



CENTRAL BANK OF CYPRUS

ECONOMIC BULLETIN

JUNE 2019

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Introduction

2

Macroeconomic
Developments
and Projections

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ABBREVIATIONS

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

Introduction

GDP in Cyprus continues to exhibit positive, albeit decelerating growth, which is still above potential. According to preliminary data, seasonally adjusted GDP registered an increase of 3,5% in 2019Q1 compared with an increase of 4% in 2018Q1. Growth was driven by domestic demand, mainly gross fixed capital formation (various forms of foreign funded investment) and private consumption. Inflation and credit growth remain sluggish despite high growth. Employment in 2018 rose by 4%, while more recent labour market indicators remain favourable. According to Eurostat figures, the seasonally adjusted harmonised unemployment rate fell to 7% in March 2019.

Growth is expected to ease to 3,5% in 2019, 3,1% in 2020 and 3,2% in 2021. Private consumption continues to be robust, driven by among other things high employment growth. The updated macroeconomic projections of the CBC are revised slightly downwards compared to the previous estimates published in the Economic Bulletin of December 2018.

The slowdown is due to the deterioration in the external environment, mainly reflecting the barriers imposed in international trade, which adversely affect exports. Private consumption is expected to register a deceleration, reflecting, inter alia, the projected acceleration in loan repayments and the impact of changes in various social contributions, including the contributions to the General Healthcare System. Investment is expected to be the main driver of growth and

comes from ongoing tourism-related projects, residential construction, renewable energy sources and education. A significant part of these investments is financed by foreign funds. Net exports are expected to constitute an important part of growth due to the high import component of domestic demand.

Risks to the outlook are tilted to the downside. Slowing global growth and investment's substantial dependence on foreign funding, leaves the economy vulnerable to uncertainty driven by external developments.

Headline HICP inflation in 2018 was 0,8%, compared with 0,7% in 2017. Inflation in 2019 is expected to remain sluggish, despite the projected high growth rate. One explanation for the weak inflationary pressures is that, despite the strong employment growth, there is still significant slack in the labour market, restricting wage and unit labour cost growth. In addition, it is possible that technological change may lower production costs and increase competition which may in turn constrain profit margins of firms, weighing on price growth

Public finances are expected to return to surpluses in 2019, after recording a temporary deficit of 4,8% of GDP in 2018, which reflected the one-off support measures related to the sale of the Cyprus Cooperative Bank. Fiscal performance is expected to remain strong, reflecting the positive macroeconomic developments and the continued prudent management of public expenditure.

Regarding the banking sector, a series of structural reforms that took place in the post-crisis years continue to be implemented and

have already strengthened the sector’s ability to deal with any remaining vulnerabilities or potential new challenges. More specifically, there has been significant progress regarding the issue of non-performing Facilities (NPFs) in 2018, mainly due to the transfer of Cyprus Cooperative Bank NPFs outside the banking system, NPFs sales and repayments. However, despite significant progress, the level of NPFs is still very high compared to the euro area average and therefore the effort to reduce them needs to continue. Additionally, it should be noted that the proper restructuring of loans remains a significant challenge despite the sales of NPFs as these

loans are no longer recorded in the banking system but remain part of private debt and therefore continue to constitute a burden for the economy.

In summary, both the economy as a whole as well as the banking sector in particular, continued to record a strong recovery. This is also reflected in the evaluation reports of the rating agencies and other international and European institutions. Nevertheless, given that the risks to the outlook are tilted to the downside, the broad economic and banking sector developments should be continuously monitored and growth needs to be strengthened with further structural reforms.



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1. International Environment: main developments

- *Subdued global economic activity, mainly due to the continuation of trade tensions and the fall in manufacturing activity in the euro area.*
- *Slight decrease of global inflation during 2019Q1 compared with 2018Q4.*
- *Relatively subdued euro area core inflation, with a gradual increase expected only over the medium term.*
- *Increased oil prices since February 2019, mainly due to OPEC's decision to reduce oil production.*
- *Unchanged key interest rates by all major central banks, except the Federal Reserve.*

1.1 External developments

GDP growth¹

Contrary to expectations, global economic activity recorded small signs of improvement in 2019Q1. The slight recovery observed, however, appears to be temporary and is not expected to continue for the remainder of 2019. The main factors that positively affected the annual growth of GDP were the temporary frontloading of stock in UK in anticipation of Brexit and the continued strong economic growth in the US. Nevertheless, downside risks such as the unresolved trade tensions between the US and China, the high import tariffs imposed by the US, Brexit, the decrease in euro area

1. GDP projections are estimated as the average of the most recent projections from the European Commission (European Economic Forecast, Spring 2019) and the IMF (World Economic Outlook, April 2019).

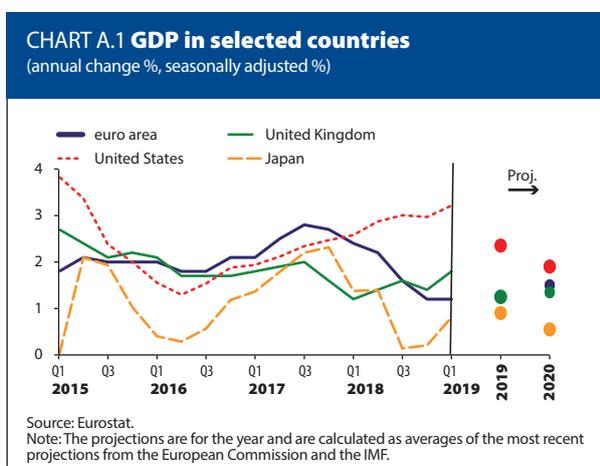
manufacturing and the tightening of credit standards in China have increased market uncertainty. These downside risks are expected to negatively affect the dynamics of global economic activity.

Economic activity in the euro area remained around the levels of 2018Q4 but slowed down compared with 2018Q1. Specifically, annual GDP growth stabilised at 1,2% in 2019Q1 compared with 1,8% in 2018Q1 (**Chart A.1**). The main factors constraining the economy’s growth dynamics are:

- market uncertainty due to trade tensions and Brexit, and lower exports due to reduced external demand from China
- the deceleration of the manufacturing sector and specifically the automotive industry in Germany, with a consequent drop in private consumption.

In addition, the unfavourable global macroeconomic conditions have shifted both the euro area and other advanced economies towards more secure investments. This has resulted in lower stock prices, increased corporate bond spreads and lower government bond yields. In the case of Germany, the 10-year government bond yield turned negative by the end of March 2019. Projections by international organisations and analysts for GDP growth currently stand at 1,3% and 1,5% in 2019 and 2020, respectively.

In contrast to the euro area, the frontloading of stocks by businesses in the UK in anticipation of Brexit has had a positive impact on the country’s GDP growth. In particular, annual GDP growth in the UK reached 1,8% in 2019Q1 compared with 1,2%



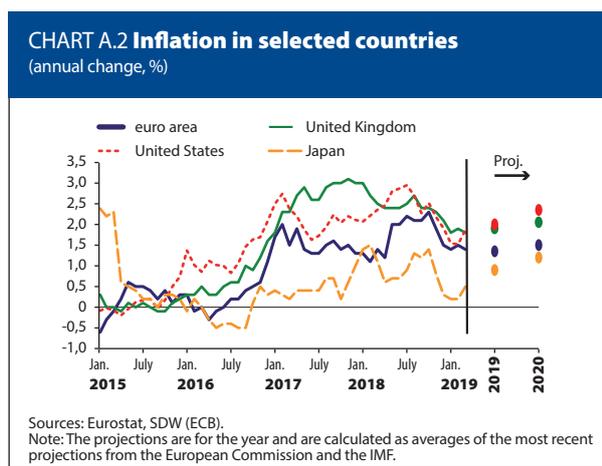
in 2018Q1. However, international organisations and analysts expect that the increase in GDP growth was of a temporary nature and forecast that it will slow down to 1,3% and 1,4% in 2019 and 2020, respectively.

In the US, economic activity remained strong mainly due to the increase in private consumption, stock inventory, government spending, and private investment (excluding investment in residential real estate). Specifically, real GDP growth reached 3,2% in 2019Q1 compared with 2,6% in 2018Q1. Nevertheless, according to the projections of international organisations and analysts, GDP growth is expected to slow down to 2,4% and 1,9% in 2019 and 2020, respectively, mainly due to the expected reduction in government spending and the subsequent contraction of US fiscal policy. In addition, factors such as the import tariffs imposed to China during 2018H2 as well as the possible imposition of tariffs to the euro area are expected to further increase market uncertainty.

Inflation²

Global inflation fluctuated at slightly lower levels during 2019Q1 compared with 2018Q4 mainly due to developments in energy prices, reflecting the generally lower price of oil during the period under review. According to the projections of international organisations and analysts, inflation in selected major advanced countries such as the US, UK, Japan and the euro area, is expected to fluctuate at lower levels in 2019 compared with 2018 (Chart A.2). This development is mainly driven

2. Inflation projections are estimated as the average of the most recent projections from: The European Commission (European Economic Forecast, Spring 2019) and the IMF (World Economic Outlook, April 2019).



by the expected slowdown in global economic growth. It should be noted, however, that based on the latest available data, oil prices for the whole of 2019 are expected to fluctuate, on average, at around the levels of 2018. With regard to 2020, inflation in the aforementioned advanced countries is anticipated to exhibit moderate increases, mainly on the back of envisaged further wage growth in response to the tightening in the labour market.

Exchange rates

The exchange rate of the euro against the dollar and yen continued to exhibit a downward trend between 28 December 2018 and 10 May 2019 (latest available data), mainly due to the lower than expected euro area economic activity (**Chart A.3**). The euro exchange rate against sterling also weakened in 2019, following the appreciation observed in the second half of 2018. Specifically, the euro exchange rate depreciated by 1,8%, 4,3% and 2,5% against the dollar, sterling and yen, respectively.

Oil

The price of Brent crude oil recorded a significant drop in 2018Q4, mainly due to increased oil production by the US, Saudi Arabia and Russia following the imposition of US sanctions on Iranian oil importers (**Chart A.4**). However, since February 2019 the price of oil has been following an upward trend following OPEC’s decision to decrease oil production. In particular, the price of oil

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

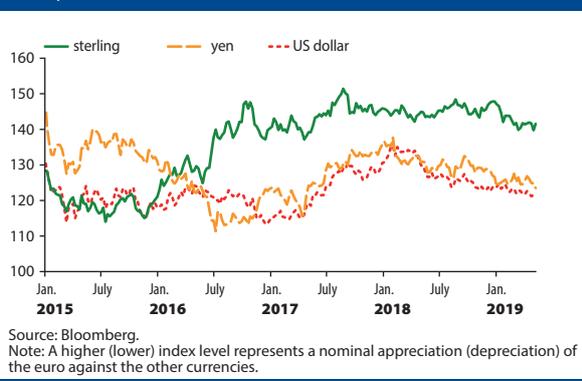


CHART A.4 Closing prices of oil (Brent)
(weekly data)



increased to \$70,62 per barrel on 10 May 2019 from \$52,20 per barrel on 28 December 2018.

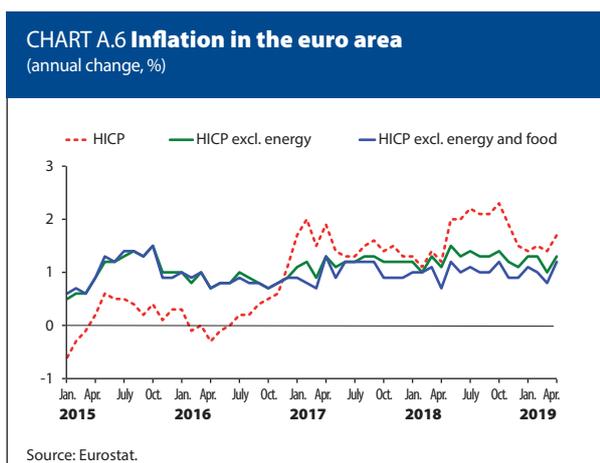
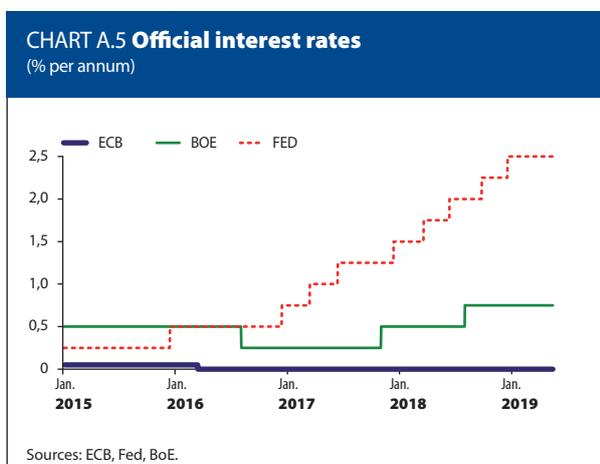
International official interest rates

Most major central banks, with the exception of the Fed, kept their key interest rates unchanged. The key interest rates of the ECB and the Bank of England currently stand at 0% and 0,75%, respectively (Chart A.5). In contrast, in mid-December 2018 the Fed decided to increase its key rate by 25 basis points (the upper rate was increased from 2,25% to 2,50%). It should be noted that the Fed does not expect to further increase its base rate in 2019, amid low inflation expectations by the markets.

1.2 Monetary developments in the euro area

Inflation

According to the latest available data, euro area inflation reached 1,7% in April 2019 compared with 1,4% in March 2019 (Chart A.6). The small acceleration of inflation was mainly driven by higher increases in the prices of services. In recent months, increased energy prices have had a major positive impact on overall euro area inflation. In contrast, during the first four months of 2019, increases in non-energy industrial goods prices continued to remain at very low levels. As a result, inflation excluding energy and food prices (core inflation) has been persistently subdued, remaining almost unchanged compared with the first four

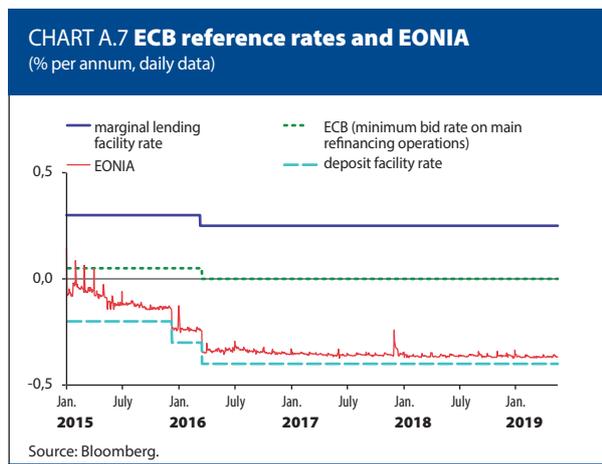


months of 2018. Over the medium term, a gradual increase in core inflation is expected, mainly supported by the ECB’s expansionary monetary policy measures, the expected ongoing economic growth and the expected further gradual rise in wages.

Given the latest available data as well as the decelerating developments in the global economy, HICP inflation is expected to slow down in the coming months. The most recent euro area inflation projections of international organisations and analysts converge to 1,4% for 2019 and around 1,5% in 2020 compared with 1,8% in 2018.

Reference rates and ECB intervention

As regards standard monetary policy measures, the ECB kept its key interest rates unchanged during the first five months of 2019, to 0,25%, 0% and -0,40% for marginal lending facility rate, the main refinancing operations rate and deposit facility rate, respectively. The EONIA rate has remained broadly unchanged (Chart A.7). Specifically, the EONIA rate closed at -0,36% on 15 May 2019, remaining at the same levels as at the beginning of the year. Concerning non-standard policy measures, the net purchases under the Asset Purchase Programme (APP) ended in December 2018. The ECB continues “reinvesting, in full, the principal payments from maturing securities purchased under the APP and will continue to do so for an extended period of time and in any case for as long as is necessary to maintain favourable liquidity conditions”. In addition, in March 2019, the ECB announced a new series of



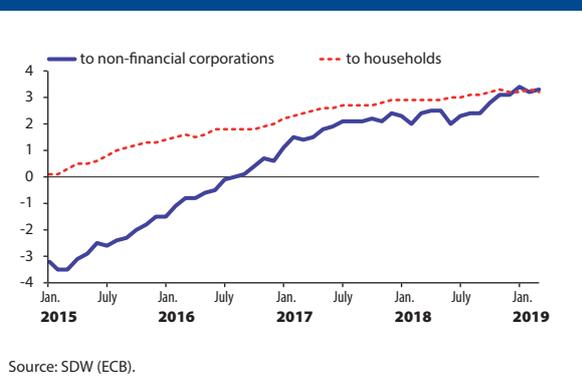
quarterly targeted longer-term refinancing operations (TLTRO-III) to be launched in September 2019 and end in March 2021, each with a two-year maturity. These new operations are expected to contribute in preserving favourable bank lending conditions and the smooth transmission of monetary policy.

The main objective of the aforementioned ECB’s monetary policy measures, both standard and non-standard, is to accommodate the return of euro area inflation back to the medium-term target of below but close to 2%.

Credit expansion: loans

Loans to the euro area private sector, both non-financial corporations (NFCs) and households, have continued to record positive growth rates during 2019Q1 (Chart A.8). It is worth mentioning that the recent positive growth rates recorded by the non-financial private sector are the highest since June 2009. This development mainly reflects banks’ excess liquidity, low euro area lending rates as well as the favourable overall terms and conditions applied by banks for the approval of new loans. More specifically, according to the results of the April 2019 euro area *Bank Lending Survey* (BLS), an increase in net loan demand by households for all loan categories was recorded in the euro area during 2019Q1, while net loan demand for loans by enterprises remained unchanged during the period under review. This is despite credit standards for loans to households being tightened and credit standards for

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



loans to enterprises remaining broadly unchanged. According to the BLS, the participating banks expect credit standards for loans to enterprises and households for consumption and other lending purposes to ease in 2019Q2 compared with 2019Q1, whereas those for loans to households for house purchase are expected to tighten in 2019Q2. Net loan demand by both households and enterprises is expected to further increase in 2019Q2 compared with 2019Q1. Despite these positive developments, the high level of NPFs in some member states continues to hinder credit growth dynamics in the euro area as well as overall economic activity.

2. Domestic developments

- *Increasing trends in domestic inflation, albeit remaining at subdued levels.*
- *Upward trend in the annual growth rates of deposits and loans to the domestic private sector.*
- *Significant decrease in the level of NPFs in 2018.*
- *Continuation of the favourable low domestic interest rate regime, with further small reductions in both lending and deposit rates.*
- *Continued GDP growth, albeit at a decelerating pace, reflecting positive developments in domestic demand.*
- *Further decline in unemployment, registering rates lower than the euro area average.*
- *Continued gradual recovery in the real estate market, with the demand rising*

sharply and prices recording relatively small increases, with the exception of Limassol, which has recorded a significant increase in apartment prices.

- Continued primary surpluses recorded by the public sector.

2.1 Domestic Prices, Monetary Aggregates and Labour Costs

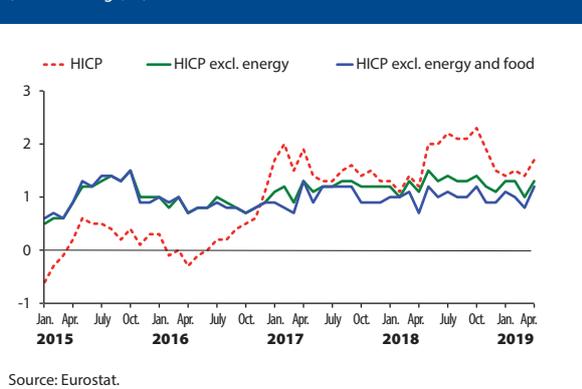
Inflation

The Harmonised Index of Consumer Prices (HICP) increased by 1,2% in April 2019 compared with a decrease of 0,3% in the corresponding month of 2018.

With regard to the first four months of 2019, HICP inflation reached 1,3% from -0,6% in the corresponding period of 2018 (Chart A.9 and Table A.1). The increasing trend of headline inflation during the first four months of 2019 reflects the increases in energy and food prices (especially in the unprocessed food category) as well as the increases in the prices of services. In contrast, non-energy industrial goods prices continued to register annual decreases mainly on the back of increased competition, including off-season or mid-season sales/special offers, Easter offers as well as online competition.

Core inflation, i.e. inflation excluding energy and food prices, also registered an increase of 0,6% during the first four months of 2019 compared with a marginal decrease of 0,1% in the corresponding period of 2018 (Chart A.9 and Table A.1). The subdued levels of core inflation mainly reflect the negative impact of non-energy industrial goods prices

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



Source: Eurostat.

TABLE A.1 Inflation in Cyprus

	Weights ⁽¹⁾	Annual change (%)				
		Jan.-Apr. 2018	Jan.-Apr. 2019	Apr. 2018	Mar. 2019	Apr. 2019
HICP	1000,00	-0,6	1,3	-0,3	1,1	1,2
Unprocessed food	51,52	-5,6	11,8	3,1	8,3	5,1
Processed food	180,01	-1,1	0,7	-0,9	0,5	1,1
Energy	85,14	-0,3	1,6	0,0	2,2	2,9
Services	459,25	1,0	1,2	0,5	0,8	1,8
Non-energy industrial goods	224,08	-2,5	-0,5	-2,4	-0,1	-1,4
HICP excluding energy	914,86	-0,7	1,3	-0,3	0,9	1,1
HICP excluding energy and food	683,33	-0,1	0,6	-0,4	0,5	0,7

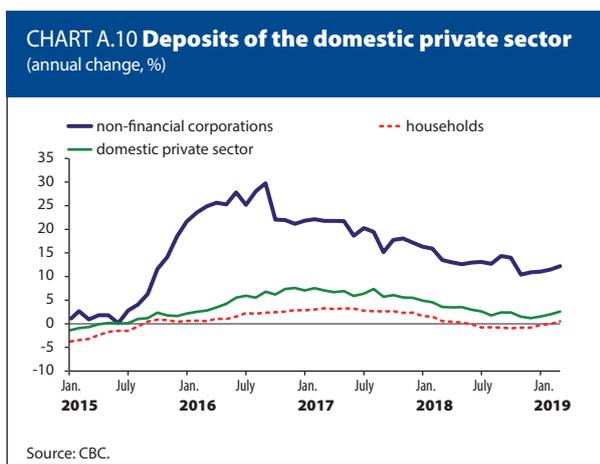
Source: Eurostat.
(1) Based on the weight for 2019.

(for further analysis and explanation of the prolonged period of subdued inflation in Cyprus, see **Box 1**, p. 21) which largely offsets the positive impact of services prices. It should be noted that core inflation is important as it shows the general price trends excluding the impact of exogenous and volatile factors and components, such as the prices of energy and food.

Monetary aggregates^{3,4}

Confidence in the banking sector in Cyprus improved in 2019Q1, following the uncertainty that prevailed during most of 2018 mainly driven by the developments in the Cooperative Central Bank. As a result, the annual growth rates of deposits and loans of the domestic private sector exhibited an upward trend in 2019Q1.

In particular, domestic private sector deposits recorded an annual increase of 2,6% in March 2019 compared with 1,2% in December 2018 and 3,6% in March 2018 (**Chart A.10**). The acceleration in the growth rate since December 2018 is mainly due to a base effect as there were large outflows of deposits in the corresponding period of 2018. In addition, the first available data on total deposits for April 2019 indicate an inflow of deposits. Non-resident deposits, on the other hand, remain on a downward trajectory, partly due to stricter anti-money laundering guidelines, and especially to efforts being made to eliminate the use of the domestic



3. For a detailed explanation of the methodology and technical analysis of monetary aggregates, see Technical Notes on p.64.
4. The analysis on monetary aggregates (deposits and loans) in this section of the *Bulletin* focuses on domestic residents excluding SPEs. SPEs are included in the non-residents category.

Box 1. The paradox of subdued inflation in Cyprus over the last few years

1. Introduction

One of the most important issues that is currently of concern to central banks and other international economic observers, is the prolonged period of low inflation. This phenomenon contrasts with the positive trends recorded in other macroeconomic variables, such as GDP growth and the unemployment rate. In general, maintaining a certain relatively low and stable level of inflation is the target of many central banks, due to the underlying adverse effects of persistent high price increases on the real economy and consumers¹. On the other hand, the persistence of inflation at excessively low or subdued levels, is of concern to central bankers² as it increases the risk of deflation (price reductions), which together with subdued or weakening economic activity may also have significant economic costs³.

Section 2 of this Box presents the inflation path in Cyprus since 2000. The history of domestic inflation is reviewed, first from 2000 to 2013, the year of the peak of the crisis, and then from 2013 to 2016, the year of the exit from the economic adjustment programme. Next,

the period 2017 to date is analysed, during which domestic inflation has continued to remain subdued, despite strong economic growth recorded by the Cyprus economy. Section 3 presents possible explanations for the above paradox, while Section 4 concludes.

2. Historical review of the course of inflation in Cyprus

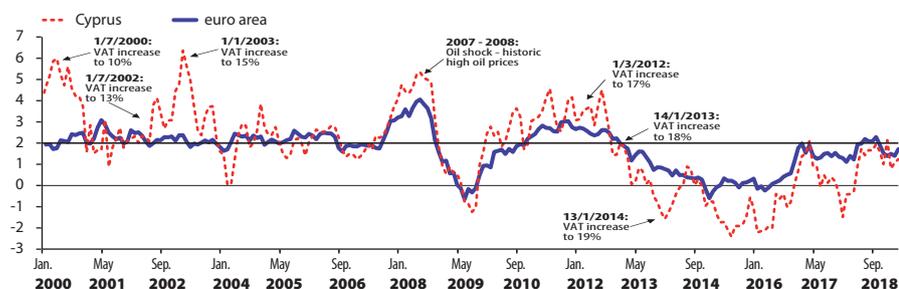
Prior to joining the euro area in 2008, Cyprus pursued a fixed exchange rate policy with the Cyprus pound either being pegged to a single currency (i.e. the euro) or a basket of currencies (i.e. the ecu). The fixed exchange rate regime played a key role in containing inflation at the levels of the island's trading partners, and specifically at euro area levels in the years preceding euro adoption. For most of the last 40 years, domestic inflation has generally remained at between 2% and 3%. Undoubtedly, the stable connection of the Cyprus pound with currencies that had a strong anti-inflationary history helped to maintain low domestic inflation through cheaper imported products. In other words, the openness of the Cyprus economy and the high weight of imported products in the consumer price index kept the general level of prices in Cyprus at low levels (Kyriacou and Syrichas, 1999, and

1. For further explanation of the effects of high inflation, see Anderson (2006) and <https://www.ecb.europa.eu/explainers/tell-me-more/html/stableprices.en.html>.
2. For example, in the minutes of the ECB Governing Council's monetary policy meeting on 9-10 April 2019 it is noted that inflation remained below its target at "uncomfortable" levels.
3. For further explanation of the consequences of deflation see, European Central Bank (2009) and <https://www.ecb.europa.eu/explainers/tell-me-more/html/stableprices.en.html>.



CHART 1 HICP in Cyprus and euro area

(annual change, %)



Sources: Eurostat, CBC.

Syrichas, Argyridou-Demetriou, Karamanou and Cleanthous, 2012).

Despite the fact that, historically, Cyprus appears to have “imported” the level of inflation of its main trading partners, it exhibited relatively higher inflation volatility. On the one hand, external factors, such as significant changes in international oil prices, had a significant impact on domestic inflation, since Cyprus was, and remains, heavily reliant on oil imports for energy compared with the rest of the euro area. On the other hand, domestic factors such as changes in indirect taxes during the harmonisation process with the *acquis communautaire*, as well as changes in agricultural commodity prices associated with weather conditions, were at times the cause of significant volatility in domestic inflation. At the same time, euro area inflation has by definition been less volatile, as it is a weighted average of its member countries’ inflation and any idiosyncratic changes at the national level can be eliminated by

opposite changes in other member countries (Cleanthous and Kapatais, 2012).

Chart 1 presents the course of inflation in Cyprus and the euro area during the period 2000 to the present. For analytical purposes, this period is divided into three sub-periods: (a) 2000-2012 (the pre-crisis period); (b) 2013-2016 (the period from the peak of the crisis till the exit from the economic adjustment programme); and (c) 2017 to date (the period of strong economic growth).

2.1 Analysis of the period 2000 – 2012

Chart 1 shows distinct periods where domestic or exogenous factors led to higher inflation in Cyprus, such as for example in 2000, 2003, 2008 and during the period 2010-2012. Indicatively, the spike in domestic HICP inflation in 2000 was due to the increase in international oil prices and the VAT increase from 8% to 10% in July 2000. In 2002 and 2003, the increase in inflation was mainly due to further VAT increases to 13% and 15%,

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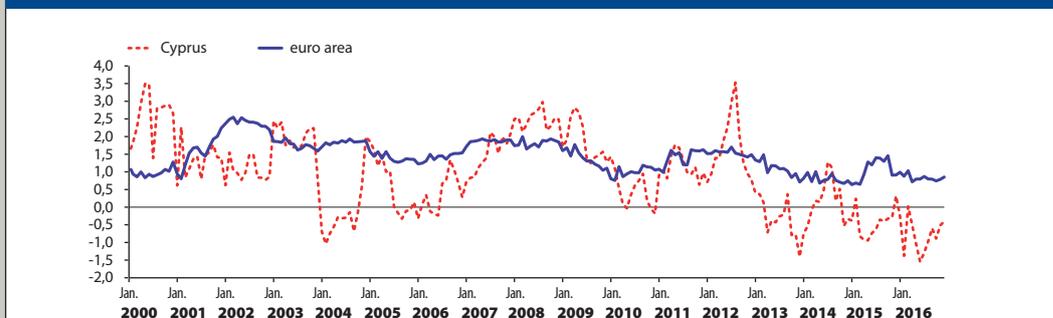


1 Introduction

2 Macroeconomic Developments and Projections

CHART 2 HICP excluding energy and food : Cyprus and euro area

(annual change, %)



Source: Eurostat.

respectively, with the aim of harmonising Cyprus with the *acquis communautaire* in the course of its EU accession. By contrast, the slowdown in domestic inflation in 2004 and 2006 was mainly driven by the reduction of consumption taxes for cars and the further liberalisation of imports following EU accession. The high inflation in 2008 was, on the one hand, the result of historically high oil prices, which reached \$145 a barrel in July 2008, and, on the other hand, a result of endogenous factors related to excessive domestic demand as well as an expansionary fiscal policy. These conditions affected not only inflation but also the current account, which reached the unprecedented level of 15,5% of GDP in 2008.

Adjusted for the impact of the above-mentioned external and one-off domestic factors, inflation in Cyprus fluctuated in line with euro area inflation, due to the pegging of the Cyprus pound to the euro

since 1999 and the introduction of the euro in January 2008.

2.2 Analysis of the period 2013 – 2016

In the period 2013-2016, the period marked by the domestic financial crisis, inflation in Cyprus was significantly lower than euro area inflation, despite the VAT increases in 2013 and 2014 (Chart 1, p. 22). The domestic financial crisis, which followed the euro area crisis, resulted in measures to reduce public spending and consolidate the banking sector, and led to a significant increase in unemployment coupled with large wage cuts and a consequent reduction in production costs. These factors shifted supply to the left and adversely affected domestic demand thus contributing significantly to the reduction in both headline and core inflation⁴ to negative levels. The drop in domestic inflation in turn resulted in the narrowing of the spread between domestic and euro

4. Core inflation excludes the categories that exhibit high volatility and are affected by external factors, namely the categories of food and energy.

area core inflation (Chart 2, p. 23). Overall, this development created an "internal domestic devaluation" during the crisis years, which, despite the broadly negative circumstances, led to an improvement in the competitiveness of the Cyprus economy and allowed the domestic economy to recover faster than initially expected⁵.

2.3 Analysis of the period January 2017 - March 2019

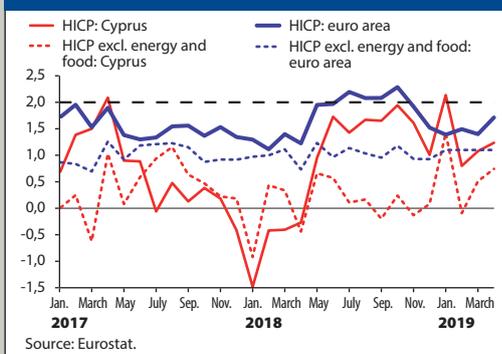
Since 2015, the domestic economy has experienced strong growth and a gradual fall in unemployment. Headline and core domestic inflation, however, remain subdued and below the corresponding euro area levels, despite the fact that since 2017 they have returned, on average, to positive levels (Chart 3).

The continuous subdued course of inflation between 2017Q1 and 2019Q1 is reflected in most categories except the energy component. Table 1 (p. 25) shows the weighted contributions of the main inflation sub-components to total headline inflation from 2017Q1 to 2019Q1. Specifically, as shown in the above table, the annual prices of services have had a small positive effect on overall inflation, while the prices of non-energy industrial goods show significant successive negative contributions. By contrast, energy prices have contributed significantly to headline inflation, while food prices recorded mixed developments.

5. Inflation is also affected by the fall in oil prices and other external factors. For further analysis of the course of inflation during the period of the domestic financial crisis, see "Box 2: Negative inflation in Cyprus", *Economic Bulletin*, December 2016, p25.

CHART 3 HICP and HICP excluding energy and food : Cyprus and euro area

(annual change, %)



The strong GDP growth that has been recorded since 2015 has resulted in a fall in unemployment, from 16,1% in 2014 to 8,4% in 2018. Cumulative precautionary savings by households helped to smooth private consumption from the original negative wage shocks. Following the strong recovery, private consumption recorded, on average, an annual increase of around 4% over the period 2016-2018. At the same time, consumers' confidence has stabilised at historically high levels, while private sector wages have recorded positive, albeit small, increases. Using the above developments as input, macroeconomic models have predicted that core inflation will increase and return to normal levels. However, these projections have tended to systematically overshoot the actual inflation outcome. As a result, forecasts of inflation are repeatedly revised downwards (Chart 4). The paradox of the decoupling of core inflation from

TABLE 1 Weighted contribution to total HICP inflation by economic category

	Weights 2019	Percentage points (%)								
		Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
HICP (%)	1.000,00	1,2	1,3	0,2	0,1	-0,8	0,8	1,6	1,5	1,3
Unprocessed food	51,52	0,4	0,2	-0,3	0,0	-0,5	0,3	0,3	0,2	0,7
Processed food	180,01	-0,1	-0,3	-0,4	-0,4	-0,2	-0,1	0,1	0,2	0,1
Energy	85,14	0,9	0,8	0,3	0,2	-0,0	0,4	1,1	1,1	0,1
Services	459,25	0,0	0,6	0,9	0,5	0,5	0,6	0,4	0,4	0,5
Non-energy industrial goods	224,08	-0,1	-0,3	-0,3	-0,3	-0,6	-0,4	-0,3	-0,3	-0,1

Sources: Eurostat, CBC calculations.
Note: Categories may not sum up to total HICP growth due to statistical error

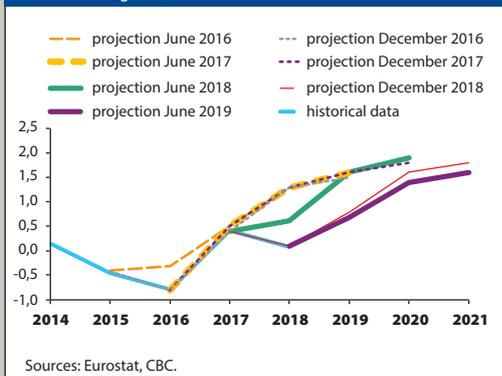
macroeconomic developments⁶ points towards the possibility that other domestic structural and international factors may affect prices.

3. Potential factors contributing to subdued inflation

To examine the reasons behind the containment of core inflation in Cyprus, it is necessary to analyse the contributions of its sub-components, i.e. inflation of services and non-energy industrial goods.

Concerning the distribution of the weighted impact of the services sub-categories (Chart 5), it appears that, at least in the last quarters, the prices of telephone services and accommodation as well as the average prices of passenger air transport have contributed negatively to services inflation. Chart 6 (p. 26) presents the contributions of the prices of the main subcategories to the non-energy industrial goods inflation from 2017Q1 until 2019Q1.

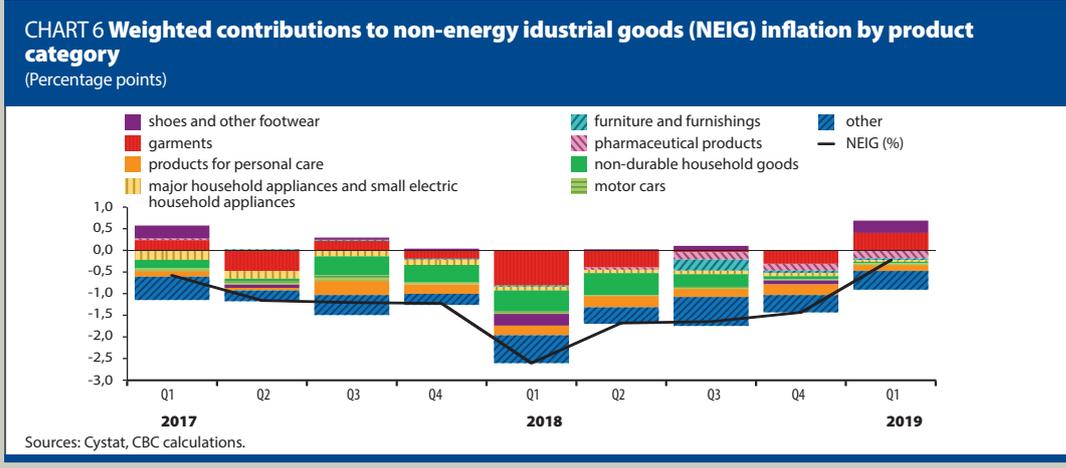
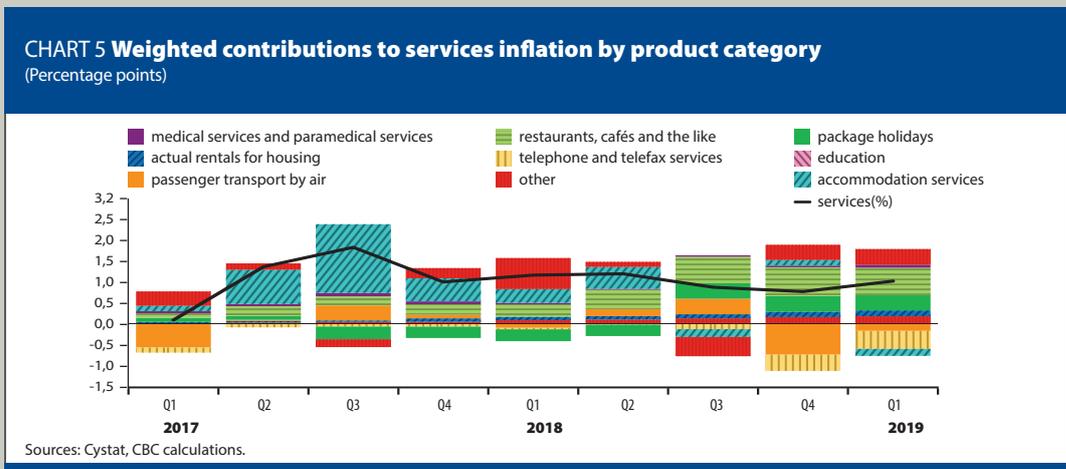
CHART 4 HICP excluding energy and food projections (annual change, %)



Sources: Eurostat, CBC.

The continuous negative inflation of non-energy industrial goods during the period under review is mainly driven by the negative contributions of the prices of cars, electrical appliances, furniture, non-durable household goods, personal care items as well as clothing and the prices of the category “others”⁷. These categories include a large share of imported goods, since Cyprus is highly dependent on other countries for supplying the domestic

6. For more in-depth analysis of the low inflation paradox, see Ciccarelli and Osbat (2017) and Abdih, Lin and Paret (2018).
7. The category “others” include, among other things, glassware and household utensils, mobile telephony equipment and sound and video capture and recording equipment.



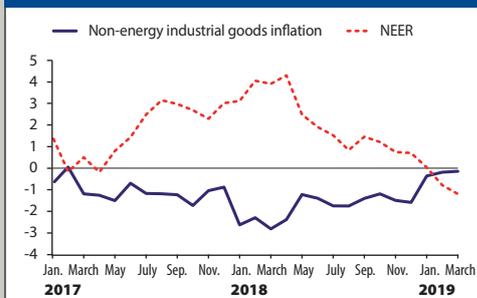
market with non-energy industrial goods (Kyriacou and Ktoris, 2012).

The imported industrial goods, the prices of which are recorded in the corresponding inflation category (Chart 6), are influenced, *inter alia*, by movements in the exchange rate. In particular, the prices of non-energy industrial goods decreased in 2017 (Chart 7, p. 27), mainly driven by the appreciation of the euro against foreign currencies as reflected in the trend of the nominal

effective exchange rate (NEER) of the euro in Cyprus. In 2018 and in the first months of 2019, the prices of non-energy industrial goods recorded a lower decrease due to the depreciation of the euro, as evidenced by the trend of the NEER index.

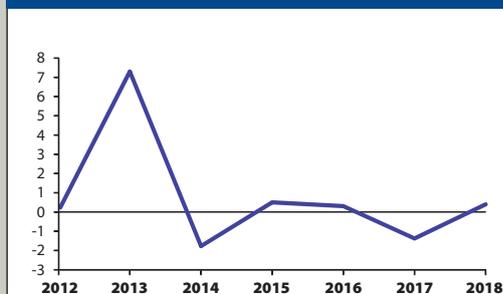
At the same time, the significant reductions in wages and the consequent reduction in unit labour costs, allowed the private sector, in an effort to remain competitive, to reduce its prices and keep

CHART 7 Non-energy industrial goods inflation and the nominal effective exchange rate (NEER) index
(annual change, %)



Sources: Eurostat, IMF.

CHART 8 Profit margin indicator
(annual change, %)



Sources: Cystat, CBC calculations.

them low. This has, to some extent, affected profit margins⁸ (Chart 8). Furthermore, ineffective and inefficient firms, which were operating with high costs and charging relatively high prices, were forced to exit the market following the crisis in Cyprus, thus reducing further the overall price level in the economy.

Technological advances also appear to have a direct impact on non-energy industrial goods inflation. In general, they can influence price dynamics through two main channels. Firstly, they can directly reduce the prices of those goods and services related to information and communication. The rapid technological development observed over the last decade has contributed to increased productivity gains with a consequent impact on prices (Lv, Liu and Xu, 2019). More specifically, and given a stable stock of human capital per worker, technological progress seems to have shifted the total

supply curve to the right causing an increase in output. Lower costs of production are thus reflected in lower consumer prices. Secondly, technological innovation can indirectly affect prices by changing consumer behaviour, market structure and competition. The widespread availability of price and product information on the internet reduces sellers' power in price setting, as consumers can look for better prices and greater variety elsewhere at no cost (Monetary Authority of Singapore, 2018).

In addition to the above analysis, which is based on the international literature, there may be other, though not unique factors in the case of Cyprus to explain the reasons for inflation remaining subdued. For example, the retail sector (supermarkets, cars, clothing, electrical products) is constantly growing with many changes taking place. In particular, competition in the retail sector in recent

8. The profit margin ratio is calculated as the difference between the GDP deflator adjusted for specific factors and the unit labour costs of the private sector.

years has led the market to expand, with the established supermarkets increasing their number of branches across the island. At the same time, a significant increase in the presence of discount stores has also been observed. Whilst these stores were initially engaged in the selling of electrical products and furniture, they have now expanded their range to also include the type of products stocked by supermarkets, such as detergents, stationery and personal care items, thus constantly offering low prices throughout the year. In addition, a number of Cypriot consumers have turned to the internet to buy various consumer goods, including electronic devices, personal care items and clothing, mainly due to the lower prices being charged compared with domestic stores. This is confirmed by the fact that amongst the top 10 most visited websites from Cypriot consumers are companies that are mainly active in online selling of electrical appliances, cars and other non-durable household goods⁹. The significant increase in competition has thus forced domestic companies to become more efficient and further reduce their costs, so that they can offer lower prices in order to maintain their market share. In relation to this, the Ministry of Labour, Welfare and Social Insurance revised through a decree¹⁰ the opening hours of stores, by increasing the working hours for Saturdays and allowing

them to operate on Sundays, thus further increasing market competition.

The above developments, and especially the widespread use of the internet, have also affected the prices of services. In particular, the price of air transport that negatively contributes to services inflation is affected by the increased availability of websites providing comparative prices and special offers. The prices of telephone services on the other hand have been affected by the liberalisation of the market and the introduction of new competitors.

4. Conclusion

Historically, inflation in Cyprus was "imported" from its main trading partners and those countries with which the Cyprus pound was pegged to. Since the adoption of the euro in 2008, inflation, adjusted for one-off factors such as VAT increases, has remained broadly close to euro area inflation. Since 2016, both headline and core inflation have remained sluggish, despite the continuous recording of high economic growth, the significant fall in unemployment and the unprecedented size of the ECB's expansionary policy. The structural break in the relationship between inflation and the fundamental macroeconomic aggregates is also reflected in the continuous downward

9. See www.topsitescy.com.

10. Official Gazette of the Republic of Cyprus (2015) *Regulation of the Operation of Shops and of the Conditions of Employment of Shop Employees Law (Laws 155 (I) of 2016, 68 (I) of 2007, 6 (I) of 2011 and 55 (I) of 2015)* in Appendix Three, Part I: Regulatory Administrative Acts, April.

revisions to inflation forecasts.

The paradox of prolonged low inflation, at least in Cyprus, can be partly explained by the various structural changes that have taken place in the economy. These changes, possibly being a consequence of the crisis and the change in consumers' behaviour, have contributed to the containment of consumer prices. For example, the change in the way companies are now operating and the opening up of other consumer purchasing options has greatly increased both the efficiency of firms and competition, particularly in the manufacturing sector, limiting to some extent their profits. Technological advances have also increased productivity in some product categories, allowing firms to lower their overall price level. A complete and definitive explanation of the protracted period of subdued inflation that is not justified by other macroeconomic data, such as the significant reduction in unemployment, has not yet been provided, neither for Cyprus nor for the euro area. Hence further research is required.

References:

Anderson, G.R. (2006) Inflation's economic cost: How large? How certain?" *Regional Economist, Federal Reserve Bank of St. Louis*, July.

Cleanthous, L. and D. Kapatais (2012) "Inflation and the importance of price stability: analysis and the effects on the domestic economy", in A. Orphanides

and G. Syrichas (eds) *The Cyprus Economy: Overview, Prospects, Challenges*, Central Bank of Cyprus.

European Central Bank (2009) "Box5.4: A safety margin against deflation", *Price Stability: Why is it important for you?*, Frankfurt am Main, April, page 61.

European Central Bank (2019), "Account of the monetary policy meeting of the Governing Council of the ECB", Frankfurt am Main, 9-10 April. <https://www.ecb.europa.eu/explainers/tell-me-more/html/stableprices.en.html>. <https://www.ecb.europa.eu/press/accoun ts/2019/html/ecb.mg190523~3e19e27fb7.en.html> <https://www.topsitescy.com>

Kyriacou, G. (2002) "The current framework of exchange rate policy in Cyprus and recent developments", *Cyprus Journal of European Studies*, Vol. 1, No. 2, Spring.

Kyriacou, G. and G. Syrichas (1999) "EMU and the introduction of the euro: macroeconomic implications for the Cypriot economy", *Quarterly Economic Review*, Issue 143, June, Central Bank of Cyprus.

Kyriakou, G. and M. Ktoris (2012) "External transactions", in A. Orphanides and G. Syrichas (eds) *The Cyprus Economy: Overview, Prospects, Challenges*, Central Bank of Cyprus.

Lv L., Z. Liu and X. Xu (2019) "Technological progress, globalization and low inflation: Evidence from the United States", *PLoS One*, 14 (4): e0215366.

Matteo, C. and C. Osbat (2017) "Low

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Introduction

2

Macroeconomic Developments and Projections

Inflation in the Euro Area: Causes and Consequences", Occasional Paper Series, No 181, European Central Bank.
Monetary Authority of Singapore (2018) "Special Feature B. The Impact of Technological Progress on Inflation: A Review", *Macroeconomic Review*, Economic Policy Group, October.
Syrichas, G., Ch. Argyridou-Demetriou, P. Karamanou and L. Cleanthous (2012)

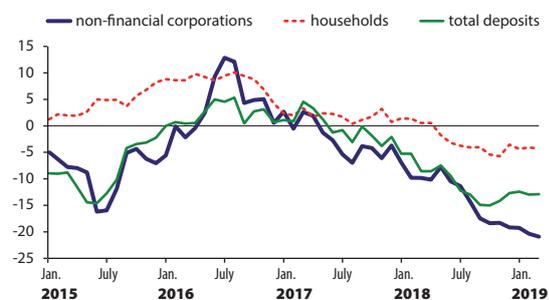
"Monetary policy strategy of the Central Bank of Cyprus (CBC)", in A. Orphanides and G. Syrichas (eds) *The Cyprus Economy: Review, Prospects, Challenges*, Central Bank of Cyprus.
Yasser Abdih, Li Lin and Anne-Charlotte Paret (2018) "Understanding Euro Area Inflation Dynamics: Why So Low for So Long?", IMF Working Paper, WP / 18/188.

financial system as a channel for the legalisation of proceeds from illicit activities. At the same time, the implementation of these guidelines may negatively affect legitimate activities or transactions that flow out of the domestic banking system due to delays and additional costs, thus further contributing to the acceleration of the rate of their decline. Specifically, the annual growth rate of non-resident deposits stood at -12,9% in March 2019 compared with -12,7% in December 2018 and -8,6% in March 2018 (Chart A.11).

In line with the robust economic environment there was an increase in new loan contracts in 2019Q1 compared with 2018Q1, especially to NFCs, supporting the upward trend in total loans. Total loans to the domestic private sector recorded an annual increase of 1,5% in March 2019 compared with 1% in December 2018 and 0,5% in March 2018. Specifically, the annual growth rate of total loans to the domestic NFCs reached 2,7% in March 2019 compared with only 0,3% to domestic households (Chart A.12). Looking at the composition of total household loans, we note that consumer and other loans recorded higher annual growth rates than housing loans, as the latter recorded only marginal growth (Table A.2).

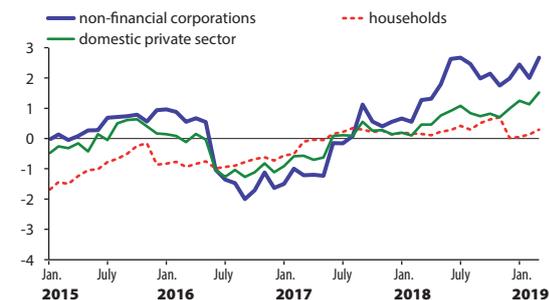
On the other hand, the high level of NPFs, despite their noticeable decline, continues to burden the loan portfolio of banks and adversely affect credit supply. Continuation of the de-escalation is expected to bring further normalisation to the financial system, laying the foundation for sustainable future growth of the sector. NPFs fell by €10,3 billion in 2018

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.

TABLE A.2 Loans to domestic households ^{(1),(2)}

	Outstanding balance as % of total ⁽³⁾	Annual percentage change					
		2017 Dec.	2018 Mar.	2018 June	2018 Sep.	2018 Dec.	2019 Mar.
Domestic households	100,0	0,1	0,2	0,3	0,5	0,0	0,3
1. Consumer credit	13,4	1,7	1,9	2,3	1,9	1,4	0,9
2. Lending for house purchase	64,4	-0,8	-0,7	-0,4	-0,1	-0,3	0,1
3. Other lending	22,3	1,2	0,9	0,8	1,1	0,3	0,6

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.

and by €17,5 billion from their peak in February 2015. The decrease in 2018, in addition to repayments, was *inter alia*, due to non-recurring factors such as the removal of the Cooperative Central Bank's NPFs from the banking system as well as the reclassification of part of the NPFs as debt securities held for sale. A further decrease is expected due to: a) the strengthened legislative framework that facilitates banks to address NPFs more effectively; b) the joint ventures between banks and specialised loan management companies; and c) the impending implementation of the ESTIA scheme. The ESTIA scheme is faced with the most challenging portfolio of NPFs, that is loans to households and small businesses that have the primary residence as collateral. The further reduction of NPFs is expected to have a positive impact on lending and contribute to the overall growth of the economy.

The April 2019 BLS results indicate that strict lending conditions continue to prevail. In particular, credit standards for granting loans remained unchanged in 2019Q1, both for enterprises and households. This implies that banks continue to apply strict criteria for granting loans at roughly the same levels adopted before 2015. Net demand on the other hand, favoured by low interest rates, has been recording consecutive increases from 2015, both for housing loans and enterprise loans. Net demand by households for consumer and other loans in 2019Q1 remained unchanged compared with the previous quarter. However, it remains elevated compared with net demand before 2015. According to the BLS, an increase in

demand across all loan categories is expected in 2019Q2, while credit standards are expected to remain unchanged (Table A.3).

Interest rates

The downward trend in interest rates in Cyprus continued in 2019Q1, as a result of the continued expansionary monetary policy in the euro area. Low interest rates have contributed to the increased demand for new loans, both by households and non-financial corporations, as recorded in the BLS, with a consequent positive impact on domestic economic activity.

Analytically, in March 2019 the domestic average interest rate on new loans to households for house purchase⁵ decreased to 2,20% compared with 2,52% in March 2018 and 2,23% in 2018Q4. (Chart A.13). The interest rate on consumption loans also fell and reached 2,86% in March 2019. The cost of new lending by domestic MFIs to euro area NFCs for amounts of up to € 1 million fell, from 3,63% in March 2018 to 3,47% in 2018Q4 and then to 3,27% in March 2019 (Chart A.14, p. 34).

With respect to domestic deposit rates, the average interest rate⁶ for new household deposits continued to decline and stood at 0,36% in March 2019 from 0,40% at end-2018, almost reaching for the first time the corresponding euro area interest rates (Chart A.15, p. 34). The average interest rate on deposits for NFCs in March 2019 stood at the level of December 2018, namely 0,44% (Chart A.16, p. 34).

5. Euro-denominated loans from Cyprus MFIs with an initial rate fixation of up to one year.
6. Average interest rate with an agreed maturity of up to one year.

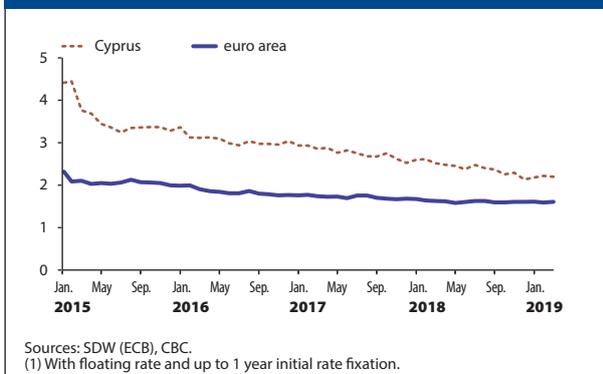
TABLE A.3 Summary of BLS results

Summary of BLS results Apr 2019	Cyprus		euro area	
	2019 Q1	2019 Q2 (expectations)	2019 Q1	2019 Q2 (expectations)
Credit standards for loans				
Enterprises	Unchanged	Unchanged	Broadly unchanged	Easing
Households				
- Housing loans	Unchanged	Unchanged	Tightening	Tightening
- Consumer credit and other lending	Unchanged	Unchanged	Tightening (slightly)	Easing
Demand for loans				
Enterprises	Increase	Increase	Unchanged	Increase
Households				
- Housing loans	Increase	Increase	Increase	Increase
- Consumer credit and other lending	Unchanged	Increase	Increase	Increase

Sources: CBC, ECB (SDW).

Note: The above results list the changes in credit standards and loan demand that occurred in the last three months (in this case 2019Q1) and the changes that are expected for the next three months (i.e. 2019Q2). The measure used for the statistical analysis of this research is the diffusion index.

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.

Indicatively, during the period March 2018-March 2019, the spread between domestic and euro area deposit rates for households and NFCs declined by 64 and 71 basis points, respectively. At the same time, the spread between the domestic lending rates for housing loans and the corresponding euro area rates declined by 30 basis points, while for NFCs the spread fell by 24 basis points.

To sum-up, the historically low interest rates, which are expected to continue at their current levels given the ECB’s expansionary monetary policy, will have a further positive impact on the real economy. Furthermore, the favourable interest rate environment contributes to the successful management of existing loan arrangements between banks and the private sector, either through restructurings or through further deleveraging by the private sector. At the same time, they are a decisive factor for the ongoing efforts of banks to consolidate their balance sheets.

Labour costs

Despite strong GDP growth in 2018, wages grew moderately owing to the scope for a further correction in the labour market. At the same time, the increase in prices reduced the purchasing power of wages, with a decrease recorded in real compensation per employee. Finally, the moderate wage increases have contained unit labour costs, an important indicator of competitiveness.

Specifically, nominal compensation per employee decelerated in the year under

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)

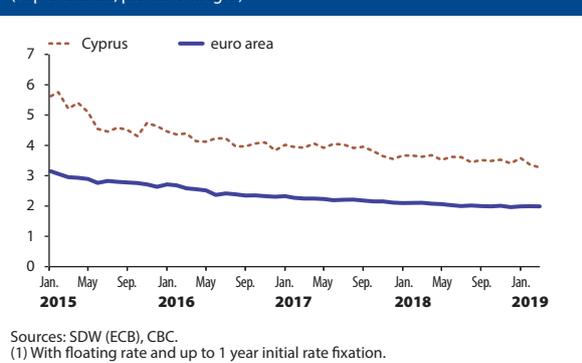


CHART A.15 MFI interest rates on euro-denominated deposits (new business) by euro area households⁽¹⁾
(% per annum, period averages)

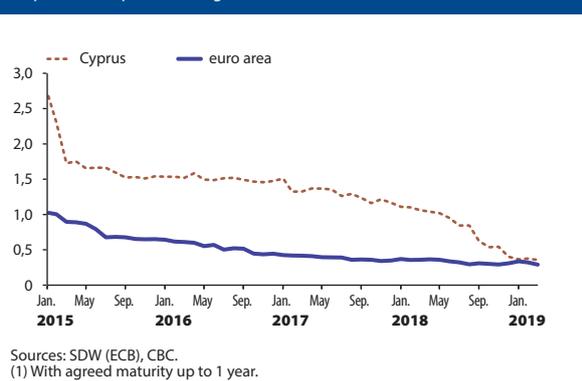
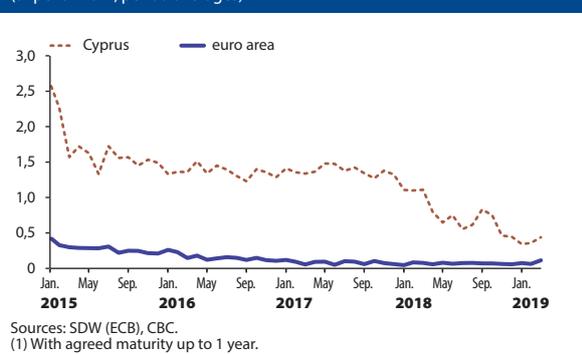


CHART A.16 MFI interest rates on euro-denominated deposits (new business) by euro area non-financial corporations⁽¹⁾
(% per annum, period averages)



review, recording a growth rate of 0,1% following an increase of 0,7% in 2017 (**Chart A.17**) and a cumulative decline of 10,9% in the period 2013-2016. The increase in compensation per employee in 2018 is attributable to a significant rise in compensation per employee in the public sector (2,4%), which was largely offset by a respective decline in the private sector (-0,3%). Increases in compensation per employee in the public sector are the result of three main factors: a) the gradual restitution to the pre-crisis public wage and pension levels as from 1 July 2018; b) the reinstatement of the policy of granting annual increments as from 2017; and c) the resumption of wage indexation based on a new system that has been adopted. Regarding the private sector, developments in compensation per employee are attributable primarily to the decline recorded in the sectors of trade, transportation, hotels and restaurants.

Real compensation per employee registered an annual decrease of 1,1% in 2018, following a 0,1% fall in the previous year (**Chart A.18**). This was largely due to the significant deceleration in nominal compensation per employee as mentioned above. At the same time, domestic prices recorded a further rise in the year under review, following a rise in 2017, leading to a reduction in the purchasing power of wages. The further rise in domestic prices in 2018 coupled with the slowdown in nominal compensation per employee resulted in a significant annual decrease in real compensation per employee. Productivity, calculated as the change in real

CHART A.17 Nominal compensation per employee by sector

(annual change, %)

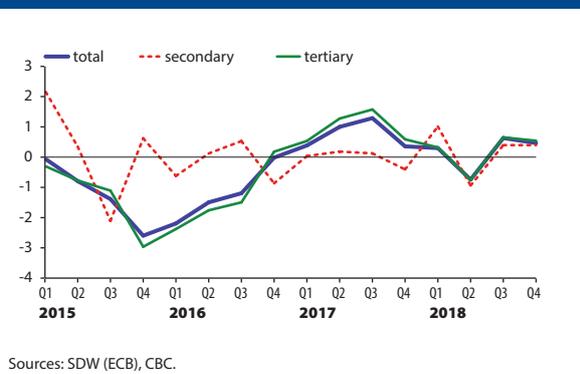
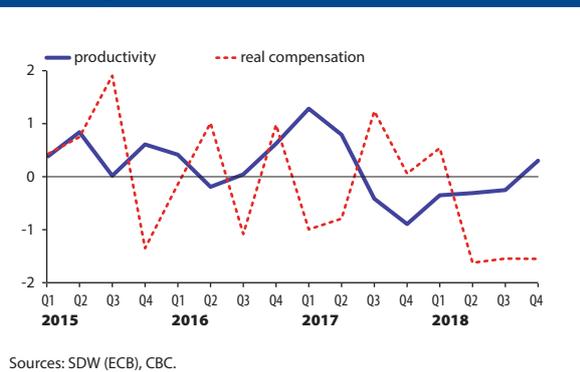


CHART A.18 Productivity and real compensation per employee

(annual change, %)



GDP per employed person, recorded an annual reduction of 0,1%, following a slight increase of 0,2% in the previous year (Chart A.18, p. 35).

Unit labour costs, determined by the difference in nominal compensation per employee relative to the change in productivity, recorded an annual increase of 0,3%, following an increase of 0,6% in 2017 (Chart A.19a). A review of the unit labour cost index over time reveals that since 2013 it has been lower compared with the euro area. This demonstrates the improvement in the competitiveness of the Cyprus economy, following the measures adopted in the context of the economic adjustment programme, with a consequent decrease in the prices of goods and services. Overall a cumulative decrease in the index by 12,1% in the period 2013-2016 was recorded. Specifically, while on the rise, the index in 2018 was well below the corresponding euro area index by around 17 percentage points (Chart A.19b). The subdued developments in the unit labour cost index of Cyprus compared with that of the euro area are reflected in the relatively weaker inflation trends in Cyprus relative to the euro area inflation.

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)⁷ terms, as calculated by

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

CHART A.19(a) Unit labour costs: Cyprus and the euro area

(annual change, %)

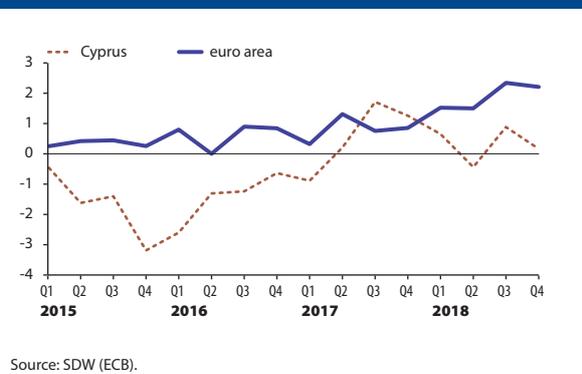


CHART A.19(b) Unit labour costs: Cyprus and the euro area

(index 2010=100)

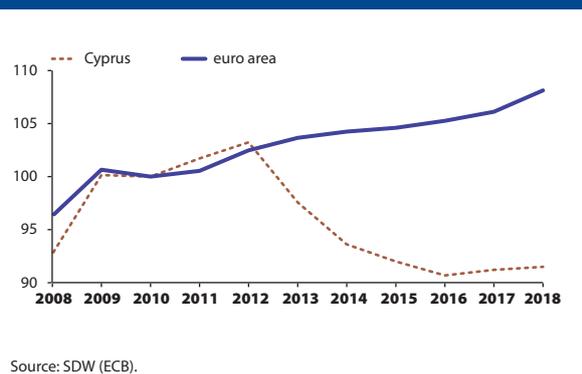
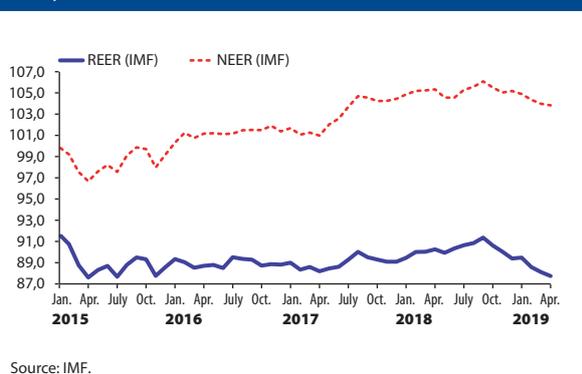


CHART A.20 Real and nominal effective exchange rates (IMF weights)

(Base year 2010 = 100)



the IMF. Both indices strengthened until September 2018, but from October 2018 until April 2019, a weakening trend was registered. Overall, 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 in the previous section, are important measures of an economy's competitiveness. 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, 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. At the same time, they contribute to the maintenance of subdued inflation figures.

Balance of payments⁸

In 2018 the current account deficit recorded an improvement, reaching €1.460,9 million (7% of GDP), compared with a deficit of

8. 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.

€1.642,5 million (8,4% of GDP) in the previous year (Table A.4). This positive development was mainly attributed to the increase in exports of goods, in particular the transactions of special purpose entities (SPEs). The current account deficit, adjusted for the impact of SPEs, reached €932,6 million (4,5% of GDP), compared to -€618,4 million (-3,1% of GDP) in 2017 (Table A.4 and Chart A.21). This development was mainly due to the decrease in the surplus of the services balance but also to the widening of the deficit in goods.

More analytically, the trade deficit of goods decreased in 2018, reaching €4.374,3 million, compared with a deficit of €4.756,2 million in 2017, mainly due to the increase in exports of goods. This was primarily attributed to SPEs transactions and, to a lesser extent, to the increase in exports of domestic goods (Table A.4). Moreover, imports of goods (excluding SPEs imports) increased, driven by the growth in imports of goods as a result of the improvement in domestic demand. More specifically, imports of intermediate inputs as well as consumer and capital goods, increased.

The surplus of the services balance decreased in 2018 and reached €3.922 million, compared with €4.066,4 million in the previous year, mainly as a result of the decline recorded in exports of services (Table A.4). This is the first time in six years that exports of services recorded a decline. To a large extent, this is related to the decrease in the exports of financial services, as explained below. It is noted that, in some services sectors, corresponding decreases were recorded in

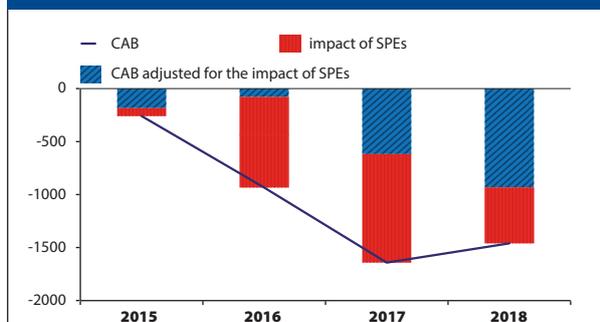
TABLE A.4 Balance of payments (main categories)

	2017 (€ million)	2018 (€ million)	Change (€ million)
Current account balance	-1.642,5	-1.460,9	181,6
Current account balance adjusted for the impact of SPEs	-618,4	-932,6	-314,1
Goods and services balance	-689,8	-452,3	237,5
Trade balance	-4.756,2	-4.374,3	381,9
Exports of goods	2.615,7	3.495,4	879,7
of which:			
Exports of goods - SPEs	844,8	1.460,4	615,6
Imports of goods	7.371,9	7.869,7	497,8
of which:			
Exports of goods - SPEs	1.868,9	1.988,8	119,8
Services balance	4.066,4	3.922,0	-144,4
Exports of services	10.110,9	9.960,9	-150,0
Imports of services	6.044,5	6.038,9	-5,6
Primary income (net)	-533,8	-586,7	-53,0
Secondary income (net)	-418,9	-421,9	-2,9

Current account balance (% of GDP)	-8,4	-7,0
Current account balance adjusted for the impact of SPEs (% of GDP)	-3,1	-4,5

Sources: Cystat, CBC.

CHART A.21 Current account balance (CAB) (€ million)



Sources: Cystat, CBC.

both exports and imports. The analysis of developments in the exports of services is important, since Cyprus is a tourist destination and a business centre.

More specifically, exports of services (Table A.5) decreased by 1,5% (€150 million) in 2018, mainly due to non-recurring factors in the category of financial services (-€144 million). Financial services decreased in 2018 as a result of the change in the legislation by the European Securities and Markets Authority (ESMA) regarding the trading of specific financial products with an expected impact up to 2019Q1. Telecommunications, computer and information services also decreased (€99 million). These decreases were mitigated by increases in other business services (€16,5 million), transport (€56,1 million) as well as revenues from travel (€69,3 million). Revenues from tourism, which are included in the travel category, recorded a small increase, mainly due to the increase in the number of tourist arrivals. On the basis of available data for the first two months of 2019, revenues from tourism decelerated, and a moderate increase is expected to be registered in 2019 (see Tourism, p. 41).

In 2018 total imports of services remained mostly unchanged, compared with the previous year (-€5,6 million). Decreases were recorded in the categories of telecommunications, computer and information services (€135,4 million) and other business services (€50,9 million). These decreases were almost fully offset by increases observed in the categories of transport (€106,1 million), travel (€51,8 million) and financial services (€13,1 million) (Table A.5).

TABLE A.5 Services balance (main categories)
(€ million)

	2017	2018	Change
Services balance	4.066,4	3.922,0	-144,4
Exports of services	10.110,9	9.960,9	-150,0
<i>of which:</i>			
Transport	2.727,1	2.783,2	56,1
Travel	2.769,0	2.838,3	69,3
Financial services	2.259,0	2.114,9	-144,0
Telecommunications, computer and information services	1.898,7	1.799,7	-99,0
Other business services	157,5	173,9	16,5
Imports of services	6.044,5	6.038,9	-5,6
<i>of which:</i>			
Transport	1.937,0	2.043,1	106,1
Travel	1.167,4	1.219,2	51,8
Financial services	918,7	931,8	13,1
Telecommunications, computer and information services	1.049,4	914,0	-135,4
Other business services	516,5	465,6	-50,9

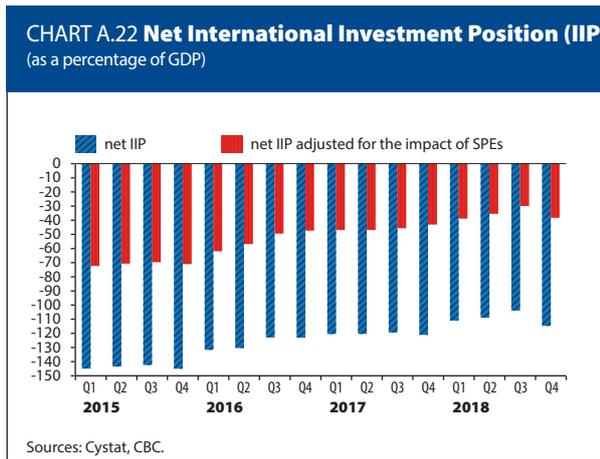
Source: CBC.

The primary income account (which mainly includes income from employment and investment) recorded a larger deficit, reaching €586,7 million, compared with €533,8 million last year. The widening of the deficit is mainly attributed to the category of direct investments. The deficit in the secondary income account (which mainly includes current transfers) deteriorated marginally (Table A.4, p. 38).

The current account deficit in 2018, was covered mainly by private sector borrowing and to a lesser extent by government borrowing.

The net international investment position (IIP) in 2018 was negative standing at - €23,8 billion (-114,7% of GDP) (Chart A.22). 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 2018 drops by 76,5 percentage points, standing at -€7,9 billion or -38,2% of GDP, compared with -€8,5 billion or -43% of GDP in 2017 (Chart A.22). It is noted that in 2018 the net IIP as a percentage of GDP was close to the threshold set by the European Commission.



Tourism

External factors adversely affected tourism, one of the most important pillars of the Cyprus economy, resulting in a decelerated growth of the sector in 2018. The Cyprus tourism industry had to cope with the return of major competitor destinations, such as Greece, Turkey, Egypt and Tunisia. However, the quality of the tourism product not only remained high but has also been upgraded through hotel renovations and new infrastructure, such as the construction of marinas and luxury hotels. Furthermore, the temporary casinos started operating in the second half of 2018 (until the construction of the casino resort by 2021).

More specifically, in 2018 tourist arrivals increased by 7,8% reaching 3,7 million tourists, compared with the previous year, after three consecutive years of strong increases (Table A.6 and Chart A.23). Regarding individual markets, arrivals from the United Kingdom increased by 5,9% reaching 1,3 million tourists, while arrivals from Russia decreased by 5% reaching 0,8 million tourists. Arrivals from other important markets, such as Israel and Germany, also decreased with the latter being negatively affected by the closing down of two airlines.

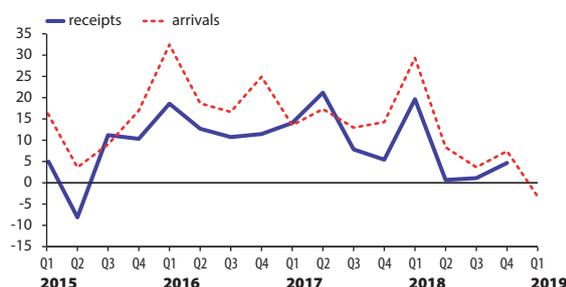
In 2018, and despite the increase in arrivals, revenues from tourism recorded a relatively small annual increase of the order of 2,7%, as a consequence of the 4,8% decrease in per capita expenditure, partly attributed to the decrease in the average length of stay from 9,5 days to 9,2 days. A significant

TABLE A.6 Tourism

	Tourist arrivals (thous.)	Tourist receipts (€ million)	Expenditure per person (€)
2017	3.652,1	2.639,1	722,6
2018	3.938,6	2.710,1	688,1
annual % change	7,8	2,7	-4,8
2018 Jan. - Feb.	177,3	91,1	513,7
2019 Jan. - Feb.	187,5	92,0	490,6
annual % change	5,7	1,0	-4,5
2018 Jan. - Mar.	369,4	n/a	n/a
2019 Jan. - Mar.	357,5	n/a	n/a
annual % change	-3,2	n/a	n/a

Source: Cystat.

CHART A.23 Tourist arrivals and receipts
(annual change, %)



Source: Cystat.

decrease of 2,1% was recorded in daily per capita expenditure (Table A.6, p. 41). It is noted that in 2018 the strengthening of the euro against foreign currencies, like the rouble and sterling, contributed significantly to the drop in the daily per capita expenditure.

Tourist arrivals recorded 5,7% annual increase in the first two months of 2019. In the same period revenues increased by 1%, as a consequence of the 4,5% decrease in per capita expenditure (Table A.6, p. 41). On the basis of the most recent data for 2019Q1, tourist arrivals decreased by 3,2% on an annual basis, mainly affected by the different dates of Catholic Easter holidays compared to last year.

On the basis of available data and the prospects for the summer season, a significant change in the number of tourist arrivals is not expected for 2019. The challenges of a possible hard Brexit and the recovery of major competitor destinations remain.

2.3 Domestic Demand, Production and the Labour Market

Quarterly national accounts⁹

In 2018 the Cyprus economy recorded a decelerated rate of growth of 3,9% compared with 4,5% in the previous year (Table A.7). Based on the latest preliminary data, GDP recorded a year-on-year increase of 3,5% in 2019Q1 (seasonally adjusted data).

9. 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.

TABLE A.7 National accounts in real terms by category of expenditure
(annual change, %)

	2015	2016	2017	2018
GDP	2,0	4,8	4,5	3,9
Private consumption	2,4	4,5	4,1	3,7
Public consumption	-0,5	-0,8	3,1	4,3
Gross fixed capital formation	13,8	41,8	29,0	-7,1
Exports of goods and services	5,2	4,6	6,0	3,3
Imports of goods and services	8,4	6,6	12,2	2,0

Source: Cystat.

According to the detailed data for 2018, all GDP expenditure sub-categories, except gross fixed capital formation, registered increases (Table A.7, p. 42). Specifically, private consumption recorded an annual growth of 3,7%, primarily attributable to the increase in disposable income because of the increase in employment. In addition, the growth in private consumption was supported by a small rise in consumer loans. Public consumption rose by 4,3% due to increases in intermediate consumption and compensation of employees (see Labour costs), which were partially offset by an increase in revenue from the sale of goods and services. The rise in intermediate consumption includes increased spending on medicines and water. Gross fixed capital formation decreased by 7,1% owing to the impact of SPEs as well as other non-recurring factors¹⁰. The increase in exports of goods and services by 3,3% also stems, mainly, from the impact of SPEs as well as non-recurring factors (see footnote 10). The rise in imports by 2% is affected to a very limited extent by the impact of SPEs.

Adjusted for the impact of SPEs and non-recurring factors, GDP growth was primarily driven by significant increases in private consumption and, to a lesser extent, in gross fixed capital formation. Specifically, gross fixed capital formation exhibited a deceleration in 2018 following the significant increase recorded in the previous year due to the completion of various projects. Many of these projects are foreign owned and/or are financed by foreign capital, thus there is no corresponding increase in domestic borrowing. Exports adjusted for the impact of SPEs declined in 2018 following a

10. These factors are related to the termination of the leasing of aircrafts by Cobalt airlines, due to the company's closure in 2018.

notable increase in 2017, mainly due to the sharp drop in revenue from financial services as well as the telecommunications, computer and information services sectors (see Balance of payments). A considerable deceleration was registered in tourism receipts due to the decrease in per capita expenditure (see Tourism and **Chart A.23**, p. 41). Imports recorded a significant slowdown in 2018 compared with 2017, due to a slowdown in imports for goods and a small decrease in imports of services.

From a sectoral point of view, growth remains broad-based (**Table A.8**). The sectors with the most important contribution to GDP growth in 2018 were trade, transportation, hotels and restaurants (with the total contribution reaching 1,2 percentage points), construction (1,2 percentage points) as well as professional, scientific and administrative activities (0,7 percentage points). A negative contribution was recorded by the financial and insurance activities sector (0,6 percentage points) owing to three factors: first, the transfer of a significant share of NPFs off the banks' balance sheets via the finalisation of the CCB deal as well as the sale of loan portfolios transaction from banks to non-bank entities; Second, the ongoing deleveraging of existing loans as part of the banking sector's consolidation effort, partly through loan repayments; and third, the decrease in export activities of financial services associated with a new European Securities and Markets Authority (ESMA) regulation (see Balance of payments).

Recent economic indicators point to continued positive trends in the economy, albeit at a decelerating trend. GDP growth

TABLE A.8 Weighted contributions to real GDP growth by economic activity
(percentage points)

	2015	2016	2017	2018
GDP (%)	2,0	4,8	4,5	3,9
Construction	-0,1	0,6	1,1	1,2
Trade, transportation, hotels and restaurants	0,1	1,4	1,6	1,2
Financial and insurance activities	1,0	-0,2	-0,8	-0,6
Professional, scientific and administrative activities	0,4	0,7	0,7	0,7
Other sectors ⁽¹⁾	0,6	2,4	2,0	1,4

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



closely follows developments in the Economic Sentiment Indicator (ESI) which points to the continuation of a markedly positive, albeit slightly slowing, rate of growth for 2019. Specifically, the ESI stood at 110,8 in April 2019, compared with 108,1 in April 2018 and 115,3 in December 2018 (Table A.9). In general, the decline in the index recorded in the first four months of 2019 was mainly driven by changes in confidence in the services sector.

The positive, but decelerating, path in private consumption is captured by various economic indicators. The turnover index of retail trade recorded an increase of 3,3% in the first two months of 2019, following an annual rise of 8,9% in the corresponding period of the previous year (Chart A.24). Regarding credit card payments, spending by Cypriot cardholders in Cyprus recorded an increase of 33,8% over January - April 2019, compared with a smaller annual rise of 14,3% in the corresponding period of 2018, mainly owing to the implementation of mandatory electronic payment of various direct taxes (effective from 1 March 2018) (Chart A.25). Adjusted for payments associated with government services and petroleum products, credit card spending recorded an increase of 13% in the first four months of 2019, following an annual increase of 14,9% in the corresponding period of 2018. The annual decrease of 9,4% in registrations of motor vehicle over January - April 2018 could be attributed to expectations of changes in vehicle taxation (ultimately adopted in March 2019) based on emissions and, therefore, is not

TABLE A.9 Business and consumer surveys: confidence indicators

(for sub-indices: difference between percentage of positive answers and percentage of negative answers)

	2018 June	2018 Sep.	2018 Dec.	2019 Mar.	2019 Apr.
ESI	105,9	113,0	115,3	109,2	110,8
Industry	-3	11	12	3	5
Services	16	32	44	28	34
Consumer	0	-3	-6	-8	-7
Retail trade	6	0	2	0	1
Construction	-15	-11	-11	-9	-10

Source: European Commission.
Note: Seasonally adjusted data.

CHART A.24 Retail sales (excluding motor vehicles)
(Base year 2015=100)

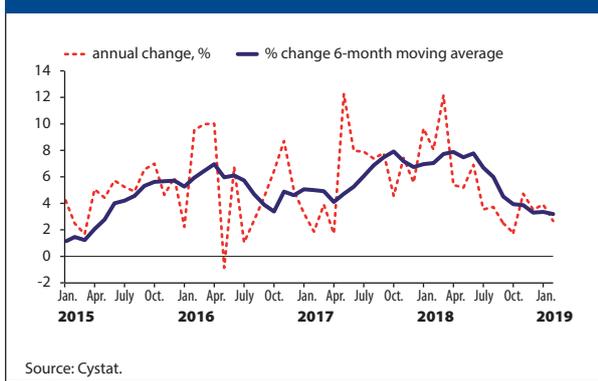
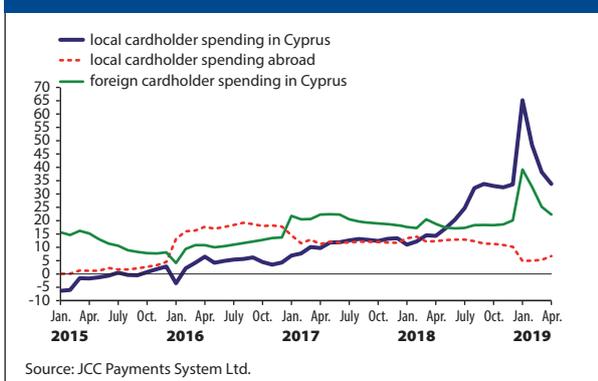


CHART A.25 Credit card spending
(cumulative annual % change from January)



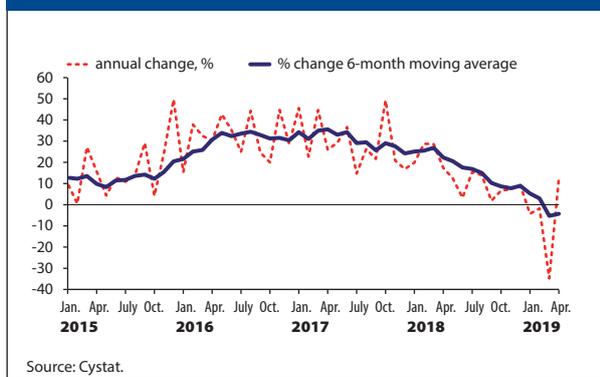
expected to continue in the following months (Chart A.26).

As previously mentioned, private sector investment projects have made an important contribution to the improvement in the domestic economic climate. Several indicators in relation to the real estate market point to rising activity in the construction sector as well as increasing demand for real estate (see Real estate market and Table A.10, p. 48). It should be noted that major projects, including renewable energy generation infrastructure, various residential, commercial and mixed developments, marinas and hotel units have been finalised or are in the process of being completed.

In relation to external demand for services, tourism receipts increased, albeit at a decelerating pace, due to the decrease in per capita expenditure (see Tourism). However, spending by foreign credit cardholders in Cyprus recorded an increase of 22% in the first four months of 2019 (Chart A.25, p. 45). In the field of professional services, following the annual increase recorded in 2018 relating to new company registrations, a year-on-year decline of 16,1% was recorded in the first four months of 2019. Nevertheless, the number of new company registrations recorded an increase for five consecutive years over the period 2014-2018, pointing to the comparative advantage that Cyprus has in this area.

At the same time, the granting of new viable loans have contributed to the positive developments in GDP. In particular, there is a continuation of new lending, with new loan contracts to the private sector rising to slightly

CHART A.26 Registration of motor vehicles



higher levels in 2019Q1 compared with 2018Q1. At the same time, loan repayments have kept the annual growth in loans to the domestic private sector to low but positive levels (**Chart A.12**, p. 55). Overall, the gradual consolidation and restructuring of the banking system (see Monetary aggregates) supports economic growth and helps strengthen the resilience of the Cyprus economy against unexpected or exogenous shocks.

Real estate sector

The real estate sector in Cyprus continued to grow during the first four months of 2019, driven by increased property demand, foreign investment, new domestic lending and increased construction activity. Despite the significant recovery in the sector and in GDP, real estate prices have shown modest increases, with the exception of areas affected by specific factors.

The contribution of the construction sector to GDP amounted to 1,2% in 2018, while the real estate sector (construction and real estate activities) amounted to 1,3% of GDP in 2018. In addition, according to Cystat figures, housing investment worth €1,5 billion (7,1% of GDP) was made in 2018, while investments in other buildings and construction amounted to € 0,9 billion (4,4% of GDP) in the same period. Based on the above, it should be emphasised that the construction activity observed in Cyprus is not due solely to residential projects, but also to investment projects such as marinas, offices, shopping centres, hotels, renewable energy projects, which increase potential GDP.

Real estate prices continued to increase moderately in 2018Q3. According to the CBC Residential Property Price Index, residential property prices recorded a quarterly increase of 0,3% and an annual increase of 1,6% in the quarter under consideration (Chart A.27). The largest increase in the sub-indices was recorded in the Limassol apartment price index (8,7%) in 2018Q3. According to detailed analysis of the data, the large increases are identified in specific areas of Limassol, with small spill-over effects in the rest of the district. In addition, Cystat's house price index recorded an annual increase of 0,8% and 1,6% in 2018Q3 and 2018Q4, respectively.

On the basis of more recent indicators, the positive trend of the sector is expected to continue. In particular, according to sales contracts data of the Department of Lands and Surveys, sales of properties recorded an annual increase of 23% for the period January - April 2019 (Table A.10)¹¹. During the same period, the number of sales to local buyers and foreign buyers increased by 31,3% and 14,8%, respectively, indicating that the increase in demand for properties is driven by both domestic and foreign buyers.

New viable lending to households for house purchase also contributes towards the recovery of the real estate sector. According to the CBC *Bank Lending Survey* (Table A.3, p. 33), demand for housing loans continued to increase during 2018Q4 and 2019Q1. According to the CBC's *Monetary and Financial Statistics*, new loans for house purchase in 2019Q1 amounted to €219 million, slightly higher than in the corresponding quarter of 2018. Demand for

CHART A.27 House and apartment price indices
(annual change, %)

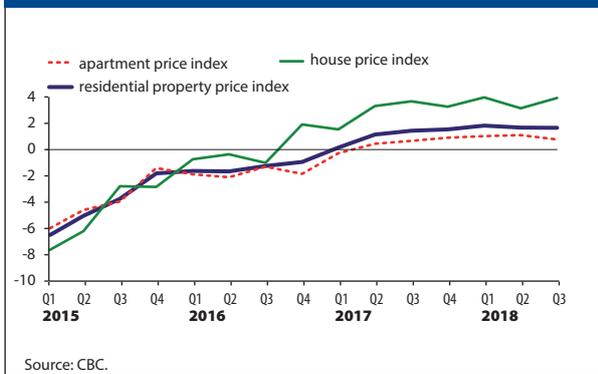


TABLE A.10 Real estate sector
(annual change, %, unless otherwise stated)

	Jan.-Apr. 2018	Jan.-Apr. 2019	Apr. 2018	Mar. 2019	Apr. 2019
Sales contracts (total)	38,4	23,0	29,4	1,7	77,4
Sales contracts (locals)	na	33,3	na	-0,3	61,4
Sales contracts (foreigners)	na	14,8	na	-2,5	44,9
Building sentiment indicator (average of index)	-18,5	-10,1	-16,7	-9,1	-9,6
Property price expectations for the next 3 months (average of index)	5,6	16,1	2,9	17,1	21,0
Price index of construction materials	0,1	1,7	0,3	2,3	2,3

Sources: Cystat, DLS, European Commission.

11. The DLS codification for the categorisation of local and foreign property buyers was changed in 2018.

loans is expected to continue to recover as long as unemployment continues to decrease and the low interest rate environment persists (Chart A.28). The fact that lending criteria are as stringent as those adopted before 2015 (Chart A.28) assures, to a great extent, that the new loans will be viable.

A positive development is the significant decrease in NPFs in the real estate and construction sector. Construction sector NPFs stood at €1,3 billion and for real estate activities at €0,6 billion at the end of 2018, recording a decrease compared with a year ago when the NPFs in these sectors stood at €3,2 billion and €1,5 billion, respectively. A further decline in NPFs is seen as crucial to the further recovery of credit institutions.

Construction activity continued its upward trend, recording an annual increase of 14,2% in 2018Q4, as reflected by the index of production in construction for buildings, which is published by Cystat. Increased construction activity is expected to continue in the future as the number of authorised building permits has increased on an annual basis by 11,9% for the whole of 2018 and 8,6% for the period January-February 2019. According to the European Commission's Business and Consumer Surveys, the market expects a further recovery in property prices, as the property price expectations rose to an average of 16,1 in January-April 2019, compared with 5,6 in the corresponding period in 2017 (Table A.9, p. 45). Other relevant sector indicators included in these surveys have been further improved, as detailed in the CBC's quarterly *Residential Property Price index*¹².

CHART A.28 Lending criteria and interest rate on housing loans

(annual change, %)



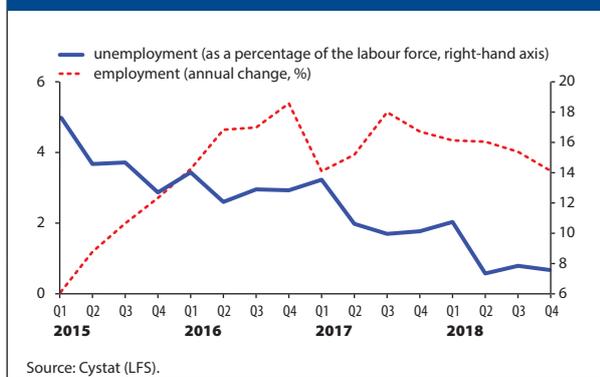
12. <https://www.centralbank.cy/el/publications/residential-property-price-indices>

Labour market

In line with the ongoing positive developments in economic activity, employment recorded a significant annual increase of 4% in 2018, following a rise of 4,3% in the previous year (Chart A.29). The improvement in employment was mainly driven by the sectors of trade, transportation, hotels and restaurants, construction as well as professional, scientific and administrative activities. According to the Labour Force Survey (LFS), this improvement is almost exclusively attributable to the rise in employment of Cypriots. Total hours worked recorded an annual increase of 3,6%, in addition to the rise of 4% in 2017. As a result, hours worked per employed person decreased by 0,4% in 2018, following a decline of 0,2% in the previous year.

As a consequence of the aforementioned developments, a significant improvement in unemployment was also recorded. According to LFS data, the unemployment rate reached 8,4% of the labour force in 2018, compared with 11,1% in the previous year. It should be stressed that the unemployment rate dropped significantly to 7,6% in 2018Q4, compared with 10,1% in the corresponding quarter of 2017 (Chart A.29). This is mainly attributable to the decrease in the number of unemployed Cypriots, which is in line with the aforementioned rise in employment of Cypriots. It should also be noted that the unemployment rate in Cyprus in 2018Q2 declined below the euro area average for the first time since 2012Q1. Furthermore, the youth unemployment rate fell to 20,6% in

CHART A.29 Unemployment and employment

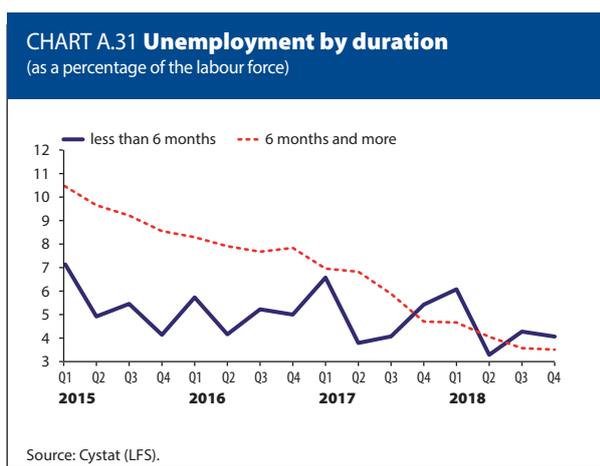
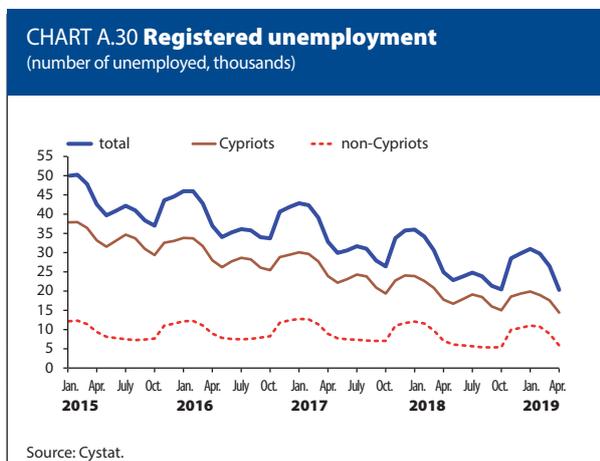


2018Q4, compared with 22,9% in the corresponding quarter of the previous year. Youth unemployment constitutes only about 1,8 percentage points of the overall unemployment rate for the quarter in question. According to EUROSTAT data concerning the harmonised unemployment rate (seasonally adjusted data), the percentage of unemployed stood at 7% in March 2019, compared with 9% in the corresponding month of 2018. The downward trend in unemployment is also confirmed by the number of registered unemployed (**Chart A.30**), which in April 2019 recorded a year-on-year decrease of 18,4% (from 24.903 to 20.315 persons).

An important development is associated with the reduction in the number of long-term unemployed given that, in periods with persistent high unemployment, the long-term unemployed find it harder to re-integrate into the labour market. According to LFS data, the unemployment rate with a duration of six months and over fell to 3,5% in 2018Q4, compared with 4,7% in the corresponding quarter of the previous year (**Chart A.31**). The number of registered unemployed with a duration of six months and over also registered a decrease of 3,695 individuals in April 2019, compared with the corresponding month of 2018. Overall, all relevant economic data suggest that the labour market, in line with the positive developments in GDP, continues to recover at a steady pace.

2.4 Domestic Fiscal Developments

According to preliminary data published



by Cystat, the 2018 budget balance recorded a deficit of 4,8% of GDP, compared with a surplus of 1,8% of GDP in 2017. At the same time, the primary balance recorded a deficit of 2,3% of GDP, compared with a surplus of 4,3% in 2017. The 2018 figures take into account the one-off cost related to the issuance of bonds facilitating the deal between the CCB and Hellenic Bank, which had a fiscal impact of €1,7 billion. Excluding the aforementioned impact, the 2018 budget balance recorded a surplus of 3,5% of GDP, while the primary surplus is at 6%, registering an improvement compared with the 2017 figures (Chart A.32 and Chart A.33).

A strong fiscal performance was also recorded in the first two months of 2019, with a budget and primary surplus of 1,9% and 2,1% of GDP, respectively (Table A.11, p. 53). The higher budget surplus compared with the corresponding period of 2018 was due to the significant increase in total revenue (20%). Total revenue increased primarily as a result of an increase in EU grants received in the first two months of 2019 (EU grants are included in the “capital transfers received” category, Table A.11, p. 53), and to a lesser extent, to an increase in direct taxes (current taxes on income, wealth, etc) and social contributions. EU grants are disbursed based on a payment schedule and although further increases in the following months of 2019 are not expected, they are already higher than the annual 2018 level by about €20 million. The increase in direct taxes and social contributions reflects the correction in labour market conditions, with unemployment

CHART A.32 Budget and primary balances of the general government
(cumulative for the period as from Q1 as a percentage of GDP)

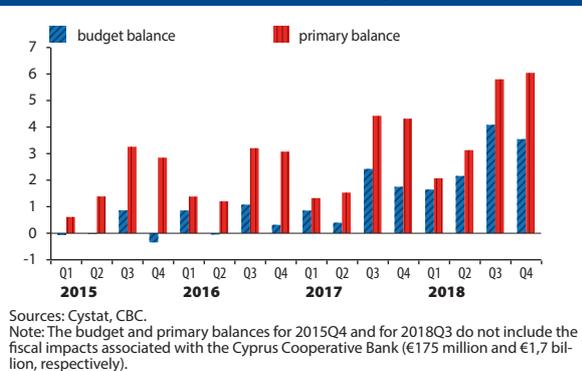
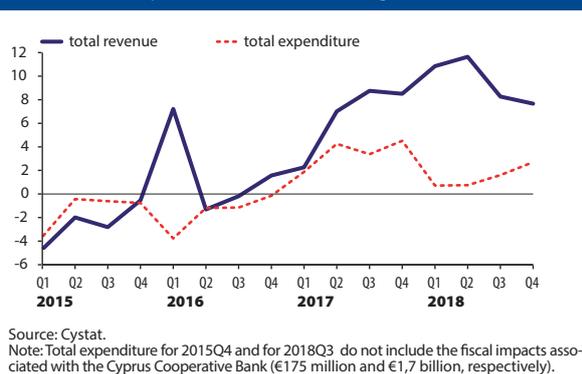


CHART A.33 Total revenue and expenditure of the general government
(cumulative for the period as from Q1, annual change, %)



declining and employment recording strong growth. Excluding the impact on revenues due to the EU grants' payment schedule, total revenue increased by about 10%. Therefore, the budget and primary surplus for the first two months of 2019 show a marginal increase compared with the corresponding period of 2018, despite the observed slowdown in economic growth. Total expenditure for the first two months of 2019 recorded an increase of 9,8% (Table A.11), mainly due to the increase in other current expenditure (53,4%), compensation of employees (7,3%) and social transfers (3,4%).

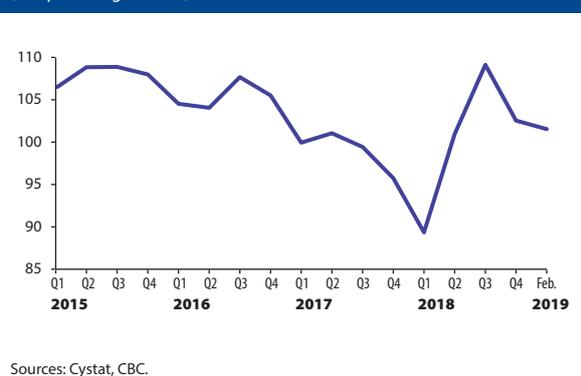
Public debt recorded an increase of about 7 percentage points in December 2018 relative to December 2017, reaching 102,5% of GDP (Chart A.34). This was mainly due to the special bonds issuance amounting to €3,19 billion for the CCB deal, in the context of the sale of part of its assets. Despite its recent increase, public debt is expected to decline significantly in the coming years, reflecting the projected strong fiscal surpluses and strong economic growth. It should be noted that the rating agencies have already discounted a significant reduction in public debt, thus any derailment will have a serious impact on the credibility of fiscal policy. Finally, a significant development is the issuance of a €750 million 30-year bond in April 2019, the longest-dated bond the Republic of Cyprus has ever issued.

TABLE A.11 Accounts of general government

	Jan.-Feb. 2018 (€ million)	Jan.-Feb. 2019 (€ million)	Change %
EXPENDITURE			
Intermediate consumption	81,3	74,7	-8,1
Compensation of employees	366,8	393,4	7,3
Social transfers	397,0	410,6	3,4
Interest	53,2	61,4	15,4
Subsidies	4,3	5,8	34,9
Other current expenditure	79,1	121,3	53,4
Gross fixed capital formation	21,4	29	35,5
Other capital expenditure	5,1	11	115,7
Total expenditure	1.008,2	1.107,2	9,8
Total expenditure as a % of GDP	4,9	5,0	
REVENUE			
Taxes on production and imports	514,2	516,4	0,4
Current taxes on income, wealth, etc	315,0	375,7	19,3
Social contributions	318,4	344,6	8,2
Other current resources	32,6	28,2	-13,5
Sales	75,9	82,0	8,0
Capital transfers received	2,4	127,4	5.208,3
Property income	4,0	40,2	905,0
Total revenue	1.262,5	1.514,5	20,0
Total revenue as a % of GDP	6,1	6,9	
Primary balance	307,5	468,7	
Primary balance as a % of GDP	1,5	2,1	
Surplus (+) / Deficit (-)	254,3	407,3	
Surplus (+) / Deficit (-) % of GDP	1,2	1,9	

Sources: Cystat, CBC.

CHART A.34 General government consolidated gross debt (as a percentage of GDP)



3. Macroeconomic forecasts for the Cyprus economy

- *Strong, albeit slightly decelerating, growth rates for the Cyprus economy expected for the period 2019-2021.*
- *Continued growth in domestic demand, particularly investment, with a slowdown foreseen in private consumption.*
- *Gradual increases in the prices of goods and services in the coming years, reflecting the ongoing improvement in domestic economic conditions and the envisaged gradual increases in wages.*
- *Downside risks in relation to the baseline scenario for GDP and balanced risks for inflation.*

The CBC's updated forecasts for GDP have been revised slightly downwards compared with the previous set of projections published in the December 2018 issue of the Economic Bulletin. This reflects the slowdown in economic activity due to the continued imposition of restrictive measures on international trade as well as rising uncertainty in relation to external demand. Regarding domestic drivers, private consumption has been revised downwards owing to the inclusion of the impact associated with the introduction of contributions towards the General Healthcare System (GHS) from 1 March 2019 (with rates adjusted upwards from 1 March 2020) in the baseline scenario. The revision in the GDP outlook is also attributable to the assumed acceleration in loan repayments compared with the previous set of forecasts.



The updated HICP inflation forecasts have also been revised downwards compared with the previous set of projections published in the December 2018 Bulletin. HICP inflation excluding energy and food (core inflation) has been revised downwards compared with the previous projections for 2020 and 2021. Furthermore, both energy and food prices have been revised downwards. Prices of non-energy industrial goods have been revised upwards, mainly owing to the foreseen weakening of the euro according to international analysts.

It should be noted that the Republic of Cyprus enjoys access to international markets on increasingly favourable terms. This is confirmed by the continued decline in Cypriot bond yields and, in particular, by the recent issuance of a 30-year bond worth €750 million, the longest bond ever issued by the Republic of Cyprus.

National accounts¹³

Based on the latest preliminary seasonally adjusted data, GDP recorded a year-on-year increase of 3,5% in 2019Q1, reflecting a positive contribution from almost all sectors of production. For 2019, the Cyprus economy is projected to grow by 3,5% (Table A.12).

13. Due to the volatility in imports and exports of mobile transport equipment (ships and aircraft), it is extremely difficult to forecast the aforementioned series. Therefore, it is assumed that the level of transactions associated with these series for the projection horizon remains broadly fixed at the 2018 level. Consequently, the rate of change in imports and exports as well as in gross fixed capital formation adjusted for the impact of these transactions does not differ relative to the unadjusted series. As regards the relevant forecasts incorporated in the June 2019 *Economic Bulletin*, the non-recurring impact associated with the termination of the leasing of aircraft by Cobalt airlines, because of the company's closure in 2018, has been taken into account in exports.

TABLE A.12 National accounts projections in real terms
(annual change, %)

	2017	2018	2019f	2020f	2021f
GDP	4,5	3,9	3,5	3,1	3,2
Private consumption	4,1	3,7	2,8	2,1	2,4
Public consumption	3,1	4,3	3,7	2,9	2,1
Gross fixed capital formation	29,0	-7,1	13,6	10,0	10,0
Exports of goods and services	6,0	3,3	3,1	2,6	2,8
Imports of goods and services	12,2	2,0	5,5	3,9	4,1

Sources: Cystat, CBC.

The foreseen GDP growth rate for 2019 is driven by developments in domestic demand. Private consumption is expected to exhibit a deceleration, registering an annual growth of 2,8%, despite the rise in wages (Table A.12, p. 55). This is mainly due to the increase in contributions to the Social Insurance Fund (SIF) and the adoption of contribution rates towards the GHS. Furthermore, it is attributable to the projected acceleration in loan repayments owing to the anticipated introduction of the ESTIA plan, which is foreseen to help address the NPFs of households. A slowdown is also foreseen in public consumption, which is expected to grow by 3,7%. This is mainly due to the decrease in intermediate consumption because of non-recurring factors (see Quarterly national accounts), which is offset by the growth in wages (Table A.12, p. 55). Gross fixed capital formation is expected to register an annual increase of 13,6% in 2019 compared with a decline of 7,1% in the previous year, partly affected by the transactions of SPEs as well as other non-recurring factors (Table A.12, p. 55). Gross fixed capital formation adjusted for the impact of SPEs is projected to grow in 2019 at a rate equivalent to that registered in 2018, due to the continued implementation of investment projects.

Net exports are projected to contribute negatively to GDP growth in 2019. Exports of goods and services are expected to register an increase of 3,1% in 2019, following a rise of 3,3% in 2018, partly influenced by transactions of SPEs (Table A.12, p. 55). Adjusted for the impact of SPEs and other

non-recurring factors, exports are projected to register an increase in 2019 compared with a decrease in the previous year. This is due to increased revenues from the non-tourism sector. Tourist revenue is envisaged to contribute to the aforementioned increase in exports, but to a lesser extent, owing to the decrease in per capita expenditure. Imports of goods and services are forecast to register an increase of 5,5% in 2019, following an increase of 2% in 2018 (Table A.12, p. 55). Adjusted for the impact of SPEs, imports of goods and services are expected to record a growth rate in 2019 equivalent to that observed in 2018.

New sustainable lending in 2019Q1 is also on a slightly higher level compared with 2018Q1. This development is supported by historically low interest rates, robust economic activity and, consequently, increased demand for new loans. At the same time, wage growth is expected to have a positive impact on household savings, thus further reducing the level of NPFs and providing a boost to the prospects for the Cyprus economy. Further decreases in NPFs are expected to have a downward impact on private debt, with a consequent positive effect on the real economy.

For the years 2020 and 2021, GDP is expected to be driven by continued growth in domestic demand. GDP is projected to record further positive, albeit decelerating, growth reaching a rate of 3,2% in 2021 (Table A.12, p. 55). In particular, private consumption growth is expected to decelerate, to a of 2,1% in 2020 and register a slight recovery to 2,4% in 2021, partly due to the foreseen trends in disposable income and employment (Table

A.12, p. 55). The deceleration in private consumption growth is mainly driven by the projected acceleration in loan repayments. In addition, it is attributed to the impact related to the increase in contributions to the GHS. Gross fixed capital formation is envisaged to register an increase of 10% per annum in 2020 and 2021 (**Table A.12**, p. 55). This is due to the improvement in expectations regarding investment in the energy, tourism and transport sectors. Significant private sector investments have already commenced and are scheduled to be completed by 2021 (see Quarterly national accounts). The casino is a major project, which will enrich the tourist product, further extend the tourism season and create new jobs. Annual growth of 2,9% and 2,1% is forecast for public consumption for the years 2020 and 2021, respectively, reflecting wages increases (**Table A.12**, p. 55).

Net exports are expected to contribute negatively to economic growth in the years 2020 and 2021 due to the import content of domestic demand. Exports are projected to increase by 2,6% in 2020 and 2,8% in 2021 (**Table A.12**, p. 55). Tourism is set to record a moderate performance from 2019 onwards. Efforts are being made to strengthen the maritime sector through improvements in infrastructure and the cluster of services created. The establishment of Deputy Ministries for Shipping (in March 2018 and Tourism in January 2019) should help to give a further boost to the sectors concerned. At the same time, total imports, which are significantly affected by imports for intermediate, consumer and capital goods, are expected to grow by 3,9% in 2020 and

4,1% in 2021, in line with growth in domestic demand (Table A.12, p. 55).

Compensation, productivity and the labour market

Significant, albeit decelerating, growth rates are also reflected in employment, which is envisaged to grow by 2,9% in 2019 (Table A.13). Employment is projected to record further decelerated rates of growth of the order of 2,4% per annum in 2020 and 2021 (Table A.13).

Further improvement is also expected in unemployment, converging to a rate closer to that associated with full employment conditions. This trend is also supported by government policies to boost employment. The unemployment rate is already lower than the average rate for the euro area and is projected to fall to 6,9% in 2019 from 8,4% in 2018 (Table A.13). The projected positive trend in GDP growth, in line with employment growth, reinforces the projections for a continued fall in the unemployment rate, which is expected to reach 6% in 2020 and to 5,6% in 2021 (Table A.13).

The significant increase in nominal compensation per employee in 2019 (4,5%) is largely due to the effect of changes in social contribution rates, including the introduction of contributions to the GHS. Adjusting for the previously mentioned impact, moderate wage growth is expected in 2019 relative to the rate of economic growth (Table A.13). Significant increases in public sector pay are expected, mainly because of the gradual restitution to the pre-crisis levels of public

TABLE A.13 Labour market projections
(annual change, %, unless otherwise indicated)

	2017	2018	2019f	2020f	2021f
Compensation per employee	0,7	0,1	4,5	3,4	2,5
Unit labour costs	0,6	0,3	3,9	2,7	1,7
Productivity	0,2	-0,1	0,5	0,7	0,8
Total employment	4,3	4,0	2,9	2,4	2,4
Unemployment rate (% of labour force)	11,1	8,4	6,9	6,0	5,6

Sources: Cystat, CBC.

wages and pensions. In 2020 and 2021, further increases are expected in nominal compensation per employee, by 3,4% and 2,5%, respectively (Table A.13, p. 59). The wage rise in 2020 includes the impact emanating from the increase in contribution rates towards the GHS. For 2021, the foreseen decline in unemployment to below 6% is expected to generate greater pressures for wage increases.

Productivity, following the marginal decline observed in 2018, is projected to continue to record positive rates of growth over the coming years. In particular, annual increases of 0,5%, 0,7% and 0,8% for 2019, 2020 and 2021, respectively, are expected, partly reflecting the gradual implementation of structural reforms (Table A.13, p. 59).

Unit labour costs are expected to record positive growth rates. In particular, the relevant index is projected to rise by 3,9% in 2019, followed by further increases of 2,7% and 1,7% over the next two years (Table A.13, p. 59). However, Cyprus retains its comparative advantage compared with the rest of the euro area owing to competitiveness gains achieved in previous years (Table A.13, p. 59).

Inflation

Prices are expected to remain subdued in 2019. Specifically, HICP inflation is expected to remain out 0,8%, as in 2018 (Table A.14), amid mixed developments in the main HICP categories. On the one hand, it is mainly influenced by expected increases in food and services prices, and on the other hand, it is influenced by the projected reductions in

TABLE A.14 HICP projections
(annual change, %)

	2017	2018	2019f	2020f	2021f
HICP	0,7	0,8	0,8	1,3	1,4
HICP excluding energy and food	0,4	0,1	0,7	1,4	1,6

Sources: Cystat, CBC.

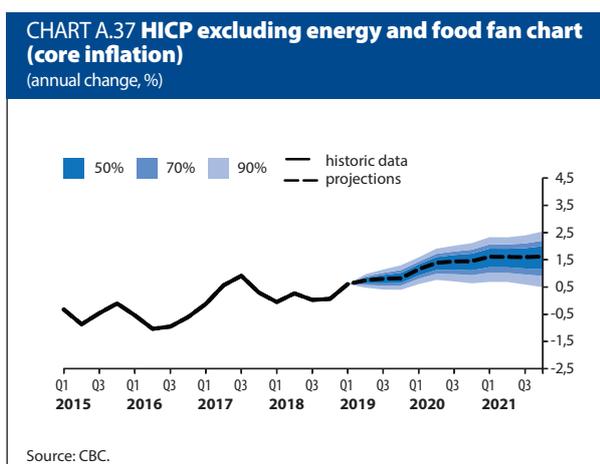
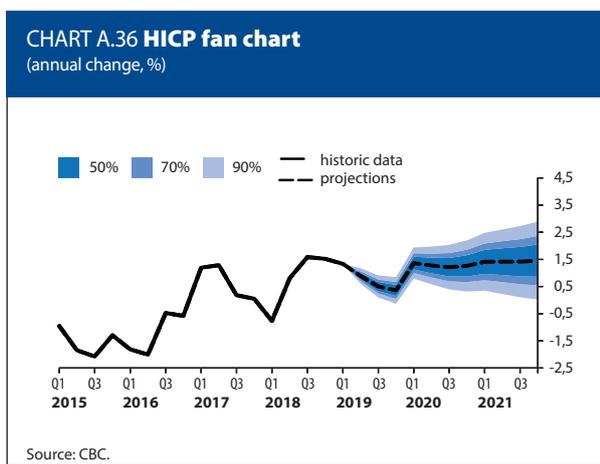
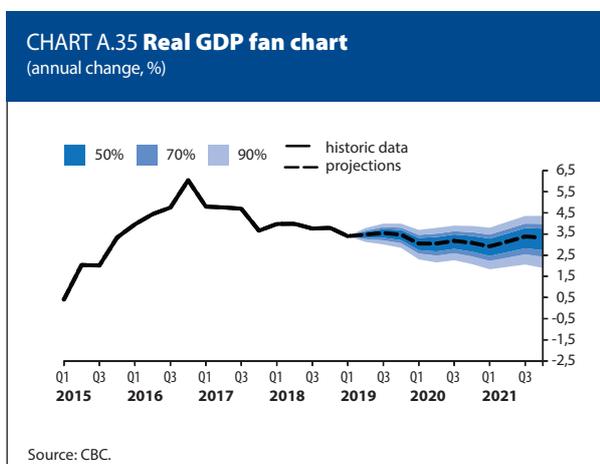
energy prices and non-energy industrial goods prices. Core inflation, i.e. HICP excluding energy and food, is projected to reach 0,7% in 2019 compared with 0,1% in 2018.

In 2020 and 2021, further gradual increases in prices are expected. HICP inflation is forecast to reach 1,3% in 2020 and 1,4% in 2021, mainly driven by the projected increases in services prices and the latest available exchange rate assumptions. Furthermore, HICP inflation is expected to be influenced by further wage increases as well as the projected continuation of the positive path of domestic economic activity. At the same time, core inflation is projected to continue rising, reaching 1,4% in 2020 and 1,6% in 2021.

Risk assessment of macroeconomic forecasts¹⁴

The projections relating to GDP growth, as presented in **Table A.12** (p. 55), as well as for HICP and core inflation (**Table A.14**), are considered to form the baseline scenario. The confidence intervals associated with the baseline scenario forecasts, which capture the probabilities of deviating from the corresponding baseline scenarios, are outlined in **Charts A.35** and **A.36**, respectively. The confidence intervals associated with the baseline scenario for core inflation are shown in **Chart A.37**. The following paragraphs analyse in more detail the downside and upside risks to the GDP and inflation projections, with a summary of the risk assessment presented in **Table A.15** (p. 62).

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



Overall, risks to the baseline GDP scenario are on the downside. Possible downward deviations from the baseline scenario (downside risks) for GDP are associated with a slower-than-projected decline in the level of NPFs, as the high level of private debt constrains, to some extent, the granting of new loans, consumption and investment. Downside risks are also related to a possible deterioration in external demand for services, attributable to the imposition of restrictive measures on international trade and the possibility of a hard Brexit. Adverse geopolitical developments in the eastern Mediterranean region could adversely affect the prospects of the tourism and professional services sectors. Potential upward deviations from the baseline scenario for GDP (upside risks) relate to a higher than expected implementation rate of investment projects by the private sector.

Risks in relation to inflation are balanced. Possible downward deviations from the baseline scenario (downside risks) are mainly linked to a deterioration in domestic credit conditions. In addition, they are associated with a further escalation of restrictive measures in relation to international trade and the possibility of a hard Brexit, especially for the years 2020 and 2021. Specifically, the negative impact on inflation due to reduced demand that may result from the imposition of restrictive measures and tariffs on trade is expected to outweigh the direct impact on inflation from the imposition of the aforementioned measures. Upward deviations from the baseline inflation scenario (upside risks) stem from the domestic

TABLE A.15 Summary of risk assessment

Risk	GDP	Inflation
NPFs and credit conditions	-	-
Geopolitical developments, incl. possibility of higher oil prices	-	+
Hard Brexit	-	-
Global trade war	-	-
Higher-than-envisaged energy-related investments	++	+
Casino, incl. tourism-related services	+	+
Overall assessment	-	=

Source: CBC.

Note: the following symbols cover the spectrum of risks: ++, +, =, -, --.

environment. The higher than expected implementation of investment projects, especially in relation to the energy sector, is foreseen to have a positive impact on inflation. Finally, higher oil prices than originally envisaged constitutes an upside risk. By contrast, adjusting the balance of risks for deviations in oil prices from the baseline scenario, it emerges that the risks to core inflation are on the downside.

Technical Notes

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1

Introduction

2

Macroeconomic
Developments
and Projections

(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.

