CENTRAL BANK OF CYPRUS
EUROSYSTEM

FINANCIAL STABILITY REPORT

2022

December 2023

NICOSIA - CYPRUS

Enter/ Exit
Full Screen

Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

Enter/
Exit
Full
Screen

Introduction

1 Medium-term risks to financial stabilityt

2 Resilience of the financial sector

3 Macroprudential policy

Prepared and published by:
Macroprudential Oversight Section
of the Financial Stability Department

© CENTRAL BANK OF CYPRUS, 2024

Address	80 Kennedy Ave 1076 Nicosia Cyprus
Postal Address	P.O. Box 25529 1395 Nicosia Cyprus
Telephone	+357 22714100
Website	http://www.centralbank.cy

Design and Interactive pdf:	FBRH CONSULTANTS Ltd, www.fbrh.co.uk

All rights reserved.
Reproduction for educational and non-commercial purposes is permitted provided that the source is acknowledged.

ISSN (online) 2421-857X

CENTRAL BANK OF CYPRUS
EUROSYSTEM

FINANCIAL STABILITY REPORT
2022

December 2023

NICOSIA - CYPRUS

Enter/ Exit

Full Screen

Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

Enter/Exit Full Screen

Introduction

1 Medium-term risks to financial stability

2 Resilience of the financial sector

3 Macroprudential policy

CONTENTS

Introduction 8

1. Medium-term risks to financial stability 14

1.1 Challenges to the balance sheets of the domestic private non-financial sector stemming from the protracted high inflation and the high lending rates 15

1.1.1 Impact of high inflation and high lending rates on the balance sheets of the private non-financial sector 15

1.1.2 Resilience of the non-financial sector 19

1.2 Potential deterioration in the asset quality of financial institutions, despite the positive profitability and solvency prospects 21

1.2.1 Banking sector 21

1.2.2 Credit Acquiring Companies CACs 27

1.2.3 Insurance sector 27

1.3 Exposure of financial institutions to the real estate sector, rendering them vulnerable to any negative developments in the real estate market, despite market resilience 30

1.3.1 Exposure of credit institutions and CACs 30

1.3.2 Exposure of the insurance and investment funds sector to the real estate sector 34

1.3.3 Resilience of the real estate market 35

1.4 Emerging external risks: the risk of climate change and cyber risk 37

1.4.1 Climate change risk 37

1.4.2 Cyber risks 43

2. Resilience of the financial sector 45

2.1 Banking sector 45

2.1.1 Capital adequacy 45

2.1.2 Profitability 46

2.1.3 Provisions 48

2.1.4 Loan-to-Value ratio 48

2.1.5 Debt-service-to-income ratio 48

2.1.6 Liquidity 49

2.2 Insurance sector 54

2.2.1 Capital adequacy 54

2.2.2 Liquidity 55

3. Macroprudential policy 56

Note: The latest date for updating the data of the general analysis is 31 March 2023.

Enter/ Exit
Full Screen

Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

CHARTS

1.1	Harmonised Index of Consumer Prices (HICP) inflation	15
1.2	Changes in demand for loans or credit lines to enterprises, by contributing factor	16
1.3	ECB deposit facility rate	17
1.4	Breakdown of bank loans by reference rate	17
1.5	Debt of households and NFCs	17
1.6	NFC debt to Gross Value Added	18
1.7	Factors contributing to changes in overall terms and conditions for loans or credit lines to enterprises	18
1.8	Factors contributing to changes in overall terms and conditions for loans to households for house purchase	18
1.9	Bankruptcies and voluntary liquidations of Cyprus companies	19
1.10	Gross Domestic Product (GDP)	19
1.11	Deposits of domestic households and NFCs	19
1.12	Net financial assets of households and net financial liabilities of NFCs	20
1.13	Deposits of NFCs	20
1.14	Gross Value Added and change in non-performing loans ratio	21
1.15	Balance sheet structure	21
1.16	Distribution of credit institutions' loan portfolio	22
1.17	Increases in lending rates by floating base rate category, compare to the ECB base rate	22
1.18	Non-performing loans	23
1.19	Loans by IFRS 9 staging	24
1.20	Credit institutions' exposure to Cyprus sovereign	26
1.21	Bond portfolio structure by investment grade and bond type	26
1.22	Insurance sector balance sheet structure - assets	28
1.23	Breakdown of investment portfolio	28
1.24	Investment breakdown by issuer country for insurers 'holdings of government bonds	29
1.25	Immovable property by sector	31
1.26	Breakdown of real estate owned by credit institutions by type of property	31
1.27	Exposure to the broad real estate sector	33
1.28	Distribution of the loan portfolio of credit institutions	34
1.29	Distribution of the loan portfolio of credit acquiring companies by type of collateral	34
1.30	New real estate transfers (sales)	35
1.31	Residential real estate index	36

CHARTS (continued)

1.32	Over/undervaluation of residential property prices	36
1.33	Greenhouse gas emission intensity - Cyprus	39
1.34	GHG Emissions	39
1.35	Largest sectors based on greenhouse gasses emissions per euro of Gross Value Added	40
1.36	Share of the five largest brown sectors out of total loans (2022 loans)	40
2.1	Capital adequacy ratios	45
2.2	Net interest margin	47
2.3	Loan-to-value ratio	48
2.4	DSTI at origination of new RRE loans	49
2.5	Interest coverage ratio at origination of new CRE loans	49
2.6	Liquidity coverage ratio for significant institutions, Cyprus comparison with SSM countries	49
2.7	Liquidity coverage ratio for less significant institutions, Cyprus comparison with SSM countries	50
2.8	Insurance sector solvency ratio	55

TABLES

1.1	Breakdown of pure new loans to households (euro area residents) by loan category	36
3.1	O-SII Institutions and O-SII buffer requirement according to the CBC annual review 2022	58
3.2	O-SII Institutions and O-SII buffer requirement according to the CBC annual review 2023	58

BOXES

1	Recent developments in the international banking sector	51
2	Countercyclical buffer rate (CCyB)	61

Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

ABBREVIATIONS

BBR	Bank Base Rate
CAC	Credit Acquiring Company
CBC	Central Bank of Cyprus
CCyB	Countercyclical Buffer Rate
CET 1	Common Equity Tier 1
CIF	Cyprus Investment Firm
Cystat	Statistical Service of the Republic of Cyprus
DSTI	Debt Service-to-Income ratio
DSTI-O	Debt Service-to-Income ratio at origination
ECB	European Central Bank
EIOPA	European Insurance and Occupational Pensions Authority
ESRB	European Systemic Risk Board
EEA	European Economic Area
EU	European Union
Eurostat	Statistical Authority of the European Union
GDP	Gross Domestic Product
GVA	Gross Value Added
HICP	Harmonised Index of Consumer Prices
ICR-O	Interest coverage ratio at origination
IFRS	International Financial Reporting Standard
LCR	Liquidity Coverage Ratio
LTV	Loan-to-Value ratio
NFC	Non-Financial Corporation
NPL	Non-Performing Loan
NSFR	Net Stable Funding Ratio
ORSA	Own Risk and Solvency Assessment
O-SII	Other Systemically Important Institution
RPPI	Residential Property Price Index
SCR	Solvency Capital Requirement
SPE	Special Purpose Entity
SSM	Single Supervisory Mechanism
SVB	Silicon Valley Bank
TLTROs	Targeted longer-term refinancing operations

Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

Introduction

In 2022, following the end of the pandemic, the Cyprus economy was faced with new external shocks. The Russian invasion of Ukraine, the ensuing energy crisis and the new supply chain disruptions pushed global inflation to very high levels, causing unprecedented uncertainties in the economic environment. Without the intervention of monetary authorities, inflation, would have particularly adverse consequences, eroding the purchasing power of households' income, having a stronger negative impact on lower-income households, and leading to the widening of inequalities between the richest and most vulnerable segments of the society. Similarly, uncontrolled inflation, would negatively affect the planning and investment decisions of businesses, with adverse consequences on the economy. In an attempt to address the prolonged high inflation, in 2022, a number of central banks worldwide, including the European Central Bank (ECB), proceeded with successive increases in the key monetary policy interest rates, leading to significant increases in banks' interest rates for certain loans. In particular, households and businesses with variable interest rate loans, linked to the Euribor or to the ECB interest rate, face new challenges in terms of servicing their debt. It should be noted, however, that a significant percentage of loans is linked to the Bank Base Rate (BBR), which, for the time being has not recorded any significant increases, as it is linked to the financing costs of credit institutions, including the deposit rate, which has not increased significantly. As a result, households and businesses, the loans of which fall into the above-mentioned category, are not currently expected to be significantly affected.

The full impact of the prolonged high inflation and the consequent significant increases in interest rates on the balance sheets of the private non-financial sector, is expected to become more pronounced over time. However, the Cyprus economy, as well as the Cyprus banking sector, have shown considerable resilience in 2022, which continues to date.

The Cypriot economy recorded a significant growth of 5,6%[1] in 2022 compared with an increase of 3,5% in the euro area. This was driven by the better than expected performance of the tourism sector, the economic impact of the inflow of foreign companies relocating to Cyprus under the Strategy for Attracting Companies for Business and/or Expansion of their Business in Cyprus (international headquartering) and the negligible dependence of the economy on natural gas compared to other European countries. In 2022, domestic inflation reached historically high levels with the Harmonised Index of Consumer Prices (HICP) standing, on average, at 8,1%. The significant surge in inflation is mainly due to the unprecedented adverse effects of the Russian invasion of Ukraine, especially on energy and food prices, with consequent impact on a number of sectors of the domestic economy.

Despite the prolonged war in Ukraine and the ongoing global challenges, the Cyprus economy is expected to continue its positive performance during 2023. Based on the

1. Based on data from the Statistical Service of the Republic of Cyprus (Cystat).

Enter/ Exit Full Screen

Central Bank of Cyprus' (CBC) latest forecasts for September 2023[2], the growth rate of Gross Domestic Product (GDP) is expected to reach 2,4% in 2023, 2,7 % in 2024 and 3,1% in 2025. Based on the same forecasts, inflation is expected to fall significantly to 3,9% in 2023, while inflationary pressures are projected to slow further in 2024 and 2025, to 2,7% and 2%, respectively. It should be noted, however, that these forecasts were prepared before the outbreak of the tragic conflict in Israel caused by the terrorist attacks, leading to uncertainty as to the potential consequences on the Cyprus economy, which would depend on the duration, intensity and extent of the war.

The recent surge in geopolitical tensions creates global challenges, in an economic environment where uncertainty already prevails. Although the Cyprus financial sector remains resilient, the impact on the Cyprus economy in a scenario of a protracted war, with other countries also being involved, could indirectly create further challenges for financial institutions. For Cyprus, the main downside risks to GDP relate to the possibility of a higher than expected negative impact on exported services, due to the impact of geopolitical tensions on the external environment. These risks are also linked with any potentially higher than expected commodity and product prices.

In 2022, the risks to financial stability, as identified by the CBC in this report, stem from the above-mentioned global developments in conjunction with the specificities of the Cyprus financial system (**Table 1**, p. 14).

The prolonged high inflation, in combination with increased lending rates, mainly on loans linked to the Euribor or the ECB base rate, have posed challenges to the balance sheets of the domestic private non-financial sector. As previously stated, the increase in prices undermines the purchasing power of households and businesses, which, combined with the slow correction in inflation, creates uncertainty, with a consequent adverse impact on economic activity and growth. The high indebtedness of the private non-financial sector, (despite the downward trend in recent years), in conjunction with the increases in lending rates and the pressures on the cost of living due to the prolonged high inflation, poses additional challenges to the repayment ability of the sector, especially for vulnerable households and businesses. Taking into consideration the expected reduction in household disposable income, the potential decline in the profitability of non-financial corporations, as well as the increase in lending rates, the risk of a new wave of insolvent households and corporations cannot be disregarded. However, so far, there is no evidence that this risk has materialised.

While vulnerabilities in the household and the non-financial corporation sectors appear to have increased, the observed economic growth, the fiscal measures taken to mitigate the effects of the prolonged inflation, as well as the precautionary saving of the private non-financial sector support the resilience of the financial sector. It is also worth noting that the tightening of the ECB single monetary policy has led to a significant containment of domestic inflation, which remains, however, above the ECB's medium-term target rate of 2%.

2. Central Bank of Cyprus – Macroeconomic Projections of the Central Bank of Cyprus for the Cyprus Economy, September 2023.

Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

Enter/ Exit Full Screen

Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

The potential deterioration in the asset quality of financial institutions, is also a challenge faced by the financial sector, despite its positive profitability and solvency prospects. As mentioned above, the higher borrowing costs, combined with inflationary pressures on domestic households and businesses, may limit the debt servicing capacity of borrowers, especially those with increased vulnerabilities. In view of the fact that a large proportion (80%) of the assets of the financial sector is concentrated within the banking sector, the main challenges relate to the banking sector, mainly with respect to the servicing of the loan portfolio of credit institutions. A potential increase in non-performing loans (NPLs) will have a direct impact on the profitability of credit institutions due to increased provisions, and may affect their capital adequacy and asset quality, and to a lesser extent, their ability to extend new lending to the economy.

However, the positive GDP growth projections, the low unemployment rate, as well as the projected wage growth according to the most recent CBC projections, may assist in mitigating these risks. It is worth noting that the quality of the loan portfolio of credit institutions has not deteriorated in 2022 but, on the contrary, continued to improve. The improvement in the asset quality of the banking sector is reflected both in the decline in the NPL ratio and the decline in the percentage of loans categorised as Stage 2 (early warning indicator on NPLs) in accordance with International Financial Reporting Standard 9 (IFRS 9).

Despite the resilience of the financial sector as a whole, developments over the recent months and the last two years, as well as the resulting uncertainty, point to the need for continued vigilance. Therefore, credit institutions should closely monitor credit risk in their loan portfolio on an ongoing basis, and make proper and timely use of the restructuring or renegotiations tools, with a view to finding an appropriate sustainable solution. At the same time, credit institutions should continue granting new loans in a prudent manner, in order to ensure the borrower's repayment ability even under unfavourable conditions.

At the same time, the existence of a stable foreclosures legal framework remains vital for the management of both the legacy volume of NPLs and the possible new NPLs. In particular, the foreclosures framework should be functional and be applied, without any impediments, so that it acts as an effective tool to deal with strategic defaulters, but also as a leverage for creditors and borrowers to reach sustainable restructuring solutions.

The significant overall exposure of financial institutions to the real estate sector renders them vulnerable to any negative developments in the specific market. Overall, the real estate sector is characterised by strong price volatility and boom-bust cycles. Therefore, a potential decline in real estate prices, combined with the fact that investments in real estate cannot be liquidated immediately, entails risks to the profitability and capital adequacy of the financial sector, as well as its liquidity.

Despite the exposure of financial

Enter/ Exit
Full Screen

institutions to the real estate sector, especially the banking sector, the possibility of such exposures having a negative impact on financial stability in the medium term, has so far been limited. The Cyprus real estate market has proved to be particularly resilient.

More specifically, both residential and commercial property prices followed an upward trend in 2022 and at the beginning of 2023. This rise in prices seems to be in line with the fundamentals of the market. According to the baseline macroeconomic scenario of the 2023 European stress test conducted by the ECB for the banking system, a stabilisation in the domestic residential and commercial property prices is expected, while even in the adverse scenario, domestic real estate price declines are projected to be among the smallest in the euro area, with the banking sector appearing to be able to absorb the potential losses.

The financial sector also has to deal with emerging exogenous risks, especially those related to climate change and cyberattacks. The economic cost of climate change will be significantly higher in the absence of timely and effective adaptation plans, while cybersecurity risk has increased, as reflected by the increased incidents of cyber-attacks observed in the euro area, amid high geopolitical uncertainty. It should be noted that serious cyber incidents may pose a direct or indirect systemic risk to the financial system, as they might disrupt critical financial services and operations, threatening financial stability. Having regard to the above, the CBC encourages financial institutions to take appropriate action in order to integrate these emerging risks into their general risk management framework.

Despite the above challenges, the Cyprus banking sector remains resilient with high levels of capital adequacy and liquidity, and continues to serve adequately the credit needs of households and businesses. During the first three months of 2023, the sector successfully weathered the shocks in the international markets due to developments with US banks and Credit Suisse. These events, however, further emphasise the need for both credit institutions themselves to evaluate and reassess the risk on their balance sheets on a continuous basis, as well as the need for supervisory authorities to continue to remain vigilant.

Moreover, the satisfactory NPL provision coverage levels, compared to those in the European Union (EU), and the high levels of collateral against the credit institutions' loan portfolio, as well as the strict lending criteria that are currently in place, help to maintain the quality of the portfolio of credit institutions in the current environment of prolonged high inflation and increased interest rates. The increased resilience of the banking sector was also confirmed by the results of the European Stress Test for 2023 (July 2023) conducted by the ECB, which included the two largest credit institutions of the country.

The insurance sector also remains resilient, while recording high growth rates in terms

Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

of premium production in 2022, which continued in 2023. At the same time, most insurance companies maintained strong capital levels, well exceeding the regulatory requirements, highlighting the sector's capital strength. The average solvency ratio of insurance companies remained high. Furthermore, the sector's liquidity ratio remained stable as a whole. The sector's credibility continued to strengthen, due to the strict regulatory framework governing its operations (EU Solvency II Directive). Overall, the sector has demonstrated resilience in recent years.

The CBC monitors risks to the financial stability on an ongoing basis and actively and effectively applies macroprudential policy by implementing timely macro-prudential tools where necessary.

In 2022, the CBC acting proactively in order to fulfil its primary objective of safeguarding financial stability, decided inter alia, to increase the countercyclical capital buffer rate from 0% to 0,5% of the total risk exposure amount of each credit institution in the Republic, with effect as from 30 November 2023. On 2 June 2023, the CBC, on the basis of the same policy, decided to further raise the countercyclical buffer rate from 0,5% to 1,0% of the total risk exposure amount in the Republic, with effect as from 2 June 2024. These decisions are intended to further enhance the resilience of the financial system during a period where the risks were deemed to be neither particularly elevated nor subdued.

It is worth noting that, Cyprus is one out of the twelve euro area countries that have implemented a positive countercyclical capital buffer rate by the end of 2022. At the same time, it is one of the five euro area countries that have recently adopted a policy that allows the introduction of a positive countercyclical buffer rate when cyclical risks are assessed to be neither subdued nor elevated, i.e. during periods of neutral risks.

The implementation of the above measure enhances the resilience of the banking sector and the economy, as it creates a cushion of capital for credit institutions to be used in times of crisis and economic downturns to absorb losses and/or support lending to the private sector. The primary objective of this measure is to ensure, to the extent possible, a sustainable flow of credit in the economy in future periods of potential elevated risks.

In 2022, the CBC, on the basis of its annual review, designated six credit institutions as other systemically important institutions ('O-SII institutions'[3]) and reset the O-SII capital buffer which they are required to maintain. The Policy on O-SII capital buffers first entered into force on 1 January 2019[4]. The O-SII buffer strengthens the resilience of O-SII institutions and mitigates the impact on the economy from the size of the banking sector.

In 2023, the CBC, following its yearly reassessment, designated five credit institutions as O-SII institutions and determined the level of O-SII capital buffer that they are required to maintain based on their systemic importance.

The macroprudential tools activated by the CBC in previous years that are still in force today, are the Loan-to-Value (LTV) ratio and

3. O-SII: Other Systemically Important Institutions.
4. For credit institutions, a phasing-in of the O-SII buffer requirement was applied from 1st January 2019 to 1st January 2023.

the Debt Service to Income (DSTI) ratio, which safeguard, to some extent, the asset quality of the banking sector.

In conclusion, despite the challenges described above, as also further analysed in the next sections of this Report, the financial sector remains resilient and is able to absorb potential shocks. The CBC, as the macro-prudential authority, implements timely supportive measures, that strengthen the resilience of financial institutions, where deemed necessary, in order to ensure the stability of the financial sector.

Enter/ Exit
Full Screen
Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

1. Medium-term risks to financial stability

The main medium-term risks to financial stability along with the factors that may trigger them are listed in the table below:

1. Challenges to the balance sheets of the domestic private non-financial sector due to the prolonged high inflation and high lending rates • Shrinking of the disposable income of households • Lower profit margins of businesses • Stricter lending criteria • Already heavily indebted private non-financial sector ↑	**2. Potential deterioration in the asset quality of financial institutions, despite the positive prospects of profitability and solvency** • Limited private sector debt servicing capacity • Long term structural challenges • Reduction in government bond prices on the balance sheets of financial institutions ↑
3. Exposure of financial institutions to the real estate sector, rendering them vulnerable to any negative developments in the real estate market, despite market resilience • Impairment of assets on their balance sheets • Increased credit risk from loans to the wider real estate sector • Reduction in the value of real estate collateral →	**4. Emerging exogenous risks, such as climate change risk and cyber risks** • Exposure to physical risk and transition risk • Ineffective and/or slow response to climate change risks • Increase in cyber attacks →

The arrows determine whether the risk has increased (↑), decreased (↓) or has remained unchanged (→), compared with the corresponding period last year.

1.1 Challenges to the balance sheets of the domestic private non-financial sector stemming from the protracted high inflation and the high lending rates

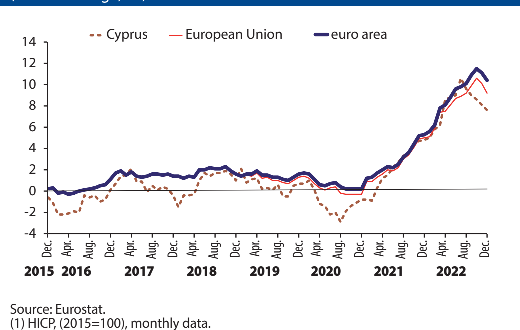
The full impact of the prolonged high inflation and the consequent significant increases in lending rates is expected to have an impact on the balance sheets of the private non-financial sector gradually over time. A decrease in households' real disposable income and in the profit margins of non-financial corporations, coupled with the already high level of debt, could potentially result in a diminished capacity for debt repayment of the private non-financial sector, in particular of vulnerable households and businesses, as well as to an increase in bankruptcies. On the other hand, the positive economic growth, the fiscal measures implemented to alleviate the impact of the prolonged high inflation, as well as precautionary savings support the resilience of the domestic private non-financial sector.

1.1.1 Impact of high inflation and high lending rates on the balance sheets of the private non-financial sector

In 2022, domestic inflation reached historically high levels with the Harmonised Index of Consumer Prices (HICP) averaging at 8,1% (**Chart 1.1**). The significant surge in inflation was primarily due to the adverse effects of Russian's invasion of Ukraine, especially affecting energy and food prices.

The prolonged high inflation presents new challenges for households. The ongoing, albeit decelerating, rise in prices undermines the purchasing power of households, while the slow correction of inflationary pressures

CHART 1.1 **Harmonised Index of Consumer Prices (HICP) inflation**[(1)]
(annual change, %)



Source: Eurostat.
(1) HICP, (2015=100), monthly data.

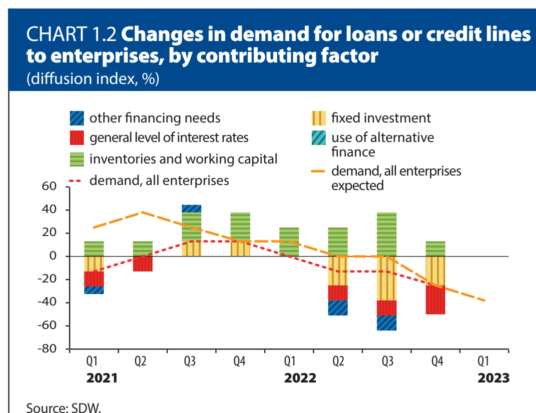
Enter/Exit Full Screen
Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

impacts household consumption and investment decisions, with negative consequences in economic activity and growth. Although the fiscal measures[5] taken mitigate, to some extent, the impact of inflationary pressures, the substantial and persistent nature of price increases is expected to adversely affect households' actual disposable income, and consequently their consumption.

At the same time, based on the latest CBC forecasts, wages are expected to increase, partly due to the automatic wage indexation, providing support to some consumers. However, wage increases have a negative effect on the already burdened, due to inflation[6], production costs of a number of non-financial corporations. Simultaneously, businesses are also confronted with a potential decline in sales, due to the constrained household consumption. As a result, there are downward pressures on the profit margin of non-financial corporations, with the challenges regarding the viability of companies, especially those with pre-existing vulnerabilities, having increased significantly.

The increased demand for stocks and working capital (**Chart 1.2**), amid a general decline in the overall demand for business loans, as shown in the April 2023 Bank Lending Survey of the CBC[7], is an indication of

CHART 1.2 **Changes in demand for loans or credit lines to enterprises, by contributing factor**
(diffusion index, %)



Source: SDW.

5. Mainly the reduction of VAT on electricity (1/11/2021-31-8/2022) and the subsidy on electricity prices (1/9/2022 - 30/6/2023), as well as the reduction of consumption tax on motor and heating fuels.
6. The data analysed in this report which relate to Cyprus residents is significantly affected by the classification of Special Purpose Entities (SPEs) as Cyprus residents and in particular by those considered to be economic owners of mobile transport equipment (vessels). It should be noted that the transactions of SPEs do not affect, nor are they affected substantially by the domestic economy cycle.
7. APRIL 2023 BANK LENDING SURVEY Results for Cyprus (centralbank.cy)

the potential liquidity problems that non-financial corporations are already facing.

As part of the efforts to address the prolonged high inflation, the European Central Bank has substantially raised interest rates (**Chart 1.3**), leading to subsequent increases in domestic lending rates. Given the significant proportion of variable-rate loans (**Chart 1.4**), the increases in lending rates pose additional challenges for households and businesses in servicing their debt for this category of loans. This is particularly the case for those borrowers whose variable interest loans are linked to the Euribor or to the ECB interest rate. It should be noted, however, that a significant percentage of loans have as their reference rate the Bank Base Rate, which, for the time being, has not recorded significant increases as it is linked to the financing cost of credit institutions, including the deposit rate, which has not increased significantly. Therefore, it is anticipated that households and corporations the loans of which fall into the above-mentioned category will not be significantly affected.

The high debt of the private, non-financial sector, although on a declining trend over the past few years, poses further challenges in relation to the sector's debt servicing capacity, in this high inflation environment, especially for vulnerable households and businesses.

Specifically, during the fourth quarter of 2022, the total debt of households and non-financial corporations accounted for 162,8 % of GDP, compared with 186,9 % in 2021 (**Chart 1.5**), with the reduction attributed both to the deleveraging of the sector and to increase of

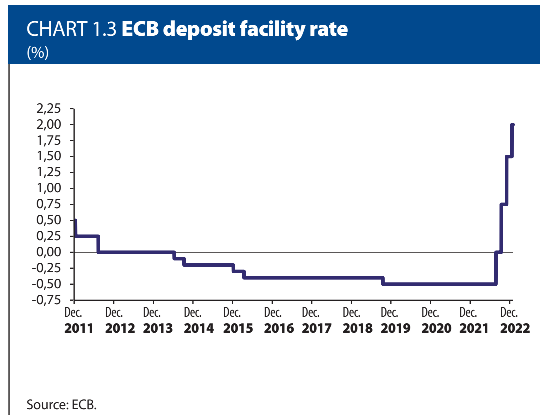


CHART 1.3 **ECB deposit facility rate**
(%)

Source: ECB.

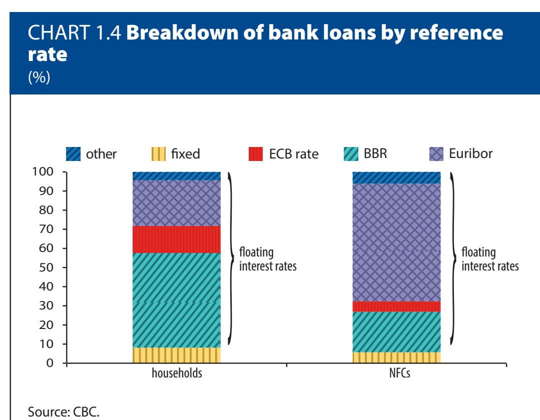


CHART 1.4 **Breakdown of bank loans by reference rate**
(%)

Source: CBC.

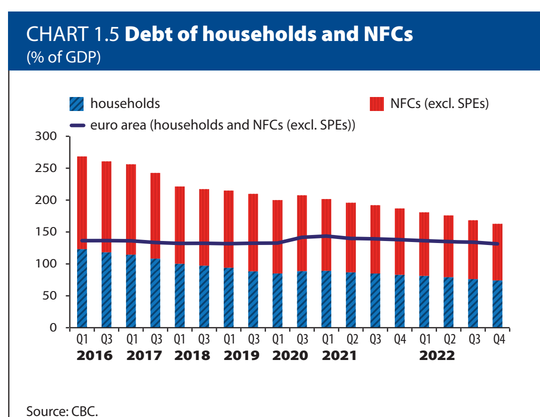


CHART 1.5 **Debt of households and NFCs**
(% of GDP)

Source: CBC.

Enter/Exit Full Screen
Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

Enter/ Exit Full Screen

Introduction

1 Medium-term risks to financial stabilityt

2 Resilience of the financial sector

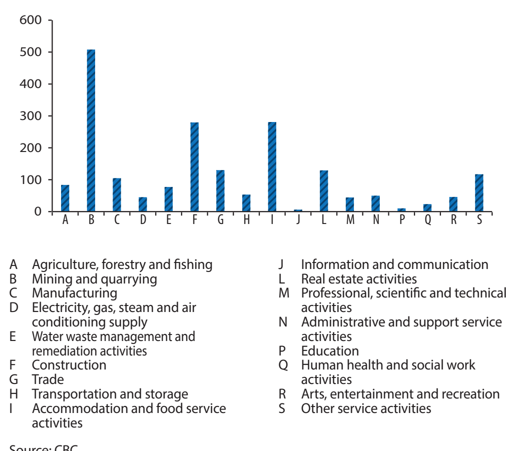
3 Macroprudential policy

GDP. Non-financial corporations operating in the 'Mining and quarrying', 'Hotels and restaurants' and 'Construction' sectors have the highest levels of debt as a percentage of the Gross Value Added (GVA) of their respective sector (**Chart 1.6**[8]). As a result, these specific sectors may face particular difficulties in meeting their obligations in the current environment. It should be noted, that the contribution of the "Mining and quarrying" sector to GDP and the exposure of the banking system to this sector is very small (0,2% and 0,4%, respectively). By contrast, the other two above-mentioned sectors make a greater contribution to GDP and the exposure of the banking system to these sectors is higher (overall, 12,9% and 32,9% respectively).

In addition, households and businesses that emerged from the pandemic with higher levels of debt, subdued profits and lower liquidity reserves may encounter difficulties in securing loans to meet certain short-term needs due to the tightening of the lending criteria by credit institutions. Specifically, according to the CBC Bank Lending Survey of January 2023, the tightening of the lending criteria is attributed to an increased perception of risk, particularly related to the overall economic situation, and a reduced risk tolerance by credit institutions – a trend that is expected to continue (**Charts 1.7** and **1.8**).

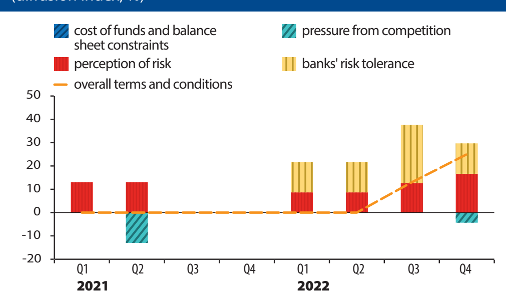
Despite the challenges in the balance sheets of non-financial corporations, corporate liquidations continued to decline (**Chart 1.9**[9], p. 19). It is noted that a new wave

CHART 1.6 **NFC debt to Gross Value Added**
(%, December 2022)



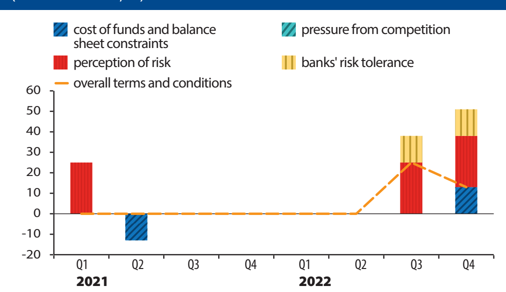
Source: CBC.

CHART 1.7 **Factors contributing to changes in overall terms and conditions for loans or credit lines to enterprises**
(diffusion index, %)



Source: SDW.

CHART 1.8 **Factors contributing to changes in overall terms and conditions for loans to households for house purchase**
(diffusion index, %)



Source: SDW.

8. In calculating the debt of non-financial corporations by sector of economic activity, the credit extended by credit institutions and CACs to non-financial corporations has been taken into account.
9. Voluntary liquidations include, among other things, insolvent companies that closed voluntarily or solvent companies that have closed because they have completed their business cycle.

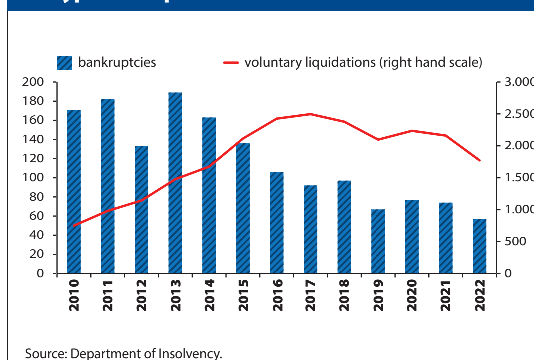
of household and corporate insolvencies has not yet materialised; however, the insolvency process is time-consuming and the impact of the challenges may be viewed in the near future.

1.1.2 Resilience of the non-financial sector

Overall, vulnerabilities in the household and business sector have continued to rise. However, there are some factors that contribute to its resilience. Specifically, in 2022, every sector of economic activity recorded positive growth in terms of their gross value added, reinforcing their resilience. The only exception is the construction sector, albeit with a small negative contribution to GDP growth, which appears to be negatively affected by the large appreciations in raw materials. The projected stabilisation of economic growth at around 3% per year in the period 2023 - 2025[10], indicates a positive outlook on the overall resilience of the non-financial business sector (**Chart 1.10**).

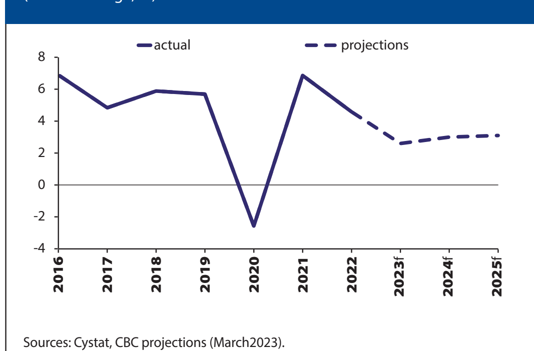
Furthermore, the private non-financial sector's precautionary savings, that started during the pandemic and continued in 2022 (**Chart 1.11**), could serve as a first line of defense, enabling the sector to repay, for a period of time, its debt by utilizing its accumulated savings. Specifically, the positive net financial position[11] (**Chart 1.12**, p. 20) of households allows them to utilize their savings to address both increased living expenses as well as the repayment of their loans.

CHART 1.9 **Bankruptcies and voluntary liquidations of Cyprus companies**



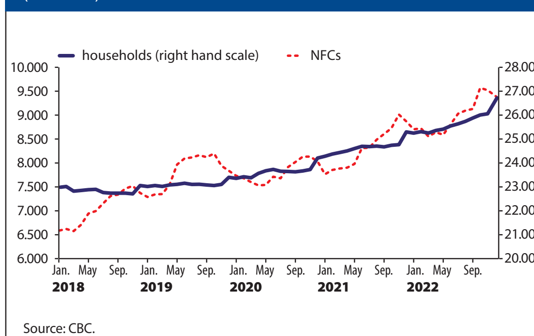
Source: Department of Insolvency.

CHART 1.10 **Gross Domestic Product (GDP)**
(annual change, %)



Sources: Cystat, CBC projections (March2023).

CHART 1.11 **Deposits of domestic households and NFCs**
(€ millions)



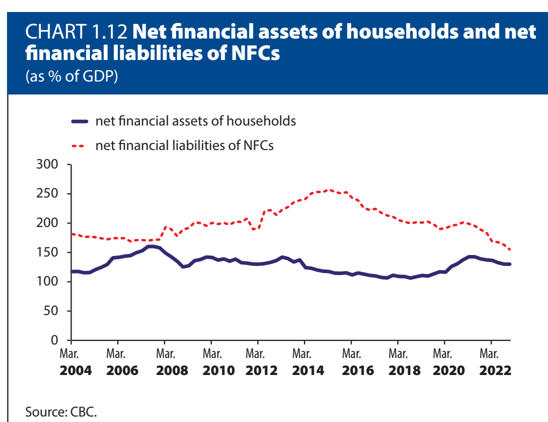
Source: CBC.

10. According to the June 2023 medium-term forecast published by the CBC.
11. That is, the assets held by households (e.g. cash, deposits with credit institutions, investments in financial instruments) outweigh their borrowing.

In contrast, non-financial corporations are required to face the new challenges with negative net financial position and an already stressed balance sheet due to the pandemic, the disruptions in the international trade supply chain, and the energy and geopolitical crisis. Nevertheless, the increase in savings and the reduction in the negative net financial position have improved the sector's resilience in comparison to prior years. Deposits could, in general, be used to cover the increased production costs and support, in times of crisis, the repayment of their annual instalments as they come due[12] (**Chart 1.13**). While deposits of the private non-financial sector appear to enhance the sector's resilience in the current environment, the concentration of deposits in households and non-financial corporations with high incomes and/or no debt may reduce the capacity of households and non-financial corporations with lower incomes or debts to address their short-term needs using deposits. As a result, the inflationary pressures, the rising interest rates and the forthcoming tightening of lending criteria are expected to affect primarily low-income households and non-financial corporations with low profitability. These entities may, on one hand, have high levels of debt, but on the other hand, represent a low share of the overall debt of the private non-financial sector.

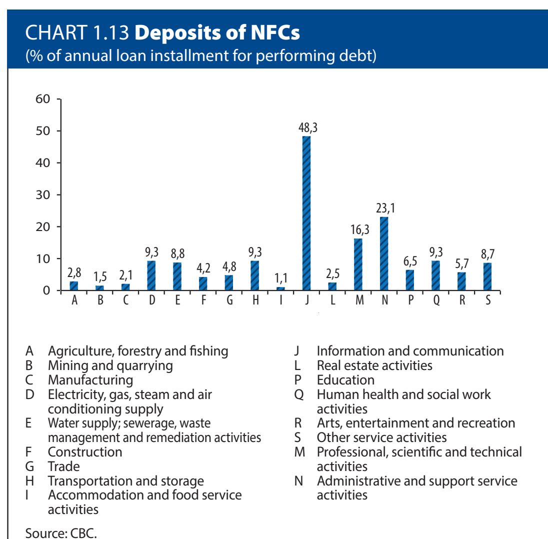
At the same time, the overall picture may conceal underlying problems in specific

CHART 1.12 **Net financial assets of households and net financial liabilities of NFCs**
(as % of GDP)



Source: CBC.

CHART 1.13 **Deposits of NFCs**
(% of annual loan installment for performing debt)



Source: CBC.

12. The annual loan installment was calculated on the basis of a fixed installment amortization plan, with a loan residual maturity of 5 years and an annual interest rate equal to the average interest rate on euro area residents' loans extended by MFIs to non-financial corporations. For the purposes of the analysis, it was assumed that non-financial corporations with non-performing loans had nil deposits as any deposits they would have, would have been used to repay their loan instalments before they become past due.

Enter/Exit Full Screen
Introduction
1 Medium-term risks to financial stability
2 Resilience of the financial sector
3 Macroprudential policy

sectors. Specifically, the energy-intensive sectors of the economy[13], such as manufacturing, as well as sectors that were expected to be affected by the Russian-Ukrainian war, have recorded positive growth rates in terms of gross value-added and seem to have adequately coped with the new challenges. However, despite their overall positive performance, the small increases in the NPL ratio of these sectors point to potential problems in specific companies (**Chart 1.14**).

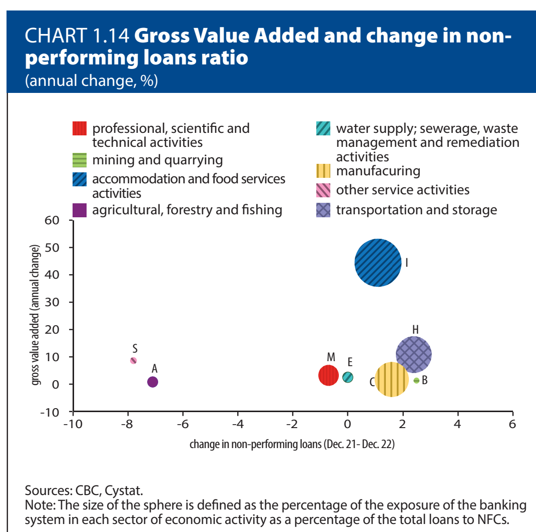


CHART 1.14 **Gross Value Added and change in non-performing loans ratio**
(annual change, %)

Sources: CBC, Cystat.
Note: The size of the sphere is defined as the percentage of the exposure of the banking system in each sector of economic activity as a percentage of the total loans to NFCs.

1.2 Potential deterioration in the asset quality of financial institutions, despite the positive profitability and solvency prospects

The current macroeconomic environment and recent developments pose challenges relating to the asset quality of financial institutions, with which institutions need to deal in a timely and effective manner. A large proportion (about 80%) of the assets of the financial sector are concentrated within the banking sector. The slow inflation corrections and increasing trends in lending rates may lead to a deterioration in the quality of the assets of the financial sector. However, the positive projections for GDP growth and the unemployment rate may help mitigate these risks.

1.2.1. Banking sector

1.2.1.1.Balance sheet structure of credit institutions

The Cyprus banking sector, despite its resilience, is exposed to credit risk (**Chart 1.15**)

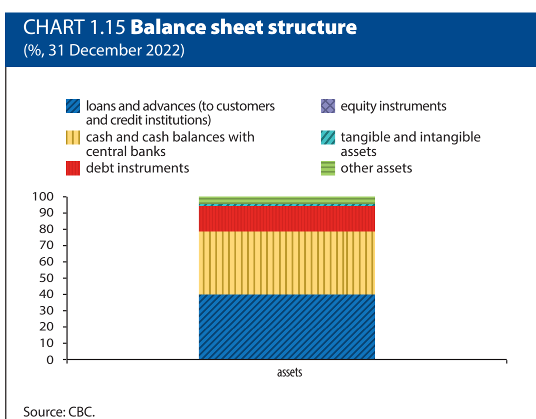


CHART 1.15 **Balance sheet structure**
(%, 31 December 2022)

Source: CBC.

13. Energy-intensive sectors of the economy are defined for analysis purposes as sectors where electricity consumption exceeds 5 % of the sector's GVA.

due to the concentration of its balance sheet in loans and advances (40% of total assets) and debt securities (16% of total assets), compared to 62% and 12% in the EU[14], respectively.

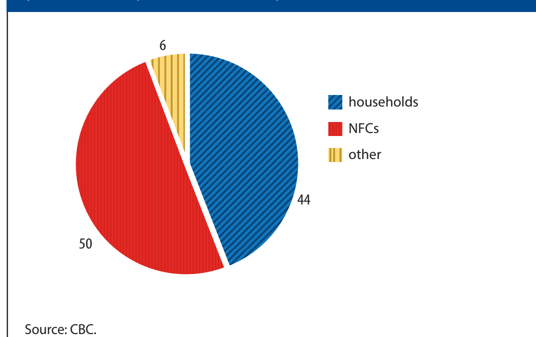
1.2.1.2.Credit institutions' loan portfolio

The credit institutions' loan portfolio consists mainly of long-term lending to the private sector. As at year-end 2022, lending to households and non-financial corporations accounted for 44% and 50% of the loan portfolio of credit institutions, respectively (**Chart 1.16**).

The largest share of this portfolio (83% of the total loan portfolio) has been granted at variable interest rates, with 50% of the loan portfolio being linked to the Euribor and ECB interest rates. This share of the portfolio is directly affected by changes in the cost of lending, also due to recent increases in the ECB interest rates in the second half of 2022 and the first quarter of 2023. A share of 33% of the total loan portfolio is linked to BBRs and does not appear to have been particularly affected by the increases in the ECB interest rates (**Chart 1.4**, p. 17).

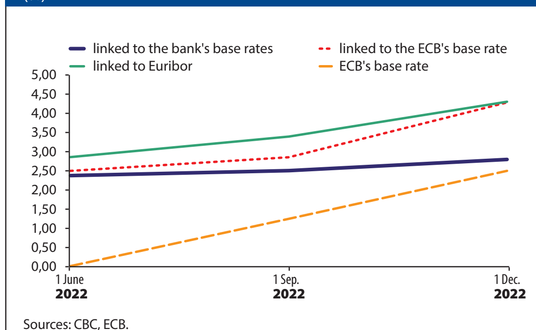
In particular, the part of the loan portfolio linked to the Euribor and ECB interest rates appears to show increase in lending rates up to +1,8%[15] (approximately 71% of the 2,5% increase in the ECB's interest rate). By contrast, lending rates in the portfolio linked to the BBRs appear to have increased by +0,4%[16] (around 17% of the 2,5% increase in the ECB's interest rate) (**Chart 1.17**).

CHART 1.16 **Distribution of credit institutions' loan portfolio**
(% of total loans, 31 December 2022)



Source: CBC.

CHART 1.17 **Increases in lending rates by floating base rate category, compare to the ECB base rate**
(%)



Sources: CBC, ECB.

14. Risk Dashboard | European Banking Authority (europa.eu)
15. Weighted average for the total loan portfolio of domestic credit institutions, as at 31 December 2022.
16. Weighted average for the total loan portfolio of domestic credit institutions, as at 31 December 2022.

Enter/ Exit Full Screen
Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

The higher borrowing costs, particularly for loans linked to the Euribor and ECB interest rates, combined with the inflationary pressures exerted on domestic households and businesses, may limit the borrowers' ability to service their debt, especially those with increased vulnerabilities. Therefore, there are concerns about the future servicing of the loan portfolio of credit institutions. A potential increase in NPLs will have a direct impact on the profitability of credit institutions due to increased provisions, and may affect their asset quality, capital adequacy, as well as their ability to extend new credit to the economy. However, it is worth noting that the quality of the loan portfolio of credit institutions did not deteriorate in 2022, but, on the contrary, continued to improve. The improvement in asset quality for the banking sector is reflected both in the decline in the NPL ratio[17] and the percentage of loans categorised as Stage 2 in accordance with IFRS 9.

In particular, as at 31 December 2022, the overall NPL ratio stood at 9,5% (**Chart 1.18**), showing improvement compared to the end of 2021 (11,0%). The improvement was achieved in spite of the increase in NPL ratios of some economic activity sectors, as credit institutions continued their balance sheet deleveraging process, through the sale of NPL portfolios and the write-off of debt. Despite the significant improvement in the level of NPLs, it is worth noting that the domestic banking sector still maintains the second highest NPL ratio among EU countries and is significantly above the European average of 1,8%.

It should be noted that the improvement in the NPL ratio was mainly driven by large

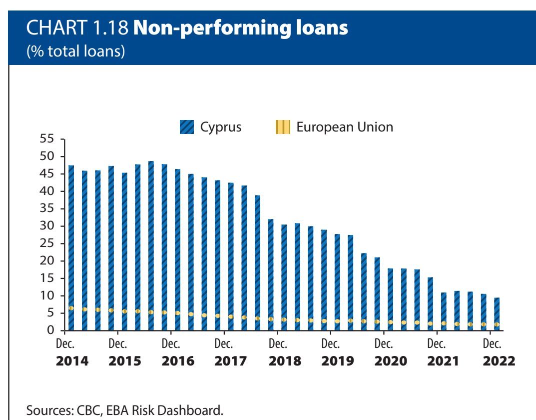


CHART 1.18 **Non-performing loans**
(% total loans)

Sources: CBC, EBA Risk Dashboard.

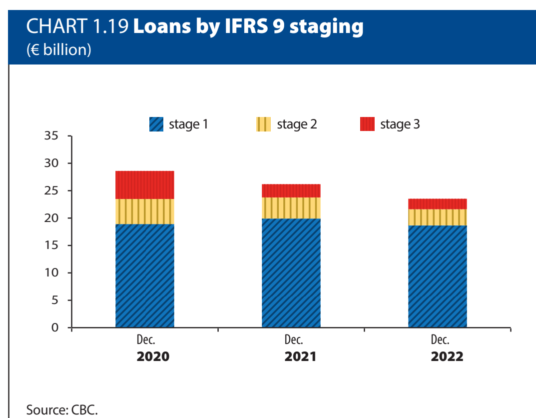
17. Excluding loans to central banks and credit institutions.

credit institutions. Smaller credit institutions are still significantly lagging behind in the process of reducing their NPLs, with the relevant NPL ratio standing at around 25% as at 31 December 2022. Therefore, these credit institutions should accelerate the deleveraging process of their balance sheets.

It should be noted, of course, that the existence of a stable foreclosures framework is vital for the management of both the legacy volume of NPLs and possible new NPLs. In particular, the foreclosures framework should be functional so as to act as an effective tool for dealing with strategic defaulters, but also as a leverage, so that creditors and borrowers can reach sustainable restructuring solutions.

The aforementioned improvement in asset quality for the banking sector is also reflected in the decreased volume of loans categorised as Stage 2 in accordance with IFRS 9. In particular, total lending with increased risk of default (Stage 2), both in absolute terms and in percentage terms of the total loan portfolio, decreased as at 31 December 2022 (13%[18] of the total loan portfolio) compared to 31 December 2021 (15%[19] of the total loan portfolio) (**Chart 1.19**). This trend, which has occurred despite challenges in the macroeconomic environment, also reflects the prudent approach followed by domestic credit institutions during the pandemic. In particular, during the pandemic, credit institutions had proactively classified as Stage 2 exposures to companies operating in economic sectors vulnerable to the impact of the pandemic (such as the tourism and transport sector), which post-pandemic have been reclassified as Stage 1.

CHART 1.19 **Loans by IFRS 9 staging**
(€ billion)



Source: CBC.

18. Excluding loans categorised as POCIs ("purchased or originated credit-impaired financial assets").
19. Excluding loans categorised as POCIs ("purchased or originated credit-impaired financial assets").

Enter/ Exit Full Screen
Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

Although the NPL ratio and the percentage of loans classified as Stage 2 are the most widely used metrics for assessing the loan portfolio quality, these ratios tend to be lagging indicators. Thus, the use of leading indicators to assess the quality of the loan portfolio, such as the growth rate in loan renegotiations[20], can help identify credit risk in a timely manner.

During the second half of 2022, following the first increase in the ECB interest rates, the pace of renegotiations showed an average negative change of 41% and 31% in household and corporate loans, respectively. In the first months of 2023, however, the growth rate in renegotiations shows increases in both residential and corporate loans. A continued increase in renegotiations may indicate possible pressures on borrowers' balance sheets and, consequently, a potential deterioration in the quality of the loan portfolio in the short or medium-term, as it is usually the case with borrowers experiencing future difficulties in repaying their loans.

The recently observed improvement in the loan portfolio quality may be reversed in the near future, as inflationary pressures and increased lending rates exert pressure on borrowers' balance sheets (see Section 1.1) and may therefore adversely affect the asset quality of the banking sector. Hence, credit institutions should closely monitor credit risk in their loan portfolios on an ongoing basis and make proper and timely use of the restructuring and renegotiation tools, in order to find sustainable solutions, while continuing the prudent granting of new loans so as to ensure the borrowers' ability to repay.

20. It is calculated as the 12-month rolling sum in the 12-month rolling sum.

1.2.1.3.Bond portfolio of credit institutions

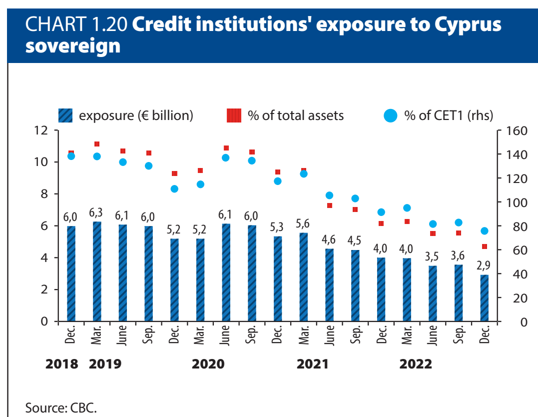
The assets of credit institutions also include debt securities (16% of total assets), consisting of corporate (9%) and government bonds (7%). The corporate bonds held by the banking sector mainly relate to bonds issued by other domestic and international credit institutions (59%[21]). Government bonds mostly relate to securities issued by the Cypriot government (59%[22]) and EU/EEA securities (20%[23]).

It should be noted that the exposure of domestic credit institutions to the Cyprus government decreased significantly as at 31 December 2022 to 4,7% of their total assets, compared to 6,0% as at 31 December 2021 (**Chart 1.20**). This decrease significantly contributed to limiting the sovereign--bank nexus, as the simultaneous realisation of vulnerabilities in the private non-financial sector and the Cyprus government could test the resilience of Cyprus credit institutions.

The banking sector's bond portfolio mainly consists (68%[24]) of investment grade bonds (**Chart 1.21**). These bonds are characterised by lower credit risk and contribute to the high overall quality of the bond portfolio held by credit institutions.

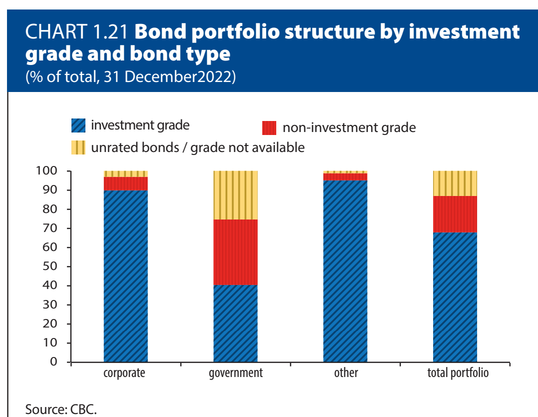
It should be noted that only a small part of the debt instruments held by the banking sector (less than 2% of its total assets) appears to be subject to valuation methods that would leave it exposed to interest rate changes. However, losses for this share of the portfolio may occur if credit institutions sell the specific bond portfolio at prices lower than their valuations. Still, as stated in **Box** A

CHART 1.20 **Credit institutions' exposure to Cyprus sovereign**



Source: CBC.

CHART 1.21 **Bond portfolio structure by investment grade and bond type**
(% of total, 31 December2022)



Source: CBC.

21. All corporate bonds.
22. All government bonds.
23. All government bonds, with the exception of Cyprus.
24. The entire bond portfolio.

Enter/
Exit
Full
Screen
Introduction
1
Medium-term risks to financial stabilityt
2
Resilience of the financial sector
3
Macroprudential policy

Enter/Exit Full Screen

(p. 51), domestic credit institutions have access to the Eurosystem's monetary policy tools through which they can raise additional liquidity, thus avoiding the need to sell bonds at loss-making prices.

1.2.2. Credit Acquiring Companies (CACs)

CACs have evolved into a significant part of the Cyprus financial sector by purchasing loans from credit institutions. These companies play a fundamental role in the ongoing effort of credit institutions to deleverage their balance sheets and improve the quality of their loan portfolios.

Specifically, as at 31 December 2022, loans with book value of €8,1 billion were held on the CACs' balance sheets, with 77,7% relating to NPLs. Although the performing part of the CACs' loan portfolio is expected to be adversely affected by both inflation and the increase in lending rates, the high ratio of NPLs on their balance sheets suggests that the risk of a deterioration in the asset quality of CACs, and thus the impact to financial stability, is low.

Nevertheless, the high share of NPLs held by CACs highlights the important role of both the restructuring tool and the existence of a stable foreclosures framework for the management of NPLs.

1.2.3 Insurance sector

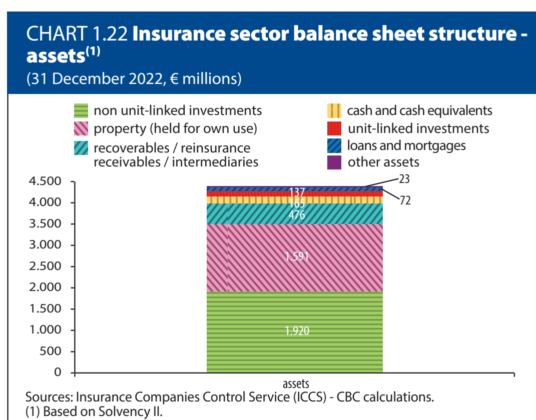
1.2.3.1.Insurance sector balance sheet structure

The assets of the 32 Cyprus insurance compa-

Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

nies declined slightly, reaching €4,39 billion as at 31 December 2022, compared with €4,58 billion as at 31 December 2021. It is noted that €1,9 billion, or 43% of these total assets, related to insurance companies investment portfolio excluding unit-linked funds and €1,6 billion, or 37% of total assets, related to investments in unit-linked funds[25], where policyholders assume the investment risk (**Chart 1.22**), compared with 65% and 21% in the EU, respectively.

CHART 1.22 **Insurance sector balance sheet structure - assets**[(1)]
(31 December 2022, € millions)



Sources: Insurance Companies Control Service (ICCS) - CBC calculations.
(1) Based on Solvency II.

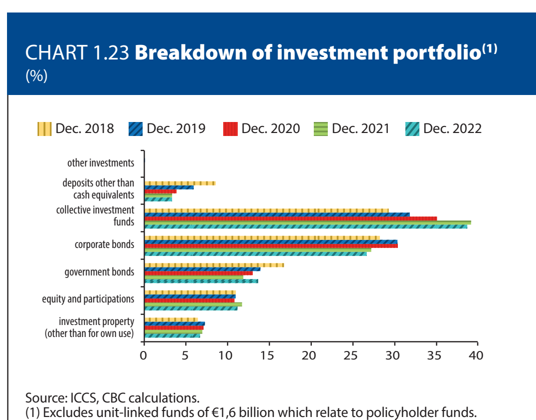
1.2.3.2. Insurance companies investment portfolio

Bonds continue to constitute the largest category of the investment portfolio (40% of total investments, of which 26% are corporate bonds and 14% are government bonds), along with investments in collective investment undertakings (39% of investments). Investments in real estate (7%), shares and participations (11%) and deposits (3%) remain relatively unchanged (**Chart 1.23**).

The significant investment by insurance companies in bonds reflects the important role insurance companies play in providing financing to both governments and corporates. In recent years, there has been a decline in investments in bonds and an increasing preference for investments in collective investment undertakings, with insurance companies pursuing a policy of even greater diversification of their investments, thus reducing risks on their balance sheets.

The risks associated with the investment

CHART 1.23 **Breakdown of investment portfolio**[(1)]
(%)



Source: ICCS, CBC calculations.
(1) Excludes unit-linked funds of €1,6 billion which relate to policyholder funds.

25. The investment risk inherent in unit-linked products is borne solely by the policyholder and not by the company, while the returns on investments depend on the type of investment mix chosen by the policyholder.

Enter/Exit Full Screen
Introduction
1 Medium-term risks to financial stability
2 Resilience of the financial sector
3 Macroprudential policy

portfolio of insurance companies mainly stem from market instability. In 2022 there was increased volatility in bond markets as well as in equity markets due to the war in Ukraine, but also following the ECB's decisions to raise interest rates. The increase in interest rate has led to a decline in the price of bonds in insurance companies existing portfolios, affecting to some extent the profitability of the sector. By contrast, bond yields rose in 2022, resulting in new bond holdings enjoying higher returns, with a positive impact on profitability.

Exposure to credit risk[26] is limited, due to the very small size of the domestic insurance sectors' loan portfolio compared to the banking sector and the CACs sector. Credit risk may also arise from a loss in the investment portfolio due to a downgrade in the credit quality rating or the default of a bond issuer.

Insurance companies predominantly hold corporate bonds from EU/EEA countries (45%). As regards government bond holdings, these are mainly bonds issued by the Cyprus government (38%) and by EU/EEA governments (36%) (**Chart 1.24**).

In view of the above-mentioned investments, excluding unit-linked investments, insurance companies are exposed to market risk arising from volatility in financial markets. Market risk arises from losses that may result from adverse price developments or volatility in investments of insurance companies in shares, bonds or other assets. Any expected potential decrease in the values of the above investments may lead to investment losses and devaluation of assets.

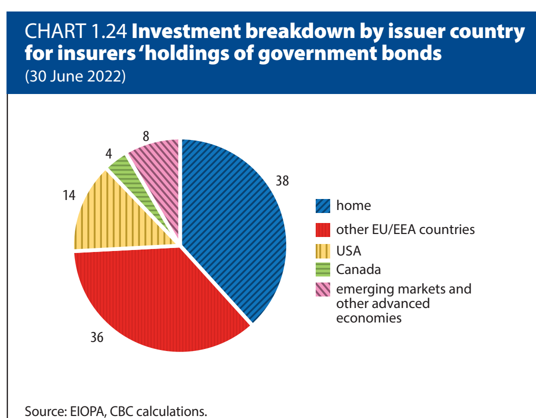


CHART 1.24 **Investment breakdown by issuer country for insurers 'holdings of government bonds**
(30 June 2022)

Source: EIOPA, CBC calculations.

26. Defined as the risk of failure of a counterparty to meet its contractual obligations.

Enter/ Exit
Full Screen
Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

Enter/ Exit Full Screen

However, the wide diversification of most insurance companies' investment portfolios and their long-term investment horizon (mainly life insurance companies), limits market risk to some extent.

1.3 Exposure of financial institutions to the real estate sector, rendering them vulnerable to any negative developments in the real estate market, despite market resilience

The real estate sector is characterised by boom-bust cycles. Therefore, a potential decline in real estate prices, combined with the fact that investments in real estate may not be liquidated immediately, entails risks to the profitability and capital adequacy of the financial sector, as well as its liquidity.

1.3.1. Exposure of credit institutions and CACs

The significant overall exposure of financial institutions to the real estate sector makes them vulnerable to any negative developments in the real estate market. In general, the financial sector may be affected by the performance of the real estate sector, both directly and indirectly, through three channels:
(i) through the real estate property held by financial institutions on their balance sheets[27] (direct channel);
(ii) through loans of credit institutions and CACs to non-financial corporations operating in the broad real estate sector (indirect channel), and

27. Real estate property held by financial institutions represents a significant share of their assets. These properties have come into the possession of credit institutions and CACs mainly through settlements with borrowers, while in the case of insurance companies and investment funds, through real estate investments.

Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

(iii) through loans of credit institutions and CACs secured by real estate (indirect channel).

1.3.1.1. Direct exposure of credit institutions and CACs

As at 31 December 2022, the direct exposure of credit institutions and CACs to the real estate sector amounted to €1.411 million and €989 million, respectively. The above exposure represents 2,2% and 4,4 % of the total assets of credit institutions and CACs[28], respectively (**Chart 1.25**), reflecting an increase over the previous years. Therefore, possible reductions in real estate prices directly affect the value of the properties held by credit institutions and CACs, leading to impairment charges that affect their profitability.

It is noted that the profitability of credit institutions is affected by potential turbulence in both the residential and commercial real estate markets, as residential and commercial properties[29] represent 40% and 36% respectively of the properties they own. As regards the profitability of CACs, this is more affected by potential turbulence in the residential market than in the commercial real estate market as a large share of the properties they own consists of residential buildings and residential land (45%, 31 December 2022) (**Chart 1.26**).

It is noted that the fact that the book value of real estate property owned by credit

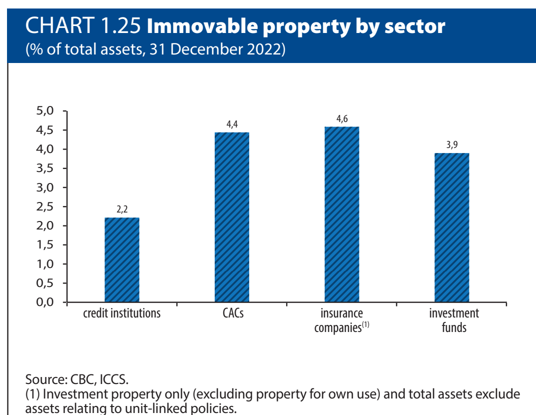


CHART 1.25 **Immovable property by sector**
(% of total assets, 31 December 2022)

Source: CBC, ICCS.
(1) Investment property only (excluding property for own use) and total assets exclude assets relating to unit-linked policies.

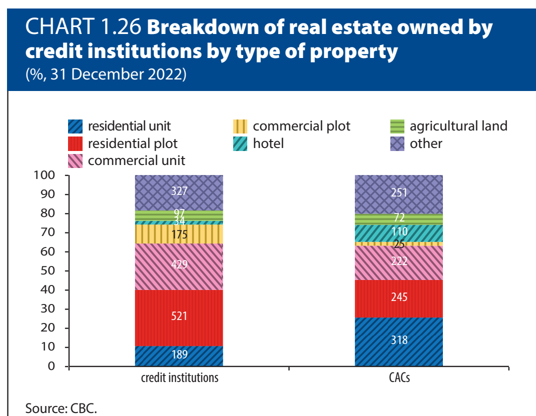


CHART 1.26 **Breakdown of real estate owned by credit institutions by type of property**
(%, 31 December 2022)

Source: CBC.

28. The figures reported for the loan portfolio of CACs reflect the contractual obligation of the borrowers and not the book value, unlike the banking sector, where the book value is presented.
29. Residential properties include residential buildings and residential land. Commercial properties include commercial units, commercial land and hotels.

Enter/ Exit
Full Screen
Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

institutions and CACs is significantly lower than the market value, protects them to some extent, from reductions in real estate prices. Specifically, as at 31 December 2022, the book value of the properties held by credit institutions and CACs accounted for 88,3% and 79,5 % of the market value, indicating that, in general, credit institutions and CACs can absorb 10% and 20% reductions in real estate prices, respectively, without having a negative impact on their profitability. In view of the above, and taking into account the relatively small amount of the above investments, both for the banking sector and the CAC sector, any reduction in real estate prices is not expected to have any substantial impact on the banking and CACs sectors from their direct exposure to the real estate sector.

1.3.1.2.Indirect exposure of credit institutions and CACs

Although the direct exposure of credit institutions and CACs to the real estate sector is lower than that of the other sectors of the financial system, they are more vulnerable to negative developments in the real estate market because of the relatively higher indirect exposure to this sector. Any possible deterioration in the borrowers' debt repayment capacity, as well as a possible decrease in the recoverable value of a loan, would result in credit institutions and CACs recognising additional impairments that would negatively affect their profitability and capital.

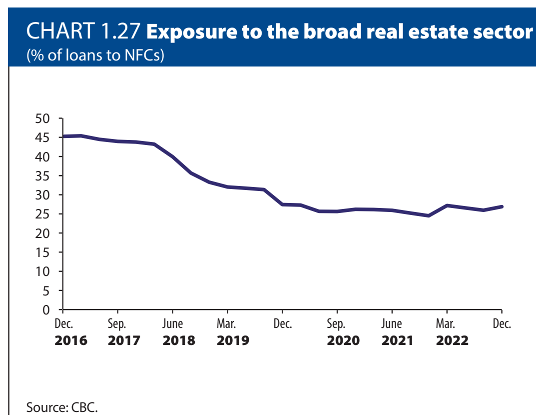
As regards the first indirect channel, the substantial concentration of credit institutions' loan portfolio to non-financial corporations

operating in the broader real estate sector makes them vulnerable to the ability of these corporations to repay, and thus to the yield of the real estate sector. Although the resilience of the real estate market is reflected in the solvency of non-financial corporations operating in the sector, the potential decreases in the profit margin of these companies from the observed increases in construction costs and the potential decline in demand from domestic residents due to increased borrowing costs, as well as from foreign buyers, exert pressure on their ability to repay their debt. The negative annual growth rate of real gross value added of the "Construction" sector in 2022 (-2,2%), as well as the low annual growth rate of real gross value added of the "Real Estate Activities" sector recorded in 2022 (0,7%) compared to the historical average of 2,6%, indicate potential challenges in the debt repayment capacity of non-financial corporations operating in the broader real estate sector.

In particular, in 2022, the concentration of the loan portfolio of the banking sector in the broader real estate sector increased, with these loans accounting for 26,9% of the total loans of credit institutions to non-financial corporations (**Chart 1.27**) as at 31 December 2022, compared with 24,5% as at 31 December 2021. In absolute terms, the exposure of the credit institutions recorded a decrease from €3,6 billion on 31 December 2021 to €3,2 billion on 31 December 2022. The exposure of CACs to non-financial corporations operating in the broader real estate sector amounted to €3,6[30] billion and accounted for 20,3% of the total loan portfolio of CACs.

30. The figures reported for the loan portfolio of CACs reflect the contractual obligation of the borrowers and not the book value, unlike the banking sector, where the book value is presented.

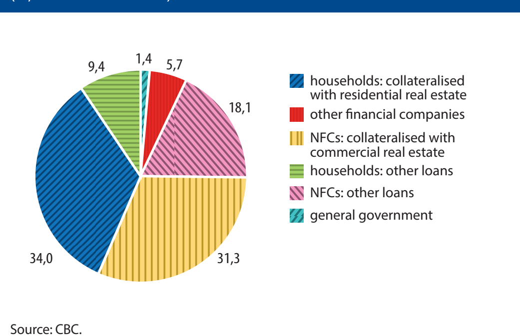
CHART 1.27 **Exposure to the broad real estate sector**
(% of loans to NFCs)



Source: CBC.

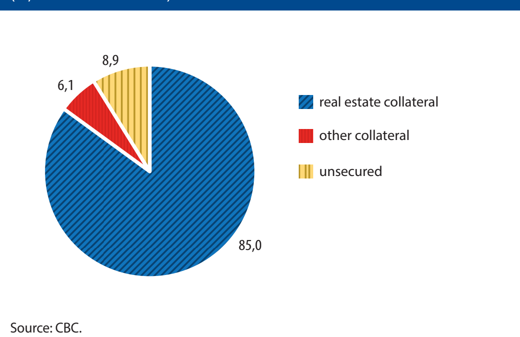
In relation to the second indirect channel, in the event of default of a borrower's debts, the amount that a credit institution or a CAC will recover depends on the value of the loan collateral, i.e. the value of the mortgaged real estate property. On 31 December 2022, credit institutions' exposure to loans secured by real estate remained substantial, representing 65,4 % of their total portfolio (**Chart 1.28**). In the case of CACs, loans secured by immovable property, on the same reference date, accounted for 85,0% of their total loan portfolio (**Chart 1.29**).

CHART 1.28 **Distribution of the loan portfolio of credit institutions**
(%, 31 December 2022)



Source: CBC.

CHART 1.29 **Distribution of the loan portfolio of credit acquiring companies by type of collateral**
(%, 31 December 2022)



Source: CBC.

1.3.2 Exposure of the insurance and investment funds sector to the real estate sector

The exposure of the insurance and investment funds sector to the real estate sector is direct, and stems from their own investments in real estate.

Insurance companies' exposure to the real estate sector has remained relatively unchanged in recent years. As at 31 December 2022, insurance companies invested an amount of €265 million in property[31], representing a share of 9,5% of their total assets[32]. These investments are split into real estate investment for the insurance company's own use (4,9%) and investments excluding own use (4,6%) (**Chart 1.23**, p. 28). It should be noted that these investments in real estate are almost entirely in the domestic market. A potential fall in property prices may have some negative impact on the financial results of

31. Excluding investment in real estate through participations in mutual fund units of EUR 30 million, and excluding investment in real estate in relation to 'unit-linked' contracts.
32. The assets exclude 'unit-linked' assets (€1,6 billion in total), the investment risk of which is borne by the policyholders and not by the insurance company.

Enter/
Exit
Full
Screen
Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

insurance companies. Furthermore, a possible decline in property prices, combined with the fact that such investments are not immediately liquid, entails risks for certain insurance companies, which are key investors in the real estate sector, should they be forced to liquidate their investments at lower prices, due to unforeseen and significant claims.

As regards investment funds, their exposure to the real estate sector through their investments amounted to €305 million as at 31 December 2022, representing 3,9% of their total assets (**Chart 1.23**, p. 28). The largest share (77%) of the above investments is in the domestic market as it is the case for the insurance sector.

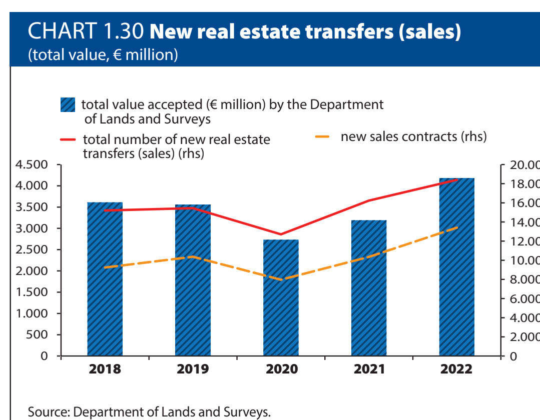
Despite the direct links with the financial system and the economy, the total amount of the above investments of the insurance sector as well as of the investment fund sector, is relatively small both in absolute numbers and in comparison to all their investments.

1.3.3 Resilience of the real estate market

Despite the exposure of financial institutions to the real estate sector, the possibility of such exposures having a negative impact on financial stability, in the medium term, has so far been limited. The Cyprus real estate market has proved to be particularly resilient, as reflected in the upward trend observed in 2022 in real estate transactions, both in terms of value and in terms of the number of sale contracts (**Chart 1.30**).

The increased demand for real estate appears to be fuelled to a large extent by demographic changes, in the context of the

CHART 1.30 **New real estate transfers (sales)**
(total value, € million)



Source: Department of Lands and Surveys.

growing interest by foreign companies for establishment in Cyprus. This trend has further accelerated after the war in Ukraine. Specifically, in 2022 there was a 34,6% increase in sales contracts to foreign buyers. Also, domestic demand contributed positively, mainly due to the government's interest rate subsidisation scheme, as reflected in the high growth rates of new housing loans by Cyprus residents (**Table 1.1**).

In spite of the above trends, the prolonged inflation, the high interest rate environment, as well as the stricter lending standards, are expected to affect adversely real estate demand from domestic investors in the near future. On the other hand, demand from foreign investors and the fact that real estate is seen by domestic investors as a form of a safe alternative investment (particularly as deposit rates remain low) are expected to stimulate the activity in the sector and the resilience of the real estate market.

As regards real estate prices, increased demand in 2022, combined with increased construction costs, led to an acceleration in the growth of residential property prices with the Residential Property Price Index (RPPI) recording an annual increase of 6,6% in the fourth quarter of 2022 (**Chart 1.31**). Despite the increase recorded by the RPPI, property prices in Cyprus appear to be lower than their fundamental value. In particular, based on a methodology developed by the ECB[33], as at 30 September 2022, residential property prices appear to have averaged 11,0% below their fundamental value (**Chart 1.32**). The range of

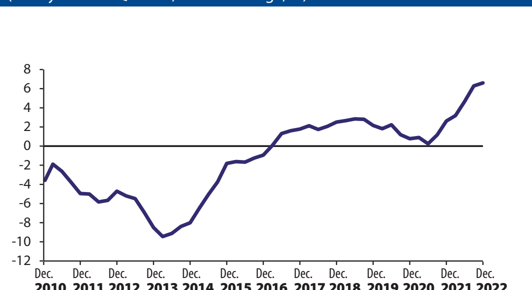
33. The estimates are based on four different valuation methods: (i) price-to-rent ratio, (ii) price-to-income ratio, (iii) asset pricing approach and (iv) an estimated inverted Bayes demand model. Further details can be found in Box 3 of the ECB's Financial Stability Report, June 2011 and in Box 3 of the ECB's Financial Stability Report, November 2015.

Table 1.1 **Breakdown of pure new loans to households (euro area residents) by loan category**
(in € millions)

	2015	2016	2017	2018	2019	2020	2021	2022
Households	535	867	1.087	1.214	1.220	1.074	1.395	1.416
Loans for house purchase	271	546	721	868	876	783	1.121	1.178
Loans for consumption	83	119	171	162	161	149	149	155
Other loans	181	202	196	184	182	141	124	83
Non financial corporations	1.152	1.491	2.141	1.929	1.984	1.330	1.544	1.817
Other loans up to €1 million	287	378	473	504	438	365	539	531
Other loans over €1 million	865	1.113	1.668	1.424	1.546	965	1.005	1.286

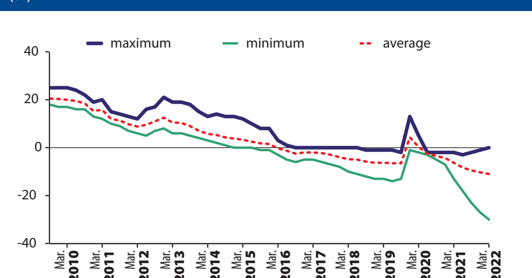
Source: CBC.
Note: The series starts from December 2014.

CHART 1.31 **Residential real estate index**
(base year 2010Q1=100, annual change, %)



Source: CBC.

CHART 1.32 **Over/undervaluation of residential property prices**
(%)



Source: ECB..

Enter/ Exit Full Screen

Introduction

1 Medium-term risks to financial stabilityt

2 Resilience of the financial sector

3 Macroprudential policy

prices underlies the uncertainty surrounding the calculations, with one model indicating that residential property prices are in line with their fundamental value, while another model indicates that these prices are 30% below their fundamental value. However, the fact that real estate prices in Cyprus, on average, are estimated to be below their fundamental value, indicates that any corrections to property prices are not expected to be significantly large.

It should also be noted that according to the baseline macroeconomic scenario of the 2023 EU-wide stress test for the banking sector, conducted by the ECB, a stabilisation in the domestic residential and commercial real estate prices is expected, while even in the adverse scenario, real estate price declines are projected to be among the smallest in the euro area, with the banking sector appearing to be able to absorb the resulting losses.

1.4 Emerging external risks: the risk of climate change and cyber risk

The financial sector also faces challenges stemming from emerging risks, such as climate change and cyber-attacks. The economic cost of climate change is significantly higher in the absence of timely and effective adaptation of policies, while cybersecurity risk has increased as reflected in the rise of cyber incidents observed in the euro area.

1.4.1 Climate change risk

The financial sector is affected by climate change through two main channels. On the one hand, physical risks arising from extreme

Enter/ Exit Full Screen

Introduction

1 Medium-term risks to financial stability

2 Resilience of the financial sector

3 Macroprudential policy

weather conditions, such as fires and floods, cause damage to natural resources and affect various sectors of the economy (for example agriculture, fisheries, forestry, health care, tourism, etc.). On the other hand, there are also transition risks, which refer to economic losses that may result from the process of adjustment towards a low-carbon emission economy and a more environmentally sustainable economy. Financial institutions should therefore take appropriate action to integrate the above risks into their general risk management framework.

The need to mitigate climate change risks is becoming increasingly urgent. According to a recent joint study by the ECB and the ESRB[34], entitled "The macroprudential challenge of climate change", climate risks can spread rapidly causing losses to financial corporations and banks. However, a smooth transition towards a net-zero-emission economy by 2050 could mitigate these risks and the impact they can have on companies and banks.

Regarding physical risk, a related ECB study[35] has shown that Cypriot businesses are, to a low degree, exposed to sea level rise, flooding, water and thermal stress, and fire risk. The same study notes that the exposure of the domestic banking sector to firms located in areas of high or increasing natural hazards is small and is mainly affected by water stress and other individual hazards.

Regarding transition risk, a study by the ECB[36] concluded that a smooth and gradual transition to a climate neutral Europe by 2050 will ensure that transitional costs are

34. https://www.esrb.europa.eu/pub/pdf/reports/esrb.ecb.climate_report202207~622b791878.en.pdf
35. https://www.ecb.europa.eu/pub/pdf/other/ecb.climaterisk - financialstability202107~87822fae81.en.pdf
36. ECB 2022 Climate risk stress test https://www.bankingsu-report.20220708~2e3cc0999f.en.pdf.

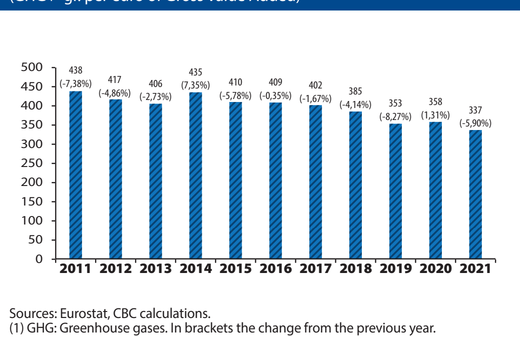
Enter/Exit Full Screen
Introduction
1 Medium-term risks to financial stability
2 Resilience of the financial sector
3 Macroprudential policy

minimised. At the same time, the gradual transition leads to limiting the overheating of the planet to 1.5°C, contributing to the mitigation of physical risk. However, if no action is taken to address climate change any savings due to the absence of transition costs will be outweighed by the cost of the adverse effects of physical risk to the economy.

With regard to transition risk in Cyprus, specifically greenhouse gas emissions[37], the intensity of gas emissions per euro of gross value added has seen a small but steady decline over the last decade (**Chart 1.33**). Specifically, the greenhouse gas emission intensity for the year 2021, the latest year for which official data is available, amounts to 337 grams of greenhouse gas per euro of gross value added. In addition, Cyprus remains below the EU average in terms of greenhouse gas emissions per euro of GDP - **Chart 1.34**). In particular[38], for the year 2021, Cyprus ranks twelfth, with greenhouse gas emissions per euro of GDP reaching 297 tonnes, while the EU-27 average is 311 tonnes. Therefore, the transition risk due to the emission of greenhouse gases; in Cyprus is estimated to be lower than that of the EU average.

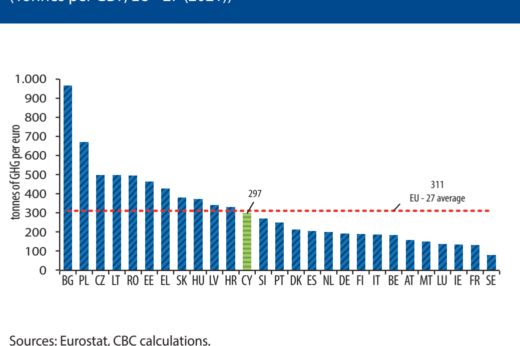
According to Eurostat data[39], the most polluting sector in Cyprus, based on greenhouse gas intensity, is the electricity, gas, steam and air conditioning supply sector, which emits around 60,0% of the greenhouse gas pollutants. The water

CHART 1.33 **Greenhouse gas emission intensity - Cyprus**
(GHG+ gr. per euro of Gross Value Added)[(1)]



Sources: Eurostat, CBC calculations.
(1) GHG: Greenhouse gases. In brackets the change from the previous year.

CHART 1.34 **GHG Emissions**
(Tonnes per GDP, EU - 27 (2021))

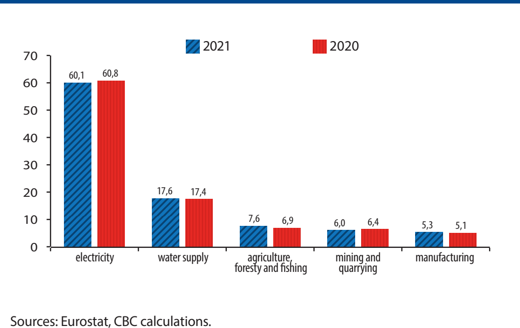


Sources: Eurostat, CBC calculations.

37. The greenhouse gases taken into account for the calculation of the intensity of greenhouse gas emissions are carbon dioxide (CO_2), nitrogen oxide (N_2O) and methane (CH_4). The emissions of those gases are converted to equivalent CO_2 emissions.
38. The most recent data available are for 2021.
39. This analysis is based only on direct greenhouse gas emissions (Scope 1) and does not include indirect emissions (Scope 2) and indirect emissions from the supply/production chain of goods and services (Scope 3).

supply, sewerage, waste management and remediation activities sector emits 17,6% of greenhouse gasses pollutants, while agriculture, forestry, and fishing emits 7,6% of the pollutants. Finally, mining and quarrying, and manufacturing emit 6,0% and 5,3%, respectively. These sectors produce 96,6% of the total greenhouse gas emissions per euro of gross value added (**Chart 1.35**).

CHART 1.35 **Largest sectors based on greenhouse gasses emissions per euro of Gross Value Added**
((% of total emissions)



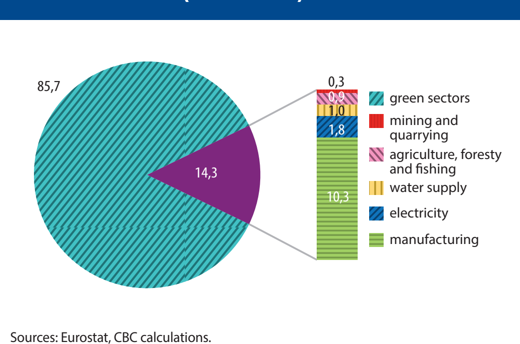
Sources: Eurostat, CBC calculations.

1.4.1.1.Banking sector

Regarding the distribution of existing loans to non-financial corporations[40] granted by Cyprus credit institutions, 14,3% of the total was allocated to the five most polluting sectors while the remaining 85,7% was allocated to green sectors. According to **Chart 1.36**, 10,3% of existing loans to non-financial corporations active in brown sectors were allocated to the manufacturing sector, while 1,8% of the loans were granted to the electricity, gas, steam and air-conditioning sector. The remaining 2,2% of existing loans were allocated to the rest of the brown sectors. The manufacturing sector, according to Eurostat data, contributes only 6,27% of the total gross value added to the economy. Considering the relatively small contribution of the sector to the domestic economy[41] and the relatively small exposure of the banking sector to this sector, the transition risk from the decarbonisation of loans remains limited.

In 2022, the ECB conducted stress tests across Europe to assess the impact of climate

CHART 1.36 **Share of the five largest brown sectors out of total loans (2022 loans)**



Sources: Eurostat, CBC calculations.

40. The analysis does not include households and the government sector due to unavailability of data.
41. 6,27 %.

Enter/ Exit
Full Screen
Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

change risks on the banking sector[42], encompassing inter alia, the domestic credit institutions that are under the direct supervision of the ECB[43]. The aim of the exercise was not to assess capital adequacy, but to draw conclusions for both credit institutions and supervisors. This exercise collected qualitative and quantitative data to assess the sector's degree of preparedness for climate change risks and to identify best practices to address such risks. The results of the exercise show that euro area credit institutions have not yet sufficiently integrated climate risks in the framework of stress tests and their internal models, despite some progress made since 2020[44].

In Cyprus, some credit institutions have already begun to take some measures in order to address climate change risks, but these are at an early stage and comparatively behind their European peers. In this regard, credit institutions in Cyprus need to act more swiftly and more decisively to meet supervisory expectations of integrating relevant climate-related risks into their general risk management frameworks.

1.4.1.2.Insurance sector

In the insurance sector, increased claims may arise due to the higher frequency and severity of extreme natural disasters associated with climate change. The consequences of climate change in the Cyprus region, that are expected to affect insurance companies, include rising

42. The stress test divided into three modules and in total involved 104 significant banks, which provided information on: (i) their own climate-risk stress testing capabilities, (ii) their dependency on carbon intensity and (iii) their performance under different scenarios and time horizons.
43. Bank of Cyprus and Hellenic Bank.
44. https://www.bankingsupervision.europa.eu/press/pr/date / 2022/html/ssm.pr220708~565c38d18a.el.html

Enter/Exit Full Screen

temperatures, wildfires and drought, with the non-life sector, particularly fire and property damage, anticipated to be more significantly affected. In a relevant discussion paper by the ECB and EIOPA on policy options to reduce the climate insurance protection gap[45], Cyprus is among the EU countries with the lowest insurance coverage with respect to climate-related damage (below 5%[46]). The lack of insurance for climate disasters can affect the economy and financial stability. If the damage is not covered by insurance, the speed at which households and businesses can continue their activities declines, slowing down post-disaster economic recovery.

It should be noted that in 2022 EIOPA published guidance on materiality assessments of climate change and climate change scenarios in the Own Risk and Solvency Assessment (ORSA) for insurers[47]. According to the relevant EIOPA guidance, integrating the use of climate change scenarios by insurance companies in the ORSA assessment would contribute to the lowering of implementation costs for insurance undertakings, in particular small- and mid-sized ones, taking into account the size, nature and complexity of exposure to climate change risk. EIOPA encourages a long-term management of these risks, given the fact that undertakings are expected to be affected by physical and transition risks related to climate change.

45. https://www.ecb.europa.eu/pub/pdf/other/ecb.policyoptions_EIOPA~c0adae58b7.en.pdf
46. Percentage of insured claims relative to total losses.
47. https://www.eiopa.europa.eu/publications/application-guidance-climate-change-materiality-assessments-and-climate-change-scenarios-orsa_en
This document provides a detailed and practical basis on how to implement sustainable finance ambitions in practice, as well as examples to help undertakings design the steps of the materiality assessment and run climate change scenarios in the ORSA report.

Introduction
1 Medium-term risks to financial stability
2 Resilience of the financial sector
3 Macroprudential policy

Enter/Exit
Full Screen

Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

1.4.2 Cyber risks

The EU financial sector has witnessed a surge in cybersecurity risk, marked by a rise in cyberattacks, particularly amidst elevated geopolitical uncertainty[48]. The growing digital interconnectivity, combined with the rising trend in teleworking over recent years, along with the trend of outsourcing critical IT infrastructure to third-party providers by financial institutions, has exacerbated the vulnerability to cyber threats at both the European and global scales.

Potential large-scale cyberattacks, both in the EU and globally, pose a threat to financial stability, since they may disrupt financial infrastructure, critically affecting the provision of basic financial services, and causing losses and damage to the credibility of the financial system. In view of the above, the need for procedures and measures to address these risks becomes imperative.

Regarding the actions of competent authorities at European level, it should be noted that in 2022 the ESRB adopted a Recommendation[49] proposing the creation of a pan-European framework for the coordination of systemic cyber incidents (EU – SCICF). The above framework aims, inter alia, to strengthen coordination between the relevant EU financial authorities as well as between the said authorities and other authorities in the EU in the event of a serious cyber incident. Serious cyber incidents may pose a systemic risk to the financial system, as they might disrupt critical financial services and operations, threatening financial stability.

48. https://www.ecb.europa.eu/pub/financial-stability/fsr/special/html/ecb.fsrart202211_03~9a8452e67a.en.html
49. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022Y0325(01)

The CBC, acknowledging and monitoring the risk of cyber-attacks in the financial sector, has asked the financial institutions that it supervises to be vigilant and carry out a series of actions, on an annual basis, including annual tests of penetrating their critical systems. At the same time, the CBC is actively monitoring and contributing to the implementation process of the EU Digital Operational Resilience Act, known as DORA, which was recently introduced and will enter into force in January 2025.

As far as the insurance sector is concerned, the advent of new technologies, the digital transformation in insurance, the digitalisation of data, the upgrading of infrastructure and IT systems, technological applications and the use of modern and innovative solutions to provide insurance services (insurtech, insurance technology) can bring challenges and increased risks from cyberattacks. On the other hand, the investment of insurance companies in digital transformation and new technologies is expected to lead to an improvement in the level of service for policyholders, to an increase in the efficiency and quality of the services provided, as well as to opportunities for further development through personalised services and innovative insurance products.

Insurance companies recognise the new challenges of digital transformation and are already gradually capitalising on new technological developments in order to respond promptly to customers' needs.

It should be noted that no cyber incidents affecting the proper functioning of insurance companies were observed until the last update of the Report.

2. Resilience of the financial sector

Despite the challenges identified in Section 1 of this Report, the financial sector remains resilient and able to absorb any new shocks. In particular, the Cyprus banking sector demonstrates high levels of capital adequacy and liquidity, while at the same time, its profitability has improved. As a result, the Cyprus banking sector continues to serve adequately the credit needs of households and businesses, even in challenging times. Moreover, the satisfactory NPL coverage levels and the high collateralisation levels against the credit institutions' loan portfolios, as well as the strict lending criteria that are currently in place, help maintain the loan portfolio quality in the current environment of prolonged inflation and increased interest rates.

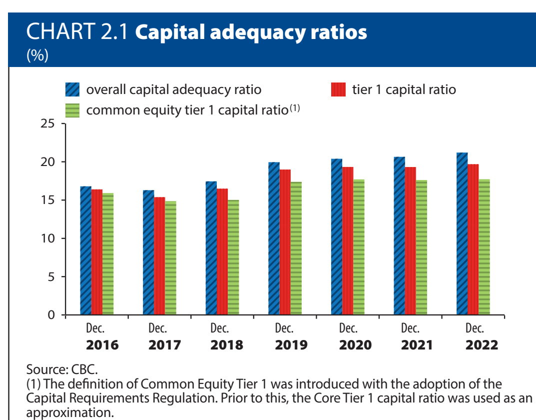
As far as the insurance sector is concerned, as a whole, it recorded high growth rates in 2022 while maintaining its solvency at high levels. Furthermore, the liquidity ratio for the sector as a whole remained stable. The sector's credibility continued to strengthen, due to the strict regulatory framework governing its operations (EU Solvency II Directive).

2.1 Banking sector

2.1.1 Capital adequacy

In 2022, credit institutions continued to maintain high capital adequacy levels. In particular, as at year end 2022, the Common Equity Tier 1 ratio (CET 1) for the aggregate banking sector remained stable at 17,7%, similar to year end 2021 (**Chart 2.1**), which was higher than the minimum supervisory requirements (11,6%). It should be noted that

CHART 2.1 **Capital adequacy ratios**
(%)



Source: CBC.
(1) The definition of Common Equity Tier 1 was introduced with the adoption of the Capital Requirements Regulation. Prior to this, the Core Tier 1 capital ratio was used as an approximation.

Enter/ Exit Full Screen

in 2021, the CET 1 ratio reached its historically highest level since 2013.

High capital adequacy acts as a safety net for credit institutions, as it allows for the absorption of potential losses from the materialisation of risks, particularly from a potential increase in credit risk in the current macroeconomic environment through increased default rates and/or a decrease in the value of mortgages. As such, it can partly ensure the undisrupted lending to the real economy in times of uncertainty when viable households and businesses resort to borrowing to cover their short-term financial needs.

2.1.2 Profitability

The banking sector enjoyed generally improved profitability levels during 2022, with most credit institutions recording increased profits. The increase in the aggregate banking sector income, mainly due to interest income, outweighed the higher operating costs, resulting in overall positive net profits. More specifically, the banking sector's total net profits reached €178 million in 2022, compared to a total net loss of €79 million recorded in 2021.

The high level of liquid assets held by credit institutions as cash reserves with central banks and the increase in the deposit facility rate , after a period of negative interest rates (2014 to mid-2022), led to an increase in their interest income. At the same time, the large share of the loan portfolio which is linked to variable interest rates, led to a high pass-through of increases in the Euribor and the

Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

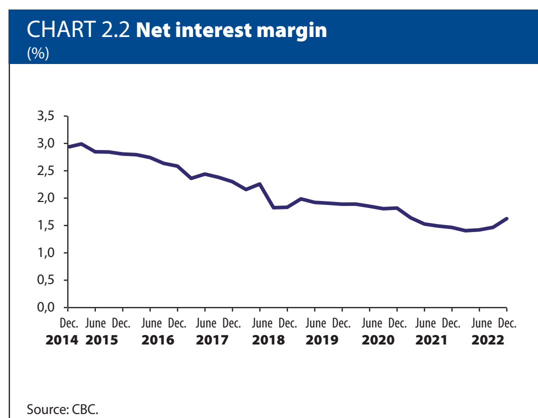
ECB interest rates to the credit institutions' lending rates.

Current deposits, which do not typically receive interest[50], account for 61% of the domestic banking sector's deposit portfolio, while the rest of the portfolio recorded only slight increases in deposit rates during 2022. Thus, the limited pass-through of interest rate increases to deposit rates compared to lending rates had a further positive impact on credit institutions' net interest income. It is noted that the net interest income ratio remained stable at 1,6% as at year-end 2022 (**Chart 2.2**), however, it is expected to be further improved in 2023, as a result of both the increase in interest income and the decline in operating costs.

As regards the operating costs, the two largest credit institutions in Cyprus (Bank of Cyprus and Hellenic Bank), offered voluntary exit plans to their employees in 2022, as part of the optimisation of their cost structure. Despite the fact that these plans caused a short-term increase in the operating costs of the banking sector (6,5% year-on-year increase as at December 2022), they are expected to bring improved cost returns in the immediate future, due to lower operating costs resulting from the reduction in permanent staff.

Profitability prospects in the near future are positive due to the continued normalisation of monetary policy, which is expected to further strengthen capital adequacy and, by extension, the resilience of

CHART 2.2 **Net interest margin**
(%)



Source: CBC.

50. Current deposits are accounts that give depositors quick access to funds for payments, withdrawals and transfers. The accumulation of interest on current deposits is not a typical practice for credit institutions, since these accounts have an unknown maturity depending on the liquidity needs of depositors, and credit institutions cannot use these funds for borrowing or investment purposes that could potentially yield returns.

Enter/ Exit Full Screen
Introduction
1 Medium-term risks to financial stability
2 Resilience of the financial sector
3 Macroprudential policy

the banking sector. On the other hand, risks arising from a possible deterioration in asset quality, due to higher borrowing costs, inflationary pressures and the exposure of credit institutions to the real estate sector, may negatively impact the banking sector's profitability in the medium term.

2.1.3 Provisions

The Cyprus banking sector's high provisioning coverage ratio, compared to the EU average, reinforces the sector's resilience, as NPL provisions can be used to absorb expected credit losses, thus limiting their impact on banks' profitability and capital adequacy. In particular, despite the decline in NPL volumes in recent years, as a result of the Cyprus credit institutions' deleveraging efforts, the provisioning coverage ratio to total NPLs stood at 48% as at December 2022, remaining above the EU average of 43,4%.

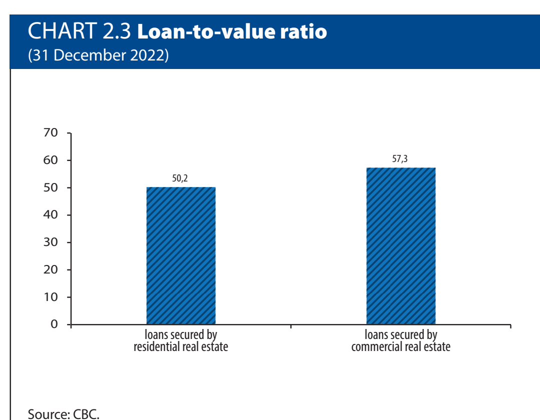
2.1.4 Loan-to-Value ratio

At the same time, the relatively low Loan-to-Value ratios (LTV)[51] (**Chart 2.3**) for the loan portfolio secured by residential and commercial real estate are also indicative of the banking sector's resilience. The low LTV ratios allow the banking sector to absorb potential revaluation of real estate collaterals, reducing the need for additional provisions.

2.1.5 Debt-service-to-income ratio

The credit institutions' prudent lending behaviour, as reflected in the strict criteria for

CHART 2.3 **Loan-to-value ratio**
(31 December 2022)



Source: CBC.

51. The CBC has put in place a Loan-to-Value (LTV) limit. More information on this macroprudential tool can be found in Section 6.

Enter/Exit Full Screen
Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

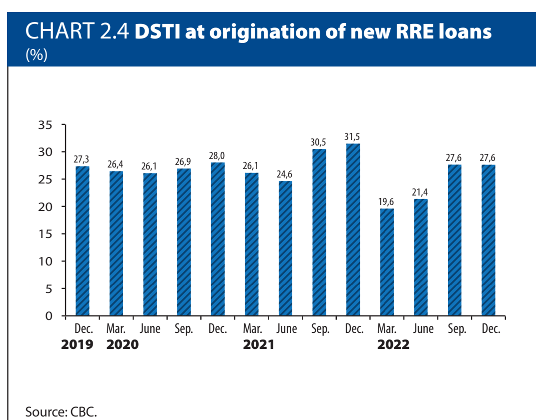
the origination of new loans, helps limit the impact to their balance sheet from a possible increase in household and corporate debt defaults. In particular, the relatively low levels of debt-service-to-income ratios at origination (DSTI-O[52]) (**Chart 2.4**) and interest coverage ratios at origination[53] (ICR-O) (**Chart 2.5**) help maintain the credit institutions' loan portfolio quality, as they limit over-borrowing and ensure that debtors can absorb reductions in their income while continuing to service their debt. Consequently, the probability of default of loans is reduced.

2.1.6 Liquidity

During 2022 the banking sector continued to enjoy excess liquidity and domestic credit institutions maintained liquidity significantly above the minimum supervisory requirements. The high levels of liquidity are sufficient to meet both the short-term and long-term needs of domestic credit institutions.

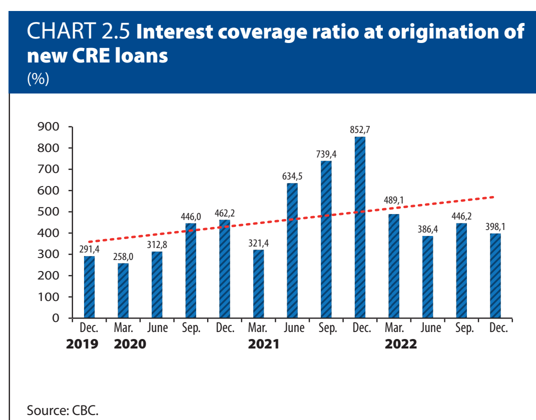
The Liquidity Coverage Ratio (LCR) of domestic credit institutions as at December 2022 was one of the highest across the Single Supervisory Mechanism (SSM) countries. In particular, the Significant Institutions in Cyprus recorded LCR levels 2,2 times higher than the equivalent average for SSM institutions as at September 2022 (**Chart 2.6**). At the same time, the above indicator for Cyprus' Less Significant

CHART 2.4 **DSTI at origination of new RRE loans**
(%)



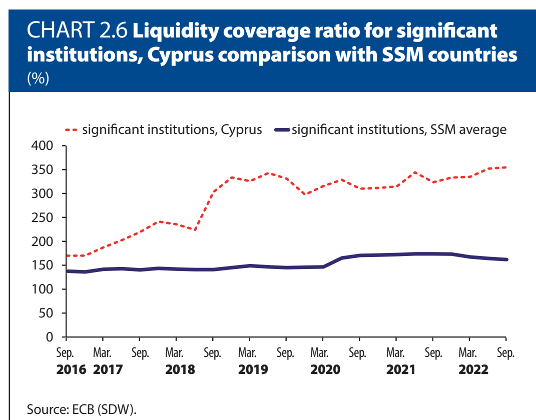
Source: CBC.

CHART 2.5 **Interest coverage ratio at origination of new CRE loans**
(%)



Source: CBC.

CHART 2.6 **Liquidity coverage ratio for significant institutions, Cyprus comparison with SSM countries**
(%)



Source: ECB (SDW).

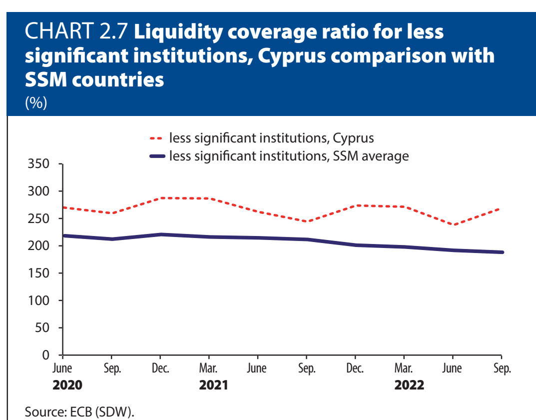
52. DSTI-O is defined as the annual servicing of the total debt relative to the borrower's total annual disposable income at the time of loan origination.
53. ICR-O is defined as the gross annual rental income (i.e. before operational expenses and taxes are paid) from leased commercial immovable property or group of immovable commercial properties, relative to the annual interest expenses applicable to the loan secured by the said property or group of properties at the time of loan origination.

Institutions was 1,4 times higher than the equivalent average for SSM institutions as at September 2022 (**Chart 2.7**). Overall, the LCR reached 310% as at year-end 2022, compared to 312% as at year-end 2021, remaining significantly above the 100% minimum required threshold set by the EU Capital Requirements Regulation. This means that credit institutions have more than three times as much liquidity as they are estimated to need for covering extraordinary short-term outflows (over a period of 30 days).

At the same time, the net stable funding ratio (NSFR[54]) for the Cyprus banking sector recorded an increase to 178% as at year-end 2022, compared to 162% as at year-end 2021, above the 100% minimum requirement threshold. The NSFR ensures that credit institutions have enough long-term stable funding to finance their long-term assets.

It should be noted that credit institutions that have Targeted Longer-Term Refinancing Operations (TLTROs) are expected to be able to repay these balances using their available liquidity. Even in the scenario of the total repayment of the remaining TLTRO balances, these institutions are expected to maintain higher liquidity coverage ratios than the minimum supervisory requirements.

CHART 2.7 **Liquidity coverage ratio for less significant institutions, Cyprus comparison with SSM countries**
(%)



Source: ECB (SDW).

54. NSFR is defined as the ratio of available stable funding to the required stable funding and is structured to ensure that long-term assets are financed through stable sources of financing. This indicator aims to reduce liquidity risk over a long-term horizon.

Enter/ Exit
Full Screen
Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

Enter/ Exit
Full Screen
Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

Box A: Recent developments in the international banking sector[1]

Recent developments in the banking sector in the United States and Switzerland have reignited concerns about the resilience of credit institutions. Although the Cyprus banking system proved resilient in the face of these turbulences, these events point to the need for continued vigilance as well as for the timely identification and management of risks by credit institutions.

In March 2023, US Silicon Valley Bank (SVB), which had limited liquidity available, faced increased deposit outflows mainly from the technology sector in which its depositors were primarily active. In response to these withdrawals, SVB was forced to sell government bonds, which were measured at amortised cost instead of market value, thus recording significant unrealised losses, due to the rise in interest rates. The resulting decline in depositor confidence, mainly due to concerns about SVB's capital adequacy, given that the majority of depositors were not covered by the US Federal Deposit Insurance Corporation due to their size, resulted in significant deposit withdrawals, eventually leading to SVB's collapse.

These developments caused significant turbulence and large price volatility in financial markets, while depositors' concerns spread to other US banks, ultimately leading to the collapse of Signature Bank and First Republic Bank. In all these cases, central banks, including the ECB, as well as other competent authorities took swift and effective measures to avoid contagion to other credit institutions, as well as the possibility of a financial crisis. For example, the ECB, in coordination with other central banks, enhanced the provision of liquidity via the standing US dollar liquidity swap line arrangements to ease strains in global funding markets[2].

Moreover, the statement from Credit Suisse's largest shareholder in March 2023 of reluctance to provide the bank with further financial assistance, combined with the longstanding problems the bank faced in conjunction with the turmoil in the markets from the US banking crisis, led to a decline in confidence and eventually the collapse of the Swiss bank. The Swiss authorities placed Credit Suisse in resolution, which included its acquisition by Swiss-based USB. As part of the resolution measures taken by the Swiss authorities, it was decided to fully write down Credit Suisse's Additional Tier 1 bonds. At the same time shareholders were compensated without first absorbing losses, contrary to the resolution rules of the Financial Stability Board and the provisions of the European resolution framework.

However, due to the specific nature of the problems/issues faced by credit institutions in the US and Switzerland, the wider impact on the banking sector of Cyprus, and the euro area in general, was

1. Source: Financial Stability Report, ECB May 2023 and Financial Stability Report 2023:1, Sveriges Riskbank, De Nederlandsche Bank (DNB)
2. Further information on the coordinated action can be found in the ECB press release Coordinated central bank action to enhance the provision of US dollar liquidity (europa.eu).

Enter/Exit Full Screen

limited. The Cyprus banking sector, shielded by strong capital adequacy, and with liquidity standing at one of the highest levels in the euro area, successfully faced the turmoil in the international markets from the above developments.

In general, the collapse of these institutions has shown, among other things, that small credit institutions are also important for financial stability, as they can both create and lead to contagion of a crisis. More specifically, this collapse highlighted risks to the banking system stemming from:

1. the potential volatility of all deposits as a result of digitalisation;
2. the concentration of the banking system to specific investments or funding sources;
3. the impact of interest rate increases on the value of bonds and other financial instruments;
4. the impact on capital adequacy from the materialisation of unrealised losses in the case of the sale of bonds measured at amortised cost;
5. the access to markets and the funding cost of Additional Capital Tier 1 bonds, following how these were treated through the resolution of Credit Suisse, and
6. concerns in relation to the sustainability of credit institutions' business models and risk management practices.

With regard to risk 1, the CBC undertook a reverse stress test exercise with the aim of assessing the amount of deposit withdrawals that domestic credit institutions can absorb before they are forced to sell their bond portfolio measured at amortised cost and to bear unrealised losses. For the purpose of this exercise, it was assumed that credit institutions would be forced to sell their bond portfolio in the event that, as a result of the withdrawal of deposits, they would fully use their holdings with the ECB or breach the 100% liquidity coverage ratio. The results of the exercise showed that the banking sector as a whole is able to absorb an outflow of about 40% of its deposits before banks need to sell part of their bond portfolios.

It should be noted that, even in this case, the Cyprus banking sector, in the context of the implementation of the single monetary policy in the euro area, has, at its disposal, tools that can be used in cases of (immediate) liquidity needs, with no significant impact, and which constitute a disincentive to the sale of bond portfolios measured at amortised cost. In particular, credit institutions, as members of the Eurosystem, have access, inter alia, through the CBC, to liquidity-providing monetary policy operations, such as the marginal lending facility, through which they can acquire overnight liquidity against the provision of adequate (acceptable) collateral.

With regard to risk 3 and more generally, the interest rate risk in the banking book of

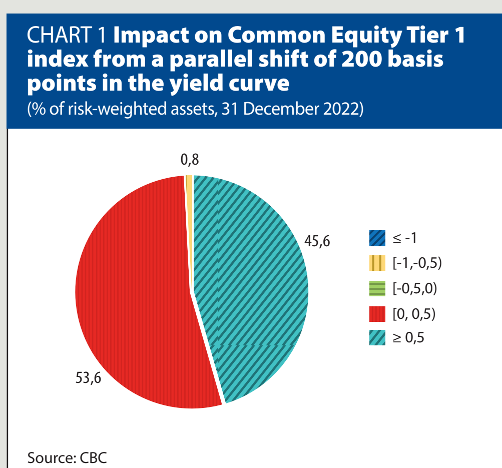
Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

credit institutions, it is noted that a sensitivity analysis to assess the impact on the economic value of credit institutions from a parallel upward shift in the yield curve by 200 basis points generally reflects the resilience of the sector. In particular, most credit institutions reported that they benefit from a possible further increase in interest rates (**Chart 1**) estimating an increase in their economic value in the above-mentioned scenario. Only a small percentage of the credit institutions expect a negative impact on their economic value from the specific scenario.

In addition, the successful issuance of fixed-rate Additional Tier 1 debt instruments amounting to €220 million by the Bank of Cyprus Group (BOC Holdings) in June 2023, with significant demand and final pricing tighter than the initial pricing, mitigates the concerns that arose from the handling of Additional Tier 1 capital securities during the resolution of Credit Suisse and the relevant risk 5. The above constitute a positive indication of the access of domestic credit institutions to international markets. It is noted that Hellenic Bank had successfully issued €200 million subordinated bonds in March 2023 attracting significant international investment interest.

Focusing on risk 4, possible materialisation of unrealised losses is a potential vulnerability for domestic credit institutions, given that a significant share of their assets is invested in bonds measured at amortised cost (13,8 % of

CHART 1 **Impact on Common Equity Tier 1 index from a parallel shift of 200 basis points in the yield curve**
(% of risk-weighted assets, 31 December 2022)



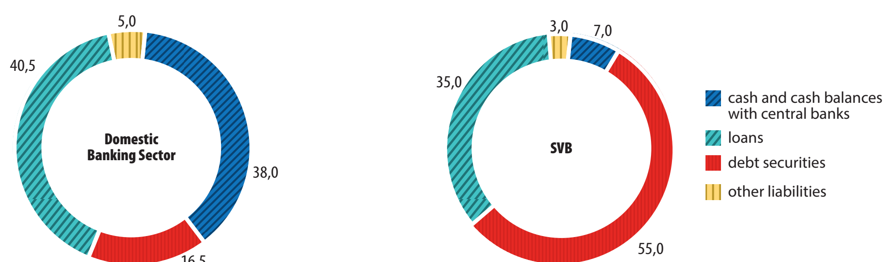
Source: CBC

assets as at 31 December 2022). However, the probability of such a scenario materialising is small. In particular, the business model of the domestic banking sector differs significantly from that of SVB, thus limiting risks (**Chart 2**, p. 54). Surplus liquidity, the smaller amount of debt securities (bonds) and the high portion of liquid assets in the form of ECB placements of the domestic banking sector, can be used to deal with deposit outflows. Finally, domestic credit institutions, following best practices, have a supervisory obligation to closely monitor and actively manage the risks to which they are exposed (risk 2), including those arising from concentration of assets and funding sources (risk 6). In this way, domestic credit institutions remain protected from similar issues.

In conclusion, the above-mentioned developments with the US banks and Credit Suisse, stress the need for continued vigilance and timely identification of potential vulnerabilities in the banking

Enter/Exit Full Screen
Introduction
1 Medium-term risks to financial stability
2 Resilience of the financial sector
3 Macroprudential policy

CHART 2 **Analysis of SVB assets relative to the domestic banking sector**
(%)



Sources: CBC, SVB.

sector. The resilience of the domestic banking sector, as demonstrated by the recent results of the EU-wide stress test, along with the ECB's tools for providing additional liquidity to euro area credit institutions in crisis scenarios, help mitigate potential risks, which continue to be closely followed by the CBC.

2.2 Insurance sector

2.2.1 Capital adequacy

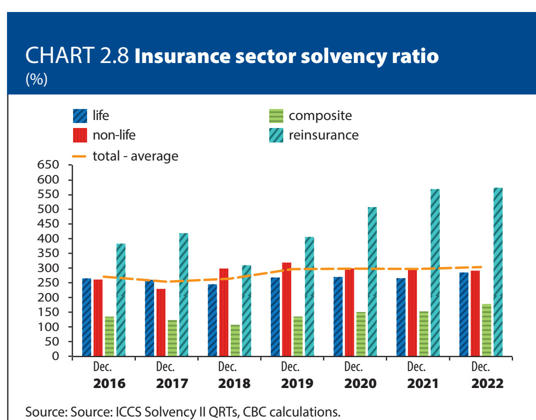
Most insurance companies record strong solvency positions, far exceeding supervisory solvency requirements, highlighting the capital strength of the sector. The average solvency ratio[55] remained healthy and stood at 303,6%[56] as at 31 December 2022, compared with 268% which was the EU average in September 2022, down from 297,2 % as at 31 December 2021 (**Chart 2.8**), ensuring that insurance companies can continue to support their customers and the real economy. Despite the fact that the insurance sector is sufficiently capitalised as a whole, a very small number of companies in

Enter/ Exit Full Screen
Introduction
1 Medium-term risks to financial stability
2 Resilience of the financial sector
3 Macroprudential policy

the non-life sector (small in size) have relatively low solvency ratios, albeit still above the regulatory thresholds. However, due to their small size (0,5% of total assets), the above companies do not pose any systemic risk to the Cyprus financial system.

As at the end of 2022, insurance companies' assets exceeded liabilities by €1,5 billion, with the amount of assets over liabilities amounting to 154%. This percentage has remained stable in recent years.

CHART 2.8 **Insurance sector solvency ratio**
(%)



Source: Source: ICCS Solvency II QRTs, CBC calculations.

2.2.2 Liquidity

As at the end of December 2022 the average liquidity ratio[57] (proportion of liquid assets to total assets) remained stable at around 42%, below the corresponding European average at 48%[58]. Based on the forward-looking liquidity stress test carried out during the pandemic by EIOPA, and the annual ORSA framework, no company faced liquidity problems.

55. The solvency ratio is equal to eligible own funds divided by the Solvency Capital Requirement (SCR) that a company must hold.
56. The high percentage is influenced by a particular company - if removed, the percentage falls to 260%, which is close to the EU average.
57. The ratio is calculated on the basis of the methodology used by EIOPA, by applying different weights (ranging from 100% for cash to 0% for intangible assets) to different assets, according to their liquidity profile, excluding unit-linked investments. The higher the ratio, the lower the liquidity risk.
58. CBC calculations based on EIOPA data.

Enter/Exit Full Screen
Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

Enter/Exit Full Screen

Introduction

1 Medium-term risks to financial stabilityt

2 Resilience of the financial sector

3 Macroprudential policy

3. Macroprudential policy

One of the main responsibilities of the CBC[59] is the macroprudential oversight of the financial system, with the ultimate objective of contributing to the safeguarding of financial stability. As part of its supervisory responsibilities, the CBC monitors developments in the financial system and identifies potential systemic risks. The CBC subsequently designs and implements macroprudential tools to reduce the accumulation of systemic risks and strengthen the resilience of the financial system.

The CBC macroprudential policy decisions and actions from 1st January 2022 to 30 June 2023, which aim to ensure the stability of the financial system are presented below. In particular:

1. On 30 November 2022, the CBC, based on the revised methodology described in the macroprudential policy for setting the countercyclical buffer rate and after consulting the ECB, decided to increase the countercyclical buffer rate from 0% to 0,5% of the total risk exposure amount in the Republic of each authorised credit institution incorporated in the Republic, with effect from 30 November 2023.

   On 2 June 2023, the CBC, on the basis of the same policy, decided to further increase the countercyclical buffer rate from 0,5% to 1,0 % of the total risk exposure amount in the Republic, with effect from 2 June 2024.

59. In accordance with sections 6 and 47A of the CBC Law.

Enter/ Exit
Full Screen

Introduction
1 Medium-term risks to financial stability
2 Resilience of the financial sector
3 Macroprudential policy

The abovementioned decisions were based on the revised methodology outlined in the CBC's published revised macroprudential policy for the setting of the countercyclical buffer rate. Further information on the said macroprudential policy of the CBC can be found in **Box B** (p. 61).

2. On 2 December 2022[60], the CBC reset the O-SII[61] capital buffer for other systemically important credit institutions ('O-SII institutions')[62] which had entered into force on 1 January 2019[63]. The O-SII buffer strengthens the resilience of O-SII institutions and reflects the cost of being a systemically important institution, while mitigating the higher risk that systemically important O-SII institutions represent to the domestic financial system and the possible consequences in the event of their failure. At the same time, it aims to act as a disincentive to further growth of O-SII institutions as the size of credit institutions is one of the main indicators in calculating the O-SII buffer. The designation of credit institutions as O-SII institutions and the determination of the O-SII buffer requirement for each such credit institution is carried out by the CBC on an annual basis.

   Based on the 2022 annual review of the CBC, with data dated 31 December 2021,

60. On 2 July 2023, the CBC reset the O-SII capital buffer for other systemically important credit institutions on the basis of the annual review.
61. O-SII – Other Systemically Important Institutions.
62. There are no domestic credit institutions that meet the definition of Global Systemically Important credit institutions.
63. For credit institutions, a phasing-in of the O-SII buffer requirement was applied from 1 January 2019 up to 1 January 2023.

Enter/ Exit

Full Screen

Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

six credit institutions have been designated as O-SII institutions, which are reported in **Table 3.1** together with the corresponding O-SII buffer they are required to maintain.

Based on the 2023 annual review of the CBC, with data dated 31 December 2022, five credit institutions have been designated as O-SII institutions, which are reported in **Table 3.2** together with the corresponding O-SII buffer they are required to maintain.

The CBC, following cooperation and consultation with the Cyprus Securities and Exchange Commission, completed the annual review of the designation of the Cyprus Investment Firms (CIFs) that fall under the scope of the O-SII Institutions' definition for 2022 and 2023. On the basis of this review, no CIFs fulfilled the conditions required to be subject to the prudential framework contained in the EU Directive for Capital Requirements (CRD) and the EU Regulation on Capital Requirements (CRR). Therefore, no CIF falls within the scope of the definition of O-SII institutions.

3. As regards the voluntary implementation of macroprudential policy measures on the basis of reciprocity, in 2022 the CBC decided not to reciprocate certain macroprudential measures that the ESRB recommended for reciprocation through its Recommendations to the EU national macro-prudential authorities. The CBC decided not to reciprocate these measures due to the fact that the exposures of the

Table 3.1 **O-SII Institutions and O-SII buffer requirement according to the CBC annual review 2022**
(% of the total risk exposure amount in the Republic)

Name of institution	O-SII buffer requirement with effect from 1 January 2023:
Bank of Cyprus Public Company Ltd	1,50 %
Hellenic Bank Public Company Ltd	1,00 %
Eurobank Cyprus Ltd	0,75 %
AstroBank Ltd	0,25 %
Alpha Bank Cyprus Ltd	0,25 %
RCB Bank Ltd[1]	0,50 %

Source: CBC
(1) Following a relevant decision by the ECB that was published on 22 December 2022, the banking license of RCB Bank Ltd was revoked. Therefore, RCB Bank Ltd is not considered as an O-SII institution after that date.

Table 3.2 **O-SII Institutions and O-SII buffer requirement according to the CBC annual review 2023**
(% of the total risk exposure amount in the Republic)

Name of institution	O-SII buffer requirement with effect from 1 January 2024:	O-SII buffer requirement with effect from 1 January 2025:
Bank of Cyprus Public Company Ltd	1,875 %	2,25 %
Hellenic Bank Public Company Ltd	1,25 %	1,50 %
Eurobank Cyprus Ltd	0,75 %	0,75 %
AstroBank Ltd	0,25 %	0,25 %
Alpha Bank Cyprus Ltd	0,25 %	0,25 %

Source: CBC.

Enter/ Exit
Full Screen

Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

domestic credit institutions to these countries were lower than the materiality thresholds set by the national macro-prudential authorities. In particular, the CBC decided:

a) on 24 May 2022, not to apply the following measures on the basis of reciprocity, in accordance with Recom-mendation ESRB/2022/1:
   - the systemic risk buffer rate of 2% adopted by Lithuania for all retail exposures to natural persons resident in the Republic of Lithuania and secured by residential property; and
   - the minimum average risk weight adopted by the Netherlands on exposures to natural persons secu-red by residential property located in the Netherlands and applied to credit institutions, using the IRB approach to calculate their capital requirements.

b) on 17 January 2023, not to apply the following measures on the basis of reciprocity, in accordance with Recom-mendation ESRB/2022/3:
   - the systemic risk buffer rate of 9% adopted by Belgium for all retail exposures to natural persons secu-red by residential property located in Belgium and applied to credit institutions using the IRB approach to calculate their capital requi-rements; and
   - the systemic risk buffer rate of 2% adopted by Germany for all expo-sures to natural and legal persons

Enter/Exit Full Screen

Introduction
1 Medium-term risks to financial stabilityt
2 Resilience of the financial sector
3 Macroprudential policy

that are secured by residential real estate located in Germany.

The macroprudential tools activated by the CBC in previous years that are still in force today, are the following:

a) Loan-to-Value ratio (LTV). The LTV ratio limits the loss of credit institutions in the event of default of the borrower by mitigating the impact on the banking sector stemming from the high debt of the private non-financial sector. In particular,
   - in case the credit facility is granted for financing the primary permanent residence of the borrower, the ratio shall not exceed 80%.
   - in case the credit facility is granted to real estate developing companies for financing the acquisition or the construction of luxurious properties, the ratio shall not exceed 50%.
   - for all other property financing cases, the ratio shall not exceed 70%.

b) Debt Service to Income ratio (DSTI). The aim of this ratio is to reduce the likelihood of default on the borrower by limiting new lending to over-indebted borrowers, ensuring the bank's asset quality. In particular,
   - the total debt servicing amount should be limited to 80% of each borrower's net disposable income[64].
   - in the case of loans in foreign currency, the total debt servicing amount should be limited to 65% of each borrower's net disposable income.

64. Net disposable income is calculated as the difference between the "Total Monthly Income" and the "Total Monthly Expenditure", in accordance with the CBC Directive on Credit Granting and Review Processes.

Box B: Countercyclical buffer rate (CCyB)

The countercyclical buffer is one of the macroprudential tools available to the CBC, as well as any macroprudential authority in the EU, and aims to create a capital cushion for credit institutions, that can be used in time of crisis and economic downturns to absorb losses. In this way the resilience of credit institutions is strengthened and at the same time the supply of credit to households and corporates during difficult economic times continues, helping economic recovery. An increase in the countercyclical buffer may also contribute towards reducing excessive credit growth during the upswing of the financial cycle.

The CBC, as the designated macro-prudential authority[1], in accordance with the Macroprudential Oversight of Institutions Law of 2015 to 2022, assesses the intensity of the cyclical systemic risk and the appropriateness of the countercyclical buffer rate for the Republic on a quarterly basis and sets or decides to adjust the countercyclical buffer, if necessary. More specifically, depending on the phase of the financial cycle of the system in the Republic, the CBC may increase or reduce the countercyclical buffer rate.

It is noted that a systemic risk is defined as the risk that threatens the system in its entirety, while the countercyclical systemic risk is the systemic risk associated with the financial and/or credit cycle, i.e. when the economy is on an upward or downward swing.

The countercyclical buffer rate may vary between 0% and 2,5%, takes values that are multiples of 0,25% and is expressed as a percentage of the total risk exposure amount of institutions with credit risk exposures in the Republic. Where justified, the CBC may set the countercyclical buffer rate above 2,5%[2].

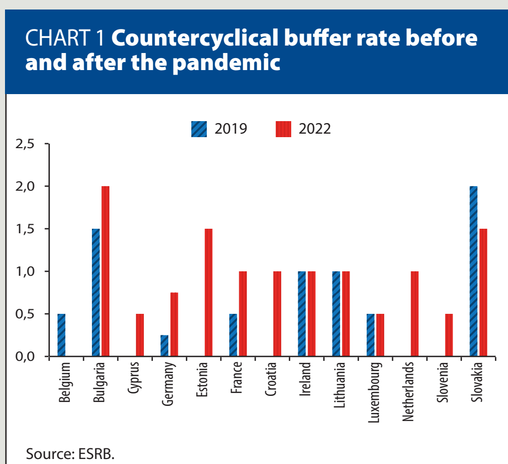
In March 2020, during the outbreak of the COVID-19 pandemic, it appeared that at a European level only a small number of macroprudential authorities had adopted a positive countercyclical buffer rate, which they released to mitigate the impact of the pandemic. As a result, the macroprudential policy response to the economic shock caused by the pandemic was limited.

This experience and the results of several post-COVID studies[3] demonstrate that the role of macroprudential capital buffers that can be released during crisis periods, needs to be enhanced in order to effectively address any adverse systemic disruptions that may arise regardless of a country's position in the financial or economic cycle. For example, health emergencies such as the pandemic, as well as natural shocks, wars and climate change disruptions, political events or technological disorders, can occur at any stage of the cycle. Such unforeseen stress events may negatively affect the financial sector, disrupting its main function with adverse effects on the wider economy.

In view of the above, and given the end

1. pursuant to section 10(2) of the Macroprudential Oversight of Institutions Laws of 2015 to 2022 (the Law)
2. pursuant to section 10(3) of the Macroprudential Oversight of Institutions Laws of 2015 to 2022.
3. Source ECB: A positive neutral rate for the countercyclical capital buffer – state of play in the banking union (europa.eu).

CHART 1 **Countercyclical buffer rate before and after the pandemic**



Source: ESRB.

of the pandemic, a number of macroprudential authorities in the EU have started to more actively apply this tool, using the guided discretion available to them under their national law. According to ECB[4] data, by the end of 2022, twelve euro area countries had implemented a positive countercyclical buffer rate, compared with eight countries that had implemented a positive countercyclical buffer rate by the end of 2019 (**Chart 3.1**). The decisions of these countries were based on the need to strengthen the releasable capital buffers and on:

- their estimates of increased cyclical systemic risk in the specific phase of their country's financial cycle; or
- the implementation of a positive-neutral countercyclical buffer rate when cyclical systemic risks are deemed to be neutral, i.e. they are neither subdued nor elevated. In order to implement a positive-neutral countercyclical buffer rate, several European countries have revised their frameworks for setting countercyclical buffers to allow them the flexibility to apply a positive countercyclical buffer[5] rate during a period of neutral cyclical risks.

CBC macroprudential policy for setting the countercyclical buffer rate in the Republic

On 15 November 2022, the CBC revised its macroprudential policy for setting the countercyclical buffer rate for exposures in the Republic[6]. This policy allows for the introduction of a positive countercyclical buffer rate both at times of increasing cyclical systemic risk and at times when cyclical systemic risks are deemed to be neither subdued nor elevated, i.e. in times of neutral cyclical systemic risk. Cyprus is one of the five euro area countries that have recently adopted a similar Policy[7].

With the decisions to increase the countercyclical buffer rate as mentioned in section 3, the CBC acted proactively, in order to fulfil its primary objective of safeguarding financial stability. In doing so, it strengthened the resilience of the banking sector by creating a cushion of capital for credit institutions which can be used in future times of crises and economic downturns to absorb losses and/or support lending to the private sector.

The specific decisions of the CBC intended to enhance the resilience of the

4. ECB Annual Report 2022.
5. The rates per national authority are presented and reviewed quarterly on the ESRB website: Countercyclical capital buffer (europa.eu).
6. Macroprudential Policy for setting the countercyclical buffer.
7. A positive neutral rate for the countercyclical capital buffer – state of play in the banking union (europa.eu)

banking sector during the period under review, i.e. at a time when risks were neither particularly high nor subdued. The primary objective of these decisions is to ensure, to the extent possible, a sustainable flow of credit to the economy in future periods of potential elevated risks.

The methodology used for assessing and setting the countercyclical buffer is set out in the policy for setting the countercyclical buffer rate and in the Law. The said methodology takes into account the ESRB Recommendation ESRB/2014/1 on guidance for setting countercyclical buffer rates. The policy on setting the countercyclical buffer rate sets out the general principles governing the setting of the rate of the countercyclical buffer by predetermining four stages of cyclical systemic risk intensity and has been published on the CBC's website[8].

- When risks are assessed to be neither subdued nor elevated and the intensity of cyclical systemic risk is identified as neutral (Stage 2), the CBC may set a positive countercyclical buffer rate of 0,5 % (at a minimum).
- When cyclical systemic risks are assessed as increasing, the countercyclical buffer rate will also increase (Stage 3).
- When cyclical systemic risks are reduced or realised, the countercyclical buffer rate will be reduced, i.e. released, and where necessary will reach zero (Stage 4).
- During the post-crisis recovery phase (Stage 1) the countercyclical buffer rate will remain reduced or to zero.

The CBC's assessment is based on a holistic approach using qualitative tools, i.e. a set of indicators; on qualitative analysis and the Guided Discretion principle, as proposed by the ESRB through Recommendation ESRB/2014/1.

The indicators monitored by the CBC in its quantitative analysis include the deviation of the credit-to-GDP ratio from its long-term trend (Credit-to-GDP gap), indicators related to credit growth, the private non-financial sector debt, the property market, the real economy, the external imbalances and the resilience of the banking sector.

At the same time, the CBC also assesses and takes into account, among other things, the following:

- The total capital requirements of institutions and their available capital;
- Other macroprudential tools and buffers adopted by the CBC;
- The risks and challenges faced by institutions;
- The ability of institutions to generate profits and thereby capital;
- Other national characteristics of the economy and the banking sector, including growth prospects, possible structural imbalances, and market accessibility;
- Any structural reforms of the economy and current developments.

It is noted that the CBC publishes on a quarterly basis on its website the effective rate of the countercyclical buffer and other relevant information, as well as a summary table with the quantitative indicators monitored during its assessment.

8. Central Bank of Cyprus – Countercyclical capital buffer.