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## ABBREVIATIONS

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<th>Description</th>
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<tr>
<td>CBC</td>
<td>Central Bank of Cyprus</td>
</tr>
<tr>
<td>CCB</td>
<td>Cyprus Cooperative Bank</td>
</tr>
<tr>
<td>CIF</td>
<td>Cyprus Investment Firm</td>
</tr>
<tr>
<td>CySEC</td>
<td>Cyprus Securities and Exchange Commission</td>
</tr>
<tr>
<td>ECB</td>
<td>European Central Bank</td>
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<tr>
<td>ESRB</td>
<td>European Systemic Risk Board</td>
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<td>EU</td>
<td>European Union</td>
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<tr>
<td>Eurostat</td>
<td>Statistical Authority of the EU</td>
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<tr>
<td>GDPR</td>
<td>General Data Protection Regulation</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>GHS</td>
<td>General Healthcare System</td>
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<tr>
<td>IDD</td>
<td>Insurance Distribution Directive</td>
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<tr>
<td>IFRS</td>
<td>International Financial Reporting Standard</td>
</tr>
<tr>
<td>IF</td>
<td>Investment Fund</td>
</tr>
<tr>
<td>MFI</td>
<td>Monetary Financial Institution</td>
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<tr>
<td>NPLs</td>
<td>Non-Performing Loans</td>
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<tr>
<td>O-SII</td>
<td>Other Systemically Important Institution</td>
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<tr>
<td>SEDIPES</td>
<td>Cooperative Asset Management Company Ltd</td>
</tr>
<tr>
<td>SCR</td>
<td>Solvency Capital Requirement</td>
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<td>SPE</td>
<td>Special Purpose Entity</td>
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<td>UCITS</td>
<td>Undertaking for Collective Investment in Transferable Securities</td>
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Executive summary

In 2018, the Cyprus economy continued to record expansion for the fourth consecutive year, following three years of recession. Economic activity recorded an upswing, with real Gross Domestic Product (GDP) recording an increase of 3.9% in 2018, compared with an increase of 4.5% in 2017. The unemployment rate decreased significantly, to 8.7% in 2018 from 11.1% in 2017. The robust growth of the economy and the improvement in confidence in the real estate market, have contributed to the gradual recovery of property prices, with the Central Bank of Cyprus (CBC) residential property index (houses and apartments) recording an annual increase of 1.6% in 2018Q3. Demand for real estate properties increased, supported by low interest rates and the gradual recovery in economic activity.

The transfer of certain assets and liabilities of the Cyprus Cooperative Bank (CCB) to Hellenic Bank, which was completed in September 2018, reduced uncertainty in the banking sector and led to an improvement in depositor confidence. As a result, the non-performing loans (NPLs) of the CCB, with a net value of €5.6 billion - accounting for about one third of total NPLs of the banking sector as at September 2018 - were transferred to the banking system to the Cooperative Asset Management Company Ltd (SEDIPES). This development resulted in a reduction in total lending by credit institutions to the private sector and, consequently, a further contraction in the size of the banking sector. Total NPLs declined to 32.1% of total loans in 2018Q3, their lowest level following the financial crisis.

The multidimensional approach adopted by credit institutions in an effort to consolidate their balance sheets, is expected to continue during 2019. This approach mainly includes the sale of loans, loan write-offs, debt-to-asset swaps and restructurings. Furthermore, the implementation of the ESTIA scheme, through which the state will subsidise part of the loan instalment on certain NPLs on primary residence mortgages held by vulnerable individuals, is expected to lead to a further reduction in the level of NPLs, as a result of the debt restructurings that will take place.

Despite continued strong economic growth, factors such as the high levels of public and private debt, in conjunction with the challenges faced by the banking sector, continue to render the economy vulnerable. The high level of NPLs remains the biggest obstacle for the further strengthening of the banking sector. The challenges faced by credit institutions include the increased supervisory requirements, such as the new guidelines published by the European Central Bank (ECB) on 15 March 2018, governing the increase in provisions for doubtful debts on new NPLs.

The continued use of debt-to-asset swaps by credit institutions has significantly increased the number and value of properties held, as well as their exposure to real estate. Credit institutions should be cautious when disposing of properties, as mass sales could lead to a sharp fall in property prices, creating negative spillovers between the real economy and the financial sector.

At the same time, the NPLs that are outside the banking sector need to be addressed, as they remain in the real economy and continue

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1. The CCB was renamed Cooperative Asset Management Company Ltd (SEDIPES), following the decision taken by its General Meeting that was held on 30 August 2018.
to constitute obligations of households and non-financial corporations (NFCs).

Credit institutions are under further pressure due to the decrease in their net interest income and their high operating costs. Thus there is a pressing need to limit their operating expenses. The continuous contraction of their revenues is also impacted by rapid technological change at a time of digital transformation, with increased competition from fintech companies. Investment in technology and in technological development by credit institutions is a prerequisite for their sustainable growth and for reducing their high operating expenses.

Public debt recorded a significant increase between 2017Q4 (96.1% of GDP) and 2018Q3 (110.9% of GDP). The increase was mainly due to the €3.2 billion special bonds issued by the state, in the context of the transfer of certain assets and liabilities from the CCB to Hellenic Bank. In the medium term, however, public debt is expected to follow a downward path, reaching more acceptable levels.

Despite its downward trend, private non-financial sector debt still represents a risk to the Cyprus economy, rendering the sector vulnerable to an increase in interest rates or a sudden slowdown in economic growth. Based on the non-consolidated quarterly financial accounts, the debt levels of households and NFCs remain very high, amounting to 96.9% of GDP and 118.5% of GDP, respectively, in 2018Q3.

The real estate market continued its gradual recovery during 2018, assisted by the positive developments in the economy. The increase in property prices observed in certain areas of Limassol, Paphos and Famagusta districts is supported, to a large extent, by the overall development of these areas, due to the big infrastructure projects and the demand for high value residential properties by non-residents acquired through the Cyprus Investment Programme. Despite the overall modest increase in property prices, the acceleration of property price increases - particularly of apartments in the Limassol district - highlights the need for close monitoring of developments and of the potential spillover effects on the economy.

The Cyprus insurance sector recorded satisfactory growth in the first nine months of 2018 compared with the corresponding period of 2017, outpacing the growth rates of the rest of the economy. The financial crisis was a major challenge for the insurance sector, which nevertheless, has managed to return to a stable growth path since 2015. It has recorded continuous uptrend in underwritten premiums, reaching 7.7% in the first nine months of 2018.

Despite the upward trend, the insurance sector faces new challenges stemming from increased regulatory requirements, such as the introduction of the EU Insurance Distribution Directive (IDD). Furthermore, the new International Financial Reporting Standard (IFRS) 17 on insurance contracts is expected to bring about significant regulatory changes in the sector. Challenges are also expected due to technological developments, with the digitisation of data accompanying

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2. The data this report relating to Cyprus residents, are adjusted to exclude special purpose entities (SPEs). SPEs are mainly ship-owning companies that are registered in Cyprus. They significantly affect the data despite the fact that their transactions do not affect nor are affected substantially by the domestic market and their economic activity in Cyprus is not material.
new technology products. This creates the need for modernisation of insurance companies, so that they are able to maintain their competitiveness, to adapt to changing conditions and to continuously advance knowledge and training.

The investment funds sector has grown significantly over the past years, providing a pillar for investments. The activities of investment funds are increasingly expanding within Cyprus and, as a result, the importance of investment funds and their interconnection with the domestic financial sector is increasing. The Cyprus Investment Firms (CIF) sector continues to attract new CIFs and the sector is continuously expanding.
Key risks and vulnerabilities

The following vulnerabilities have been identified as the main sources of risk for the Cyprus financial system and are analysed in detail in this report.

<table>
<thead>
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<th>Vulnerabilities</th>
<th>Overall assessment</th>
<th>Risk outlook</th>
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<tbody>
<tr>
<td>1. Addressing the problem of the high level of NPLs and the low quality of the loan portfolio of credit institutions.</td>
<td>The high level of NPLs continues to pose significant risks to the stability of the financial system and remains the biggest obstacle to the further strengthening of the banking sector. It is imperative that credit institutions continue their intensive efforts for the reduction of NPLs, by implementing holistic and sustainable strategies. Alongside this, the NPLs which are outside the banking sector continue to burden the real economy, given that the private sector remains heavily indebted.</td>
<td>Stable vulnerability; expected to improve.</td>
</tr>
<tr>
<td>2. Weak profitability of credit institutions.</td>
<td>The profitability of credit institutions remains under pressure. Increasing their revenue, limiting their expenses and enhancing their operational efficiency remains a major challenge. Credit institutions need to broaden their revenue base, invest in technology and focus on the quality and development of the services they provide to customers, seeking alternative sources of revenue in order to improve their profitability.</td>
<td>Stable vulnerability; expected to improve.</td>
</tr>
<tr>
<td>3. The excessive debt of the private non-financial sector.</td>
<td>The high level of indebtedness of households and NFCs continues to pose risks for the Cyprus economy. A potential increase in the level of interest rates or a sharp slowdown in economic growth, could lead to increased vulnerabilities in the private non-financial sector. The reduction of household and NFC debt needs to continue unhindered, as it is a prerequisite for improving the stability of the financial system and for achieving sustainable economic growth.</td>
<td>Stable vulnerability; expected to improve.</td>
</tr>
</tbody>
</table>
1. Macroeconomic environment

This section examines the Cyprus macro-economic environment, the domestic private non-financial sector and the real estate market. Further information on macroeconomic developments are presented extensively in the CBC’s Economic Bulletin3, which is published biannually.

**Domestic macroeconomic environment**

In 2018, the Cyprus economy continued to grow for a fourth consecutive year. Economic activity continued its upward trend with strong growth rates, mainly reflecting an increase in private consumption and private sector investment.

Despite the positive course of economic activity and continued robust economic growth factors such as the very high levels of debt in the private non-financial sector and the high levels of NPLs, along with the risks faced by the banking sector, continue to render the economy vulnerable.

Real GDP recorded a year-on-year growth of 3.9% during 2018, compared with 4.5% the previous year (Chart 1.1). Prospects remain positive and according to the most recent CBC projections of December 2018, real GDP growth is forecast to grow by 3.7% in 2019.

The labour market was positively affected by developments in economic activity. As a result, the unemployment rate decreased to 8.7% during 2018, compared with 11.1% in 2017, based on Eurostat’s seasonally adjusted harmonised unemployment index. In the euro

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area, unemployment decreased to 8.2% during 2018, compared with 9.1% in 2017 (Chart 1.2). According to the latest CBC forecasts, the unemployment rate is expected to decline further over the medium term.

According to the Harmonised Index of Consumer Prices (HICP), inflation continued to remain at positive, albeit low, levels. Inflation in 2018 reached 0.8%, compared with 0.7% in 2017. The respective inflation rate in the euro area rose to 1.8% in 2018, compared with 1.5% in 2017 (Chart 1.3). Based on the latest CBC forecasts, inflation is expected to reach 1.1% in 2019, driven mainly by the positive outlook of the economy and the gradual increase in salaries.

As regards the balance of payments, the current account balance improved during the first nine months of 2018, recording a deficit of €339 million (2.2% of GDP) compared with a deficit of €446 million (3.1% of GDP) during the first nine months of 2017. The current account balance, adjusted for the impact of SPEs, recorded a deficit of €330 million (2.1% of GDP) in the first nine months of 2018, compared with a deficit of €253 million (1.7% of GDP) in the same period of 2017.

The economic environment in Cyprus, as reflected by the Economic Sentiment Indicator (Chart 1.4), has improved considerably since the end of 2012, evidencing the continuous positive course of economic activity. During 2018, the Economic Sentiment Indicator for Cyprus exceeded that for the euro area, except for the months of June, July and August, during which the lowest levels for 2018 were recorded in Cyprus, mainly due to the

4. See footnote 2.
temporary impact of the uncertainty that prevailed in the banking system in relation to the CCB. The Economic Sentiment Indicator for Cyprus increased to 117.4 units in 2018Q4 compared with 115.7 units in 2017Q4.

The overall debt of the public and private sector\(^5\) as a percentage of GDP, declined from 347.80% in 2017Q3 to 326.3% in 2018Q3, continuing its downward trend since the beginning of 2016 (Chart 1.5).

According to the latest Eurostat data, Cyprus public debt recorded a significant increase, reaching 110.9% of GDP in 2018Q3, compared with 96.1% of GDP in 2017Q4. The increase was mainly the result of the special government bond issued during 2018Q2 and 2018Q3 amounting to €3.2 billion, in the context of the transfer of certain assets and liabilities from the CCB to Hellenic Bank, and due to the issuance of a ten-year bond amounting to €1.5 billion in September 2018. Public debt as a percentage of GDP in Cyprus was higher than the respective indicators of the euro area of 86.1% and of the EU average of 80.8% in 2018Q3. However, Cyprus' public debt is expected to follow a downward path, reflecting the positive economic growth and continuous fiscal surpluses. Nevertheless, a prudent fiscal policy is needed, given that public debt still remains at a very high level and hence the possibility of absorbing unexpected economic shocks remains limited.

In 2018Q3, NFCs continued to account for the largest share in overall debt, amounting to 118.5% of GDP\(^6\), followed by the general government at 110.9% of GDP and households at 96.9% of GDP (Chart 1.5).

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5. Adjusted for the impact of SPEs. See footnote 2.
6. Adjusted for the impact of SPEs. See footnote 2.
Domestic private non-financial sector

Debt in the private non-financial sector reached 215.4% of GDP at end-September 2018, having recorded a decrease from 247.0% at end-September 2017 (Chart 1.5, p. 15). The strengthened insolvency framework and the ESTIA scheme are expected to lead to an acceleration in the pace of private sector debt reduction.

The domestic private non-financial sector debt service ratio, i.e. debt repayments as a percentage of total annual private sector income, continued its downward trend since 2015Q1, reaching 16.4% in 2018Q3 (Chart 1.6). The downward trend is attributable to the reduction in bank credit to the non-financial sector, due to the continuous deleveraging. Furthermore, based on the transfer agreement of certain assets and liabilities of the CCB to the Hellenic Bank that was completed in September 2018, the NPLs of the CCB remained in SEDIPES, which is a credit acquiring company and has no banking

7. The analysis is based on the latest available data from various sources, mainly from monthly balance sheet data submitted by monetary financial institutions (MFIs) to the CBC and from the quarterly financial accounts. MFIs are all credit institutions operating in Cyprus, excluding the CBC. With regard to euro area comparisons, data is mainly sourced from the ECB Statistical Data Warehouse (SDW) and from Eurostat.

8. Adjusted for the impact of SPEs See footnote 2.

9. Debt Service Ratio of households and non-financial corporations, excluding SPEs, is calculated using the formula below where DSR is the debt service ratio, DSC is the debt service cost, D is the total credit stock of credit institutions, i is the average annual interest rate in the stock, s is the average residual maturity of the stock in years, Y is the total annual income and t is the time expressed in quarters. Due to unavailability of quarterly data for Y, GDP is used.

\[
DSR_t = \frac{DSC_t}{Y_t} = \frac{iD_t}{(1 - (1 + i)^{-s})Y_t} 
\]

10. The calculation of the domestic private non-financial sector debt service ratio for September 2018 does not include the credit stock of SEDIPES.
license. The balance sheet of SEDIPES (i.e. the former CCB) includes approximately one third of all NPLs as at end-September 2018. The transfer agreement between the CCB and Hellenic Bank resulted in the reduction in the level of bank lending to the private sector and consequently in the contraction of the banking sector. Furthermore, many households and NFCs continue to face difficulties in servicing their debt.

Household and NFC debt, despite its downward trend, still represents a risk to the Cyprus economy. The debt burden, combined with a potential increase in interest rates or a sudden slowdown in economic growth, could render the private non-financial sector even more vulnerable. Given that 94% of housing loans in 2018Q3 were floating rate loans, any increase in lending rates will result in a significant increase in the cost of servicing household debt. As a result, borrowers must be extremely careful, in order to take into account the risk that their monthly instalments on floating rate loans might increase, in the case of an interest rate increase. Furthermore, credit institutions should be vigilant when approving loans to borrowers with marginal repayment ability, since their ability to repay will be negatively affected in the event of an increase in interest rates.

**Household sector**

While domestic households remain heavily indebted, a gradual improvement has been observed in their debt levels. Households’ debt as a percentage of GDP decreased to 96.9% in 2018Q3 from 111.2% in 2017Q3 (Chart 1.7).

![Chart 1.7 Householder debt from credit institutions and credit acquiring companies (CACs) (as % of GDP)](image)
The household debt to GDP ratio in 2018Q3 was very high compared with the euro area average of 58.6% of GDP. However, domestic households have a positive net financial position, i.e. the financial assets they hold (e.g. cash, deposits in credit institutions, investments in financial instruments) exceed their liabilities to credit institutions. More specifically, the household sector’s net financial position (net value) reached 107.1% of GDP in 2018Q3 compared with 104.5% in 2017Q3, albeit significantly below the respective euro area average (148.8% of GDP in 2018Q3) (Chart 1.8).

At the same time, household savings remain at extremely low levels. According to the most recent Eurostat data, the savings rate\(^{11}\) of Cyprus households was -3.1% in 2017 (-3.2% in 2016) and represents the lowest level in the euro area (Charts 1.9 and 1.10). The negative savings rate suggests that household spending exceeds their disposable income, i.e. households use their existing savings to cover their expenses. It should be noted that the negative rate of savings observed in recent years in Cyprus, stemmed from the recession that followed the banking crisis of 2013 and can be attributed mainly to households’ efforts to smooth their consumption using their existing deposits. The negative savings of households represents a significant risk to their debt servicing capacity and the accumulation of satisfactory retirement benefits. Increased savings is a prerequisite for improving household debt servicing. The projected further increase in employment, coupled with the gradual rise in salaries, is

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11. The savings rate is defined as the gross savings to households’ gross disposable income and is calculated on an annual basis.
expected to lead to a recovery in the savings rate in the medium term. Household financial liabilities as a percentage of financial assets decreased to 51.9% in 2018Q3, from 55.6% in 2017Q3 (Chart 1.11).

Banking deposits of domestic households amounted to €23.5 billion in 2018Q4, compared with €23.6 billion in 2017Q4, recording an annual decrease of -0.8%, compared with an annual increase of 2.4% in 2017Q4 (Chart 1.12).

Total bank loans to domestic households remained stable during 2018\textsuperscript{12}, compared with a year-on-year increase of 3.2% in the corresponding euro area average over the same period and amounted to €13.5 billion (Chart 1.13).

Based on the latest consolidated supervisory data, NPLs as a percentage of total loans to domestic households in the banking sector amounted to 38.3% at end-November 2018, exhibiting a significant reduction since November 2017 (52.8%) (Chart 1.14, p. 20). The main reason for the reduction in the NPL ratio of domestic households to total domestic household loans was the transfer, in September 2018, of a large proportion of NPLs of domestic households to SEDIPES, which is outside the banking sector.

At the same time, loan loss provisions as a percentage of domestic household NPLs in the banking sector (coverage ratio), increased to 51.7% in November 2018, compared with 45.1% in November 2017. The transfer of a large proportion of domestic household NPLs

\textsuperscript{12} The calculation of annual growth rates for monthly MFI balance sheet statistics is based on the ECB methodology, which takes into account net transactions but excludes reclassifications/other adjustments, revaluations and exchange rate adjustments.
outside the banking system in September 2018, resulted in a significant reduction in the total NPLs of the banking sector. The coverage ratio also increased not only due to the fact that NPLs were transferred outside of the banking sector but also because of the impact of new accounting standards and pressure by the ECB.

Non-financial corporations sector

Despite the downward trend in their debt levels, domestic NFCs remain heavily indebted. NFC debt as a percentage of GDP\(^3\) reached 118,5\% in 2018Q3, decreasing from 135,3\% in 2017Q3 (Chart 1.15).

The net financial position of NFCs as a percentage of GDP\(^4\) was negative (i.e. financial liabilities exceeded financial assets) and decreased to 98,8\% at end-September 2018, from 121,6\% at end-September 2017 (Chart 1.16). The ratio of financial liabilities to financial assets\(^5\) decreased to 140,2\% in 2018Q3, compared with 146,4\% in 2017Q3. These indicators show that the financial position of NFCs remains weak, although there are signs of improvement.

Deposits of domestic NFCs\(^6\) reached €7,4 billion in 2018Q4 compared with €6,7 billion in 2017Q4, exhibiting a significant annual increase of 10,9\% in 2018Q4, compared with an annual increase of 17,2\% in 2017Q4 (Chart 1.17, p. 21).

Total bank loans to domestic NFCs\(^7\), recorded an annual increase of 2,0\% in 2018Q4 and reached €15,5 billion, compared

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13. Adjusted for the impact of SPEs. See footnote 2.
15. Adjusted for the impact of SPEs. See footnote 2.
16. Adjusted for the impact of SPEs. See footnote 2.
17. Adjusted for the impact of SPEs. See footnote 2.
with an increase of 2.9% in the respective euro area average in the corresponding period (Chart 1.18).

Based on the latest consolidated supervisory data, the level of NPLs of NFCs as a percentage of NFCs’ total bank loans declined to 36.6% in November 2018 from 49.2% in November 2017 (Chart 1.19), mainly reflecting the impact of credit institutions’ sale of NPLs and the transfer of the NPLs of the former CCB outside the banking system. At the same time, loan loss provisions as a percentage of NPLs of NFCs increased to 55.4% at end-November 2018, compared with 51.9% at end-November 2017.

Additional information on the level of debt and the financial position of the main debtors of the financial system of Cyprus is set out in the CBC Household and Non-Financial Corporations Indebtedness Report18.

**Real estate market**

During 2018, the real estate market continued its gradual recovery that commenced in 2017Q1, supported by the positive developments in the economy and the improvement in confidence in the real estate market.

More specifically, following the rapid increase observed over the period 2006-2009, the CBC’s residential property price index (houses and apartments) followed a steady downward trend until the end of 2016, reflecting the abrupt change in economic conditions due to the crisis that followed (Chart 1.20, p. 22). The decline in the CBC’s residential property price index

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19. For further information, see the CBC’s quarterly Residential Property Price Index.
from its highest point in 2008Q3 to the lowest recorded in 2016Q2 is estimated at over 30%. Since then, it has been on a gradual upward path. On an annual basis, the CBC residential property price index recorded an increase of 1.6% in 2018Q3, compared with an annual increase of 1.4% in 2017Q3 (Chart 1.21).

The largest annual increase in house prices in 2018Q3 was recorded in the district of Famagusta (4.5%), followed by Limassol (1.6%), Larnaca (1.1%) and Nicosia (0.5%), while the index recorded an annual decrease of 2% in the Paphos district (Table A.1). The largest annual increase in apartment prices in 2018Q3 was recorded in the district of Limassol (8.7%), followed by Paphos (5.2%), Famagusta (5.0%), Larnaca (2.7%) and Nicosia (1.2%) (Table A.2, p. 24).

The significant annual increase in apartment prices in Limassol, which has been continuous since 2017Q1, is due to the increased demand for apartments, mainly in coastal areas. The rise in prices seems to reflect the overall development of this area (e.g. due to large infrastructure projects such as the casino, the marina and the Cyprus University of Technology - TEPAK), but also due to the indirect effect from the acquisition of apartments by non-residents through the Cyprus Investment Programme. More information regarding the property market is presented in Box 1 (p. 23).

According to data from the Royal Institute of Chartered Surveyors (RICS), the ratio of annual rent to real estate prices recorded slight fluctuations, with annual rental yields in 2018Q2 reaching 2.4% for...
Box 1: Property market

Investment in property by Cyprus residents and non-residents, as evidenced by the number of sales contracts filed with the Department of Lands and Surveys, increased during 2018 by 5.8%. Investments from non-residents represent 47.3% of the total number of sales contracts filed for 2018, with 15.5% relating to non-residents from the EU and 31.8% relating to non-residents from third countries. At the same time, the district of Paphos registered the largest number of sales contracts relating to non-residents during 2018 (40.4% of total sales contracts for the whole of Cyprus), followed by the districts of Limassol (29.7%), Larnaca (15.8%), Famagusta (8.8%) and Nicosia (5.3%).

The increase recorded in property prices, particularly in the price of apartments situated mainly in the coastal areas of Limassol district, reflects the overall development of these areas due to large infrastructure projects, as well as the demand for high value residential property through the Cyprus Investment Programme. Investments in property through the Cyprus Investment Programme have exerted an indirect upward pressure on property prices, mainly apartments, especially in the coastal areas of Limassol. More specifically, property prices in the district of Limassol recorded significant annual growth of 6.9%, 6.1% and 8.7% during the first three quarters of 2018, respectively. These increases exceeded the annual growth in property prices in the other districts of Cyprus. Furthermore, according to RICS data, rental prices in the Limassol district have recorded a significant increase during the last two years.

Any disposal by credit institutions of large numbers of properties that were obtained through debt-to-asset swaps, as well as by large investment entities that acquired collateralised loans through the sale of NPLs, will increase the supply of properties, which may lead to a deceleration in the increase of property prices, or even to a fall in prices. A potential decrease in property prices due to excess supply, will adversely affect the collateralised properties of credit institutions. As a result, credit institutions should dispose of them with caution, since large scale disposals could lead to sudden decreases in property prices and generate negative spillovers between the real economy and the financial sector.

Furthermore, it is important that credit institutions are prudent during the approval of loans and that they comply with the CBC Directives on credit granting and review processes, as well as complying with the

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20. According to the Department of Lands and Surveys, the definition of “non-residents” was amended in 2018. As a result, based on the recommendation of the Department of Lands and Surveys, no comparison is made of the 2018 data with data from previous years.

21. For further information, see the CBC’s quarterly Residential Property Price Index.

22. For the purposes of this Box, the references to the definitions of the Cyprus Investment Programme relate to the terms and conditions that were in force up to 12 February 2019, i.e. before they were amended by the Council of Ministers on 13 February 2019.

23. Sales of luxury residences that take place through the Cyprus Investment Programme are not financed by the domestic banking system and hence are not included in the sample used to produce the CBC’s property price indices, since these indices are calculated using valuations of the market prices of properties for the purposes of granting or restructuring loans, or on revaluation of properties.
limits of the loan-to-value ratio and the debt-service-to-income ratio. It is noted that income received from pre-construction sales, could cover a significant part of the cost of construction and of any potential borrowing. Although it is desirable for credit institutions to increase their lending in the real economy, any loosening of the lending criteria could adversely affect the resilience of credit institutions against possible credit losses. In addition, credit institutions must avoid excessive concentration in the real estate and construction sectors, since such concentration entails a high credit risk. It is of paramount importance that the developments observed in the real estate and construction sectors are sustainable in the long term to avoid any likelihood of creating new NPLs. Moreover, despite the generally modest average increase in property prices, the increasing uprend in prices, particularly of apartments in the Limassol district, highlights the need for close monitoring of developments and of their potential effects on the economy at large.

houses, 4.5% for apartments, 5.5% for shops, 4.2% for warehouses and 5.1% for offices (Chart 1.22).

At the same time, the price-to-GDP per capita ratio remained stable between 2015Q4 and 2018Q4 across all property types, with the exception of offices which recorded a slight increase, reflecting the fact that the recovery in real estate prices is due to the improvement of the wider economy and the return of confidence in the real estate market (Chart 1.23).
2. Banking sector

This section presents a concise analysis of the structure, financial position and regulatory framework of the Cyprus banking sector. The analysis is based on the latest available supervisory data submitted to the CBC by credit institutions.

Structural developments in the banking sector

The size of the banking sector reduced significantly between 2017Q3 and 2018Q3, from €67.2 billion to €59.4 billion. The contraction was mainly due to the surrender of the banking license of the former CCB on 3 September 2018, that resulted in the transfer of assets worth €8.3 billion to SEDIPES, as well as the continuing deleveraging efforts undertaken by credit institutions. The sale of loans by credit institutions is expected to continue in 2019, which will further reduce the size of the banking sector. The ratio of total assets of the banking sector to GDP fell to 291% at 2018Q3, from 348% at 2017Q3 (Chart 2.1). The growth in GDP has also contributed towards the decrease in this ratio.

At the same time, the leverage ratio decreased from 8.5% in 2017Q3 to 7.0% in 2018Q3, mainly due to developments concerning the former CCB. In particular, the transfer of part of the assets and liabilities of the CCB to Hellenic Bank, resulted in a reduction in own funds for the entire banking sector and a relatively smaller reduction in the total assets of the banking sector.
Financial position

Credit and loan portfolio quality

The agreement for the transfer of part of the assets and liabilities of the CCB to Hellenic Bank was a major development in improving the banking sector and returning the sovereign rating to investment grade. As a result of the above agreement, approximately one third of banking sector NPLs (€5,6 billion) in 2018Q3 remained in SEDIPES.

During 2018, credit institutions continued their intensive efforts to address the problem of the high level of NPLs, with the aim of continuing the cleaning up of their balance sheets. The multidimensional approach adopted by credit institutions contributed significantly to the downward trend that was recorded by NPLs. This approach includes mainly loan restructurings, write-offs, debt-to-asset swaps and the sale of loans.

In particular, during 2018, the first NPL portfolio sales were recorded by Hellenic Bank (worth €144 million) and Bank of Cyprus (worth € 2,8 billion). As regards NPL repayments through debt-to-asset swaps, it is noted that these arrangements are applied mainly in the case of large corporations and households. The write-off of loans as part of the loan restructuring proceeds, has also contributed to the reduction in the level of NPLs.

Despite the significant progress achieved, the high level of NPLs continues to pose significant risks to the stability of the financial system and poses a challenge for credit institutions. Even after the conclusion of the CCB agreement, NPLs as a percentage of total
lending by credit institutions continue to remain among the highest in the EU. Thus, credit institutions should continue their intensive efforts to further reduce the level of NPLs, by applying holistic and sustainable strategies.

Total NPLs in the banking sector fell by €10.5 billion to €11.3 billion between 2017Q3 and 2018Q3. As a percentage of total loans, NPLs declined to their lowest level since the financial crisis, from 43.2% as at 2017Q3 to 32.1% as at 2018Q3 (Chart 2.2). It is noted that between 2014Q4 and 2018Q3, NPLs decreased by a total of €17 billion, from €28 billion to €11 billion. Restructured loans as a percentage of total lending to the domestic private sector declined to 21.2% in 2018Q3, compared with 24.7% recorded in 2017Q3.

As at 2018Q3, 41% of NPLs to NFCs related to loans in the construction and real estate management sectors, compared with 48% in September 2017 (Chart 2.3).

As a result of the use of debt-to-asset swap agreements, the exposure of credit institutions to real estate has increased significantly. In particular, Bank of Cyprus and Hellenic Bank made substantial use of the debt-to-asset swap tool (Chart 2.4) and are proceeding with the sale of property acquired through such agreements.

The adoption by the House of Representatives in July 2018 of an improved legislative framework governing foreclosures and insolvency, the securitisation of loans, along with the amendment of the sale of loans legislation, is expected to help further reduce the level of NPLs of credit institutions. However, a potential increase in the supply of

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24. Excluding loans to central banks and credit institutions.
properties in the market may exert a downward pressure on real estate prices, leading to a decrease in the value of collateral securing loans extended by credit institutions.

Furthermore, NPLs that are now outside the banking sector in credit acquiring companies, continue to burden the economy and the borrowers, as the private sector remains heavily indebted. The business models of credit acquiring companies - which have been licensed by the CBC - warrant particular attention, due to the interconnections arising with the real estate sector from collateralised loans they acquire and due to the increased risk of contagion. Thus, it is imperative to closely monitor the sector of credit acquiring companies, in order to prevent any risks to the economy that could arise from their activities.

The government’s ESTIA scheme, which was approved following consultations with the European Commission, aims to support vulnerable borrowers which encountered difficulties as at September 2017 in repaying their loans that are secured by their primary residence. The scheme provides for a state subsidy of part of the loan instalment, if certain conditions are met. The scheme is expected to help reduce the level of NPLs, as it provides attractive incentives for relaunching the debt servicing capacity of borrowers, including strategic defaulters. Despite the positive elements, the scheme raises moral hazard concerns, although these concerns have somewhat been mitigated by the final amendments made by the government in relation to the eligibility criteria and conditions.
Income and profitability

The operating results of credit institutions, before provisions and taxes, for the period January – September 2018 deteriorated further compared with the corresponding period of 2017, mainly due to the decrease in net interest income and the disproportionately high operating costs.

In particular, net interest margin decreased to 1.8% in the first nine months of 2018 from 2.4% in the first nine months of 2017 (Chart 2.5). The significant compression of net interest margin is mainly due to the distortion of operating results, caused by the transfer of certain assets and liabilities of the CCB to Hellenic Bank, as well as the intense competition among credit institutions to attract credit-worthy borrowers in a global low interest rate environment. Net interest income decreased to €745 million during the first nine months of 2018, registering a decrease of €308 million in comparison with the corresponding period of 2017. It is noted that the decrease in net interest income is mainly due to the fact that the results of the banking sector for the first nine months of 2018 do not include the results of the CCB25.

The cost-to-income ratio of credit institutions increased and reached 60.0% in the first nine months of 2018, from 48.7% during the corresponding period of 2017 (Chart 2.6). The increase is mainly attributable to the marked reduction in operating income of certain significant institutions between 2017Q3 and 2018Q3. Based on the above, credit institutions must improve their operating profitability by increasing their income and

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25. On 3 September 2018, the CCB surrendered its banking licence and is thus no longer a credit institution.
decreasing their operating costs. Despite the decrease recorded in the number of branches and the number of employees in the largest credit institutions during the first nine months of 2018, the size of the banking sector continues to remain large compared to the size of the Cyprus economy, while staff expenses continue to absorb a significant part of credit institutions’ operating income. Credit institutions must continue their efforts to implement digital methods and technologies, in order to further reduce operating costs and improve operating profitability. Box 2 (p. 31) contains further discussion on the potential impact of technological innovation.

Furthermore, credit institutions need to broaden their income base by seeking alternative sources of revenue that so far have not been taken advantage of. The income from fees and commission as a percentage of total operating income of significant domestic credit institutions, has followed an upward trend over the past years (Chart 2.7). Nevertheless, this increase is not substantial and has not resulted in a material improvement in the operating profitability of credit institutions. As such, credit institutions must start offering services and engaging in activities that have thus far not been exploited in their traditional business model.

Total loan loss provisions in the banking sector fell significantly to €5.7 billion at the end of September 2018, from €10.1 billion at the end of September 2017. This was mainly due to the NPLs of the former CCB that are no longer in the banking sector, and due to the sale of NPLs to credit acquiring companies that are also not included in the banking sector.
Box 2: Technology developments and digital era

The transformation to a more technology-oriented environment that is developing continuously, is an important challenge for credit institutions. It is estimated that fintech will dramatically alter the functions and operational structure of credit institutions. This change in operational models is necessary both from the supply side as well as the demand side. On the one hand, technological innovations result in faster and more accurate processing of information and swifter execution of transactions, resulting in the reduction of operational costs. On the other hand, consumers raise increased expectations from credit institutions as they look for alternative ways of processing their financial transactions that are simpler and faster.

By identifying the strengths that these technological innovations offer, domestic credit institutions have set targets for their digital transformation, by increasingly using and providing more digital services. These services include, inter alia, the potential to carry out a broader range of transactions through ATMs and the internet, as well as the use of smartphones for customer identification purposes (e.g. through fingerprints) and the execution of wireless transactions.

It is evident that technological developments offer considerable prospects for growth. The modernisation of credit institutions and the transition to a digital operational model, can potentially have a positive impact on the stability of the financial system. However, caution is warranted, as this can create preconditions for the accumulation of different types of risks, such as the potential loss of data or breaches of data confidentiality and the disruption of operations due to cyber attacks (cyber risks). Such incidents may generate large financial costs both for credit institutions as well as for customers. Thus, credit institutions need to implement policies to enable them identify and minimise such risks, as well as develop alternative ways to support business continuity of their operations in case of failure of the technological innovations they have adopted.

sector. Nevertheless, loan loss provisions as a percentage of NPLs increased materially. The coverage ratio of loan loss provisions to NPLs increased to 51,9% in 2018Q3, compared with 47,0% in 2017Q3, mainly due to the application of IFRS 9 since 1 January 2018, that requires credit institutions to recognise provisions based on expected credit losses.
Based on the ECB’s guidance\textsuperscript{26}, in addition to provisions for existing loans, credit institutions shall be required in future to book more timely provisions for new problematic loans. Significant credit institutions will be expected to justify any deviations from the ECB guidance and to submit on an annual basis information concerning their compliance with minimum prudential provisions. The new framework will be integrated into the Supervisory Review and Evaluation Process (SREP) from 2021 onwards.

According to the most recent data, total losses of the banking sector before taxes and after provisions for doubtful debts for the first nine months of 2018 amounted to €102 million, compared with losses of €535 million for the first nine months of 2017. The profitability of credit institutions, which can be measured by the return on assets and return on equity, recorded a moderate improvement. On an annual basis, the return on assets ratio (after taxes and provisions) increased to -0.2\% at 2018Q3 from -1.3\% at 2017Q3. The return on equity ratio (also after taxes and provisions) improved, reaching 1.2\% in the first nine months of 2018, compared with -12.5\% in the corresponding period of 2017. Based on the above, the results of credit institutions recorded some improvement in the first nine months of 2018.

Total profits before taxes and provisions for doubtful debts of €196 million were recorded in the first nine months of 2018. This was due to the recognition by Hellenic Bank of the negative goodwill resulting from the difference

between the fair value of the assets and liabilities that it purchased from the CCB and their purchase price (Chart 2.8). As a result, the return on assets ratio (after taxes and provisions) reached 0.4% at 2018Q3 (Chart 2.9) and the return on equity ratio (also after taxes and provisions) reached 8.5% (Chart 2.10). However, this is a one-off transaction and its impact is unlikely to re-occur.

Credit institutions should continue their efforts to improve their profitability and focus on the quality and the enhancement of the services they offer to customers. Furthermore, credit institutions need to terminate their loss-making operations and diversify the range of services they offer, for example by using technological tools that could lead to new, more profitable business models.

**Capital adequacy**

The high level of NPLs in the banking sector and the implementation of IFRS 9, led to a further decline in the supervisory capital levels of credit institutions. Despite this, the capital of credit institutions remained above the required minimum capital adequacy ratios.

More specifically, the total capital adequacy ratio declined by 70 basis points to 14.8% in 2018Q3 from 15.5% in 2017Q3, while the total Common Equity Tier 1 (CET1) ratio decreased to 14.1% in 2018Q3 from 15.0% in 2017Q3 (Chart 2.11, p. 34).

**Liquidity**

The fully phased-in Liquidity Coverage Requirement (LCR) was implemented in the
EU and Cyprus on 1 January 2018. The LCR is calculated by dividing high-quality liquid assets by projected net cash outflows, over a 30-day horizon.

Based on the most recent data, the LCR of the Cyprus banking sector reached 332% as at 2018Q3, exceeding the minimum limit of 100% required under the EU Capital Requirements Regulation.

Loans and deposits

Total deposits of the Cyprus banking sector, recorded a net increase\(^2\) of €1,8 billion during the 12 months to December 2018, compared with a net increase of €1,5 billion for the corresponding period in 2017. The annual growth rate of deposits, rose to 3,7% in 2018Q4, compared with 3,1% in 2017Q4\(^2\). Total deposits in December 2018 reached €47,9 billion, compared with €49,4 billion in December 2017.

Total lending of the banking system, exhibited a net decrease of €1,0 billion during the 12 months to December 2018, compared with a net decrease of €0,9 billion for the corresponding period in 2017. The annual growth rate of loans stood at -2,6% in 2018Q4, compared with -1,7% in 2017Q4. The stock of loans in 2018Q4 reached €39,2 billion, compared with €51,4 billion in 2017Q4. The significant decline that was recorded in total loans reflects, inter alia, CCB loans worth €5,6 billion which were

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27. The term ‘increase/decrease’ represents ‘transactions,’ i.e. it excludes reclassifications/other adjustments, revaluations and exchange rate adjustments.
28. Deposits of domestic residents recorded a net increase of €3,2 billion in the 12 months to December 2018 (2017: net increase €1,5 billion), while deposits from non-residents fell by €1,4 billion during the same period (2017: negligible reduction).
transferred to SEDIPES (former CCB) and thus outside the banking system, the sale by the Bank of Cyprus of a loan portfolio worth €2,8 billion to credit acquiring companies as well as the sale of the United Kingdom operations of Bank of Cyprus, with a loan portfolio amounting to €1,8 billion.

As regards new lending by credit institutions to households and non-financial corporations of the euro area, a slight decrease was recorded in 2018 compared with 2017. More specifically, net new loans (excluding re-negotiations) reached €3,1 billion in 2018 compared with €3,2 billion in 2017. According to the latest CBC Bank Lending Survey⁹⁹, net demand for loans from households as well as non-financial corporations followed a continuous increase each quarter since the beginning of 2015. This development is mainly due to the increase in economic activity, moderate salary increases and the historically low level of domestic interest lending rates.

Credit institutions are increasingly searching for new lending and investment opportunities, seeking to improve their financial performance. In this context, it is important that prudent standards and strict lending criteria are maintained. Thus, caution needs to be exercised by credit institutions when using liquidity available at their disposal, avoiding loans or investments that carry a high level of risk.

**Developments in the regulatory framework**

In December 2018, the Council of the EU

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adopted a legislative package aimed at reducing risks in the banking sector, which is expected to be published in the *Official Journal of the European Union* in the first half of 2019. The package contains amendments to the: (a) Capital Requirements Regulation, (b) Capital Requirements Directive, (c) Regulation for the Resolution of Credit Institutions and certain Investment Firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund, and (d) Recovery and Resolution Directive of Credit Institutions and Investment Firms.

The agreed measures deliver on three of the key objectives set out by the Council roadmap on completing the banking union agreed in June 2016. In particular:

- Enhancing the framework for bank resolution, in particular the necessary level and quality of the subordination of liabilities (MREL) to ensure an effective and orderly “bail-in” process;
- Introducing the possibility for resolution authorities to suspend a bank's payments and/or contractual obligations when it is under resolution - the so-called "moratorium tool" - so as to help stabilise the bank's situation, and;
- Strengthening bank capital requirements to reduce incentives for excessive risk taking, by including a binding leverage ratio, a binding net stable funding ratio and setting risk sensitive rules for trading in securities and derivatives.

Furthermore, the banking package contains measures to improve banks' lending capacity and to facilitate a greater role for banks in the
capital markets, such as:
• Reducing the administrative burden for smaller and less complex banks, linked in particular to reporting and disclosure requirements;
• Enhancing the capacity of banks to lend to SMEs and to fund infrastructure projects, and;
• Reducing the costs of issuing/holding certain instruments, such as high quality securitisation instruments or covered bonds.

The banking package also contains a framework for cooperation and information sharing among the authorities involved in the supervision and resolution of cross-border banking groups. The agreed measures preserve the balance between the powers of home and host supervisors in order to facilitate cross-border flows of capital and liquidity, while ensuring an adequate level of protection for depositors, creditors and financial stability in all member states. The agreement also introduces amendments to improve cooperation between competent authorities on matters related to the supervision of anti-money laundering activities.

As regards the macroprudential oversight of the financial sector, the legislative measures, *inter alia*, empower national macroprudential authorities to set higher risk buffers for Other Systemically Important Institutions (O-SII buffer) compared with the existing legislation, to impose capital buffers to address systemic risk in specific sectors of the economy and, more generally, enhance the role of national macroprudential
authorities. Where appropriate, the CBC will adjust its macroprudential policies and align them with the revised macroprudential tools.

In addition to the above package, on 9 April 2019 the Council of the EU adopted a new framework for dealing with credit institutions’ NPLs. The new rules set capital requirements applying to banks with NPLs on their balance sheets. The aim of the reform is to ensure that banks set aside sufficient own resources when new loans become non-performing and to create appropriate incentives to avoid the accumulation of NPLs.

When borrowers fail to meet their agreed repayment arrangements, the credit institution must set aside more capital on the assumption that the loan will not be paid back. This increases credit institutions’ resilience to adverse shocks. Furthermore, addressing the problem of future potential NPLs preserves financial stability and encourages lending for financing growth and job creation.

On the basis of a common definition of NPLs, the proposed new rules introduce a "prudential backstop", i.e. common minimum loss coverage for the amount of capital banks need to set aside to cover losses caused by future loans that become non-performing. Different coverage requirements will apply depending on the classification of the NPLs as "unsecured" or "secured" and whether the collateral is movable or immovable.
3. Insurance sector

This section examines the main developments in the insurance sector and evaluates the potential risks it faces. The analysis focuses on 31 insurance companies that are incorporated in Cyprus, which are supervised micro-prudentially by the Superintendent of Insurance and are operating in Cyprus or abroad under the EU Solvency II Directive.

The analysis of the sector is based on the quarterly Quantitative Reporting Templates (QRTs) as at 30 September 2018, provided to the CBC by the Superintendent of Insurance.

Financial position and solvency

Assets and investments

Total assets of the Cyprus insurance sector reached €3.9 billion in September 2018, whereas total liabilities of all insurance companies reached €2.5 billion. As a result, assets of insurance companies exceeded their liabilities by €1.4 billion in September 2018, an amount much higher than the Solvency Capital Requirement (SCR) of €486 million required under the EU Solvency II Directive.

The assets of insurance companies, excluding unit-linked funds, reached €2.6 billion in September 2018, of which the largest part, amounting to €1.8 billion, related to the category “investments”. The distribution of total assets and liabilities is shown in Chart 3.1. In particular, bonds constituted the largest single component of investments as at September 2018 and amounted to €765

30. Where the policyholders assume the investment risk.
31. Excluding unit-linked investment funds.
million (42% of investments), of which €456 million (25%) related to corporate bonds and €309 million (17%) to government bonds. These large amounts, which do not include unit-linked investment funds, demonstrate the importance of insurance companies in providing financing to both the government and businesses. Investments in collective investment funds amounted to €578 million (32% of investments), followed by investment in shares and participations at €119 million (11% of investments) and deposits at €159 million (9% of investments) (Chart 3.2). In recent years, a gradual decrease in the share of deposits has been observed along with a significant increase in investments in collective investment funds, due to the higher returns generated by the latter compared with other assets. Investment diversification is crucial in the context of the EU Solvency II Directive, due to the high capital charge required in the event of insufficient investment diversification.

Further to these investments, insurance companies managed €1.3 billion of unit-linked funds. Other important but smaller categories of assets were cash, customer and insurer balances and recoveries from reinsurers.

**Premium production, revenues and expenses**

The production of gross premiums in the first nine months of 2018 recorded a significant increase, indicating that the reversal of the adverse economic climate and the restoration of confidence in the Cyprus economy have
brought the sector back to positive growth. In particular, total gross written premiums for the first nine months of 2018 amounted to €736 million, compared with €683 million in the corresponding period of 2017 (Chart 3.3).

Total gross premiums of life insurance companies, recorded an increase of 10.3% during the first nine months of 2018, compared with 11% in the first nine months of 2017, while the generation of new revenue (contracts) increased by 13% from 10% during the same period of 2017. In the non-life sector, an increase of 6.2% was recorded in total gross written premiums for the first nine months of 2018, compared with an increase of 14% during the same period of 2017. In recent years, the growth of the non-life sector and in particular property protection coverage, is partly related to the growth in the real estate sector and the large construction projects which are underway, such as marinas, multi-storey buildings, hotels and casinos.

In the non-life sector, the gross expense ratio improved, recording a decrease from 31% during the full year 2017, to 29% in the first nine months of 2018, while this ratio remained stable at 21% for the life sector for the respective periods. The above development reflects insurance companies’ efforts to reduce costs and enhance their operational efficiency.

Analysis of insurance policy claims

In the non-life sector, the gross claims ratio

32. Excluding accident and health insurance premiums of life insurance companies.
33. Including accident and health insurance premiums of life insurance companies.
34. It depicts the ratio of expenses to gross written premiums.
35. It depicts the relationship between gross incurred claims to gross premiums earned.
recorded a slight decrease from 56% in the whole of 2017, to 55% during the first nine months of 2018.

In the life sector, the gross claims ratio recorded a decrease from 76% in the whole of 2017 to 66% in the first nine months of 2018. Redemptions and surrenders of life insurance policies, which had risen sharply during 2012 and 2013 due to the financial crisis, remained stable at pre-crisis levels (Chart 3.4).

**Solvency position**

As regards the capital adequacy of the insurance sector, the average solvency ratio of all insurance companies supervised in Cyprus rose to 281% in September 2018, from 273% in September 2017 (Chart 3.5). Due to the nature of their operations, life insurance companies have a higher average solvency ratio (313%) compared with the corresponding ratio of non-life insurance companies (250%). Nevertheless, a small number of non-life companies have a relatively low solvency ratio and as such, may require additional capital in the future. However, due to their small size, they do not pose a systemic risk for the financial system of Cyprus.

**Overall assessment and outlook of the insurance sector**

The crucial role of insurance companies in mitigating risks, in providing coverage against future loss events and in the restoration of losses, is widely recognised. Through coverage of risks, insurance companies help to safeguard the stability of the financial

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36. Based on the EU Solvency II Directive, this is equal to the eligible own funds over the Solvency Capital Requirement (SCR), that an insurance company is required to hold.
position of households and of the balance sheets of corporations. They are institutional investors in equities, government bonds and corporate bonds and, due to the large size of their investments in financial markets, insurers play an important role in enhancing the stability of the financial system.

In particular, in the case of life insurance companies, their investment policy is guided by the need to ensure adequate and predictable cash flows over time. Their balance sheets, in contrast to the balance sheets of credit institutions, consist of relatively long-term investments that protect insurance companies from the risk of illiquidity when they are called to pay the insured at the maturity of a life insurance policy. As a result, life insurance companies tend to have a long-term investment horizon and can act as a stable and secure source of investment in times of crisis.

Nevertheless, the insurance sector can also be a source of vulnerabilities for the financial system. As institutional investors, insurance companies have substantial links with the rest of the financial sector through their holdings in the equity of financial corporations and vice versa, which can cause contagion risks with widespread consequences.

At the same time, the insolvency of a large insurance company may create negative repercussions for financial stability. In this regard, the CBC considers necessary the introduction of a credible and reliable institutional framework for the recovery and resolution of insurance companies and that the issue should be swiftly addressed at the EU level.
While the improvement in the economic climate has supported the recovery of the insurance sector, challenges remain. During 2018, the sector faced new institutional changes concerning the transposition of the EU IDD and the implementation of the GDPR. The IDD seeks to safeguard consumer interests through improved provision of insurance services, by introducing rules of conduct for insurance companies in relation to the distribution and sale of their insurance products.

Furthermore, new regulatory requirements are to be implemented, such as IFRS 17, the new accounting standard for insurance policies. IFRS 17, which replaces the current IFRS 4, will enter into force on 1 January 2021 and aims to enhance comparability and transparency between the financial statements and the profitability of insurance companies. The successful implementation of the standard and the effective response from insurers to the increased demands, require insurance companies to change their infrastructure, upgrade regularly their IT systems to collect necessary data, as well as implement new procedures and controls.

The prolonged low interest rate environment continues to burden the sector’s profitability – particularly in the case of life insurance companies – and continues to be one of the major concerns in the insurance sector, as interest rates on deposits and returns on investments remain at low levels. It should be noted that the profitability of insurance companies is increasingly dependent on the return on their investments. Hence, insurance companies
may seek alternative sources of investment with increased expected returns, but also with increased risk.

The challenge for all insurance companies is to increase their revenues, reduce their costs and thus increase their operational efficiency. For life insurance companies in particular, a key challenge is to maintain existing contracts while generating new revenues, which are the key driver for their future profitability, given the long-term horizon of the life insurance sector.

Furthermore, the emergence of new technologies, digital transformation developments in insurance, and the use of modern and innovative solutions for the provision of insurance services (insurtech - insurance technology), can pose challenges for the insurance sector as well as increased cyber risks. The insurance sector needs to adapt to the new landscape and embrace the changes and developments that have already begun.

Medical insurance constitutes a major part of insurance premium income for both life and non-life insurance companies. With the implementation of the GHS, the production and revenue of insurance companies are expected to be adversely affected. This is particularly the case for group health plans, given that employers may reduce the coverage of their employees as they start pay contributions to the GHS from 1 March 2019.
4. Investment Funds and Investment Firms sector

This section reviews developments in the domestic IFs and CIFs sectors. The assessment is based on data provided directly by the IFs to the CBC and on supervisory data submitted to the CBC.

IFs do not guarantee a rate of return on investments, since the risk underlying their activities is borne by the holders of the participation units.

**Investment funds sector**

The IFs sector in Cyprus comprises Alternative Investment Funds and Undertakings for Collective Investment in Transferable Securities (UCITS) resident in Cyprus, which are regulated and supervised by the Cyprus Securities and Exchange Commission (CySEC).

IFs fall into two categories; open-ended funds whose units or shares are repurchased or redeemed at the request of the holders, either directly or indirectly, using the undertaking’s assets, and; close-ended funds, which have a fixed number of issued shares and whose shareholders have to buy or sell existing shares when entering or leaving the IF.

The number of domestic IFs reached 142 reporting entities in 2018Q3, compared with 108 in 2017Q3, with their total assets reaching €4,9 billion in 2018Q3, compared with €2,7 billion in 2017Q3 (Chart 4.1), mainly due to the increase in the number of IFs as well as the significant expansion in their investments in immovable property. At the same date, open-ended IFs represented 91,4% of the total assets
of domestic IFs, while close-ended IFs represented 8.6% of the total assets of domestic IFs (84.2% and 15.8%, respectively, in 2017Q3).

The resident IF sector has expanded considerably, more than doubling in size since 2008. The ratio of IF assets to GDP was 23.8% in 2018Q3, compared with 14.5% in 2017Q3. Due to the considerable increase in the share of the investments of IFs in immovable property, from 3.3% in 2017Q3 to 24.0% in 2018Q3, the share of investments in shares and other participations was reduced significantly. In 2018Q3, investments in shares and other participations represented approximately 58.8% of the total sector’s investment assets under management (75.0% in 2017Q3) (Chart 4.2).

During the first nine months of 2018, domestic IFs were mostly owned by NFCs, which owned 50.1% of the shares of these funds (45.6% in 2017Q3), with other financial intermediaries also having a substantial proportion of the shares of these funds, amounting to 18.4% in 2018Q3 (24.7% in 2017Q3) (Chart 4.3).

There are two notable features regarding the domestic IFs that are important for systemic risk analysis:
(i) the ownership of IFs; and
(ii) the amount of their investments in the domestic market.

The majority of investors in IFs were domestic residents, with holdings of 50.1% of the total capital of IFs as at 2018Q3 (2017Q3: 56.7%). Non-euro area investors held 42.1% of the capital of IFs (2017Q3: 38.0%) (Chart 4.4). Euro area investors owned the remaining 7.8% of the capital of IFs (2017Q3: 5.3%).
Based on the above, it is evident that there are no significant structural shifts in the ownership of IFs, confirming the sector’s importance for the domestic economy.

Focusing on domestic investors, in 2018Q3 the largest share of holdings was by NFCs, reaching 58,9% of total shares (2017Q3: 66,7%), while domestic households held 9,6% of total shares (2017Q3: 11,1%). For euro area investors, the holdings were more diversified, mainly between households (76,9%) and monetary financial institutions (11,5%) and structural changes were observed compared with 2017, where NFCs held 43,4% of shares, households held 32,1% and other financial intermediaries held 11,3%. As far as non-euro area investors are concerned, the largest proportion of holdings was by NFCs, reaching 47,3% of shares (2017Q3: Other financial intermediaries 62,1%). This breakdown of ownership is illustrated in Chart 4.5.

In the first nine months of 2018, the majority of IF assets were invested domestically and in the euro area (Chart 4.6). Holdings of equity were the dominant form of investment, with a skew towards shares quoted in markets in other euro area countries (38,9% in 2018Q3 compared with 49,8% in 2017Q3) and shares quoted in markets in third countries (36,7% in 2018Q3 compared with 25,6% in 2017Q3). Nevertheless, during the first nine months of 2018 a material increase in investments in immovable properties was observed, both in the euro area and in the domestic market.

A significant proportion of IF assets and liabilities is located domestically (Chart 4.7).
Therefore, there are direct linkages with the domestic financial system and the economy. However, since the participation of the other domestic financial intermediaries, insurance companies and MFIs in domestic IFs is limited, any deterioration in the returns of IF investments is not expected to have a material direct effect on the domestic financial sector. Based on the above, the risks to the stability of the financial system of Cyprus stemming from domestic IFs remain limited. However, the rapid growth of the sector in recent years and links to both the economy and the financial sector, warrant the continuous monitoring of developments and the macroprudential oversight of the sector.

**Cyprus investment firms sector**

The CIFs sector consists of the firms providing the investment services listed in the *Investment Services and Activities and Regulated Markets Law*, which are supervised by CySEC.

The sector experienced rapid growth during recent years, with the number of licenced CIFs reaching 238 on 30 June 2018, compared with 215 on 30 June 2017. For macroprudential oversight purposes, of particular interest are the 88 CIFs that provided the investment services of dealing on own account and underwriting of financial instruments and / or placing of financial instruments on a firm commitment basis (30 June 2016: 82 CIFs).

The total assets of these 88 CIFs amounted to €9,8 billion in 2017Q4, exhibiting a decrease of 11,5% compared with 2016Q4.
The nominal value of the over-the-counter derivatives held by the 88 CIFs on 31 December 2017 showed an annual decrease of 13.6%, reaching €72.2 billion.

The interconnectedness of the above CIFs with the EU financial system increased, since on 31 December 2017, 24.3% of their total assets related to the EU intra-financial system assets, including the financial system of Cyprus (31 December 2016: 13.5%). A similar picture emerges on the liability side of the above CIFs, since their EU intra-financial system liabilities reached 14.7% of their total assets (31 December 2016: 10.8%).

It is imperative to continue the close supervision and oversight of the CIFs, particularly as regards their risk mitigation measures and their governance.
Annex I: Macroprudential policy decisions concerning the stability of the financial system

37. One of the main responsibilities of the CBC is the macroprudential oversight of the financial system, with the ultimate objective to contribute towards safeguarding the stability of the financial system. Financial system means all financial institutions, markets, financial products and financial market infrastructures. Financial institution means any credit institution, financial conglomerate, payment institution, electronic money institution, insurance undertaking, re-insurance undertaking, insurance intermediary, occupational retirement benefit institution, investment firm (i.e. CIF) or collective investment undertaking or other institution, an enterprise or entity having a principle activity of a similar nature established in the Republic and authorised by a competent authority of the Republic or operating in the Republic.
The CBC follows an active macroprudential policy. The macroprudential policy decisions taken by the CBC during 2018 aiming at improving the stability of the financial system, as well as the macroprudential instruments that have been activated, are set out below.

During 2018, the CBC:

1. Reset the O-SII capital buffer for the other systemically important credit institutions that they have to meet gradually starting from 1 January 2019 and for the systemically important CIFs that they have to meet from April 2019.

2. Re-evaluated quarterly and set the countercyclical capital buffer rate at 0% of risk weighted assets of each licensed credit institution and certain CIFs. The deviation of the indicator of the bank credit to GDP for Cyprus from its long-term trend during 2018 remained negative.

3. Decided, based on the power vested in it by article 5(2) of the Macropudential Oversight of Institutions Law, 6(I) 2015, to exempt certain small and medium-sized CIFs from the requirement to maintain the institution specific countercyclical capital buffer for 2018.

4. Designated, in accordance with the ESRB Recommendation ESRB/2015/138, the Russian Federation as a material third country for the banking system of Cyprus for 2018, in relation to the recognition and the setting of the countercyclical capital buffer for exposures to each material third country. Furthermore, the CBC decided not to monitor the risks related with any undue credit expansion in the Russian Federation, given that the Russian Federation is already being monitored for these risks by the ESRB.

It is noted that the validity of the national macroprudential measure for the maintenance of additional liquidity by credit institutions that entered into force on 1 January 2018 for a period of 12 months, expired on 31 December 2018.

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38. Recommendation of the ESRB on recognising and setting countercyclical capital buffer rates for exposures to third countries (ESRB/2015/1).
Annex II: Macroprudential measures
## Macroprudential Level Notes

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<thead>
<tr>
<th>Macroprudential measure</th>
<th>Level</th>
<th>Notes</th>
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<tr>
<td>Loan to Value (LTV)</td>
<td>80% in the case the credit facility is granted for financing the primary permanent residence of the borrower.</td>
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<tr>
<td>Debt Service To Income ratio (DSTI)</td>
<td>70% for all other property financing cases. The total debt servicing amount should not exceed 80% of the applicant’s net disposable income. In the case of loans in foreign currency, the total debt servicing amount should not exceed 65% of the applicant’s net disposable income.</td>
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<tr>
<td>Countercyclical Capital Buffer (CCyB)</td>
<td>0% of the total risk exposure amount of licensed credit institutions and of certain CIFs that have not been exempted by the CBC due to their small or medium size. Assessed on a quarterly basis, by analysing a set of indicators. The CCyB requirement came into force on 1 January 2016.</td>
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</tbody>
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| Other Systemically Important Institutions Buffer (O-SII buffer) | Bank of Cyprus: 2,0%  
RCB Bank Ltd: 1,5%  
Hellenic Bank: 1,5%  
Eurobank Cyprus: 1,0%  
Alpha Bank Cyprus: 0,5%  
Renaissance Securities (Cyprus): 1,5%  
SIB (Cyprus) Ltd: 1,0%  
BrokerCreditService (Cyprus) Ltd: 1,0%  
Alfa Capital Holdings (Cyprus): 1,0%  
Etoro (Europe) Ltd: 0,5% | Annual reassessment. For credit institutions, the requirement to maintain the O-SII buffer requirement is being phased-in from 1 January 2019 to 1 January 2022.  
Annual reassessment. For CIFs, the revised O-SII buffer is applicable as of 1 April 2019. |