CENTRAL BANK OF CYPRUS
EUROSYSTEM

ECONOMIC BULLETIN

JUNE 2018

NICOSIA - CYPRUS

1 Introduction
2 Macroeconomic Developments and Projections

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Note: The cut-off date for data in this *Bulletin* is 22 May 2018.

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ABBREVIATIONS

BLS	Bank Lending Survey
BoE	Bank of England
BPM	Balance of Payments and International Investment Position Manual
CA	Current Account
CBC	Central Bank of Cyprus
CCB	Cyprus Cooperative Bank
CPPI	Commercial Property Price Index
Cystat	Statistical Service of the Republic of Cyprus
DLS	Department of Lands and Surveys
ECB	European Central Bank
EER	Effective Exchange Rate
EONIA	Euro Overnight Index Average
ESA	European System of Accounts
ESI	Economic Sentiment Indicator
EU	European Union
EURIBOR	Euro Interbank Offered Rate
Eurostat	Statistical Office of the European Union
FED	Federal Reserve
FOMC	Federal Open Market Committee
GDP	Gross Domestic Product
HICP	Harmonised Index of Consumer Prices
IIP	International Investment Position
IFRS	Interational Financial Reporting Standard
IMF	International Monetary Fund
LFS	Labour Force Survey
MFIs	Monetary Financial Institutions
NEER	Nominal Effective Exchange Rate
NACE	Statistical classification of economic activities in the European Union
NFCs	Non-Financial Corporations
NPFs	Non-Performing Facilities
OPEC	Organisation of the Petroleum Exporting Countries
QE	Quantitative Easing
REER	Real Effective Exchange Rate
RPPI	Residential Property Price Index
SDW	Statistical Data Warehouse
SPEs	Special Purpose Entities
UK	United Kingdom
US	United States of America

Introduction

Based on the cut-off date (22 May 2018) for the statistical data used in the preparation of the present *Bulletin*, real GDP in Cyprus grew by 3,9% in 2017 (the best performance in the last decade or so) compared with 3,4% the year before. The upward trend in domestic demand, both investment and private consumption, as well as the acceleration in exports of services, mainly tourism, were the main drivers of growth. Private consumption continues to grow considerably despite increased loan repayments, while growth was recorded in almost all sectors of the economy (excluding financial and insurance activities as a consequence of the necessary deleveraging of loans).

Significant growth was also recorded in 2018Q1 with real GDP expanding by an annual rate of 3,8% (seasonally adjusted), compared with an increase of 4% in the previous quarter and 3,8% in the same quarter of 2017. For the whole of 2018, growth is expected to fluctuate around 4%, while a slight deceleration is expected in 2019. These positive forecasts are based on estimates for continued growth in investment and private consumption. The positive prospects of the economy are expected to be sustained through the improvement in competitiveness recorded in recent years, reflecting the reduction in production costs, which have had a downward impact on the prices of goods and services.

The aforementioned developments in GDP growth have had, albeit with a lag, a positive impact on the labour market, with employment registering an increase in almost all areas of economic activity. At the same time, unemployment, though still high, has been steadily declining since the historical high rate of 17,6% in 2015Q1. Based on the Labour Force Survey, the unemployment rate fell to 10,1% in 2017Q4 compared with 11,1% in 2016Q4. Harmonised unemployment (seasonally adjusted) as estimated by Eurostat, stood at 9,1% in March 2018 compared with 12,3% in March 2017.

It is important to note that GDP growth has not been based either on unsustainable fiscal expansion or on unsustainable lending. Public finances have improved significantly, and private consumption growth is mainly driven by growth in employment and household disposable income. At the same time, investment has been mainly financed by private domestic as well as foreign capital. Therefore, the economic growth has been based on solid foundations and is sustainable provided that certain conditions are fulfilled. For example, the consolidation process, especially in the banking sector, needs to continue without delays. The future course of the economy will also be determined by the extent to which structural reforms are implemented in both the private and public sector. Some reforms have either begun or are pending.

The better than expected economic growth has been recognised by the international credit rating agencies, some of which have upgraded Cyprus's sovereign rating. Nevertheless, the current ratings - still below investment grade (in some cases only marginally so) - have been affected by the biggest problem facing the economy, which is the very high percentage of non-performing facilities (NPFs) in the banking sector, albeit on a decreasing trend. Risks related to the high rate of both private and public debt levels are also identified.

Since December 2017, domestic headline inflation, as measured by the HICP, has returned, albeit temporarily, to negative levels. More specifically, during the first four months of 2018 HICP decreased by 0,6% compared with an increase of 1,4% in the corresponding period of 2017, on the back of negative prices in all inflation sub-categories, apart from the prices of services. The negative trend of headline inflation during the first four months of 2018, although temporary, mainly reflects the fact that the prices of non-energy industrial goods continued to record significant yearly decreases as a result of increased competition, lower costs of production and the ongoing downward correction in the prices of various products following the 2013 crisis. Sizeable decreases were also recorded in unprocessed food prices, thus contributing significantly to the overall negative inflation of the first four months of 2018. It should be noted that, in general, the developments in unprocessed food inflation are mainly driven by exogenous factors, which contribute to the marked volatility of this inflation category. The abovementioned reductions were partly offset by increases in the prices of services.

As far as developments in the banking sector are concerned, short-term outflows of deposits have been observed since the end of 2017, reflecting rumours of a possible resolution of the Cyprus Co-operative Bank (CCB) through a bail-in process. Outflows were contained significantly after the Government deposited (against collateral) €2,5 billion in CCB. This action aided the procedures regarding the selling of the CCB.

In 2018Q1 the level of new loan contracts generally exhibited a stabilising trend. In March 2018, the annual rate of change of total loans recorded a 2% decrease as a consequence of the ongoing deleveraging effort of older private sector loans and despite the continued rise of new loan contracts.

The level of the problematic loans in the banking sector as well as the increasing number of supervisory regulations and requirements, present huge challenges for the sector in the years to come. In particular, the level of NPFs continues be the main problem of the banking sector, despite the progress achieved in recent years. Specifically, during the period between end of 2016 and December 2017, NPFs declined by €3,2 billion. The systemically important banking institutions that are directly supervised by the ECB have submitted to both the CBC and the ECB their updated 2018 strategic plans for the further reduction of NPFs over the next three years.

Despite the reduction in NPFs, the rate of loan restructurings in 2017 has been reduced. This is an indication that non-restructured NPFs cannot be dealt with only through loan restructuring. An important reason for this is the level of terminated NPFs, i.e. the level of non-performing facilities currently handled by the loan recovery and restructuring departments of banks which account for

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about 50% of all NPFs. Three systemically important banks have contracted foreign companies specialised in NPFs management. In order to deal with the problem, the credit institutions need to move forward with more resolute measures, as used in other countries, and make use of all tools at their disposal. At the same time, the relevant legal framework and procedure implementation need further improvement and reinforcement. This includes the legislative framework for foreclosures and insolvency as well as the approval of the law for loan securitisation. In addition, beyond loan restructurings, banks are now largely implementing other solutions to draw down the stock of NPFs such as debt-to-asset swaps and selling NPFs. Banks have the primary responsibility for finding solutions to deal with the problem of NPFs but, of course, the CBC has not remained passive. The CBC is in constant contact with the banks, the ECB and the Ministry of Finance in order to find effective solutions to tackle the problem efficiently. For example, in March 2018, the CBC compiled and submitted to the Ministry of Finance a draft bill that regulates loan securitisations. It also submitted views on proposed amendments regarding the legislation dealing with the issues of foreclosures, the selling of loans, fragmentation of mortgages, insolvency, trapped buyers and banking secrecy. The effort to reduce NPFs needs to be intensified as the delay in solving this problem is at the expense of all parties involved with a potentially negative impact on the economy.

Macroeconomic Developments and Projections

1. International Environment: main developments

- *Global economic activity continues to remain strong and broad-based during 2018Q1.*
- *New risks for European and global growth on the back of import tariff announcements by the US government as well as various geopolitical developments.*
- *Depreciation of the euro exchange rate due to the potential uncertainty in Italy, the economic slowdown in the euro area and the consequent change in expectations regarding the ECB's exit from unconventional monetary policy.*
- *Euro area economic activity expected to remain robust and broad-based in 2018 despite the slowdown observed in 2018Q1.*
- *Significant rise in oil prices since the beginning of the year due to the decline in OPEC's production and certain geopolitical developments, especially in relation to Iran.*
- *Increased global inflation in the first months of 2018, partly due to higher oil prices.*
- *Subdued euro area core inflation, with a gradual increase expected over the medium term.*
- *Further contraction in monetary policy through an increase in interest rates by the US Federal Reserve continued expansionary monetary policy by the ECB with low interest rates remaining unchanged even though the monthly purchase of bonds has been reduced*

1.1 External developments

GDP growth[1]

Global economic activity recorded a significant improvement in 2017, while continuing to stay strong and broad-based in 2018Q1. However, the recent import tariff announcement by the US government creates new risks for European and global growth. In fact, the indicators of economic activity in international trade were already pointing to some deceleration at the beginning of the year. In addition, the increased geopolitical risks have led to a significant increase in oil prices.

Growth rates in the developed economies are generally expected to exceed GDP potential growth both in 2018 and 2019, before they decelerate in 2020, while emerging and developing economies will continue to grow further. The accelerated pace of growth of the global economy in 2018 mainly reflects the strong growth in the euro area, the US, Japan and China, whose economies in 2017grew beyond initial estimates. Global growth has never been as strong and broad since 2010, reflecting the increased investment activity in developed but also in several others economies. This development is expected to help eliminate some remaining legacies of the 2008-09 financial crisis, accelerating the exit from unconventional monetary support measures in advanced economies, while encouraging investment and further improving the labour market.

More specifically, overall economic activity in the euro area is expected to remain robust

1. GDP projections are estimated as the average of the most recent projections from: The Economist Poll of Forecasters (10 May 2018), the European Commission (European Economic Forecast, Spring 2018) and the IMF (World Economic Outlook, April 2018).

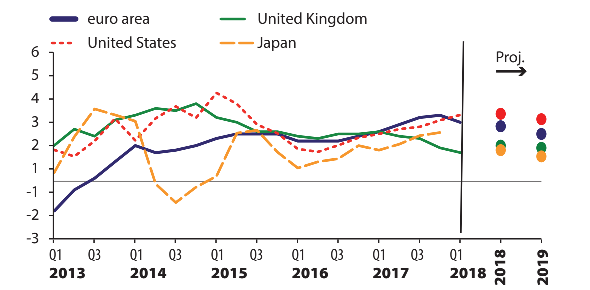
and broad-based in 2018, despite the slowdown observed in 2018Q1 (**Chart A.1**). This slowdown may be partly due to a correction following the intense economic activity recorded at the end of 2017 but also due to other temporary factors. Domestic demand (both private consumption and investment) remains strong in the euro area, supported by the improvement observed in employment and rising household wealth. The broad-based global growth also offers a further boost to euro area exports.

In the US, growth rates for 2018 and 2019 have been revised upwards, mainly due to the higher than expected growth of 2017, the stronger trend in external demand and the expected impact of recent fiscal policy changes. In the UK, GDP is expected to slow down in 2018 and 2019 with investment remaining weak due to Brexit's uncertainty. A deceleration in economic activity is also expected in Japan for the period 2018 - 2019 due, in part, to declining industrial production and the slowdown of net exports.

Inflation[2]

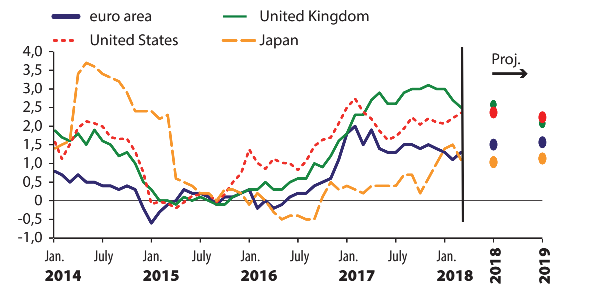
Global inflation in the first months of 2018 fluctuated around the same levels as in 2017Q4, mainly driven by higher oil prices (**Chart A.2**). Global core inflation (inflation excluding energy and food) continued to remain at low levels, mainly reflecting moderate wage growth as well as the current level of the global economic slack. According to projections by international organisations

CHART A.1 **GDP in selected countries**
(annual change %, seasonally adjusted %)



Source: Eurostat.
Note: The projections are for the year and are calculated as averages of the most recent projections from the European Commission, The Economist poll and the IMF.

CHART A.2 **Inflation in selected countries**
(annual change, %)



Sources: Eurostat, SDW (ECB).
Note: The projections are for the year and are calculated as averages of the most recent projections from the European Commission, The Economist poll and the IMF.

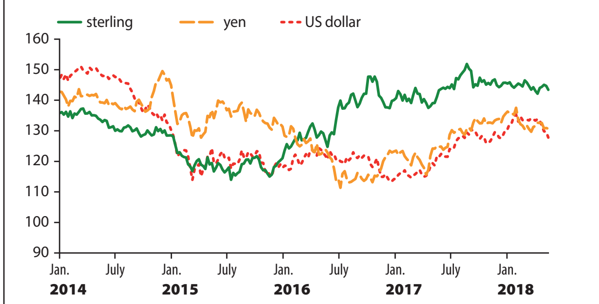
2. Inflation projections are estimated as the average of the most recent projections from: The Economist Poll of Forecasters (10 May 2018), the European Commission (European Economic Forecast, Spring 2018) and the IMF (World Economic Outlook, April 2018).

and analysts, inflation in selected advanced countries such as the US, Japan and the euro area, is expected to fluctuate around the same or even higher levels in 2018 and 2019 compared with 2017 (**Chart A.2**, p. 14). This development is attributed to the expected continuous global economic recovery, higher wages and diminishing global economic slack. In the UK, inflation is expected to stabilise in 2018 and decelerate in 2019 compared with 2017, mainly due to the elimination of the impact of sterling depreciation on inflation.

Exchange rates

The euro exchange rate against major currencies exhibited a broadly downward trend in 2018Q1, despite some fluctuations (**Chart A.3**). This was mainly due to changes in market expectations regarding the ECB's exit from unconventional monetary policy measures, given the deceleration in euro area GDP during 2008Q1, and the persistence of euro area inflation below the ECB's target. The euro exchange rate was also negatively affected by the political uncertainty in Italy as well as the easing of tensions between the USA and China regarding import tariffs (a development that led to an appreciation of the dollar). More specifically, between 29 December 2017 and 18 May 2017 (latest available data), the euro exchange rate depreciated by 1,9%, 1,6% and 3,6% against the dollar, sterling and yen, respectively.

CHART A.3 **Euro exchange rate against selected currencies**
(weekly data, 2000=100)

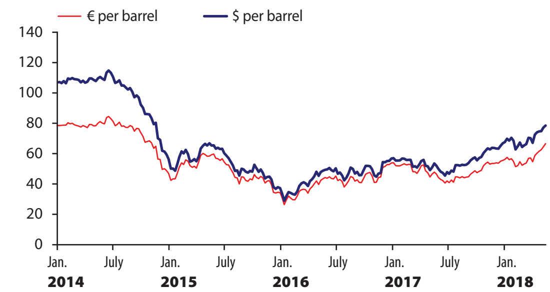


Source: Bloomberg.
Note: A higher (lower) index level represents a nominal appreciation (depreciation) of the euro against the other currencies.

Oil

The price of Brent crude oil increased significantly in the first months of 2018 (**Chart A.4**). The increase was driven mainly by the anticipated further decrease in oil production by OPEC as well as the general improvement in global economic activity, and hence the subsequent increase in oil demand. Geo-political tensions, such as the US sanctions against Iran, also boosted significantly the price of oil. According to the latest available data, the closing price of Brent crude oil stood at $78,51 per barrel on 18 May 2018, up from $66,87 on 29 December 2017.

CHART A.4 **Closing prices of oil (Brent)**
(weekly data)

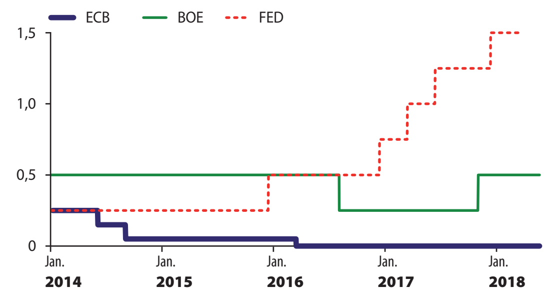


Source: Bloomberg.

International official interest rates

Since 2017, the major central banks, excluding the ECB, have adopted a more contractionary monetary policy stance. Specifically, the Federal Reserve increased its base rate range twice during 2017 (the upper limit increased from 0,75% to 1,00% and then 1,25%, respectively) and once in March 2018 (to 1,75%). The BoE increased interest rates once (from 0,25% to 0,5%). In both economies, the rate hikes came mainly as a result of inflation exceeding the medium-term target of 2% (**Chart A.5**). In contrast, the ECB continued its expansionary monetary policy by maintaining its main refinancing operations rate unchanged at 0% (although the ECB's quantitative easing programme, i.e. purchase of bonds, was reduced from €60 billion to €30 billion per month as from January 2018).

CHART A.5 **Official interest rates**
(% per annum)



Sources: ECB, Fed, BoE.

1.2 Monetary developments in the euro area

Inflation

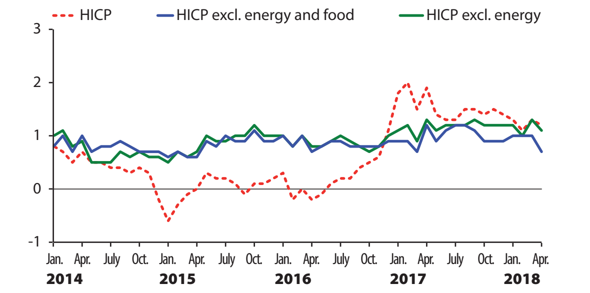
According to the latest available data, euro area inflation reached 1,2% in April 2018 compared with 1,3% in March 2018 and 1,9% in April 2017 (**Chart A.6**). This marginal deceleration of inflation in April 2018 was mainly driven by smaller increases in the prices of services. In general, the level of economic slack stemming from the current economic activity, the weak wage growth and the pressures on production costs are still hampering price formation. As a result, core inflation continues to remain subdued. Over the medium term, a gradual increase in core inflation is expected, mainly supported by the ECB's expansionary monetary policy measures, expected ongoing economic growth, the gradual absorption of the slack in the economy and the expected rise in wages.

Given the current energy futures price contracts, HICP inflation is expected to accelerate in the coming months, mainly driven by the recent pick up in energy prices. The euro area inflation projections of international organisations and analysts converge to 1,5% in 2018 and around 1,6% in 2019.

Reference rates and ECB interventions

The ECB kept its key interest rates unchanged during the first five months of 2018 to 0,25%, 0% and -0,40% for the main refinancing operations rate, marginal lending facility rate and deposit facility rate, respectively. The

CHART A.6 **Inflation in the euro area**
(annual change, %)



Source: Eurostat.

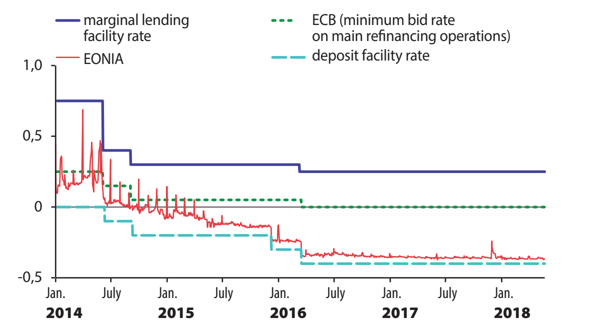
EONIA curve also remained unchanged, indicating that markets do not expect further change in the deposit facility rate (**Chart A.7**). EONIA closed at -0,37% on 23 May 2018, remaining at the same level as last year. It should be noted that the ECB has continued to support money markets through standard liquidity-providing operations and non-standard measures in order to support the return of euro area inflation back to the medium-term target of below but close to 2%. However, the ECB's quantitative easing programme, i.e. the purchase of bonds, was cut back from €60 billion to €30 billion per month as from January 2018, and is expected to last until September 2018.

Credit expansion: loans

Loans to the euro area private sector have continued to record positive growth rates in 2018Q1, attributed to both non-financial corporations (NFCs) and households (**Chart A.8**). This development mainly reflects banks' excess liquidity and low euro area lending rates, brought about by the ECB's expansionary monetary policy, as well as the improved terms and conditions and credit standards applied by banks for the approval of new loans.

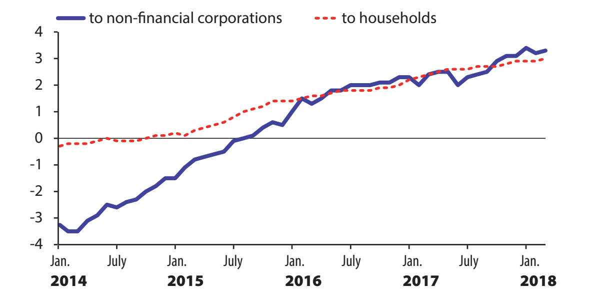
More specifically, according to the results of the Bank Lending Survey (BLS) in the euro area, net loan demand has been continuously increasing between 2014Q1 and 2018Q1 (latest available data). At the same time, credit standards for loans to the above mentioned sectors have eased since mid-2014. According to the BLS, the participating banks expect

CHART A.7 **ECB reference rates and EONIA**
(% per annum, daily data)



Source: Bloomberg.

CHART A.8 **Loans to the private sector: euro area**
(annual change %, seasonally adjusted data)



Source: SDW (ECB).

credit standards for loans to enterprises and households for house purchase to further ease in 2018Q2 compared with 2018Q1. Credit standards for loans to households for consumption and other lending purposes are also expected to ease further. Net loan demand by both households and enterprises is expected to further increase in 2018Q2 compared with 2018Q1.

Despite the above positive monetary developments, the high level of NPFs in some member states continues to hinder credit growth dynamics in the euro area, with a negative impact on the real euro area economy. In this respect, an effective and successful solution to the NPFs problem is considered imperative. The ECB is already working towards this direction, while a comprehensive and coordinated European strategy that includes a wide range of instruments and tools for addressing NPFs is underway.

2. Domestic Developments

- *Negative inflation during the first four months of the year, despite the increase in the prices of services.*
- *Short-term deposit outflows amid rumours associated with the viability of the CCB, which were considerably curtailed after the government's move to strengthen confidence in the CCB.*
- *Containment of the annual growth rate of loans to the domestic private sector due to increased repayments, in particular through alternative means of debt settlements.*
- *An increase in NPFs due to the implemen-*

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tation of the new IFRS 9[3], despite the downward trend in the last three years.

- *Further decrease in domestic interest rates and narrowing of the spread between domestic and euro area interest rates.*
- *Ongoing growth of GDP, with continued growth in domestic demand and exports.*
- *Further signs of declining unemployment.*
- *Continuation of gradual real estate market recovery, with real estate demand rising sharply and prices registering relatively small increases, following previous significant cumulative declines.*
- *Continuation of primary surpluses.*

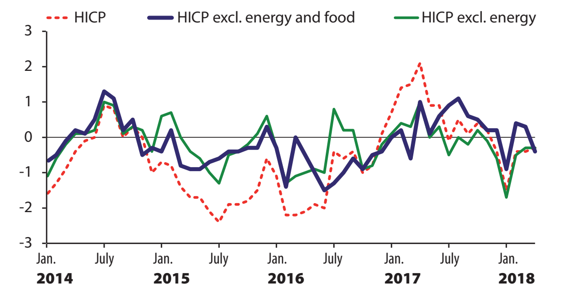
2.1 Domestic Prices, Monetary Aggregates and Labour Costs

Inflation

Since December 2017, domestic headline inflation, as measured by the Harmonised Index of Consumer Prices (HICP), returned, albeit temporarily, to negative levels. HICP inflation decreased by 0,3% in April 2018 compared with an increase of 2,1% in the corresponding month of 2017. This development was mainly attributed to significant decreases in non-energy industrial goods prices.

With regard to the first four months of 2018, HICP decreased by 0,6% compared with an increase of 1,4% in the corresponding period of 2017 (**Chart A.9** and **Table A.1**), on the back of negative prices in all inflation sub-categories, apart from services. More specifically, the negative inflation trend during the first four months of 2018 mainly

CHART A.9 **Inflation in Cyprus**
(annual change, %)



Source: Eurostat.

TABLE A.1 **Inflation in Cyprus**

		Annual change (%)				
	Weights[(1)]	Jan.-Apr. 2017	Jan.-Apr. 2018	Apr. 2017	Mar. 2018	Apr. 2018
HICP	1.000,00	1,4	-0,6	2,1	-0,4	-0,3
Unprocessed food	70,16	6,5	-5,8	7,2	-4,7	0,5
Processed food	165,88	-0,8	-0,6	-1,4	-0,9	-0,3
Energy	84,01	14,2	-0,3	16,5	-1,7	0,0
Services	460,13	0,6	1,0	2,1	1,8	0,5
Non-energy industrial goods	219,83	-0,7	-2,5	-1,2	-2,7	-2,3
HICP excluding energy	915,99	0,5	-0,7	1,0	-0,3	-0,3
HICP excluding energy and food	679,96	0,2	-0,1	1,0	0,3	-0,4

Source: Eurostat.
(1) Based on the weight for 2018.

3. International Financial Reporting Standard IFRS 9.

reflects the continuous significant yearly decreases in non-energy industrial goods prices, mainly as a result of increased competition (including off-season or mid-season sales/special offers). Lower cost of production and the ongoing general corrective pattern in the prices of various products following the 2013 crisis also had a negative contribution. Sizeable decreases were also recorded in the unprocessed food prices category, thus contributing significantly to the overall negative inflation during the first four months of 2018. It should be noted that, in general, the developments in unprocessed food inflation stemmed from exogenous factors. The decrease in both non-energy industrial goods and unprocessed food prices was partly offset by the observed increase in service prices. In particular, services inflation registered a significant increase during the first four months of 2018, reflecting the strong performance of the tourism related categories. The negative inflation path observed during the first months of 2018 in Cyprus is expected to reverse in the coming months, with prices registering overall positive growth for the year. This is mainly reflecting robust domestic economic activity, the rise in services prices over the course of the forthcoming months and the increase in oil prices compared with the previous year (see "Macroeconomic forecasts for the Cyprus economy", p. 50).

Inflation excluding energy registered a decrease of 0,7% in the first four months of 2018 compared with an increase of 0,5% in the corresponding period of 2017 (**Chart A.9** and **Table A.1**, p. 20). Excluding food and energy, core inflation stood at -0,1% during the first four months of 2018 compared with 0,2% in the corresponding period of 2017 (**Chart A.9** and **Table A.1**, p. 20). The marginal negative trend in core inflation mainly reflects the significant negative impact of non-energy industrial goods prices, despite the positive impact of increased demand for services (especially tourism related services) and strong domestic economic growth. It is noted that core inflation is important as it shows the general price trends excluding the impact of exogenous and volatile factors.

Monetary developments[4,5]

Despite the steady economic growth, the annual growth rate of domestic private sector deposits slowed down in 2018Q1 amid rumours of overwhelming difficulties at the CCB and a possible need of a bail-in. These rumours were dissipated after the government's move to strengthen confidence in the CCB. Specifically, on 4 April 2018, the government deposited €2,5 billion in the CCB using €7,6 billion[6] of CCB assets(including all of its NPFs) as collateral. At the same time, the annual growth rate of the domestic private sector loans did not record significant fluctuations in 2018Q1 and remained at very low levels. The containment in the growth of loans is, on the one hand, attributed to the stabilisation in the level of new loan contracts and on the

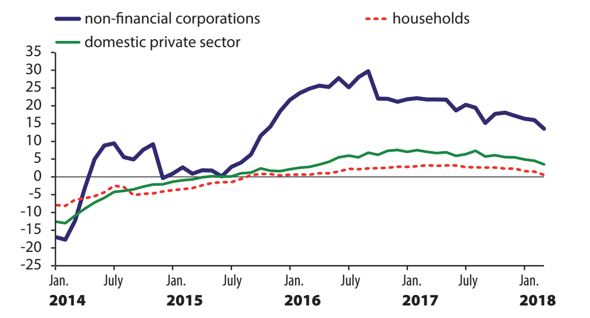
4. For a detailed explanation of the methodology and technical analysis of monetary aggregates, see the Technical Notes on p. 63.
5. The analysis on monetary aggregates (deposits and loans) in this section of the *Economic Bulletin* focuses on domestic residents excluding SPEs. SPEs are included in the non-residents category.
6. The total value of collateral taking into account the value of the properties securing the NPFs is close to €10 billion.

other to the increased repayments and debt settlements, partly associated with NPFs.

Despite the recording of deposit inflows in the domestic banking sector from the middle of 2015 to the end of 2017, outflows were observed in the first three months of 2018, leading to a deceleration in the annual growth rate of deposits. In particular, domestic private sector deposits recorded an annual increase of 3,6% in March 2018 compared with 5,5% in December 2017 and 7,1% in March 2017 (**Chart A.10**). However, following the government's deposit in the CCB, and as indicated by the first available total deposits data for April 2018, the outflows from the CCB have been reduced to manageable levels. Non-residents' deposits, on the other hand, which by their nature are not stable over time, recorded a negative annual growth rate of -8,6% in March 2018 compared with -2,1% in December 2017 and 4,6% in March 2017 (**Chart A.11**).

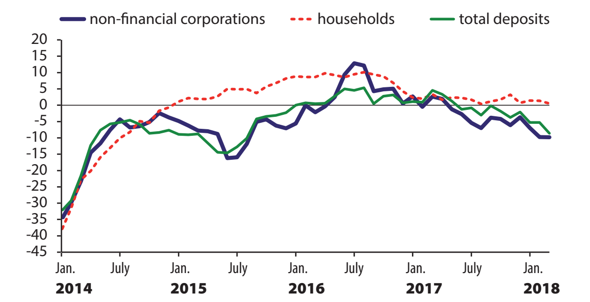
Turning to lending, in general, a stabilisation in the level of new loan contracts was observed in 2018Q1 compared with 2017Q1. On the other hand, existing debt settlements, through debt to asset swaps agreements as well as loan repayments, have kept the annual growth rates of domestic private sector loans at positive but low levels (**Chart A.12**). Specifically, the annual growth rate of domestic NFCs loans stood at 1,3% in March 2018 compared with 0,5% in December of 2017 and -1,2% in March 2017 (**Chart A.12**). Domestic household loans recorded a marginal yearly increase of 0,1% in March 2018, as in December of 2017, compared with a marginal decrease of 0,1% in March 2017 (**Chart A.12** and **Table A.2**, p. 24).

CHART A.10 **Deposits of the domestic private sector**
(annual change, %)



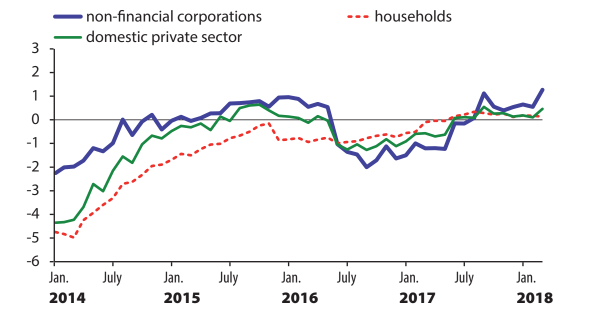
Source: CBC.

CHART A.11 **Deposits of non-residents: Cyprus**
(annual change, %)



Source: CBC.

CHART A.12 **Loans to the domestic private sector**
(annual change, %)



Source: CBC.

Furthermore, according to the results of the April 2018 BLS for 2018Q1, net demand for loans both from households and enterprises continued registering further increases as from the beginning of 2015. As regards the criteria for granting loans, these remained unchanged in 2018Q1 for loans to enterprises as well as for housing and consumer and other lending (**Table A.3**). In other words, banks continued to apply in general the same strict credit standards that were adopted before 2015.

The implementation of stricter credit standards for loans is to a large extent the result of the high level of NPFs that continue to burden the banks' portfolios, despite their downward trajectory from early 2015 until the end of 2017. In particular, from February 2015 to December 2017, the level of NPFs decreased by €7,2 billion. The gradual decrease of NPFs is mainly due to increased repayments, restructurings reclassified as performing facilities at the end of the observance period, write-offs and debt settlement mainly with large enterprises through swaps with immovable property. It is noted that the level of NPFs increased in January of 2018 (latest available data) due to the implementation of the new IFRS 9[7] as from 1 January 2018.

TABLE A.2 **Loans to domestic households [(1),(2)]**

	Outstanding balance as % of total[(3)]	Annual percentage change					
		2016 Dec.	2017 Mar.	2017 June	2017 Sep.	2017 Dec.	2018 Mar.
Domestic households	100,0	-0,7	-0,1	0,2	0,3	0,1	0,1
1. Consumer credit	12,1	-0,8	-0,5	0,7	1,5	1,7	2,1
2. Lending for house purchase	57,0	-0,9	-0,7	-0,9	-0,6	-0,8	-0,7
3. Other lending	30,9	-0,4	1,0	1,7	1,4	1,2	0,8

Source: CBC.
(1) Sectoral classification is based on ESA 2010.
(2) Including non-profit institutions serving households.
(3) As at the end of the last month available. Figures may not add up due to rounding.

TABLE A.3 **Summary of the April 2018 BLS results**

Summary of BLS results April 2018	Cyprus 2018 Q1	Cyprus 2018 Q2 (expectations)	euro area 2018 Q1	euro area 2018 Q2 (expectations)
Credit standards for loans				
Enterprises	Unchanged	Unchanged	Easing (considerably)	Easing
Households				
- *Housing loans*	Unchanged	Unchanged	Easing (considerably)	Easing
- *Consumer credit and other lending*	Unchanged	Unchanged	Easing	Easing
Demand for loans				
Enterprises	Increase	Increase	Increase	Increase
Households				
- *Housing loans*	Increase	Increase	Increase	Increase
- *Consumer credit and other lending*	Increase	Increase	Increase	Increase

Sources: CBC, ESB (SDW).
Note: The above results list the changes that occurred in the last three months (in this case 2018Q1) and the changes that are expected for the next three months (i.e. 2018Q2). The measure used for the statistical analysis of this research is the diffusion index.

Interest rates

Interest rates in Cyprus continued to record a downward trend during 2018Q1. The historically low domestic interest rates, coupled with favourable macroeconomic conditions, support the robust economic

7. See footnote 3.

activity, the ongoing deleveraging efforts of the private sector as well as the banks' efforts to clean up their balance sheets. In addition, they are the main tool for restructuring existing loans, both performing and non-performing.

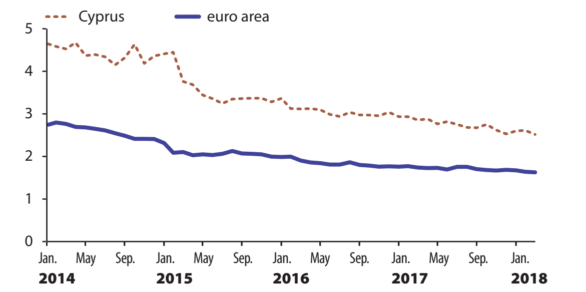
More analytically, the domestic average interest rate[8] on new euro-denominated loans from Cyprus MFIs to both households and NFCs, with an initial rate fixation of up to one year, recorded a very slight downward trend. In March 2018, the average interest rate for housing loans dropped to 2,52% from 2,86% in March 2017 (**Chart A.13**). Over the same period, the cost of new lending to NFCs for amounts up to €1 million decreased to 3,63% from 3,92% (**Chart A.14**).

Deposit rates recorded a similar trend. The average interest rate on new deposits for households with an agreed maturity of up to one year declined to 1,06% in March 2018 from 1,33% in March 2017 (**Chart A.15**), whereas the corresponding interest rate for NFCs decreased to 1,11% from 1,34% (**Chart A.16**, p. 26).

Despite the decline in euro area interest rates, as a result of the ECB's accommodative monetary policy, the declining trend in interest rates has contributed to a further narrowing of the spread between domestic and euro area interest rates. In particular, the corresponding spread for housing loans decreased by 23 basis points to 89 basis points in March 2018 (**Charts A.13** and **A.14**). Likewise, the spread for NFCs decreased by 18 basis points to 150 basis points by end March 2018. The spread between domestic and euro area deposit rates recorded

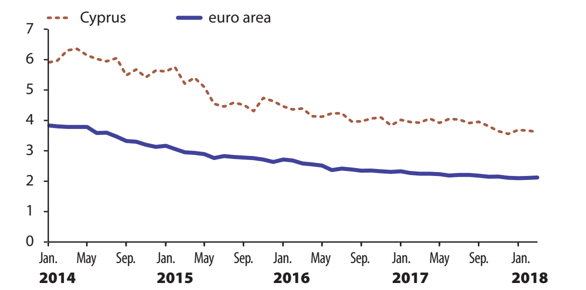
8. The interest rate level on new loans includes the interest rates applicable to loans that were performing but have been restructured.

CHART A.13 **MFI interest rates on euro-denominated housing loans (new business) to euro area households(1)**
(% per annum, period averages)



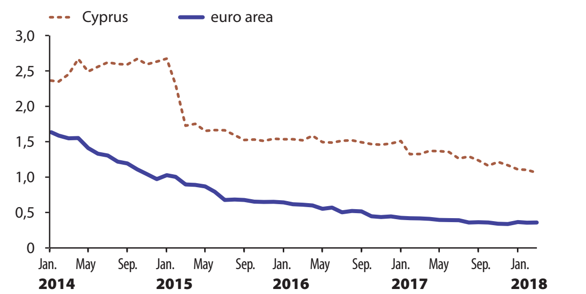
Sources: SDW (ECB), CBC.
(1) With floating rate and up to 1 year initial rate fixation.

CHART A.14 **MFI interest rates on euro-denominated loans (new business) up to €1 million to euro area non-financial corporations(1)**
(% per annum, period averages)



Sources: SDW (ECB), CBC.
(1) With floating rate and up to 1 year initial rate fixation.

CHART A.15 **MFI interest rates on euro-denominated deposits (new business) by euro area households(1)**
(% per annum, period averages)



Sources: SDW (ECB), CBC.
(1) With agreed maturity up to 1 year.

a further decrease and stood at 70 and 103 basis points in March 2018 for households and NFCs, respectively (**Charts A.15**, p. 25 and **A.16**).

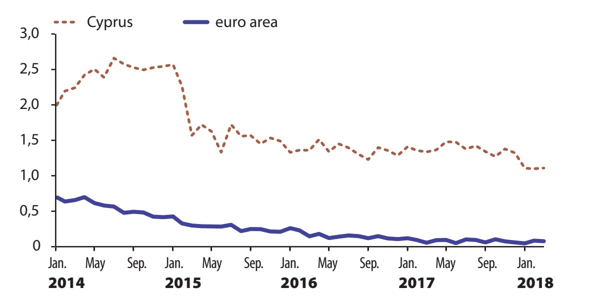
Looking ahead, domestic interest rates are not expected to record any significant changes in the next year, given the continuation of the ECB's expansionary monetary policy through the reinvestment phase, as announced at the Governing Council meeting on 26 April 2018.

Labour costs

According to latest available data, labour costs recorded a relatively small increase in 2017 compared with a decrease in the previous year, within the context of the ongoing recovery of the labour market. In particular, compensation per employee increased by 0,7% in 2017 compared with a decrease of 0,7% in 2016 (**Chart A.17**) and a cumulative decline of 10,5% over the period 2013-2016. Compensation per employee in the public sector recorded a rise of 0,5% in 2017 as a result of three factors. First, the expiration of the wages and pensions freeze, with the resumption of annual increments as from 2017. Second, the granting of salary increases as from 1 January 2017 to civil servants who were promoted during the period of the wage freeze. Third, the change in the composition of public sector employment, in particular the recruitment of professional soldiers in the National Guard in late 2016 whose wages were lower than the average wage of civil servants.

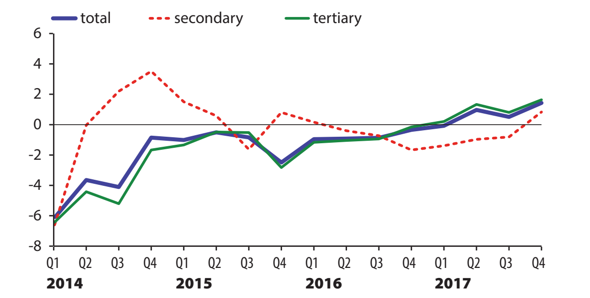
Regarding the private sector, nominal compensation per employee also rose by 0,8% due to increases in specific sectors[9]. The

CHART A.16 **MFI interest rates on euro-denominated deposits (new business) by euro area non-financial corporations** [(1)]
(% per annum, period averages)



Sources: SDW (ECB), CBC.
(1) With agreed maturity up to 1 year.

CHART A.17 **Nominal compensation per employee by sector**
(annual change, %)



Sources: SDW (ECB), CBC.

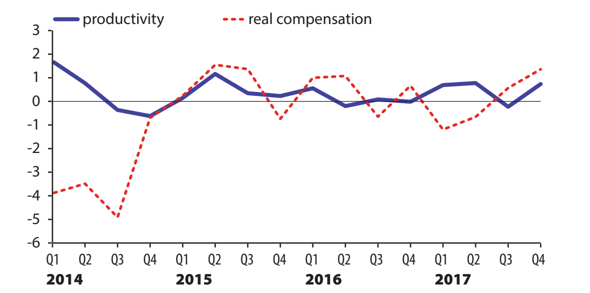
9. These sectors include financial and insurance activities and information and communication.

increase in nominal compensation per employee in 2017 is explained by developments in the tertiary sector (**Chart A.17**, p. 26). This sector accounts for about 82% of total employment, with the relevant compensation per employee rising by 1% in 2017. An annual change of -0,1% and -0,7% was registered in nominal compensation per employee in the primary and secondary sectors, respectively.

Real compensation per employee remained unchanged in 2017 following an increase of 0,6% in the previous year (**Chart A.18**). This development reflects the rise in domestic prices registered during the period under review, which fully offset the increase in nominal compensation per employee. Productivity, calculated as the change in real GDP per employed person, recorded an annual increase of 0,5% in 2017, following a marginal increase of 0,1% in the previous year (**Chart A.18**). The positive trend in productivity is mainly the result of the adoption of various structural reforms in the labour market in recent years.

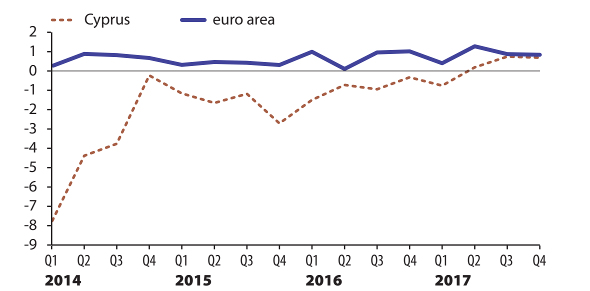
Unit labour costs, determined by the difference in the change in nominal compensation per employee relative to the change in productivity, recorded an annual increase of 0,2% in 2017, compared with a decrease of 0,8% in the previous year (**Chart A.19a**). It should be noted that unit labour costs recorded a significant cumulative decline of 11,4% over the period 2013-2016. By contrast, unit labour costs in the euro area rose by 0,9% in 2017, following an increase of 0,8% in 2016. In addition, unit labour costs in the euro area registered a cumulative rise of 3% over the period 2013-2016. The unit labour

CHART A.18 **Productivity and real compensation per employee**
(annual change, %)



Sources: SDW (ECB), CBC.

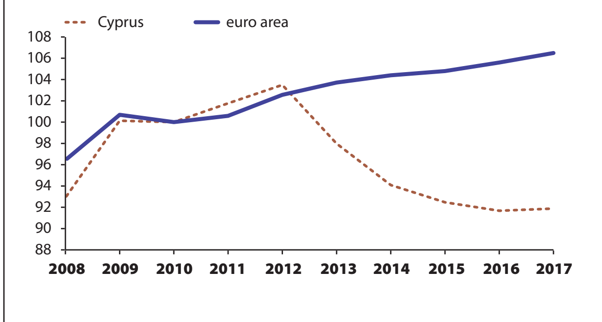
CHART A.19(a) **Unit labour costs: Cyprus and the euro area**
(annual change, %)



Source: SDW (ECB).

costs index is an important indicator of competitiveness for an economy relative to competitor economies, as it reflects the unit labour cost per unit of output. A review of the unit labour cost index over time, reveals that it has been lower compared with the euro area since 2013. This demonstrates the improvement in the competitiveness of the Cyprus economy, following the measures adopted within the context of the economic adjustment programme, with a consequent reduction in the prices of goods and services. In particular, the unit labour costs index was around 15 percentage points below the corresponding euro area index in 2017 (**Chart A.19b**).

CHART A.19(b) **Unit labour costs: Cyprus and the euro area**
(index 2010=100)



Source: SDW (ECB).

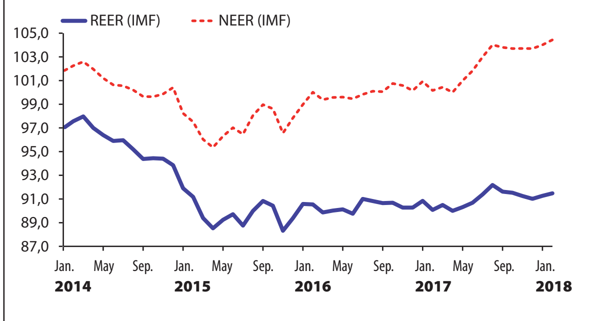
2.2 Domestic Competitiveness and the Balance of Payments

Effective exchange rate

Chart A.20 shows the effective exchange rate (EER) index of the euro in Cyprus, in nominal (NEER) and real (REER)[10] terms, as calculated by the IMF. In 2017, the NEER index strengthened, while the REER index stabilised at around 2016 levels. Overall, during the recent period, the trend of the REER index as well as the widening of the gap between the NEER and REER indexes was influenced by developments in the nominal value of the euro, but most importantly by domestic developments, in particular the lower inflation recorded in Cyprus compared with its trading partners.

The REER index, the inflation rate as well as the unit labour costs that have been analysed

CHART A.20 **Real and nominal effective exchange rates (IMF weights)**
(base year 2010=100)



Source: IMF.

10. The effective exchange rate index in Cyprus in real terms (REER) is calculated by taking into account the trade relations between Cyprus and its 26 main trading partners (countries).

in the previous section, are important measures of the competitiveness of an economy. Lower unit labour costs and a lower REER in Cyprus compared with competing countries, suggest that domestic exports tend to be more price competitive. In general, inflation is related to, among other factors, to both variables mentioned above and therefore also reflects the degree of competitiveness of the Cyprus economy. The adoption of measures affecting salaries and other benefits both in the public and private sectors have reduced unit labour costs for the whole economy, thus improving competitiveness and supporting the recovery of the Cyprus economy in the medium term.

Balance of payments[11]

In 2017 the current account deficit widened, reaching €1.291 million (6,7% of GDP) compared with a deficit of €888,8 million (4,9% of GDP) in the previous year (**Table A.4**). The current account deficit, adjusted for the impact of SPEs, was reduced to €279,1 million (1,5% of GDP), but still recorded a deterioration compared with 2016, mainly due to the developments in the trade balance of goods and the net primary income, and despite the improvement recorded in the services balance.

More analytically, the trade deficit of goods reached €4.519,5 million in 2017 compared with a deficit of €3.867 million in the previous year, mainly driven by the increase in imports of goods. Exports of goods decreased due to SPE transactions (**Table A.4**). Adjusted for the

TABLE A.4 **Balance of payments (main categories)**

	2016 (€ million)	2017 (€ million)	Change (€ million)
Current account balance	**-888,8**	**-1.291,0**	**-402,2**
Goods and services balance	**-141,5**	**-376,2**	**-234,7**
Trade balace	**-3.867,0**	**-4.519,5**	**-652,5**
Exports of goods	**2.594,0**	**2.478,5**	**-115,5**
Imports of goods	**6.461,0**	**6.998,1**	**537,1**
Services balance	**3.725,5**	**4.143,4**	**417,9**
Exports of services	**9.195,6**	**9.928,5**	**732,9**
of which:			
Transport	2.530,9	2.607,1	76,2
Travel	2.489,4	2.769,0	279,6
Finanacial services	2.207,7	2.239,2	31,5
Telecommunications, computer and information services	1.600,2	1.845,8	245,6
Other business services	178,8	157,0	-21,8
Imports of services	**5.470,1**	**5.785,1**	**315,0**
of which:			
Transport	1.714,1	1.824,8	110,7
Travel	1.062,1	1.143,4	81,3
Finanacial services	921,5	875,1	-46,4
Telecommunications, computer and information services	939,9	1.023,1	83,2
Other business services	409,8	483,0	73,2
Primary income (net)	**-284,9**	**-489,8**	**-204,9**
Secondary income (net)	**-462,4**	**-425,1**	**37,3**
Current account balance (% of GDP)	**-4,9**	**-6,7**	
Current account balance adjusted for the impact of SPEs (% of GDP)	**-0,2**	**-1,5**	

Sources: Cystat, CBC.

11. The external statistics data are significantly affected by the classification of SPEs as residents of Cyprus and, in particular, by those which are considered as economic owners of mobile transport equipment (mainly ships). The transactions of SPEs do not affect nor are affected substantially by the domestic economic cycle.

impact of SPEs, the trade balance of goods recorded a deterioration in the period under review, resulting mainly from the increase in imports of goods. This was only partly offset by the increase in exports of goods. The abovementioned increase in imports of goods was mainly attributed to the significant increase in the value of oil imports, as a result of the increase in international oil prices, as well as imports of aircraft. The increase recorded in imports of intermediate, capital and consumer goods, was mainly due to the improvement in domestic demand.

The surplus of the services account increased further in 2017 and reached €4.143,4 million, compared with €3.725,5 million in 2016. This was mainly the result of higher increases recorded in the exports of services relative to the imports of services.

Exports of services increased by 8% (€732,9 million) in 2017, mainly reflecting rises in telecommunications, computer and information services by 15,3% (€245,6 million) as well as revenues from travel. Revenues from tourism, which are included in the travel category, recorded a significant increase of 11,2% (€279,6 million). The positive trend in the tourism sector has continued in 2018. On the basis of available data for the first two months of 2018, revenues from tourism continued to rise (see Tourism, p. 32). Increases were also recorded in transport and financial services. However, minor decreases were recorded in the category of other business services.

In 2017, imports of services increased by 5,8% (€315 million) compared with the previous year, mainly driven by increases recorded in the categories of transport, telecommunications, computer and information services, travel and other business services. In contrast, imports of financial services recorded a decrease.

The primary income account (which mainly includes income from employment and investment) recorded a larger deficit of €489,8 million compared with €284,9 million in the previous year. The widening of the deficit is mainly attributed to portfolio investments and, more specifically, to the larger amount of interest paid relative to the amount of interest received. The deficit in the secondary income account (which mainly includes current transfers) improved marginally.

The current account deficit in 2017 was mainly covered by the borrowing of the private sector and to a lesser extent by the government.

The net international investment position (IIP) in 2017 was negative standing at -€23,1 billion or -120,4% of GDP. The IIP was negatively affected by the inclusion of the economic transfer of mobile transport equipment (mainly ships) by SPEs registered in Cyprus. These companies have significant financial liabilities, in particular loans which are mainly associated with the purchase of ships. While these loans have a direct impact on the net IIP, the respective real assets (ships) do not, thus creating an imbalance in the figures reported. As these companies are financed entirely by non-domestic banks, they do not constitute a substantial risk to the Cypriot financial system.

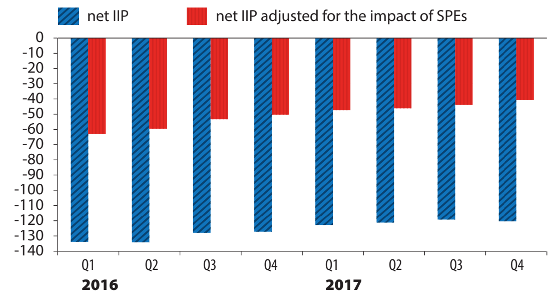
Adjusted for the impact of SPEs, the net IIP in 2017 drops by 79,6 percentage points, standing at -€7,8 billion or -40,8% of GDP, registering an improvement compared with the -€9,2 billion or -50,3% of GDP recorded in the previous year (**Chart A.21**).

Tourism

The tourism sector constitutes one of the most important pillars of the Cyprus economy. In 2017 a new historical high of tourist arrivals was recorded, with all major and some new markets recording a notable improvement. The conditions prevailing in the external environment adversely affected neighbouring competitor countries. Furthermore, domestic economic conditions helped maintain the competitiveness and the quality of the tourist product.

More specifically, 3,7 million tourists visited Cyprus in 2017. Tourist arrivals increased by 14,6% compared with the previous year, recording rises for the fourth consecutive year (**Table A.5**). Regarding individual markets, arrivals from the United Kingdom increased by 8,3% reaching 1,3 million tourists, while arrivals from Russia increased by 5,5% reaching 0,8 million tourists. At the same time, arrivals also increased from other important markets, such as Israel, Germany, Greece and Sweden. This indicates that the efforts to diversify towards new markets (such as other European countries as well as the Middle East) have been successful. However, revenues from tourism increased by 11,7% (**Chart A.22**). As a consequence, the per capita expenditure of tourism decreased by 2,6% in 2017 (**Table A.5**). This is attributed to the decrease of 2,3% in daily per capita expenditure given that the average length

CHART A.21 **Net International Investment Position (IIP)**
(as a percentage of GDP)



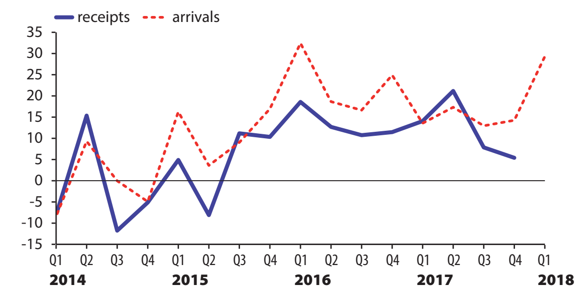
Sources: Cystat, CBC.

TABLE A.5 **Tourism**

	Tourist arrivals (thous.)	Tourist receipts (€ million)	Expenditure per person (€)
2016	3.186,5	2.363,2	741,6
2017	3.652,1	2.639,1	722,6
annual % change	14,6	11,7	-2,6
2017 Jan. - Feb.	144,8	82,0	566,2
2018 Jan. - Feb.	177,3	91,1	513,7
annual % change	22,5	11,1	-9,3
2017 Jan. - Apr.	572,0	na	na
2018 Jan. - Apr.	683,6	na	na
annual % change	19,5	na	na

Source: Cystat.

CHART A.22 **Tourist arrivals and receipts**
(annual change, %)



Source: Cystat.

of stay remained the same as 2016 levels (9,5 days).

Available data on tourist arrivals for the first four months of 2018, show an increase of 22,5%. Also revenues from tourism increased by 11% in the first two months of 2018 (**Table A.5**, p. 32). Despite the fact that the winter months contribute less than the summer months, the significant rise recorded in the first months of the year, suggests that the efforts made to mitigate the issue of seasonality have been successful.

In the summer months, further increases in tourist arrivals are expected from most of the major markets, with the exception of Russia. Thus, the recovery of competing destinations such as Turkey and Egypt, could potentially be a challenge for the Cypriot tourism sector.

Hoteliers have proceeded with hotel extensions and renovations as well as the construction of new accommodation units in order to meet increased demand during the summer season. Also, new tourist products are being promoted so as to diversify the Cypriot tourism product through new infrastructure, such as the construction of marinas and a casino.

2.3 Domestic Demand, Production and the Labour Market

Quarterly national accounts[12]

In 2017 the Cyprus economy recorded an

12. With the introduction of the ESA 2010 and BPM6 statistical methods, total exports and imports of Cyprus as well as gross fixed capital formation include, *inter alia*, the transfer of economic ownership of mobile transport equipment (mainly ships) by SPEs, which affect the aforementioned GDP expenditure sub-categories. However, given the double entry accounting system they do not affect the level and growth rate of GDP.

acceleration in growth, reaching 3,9% compared with 3,4% in the previous year (**Table A.6**). GDP growth in 2017 was driven by the increase in domestic demand, mainly by private investment, and was partly offset by a decline in net exports, as a result of higher growth in imports, relative to that of exports. Based on the latest preliminary data for 2018Q1, real GDP recorded a year-on-year growth of 3,8% (seasonally adjusted).

Detailed data for 2017 point to an increase in private consumption by 4,2% (**Table A.6**), mainly due to the significant improvement in the domestic economic environment, which contributed to the reduction of unemployment and the increase in employment. Public consumption increased by 2,7% (**Table A.6**), owing to a rise in intermediate consumption and wages, which was partly offset by the increase in sales revenue from the provision of public goods and services. The increase in intermediate consumption was mainly due to increased spending on energy owing to the rise in oil prices as well as for the purchase of medicines and water. The increase in wages is attributed to the expansion in public employment, which outpaced the decline in real compensation per public sector employee.

Gross fixed capital formation rose significantly by 27,8% (**Table A.6**), primarily due to the implementation of specific development projects in the private sector and, to a lesser extent, on account of the inclusion of the transfer of economic ownership of mobile transport equipment (mainly ships) by SPEs. Exports of goods and services increased by 3,4%, mainly as a result

TABLE A.6 **National accounts in real terms by category of expenditure**
(annual change, %)

	2013	2014	2015	2016	2017
GDP	-5,9	-1,4	2,0	3,4	3,9
Private consumption	-5,9	0,7	2,6	3,3	4,2
Public consumption	-8,1	-7,2	-2,6	-0,4	2,7
Gross fixed capital formation	-12,9	-17,5	13,6	35,0	27,8
Exports of goods and services	2,1	4,2	5,8	4,0	3,4
Imports of goods and services	-4,8	4,6	7,4	6,8	10,1

Source: Cystat.

of the positive trends in exports of services, but were partly offset by the decline in exports of mobile transport equipment by SPEs. Imports of goods and services grew by 10,1% primarily owing to the significant increase in imports for goods (**Table A.6**, p. 34). At the same time, the imports of mobile transport equipment of SPEs (mainly ships) affected to only a very limited extent the rate of change in total imports.

As previously mentioned, the figures above are affected by the inclusion of the transfer of the economic ownership of mobile transport equipment by SPEs. Adjusted for this, exports exhibit a significant increase compared with 2016, mainly due to the strong performance observed in the tourism sector (see Tourism and **Chart A.22**, p. 32) as well as exports of telecommunication, computer and information services. Imports, adjusted for the impact of transactions in mobile transport equipment by SPEs as well as other non-recurring factors, recorded a significant increase in the year under review compared with 2016. This is attributable to imports of petroleum products as well as imports of intermediate, consumer and capital goods, in line with developments in domestic demand. Gross fixed capital formation, adjusted for the impact of SPEs as well as other non-recurring factors, also exhibited a significant acceleration compared with 2016.

From a sectoral point of view, growth is broad-based with most sectors of production contributing positively (**Table A.7**). The sectors with the most important contribution to GDP growth in 2017 were trade, transportation, hotels and restaurants (with the total

TABLE A.7 **Weighted contributions to real GDP growth by economic activity**
(percentage points)

	2013	2014	2015	2016	2017
GDP	-5,9	-1,4	2,0	3,4	3,9
Construction	-1,4	-0,6	-0,1	0,4	1,1
Trade, transportation, hotels and restaurants	-1,7	-0,7	0,2	1,1	1,2
Financial and insurance activities	-0,7	-0,5	0,7	-0,2	-0,1
Professional, scientific and administrative activities	-0,6	-0,3	0,5	0,6	0,4
Other sectors(1)	-1,6	0,6	0,6	1,5	1,3

Source: Cystat.
Note: (1) Main sectors included are those of agriculture, manufacturing, public administration, education and health as well as information and communication.

contribution reaching 1,2 percentage points), construction (1,1 percentage points) and professional, scientific and administrative activities (0,4 percentage points). A negative contribution was recorded only in the financial and insurance activities sector (0,1 percentage points), owing to loan deleveraging in the context of the ongoing consolidation of the banking sector and the adjustment of private sector balance sheets (**Table A.7**, p. 35).

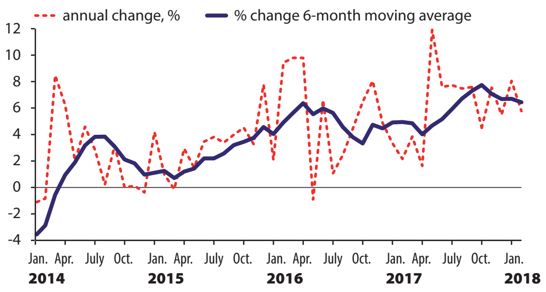
Recent economic indicators point to the ongoing recovery in domestic demand as well as the positive trends in exports. Specifically, the Economic Sentiment Indicator (**Table A.8**) increased from 115,7 in December 2017 to the historically high level of 116,6 in April 2018, reaching a level comparable to that observed in August 2007. The turnover index of retail trade recorded a significant improvement of 6,9% in the first two months of 2018 (**Chart A.23**). Also, registrations of motor vehicles continued their upward trend, registering a year-on-year increase of 23,8% in the first four months of 2018 (**Chart A.24**). Regarding credit card payments, spending by Cypriot cardholders in Cyprus rose by 14,3% in the period January - April 2018, compared with the corresponding period of the previous year (**Chart A.25**, p. 37). Adjusted for payments associated with government services and petroleum products, credit card spending recorded a higher increase in the first four months of 2018 of the order of 14,9%. VAT receipts (as compiled on a cash basis and including relevant returns), which is an indication of the future path of private

TABLE A.8 **Business and consumer surveys: confidence indicators**
(for sub-indices: difference between percentage of positive answers and percentage of negative answers)

	2017 June	2017 Sep.	2017 Dec.	2018 Mar.	2018 Apr.
ESI	113,7	111,7	115,7	114,8	116,6
Industry	3	3	9	6	7
Services	37	26	37	36	41
Consumer	-1	-1	-1	2	4
Retail trade	7	6	10	13	8
Construction	-28	-27	-24	-16	-17

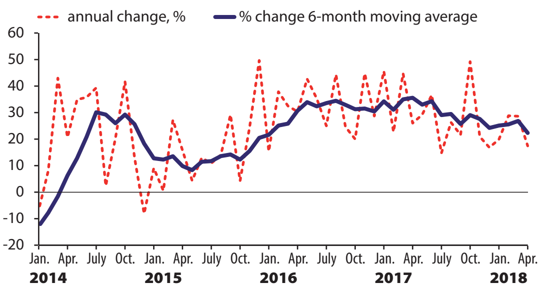
Source: European Commission.
Note: Seasonally adjusted data.

CHART A.23 **Retail sales (excluding motor vehicles)**
(base year 2015=100)



Source: Cystat.

CHART A.24 **Registration of motor vehicles**



Source: Cystat.

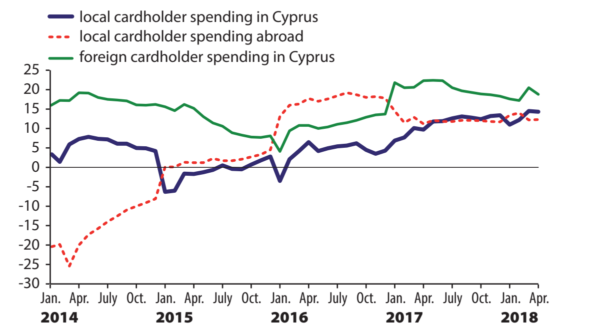
consumption, recorded a year-on-year increase of 24,8% in 2018Q1.

As previously mentioned, private sector investment projects have made an important contribution to the improvement in the domestic economic climate. It is noteworthy that the confidence index in the construction sector has been improving over time, stabilising at low levels in the first four months of 2018 (**Table A.9,** p. 38). Although still at very low levels, the production index in construction continues to exhibit positive rates of change since 2015Q3.

The tourism sector recorded a significant recovery, with marked increases registered in both arrivals and revenue (see Tourism and **Chart A.22**, p. 32). Reflecting the positive developments in tourism, spending by foreign credit cardholders in Cyprus rose by 19% in the first four months of 2018 (**Chart A.25**). In the field of professional services, available data for 2018 relating to new company registrations in Cyprus (increase of 13,9% in 2018Q1), point to the comparative advantage that Cyprus has in this area.

At the same time, new lending in the banking sector stabilised, with new loan contracts to households and non-financial corporations in 2018Q1 reaching approximately the same level as in the previous year. Nevertheless, the annual growth rate of total loans to the domestic private sector (**Chart A.12**, p. 23) is positive but still low, mainly owing to the continued efforts of both the private and the banking sectors to deleverage and adjust their balance sheets. The deceleration in the annual growth rate of the domestic private sector deposits at

CHART A.25 **Credit card spending**
(cumulative annual % change from January)



Source: JCC Payments System Ltd.

the end of 2018Q1 compared with end-2017 (**Chart A.10**, p. 23) is attributable to rumours associated with the viability of the Cyprus Cooperative Bank. However, these rumours did not affect confidence in the overall banking system or the macroeconomic prospects of the Cyprus economy (see Monetary aggregates, p. 22).

Real estate market

The real estate sector continued to recover. Both construction activity and immovable property demand, and their respective prices, continued to rise, following significant reductions recorded between 2008 and 2017. The major challenge for the sector remains the successful handling of non-performing facilities (NPFs).

The increased demand for immovable properties continued in 2018. Specifically, according to the Department of Lands and Surveys (DLS), for the period January - April 2018 sales contracts recorded an annual increase of 38,4% (**Table A.9**). It should be noted that the DLS's definition of local and foreign property buyers has changed as of 2018 and therefore the relevant data are not comparable with previous years.

Nevertheless, it is noteworthy that the largest number of foreign buyers in the period January - April 2018 was observed in Paphos, and about half of them were European citizens. The second highest number of foreign buyers was observed in Limassol, of which 76% were third-country nationals. This is likely to be linked to the naturalisation by investment scheme.

TABLE A.9 **Real estate sector**
(annual change, %, unless otherwise stated)

	Jan.-Apr. 2017	Jan.-Apr. 2018	Apr. 2017	Mar. 2018	Apr. 2018
Sales contracts (total)	6,9	38,4	-1,6	22,7	29,4
Sales contracts (locals)	2,8	na	-0,3	na	na
Sales contracts (foreigners)	20,6	na	38,1	na	na
Building sentiment indicator (average of index)	-25,3	-18,5	-23,8	-15,6	-16,7
Property price expectations for the next 3 months (average of index)	-2,1	5,6	3,8	9,0	2,9
Price index of construction materials (Period: Jan. - Sep. 2015 and 2016)	0,8	1,0	0,6	0,8	1,2

Sources: Cystat, DLS, European Commission.

The upward trend in demand for properties has led to a moderate increase in real estate prices. According to the CBC Residential Property Price Index, residential property prices exhibited a quarterly increase of 0,4% in 2017Q4. All districts recorded either a quarterly increase or stabilisation in residential property prices in this quarter. At the same time, the index recorded an increase of 1,5% on an annual basis, which was the highest since the beginning of the financial crisis (**Chart A.26**). It is worth mentioning that the highest increase in the sub-indices was recorded in the price of Limassol apartments (6,3%).

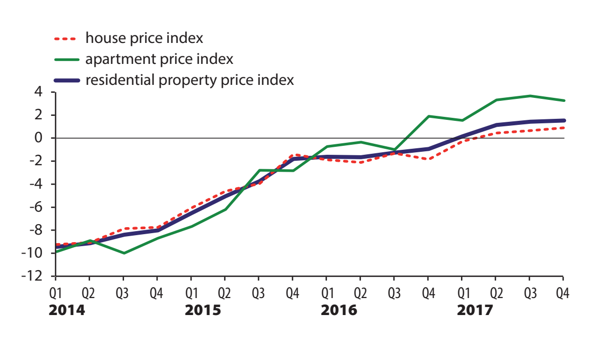
An increase was also recorded in the CBC Commercial Property Price Index, which showed an annual increase of 1,1% in the second half of 2017 (see **Box 1**, p. 44).

With regard to borrowing, according to the CBC Bank Lending Survey (**Table A.3**, p. 24), demand for housing loans is increasing, which is driven, among other things, by the low interest rates. It is also noted that the lending criteria have long since ceased to be tight, but remain at the same stringent levels as those applied since 2014Q4 (**Chart A.27**)

The main challenge for the sector and the ability of banks to finance the construction sector remains the high percentage of NPFs. According to European Banking Authority figures, the percentage of NPFs in Cyprus's construction sector stood at 76,3% at the end of 2017, when the corresponding figure in the EU was only 21,1%.

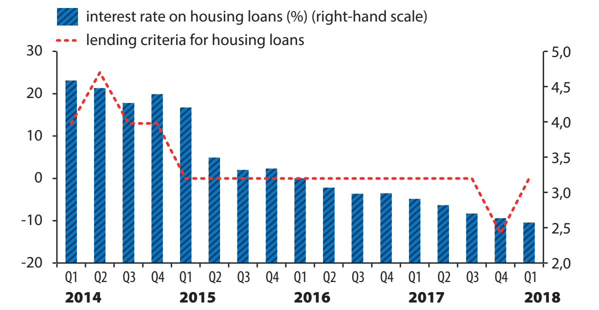
Nevertheless, the construction sector is recovering owing to the stimulus provided by several large scale investment projects.

CHART A.26 **House and apartment price indices**
(annual change, %)



Source: CBC.

CHART A.27 **Lending criteria and interest rate on housing loans**
(annual change, %)



Source: CBC.
Note: The higher the positive number in the lending criteria series the tighter the criteria.

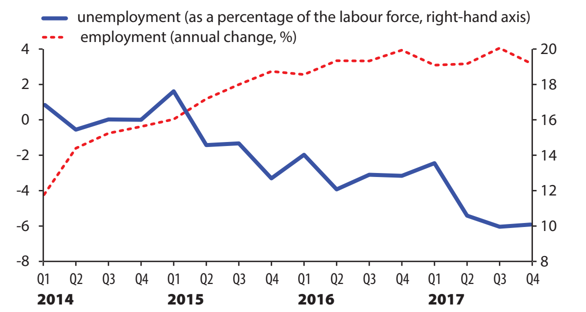
Specifically, the index of production in construction, which is published by Cystat, recorded an annual increase of 12,1% in 2017Q4. At the same time, the number of authorised building permits registered an annual increase of 8,3% in the period January - February 2018. The number of authorised building permits for dwellings increased by 12,5% during this period, while for non-residential buildings it decreased by 4,1%.

Market sentiment in the construction sector is improving, as reported in the European Commission's Business and Consumer Survey, the index of property price expectations averaged 5,6 in January-April 2018 compared with 2,1 in the corresponding period of 2017 (**Table A.9**, p. 38). Other relevant indicators of the sector included in these surveys show further improvements. A more detailed analysis of which is included in the CBC's quarterly Residential Property Price Index[13].

Labour market

In line with the continued economic recovery, employment rose further by 3,4% in 2017, following an increase of 3,3% in the previous year (**Chart A.28**). Total hours worked increased by 3,3% in 2017, compared with an increase of 3,1% in 2016. As such, hours worked per employed person declined by 0,1% in 2017, following a decrease of 0,2% in the previous year. The aforementioned marginal reduction in hours worked per employed person is evident from the Labour Force Survey (LFS) and is associated with the rise in the share of non-

CHART A.28 **Unemployment and employment**



Source: Cystat (LFS).

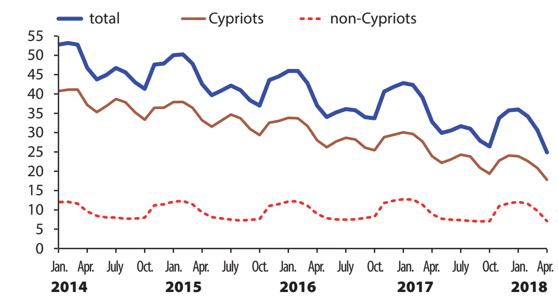
13. Available at: https://www.centralbank.cy/en/publications/residential-property-price-indices

standard employment[14] in the years following the financial crisis. Specifically, part-time work and employment associated with temporary contracts.

Unemployment as a percentage of the labour force continued improving, reaching 11% in 2017 compared with 12,9% in 2016 as reported by the LFS. It should be noted that in 2017Q4 the unemployment rate decreased significantly, reaching 10,1%, compared with 12,8% in the corresponding quarter of 2016 (**Chart A.28**, p. 40). According to the LFS, youth unemployment fell to 22,9% in 2017Q4 compared with 29,8% in the corresponding quarter of the previous year. However, youth unemployment constitutes only two percentage points of the overall unemployment rate for the period under review. According to EUROSTAT data concerning the harmonised unemployment rate (seasonally adjusted), the percentage of unemployed reached 9,1% in March 2018, compared with 12,3% in the corresponding month of 2017. The downward trend in unemployment is also confirmed by the number of registered unemployed (**Chart A.29**), which recorded an annual decline of 24,1% in April 2018 (from 32.804 to 24.903 persons).

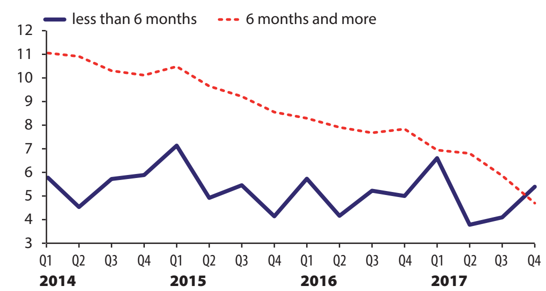
In periods with persistently high unemployment levels, it is very important to monitor the duration of unemployment (**Chart A.30**), given that the long-term unemployed find it harder to reintegrate into the labour market. According to the LFS, the

CHART A.29 **Registered unemployment**
(number of unemployed, thousands)



Source: Cystat.

CHART A.30 **Unemployment by duration**
(as a percentage of the labour force)



Source: Cystat (LFS).

14. The term non-standard employment is associated with forms of employment that deviate from the standard work practices whereby the employee provides his / her services within the office space provided by the employer and fulfils the total weekly / daily working time as provided for by relevant legislation.

unemployment rate with a duration of six months and over fell to 4,7% in 2017Q4, compared with 7,8% in the corresponding quarter of the previous year. The latest available data on the number of registered unemployed with a duration of six months and over published by Cystat point to a decrease of 5.181 individuals in April 2018, compared with the corresponding month of 2017. Overall, all relevant economic data point to the steady recovery in the labour market, in line with the very strong growth in economic activity.

2.4 Domestic Fiscal Developments

In 2017 the general government accounts recorded a surplus of 1,8% of GDP, with the primary surplus reaching 5% of GDP (**Chart A.31**). According to preliminary data from Cystat, in 2018Q1 the strong fiscal performance continued registering a surplus of 1,5% of GDP, compared with a surplus of 0,9% in the corresponding period of 2017. At the same time, the primary balance as a percentage of GDP exhibited a surplus of 2% in the first three months of 2018, compared with a surplus of 1,5% in the corresponding period last year (**Chart A.31**).

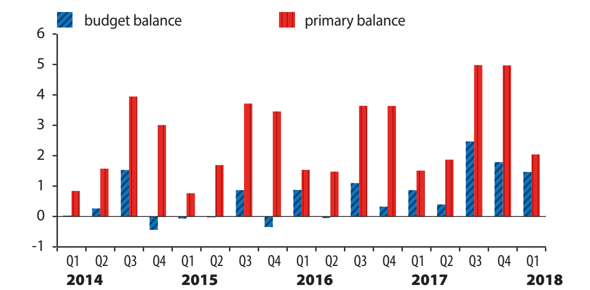
Public revenues increased by 9,5% in 2018Q1 (**Chart A.32** p. 43 and **Table A.10**), mainly due to the 15,1% increase in tax revenues on production and imports, with the most significant contribution resulting from VAT receipts, which rose by 24,9%, due to the improvement in domestic demand and the construction sector. At the same time, revenue from capital transfers recorded a

TABLE A.10 **Accounts of general government**

	Jan.-Mar. 2017 (€ million)	Jan.-Mar. 2018 (€ million)	Change %
EXPENDITURE			
Intermediate consumption	96,9	100,8	4,0
Compensation of employees	520,1	552	6,1
Social transfers	593,5	598,3	0,8
Interest	123,5	116	-6,1
Subsidies	8,0	8,2	2,5
Other current expenditure	110,3	113,8	3,2
Gross fixed capital formation	64,4	58,4	-9,3
Other capital expenditure	9,4	9,1	-3,2
Total expenditure	**1.526,1**	**1.556,6**	**2,0**
Total expenditure as a % of GDP	**8,4**	**8,1**	
REVENUE			
Taxes on production and imports	645,9	743,2	15,1
Current taxes on income, wealth, etc	402,4	447,5	11,2
Social contributions	419,7	433,3	3,2
Other current resources	38,2	44,3	16,0
Sales	114,1	126,4	10,8
Capital transfers received	7,5	53,9	618,7
Property income	64,6	5,3	-91,8
Total revenue	**1.692,4**	**1.853,9**	**9,5**
Total revenue as a % of GDP	**9,3**	**9,6**	
Surplus (+) / Deficit (-)	**166,3**	**297,3**	
Surplus (+) / Deficit (-) % of GDP	**0,9**	**1,5**	

Sources: Cystat, CBC.

CHART A.31 **Budget and primary balances of the general government**
(cumulative for the period as from Q1 as a percentage of GDP)



Sources: Cystat, CBC.
Note: The budget and primary balance of the general government for 2014Q1 and 2015Q4 does not include the equity injection to restore the capital base of the CCB (€1,5 billion and €175 million, respectively).

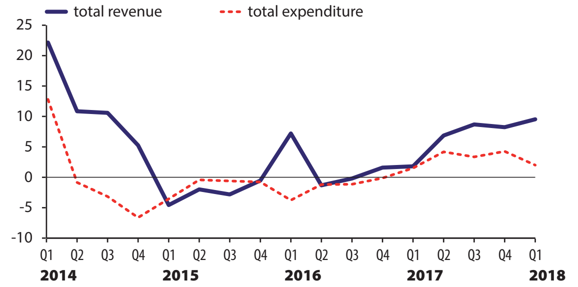
1 Introduction
2 Macroeconomic Developments and Projections

noticeable rise due to increased subsidies from the European Union. Furthermore, the significant decrease in the property income category is due to the rescheduling of the CBC dividend payment to the government. Property income is expected to be reduced in 2018 compared to last year.

Public expenditures (**Chart A.32**, and **Table A.10**, p. 42) recorded an annual increase of 2% in 2018Q1. This was mainly due to the increase of 6,1% in compensation of employees due to the rise in the number of public sector employees, as well as the resumption of wage increases and the cost of living allowance in the public sector.

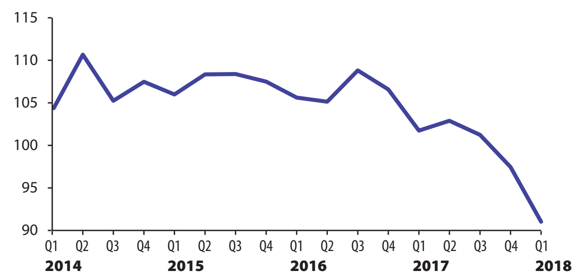
The general government consolidated gross debt as a percentage of GDP reached 97,5% in 2017. In the year under review, and according to the most recent preliminary data available by Cystat at the end of March 2018, the debt level was reduced to around 91% (**Chart A.33**). Nevertheless, the issuance of government bonds to the Cyprus Cooperative Bank (CCB) at the beginning of April 2018, the proceeds of which were subsequently converted into a deposit with the same bank, led to a debt increase in 2018. With this move of confidence-building, the government aimed to reassure existing depositors of the CCB while at the same time broadening the investment options for the bank. Following the significant increase in 2018, public debt is expected to continue its previously significant downward trend, in line with the expected materialisation of strong fiscal surpluses.

CHART A.32 **Total revenue and expenditure of the general government**
(cumulative for the period as from Q1, annual change, %)



Source: Cystat.
Note: Total expenditure of the general government for 2014Q1 and 2015Q4 does not include the equity injection to restore the capital base of the CCB (€1,5 billion and €175 million, respectively).

CHART A.33 **General government consolidated gross debt**
(as a percentage of GDP)



Sources: Eurostat, Cystat, CBC.

Box 1: Commercial Property Price Indices of the Central Bank of Cyprus

In 2010 the CBC, in cooperation with domestic commercial banks, began estimating and publishing a number of residential property price indices (RPPIs). The main purpose of these indices is to assist commercial banks in implementing the Capital Requirements Regulation (EU) No. 575/2013, as well as to enhance information and transparency in the domestic property market. It should be noted that when the RPPIs were initially published, there were no other similar publicly available indicators in the Cyprus market.

A commercial property price index (CPPI) has been recently completed. This indicator, along with RPPIs, can be used to assess financial stability and credit institutions' exposure to mortgage-backed loans. It can also be used as a tool for the macroeconomic assessment of the real estate sector. For the construction of these indicators, commercial properties are defined as offices, retail shops and warehouses in all areas under the control of the Republic of Cyprus.

The CPPIs and RPPIs are based on valuations data collected by the banks from real estate appraisal offices and are carried out for various purposes, such as mortgage lending, loan rescheduling, monitoring, etc. When collecting data, banks apply controls for the validity of the data, which are also cross-checked by the CBC. The data are sent by the banks on a monthly basis in a standardised form to the CBC's specially-designed database, where they are subject to further checks (both parametric and non-parametric) for their plausibility.

The fact that the indices are based on appraisals ensures that a sufficient number of data enters the CBC's database. This is important as commercial properties are not heavily traded and in times of crises the number of transactions is limited, as evidenced by Silver and Graf (2014), Kanutin (2013) and the recent economic crisis in Cyprus. A feature of indices based on appraisals is that they have lower volatility than price indices based on actual transaction data. They also tend to capture the real price changes in the market with a time lag relative to the true price changes (Diewwert and Shimizu, 2013, Case and Wachter, 2005). However, these indicators have an important role to play (Passerini, 2013), since they can give a representative and reliable picture of price fluctuations in the market. According to the 2010 ECB survey, most euro area data on commercial real estate are based on appraisals (Kanutin, 2013) and they are utilised by other central banks, such as Spain and Greece, to construct similar commercial property price indices. Other central banks which use commercial banks as their source of data are the Bundesbank, the Bank of Greece and the Central Bank of Malta (Kanutin, 2013). Appraisals data include, in addition to the market value of commercial properties, a plethora of property characteristics[1]. This enables the CBC to conduct in-depth analysis of the data and to use the hedonic method for the estimation of the indices, which requires a large number of observable characteristics. This technique is one of the most commonly used methods of estimating price indices. In the literature, it is considered to be the most reliable method used (Kanutin, 2013, Gourieroux and Laferrere, 2006, Hoffman and Lorenz, 2006, Wen, Jia and Guo, 2005 and Maurer, Pitzer and Sebastian, 2004).

The basic principle of the hedonic methodology in the construction of indices is that the aggregate price of a property depends on the value assigned by the market in each of the quantitative and qualitative characteristics of the property (location, area, degree of maintenance, etc.). Thus, although the values of each characteristic are not directly observable, the hedonic method can statistically analyse and decompose the market value of a property into the individual characteristics of the property through multi-variable regressions (Thwaites and Wood, 2003). As a result, it is able to distinguish the fluctuation of prices between two periods given (a) the change in the composition of property characteristics and (b) the change in supply and demand equilibrium conditions in the real estate market. Thus, the indices estimated using the hedonic method are both comparable and constant in terms of quality. This important advantage stems from the fact that this technique takes into account the heterogeneous nature of the various physical, structural and geographical characteristics of the property.

TABLE 1 **Number of observations and descriptive statistics by type of commercial property**

	Offices	Shops	Warehouses	Total
2010	357	694	195	1.246
2011	290	674	119	1.083
2012	469	1.020	189	1.678
2013	286	870	93	1.249
2014	461	1.210	89	1.760
2015	523	1.362	119	2.004
2016	823	2.398	164	3.385
2017	664	2.274	141	3.079
Adj. R^2	0,89	0,81	0,58	
Root- MSE	0,27	0,37	0,49	

Source: CBC.

The sub-indices of the CPPI are calculated at a country level and on an annual basis due to the relatively small number of available observations, while the aggregated CPPI is estimated on a biannual basis. It should be noted that the RPPIs are calculated on a quarterly basis as the number of available observations is higher than for commercial properties. **Table 1** presents descriptive statistics of the individual indices, such as the number of observations per year, the adjusted R^2, and the root mean square error (RMSE). The adjusted R^2, which is a measure of the linear relationship between the property characteristics and its price[2], reveals that for offices and shops more than 80% of the observed fluctuations in property prices is explained by the variables included in the regression. In contrast, this correlation is smaller for warehouses. This is probably due to the relatively small

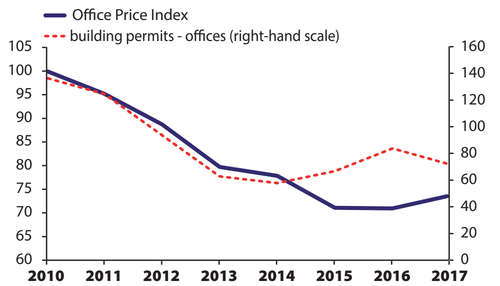
1. For more information, see "Methodology for the Construction of Commercial Property Price Indices", which will be posted on the CBC website shortly.
2. The higher the adjusted R^2, the better the price of the property is explained by its characteristics.

TABLE 2 Commercial property price indices by type of property

	Offices		Shops		Warehouses	
	Index	Annual change, %	Index	Annual change, %	Index	Annual change, %
2010	100,0	n/a	100,0	na	100,0	n/a
2011	95,2	-4,8	98,2	-1,8	85,6	-14,4
2012	88,7	-6,8	86,8	-11,7	83,9	-2,1
2013	79,7	-10,1	78,8	-9,1	76,8	-8,4
2014	77,8	-2,3	74,4	-5,6	70,5	-8,2
2015	71,1	-8,7	69,4	-6,8	61,3	-13,1
2016	71,0	-0,2	68,5	-1,2	60,7	-1,0
2017	73,7	3,9	69,7	1,7	62,3	2,8

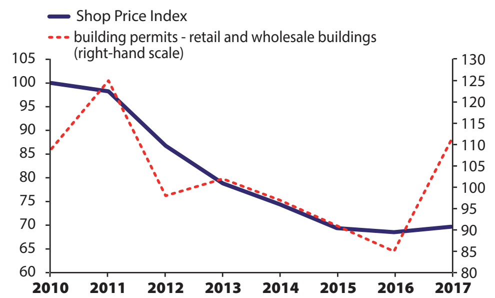
Source: CBC.

CHART 1a Office Price Index and number of authorised building permits for offices



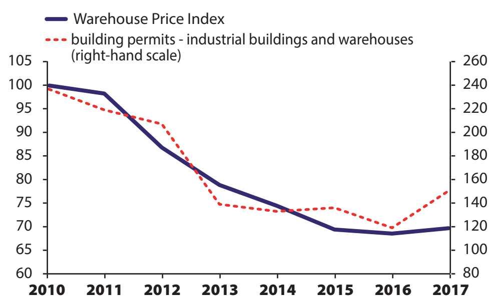
Sources: Cystat, CBC.

CHART 1b Shop Price Index and number of authorised building permits for retail and wholesale buildings



Sources: Cystat, CBC.

CHART 1c Warehouse Price Index and number of authorised building permits for industrial and warehouse buildings

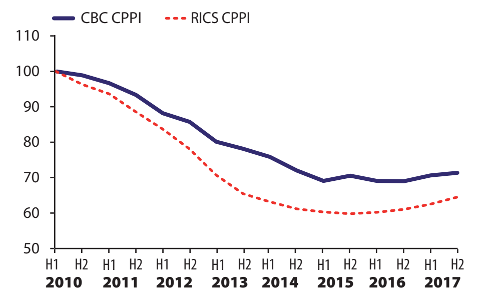


Sources: Cystat, CBC.

number of observations compared with the other two types of commercial properties. In addition, the RMSE is higher in the warehouse price index compared with the other two types, which is also probably due to the relatively small number of observations.

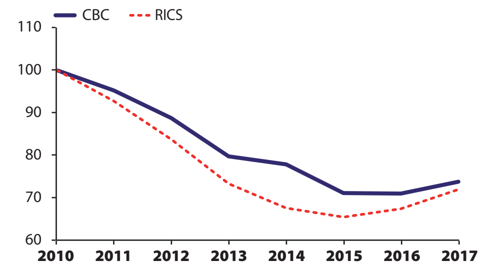
The estimated CPPI sub-indices, as well as their annual changes, are presented in **Table 2**. All indices exhibited a downward trend from 2010 until 2016, although in 2016 the rate of decrease was noticeably lower than in previous years. In contrast, all indices recorded an annual increase in 2017. **Chart 1** shows the number of authorised building permits per type of commercial property, which are considered to be a leading indicator of construction activity. **Chart 1a** shows that building permits are recovering earlier than office prices, which is what we would expect given that the land development companies first have to acquire the permits in response to an expected increase in demand. A similar trend can also be seen in **Charts 1b** and **1c**,

CHART 2a **Commercial property price indices**



Sources: CBC, RICS.

CHART 2b **Office price indices**

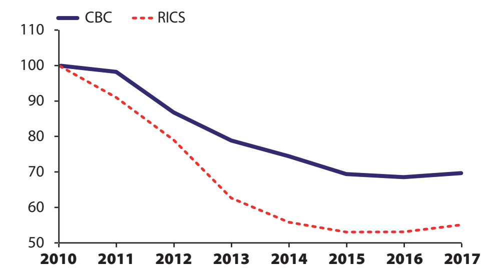


Sources: CBC, RICS.

where building permits for wholesale and retail buildings and permits for industrial buildings and warehouses are increasing earlier than shop and warehouse price indices, respectively.

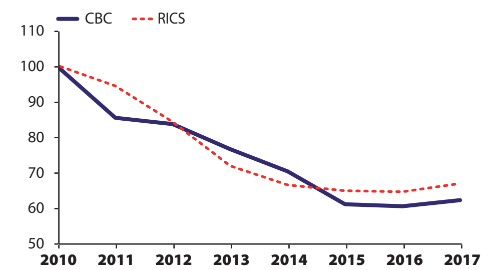
A comparison of the CBC CPPI with that of the Royal Institute of Chartered Surveyors is presented in **Chart 2a**. These indices are the only currently available commercial property price indices for Cyprus. The two indices move in the same direction both during the period of declines and during the period of moderate recovery. However, the RICS CPPI appears to be more volatile, recording a peak to trough reduction of around 40%, as opposed to the CBC CPPI which recorded a corresponding decrease of around 30%[3]. Furthermore, in **Chart 2b**, **2c**, and **2d**, the CBC and RICS price indices for offices, shops and warehouses are reported on an annual basis. The differences in the magnitude of price changes can be explained by

CHART 2c **Retail price indices**



Sources: CBC, RICS.

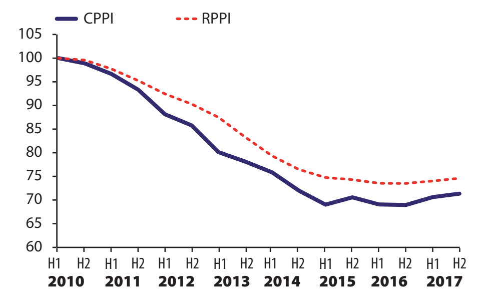
CHART 2d **Warehouse price indices**



Sources: CBC, RICS.

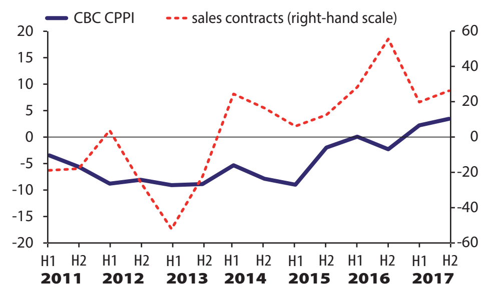
3. The total peak to trough reductions may be larger than those presented in Chart 2, as available data begin in 2010, when the downward trend in property prices had already begun.

CHART 3 **CBC Commercial Property Price Index (CPPI) and Residential Property Price Index (RPPI)**



Source: CBC.

CHART 4 **CBC Commercial Property Price Index and sales contracts**
(annual change, %)



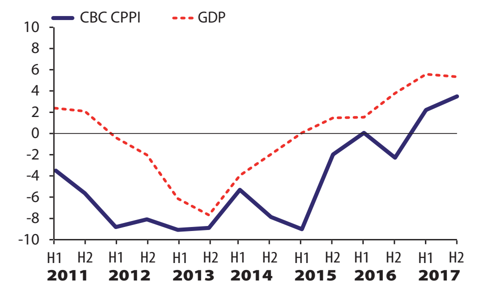
Sources: CBC, Department of Lands and Surveys.

differences in geographical coverage and methodology[4].

Chart 3 depicts the RPPI and CPPI published by the CBC biannually. Although the two indices follow a similar pattern both during the economic crisis and during the recovery, the CPPI exhibits cycles of larger magnitude. This reflects the greater volatility that is usually observed in CPPIs. In **Chart 4**, the CBC CPPIs and the sales contracts deposited with the Department of Lands and Surveys are compared. Although a breakdown of sales contracts by type of property is not available, their aggregated figure provides a good indication of the general demand for real estate. We observe that while sales contracts recover from the first half of 2014 onwards, commercial property prices start to recover later, in particular in 2017. A similar comparison is also depicted in **Chart 5**, where GDP is recovering earlier than commercial property prices.

Concluding, CBC's CPPIs, which are published for the first time, are a useful tool for both banks and other stakeholders in the real estate market. The indices presented here showed that the recovery in the commercial real estate market started in 2017 and with a relative lag compared to the RPPI and other market indicators. The results of the general CPPI will be published on a semi-annual basis on the CBC website, and a corresponding bulletin will be published annually with the results of all the sub-indices. Future work on these indices includes extending

CHART 5 **CBC Commercial Property Price index and GDP in current prices**
(annual change, %)



Sources: CBC, Cystat.

4. According to their methodological note (McAllister and Fuerst, 2011) the RICS indices cover specific areas of each district (e.g. for retail buildings in Nicosia, Makarios III Avenue is monitored), and a number of market value assessments of hypothetically typical properties are used for their estimation. On the other hand, the CBC indices cover all areas under the control of the Government, and all the valuations carried out in the banking system are taken into account.

the series to cover data before 2010, while further data analysis will become possible as the number of observations in the database grows.

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3. Macroeconomic Forecasts for the Cyprus Economy

- *Strong economic growth in the period 2018-2020.*
- *Estimates for continued growth in domestic demand and exports.*
- *Gradual increases in the prices of goods and services in the coming years.*
- *Downside risks as regards GDP and balanced risks for inflation.*

In 2017 GDP recorded the highest growth rate since 2008. Growth was broad-based stemming from almost all sectors of production, with the exception of the banking sector. This is attributable to the ongoing deleveraging of household and non-financial corporations, which is nevertheless necessary to reduce the high level of private debt. In 2018 economic activity in Cyprus is expected to register a significant increase, with continued growth in domestic demand and exports. In 2019 and 2020 economic activity is expected to decelerate slightly, but to continue recording strong growth.

This section analyses the CBC's updated economic forecasts as prepared within the context of the Eurosystem's projections. The updated forecasts for GDP growth in the period 2018-2020 have been revised significantly upwards compared with the previous projections published in the December 2017 *Economic Bulletin*. In the baseline scenario, growth is projected to reach around 4,1% in 2018, with a gradual and relatively small deceleration in the coming years, reaching 3,5% in 2020. Recent developments, particularly with regard to investment and tourism, support the upward revision in the GDP projections compared with the CBC forecasts produced six months ago. Regarding inflation, gradual increases in prices are expected in the coming years as a result of the ongoing recovery of the economy and the increase in oil prices.

Inflation

Inflation in Cyprus is expected to reach 0,9% in 2018 compared with 0,7% in 2017 (**Table A.11**). This development is mainly due to increases in the price of oil and tourism-related services, which were partly offset by the significant drop in the prices of non-energy industrial goods. HICP excluding energy is expected to rise to 0,4% in 2018 compared with 0,1% in 2017 (**Table A.11**). Prices excluding energy and food (core inflation), which better reflect domestic price pressures, are projected to reach 0,6% in 2018 compared with 0,4% in 2017, mainly owing to developments in the prices of services, in particular tourism (**Table A.11**).

Inflation is projected to increase further in 2019 and 2020, reaching 1,4% in 2019 and 1,6% in 2020, primarily driven by the projected continued strengthening of domestic economic activity and the rise in prices of goods and services. Both HICP excluding energy and core inflation are forecast to continue on an upward trend. In particular, HICP excluding energy is expected to reach 1,4% and 1,8% in 2019 and 2020,

TABLE A.11 **Inflation projections**
(annual change, %)

	2017	2018f	2019f	2020f
HICP	0,7	0,9	1,4	1,6
HICP excluding energy	0,1	0,4	1,4	1,8
HICP excluding energy and food	0,4	0,6	1,6	1,9

Sources: Cystat, CBC.

respectively. Core inflation is anticipated to reach 1,6% in 2019 and 1,9% in 2020.

Compensation, productivity and the labour market

The recovery path of the Cyprus economy is reflected in the labour market. Employment is projected to continue to rise by 3,5% in 2018 (**Table A.12**). In the medium term, employment is expected to register further increases, albeit at a decelerating pace, in line with GDP growth and the associated improvement in the economic climate and company turnover. Specifically, employment is projected to record annual growth of 3,3% and 2,9% in 2019 and 2020, respectively.

Unemployment is expected to decline further, partly due to existing government policies aimed at boosting employment, including programmes targeting the youth and the long-term unemployed. Following a downward trend since 2015Q1, the unemployment rate, as defined by the LFS, is projected to reach a yearly average of 9,1% in 2018, down from 11% in 2017 (**Table A.12**). The economic recovery projected for 2019 and 2020 is in line with the projected ongoing fall in the unemployment rate, which is expected to reach 7,4% and 6,5% of the labour force in 2019 and 2020, respectively. This is attributed to the ongoing recovery in employment and the overall positive trend in GDP growth. However, by 2020 the unemployment rate is projected to remain above the average unemployment rate recorded in the years before the crisis.

Nominal compensation per employee is

TABLE A.12 **Labour market projections**
(annual change, %, unless otherwise indicated)

	2017	2018f	2019f	2020f
Compensation per employee	0,7	1,9	2,9	2,2
Unit labour costs	0,2	1,3	2,4	1,6
Productivity	0,5	0,6	0,6	0,6
Total employement	3,4	3,5	3,3	2,9
Unemployment rate (% of labour force)	11,0	9,1	7,4	6,5

Sources: Cystat, CBC.

expected to register an increase of 1,9% in 2018, following a rise of 0,7% in 2017, attributable to wage increases in the public sector as well as in various segments of the private sector (**Table A.12**, p. 52). In the public sector, compensation per employee is projected to grow in 2018 on account of the reintroduction of wage indexation and annual general increases. These wage increases are in addition to the wage increases due to increments as from 2017. It should be noted that relevant announcements associated with the restitution of public sector wage cuts were not incorporated in the baseline macroeconomic scenario as they were made after the cut-off date for the production of forecasts. The expected increase in compensation per employee in the private sector is attributable, in part, to wage increases that govern the collective agreements of the banking and tourism sectors.

In 2019 and 2020, further annual increases in nominal compensation per employee of the order of 2,9% and 2,2%, respectively, are foreseen. This is mainly due to the improvement in the domestic economy and the consequent improvement in the labour market, thus resulting in further wage increases, particularly in the private sector. The relatively higher annual increase in 2019 compared with 2020 is due to the rise in contributions to the Social Insurance Fund as from January 2019, which affects wages both in the private and public sectors.

Turning to productivity, this is projected to increase by 0,6% in 2018, following a 0,5% rise recorded in the previous year (**Table A.12**, p. 52). In 2019 and 2020, productivity is also expected to record an annual increase of 0,6% owing to the adoption of various structural reforms in recent years, such as the government policies aimed at boosting employment, especially during the period of the economic adjustment programme. The unit labour costs index, mainly driven by developments in compensation per employee but also productivity growth, is projected to rise by 1,3% in 2018 (**Table A.12**, p. 52), in addition to the 0,2% increase in 2017 following four consecutive years of decline (cumulative contraction of the order of 11,4%). Further growth of 2,4% in 2019 and 1,6% in 2020 is foreseen. Cyprus will nevertheless still retain its comparative advantage compared with the rest of the euro area, owing to competitiveness gains in recent years. The relatively larger increase in unit labour costs growth expected to be recorded in 2019 is due to the aforementioned rise in Social Insurance Fund contributions. For the euro area, the unit labour costs index is expected to continue to register higher increases compared with Cyprus, in particular by 1,5% in 2018, 1,2% in 2019 and 1,8% in 2020.

National accounts[15]

According to the latest available preliminary data, GDP recorded year-on-year growth of 3,8% (seasonally adjusted) in 2018Q1. The better-than-expected growth reflects developments across almost all sectors of

15. Due to the volatility in imports and exports of mobile transport equipment (mainly ships), it is extremely difficult to forecast the aforementioned series. Therefore, it is assumed that the level of transactions associated with these series for the years 2018-2020 remains at the 2017 levels. Consequently, the rate of change in imports and exports, as well as in gross fixed capital formation, adjusted for the impact of transactions in mobile transport equipment, does not differ relative to the unadjusted series.

production. On the basis of the latest available data, and in conjunction with leading economic indicators, the Cyprus economy is projected to expand by 4,1% in 2018 (**Table A.13**), reflecting primarily the favourable developments in exports and domestic demand.

More analytically, real private consumption is expected to grow by 2,5% in 2018, following an increase of 4,2% in 2017, mainly reflecting the rise in disposable income, which is attributable to employment growth and, to a lesser extent, rising wages. In addition to the positive impact on private consumption, wage growth is expected to have a positive effect on the savings of households, which have used their accumulated savings to smooth their consumption during the economic crisis, and to contribute to a reduction in non-performing facilities (NPFs). Regarding public consumption, an increase of 1,8% is projected, following a rise of 2,7% in 2017, owing to the increase in wages in line with the foreseen growth in public employment. Gross fixed capital formation is expected to increase by 9% in 2018 compared with 27,8% in the previous year, partly due to the transfer of economic ownership of mobile transport equipment (mainly ships) of special purpose entities (SPEs). Adjusted for the impact of SPEs, gross fixed capital formation is projected to continue to record a moderate increase in 2018 compared with 2017 due to the assumption of a conservative implementation rate for investment projects in the baseline macroeconomic scenario. Investment growth is attributable to specific

TABLE A.13 **National accounts projections in real terms**
(annual change, %)

	2017	2018f	2019f	2020f
GDP	3,9	4,1	3,9	3,5
Private consumption	4,2	2,5	2,5	2,2
Public consumption	2,7	1,8	1,4	0,3
Gross fixed capital formation	27,8	9,0	8,3	7,5
Exports of goods and services	3,4	6,1	5,7	5,8
Imports of goods and services	10,1	5,5	5,2	5,2

Sources: Cystat, CBC.

development projects from the public and, in particular, from the private sectors[16].

Exports of goods and services are projected to grow by 6,1% in 2018, in addition to the increase of 3,4% in 2017, partly affected by transactions in mobile transport equipment (mainly ships) of SPEs. Adjusted for the impact of SPEs, exports are expected to accelerate in 2018 compared with the previous year. This is mainly due to a significant increase in revenues from telecommunications, computer and information services, tourism as well as transport (SPEs). At the same time, imports of goods and services are forecast to record a rise of 5,5% in 2018, compared with an increase of 10,1% in 2017, partly due to the transfer of economic ownership of mobile transport equipment (mainly ships) of SPEs. Adjusted for the impact of SPEs as well as other non-recurring factors, imports of goods and services are projected to continue to register a more moderate increase compared with 2017, owing to imports of intermediate, consumer and capital goods, in line with foreseen developments in domestic demand, in particular investment.

At the same time, the continuation of the granting of new loans in 2018Q1, supported by historically low interest rates and increased demand, is expected to support economic activity. The recent upgrades of Cyprus's sovereign rating by the major rating agencies have contributed to the gradual return to the markets, despite the fact that Cypriot government bonds continue to be below investment grade. The most recent rating

16. Public sector investment projects as well as large private sector development projects, such as the marinas of Ayia Napa and Paralimni, as well as infrastructure projects at the port of Limassol and Vasiliko.

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action is from Fitch Ratings (20 April 2018) and classifies the sovereign rating at BB+, one notch below investment grade with a positive outlook. The ongoing consolidation of the banking sector should also be noted, including the intensification of efforts by the authorities to address the level of NPFs.

In 2019 and 2020, GDP is projected to record further recovery, however at a decelerating rate, reaching 3,9% and 3,5% in 2019 and 2020, respectively. In particular, private consumption is expected to register an increase of 2,5% in 2019 and 2,2% in 2020, partly owing to the recovery in disposable income. A rise of 8,3% is foreseen in gross fixed capital formation in 2019, with a further increase of 7,5% in 2020. This is mainly attributed to improved expectations regarding the investment prospects in the energy, tourism and transport sectors. Significant private sector investment projects amounting to over €3 billion, with a large share of these being financed via foreign funds, have already commenced and are scheduled to be completed by 2020. Among other projects, renewable electricity generation infrastructure, various residential, commercial and mixed developments, the two marinas in Paralimni and Ayia Napa, a number of luxury hotels and the casino are expected to provide a boost to the Cyprus economy in the coming years. The casino is a major project, which will enrich the tourist product, further extend the tourism season and create new jobs. In addition, the ongoing efforts to create an appropriate legal framework, including a fast-track strategic investment mechanism, is expected to encourage high value added investments. Annual increases of the order of 1,4% and 0,3% are foreseen in public consumption in 2019 and 2020, respectively, mainly due to the rise in wages. As previously mentioned, the increase in public consumption is attributable to the reinstatement of wage increases as from 2017, in conjunction with the growth in public employment. Also, the relatively higher increase in the growth rate of public consumption in 2019 compared with 2020 is the result of the increase in Social Insurance Fund contributions as from January 2019.

Exports are projected to record an increase of around 5,7% per annum over the period 2019-2020. Tourism in particular is expected to perform particularly well in the coming years, given the extension of the tourism season during the autumn and spring months and the rise in accommodation capacity in terms of available rooms (new hotels and extensions to existing hotels). As far as the maritime sector is concerned, efforts to strengthen it through improvements in the cluster of services that have been created, existing infrastructure (including ports) and the international reputation of the Cyprus flag seem to have borne fruit. Additionally, improvements in competitiveness, partly owing to the significant declines in wages, production costs and the cost of companies overall in recent years, has generally contributed to Cyprus' strong export performance. Total imports, which are driven to a large extent by imports of intermediate, consumer and capital goods, are expected to grow at around 5,2% per annum over the period 2019-2020, in line with the projected growth in domestic demand and, in particular, investment.

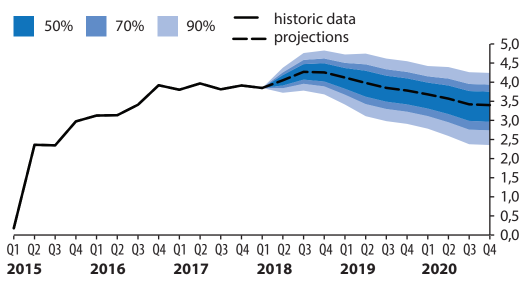
Risk assessment of macroeconomic forecasts[17]

The projections relating to GDP (**Table A.13**, p. 55), as well as HICP and HICP excluding energy and food (core inflation) (**Table A.11**, p. 51) are considered to form the baseline scenario. The confidence intervals associated with the baseline scenario forecasts for GDP and HICP, which capture the probabilities of deviating from the corresponding baseline scenarios are outlined in **Charts A.34** and **A.35**, respectively. The confidence intervals regarding the baseline scenario for core inflation are shown in **Chart A.36**. As analysed in more detail below, risks to GDP are assessed overall to be on the downside, while risks to inflation are considered to be balanced.

Possible downward deviations from the baseline scenario (downside risks) as regards GDP are associated with a slower-than-projected progress in lowering the high level of NPFs, which could negatively affect economic activity. The high level of private debt could constrain, to a certain extent, the granting of new loans as credit institutions tend to refrain from lending to indebted households and non-financial corporations. Moreover, downward deviations from the baseline GDP scenario relate to a possible deterioration in external demand for services, as a consequence of the unfavourable economic situation that may prevail due to Brexit. Although individual sectors such as tourism could be affected to a manageable

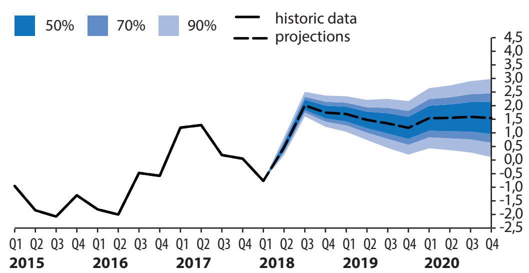
17. For further information regarding the methodology of the risk assessment of macroeconomic projections, see *Economic Bulletin*, June 2015, p. 67.

CHART A.34 **Real GDP fan chart**
(annual change, %)



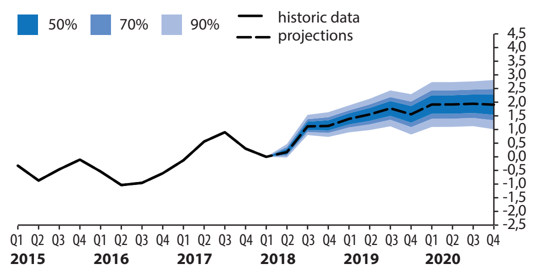
Source: CBC.

CHART A.35 **HICP fan chart**
(annual change, %)



Source: CBC.

CHART A.36 **HICP excluding energy and food fan chart (core inflation)**
(annual change, %)



Source: CBC.

degree (for example due to access to other markets), these risks are not expected to have a significant impact on GDP. Also, recent geopolitical developments in the eastern Mediterranean region may adversely affect the prospects of the tourism and professional services sectors, especially if tensions are prolonged, thus contributing to the climate of uncertainty prevailing in the region. Finally, a possible further appreciation of the euro against the dollar due to political developments could make Cypriot exports more expensive and imports cheaper, resulting in a slowdown in economic activity via reduced exports and investment.

By contrast, possible upward deviations from the baseline GDP scenario are linked to the gradual restitution of public sector wage cuts, with a positive impact on both public and private consumption. Possible relevant deviations are also associated with a higher-than-expected implementation rate of investment projects by the private sector. The higher value added arising from these projects may have a positive impact on the macroeconomic environment beyond that which is associated with the construction of the projects in question. Higher-than-expected absorption of funds from sources outside of the domestic banking system could also contribute to a higher-than-expected increase in investment. In particular through greater use of available financial resources from European Structural and Cohesion Funds as well as financing from the European Investment Bank and the European Bank for Reconstruction and Development. Investments related to the exploration of new gas fields in the Republic of Cyprus' Exclusive Economic Zone could have a further impact on the macroeconomic outlook. It should be noted that the baseline GDP scenario does not take into account possible commercial exploitation of natural gas, which could lead to higher revenues, directly and indirectly, via increased economic activity as any such revenues accrue outside the forecast horizon.

Regarding inflation, and in line with the GDP risks discussed above, possible downward deviations from the underlying scenario (downside risks) are linked to possible deterioration in domestic credit conditions. In particular, if the high level of NPFs is not effectively addressed, domestic demand could be adversely affected. In addition, downside risks are associated with a possible decline in external demand for services as a result of Brexit as well as the recent geopolitical turmoil in the Eastern Mediterranean region. Possible appreciation of the euro against the dollar could also have a direct impact on inflation via a fall in import prices.

The main drivers for possible upward deviations from the baseline inflation scenario are related to a better-than-expected improvement in the domestic economic outlook as outlined above for GDP, including the anticipated restitution of wage cuts in the public sector. In addition, greater-than-expected implementation of investment projects, partly owing to broader use of available funds from sources outside the Cypriot banking system, is expected to have a positive impact on inflation. Finally, the formation of higher-than-originally envisaged oil prices presents an additional upside risk, stemming from the recent geopolitical developments in the Eastern Mediterranean region.

Technical Notes

(A) Domestic monetary aggregates

All monetary aggregates' data exclude the CBC.

On 1 July 2008, a new definition of residents of Cyprus entered into force (Statistical Purposes Directive, 2008). As a result, MFIs reclassified a large number of organisations or customers' businesses with limited or no physical presence in Cyprus, known as 'special purpose entities (SPEs), from non-residents to residents. The effect of this change is excluded from the monetary and financial statistics series presented in this publication, which reports domestic residents data excluding SPEs. For purposes of normalisation and comparability of monetary time series, data have been further processed by the CBC's Economic Analysis and Research Department.

The calculation of annual percentage changes is based on the methodology used by the ECB. More specifically, the growth of monetary aggregates is calculated based on the monthly differences in outstanding amounts adjusted for amounts that do not arise from transactions, such as reclassifications/other adjustments, revaluation adjustments and exchange rate adjustments, so as to reflect changes due to net transactions.

The above methodology has been adopted since the December 2009 edition of the *Economic Bulletin*. In previous editions of the *Bulletin*, the growth rate of monetary variables was calculated as the annual percentage change of outstanding balances at the end of the period. Details of the methodology can be found in the *Monetary and Financial Statistics*, published by the Statistics Department of the CBC, which is available on the CBC website.

(B) Balance of Payments

The present statistical collection system adopted as of June 2014, is based on the methodology of International Monetary Fund (BPM6), which has also been adopted by the EU, as well as on additional requirements and the level of detail required by both the Statistical Service (Eurostat) and the European Central Bank (ECB).

The adoption of BPM6 by the external statistics of the Cyprus took place in June 2014. In October 2014 was the first publication of the data. The published data for BoP, IIP and external debt cover the period from 2008 to date.

The application of new manuals provided the opportunity to adopt broader changes and revisions to improve the coverage and quality of the statistics of the external sector. Specifically, in addition to the incorporation in all external statistics produced and published of the special purpose entities that are registered / incorporated in Cyprus, the CBC has also upgraded the collection systems and compiling statistics of the external sector, giving greater emphasis to the application of new research and the use of available administrative sources.

(C) National Accounts

In June 2014 Cystat implemented the new statistical standards for the historical data series since 1995. The ESA 2010 replaces ESA 1995 and is based on the System of National Accounts (ESA) 2008 which is in the process of being implemented worldwide. The aim is to adapt the national accounts to the current economic environment, advances in methodology and changing user needs. Regarding the sectoral classification, ESA 2010 provides a clearer separation between non-financial corporations and corporations that are not directly engaged in the non-financial activities. In particular, holding companies of non-financial corporations and other so-called captive financial institutions as well as certain Special Purpose Entities (SPEs) are now classified under a new category. In parallel, the investment funds sector is now separated from the remaining part of other financial intermediaries and insurance companies are shown separately from pension funds. The ESA 2010 has also adopted changes to the financial accounts.

More details on the methodology of compiling the balance of payments and the national accounts are available in Box 1, p. 51, of the December 2014 *Economic Bulletin* and on the website of the CBC.