may be viewed as a gauge of over or underutilisation of productive capacity of the economy over the business cycle. A positive gap signals overutilisation of resources, whereas a negative one indicates underutilised resources.

\(^4\) The BCI is a synthetic indicator, which includes information from a number of economic variables such as the term-structure of interest rates, industrial production, an indicator for the services sector, economic sentiment, tax revenues and private sector credit. By construction it has an average value of zero over the estimation period since 2000. A full time series can be found at [https://www.centralbankmalta.org/business-conditions-index](https://www.centralbankmalta.org/business-conditions-index). For further details on the methodology underlying the BCI, see Ellul, R. (2016), “A real-time measure of business conditions in Malta,” Working Paper 05/2016.
ture of production, the state of technology and the available inputs. Going beyond this level of output results in higher factor utilisation, leading to pressure on factor input costs and, eventually, on consumer prices. Changes to potential output growth are driven by factors such as capital accumulation (investment), labour and total factor productivity (TFP). The latter relates to a number of factors such as technological innovation, capital vintage and efficiency, and labour quality.

Potential output is not measured exactly or published as an official time series. Its nature as an unobservable variable implies that it may only be estimated under uncertain conditions. There are a number of methods which can be used to compute potential output estimates using observed data. Irrespective of the method used, however, the figures for potential output will remain subject to considerable uncertainty. Moreover, they tend to be subject to significant revisions over successive vintages of the underlying data. A major caveat of supply side analysis remains the cautionary interpretation of estimates.

The method presented here differs from the pure production function approaches, which usually derive from the separate univariate filtering of single variables, which are then combined in a production function. A major concern in univariate filtering methods is the endpoint bias problem. The main critique of this method is that the resulting output shifts the concerns relating to the filtering of output to the level of the input subcomponents (Anderton et al., 2014). The UCM-PF presented here solves this problem by estimating trends for each respective input simultaneously in a system of equations. This trend-cycle decomposition is also subject to a number of important reduced-form economic relationships, such as Okun’s Law, and a wage and a price Phillips curve.

The model used here is a backward-looking state-space model, which uses a Kalman filter decomposition on real GDP, a measure of core inflation, wage inflation and the unemployment rate. This approach splits series into cyclical and trend components. These are in turn derived from several economic relationships, such as a Cobb-Douglas production function, an Okun’s law relationship and a wage and a price Phillips curve. Some observed variables, such as the working age population or capital stock feature exogenously in the model, while other variables, like average hours worked and the participation rate, are decomposed endogenously into trend and cyclical components. Import prices and a measure for external demand, which are seen as important factors in the Maltese economy, are also included in the price Phillips curve. These two variables are seen to provide a richer story to supply-side analysis, and are seen as important features of the model in an open economy context. The trends would then be inputs to the model’s production function. A closed output gap in the model would imply a lack of excessive wage or price pressures, that is, inflation would be at its long-run trend. Inflation in wages would also be compatible with trend inflation and the productivity growth trend. Another

---

important feature of this model is the ability to provide confidence intervals around point estimates.

The estimates of potential output and the output gap derived from the model are compared with estimates produced by the Economic Policy Department within the Ministry for Finance (MFIN), the European Commission (EC), the International Monetary Fund (IMF) and the Bank’s pure production function estimates. These estimates are presented as ranges, to highlight the uncertainty around them (see Charts 1 and 2). They are also compared with the respective EC series based on the Hodrick-Prescott (HP) filter.

It is apparent that there are methodological differences which, at times, lead to a comparatively wide range of estimates. The simple univariate HP filter method, which is a statistical method, returns highly volatile potential output and output gap estimates. As noted in Grech (2014), these results are also affected by strong shocks in Maltese data, which reflect the small size of the economy rather than actual changes in potential output. This simpler method may be out of step with the estimates from production functions. The estimates of potential output based on production functions tend to be rather similar. Having a number of similar estimates, however, may play down the uncertainty around potential output estimates; the latter should always be discussed as an imperfect estimate of an unobservable variable.

---

7 These include both the EC’s production function approach and a Hodrick-Prescott univariate filter to GDP.
An advantage of the UCM-PF method over the classical production function method is that it allows the computation of less volatile quarterly estimates of potential output without resorting to moving averages. Furthermore, it enables the construction of uncertainty bands around the point estimates (see Chart 3). A disadvantage of this method, however, is that as more variables are added, the number of trends and cycles (and implicitly ‘gaps’) to be computed increases. This may introduce noise into the estimates – leading to wide confidence bands. Moreover, in most cases, the modeller has to calibrate the signal-to-noise ratio of the various elements in the model.

Compared with the other production function method at the Central Bank of Malta, the UCM-PF appears to suggest higher total factor productivity growth in the years 2004-2013, and slightly lower TFP contributions over the medium term horizon (see Table 1). The UCM has a lower contribution of labour in the years 2009-2013, but this contribution exceeds that in the Bank’s other method in later years. This is attributable to higher participation rates over the medium term in the UCM-PF framework. TFP is seen to slow down to its long-run average in the traditional production function method, while the UCM sees a sharp slowdown. Taken together, this information highlights the prudent assumptions underpinning the Bank’s current production function methods.

In any case, all measures show that potential growth in Malta increased substantially since around 2011. In fact, by 2014, it is seen to have exceeded the estimates for the late 1990s. As discussed in Micallef and Ellul (2017) and in Grech and Borg (2018), potential growth accelerated further in recent years moving closer to the historic high growth rates estimated for the 1980s. The negative output gap which opened in the aftermath of the global financial crisis and the sovereign crisis shrunk gradually and largely disappeared by 2015. As domestic supply constraints became increasingly binding, high growing industries absorbed factor inputs from other economies. This was particularly the case for the labour

---

9 The two models are estimated using the same basic dataset, including identical series for the capital stock and basic labour market variables such as hours worked, participation rates and working age population. However, over the projection period, the UCM-PF diverges from the traditional PF approach, as its dynamics govern the development of underlying trends in key variables, such as hours worked, participation rates, etc. These may be pinned down by more conservative assumptions in the PF method.


input, with a sharp increase in immigration of foreign workers. In that sense, concerns about labour market tightness in Malta should be framed in the context of slack in neighbouring labour markets.\textsuperscript{12}

Looking ahead, the UCM-PF confirms the trends for potential output estimated by other institutions, and joins other measures as a further tool in the analysis of the supply-side in Malta. Its inclusion of import prices and world demand allows for a richer analysis of price pressures, which are very important in a small open economy, and augments the existing annual potential output assessments with more stable quarterly estimates.


### GDP and industrial production

**Real economy grows at a marginally faster pace**

The pace of economic activity accelerated during the fourth quarter of 2018, with real GDP rising by 7.2\% on an annual basis, following a 7.1\% increase in the previous quarter.\textsuperscript{5}

The expansion was underpinned by a strong increase in domestic demand, which contributed 7.6 percentage points to GDP growth in the quarter under review (see Table 2.1). All domestic demand components rose on a year earlier except for gross fixed capital formation, which declined on the same quarter of 2017. On the other hand, net exports shed 0.4 percentage point from GDP growth. Although both exports and imports decreased, the decrease in exports had a stronger impact.

Private consumption expenditure grew by 7.8\% in annual terms and added 3.4 percentage points to real GDP growth. It continued to be sustained by a buoyant labour market and, consequently, continued strong growth in compensation of employees. Nominal data show that the rise in expenditure was broad-based across categories.

Following an expansion of 5.7\% in the third quarter, government consumption expenditure rose by 27.9\% in the last quarter of 2018 and added 4.1 percentage points to real GDP growth. This was mainly due to higher outlays on intermediate consumption, partly related to capital projects, and in compensation paid to employees in the public administration, health and education sectors.

\textsuperscript{5} The analysis of GDP in this Chapter of the Quarterly Review is based on data published in NSO News Release 038/2019 and released on 8 March 2019.

\begin{table}
\centering
\begin{tabular}{llllllll}
\hline
 & \textbf{Traditional production function} & & & \textbf{UCM-PF} & & & \\
 & \textbf{TFP} & \textbf{Capital} & \textbf{Labour} & \textbf{TFP} & \textbf{Capital} & \textbf{Labour} \\
\hline
2004-2008 & 1.05 & 0.67 & 0.55 & 1.13 & 0.64 & 0.72 \\
2009-2013 & 0.74 & 0.71 & 1.36 & 1.65 & 0.69 & 0.47 \\
2014-2018 & 2.13 & 1.59 & 2.78 & 1.96 & 1.57 & 2.44 \\
2019-2023 & 1.51 & 1.42 & 1.22 & 1.09 & 1.37 & 1.86 \\
\hline
\end{tabular}
\caption{AVERAGE CONTRIBUTIONS TO POTENTIAL OUTPUT GROWTH}
\end{table}

Sources: Central Bank of Malta; author’s calculations.
At the same time, revenue from sales, which is netted against expenditure in national accounts, declined slightly, due to lower receipts related to the Individual Investor Programme (IIP).

Following increases in the previous two quarters, real gross fixed capital formation declined by 3.0% in the fourth quarter of 2018 and shed 0.7 percentage point from real GDP growth.

The fall in gross fixed capital formation solely reflected declines in total machinery investment, which in turn largely reflected lower expenditure in the printing and reproduction of recorded media sector, due to a base effect from higher extraordinary capital outlays a year earlier. These declines offset higher investment in dwellings and in non-residential construction.

Changes in inventories contributed 0.8 percentage point to GDP growth in the last quarter of 2018.

Both imports and exports declined by 2.2% on a year earlier. However, the fall in exports had a stronger effect, such that the contribution of net exports to real GDP growth turned negative, at 0.4 percentage point. Such development reflected trade in goods, as net services exports rose in annual terms.

**Nominal GDP growth decelerates; services remain the main driver of growth**

Nominal GDP rose by 9.3% in annual terms during the fourth quarter of 2018, after increasing by 9.6% in the previous quarter (see Table 2.2). The deceleration partly reflected that in GVA, which rose at an annual rate of 8.3% in the last quarter of 2018, after growing by 8.7% in the third quarter. In the quarter under review, GVA contributed 7.3 percentage points to nominal growth.\(^6\)

\(^6\) The difference between nominal GDP and GVA is made up of taxes on products, net of subsidies.
Services remained the main driver of activity, contributing 5.4 percentage points to nominal GDP growth. The largest additions came from the sectors comprising public administration, arts and entertainment as well as professional and scientific activities. Together, these three sectors contributed 3.7 percentage points to nominal GDP growth. Real estate activities, wholesale and retail trade, financial and insurance activities, as well as information and communication jointly added a further 1.7 percentage points. The contribution from manufacturing stood at 1.0 percentage point, while those from agriculture and fishing sector and construction were relatively lower, at 0.6 and 0.4 percentage points respectively. Meanwhile, the utilities sector lowered GDP growth by 0.1 percentage point.

GDP data by income distribution show that gross operating surplus accelerated further during the fourth quarter, rising by 12.0% on an annual basis, from 10.3% in the third quarter, and contributing 5.6 percentage points to nominal GDP growth (see Chart 2.3). Compensation of employees grew by 4.1% on an annual basis, from 3.8% in the third quarter, and contributed 3.9 percentage points to nominal GDP growth. Gross operating surplus and mixed income contributed 5.7 percentage points, while taxes less subsidies on production and imports contributed 0.3 percentage points. The contribution from compensation of employees and gross operating surplus and mixed income together contributed 11.6 percentage points to nominal GDP growth. The contribution from taxes less subsidies on production and imports was relatively lower, at 0.3 percentage point.

Table 2.2
CONTRIBUTION OF SECTORAL GVA TO NOMINAL GDP GROWTH

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th></th>
<th>2018</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>Agriculture, forestry and fishing</td>
<td>-1.2</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Mining and quarrying; utilities</td>
<td>0.7</td>
<td>0.2</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.9</td>
<td>0.1</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Construction</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Services</td>
<td>7.1</td>
<td>6.2</td>
<td>6.2</td>
<td>6.4</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesale and retail trade; repair of motor vehicles; transportation; accommodation and related activities</td>
<td>1.0</td>
<td>1.0</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Information and communication</td>
<td>0.6</td>
<td>0.4</td>
<td>0.3</td>
<td>0.4</td>
</tr>
<tr>
<td>Financial and insurance activities</td>
<td>0.4</td>
<td>0.3</td>
<td>0.7</td>
<td>0.4</td>
</tr>
<tr>
<td>Real estate activities</td>
<td>-0.2</td>
<td>0.4</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Professional, scientific, administrative and related activities</td>
<td>2.5</td>
<td>1.1</td>
<td>1.2</td>
<td>1.7</td>
</tr>
<tr>
<td>Public administration and defence; education; health and related activities</td>
<td>1.6</td>
<td>1.6</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Arts, entertainment; household repair and related services</td>
<td>1.1</td>
<td>1.3</td>
<td>1.7</td>
<td>1.6</td>
</tr>
<tr>
<td>GVA</td>
<td>7.8</td>
<td>7.0</td>
<td>7.4</td>
<td>7.7</td>
</tr>
<tr>
<td>Taxes less subsidies on products</td>
<td>0.2</td>
<td>0.4</td>
<td>1.7</td>
<td>1.9</td>
</tr>
<tr>
<td>Annual nominal GDP growth (%)</td>
<td>8.0</td>
<td>7.5</td>
<td>9.1</td>
<td>9.6</td>
</tr>
</tbody>
</table>

Source: NSO.

GDP data by income distribution show that gross operating surplus accelerated further during the fourth quarter, rising by 12.0% on an annual basis, from 10.3% in the third quarter, and contributing 5.6 percentage points to nominal GDP growth (see Chart 2.3). Compensation of employees grew by 4.1% on an annual basis, from 3.8% in the third quarter, and contributed 3.9 percentage points to nominal GDP growth. Gross operating surplus and mixed income contributed 5.7 percentage points, while taxes less subsidies on production and imports contributed 0.3 percentage points. The contribution from compensation of employees and gross operating surplus and mixed income together contributed 11.6 percentage points to nominal GDP growth. The contribution from taxes less subsidies on production and imports was relatively lower, at 0.3 percentage point.

Chart 2.3
NOMINAL GDP AND ITS MAIN COMPONENTS
(percentage point contribution)

Source: NSO.
of employees also continued to rise robustly, although the pace of growth moderated to 6.4% from 6.9% in the September quarter. The latter added 2.7 percentage points to nominal growth. Net taxes on production and imports also increased and explain the remaining 1.1 percentage points to nominal GDP growth.

Almost all sectors registered higher gross operating surplus when compared with the same quarter a year earlier, with the arts, entertainment and recreation sector as well as manufacturing, accounting for a significant share of the increase.

Compensation of employees continued to grow strongly in almost all sectors, with the largest absolute increases registered in the sector incorporating public administration as well as in that comprising professional, scientific and technical activities.

**Annual growth in industrial production turns positive in the last quarter of 2018**

During the fourth quarter of 2018, industrial production expanded by 3.8% when compared with the same quarter of 2017. This followed a contraction of 2.0% in the preceding quarter (see Table 2.3).

The expansion in activity in the last quarter of 2018 reflected developments in all major sectors, with the largest increase registered in the quarrying sector. Production in this sector rose by 23.6%, although it has a very small weight in the overall industrial production index. Output also rose strongly in the energy sector, where production increased by 11%. The manufacturing sector, which accounts for over 80% of the index rose by 3.7%.

<table>
<thead>
<tr>
<th>Table 2.3</th>
</tr>
</thead>
</table>
| **INDUSTRIAL PRODUCTION**

*Percentages; annual percentage changes*

<table>
<thead>
<tr>
<th>Shares</th>
<th>2017</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial production</td>
<td>100.0</td>
<td>8.3</td>
<td>2.2</td>
<td>0.8</td>
<td>-2.0</td>
<td>3.8</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>87.1</td>
<td>1.7</td>
<td>-2.7</td>
<td>-0.7</td>
<td>-2.3</td>
<td>3.7</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food products</td>
<td>15.4</td>
<td>3.7</td>
<td>-15.3</td>
<td>-14.7</td>
<td>2.7</td>
<td>2.0</td>
</tr>
<tr>
<td>&quot;Other&quot; manufacturing</td>
<td>10.3</td>
<td>-1.4</td>
<td>-2.0</td>
<td>-10.5</td>
<td>-7.4</td>
<td>11.7</td>
</tr>
<tr>
<td>Repair and installation of machinery and equipment</td>
<td>7.9</td>
<td>0.9</td>
<td>5.3</td>
<td>5.6</td>
<td>-8.9</td>
<td>7.5</td>
</tr>
<tr>
<td>Basic pharmaceutical products and pharmaceutical preparations</td>
<td>7.3</td>
<td>5.4</td>
<td>9.5</td>
<td>-1.6</td>
<td>-45.0</td>
<td>-18.6</td>
</tr>
<tr>
<td>Printing and reproduction of recorded media</td>
<td>7.3</td>
<td>5.3</td>
<td>9.3</td>
<td>45.3</td>
<td>49.8</td>
<td>40.7</td>
</tr>
<tr>
<td>Beverages</td>
<td>5.6</td>
<td>5.4</td>
<td>2.4</td>
<td>4.2</td>
<td>3.8</td>
<td>-3.5</td>
</tr>
<tr>
<td>Rubber and plastic products</td>
<td>5.4</td>
<td>-5.6</td>
<td>-4.7</td>
<td>-7.6</td>
<td>-11.7</td>
<td>-16.2</td>
</tr>
<tr>
<td>Computer, electronic and optical products</td>
<td>5.0</td>
<td>-21.2</td>
<td>-28.4</td>
<td>-24.6</td>
<td>3.5</td>
<td>-0.2</td>
</tr>
<tr>
<td>Energy</td>
<td>12.5</td>
<td>59.0</td>
<td>38.9</td>
<td>13.8</td>
<td>1.8</td>
<td>11.0</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>0.5</td>
<td>21.5</td>
<td>-0.7</td>
<td>46.4</td>
<td>24.9</td>
<td>23.6</td>
</tr>
</tbody>
</table>

Sources: NSO; Eurostat.

(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.

---

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 and takes no account of input costs. The sectoral 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.
Within the manufacturing sector, output rose strongly among producers involved in the printing and reproduction of recorded media. This sector’s production was boosted by a new plant that began to operate from Malta in December 2017. Output also rose in the “other manufacturing” sub-sector, which includes medical and dental instruments, toys and related products. Moderate increases were also recorded among firms involved in the repair and installation of machinery and equipment, while the production of food rose marginally. These increases more than offset lower production among producers of pharmaceuticals as well as rubber and plastics, and, to a lesser extent, in the beverages and computer, electronic and optical products sectors.

**Business and consumer surveys**

During the fourth quarter of 2018, the Economic Sentiment Indicator (ESI) fell to 107.2, from 114.6 in the preceding quarter. Notwithstanding this fall, it remained above its long-term average of 100.1 (see Chart 2.4).\(^8\)\(^9\) Sentiment declined across all sectors, with the most significant deterioration recorded among firms active in the retail sector, in construction and industry. Confidence among consumers and in the services sector was only marginally below the third quarter average. In the fourth quarter of 2018, the ESI for Malta fell below that in the euro area, which averaged 108.9.

**Confidence in the retail sector falls sharply\(^10\)**

Sentiment in the retail sector fell to 0.9, from 13.5 in the third quarter of 2018. Thus, sentiment among retailers stood below its long-term average of 2.8 (see Chart 2.5).

---

\(^8\) The ESI summarises developments in confidence in five surveyed sectors (industry, services, construction, retail and consumers). Quarterly data represent three-month averages.

\(^9\) 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. The long-term average of the retail confidence indicator is calculated as from May 2011, when it was first published. However, the long-term average of the ESI is computed from November 2002.

\(^10\) 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.
The recent decline in confidence was driven by firms’ assessment of past and expected business activity. Also, on balance, more firms reported above-normal stock levels compared with the third quarter of 2018.11

Additional survey data indicate that on balance, a smaller share of respondents expected employment to increase during the following three months, while more firms anticipated selling prices to rise over the same period.

**Confidence in construction declines further, but remains high from a historical perspective**12

In the fourth quarter of 2018, confidence in the construction sector fell to 7.5 from 20.8 in the preceding quarter, but remained well above its long-term average of -14.2 (see Chart 2.6).

Survey results show that both subcomponents contributed to the decline in sentiment in the fourth quarter, though the largest contribution stemmed from lower employment expectations for the next three months.

Supplementary survey data indicate that in the fourth quarter of 2018, on balance, fewer respondents reported positive developments in building activity during the preceding three months, with labour shortages remaining the dominant factor limiting production in this sector. At the same time, a smaller number of firms anticipated selling prices to rise in the three months ahead.

**Industrial confidence turns marginally negative**13

Confidence in the industrial sector turned negative, standing at -0.9 in the quarter under review, below the previous quarter’s average of 11.0, but still above its long-term average of -2.9 (see Chart 2.7).

---

11 A fall in the balance of above-normal stock levels affects the overall indicator in a positive way.

12 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.

13 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.
The recent fall in sentiment in this sector reflected movements across all its three sub-components. During the quarter under review a larger net share of respondents expected order book levels to decline in the months ahead. Production expectations, while still positive on balance, weakened compared with the third quarter. Meanwhile, more firms reported higher than normal stocks of finished goods.\(^{14}\)

Additional survey data show that on balance, a smaller share of respondents anticipated an increase in their labour complement. A larger number of firms expected their selling prices to fall in the subsequent three months.

**Confidence in the services sector edges down marginally from its recent high\(^{15}\)**

Although sentiment in the services sector edged down to 34.9 from 36.6 in the preceding quarter, it remained well above its long-term average of 23.2. The fall in confidence was mainly driven by respondents’ weaker outlook for demand in the three months ahead, and, to a lesser extent, in the assessment of demand over the past three months. On the other hand, the share of respondents reporting an improvement in the business situation in the preceding three months edged up marginally (see Chart 2.8).

Supplementary survey data indicate that employment expectations were less optimistic than those in the preceding quarter.

Also, on balance, a higher net share of respondents foresaw price increases in the three months ahead.

**Consumer confidence declines marginally\(^{16}\)**

The consumer confidence indicator stood at 8.0 in the fourth quarter of 2018, declining marginally from 9.0 in the preceding quarter, while still exceeding by a wide margin its long-run average of -12.2 (see Chart 2.9). Consumers’ expectations of major purchases over the next 12 months as well as their expectations as regards the general economic situation were the main driver behind this decrease. By contrast, respondents assessed

---

\(^{14}\) 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 2.7.

\(^{15}\) 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.

\(^{16}\) 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’ assessment and expectations of their financial situation, their expectations about the general economic situation and their intention to make major purchases over the subsequent 12 months. The computation of this indicator was changed as reflected in the January 2019 release of the European Commission – [https://ec.europa.eu/info/sites/info/files/esi_2019_01_en.pdf](https://ec.europa.eu/info/sites/info/files/esi_2019_01_en.pdf).
their financial situation over the past 12 months to have improved marginally, while their expectations for their financial situation over the following 12 months were similar to those in the third quarter of the year.

Additional survey data suggest that on balance, a slightly larger share of consumers anticipated higher inflation in the 12 months ahead and a marginally lower share of respondents expected unemployment to decrease over this horizon.\(^\text{17}\)

---

**BOX 2: BUSINESS INVESTMENT AND INVESTMENT FINANCE IN MALTA – EVIDENCE FROM THE EIBIS 2018 SURVEY\(^\text{1}\)**

The EIB Group Survey on Investment and Investment Finance (EIBIS) is an EU-wide, annual survey of 12,350 firms, 170 of which are operating in Malta.\(^\text{2}\) It collects data on firm characteristics and performance, past investment activities, future plans, sources of finance, financing issues and other challenges that businesses face. Using a stratified sampling methodology, the EIBIS is representative across the 28 Member States of the European Union, firm size (from micro to large) and four main sectors (manufacturing, services, construction and infrastructure). For the third wave of EIBIS, telephone interviews with Maltese firms were carried out between April and June 2018.

EIBIS 2018 points towards an acceleration of investment activities in Malta. The survey reveals that 86% of firms had invested in the previous financial year, broadly in line with the EU average (see Chart 1). The number of firms

---

1. Prepared by Annamaria Tueske and Andreas Kappeler from the European Investment Bank (EIB).

\(^\text{17}\) Negative unemployment expectations affect the overall indicator in a positive way. Thus a fall in the number of respondents expecting unemployment to fall affects the overall indicator in a negative way.
expecting an increase in investment in 2018 was larger compared with that of firms anticipating a decrease. Looking at the investment cycle, Malta has improved its positioning in EIBIS 2018 compared with EIBIS 2017, as it moved into the ‘high investment expanding’ quadrant (see Chart 2), a more favourable investment cycle position than many other EU countries.

The “investment gap” perceived by Maltese firms increased. More than eight in ten firms believe their investment over the last three years was about the right amount (see Chart 3). Nonetheless, investment gaps persist: 15% of firms reported having invested too little, twice the share registered in EIBIS 2017, but broadly in line with the EU average. When asked about their investment priorities over the next three years, one third of firms mentioned investment in new products, processes and services, slightly above the EU average (see Chart 4). Services firms are more likely to prioritise capacity expansion (40%) than average.

---

Innovation activities by Maltese firms are moderate. In the last financial year, just over three in ten firms in Malta developed or introduced new products, processes or services as part of their investment activities, slightly less than the EU average (see Chart 5). However, the share of firms with innovation activity that is new to the country/world was slightly above the EU average. Firms in Malta are conscious of the relevance of investment in intangibles, with a greater preference, relative to the European Union, for software, data, IT and websites (see Chart 6). However, investment in research and development (R&D) and training of employees is comparatively low.

EIBIS 2018 identifies lack of staff with the right skills as a key barrier to investment in Malta. Availability of skilled staff is perceived also in 2018 as the most pressing long-term barrier to investment by 90% of firms in Malta, similar to the results from EIBIS 2017 (see Chart 7). However, the lack of skills seems to be mainly associated with finding appropriate external candidates: Maltese firms say that only 6%
of their staff does not have the right skills to fit their company’s needs, broadly in line with the EU average (see Chart 8). The proportion of staff deemed not to have appropriate skills is particularly low among staff in higher level occupations (2%). Energy costs, the quality of transport infrastructure and business regulations are other prevalent obstacles stated by firms (see Chart 7). The barriers to investment perceived by firms in Malta in 2018 are broadly in line with those identified in EIBIS 2017.

Access to finance is not a big concern for firms in Malta, albeit being a more binding constraint for micro and small firms. 4% of firms in Malta are financially constrained (see Chart 9), which is slightly below the EU average. This dropped from 6% in EIBIS 2017. However, micro and small firms tend to be more concerned about access to finance than larger ones. Like in most other EU countries, firms in Malta rely mainly on internal finance (73%). This is slightly higher than last year’s share (60%), and places Malta above the EU average (62%) (see Chart 10).

---

**Chart 8**

**SHARE OF EMPLOYEES WITHOUT THE RIGHT SKILLS**

(Chart 8: SHARE OF EMPLOYEES WITHOUT THE RIGHT SKILLS (per cent))

- **EU**: 4%
- **MT**: 12%

**Source**: EIBIS 2018.

**Question**: How many of your existing staff would you regard having the right skills to fit your company’s needs?

---

**Chart 9**

**SHARE OF FINANCIALLY CONSTRAINED FIRMS**

(Chart 9: SHARE OF FINANCIALLY CONSTRAINED FIRMS (per cent))

- **EU 2017**: 6%
- **EU 2018**: 6%
- **MT 2017**: 12%
- **MT 2018**: 12%

**Source**: EIBIS 2018.

**Note**: Very small base size of less than 30 firms.

**Question**: What proportion of your investment was financed by each of the following?

---

**Chart 10**

**SOURCE OF INVESTMENT FINANCE**

(Chart 10: SOURCE OF INVESTMENT FINANCE (per cent))

- **Intra-group**: 50%
- **Internal**: 50%
- **External**: 0%

**Source**: EIBIS 2018.

**Question**: What proportion of your investment was financed by each of the following?
As to external funding sources, firms in Malta rely almost exclusively on bank finance. At 23%, the share of external finance has declined compared with 2017 and is also below the EU average (see Chart 10). Bank loans account for about 88% of total external finance, followed by newly issued bonds and grants (see Chart 11). External finance in the form of leasing, which in the rest of the EU accounts for about one fourth of total external finance, plays a marginal role in Malta. The availability of funding from business angels or venture capitalists in the form of external equity plays a negligible role. External financing diversification is important for innovation and the growth of firms, as also highlighted in Chapter 6 of the EIB Investment Report 2018/2019. Maltese firms do not report any external finance characteristics as particularly unsatisfactory, with the exception of collateral requirements (see Chart 12).

In conclusion, the EIBIS 2018 results reveal a positive picture of investment dynamics in Malta, but also highlight areas for policy attention. After exceptional investment growth between 2014 and 2016, aggregate investment levelled off in 2017. Business investment continues to grow and expectations remain positive. The share of firms expecting a further increase in investment activities going forward exceeds the share of firms expecting a contraction. The share of investment in expanding capacity has increased from 22% to 36% in 2018.

---

Despite the investment upswing, investment gaps persist. 15% of firms report having invested too little; this is more than twice as many as in EIBIS 2017. Against the backdrop of favourable macroeconomic conditions, this points towards rising perceived investment needs. At the same time, firms’ productivity remains lower than the EU average. The average share of machinery and equipment that is perceived state-of-the-art is 45%, similar to EIBIS 2017 and broadly in line with the EU average. Moreover, 13% of firms claim to have undertaken innovations that were new to the country or global market, slightly above the EU average of 10%. EIBIS 2017 also identified transport infrastructure and training to be key public investment priorities for Malta.

Skill shortages represent a key risk for a sustained investment upswing in Malta. Nine in ten firms consider a lack of skilled staff to be a bottleneck for their investment activities. However, the lack of skills seems to be mainly associated with finding appropriately skilled workers on the labour market: Maltese firms say that only 6% of their existing staff does not have the right skills to fit their company’s needs.

From a policy perspective, addressing skill shortages, infrastructure gaps, energy costs and financial diversification are key to promote innovation and productivity growth. Besides skills, energy costs, transport infrastructure, and business regulations are other major barriers to investment identified in EIBIS 2018. Addressing these shortages would not only boost investment but also innovation in Malta. In the last financial year, just over three in ten firms in Malta developed or introduced new products, processes or services as part of their investment activities. Moreover, considering alternative ways to diversify firms’ financing mix is important to promote innovation, investment and productivity growth.

The labour market

Labour force continues to grow strongly

LFS data show that in the fourth quarter of 2018 the labour force grew by 4.9% over the same quarter of 2017 (see Table 2.4). Employment rose by 5.4% in annual terms, while the number of unemployed declined by 7.7%.

The activity rate stood at 75.0% in the December quarter, up from 73.5% in the corresponding quarter of 2017, and above the euro area average of 73.6%. This reflected increased activity among both females and males, with the former registering the largest increase. Indeed, the female participation rate increased by 2.1 percentage points, to reach 63.7%, while that of males edged up by 0.9 percentage point to 85.5%. Notwithstanding the significant increase in the female participation rate, it remained below the euro area average of 68.3%. On the other hand, the activity rate of males continued to rise further above the euro area average of 78.8%.

---

18 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. LFS data for 2012 and the first half of 2018 are updated with the latest demographic revisions published by the NSO on 12 February 2018.

19 The LFS defines the labour force as all persons aged 15 and over who are 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 are available for work.

20 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.
Employment continues to grow at a fast pace

The annual increase in employment during the quarter mostly reflected growth in the number of full-time jobs (see Table 2.4). The number of persons in such jobs increased by 11,693, or 6.1% in annual terms, while the number of part-timers, which includes those employed on a full-time with reduced hours basis, rose by 567, or 1.7%.

During the fourth quarter of 2018 the overall employment rate rose by 1.8 percentage points, reaching 72.3%. The male and female employment rates increased by 1.1 and 2.4 percentage points, respectively. The male employment rate reached 82.3%, from 81.2% a year earlier, while that of females rose to 61.5% from 59.1%. The largest increases among females were registered among those aged between 15 and 24, while the largest increases among males were registered in the 25 and 54 age bracket.

These developments imply that the Government continued to exceed the Europe 2020 target of 70% for the employment rate. Indeed, according to the LFS, the employment rate for those aged between 20 and 64 stood at 75.8% in the fourth quarter of 2018.

The unemployment rate edges down

In the fourth quarter of 2018, the unemployment rate stood at 3.5%. This was lower than the 4.0% recorded a year earlier and the 3.7% registered in the third quarter of 2018. The jobless rate for males edged down by 0.4 percentage point in annual terms, to 3.6%, while that of females fell by 0.6 percentage point to 3.4% (see Table 2.4).

Table 2.4
LABOUR MARKET INDICATORS BASED ON THE LFS
Persons; annual percentage changes

<table>
<thead>
<tr>
<th></th>
<th>2017 Q4</th>
<th>2018 Q4</th>
<th>Annual change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour force</td>
<td>236,604</td>
<td>248,140</td>
<td>4.9%</td>
</tr>
<tr>
<td>Employed</td>
<td>227,167</td>
<td>239,427</td>
<td>5.4%</td>
</tr>
<tr>
<td>By type of employment:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>192,990</td>
<td>204,683</td>
<td>6.1%</td>
</tr>
<tr>
<td>Part-time</td>
<td>34,177</td>
<td>34,744</td>
<td>1.7%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>9,437</td>
<td>8,713</td>
<td>-7.7%</td>
</tr>
<tr>
<td>Activity rate (%)</td>
<td>73.5</td>
<td>75.0</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>84.6</td>
<td>85.5</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>61.6</td>
<td>63.7</td>
<td></td>
</tr>
<tr>
<td>Employment rate (%)</td>
<td>70.5</td>
<td>72.3</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>81.2</td>
<td>82.3</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>59.1</td>
<td>61.5</td>
<td></td>
</tr>
<tr>
<td>Unemployment rate (%)</td>
<td>4.0</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>4.0</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>4.0</td>
<td>3.4</td>
<td></td>
</tr>
</tbody>
</table>

Source: NSO.

21 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.
23 According to the LFS the unemployed comprise persons aged 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 the Jobsplus definition includes only those persons registering for work under Part 1 and Part 2 of the unemployment register.
The unemployment rate in Malta remains well below the average rate for the euro area, which stood at 7.9% in the quarter under review (see Chart 2.10). The unemployment gap remained negative, as the unemployment rate remained below the Bank’s structural measure of 4.1% in the fourth quarter of 2018.24

Jobsplus data also show favourable labour market developments. The average number of registered unemployed stood at 1,788 in the fourth quarter of 2018, 456 persons less than those registered in the same quarter of 2017 (see Chart 2.11). Apart from a growing demand for labour in the context of rapidly growing activity, the drop in the number of registered unemployed since the beginning of 2014 is underpinned by measures aimed at reducing reliance on social benefits, as well as the extension of schemes which encourage employment, training and re-skilling.

Chart 2.10
UNEMPLOYMENT RATE
(per cent)

Source: Eurostat.

Chart 2.11
REGISTERED UNEMPLOYED
(annual percentage changes; persons)

Source: NSO.

BOX 3: THE LENGTH OF STAY OF FOREIGN WORKERS IN MALTA

Introduction

Over the last few years Malta has experienced an extraordinary inflow of foreign workers. Studies have shown that the related population increase had a positive and significant macroeconomic impact.2

However, the economic implications go beyond the direct effect related to the increase in the working age population. In particular, it is also important to understand the length of

---

1 Prepared by Ian Borg. Mr Borg is the principal economist coordinating macroeconomic projections at the Economic Analysis Department of the Central Bank of Malta. Any errors, as well as the views expressed here, are the authors’ sole responsibility.


24 The structural unemployment rate in this chapter refers to the non-accelerating inflation rate of unemployment (NAIRU), that is, the unemployment rate that is consistent with stable inflation. This measure of the unemployment rate is based on a multivariate filter as described in Micallef, B. (2014). “A Multivariate filter to estimate potential output and NAIRU for the Maltese economy,” Working Paper 05/2014.
stay of foreign workers in Malta, as this has implications in terms of the economic integration and assimilation of migrants (the convergence of their wage levels to those of the native population). The length of stay of foreign migrants also has implications for the housing market, the composition of the labour market, wages, productivity levels and consumption patterns.

Eurostat data show that in 2015 Malta had the second highest immigration rate, of 29%, among 29 European countries. Simultaneously, at 13.5%, Malta’s re-migration rate, that is the outmigration of foreign nationals, was the third highest among these countries. This indicates that Malta experiences a dual phenomenon of substantial inflows and outflows of migrants.

**Length of stay of foreigners in the Maltese labour market**

In this analysis, the length of stay of foreigners in the Maltese labour market is based on an individual’s first engagement and the last termination of his/her employment. This information is sourced from an anonymised longitudinal administrative dataset compiled by Jobplus, the national employment agency. The data set covers the period 2002-2017. The first engagement and last termination dates in the dataset are in annual frequency, which precludes the exact identification of their duration in Malta. Consequently, estimates of the length of stay are computed in ranges. For example: an individual who was first employed in 2005, and had his last termination in 2008, is said to have a length of stay of between three and four years. It is assumed that after the last termination the individual has left the labour force permanently. After calculating the length of stay for each individual in the data set, the author computes the exit rate.

The exit rate expresses the number of those that exit the labour market as a percentage of the number of entrants in a particular year. For example, if 1,000 foreigners were engaged in 2004 out of which 500 exited the Maltese labour market in 2004, it would imply an exit rate of 50% in that year. If a further 250 persons left in 2005, it would imply that by 2005 the exit rate for the 2004 cohort had reached 75%, meaning that three quarters of the foreigners who joined the Maltese labour market in 2004 exited it between one and two years after they were first engaged.

Chart 1 shows the average exit rate over the full time horizon considered. On average 25% of those that were engaged exited the labour market within the same year, whereas

![Chart 1](image-url)

**Chart 1**

**AVERAGE EXIT RATES**

(exits as a percentage of new entrants)

Sources: Jobplus; author's calculations.
45% of foreign workers exited after a period of between one and two years. Only 30% of non-Maltese workers remain in the Maltese labour market for more than six years after their first engagement.

Malta’s out-migration rate is more pronounced than that observed in other advanced economies. According to the Organisation for Economic Co-operation and Development (OECD), between 20% and 50% of immigrants either return to their home country or move to third countries five years after their arrival.³ By contrast, around 50% of foreign workers in Malta exit the Maltese labour market within two years of their arrival.

One would expect that the length of stay of foreign workers in Malta would respond to changes in economic conditions. For example, during a period of economic recession, foreign workers might be more inclined to return to their home country. The Maltese economy has indeed experienced significant cyclical and structural changes during the period under consideration, as outlined by Micallef (2016) and Micallef and Ellul (2017).⁴

Chart 2 depicts the weighted average length of stay in years.⁵ This was historically high in the early 2000s, reaching 4.2 years in 2004. During this period the number of new entrants was relatively low at around 1,200 per annum on average. Since 2005, the number of new entrants started to rise while at the same time the weighted length of stay declined to around 3.2 years in the period 2007-2010. After this period, the number of new entrants accelerated sharply. In the meantime, the weighted length of stay stabilised at around 3.5 years, which is close to the historical average length of stay, estimated for the period 2002-2017.

Thus, the weighted average length of stay in Malta has been subject to some fluctuations over time. However, it has remained somewhat stable since 2011. Nevertheless, its economic impact has increased from a long-term perspective. Looking at the number of leavers within the same

⁵ The weighted length of stay converts the ratio of those that stayed in the Maltese labour market to the number of entrants per annum, to years. Since the full length of stay of individuals that have not yet left in the later periods is not observed, their “potential” length of stay is projected using that of the previous year. For example: for those entering the labour force in 2002 one can observe the percentage of those that left after 16 years, but for those engaged in 2003 only the percentage of those that left after 15 years is observed. We project the potential length of stay of the 16th year for 2003 entrants based on that of persons engaged in 2002. This is done for each successive year.
year of engagement, the average number of leavers between 2002 and 2012 stood at around 840 per annum, around 0.5% of the labour supply. For the period 2013 to 2017, the absolute number of leavers was around 2,850 per annum, or 1.5% of the labour supply. As at 2017, the number of persons that left within the first year of employment was close to 4,000, or around 1.8% of the labour supply.

Characteristics that determine the length of stay

The dataset contains a number of individual characteristics, which allows a deeper assessment of the determinants of the length of stay of foreign workers in Malta. The characteristics available are the following: 1) nationality; 2) age; 3) employment status (occupation); 4) size of employer; and 5) economic sector.

Partly due to Malta’s access to the European single market, around 70% of foreign workers in Malta originate from countries in the European Union, while 30% are third country nationals (TCNs). Furthermore, EU nationals find it easier to re-migrate, either to their respective home country or elsewhere. Chart 3 shows that while the two groups’ exit rates tend to converge at longer durations, in general EU nationals tend to stay for shorter periods in the Maltese labour market. This is in line with expectations, given that the cost of migration and re-migration is relatively low for EU nationals, both due to relatively shorter distances involved, but more importantly due to free movement within the European Union.

Age differences play a role in determining the length of stay of foreign workers in Malta. Chart 4 shows that the percentage of those under 25
that exit within the first year is around 12 percentage points higher than that for the other cohorts. In addition, the percentage of those under 25 that exit between one and two years after they were first engaged is around 6 percentage points higher. The gap closes down for employment durations exceeding five years. While the exit rate for those aged between 25 and 34 is only marginally higher than that for those aged between 35-44 and 45-54, it is lower than that of older workers, although the latter’s high exit rate may be biased due to the small number of observations. Therefore, in general, we find a U-shaped relationship between age and exit rates whereby the youngest cohort and those close to retirement tend to have higher exit rates than those in intermediate age groups.6

Another important aspect is the possible selection of migrant workers on the basis of their skill level. In Malta, skill seems to be positively correlated with length of stay. Chart 5 shows that those categorised as skill 1 (lowest skilled workers) have the highest exit rate or the shortest duration of stay, while skill 4 have the lowest exit rate. However, those in skill 2 and skill 3 (which can be considered as medium-skilled) have higher exit rates when compared with both skill 1 and skill 4 persons. Thus, while in general the highest skilled foreign workers tend to have a longer length of stay than least skilled ones, the results are mixed when medium-skilled employees are included in the analysis.

The type of occupation foreign workers are engaged in is also related to the length of stay. Foreign workers employed in services and sales have the highest exit rates at the shortest duration, which probably reflects the fact that some are engaged in the accommodation sector, which is highly seasonal. At longer horizons, exit rates across different occupations tend to converge, although managers maintain the lowest exit rates, while those employed as plant and machine operators have the highest exit rates.

Maltese firms are predominantly small and medium-sized enterprises (SMEs).7 Chart 6 shows that micro firms, i.e. firms employing less than ten workers, have the lowest exit rates across the different durations. Moreover, small enterprises, i.e. firms employing between 10-49 workers, have the second lowest exit rates across all durations. On the other hand, while medium-sized enterprises

---

6 For example, Goss and Paul (1986) argue that while age increases the psychological costs related to the migration decision, older workers tend to have more experience which in turn increases their geographic mobility.

have a slightly lower exit rate when compared with large enterprises for duration of less than one year, they have a higher exit rate for longer lengths of stay.

Chart 7 clearly shows that there are also sectoral heterogeneities, where for the shortest duration, foreign workers in the wholesale and retail sector have the lowest exit rate at 17.5%, while at 32.3% the accommodation sector has the highest exit rate. For longer durations, the sectoral pattern of the length of stay changes slightly. At horizons of between four and five years, the exit rate varies between 76.7% in the sector comprising manufacturing and utilities, and 58.1% in the wholesale and retail sector.

Sectoral heterogeneities can be explained either by certain fundamental factors, such as wages or other more idiosyncratic sectoral factors. Examples of the latter would include the seasonality in the accommodation sector and the project-based work in the construction sector, which might lead to shorter durations.

**Economic and policy implications of the estimated length of stay**

The relatively short length of stay of foreign workers in Malta may limit the scope for them to experience economic assimilation, understood as the convergence of their wage levels to the native population. Indeed, some studies find that although immigrants in the United States initially earn less than the native population, their earnings rise significantly as they obtain experience in the US labour market.\(^8\) It is likely that since foreign workers tend to

be relatively young and stay for a short period of time, the rate of economic assimilation in Malta is rather low.

The process of constantly selecting and hiring workers, as a result of the high level of labour turnover, puts significant pressure on the human resource departments of firms. Furthermore, firms are unable to hire foreign workers who have already obtained experience in the Maltese job market, and are instead constrained to consistently hire workers who are not already resident in Malta. Since foreign workers tend to exit the labour market very rapidly, it poses limitations on learning-by-doing in Malta which in turn could act as a drag on future labour productivity growth.

From a macroeconomic perspective, the increasing reliance on a segment of the labour force that tends to exit rather quickly can impact the cyclicality of the supply side of the economy. In particular, as the working age population becomes more reliant on migrant flows, any cyclicality in migration would affect potential output. For example: a negative shock to foreign demand might put the economy into recession, thereby decreasing the demand for labour. To the extent that foreign workers decide to exit the Maltese labour market in search for opportunities elsewhere, this would reduce the labour supply, the working age population and employment simultaneously. On the one hand, the economic cost in terms of unemployment and social benefits would be limited during the downturn. On the other hand, the adjustment during the recovery phase may be prolonged as this would require inward migration in the context of a declining indigenous working age population, which could have adverse longer term effects on potential output.

There are also broader implications for the Maltese economy such as the quantity and nature of housing that is demanded. If a larger proportion of the workforce is transient, the demand for smaller properties available for rent is likely to increase. Given that most properties in Malta were not built for such kind of demand, this could create housing shortages and raise rents. If most workers are not intending to build a career in the country, this has implications on their relative consumption of goods and services, their demand for saving products and also for the ability of firms to motivate them. In an environment where staff tends to leave after a year or two, the incentives for employers to train and provide a career to non-natives employees inevitably declines. To overcome this challenge, policymakers might need to look at ways of how to encourage migrants to lengthen their stay and entice employers to invest in training. One could also assess whether retention policies, particularly for highly-skilled workers, could cater for certain incentives such as retirement income schemes, private health insurance or assistance with transport and accommodation.

The presence of large flows of foreign workers also has implications for certain sectors where traditionally demand evolved rather slowly, notably public transport, education and the rental market. Enhancing these sectors, both in terms of supply and in terms of their responsiveness to demand, could play a role in lengthening the stay of foreign workers in Malta.
A relatively short length of stay by migrants, however, could also have its advantages. Despite the costs related to hiring and training, new employees are likely to bring forth new ideas, which can have positive effects on innovation and productivity. Moreover, a relatively short length of stay could also have a positive impact on public finances, in that it limits pressure on health and pension costs.

Further research is warranted on this topic, in particular as regards the factors driving foreign workers to relocate to Malta, their aspirations and the reasons for exiting the Maltese labour market. This would better equip policymakers in identifying the appropriate measures to prolong the length of stay should this be deemed to be desirable.
3. PRICES, COSTS AND COMPETITIVENESS

Annual inflation as measured by the HICP moderated to 1.2% in December, from 2.5% in September. This deceleration was driven by services inflation, particularly services related to tourism. Annual inflation based on the RPI, which only takes into account expenditure by Maltese residents, eased marginally to 1.5% in December, from 1.6% three months earlier.

Cost pressures for producers continued to increase, with annual growth in the industrial producer price index standing at 3.8%. Malta’s ULC index also continued to grow during the fourth quarter, although the annual rate of change eased when compared with previous quarters. With regard to international competitiveness, Malta’s HCs indicated a further loss in competitiveness in annual terms, owing to unfavourable exchange rate and relative price movements. However, they ended the year lower relative to September, suggesting that this deterioration in external competitiveness may have started to reverse.

Inflation

HICP inflation moderates during the fourth quarter of 2018

Following a strong acceleration in the third quarter, annual HICP inflation moderated during the final quarter of 2018, reaching 1.2% in December from 2.5% three months earlier (see Chart 3.1). HICP inflation in the euro area also eased over the same period, going from 2.1% in September to 1.5% in December. Malta’s HICP inflation rate thus closed the year 0.3 percentage point lower than that in the euro area.

Among the main subcomponents of the HICP index, services inflation registered the largest change during the fourth quarter, falling from 3.0% in September to 0.9% in December (see Table 3.1). Consequently, its contribution to overall HICP inflation decreased by 1.3 percentage points to 0.4 point (see Chart 3.2). The slower rate of growth of services prices

---

1 The HICP weights are revised on an annual basis to reflect changes in household consumption patterns. In 2018 the weight allocated to energy stood at 6.3%, while that of NEIG was 27.1%. Services accounted for 46.6% of the index, while the share allocated to food stood at 20.0%.
mainly reflected developments in the prices for recreation and personal care, in particular accommodation services (see Chart 3.3). The contribution of this subcomponent had risen strongly in the third quarter, following a large increase in its weight earlier in 2018, before normalising during the fourth quarter. At the same time, the contribution of transport services also fell.

Meanwhile, inflation in non-energy industrial goods (NEIG) remained weak, with the annual rate of price change standing at 0.1%, from 0.2% three months earlier. This reflects a broad-based weakness in the prices of goods, which can in part be attributed to external downward pressures on import prices and possibly also the lagged impact of the appreciation of the euro against major currencies in 2017 and early 2018. As a result, the contribution of this subcomponent to overall HICP was nil.

In contrast, food inflation remained robust, and was the main contributor to overall HICP inflation during the fourth quarter, with a contribution of 0.6 percentage point. Unprocessed food inflation continued to accelerate, reaching 5.4% in December from 4.2% three months earlier, on the back of faster growth in vegetable prices. Meanwhile, processed food inflation stood at 2.5% in December, from 2.6% in September. Inflation in this component is being supported by price increases for a number of food items over the past twelve months, such as bread and dairy products.

As regards the energy subcomponent, annual inflation stood unchanged at 2.7% in the fourth quarter, with prices for gas, transport fuel, and electricity unchanged from their September levels.

Notwithstanding the deceleration in overall HICP inflation, core HICP inflation, as measured by the Bank’s “trimmed mean” approach, accelerated to 1.1% in December, from 0.7% three months

<table>
<thead>
<tr>
<th>Table 3.1</th>
<th>HICP INFLATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual percentage change</td>
<td></td>
</tr>
<tr>
<td>Unprocessed food</td>
<td>-0.5</td>
</tr>
<tr>
<td>Processed food including alcohol and tobacco</td>
<td>1.7</td>
</tr>
<tr>
<td>Energy</td>
<td>0.4</td>
</tr>
<tr>
<td>NEIG</td>
<td>0.7</td>
</tr>
<tr>
<td>Services (overall index excluding goods)</td>
<td>1.7</td>
</tr>
<tr>
<td>All Items HICP</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Source: Eurostat.
earlier (see Chart 3.4). Thus, the gap between the core and the overall inflation rate narrowed significantly in the final three months of 2018, partly reflecting the diminished statistical impact of the increase in the weight of accommodation services earlier in 2018.

**RPI inflation eases marginally**

Annual inflation based on the RPI index moderated slightly to 1.5% in December, from 1.6% in September (see Table 3.2). Food inflation remained the main contributor to overall RPI inflation during the fourth quarter. The contributions of the other main components remained marginal and broadly similar to those registered in September. However, the component that includes household equipment and selected services components registered slightly lower contributions over the review period.

### Chart 3.4

**HICP IN MALTA: OVERALL AND CORE MEASURE**

(annual percentage change)

| Source: Eurostat; Central Bank of Malta estimates. |

| 2013 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2014 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2015 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2016 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2017 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2018 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

| Source: NSO. |

| Table 3.2 | CONTRIBUTIONS TO YEAR-ON-YEAR RPI INFLATION |
| Percentage points | | |
| Food | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 1.1 | 0.9 | 0.9 |
| Beverages and tobacco | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Clothing and footwear | -0.2 | 0.0 | -0.1 | -0.2 | -0.3 | -0.1 | 0.0 | 0.1 | 0.0 |
| Housing | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 |
| 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 household maintenance costs | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Transport and communications | 0.2 | 0.1 | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 |
| 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 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| Other goods and services | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 |
| RPI (annual percentage change) | 0.8 | 0.9 | 1.0 | 1.0 | 1.1 | 1.6 | 1.6 | 1.6 | 1.5 |

---


3 The RPI index differs from the HICP index in that RPI weights are based on expenditure by Maltese households, while HICP weights also reflect expenditure patterns by tourists in Malta, such as accommodation services. See Darmanin, J. (2018), “Household Expenditure in Malta and the RPI Inflation Basket”, Quarterly Review 2018(3), pp. 33-40, Central Bank of Malta.
Residential property prices

*Residential property prices grow at a faster pace*

The NSO’s Property Price Index (PPI), which is based on actual transactions involving apartments, maisonettes and terraced houses, increased at a faster pace during the fourth quarter of 2018 (see Chart 3.5). It rose by 6.2% when compared with the same quarter of the previous year, after rising by 5.6% in the third quarter. House price inflation in Malta remained above that in the euro area, where it stood at 4.2%.

The sustained increase in residential property prices reflects a number of factors, notably the low-interest rate scenario and the Government’s schemes for first-time and second-time buyers. These factors promote the property market as an investment opportunity. Residential property prices are also supported by strong growth in disposable income, a buoyant labour market, and an increase in the number of foreign workers. The IIP further contributed to the growth in residential property prices, although property acquisitions under this Programme account for a limited proportion of all property transactions.

On an annual basis, the number of development permits issued continued to increase at a strong pace, although at 14.8% the annual rate of change was weaker than that of 27.2% in the third quarter. As permits are reflected in an increased supply of dwellings on the market, this should mitigate upward pressure on house prices.

Costs and competitiveness

*Producer price inflation remains strong*

Producer cost inflation, as measured by the industrial producer price index remained robust, standing at 3.8% in December. Cost inflation is being supported by developments in the intermediate goods subcomponent, which is the largest subcomponent of the index and comprises a wide range of items, including computers and electronics. On the other hand, the remaining subcomponents of the overall producer price index, namely consumer goods, capital goods, and energy, registered modest inflation rates.

*HCIs point to a further loss in international competitiveness*

Malta’s HCIs point towards a further deterioration in international competitiveness during the last quarter of the year. Annual growth in the nominal HCl, based on trade-weighted exchange

---

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.

5 The industrial producer price index measures the prices of goods at the factory gate and is commonly used to monitor inflationary pressures at the production stage.
rates, stood at 1.9% in December, following growth of 3.3% in September. The real HCI, which also takes into account relative price pressures, grew by 2.1% in annual terms, following a 4.9% increase three months earlier (see Chart 3.6). This suggests that movements in the euro exchange rate and developments in relative prices vis-à-vis international trading partners over the past year have negatively impacted Malta’s competitiveness. Nonetheless, the extent of this deterioration has moderated significantly when compared with previous quarters. Indeed, both the nominal and real measures stood below their end-September level.

**ULC grow moderately**

Malta’s ULC index, measured as the ratio of compensation per employee to labour productivity, continued to grow during the last quarter of 2018, albeit at a slower pace than before. When measured on a four-quarter moving average basis, ULCs in Malta grew at an annual rate of 0.9% in the last quarter of the year, following 2.2% growth in the previous quarter (see Chart 3.7).

The latest developments in ULCs were driven by faster annual growth in labour productivity, which accelerated to 0.9% from 0.1% in the previous quarter. At the same time, annual growth in compensation per employee slowed to 1.7%, from 2.2% in September.

---

6 HCIs act as an effective exchange rate measure for countries operating within the euro area monetary union. The nominal HCI tracks movements in the euro exchange rate against the currencies of Malta’s main trading partners, weighted according to the direction of trade in manufactured goods. The real HCI also takes into account the relative inflation rate of Malta vis-à-vis its main trading partners. A higher (or lower) score in the HCI indicates a deterioration (or improvement) in Malta’s international price competitiveness.

4. THE BALANCE OF PAYMENTS

During the last quarter of 2018 the surplus on the current account of the balance of payments decreased when compared with the corresponding quarter of 2017. The lower surplus was entirely attributable to a widening in the merchandise trade gap, as net outflows from primary and secondary income declined whereas the surplus on services edged up marginally. Meanwhile, net inflows on the capital account increased on a year earlier, while net borrowing was recorded on the financial account.

During 2018 as a whole, the current account balance was equivalent to 11.2% of GDP, compared with 2.9% of GDP in the euro area.

Meanwhile, the cyclically-adjusted current account balance is estimated at 11.0%. The small difference between the unadjusted and adjusted balances indicates that Malta’s current account surplus largely reflects structural factors.

The current account

The current account surplus narrows marginally

In the last three months of 2018, the current account registered a surplus of €190.3 million, a decline of €7.5 million on the same quarter of 2017. The lower surplus was driven by a widening of the merchandise trade deficit.

On the contrary, during the year as a whole, the surplus on the current account widened to €1,377.5 million, up from €1,177.7 million in 2017. This increase was predominantly driven by a higher surplus from trade in services. A narrowing in the merchandise trade deficit and lower net secondary income outflows also contributed, albeit to a lesser extent (see Table 4.1). As a result, the current account surplus rose to 11.2% of GDP, from 10.4% in 2017 (see Chart 4.1).

Malta’s cyclically-adjusted current account balance stood at 11.0% of GDP, up from 10.9% in the year to December 2017. The cyclically-adjusted and the unadjusted current account balances for

| Table 4.1 | BALANCE OF PAYMENTS |
| EUR millions | Four-quarter moving sums | 2017 Q4 | 2018 Q1 | 2018 Q2 | 2018 Q3 | 2018 Q4 | 2017 Q4 | 2018 Q4 |
| Current account | 1,177.7 | 1,319.6 | 1,270.8 | 1,385.0 | 1,377.5 | 197.8 | 190.3 | |
| Goods | -1,500.2 | -1,339.7 | -1,458.7 | -1,433.0 | -1,460.5 | -362.7 | -390.2 | |
| Services | 3,914.9 | 3,922.9 | 3,987.3 | 4,092.3 | 4,096.1 | 881.9 | 885.7 | |
| Primary income | -1,110.0 | -1,139.9 | -1,131.0 | -1,146.2 | -1,133.6 | -287.8 | -275.3 | |
| Secondary income | -127.0 | -123.7 | -126.8 | -128.1 | -124.5 | -33.5 | -29.9 | |
| Capital account | 60.1 | 58.2 | 64.6 | 64.5 | 69.7 | 31.3 | 50.0 | |
| Financial account(1) | 1,284.1 | 774.5 | 808.8 | 819.2 | 649.8 | 128.7 | 40.6 | |
| Errors and omissions | 46.2 | -603.3 | -526.7 | -616.9 | -797.4 | -100.4 | -281.0 | |

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

the Maltese economy tracked each other closely in recent quarters (see Chart 4.1). This suggests that movements in Malta’s current account are being driven largely by structural, rather than cyclical factors.

**The merchandise trade deficit widens**
In the last quarter of 2018, the merchandise trade deficit widened by €27.5 million on the corresponding period of 2017, reaching €390.2 million. This reflected a decline in exports, which outpaced a contraction in imports.

Conversely, when measured on a four-quarter cumulative basis, the visible trade gap narrowed to €1,460.5 million in 2018, €39.7 million less than in 2017. This improvement stemmed from a €45.2 million decline in imports, largely reflecting lower capital imports. At the same time, exports contracted by €5.5 million on a year earlier. As a result, the merchandise deficit’s share in GDP in 2018 decreased to 11.9%, from 13.3% in 2017 (see Chart 4.2).

**The surplus on services edges up further**
In the quarter under review, the services industry generated a net surplus of €885.7 million, €3.7 million more than the surplus recorded in the last quarter of 2017. This marginal increase was spurred by higher exports, which outpaced a smaller rise in imports.

The widening in the services surplus was mainly driven by the “other services” category, where net receipts increased by €12.0 million, to €603.4 million. This increase was predominantly on account of higher net receipts related to remote gaming, which more than offset higher payments related to business services, particularly professional and management consultancy fees.

Mainly reflecting the continued expansion of the aviation industry, net receipts emanating from transport services increased by €4.3 million, when compared with the last quarter of 2017 to stand at €90.4 million. At the same time, net travel exports decreased by €12.6 million to €191.8 million in the fourth
quarter of 2018, as inbound tourists’ spending declined by €7.7 million, largely reflecting lower expenditure by tourists on items other than accommodation. At the same time, expenditure by Maltese residents abroad increased by €5.0 million on the last quarter of 2017.

On a four-quarter cumulative basis, the overall surplus from services stood at €4,096.1 million in 2018, an increase of €181.2 million on the balance recorded in 2017. Despite such an increase, net services receipts as a percent of GDP dropped to 33.2% of GDP, from 34.6% a year earlier (see Chart 4.3).

**Primary income account records lower net outflows**

In the last quarter of 2018, net outflows on the primary income account stood at €275.3 million, as opposed to €287.8 million in the same period of 2017. This was largely on account of higher net interest earned on ‘other investment’ income which offset a decrease in net interest receipts on portfolio investment and higher net income payments related to direct investment.

On a four-quarter cumulative basis, net outflows on this account reached €1,133.6 million in the four quarters of 2018, €23.6 million more than a year earlier. Developments on this component of the current account continued to be strongly influenced by internationally-oriented firms which transact predominantly with non-residents.

**Outflows on the secondary income account also decrease**

Between October and December 2018, net outflows on the secondary income account decreased by €3.7 million on a year earlier, to stand at €29.9 million. In 2018 as a whole, net outflows related to secondary income amounted to €124.5 million, €2.5 million less than the amount recorded a year earlier.

**Tourism activity**

**Activity in the tourism sector**

In the fourth quarter of 2018, activity in the tourism sector remained buoyant, though it slowed down compared with the previous quarter.

The number of inbound tourists increased by 9.8% on a year earlier, to reach 561,849 (see Chart 4.4). This followed a 13.3% year-on-year increase in the third quarter. Increases in arrivals were recorded across all categories. However, almost 85.0% of the increase was driven by tourists visiting Malta for leisure purposes.

---

2 The primary income account shows income flows related mainly to cross-border investment and compensation of employees.

3 The secondary income account shows current transfers between residents and non-residents.
Meanwhile, the number of nights that tourists spent in Malta reached 3.8 million, a rise of 8.5% on the preceding year. Growth was driven by an increase in nights stayed in private accommodation, which rose by 24.6%. By contrast, nights stayed in collective accommodation decreased by 1.7%, with most of this decrease arising in the 5-star category, as a major hotel closed its doors for major renovations and re-branding in October 2018.\(^4\)

In the quarter under review, tourist expenditure in Malta grew at an annual rate of 2.7%, reaching €417.6 million.\(^5\) The strongest increase was registered in the non-package category, which increased by 21.9% in annual terms.\(^6\) On the other hand, package and “other” spending declined by 1.4% and 8.6%, respectively.

As tourist expenditure increased at a slower pace compared with arrivals, expenditure per capita fell to €743 from €795 in the fourth quarter of 2018. Expenditure per night also fell, edging down to €111.34 from €117.64. Meanwhile, the average length of stay declined marginally to 6.7 nights in the fourth quarter from 6.8 nights in the same quarter a year earlier.

The continuous efforts to promote Malta as a year-round destination, together with a robust winter schedule featuring increased frequency of flights to several destinations and the extension of certain summer routes into the winter season all had a positive impact on the tourism sector. According to Malta International Airport (MIA) data, in the fourth quarter of 2018, average seat capacity increased by 11.0% compared with a year earlier (see Chart 4.5).\(^7\)

---

\(^4\) 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.

\(^5\) Total expenditure is split into package, non-package and “other” with the latter component capturing any additional expenditure by tourists during their stay in Malta, such as expenditure on excursions and entertainment.

\(^6\) Non-package holiday expenditure is subdivided into spending on accommodation and travel fares.

\(^7\) MIA data are subject to revisions.
In line with the aforementioned decrease in nights stayed in collective accommodation, the total occupancy rate in collective accommodation establishments fell to 57.1%, from 58.2% in the same quarter a year earlier (see Chart 4.6). Lower occupancy rates were recorded in all categories, except in the “other” collective accommodation category.

In the fourth quarter of 2018, the number of cruise liners visiting Malta totalled 95, one more than a year earlier. Foreign passengers rose to 189,322, from 185,479 in the same period of 2017 (see Chart 4.7).

The capital account
Net inflows on the capital account reached €50.0 million during the last quarter of 2018, €18.7 million more than in the corresponding period of 2017 (see Table 4.1). This was mostly attributable to higher transfers to government, which in turn were propelled by the timing of funds received under EU financing programmes. When measured on a four-quarter moving sum basis, in 2018, capital inflows totalled €69.7 million, €9.6 million more than in 2017.
5. GOVERNMENT FINANCE

During the final quarter of 2018, the general government surplus decreased when compared with the same period a year earlier. When measured as a four-quarter moving sum, the general government surplus was equivalent to 2.0% of GDP, below the 3.4% observed at end-2017 and in the third quarter of 2018. The cyclically-adjusted surplus-to-GDP ratio broadly mirrored developments in the headline balance. While general government debt as a share of GDP was unchanged from September 2018, it continued to decline on an annual basis, closing the year at 46.0%.

Quarterly developments

General government surplus narrows

The general government registered a surplus of €22.0 million in the final quarter of 2018, €162.6 million less than the surplus registered in the corresponding quarter of 2017. This was due to a substantial increase in primary expenditure, which offset a rise in revenue. In fact, the primary surplus decreased by €167.6 million, to €68.1 million.

Higher tax receipts support revenue growth

In the fourth quarter, Government revenue increased by €97.7 million or 7.9% in annual terms, reaching €1,335.4 million (see Table 5.1). Growth was mainly driven by an increase in tax revenue.

### Table 5.1
REVENUE, EXPENDITURE AND DEBT

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>Change 2018Q4-2017Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
</tr>
<tr>
<td>Revenue</td>
<td>1,237.6</td>
<td>1,041.5</td>
<td>1,182.6</td>
</tr>
<tr>
<td>Taxes on production and imports</td>
<td>370.3</td>
<td>350.3</td>
<td>365.4</td>
</tr>
<tr>
<td>Current taxes on income and wealth</td>
<td>449.3</td>
<td>320.9</td>
<td>454.2</td>
</tr>
<tr>
<td>Social contributions</td>
<td>195.9</td>
<td>180.3</td>
<td>201.8</td>
</tr>
<tr>
<td>Capital and current transfers receivable</td>
<td>50.9</td>
<td>25.6</td>
<td>15.6</td>
</tr>
<tr>
<td>Other (1)</td>
<td>171.2</td>
<td>164.4</td>
<td>145.7</td>
</tr>
<tr>
<td>Expenditure</td>
<td>1,053.0</td>
<td>1,047.4</td>
<td>1,063.6</td>
</tr>
<tr>
<td>Compensation of employees</td>
<td>319.3</td>
<td>344.0</td>
<td>340.1</td>
</tr>
<tr>
<td>Intermediate consumption</td>
<td>179.7</td>
<td>169.2</td>
<td>207.7</td>
</tr>
<tr>
<td>Social benefits</td>
<td>296.1</td>
<td>293.3</td>
<td>293.4</td>
</tr>
<tr>
<td>Subsidies</td>
<td>38.7</td>
<td>32.3</td>
<td>37.4</td>
</tr>
<tr>
<td>Interest</td>
<td>51.1</td>
<td>47.1</td>
<td>47.9</td>
</tr>
<tr>
<td>Other current transfers payable</td>
<td>47.8</td>
<td>48.1</td>
<td>47.9</td>
</tr>
<tr>
<td>Gross fixed capital formation</td>
<td>90.9</td>
<td>50.3</td>
<td>67.6</td>
</tr>
<tr>
<td>Capital transfers payable</td>
<td>24.4</td>
<td>63.3</td>
<td>22.3</td>
</tr>
<tr>
<td>Other (2)</td>
<td>5.1</td>
<td>-0.1</td>
<td>-0.7</td>
</tr>
<tr>
<td>Primary balance</td>
<td>235.7</td>
<td>41.2</td>
<td>166.9</td>
</tr>
<tr>
<td>General government balance</td>
<td>184.6</td>
<td>-5.9</td>
<td>119.0</td>
</tr>
<tr>
<td>General Government debt</td>
<td>5,682.6</td>
<td>5,734.0</td>
<td>5,769.5</td>
</tr>
</tbody>
</table>

Source: NSO.

(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.
Taxes on production and imports rose by €60.8 million, led by higher intakes from VAT and duties on the transfer of property. Respectively, this reflects buoyant private consumption and a dynamic property market. Inflows from social contributions also rose at a strong pace, supported by the positive labour market environment.

On the other hand, intakes from current taxes on income and wealth decreased by €16.3 million. This is due to the timing of income tax refunds.

Regarding non-tax revenue, capital and current transfers receivable rose significantly due to higher grants from the European Union. However, this was partially offset by a decline in “other” revenue, mainly due to lower receipts from the IIP.

**Current and capital expenditure increase**

Total government expenditure increased by €260.3 million or 24.7% when compared with the fourth quarter of 2017, due to an increase in both recurrent and capital expenditure items.

Outlays on intermediate consumption posted the largest increase amongst current expenditure items, rising by €83.3 million. This increase was mainly driven by higher outlays related to health and social care, maintenance costs as well as expenditure associated with ongoing capital projects. Other current transfers payable also rose at a significant pace, partly due to transfers to church schools and to the EU budget, and partly reflecting the timing of contributions to the Contingency Reserve.¹

Spending on compensation of employees, social benefits and subsidies also increased in the period under review. On the other hand, interest payments declined.

Outlays on gross fixed capital formation grew at a strong pace on the back of higher spending on road construction and other infrastructural projects. The pick-up in activity on capital projects was also manifest through an increase in capital transfers.

**Debt decreases**

In December 2018, the stock of general government debt amounted to €5,664.7 million, €125.8 million more than its September level. This was largely due to a €143.1 million increase in the stock of long-term securities outstanding (composed of MGS), whose share in total government debt rose by 0.7 percentage point to 83.1%.

Meanwhile, the stock of short-term securities (composed of Treasury bills) declined by €35.5 million, while its share in total debt decreased by 0.8 percentage point to reach 5.1%. The value of loans outstanding rose by €17.6 million, while its share in total debt edged up to 6.9%.

In the final quarter of 2018, the value of currency and deposits outstanding increased by a marginal €0.6 million, while its share in total debt stood at 4.9%. This component increased significantly following two issues of 62+ Government Savings bonds in 2017 and one issue in June 2018.² In fact, at the start of 2017, before these bonds were issued, the ratio of this component in total debt stood at 1.2%.

¹ The Contingency Reserve was set up under the 2014 Fiscal Responsibility Act as a means to tap additional resources in the event of temporary and unforeseen circumstances, to ensure that budgetary targets are met. According to the Act, the Reserve should amount between 0.1% and 0.5% of GDP in any given year, and is to be built up over a period of five years from the entry into force of the legislation. ² As these bonds are non-tradeable, according to ESA methodology, they are classified as deposits.
Headline and cyclically-adjusted developments

**Headline surplus and debt ratios decline during the fourth quarter**

On a four-quarter moving sum basis, the general government balance remained in surplus. However, the surplus-to-GDP ratio declined to 2.0% of GDP from 3.4% of GDP in the third quarter of 2018. Compared with the surplus observed in 2017, the balance deteriorated by 1.4 percentage points (see Chart 5.1).

Developments in revenue items during the quarter under review had a neutral effect on this ratio. While the share of capital revenue in GDP increased by 0.4 percentage point compared with the third quarter, the share of current revenue declined by a similar amount. Meanwhile, the ratio of current and capital spending in GDP rose by 0.8 percentage point and 0.5 percentage point, respectively.

The debt-to-GDP ratio remained broadly unchanged from its September level, despite the Government posting a surplus (see Chart 5.2). This was due to positive deficit-debt transactions, which in turn reflected higher net trade receivables offsetting a drawdown in deposits held by Government.

Compared with 2017, the general government debt ratio declined by 4.2 percentage points.

**Public finances compare favourably with the euro area’s**

Developments in Maltese public finances continue to compare favourably with the euro area average (see Chart 5.3). The euro area general government deficit has narrowed markedly since 2013, reaching 0.9% of GDP on a four-quarter moving sum basis by December 2018. In the same period, the euro area debt ratio edged from just over 90% to 85.2%. However, the Maltese government balance improved at a much faster pace since 2015, achieving a surplus while...
ensuring a declining debt ratio which is well below the 60% threshold referenced in the Stability and Growth Pact.

Cyclically-adjusted balance On a four-quarter moving sum basis, the cyclically-adjusted surplus closed the year 2018 at 1.7% of GDP (see Chart 5.4). This marks the third consecutive year in which a surplus was achieved after correcting for the impact of the economic cycle. However, the surplus thus measured declined significantly from 3.3% of GDP in the period ending September 2018. Compared with developments in the headline balance, the cyclically-adjusted surplus declined at a slightly faster pace, reflecting a widening of the output gap in the period under review.

The deterioration in the cyclically-adjusted balance ratio was driven by a surge in the share of expenditure in GDP, coupled with a slight decline in the revenue-to-GDP ratio (see Table 5.2). The latter decreased by 0.1 percentage point, as a lower share of receipts from income taxes offset an increase in the share of other tax and non-tax revenue in GDP.

The share of cyclically-adjusted expenditure in GDP rose by 1.6 percentage points, driven mainly by higher current spending. This reflects the abovementioned increases in intermediate consumption and current transfers, which rose by more than GDP in this period. At the same time, outlays on compensation of employees and social benefits grew in line with GDP.

3 The cyclically-adjusted balance is corrected for the impact of the economic cycle on government tax revenue and unemployment assistance. The methodology used for computing this adjustment has been revised and thus the analysis included in this chapter is not comparable with previous publications. The new methodology is in line with the approach used by the European Commission but is based on own estimates for fiscal items' elasticities and the output gap. For an overview of the method used by the Commission, see Mourre, G., C. Astarita, and S. Princen (2014), “Adjusting the budget balance for the business cycle: the EU methodology,” European Economy – Economic Papers 536, (DG ECFIN), European Commission.
Meanwhile, the share of interest payments in GDP declined as the prevailing low interest rate environment, coupled with lower financing requirements, led to a level decrease in spending.

Capital expenditure items grew at a faster pace than GDP, on account of higher outlays on gross fixed capital formation.
6. MONETARY AND FINANCIAL DEVELOPMENTS

The Bank’s FCI tightened in the fourth quarter of 2018, and continued to signal tight conditions also by historical standards.

Maltese residents’ deposits with MFIs in Malta expanded at a faster pace during the final quarter of 2018.\(^1\) The shift to overnight deposits persisted, in an environment of low interest rates and a continued preference for liquidity. At the same time, credit growth continued to pick up, mainly reflecting faster growth in credit to residents outside general government. Growth in mortgage loans to households remained strong, while loans to NFCs continued to accelerate. Interest rates on loans and deposits fell further when compared with a year earlier. However, the spread between the two rates remained elevated.

In December 2018, the primary market yield on Treasury bills was stable compared with the rate prevailing at the end of September. Meanwhile, the secondary market yield on MGS fell. In the equity market, domestic share prices ended December higher relative to September.

Monetary and financial conditions

FCI deteriorates slightly

The Bank monitors domestic financial conditions through a summary measure that combines a number of local and international financial variables that influence economic activity.\(^2\)

According to the Bank’s FCI, in the fourth quarter of 2018 financing conditions remained tight from a historical perspective, and deteriorated when compared with the third quarter of 2018, owing mainly to a lower contribution from foreign influences (see Chart 6.1). In particular, euro area equity prices deteriorated markedly in the fourth quarter of 2018. Furthermore, net issues of securities by domestic NFCs, which are quite volatile, decreased in the fourth quarter. Conversely, balance sheet indicators improved marginally reflecting a continued decline in non-performing loans and an increase in credit.

The FCI also tightened in relation to the fourth quarter of 2017, as the recent decrease in euro area stock prices caused the contribution of foreign factors to turn negative. In addition, domestic influences had a slightly larger tightening effect on overall financing conditions.

---

\(^1\) Monetary data analysed in this Chapter are compiled on the basis of the statistical standards found in the Statistics section of the Central Bank of Malta website.

during the last quarter of 2018, as lower net issues of securities and weaker bank profitability offset the improvement in real credit. Notwithstanding the tight financing conditions when compared with historical levels, the FCI remains well within its standard deviation.

**Maltese residents’ deposits continue to expand**

Total deposits held by Maltese residents with MFIs in Malta continued to expand during the final quarter of 2018. In December, the annual rate of change of residents’ deposits stood at 5.5%, higher than the 4.3% registered three months earlier (see Table 6.1). This continued strength in deposit growth is consistent with an elevated level of liquidity in the economy, supported by robust income growth and low interest rates.

Overnight deposits remained residents’ preferred deposit category. Annual growth in this component rose to 7.7% in December, from 7.1% in September. The share of this category in total deposits increased to 76.4%, from 74.9% in December 2017, thereby extending the established upward pattern observed in recent years (see Chart 6.2).

![Chart 6.2](chart.png)

**Table 6.1**

<table>
<thead>
<tr>
<th>Deposits of Maltese Residents</th>
<th>EUR millions</th>
<th>Annual percentage changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overnight deposits</td>
<td>14,439,838</td>
<td>10.2</td>
</tr>
<tr>
<td>of which</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households</td>
<td>8,713,368</td>
<td>15.8</td>
</tr>
<tr>
<td>Non-financial corporations</td>
<td>3,349,529</td>
<td>4.9</td>
</tr>
<tr>
<td>Deposits redeemable at notice of up to three months</td>
<td>73,838</td>
<td>-56.2</td>
</tr>
<tr>
<td>of which</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households</td>
<td>34,973</td>
<td>-51.5</td>
</tr>
<tr>
<td>Non-financial corporations</td>
<td>19,681</td>
<td>-69.5</td>
</tr>
<tr>
<td>Deposits with an agreed maturity of up to two years</td>
<td>2,937,889</td>
<td>-1.6</td>
</tr>
<tr>
<td>of which</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households</td>
<td>2,283,688</td>
<td>-3.1</td>
</tr>
<tr>
<td>Non-financial corporations</td>
<td>257,059</td>
<td>23.7</td>
</tr>
<tr>
<td>Deposits with an agreed maturity above two years</td>
<td>1,455,163</td>
<td>-17.5</td>
</tr>
<tr>
<td>of which</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households</td>
<td>1,272,963</td>
<td>-17.7</td>
</tr>
<tr>
<td>Non-financial corporations</td>
<td>188,197</td>
<td>-29.7</td>
</tr>
<tr>
<td>Total residents’ deposits(1)</td>
<td>18,906,728</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Source: Central Bank of Malta.

(1) Total residents’ deposits exclude deposits belonging to central government.
At the same time, demand for time deposits with an agreed maturity of over two years (deposits outside M3) continued to recover, with annual growth rising to 8.2% from 1.5% three months earlier. On the other hand, growth in deposits with an agreed maturity of less than two years contracted further in December, by 5.6%. As a result, the share of these deposits declined to 15.5% of total deposits, while that of deposits with an agreed maturity above two years edged up to 7.7%. The share of deposits redeemable at notice of up to three months remained marginal.

**Credit to residents expands further**

Credit to Maltese residents expanded by 4.5% in the year to December 2018, after growing by 2.6% in the previous quarter (see Table 6.2 and Chart 6.3). The faster rate of growth was driven by a weaker contraction in credit to general government, on account of changes in banks’ holdings of MGS, as well as a continued strengthening of credit to residents outside the government sector.

The acceleration in credit outside general government was in turn mainly driven by a faster expansion in loans. These rose by 6.6% in the year to December, following growth of 5.7% three months earlier. This reflected robust growth in both loans to households and in loans to NFCs. Loans to households grew by 7.8% on an annual basis, underpinned by a further

<table>
<thead>
<tr>
<th>Table 6.2</th>
<th>MFI CREDIT TO MALTESE RESIDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUR millions</td>
<td>Annual percentage changes</td>
</tr>
<tr>
<td>Credit to general government</td>
<td>2,906,889</td>
</tr>
<tr>
<td>Credit to residents outside general government</td>
<td>10,624,419</td>
</tr>
<tr>
<td>Securities &amp; Equity</td>
<td>442,118</td>
</tr>
<tr>
<td>Loans</td>
<td>10,182,301</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
</tr>
<tr>
<td>Loans to Households</td>
<td>5,525,310</td>
</tr>
<tr>
<td>Mortgages</td>
<td>4,955,547</td>
</tr>
<tr>
<td>Consumer Credit and Other Lending</td>
<td>569,763</td>
</tr>
<tr>
<td>Loans to NFCs(1)</td>
<td>3,830,353</td>
</tr>
<tr>
<td>Total credit to residents</td>
<td>13,531,305</td>
</tr>
</tbody>
</table>

Source: Central Bank of Malta.

(1) NFCs include sole proprietors and non-profit institutions serving households.
expansion in mortgage lending. In contrast, consumer credit and other lending declined marginally (see Chart 6.4).

At the same time, loans to NFCs accelerated further in the fourth quarter, with the annual rate of change reaching 7.1% in December, from 4.6% in September. A sectoral breakdown shows that this pick-up was supported by several sectors, including construction and real estate, accommodation and catering as well as professional, scientific, and technical activities (see Chart 6.5).

At the same time, financial accounts data continue to show increased recourse to non-bank funding sources by NFCs. The share of bank lending in NFC debt extended the decline recorded in recent years, reaching 22.1% in the fourth quarter of 2018 (see Chart 6.6). This decline could reflect a number of factors, such as the increased use of internal funding by companies and banks’ recent tendency to expand loan portfolios with households rather than NFCs. The largest source of NFC debt financing remained intrasectoral lending, although at 40.4% this component’s share in total liabilities was lower than that registered a year earlier. On the other hand, the share of loans from the Rest of World (ROW), which mainly comprises loans from foreign banks or companies, rose to 19.5% of NFC debt. Other loan sources comprised 13.8% of total NFC debt.

---


4 Other loan sources comprise loans from non-bank financial institutions and auxiliaries, households, and government.
Although public issues of debt securities by NFCs increased significantly in recent years, the share of debt securities in total NFC debt remained limited at 4.1% (see Chart 6.7). As at December 2018, €1.3 billion in corporate debt was listed on the Malta Stock Exchange (MSE), 10.2% higher than the outstanding stock twelve months earlier. Issuance of equity capital has also increased in recent years, suggesting increased usage of capital markets by NFCs, particularly larger companies. However, equity issuances have levelled off somewhat in recent quarters.

**Interest rate spread between deposit and lending rate remains elevated**

Interest rates on residents’ deposits with MFIs in Malta declined in the year to December 2018, with the weighted average deposit rate offered to households and NFCs going down by 5 basis points to 0.33% (see Table 6.3). This was mainly driven by a drop in rates on households’ longer-term deposits.

Meanwhile, the weighted average lending rate paid to resident MFIs by households and NFCs fell by 9 basis points, to 3.55%. This decrease was reflected in both rates paid by households and those charged to NFCs, although lending rates to NFCs remained above those charged to households, reflecting different assessments of credit risk.

The spread between the weighted average lending rate and the deposit rate closed the quarter under review at 322 basis points, slightly narrower than its level of 326 points 12 months earlier. The elevated level of the spread (from a historic perspective) suggests that the transmission of the ECB’s monetary policy easing measures to retail lending rates remained weaker than that to deposit rates.

**Bank Lending Survey (BLS) indicates unchanged credit standards, terms and conditions**

Results from the January 2019 BLS show that credit standards, terms and conditions on loans to NFCs in Malta remained unchanged during the fourth quarter of 2018. In contrast, the demand for credit increased somewhat. Going forward, all participating banks expected credit standards to remain unchanged in the first quarter of 2019. As regards credit demand, half of the respondent banks anticipated an increase, with the remaining banks expecting stable demand.

Credit standards and terms and conditions for house purchases were also unchanged in the last quarter of 2018. In contrast, views on demand for credit were mixed. With regard to expectations of credit standards in the first quarter of 2019, respondent banks foresaw no change. Most banks neither expected changes in the demand for credit.

---

5 A number of companies have obtained capital from the recently launched MSE platform Prospects, which is mainly geared towards SMEs.

6 Basis points are rounded to the nearest whole number, and hence may not exactly match the figures given in Table 6.3.
Meanwhile, banks participating in the BLS reported unchanged standards, terms and conditions for consumer credit and other lending during the fourth quarter. Banks’ assessments of the demand for credit were mixed. No changes to credit standards and demand were foreseen during the first quarter of 2019.

The January BLS posed ad hoc questions on banks’ access to wholesale and retail funding and on their risk transfer capability as a result of the prevailing situation in financial markets. In this regard, respondent banks generally reported unchanged market access to funding and risk transfer capabilities. One bank however, reported some impact on its retail funding operations and the unsecured segment of its inter-bank money market in the previous six months. This bank also reported some deterioration in access to retail funds which was expected to persist in the following six months.

Banks were also asked to gauge the impact of the new regulatory or supervisory requirements relating to capital, leverage, liquidity or provisioning on their assets, capital and funding conditions as well as on their lending policies. Participating banks did not report any changes in their assets, risk-weighted assets, capital and funding conditions in the previous six months. Similarly, no changes were reported in credit standards or margins as a result of new regulatory or supervisory requirements. This assessment broadly also applied for the six months ahead, except that one bank anticipated a slight increase in its risk-weighted assets.

Finally, participating banks claimed that their non-performing loan (NPL) ratio had not affected their credit standards, and credit terms and conditions in the preceding six-month period and in

---

### Table 6.3

**INTEREST RATES ON DEPOSITS AND LOANS**

*Percentages per annum to residents of Malta; weighted average rates as at end of period*

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total deposits</strong>&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec.</td>
<td>0.69</td>
<td>0.48</td>
<td>0.38</td>
<td>0.37</td>
</tr>
<tr>
<td>Mar.</td>
<td>0.37</td>
<td>0.36</td>
<td>0.35</td>
<td>0.33</td>
</tr>
<tr>
<td><strong>Overnight deposits</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households</td>
<td>0.12</td>
<td>0.06</td>
<td>0.07</td>
<td>0.06</td>
</tr>
<tr>
<td>Non-financial corporations</td>
<td>0.11</td>
<td>0.03</td>
<td>0.04</td>
<td>0.06</td>
</tr>
<tr>
<td><strong>Time deposits (less than 2 years)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households</td>
<td>1.11</td>
<td>0.79</td>
<td>0.78</td>
<td>0.75</td>
</tr>
<tr>
<td>Non-financial corporations</td>
<td>0.85</td>
<td>0.65</td>
<td>0.54</td>
<td>0.59</td>
</tr>
<tr>
<td><strong>Time deposits (more than 2 years)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households</td>
<td>2.99</td>
<td>2.64</td>
<td>2.41</td>
<td>2.28</td>
</tr>
<tr>
<td>Non-financial corporations</td>
<td>2.26</td>
<td>2.03</td>
<td>1.98</td>
<td>2.04</td>
</tr>
<tr>
<td><strong>Total Loans</strong>&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec.</td>
<td>3.81</td>
<td>3.68</td>
<td>3.64</td>
<td>3.64</td>
</tr>
<tr>
<td>Mar.</td>
<td>3.64</td>
<td>3.61</td>
<td>3.58</td>
<td>3.55</td>
</tr>
<tr>
<td><strong>Households and NPISH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households</td>
<td>3.60</td>
<td>3.52</td>
<td>3.48</td>
<td>3.46</td>
</tr>
<tr>
<td>Non-financial corporations</td>
<td>4.10</td>
<td>3.93</td>
<td>3.91</td>
<td>3.93</td>
</tr>
<tr>
<td><strong>Non-financial corporations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households</td>
<td>3.12</td>
<td>3.20</td>
<td>3.26</td>
<td>3.28</td>
</tr>
<tr>
<td>Non-financial corporations</td>
<td>3.12</td>
<td>3.25</td>
<td>3.23</td>
<td>3.22</td>
</tr>
<tr>
<td><strong>Spread</strong>&lt;sup&gt;(2)&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec.</td>
<td>0.05</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Mar.</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Source: Central Bank of Malta.

<sup>(1)</sup> Annualised agreed rates on outstanding euro-denominated amounts belonging to households (incl. NPISH) and non-financial corporations.

<sup>(2)</sup> Difference between composite lending rate and composite deposit rate.
general no impact was expected in the six months ahead. However, one bank expected some tightening in the bank’s terms and conditions for loans to enterprises.

The money market

Domestic money market interest rates were unchanged

During the fourth quarter of 2018 the ECB maintained its key interest rates unchanged. In euro area money markets, the three-month EURIBOR rose marginally to -0.31% from -0.32% at the end of September. Meanwhile, secondary market yields on three-month German government securities, which act as a benchmark for euro area yields, fell to -0.87% from -0.60% (see Chart 6.8).

In the domestic primary market, the yield on three-month Treasury bills stood unchanged from the rate prevailing at the end of September, at -0.35%. As the yield on the euro area benchmark fell during this period, the spread between this rate and the yield on domestic three-month Treasury bills widened. At the end of December, it rose to 63 basis points from 43 basis points at end-September.

The Government issued €427.8 million in Treasury bills during the fourth quarter of 2018, €107.2 million more than the amount of €320.6 million issued between July and September.

The capital market

During the fourth quarter of 2018, the Government issued two new MGS with a total value of €150.0 million. Meanwhile, three public limited companies announced new bond issues: Melita Finance plc issued €9.25 million in secured bonds, Phoenixia Finance Company plc issued €25.0 million in unsecured bonds and Best Deal Properties Holding plc issued €16.0 million in secured bonds. By the end of December 2018, 12 firms had listed bonds through Prospects,
up from nine at the end of September. Hence, €51.0 million worth of bonds were issued through this facility in 2018.

In the secondary market, government bonds turnover rose to €64.5 million during the quarter under review, compared with €47.2 million in the preceding quarter. In contrast, over the same period, turnover in corporate bonds fell to €25.3 million, from €27.4 million.

Secondary market yields on Maltese government bonds fell during the fourth quarter of 2018 (see Chart 6.9). The yield on five-year bonds dropped significantly and ended December at 0.44%, from 0.67% at the end of September. Similarly, the yield on ten-year bonds fell by 21 basis points, and ended September at 1.33%. In the euro area, the yields on five-year and ten-year bonds fell by 14 and 23 basis points, ending the year at -0.27% and 0.25%, respectively. Consequently, the spread against the ten-year euro area benchmark widened marginally to 108 basis points in the fourth quarter of 2018, from 107 basis points three months earlier.

**MSE share index ends December at higher levels**

Share prices in Malta, as measured by the MSE Equity Price Index rose during the fourth quarter of 2018. At end-December, they stood 3.0% higher than three months earlier and 0.1% above their level in December 2017 (see Chart 6.10). The MSE Equity Total Return Index, which accounts for changes in equity prices and dividends, rose by 3.1% since the end of September.

Equity turnover rose to €22.5 million during the fourth quarter of 2018, from €21.8 million in the September quarter.