



BANK ĊENTRALI TA' MALTA
EUROSISTEMA
CENTRAL BANK OF MALTA



CENTRAL BANK OF MALTA INTERIM FINANCIAL STABILITY REPORT

2024

© Central Bank of Malta, 2024

Address

Pjazza Kastilja
Valletta VLT 1060
Malta

Telephone

(+356) 2550 0000

Fax

(+356) 2550 2500

Website

www.centralbankmalta.org

Contact us

<https://www.centralbankmalta.org/contact-us>

All rights reserved. Reproduction is permitted provided that the source is acknowledged.

The cut-off date for regulatory and prudential returns is 28 August 2024, unless otherwise indicated. The general risk assessment conducted in this edition of the Interim Financial Stability Report focuses on developments occurring in the first half of 2024 but in some instances was updated to consider more recent developments. The source of data in tables and charts is the Central Bank of Malta unless otherwise indicated.

The Interim Financial Stability Report is prepared by the Financial Stability Surveillance and Research Department and the Policy, Crisis Management and Stress Testing Department and is subsequently reviewed and endorsed by the Financial Stability Committee of the Central Bank of Malta.

ISSN 2074-2231 (online)

CONTENTS

EXECUTIVE SUMMARY	6
1. MACROPRUDENTIAL RISK ASSESSMENT AND POLICY RESPONSE	7
1.1 Macroprudential risk assessment	7
1.1.1 Vulnerabilities outside the financial system	7
1.1.2 Vulnerabilities within the financial system	9
Summary of risks	11
1.2 Macroprudential regulatory developments	12
1.2.1 Capital-based macroprudential measures	12
1.2.2 Borrower-based measures	13
1.2.3 Other measures	13
2. DEVELOPMENTS IN THE BANKING SECTOR	14
2.1 Core domestic banks	14
Box 1: Forecasting some key financial indicators for core domestic banks in Malta	18
2.2 Non-core domestic banks	22
2.3 International banks	24
3. STRESS TESTS	28
3.1 Scenario-based solvency stress tests	28
3.1.1 Credit quality deterioration in the bond portfolio	28
3.2 Liquidity	29
3.2.1 Persistent deposit withdrawals	29
Box 2: Reverse stress tests	32
3.2.2 Liquidity coverage ratio	35
3.2.3 Net stable funding ratio	36
3.3 Interest rate risk in the banking book	37
4. INSURANCE COMPANIES AND INVESTMENT FUNDS	39
4.1 The domestic insurance companies	39
4.1.1 Domestically-relevant life insurance companies	39
4.1.2 Domestically-relevant non-life insurance companies	42
4.1.3 Risk outlook	45
4.2 Domestically-relevant investment funds	45
4.2.1 Asset composition and investment strategies	46
4.2.2 Investors	48
4.2.3 Liquidity and leverage	49
4.2.4 Risk outlook	49
Box 3: An introduction to pension funds registered in Malta	51
APPENDIX: Financial Soundness Indicators	56

ABBREVIATIONS

AI	Artificial Intelligence
AMC	Amortised cost
ASF	Available stable funding
AUM	Assets under management
BBM	Borrower-based measure
BVAR	Bayesian Vector Autoregression
CBC	Counterbalancing capacity
CCyB	Countercyclical Capital Buffer
CET1	Common Equity Tier 1
EA	Euro Area
EBA	European Banking Authority
ECB	European Central Bank
ESRB	European Systemic Risk Board
EU	European Union
EUR	Euro
FAVAR	Factor-Augmented Vector Autoregression
FSR	Financial Stability Report
GDP	Gross domestic product
HICP	Harmonised Index of Consumer Prices
HQLA	High-quality liquid assets
IL	Index-linked
IRB	Internal ratings-based
IRRBB	Interest rate risk in the banking book
IT	information technology
ITS	Implementing Technical Standards
LCR	Liquidity coverage ratio
LTRO	Longer-term refinancing operations
MFI	Monetary financial institution
MFSA	Malta Financial Services Authority
MGS	Malta Government Stocks
MMF	Money market funds
MRO	Main refinancing operations
MRR	Minimum reserve requirement
MST	Macro stress testing
NAV	Net asset value
NFC	Non-financial corporation
NII	Net interest income
NPL	Non-performing loan
NSFR	Net stable funding ratio
O-SII	Other systemically important institution
ODP	Online deposit platform
OFI	Other financial intermediary
PDW	Persistent deposit withdrawals
ROA	Return on assets
ROE	Return on equity
RRE	Residential real estate
RSF	Required stable funding
RST	Reverse stress test
RW	Random Walk
RWA	Risk-weighted assets
SCR	Solvency Capital Requirement

SyRB	Systemic Risk Buffer
sSyRB	Sectoral Systemic Risk Buffer
TLTRO	Targeted longer-term refinancing operations
UCITS	Undertakings for the Collective Investment in Transferable Securities
UL	Unit-linked
UK	United Kingdom
US	United States
USD	United States dollar
VAR	Vector autoregression

EXECUTIVE SUMMARY

In the first half of 2024, the domestic financial sector demonstrated resilience, despite a challenging macro-financial landscape in the euro area. This environment was characterised, on the one hand by positive factors such as benign prospects for economic growth and lower inflation, and on the other by persistent geopolitical tensions.

The risk of a deep recession lessened, and inflation started converging towards the European Central Bank's (ECB) medium-term target of around 2%. This allowed central banks more flexibility to start reducing policy rates. Domestically, economic growth remained robust even though it moderated somewhat. At the same time, inflation fell at a faster pace in comparison to other euro area countries. However, geopolitical tensions persisted driven mainly by ongoing conflicts in Ukraine and the Middle East, alongside with the political uncertainty stemming from elections in Europe and the United States. This, coupled with the uncertainty over the pace and scale of future interest rate cuts, continues to pose a potential source of market volatility. Still, funding costs for both governments and the private sector are expected to decline. The private sector remained resilient, buoyed by a robust labour market, though downside risks persist due to sluggish economic activity.

The euro area banking sector showed resilience, with profitability improving marginally, driven by enhanced cost-efficiencies and higher non-interest income. Similarly, domestic banks remained highly profitable. Although credit growth in Malta slowed down, it remains robust. However, the heavy concentration in property-related activity heightens concentration risks. Such growth diverges from the broader EU landscape, where credit growth remained subdued. Similarly, diverging developments were also reported in the real estate sector, where house prices continued to rise strongly in Malta as opposed to those in the euro area which registered price declines until the first quarter of 2024. This notwithstanding, credit quality has shown improvement, supported by lower non-performing loans (NPLs) and forbearance ratios. Additionally, banks maintained ample liquidity and solid capital positions, bolstering the sector's resilience against broader economic challenges and unexpected shocks.

The non-bank financial sector experienced growth during the first six months of 2024, reflecting an increase in assets both for domestically-relevant investment funds and insurance companies. The growth in investment funds was supported by a rebound in equity markets and a modest increase in fixed-income securities. While these investments continued to be concentrated in liquid assets, cash and deposits remained low. Redemptions stayed close to historical averages, and leverage remained low and stable. However, going forward, risks persist due to the potential for a reassessment of higher risk premia. In the insurance sector, robust capital and liquidity positions were upheld, although challenges persist, especially in the life insurance segment due to declining premia influenced by shifts in customer behaviour amid still-high interest rates. Meanwhile, the non-life insurance sector reported strong profits through solid underwriting and investment returns, despite further declines in already tighter liquidity levels.

The *Report* includes three boxed articles. Box 1 presents a specialised forecasting framework for key balance sheet items of core domestic banks, with a particular emphasis on profitability. Box 2 introduces a reverse stress test (RST) that is based on one of the liquidity stress testing frameworks of the Bank. Box 3 provides an introductory analysis of pension funds registered in Malta, highlighting their role and importance within the financial landscape.

The *Interim Financial Stability Report* was prepared by the Central Bank of Malta through the joint efforts of the Financial Stability Surveillance and Research Department, and the Policy, Crisis Management and Stress Testing Department of the Bank. The *Report* was reviewed by the Bank's Financial Stability Committee, which is responsible to oversee and implement policies related to financial stability and the macroprudential framework.

1. MACROPRUDENTIAL RISK ASSESSMENT AND POLICY RESPONSE

1.1 Macroprudential risk assessment

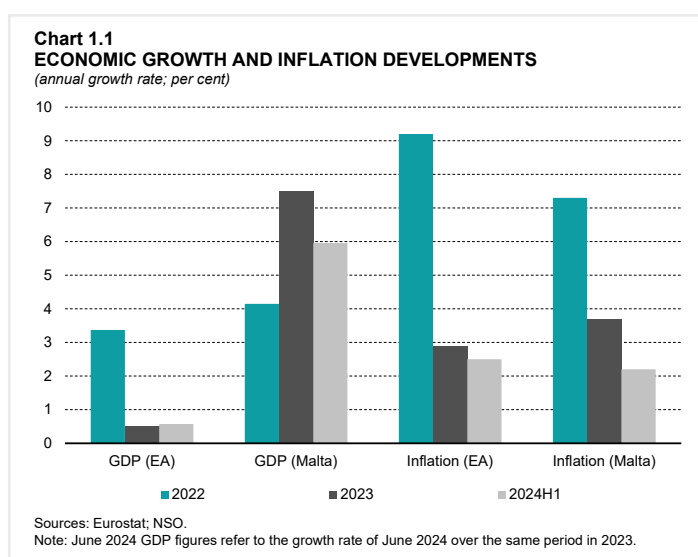
In the first half of 2024, the macro-financial environment was characterised by the interplay of stable global economic conditions and persistent geopolitical uncertainties. The global economic outlook remained stable, with the risk of a severe economic recession diminishing somewhat, although forecasts for the euro area weakened somewhat. Inflationary pressures eased considerably, such that some central banks embarked on policy rate cuts. However, geopolitical tensions continued to pose a considerable risk to financial stability. Such events could trigger a weakening in the macro-financial conditions and affect risk sentiment. This, in turn, could prompt an abrupt sell-off in financial markets. So far, euro area households and businesses showed resilience despite the higher debt-servicing costs experienced in recent years. This was buttressed by a strong labour market.

Euro area banks have successfully leveraged the high interest rates to their advantage, while maintaining good asset quality. Essentially, they have been able to benefit from increased earnings on their loans and investments due to the higher rates, without experiencing a notable decline in the quality of their assets. However, the ongoing and expected rate cuts may lower income on variable-rate assets. Financial market developments reflected market participants' expectations of the turnaround in the monetary policy stance.

1.1.1 Vulnerabilities outside the financial system

After rebounding from the pandemic, economic growth in the euro area decelerated to 0.5% in 2023 and continued at the same subdued pace in the first half of 2024 (see Chart 1.1). Inflation inched closer to the ECB's medium-term target rate of 2%, with estimated Harmonised Index of Consumer Prices (HICP) reading 1.8% in September 2024. Domestically, economic growth remained robust but moderated, with real gross domestic product (GDP) growth reading 6.0% for the first half of 2024, compared to the 7.5% in 2023. Inflation in Malta fell at a faster pace compared to other euro area countries, to reach 2.2% in June 2024.

During the first half of this year, financial market developments were mainly dominated by expectations of a reversal in the monetary policy stance of central banks in advanced economies. The ECB lowered its key rates by 0.25 basis points for the first time in June 2024, while the Bank of England followed suit in August 2024, but held rates unchanged in September 2024. The US Federal Reserve also cut its Federal Funds Rate for the first time in four years by 0.5 percentage points, marking the start of a period of monetary easing. This, coupled with the avoidance of an economic recession, pushed the Stoxx 600 higher, up by almost 7% during the first half of the year (see Chart 1.2). The S&P 500 performed better, increasing by 14.5% until June 2024, however this was mainly influenced by the strong performance of technology and Artificial Intelligence (AI) firms. Based on the developments that took place in August 2024, these sectors have shown to be highly susceptible to sudden adverse market corrections, mainly due to their elevated valuations. The SPXT, which excludes companies related to the information technology (IT) sectors, still advanced, up by just over 9% in the first six months. Developments in the fixed-income markets were more volatile as these tend to be more sensitive to interest rate expectations. After peaking in October 2023, both the US and euro area (EA) ten-year



government bond yields bottomed once more in December 2023. However, as market expectations were corrected, bond yields rose again to reach 4.3% and 3.2% in June 2024, respectively due to uncertainty about the timing of easing of monetary policy because of high wage inflation. Such developments could also have been further impacted by market participants' increased interest in equities given the strong performance observed.

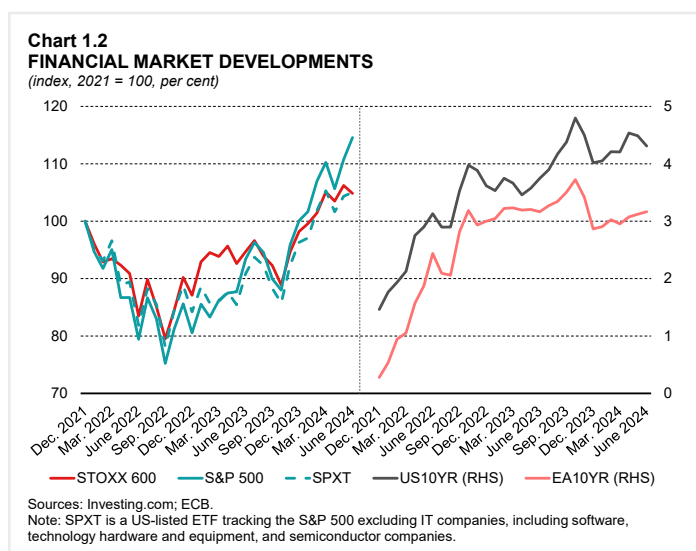
As further interest rate cuts are expected, funding costs for both private and sovereign debt should ease. The downward trend in euro area government debt as a share

of GDP reported post-pandemic persisted in the first half of this year, with the ratio dropping by 0.1 percentage points to 88.1%. Demand for sovereign debt paper was strong as investors tried to lock in higher yields, in anticipation of the prospective rate cuts. Yields on the primary market remained above the average yield on outstanding debt, exerting higher funding costs to sovereign debt.¹ However, heterogeneity across countries could be observed, with some euro area member states recording higher levels of sovereign debt, and a sudden reassessment of sovereign risk could once again increase borrowing costs. Against this backdrop, fiscal fundamentals remained weak and could possibly exert potential adverse spillovers on the wider bond market. Domestically, government debt-to-GDP remained contained, but like other euro area countries, it is expected to increase, reaching 49.8% in 2025, mostly driven by the continuation of primary deficits.² Indeed, while the fiscal deficit is declining, it is still expected to remain above the 3% European Union (EU) threshold in 2024 and 2025. The escalation of military activity in the Middle East may have an adverse effect on public debt, particularly in respect of energy support measures in the event of higher commodity prices.

Developments in the euro area residential market seem to be stabilising, as house prices increased once again by 1.3% annually in June 2024, compared to the drop of 2.2% registered in September 2023. Such developments continued to show asynchronous real estate cycles where in Malta, house prices continued to rise steadily, up by 7.0% in June 2024, compared to the 5.3% during the same period last year. This also reflected differences in the transmission of monetary policy onto lending rates, leading to diverging credit cycles with the annual growth in domestic mortgages remaining strong at 8.6%, in sharp contrast with the credit dynamics observed in the euro area, where mortgage growth was close to 0%.³ Domestic mortgage demand was backed by a 4.2% increase in final deeds of sale in the first half of this year, compared to the same period last year.

Risk outlook

Risks to the euro area macro-financial outlook remain elevated, mostly emanating from heightened geopolitical tensions. Projections indicate a modest recovery in economic growth, with end-of-year GDP expected to be around 0.8%, before trending further upwards to 1.3% in 2025, while inflation is expected to increase to 2.2% by 2025. Global demand may however slow down further if inflation remains higher than expected, which could delay rate cuts and result in sustaining restrictive financing conditions for longer periods. Apart from the direct consequences within the euro area, any delays in monetary policy easing in the United States could lead to higher import prices for the euro area due to a stronger US dollar. Financial markets



¹ See ECB Financial Stability Review, May 2024.

² Source: MFIM – [Medium-Term Fiscal Structural Plan 2025 - 2028](#).

³ Source: ECB.

may experience increased volatility, particularly in equities with stretched valuations, especially if the ongoing geopolitical tensions in the Middle East and Ukraine were to escalate further, compounded by a possible worsening in China-US trade relations, as well as the outcome of the US presidential election.

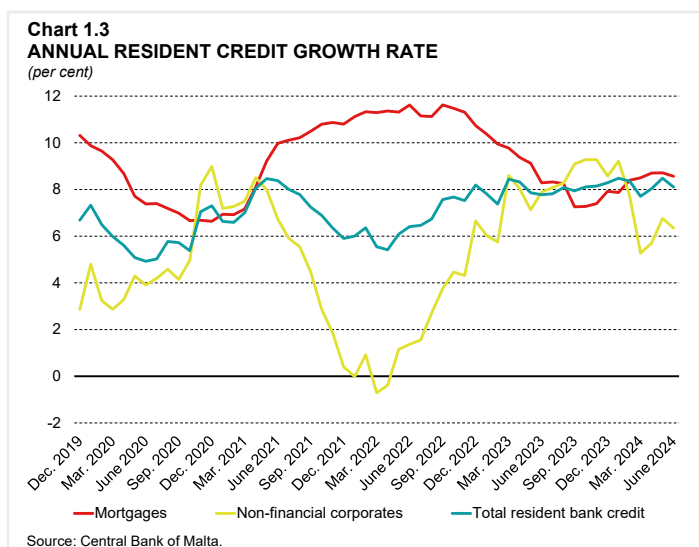
Domestically, economic growth is projected to moderate in 2024 and 2025. Following the strong growth in net exports in 2023, domestic demand, especially private consumption, is anticipated to be the main engine of economic growth in 2024.⁴ Inflation is projected to subside to 2.1% by 2025, reflecting lower inflation in food, services and non-energy industrial goods. The domestic residential real estate (RRE) market is expected to remain buoyant as evidenced by the strong increase in the number of promises of sale agreements which rose by 4.6% in the same period reviewed.

1.1.2 Vulnerabilities within the financial system

Profitability of euro area banks improved marginally in the first six months of the year, with the return on assets (ROA) reaching 0.74%, up from 0.69% six months earlier.⁵ Such improvement was mainly the result of improved cost efficiencies, and other non-interest income. Euro area banks continued to show resilience and operated with ample liquidity and strong capital buffers. Indeed, the liquidity coverage ratio (LCR) and the total capital ratio stood at 163.2% and 20.1%, respectively. In addition, despite some tentative signs of deterioration, asset quality remained healthy with an NPL ratio of 1.9%.

Domestic banks remained highly profitable with the ROA stable at 1.3%, whilst that of core domestic banks increased by 0.1 percentage points to 1.1%. Lower net impairment losses were reported, but the increase in net interest income (NII) was met with higher operating expenses, resulting in the operational cost-to-income ratio to edge higher to 56.3%. Despite annual growth in resident credit slowing down marginally to 8.1% (see Chart 1.3), it is still considered robust, highlighting the diverging credit cycles when compared to the euro area. Resident non-financial corporation (NFC) credit growth decelerated to 6.4% from 8.6%, six months earlier, but remained above the average growth rate over the last five years, which stood at 5.1%. Such increase remained highly focused on property-related activities accentuating concentration risk in domestic banks' loan books. The NPL ratio reached a new low of 2.1% on account of a faster drop in NPLs than loans and advances. The improvement was reported in both the mortgages and NFC sectors, with their NPL ratios standing at 1.3% and 3.6%, respectively. Excluding placements with the Central Bank of Malta, the NPL ratio also dropped to a new low of 2.7%. Domestic banks remained resilient on the back of strong capital levels, and operated with generally ample liquidity, as evidenced by a total capital ratio and LCR of 25.5% and 361.0%, respectively.

Amid the mix of economic and market dynamics, domestically-relevant insurers remained resilient and continued to maintain capital positions well-above regulatory requirements, indicating their capacity to adapt to evolving economic conditions. Non-life insurers' gross written premia grew, driven by property damage business, which together with improved investment returns contributed to the strong profitability, despite rising insurance service expenses. In contrast, the life insurance sector reported declining premiums influenced by shifts in customer behaviour amid the still high interest



⁴ Central Bank of Malta [Outlook for the Maltese Economy 2024:3](#).

⁵ European Banking Authority (EBA) Risk Dashboard, June 2024.

rates. Concurrently, domestically-relevant investment funds experienced renewed growth, driven by strong equity market performance and recovering bond markets. These positive developments were in line with broader trends across the euro area, where economic conditions showed signs of stabilisation. Domestically, the sector remained resilient despite challenges stemming from international market volatility and shifting investor sentiment. The liquidity ratio dropped slightly given the increased exposure to equities, although bonds, which continued to represent the bulk of investments, remained largely liquid, composed mainly of high-rated sovereign debt.

Driven by the developments within the domestic investment funds sector, the narrow measure of non-bank financial intermediation as outlined in Box 5 of the *Financial Stability Report 2023*, experienced solid growth in the first half of 2024, up by over 4%.⁶ This expansion was supported by increased activity across both lending institutions and financial vehicle corporations, which also experienced steady increases in their activities. Notwithstanding, systemic risks from entities captured in the narrow measure remained low.

Risk outlook

Euro area banks' profitability may have peaked as NII appears to have plateaued. This could be exacerbated by the sluggish credit growth and a potential narrowing of the loan-deposits spreads as further rate cuts take place. Similarly, yields on high-quality liquid assets (HQLA), including central bank reserves, are likely to decline, further impinging on banks' income generation. This may be partly offset by reduced funding costs for both retail and short-term market borrowing. However, should the pass-through of interest rate cuts on deposit rates be low and lagged, additional pressure on banks' funding costs may be observed. A significant risk factor involves cyber threats, especially as banks are continuously digitalising their operations. In 2023, Single Supervisory Mechanism banks reported that the number of cyber incidents shot up by around 78%, compared with previous years.⁷ Furthermore, a survey among 17 large European banks' Chief Risk Officers showed that the vast majority believe that cybersecurity risk is the largest threat to their business operations in 2024.⁸ This highlights the importance for banks to continue enhancing their cybersecurity measures in response to these rising cyber threats, with the recent global IT outage exposing the vulnerabilities that can impact critical services.



















Similar to euro area banks, the profitability of domestic banks may have also peaked, as remuneration on Central Bank placements, an important component of these banks' balance sheets, is expected to decline. In addition, while resident credit growth is forecasted to slow down further, also possibly impacting profitability, this is expected to remain strong. In addition, banks increased their investment in government bonds to take advantage of the higher yields, in anticipation of the expected continued interest rate cuts. Regarding the insurance sector, a potential escalation of the current conflicts and severe climate-related risks are prompting insurers across the euro area to refine their underwriting strategies and risk models, particularly in property and casualty lines. Furthermore, although inflation has eased significantly, its impact on insurance claims' costs remains a concern across Europe. Within the investment funds sector, challenges persisted in the euro area, driven by possible concerns related to portfolio concentration towards certain geographies and the tech sectors, real estate exposure, and liquidity concerns.

Financial institutions should continue adopting prudent lending practices, while maintaining healthy capital and liquidity buffers to enhance their resilience amid a backdrop of an uncertain global macroeconomic environment. This, coupled with measured dividend payouts, should ensure that capital is preserved, further buttressing the resilience of the domestic financial system.

⁶ See: [Revisiting non-bank financial intermediation in Malta: a current financial stability overview](#).

⁷ See: [ESRB Annual Report 2023 \(europa.eu\)](#).

⁸ See: [Cybersecurity remains the top risk for European banks, as heightened geopolitics increases the perceived threat of cyber warfare | EY - Global](#).

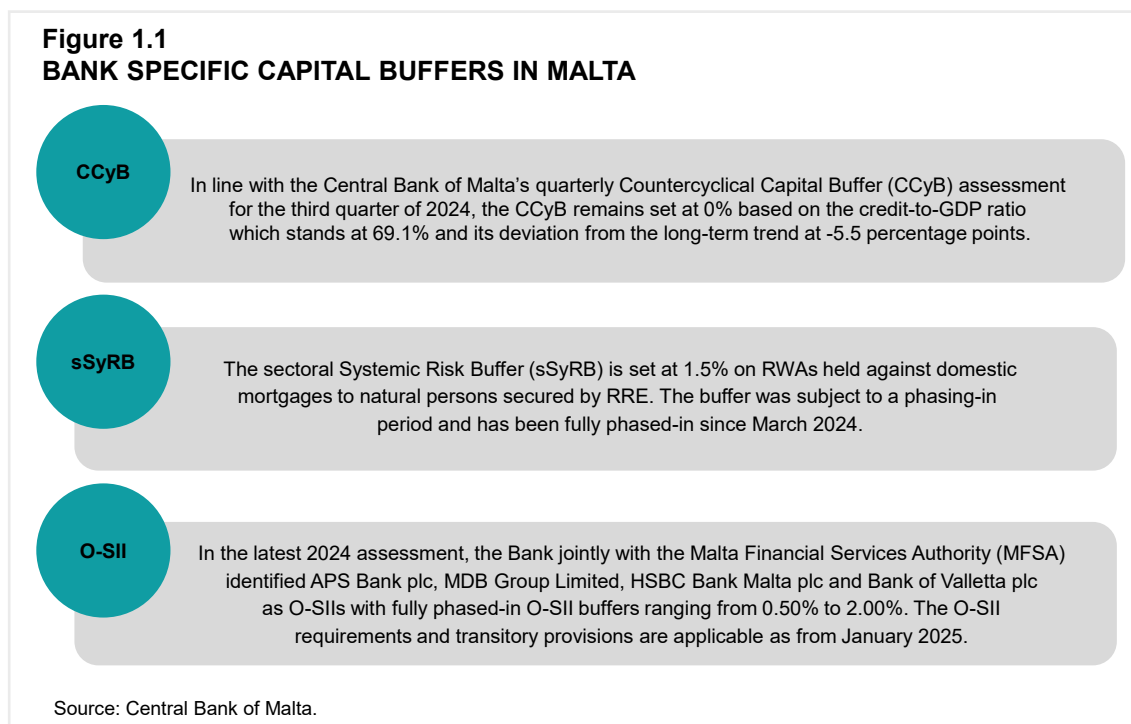
SUMMARY OF RISKS		
Main vulnerabilities and risks to financial stability	Description of risk	Risk assessment
Vulnerabilities outside the financial system		
Geopolitical uncertainties	Geopolitical risks heightened further, primarily due to the ongoing wars in Ukraine and the Middle East, as well as the continued tensions between the United States and China. This along with policy and economic uncertainty arising from recent and upcoming elections.	
Inflationary pressures	Inflationary pressures eased considerably, and as a result, major central banks began reversing their monetary policy stance. However, negative surprises may arise due to heightened geopolitical risks, which could influence the monetary policy paths adopted by different authorities.	
Reassessment in risk premia	Financial markets continued to show signs of overvaluation, particularly in the technology and communications sectors, including AI. A sudden shift in market sentiment, as occurred in August 2024, could negatively impact the valuations of these asset classes, potentially triggering an abrupt sell-off.	
Economic conditions in the euro area and public debt sustainability	The likelihood of a severe downturn in the euro area has diminished somewhat, driven by the avoidance of an economic recession, and resilient labour markets, although downside risks remain. Sovereign financing conditions have improved as interest rates continued to decline; however, persistent geopolitical risks may increase borrowing pressures on governments going forward.	
Domestic macroeconomic developments	Domestic economic growth moderated slightly in the first half of 2024 and is forecast to slow further over the next few years. Despite contained debt, the deficit level is still above the EU's 3% threshold. However, the economy is expected to remain strong, supported by a resilient labour market and robust private consumption growth.	
Real estate market developments	Domestic RRE price growth maintained its momentum, driven by strong demand, which has kept estimates of the house price gap in positive territory. Looking ahead, the RRE cycle is expected to remain buoyant, as evidenced by robust increase in the number of signed promises of sale agreements. However, this may raise concerns about overheating, potentially increasing vulnerabilities in the housing sector. Some segments within the domestic commercial real estate market remained weak, though they are not expected to pose any systemic risks as overall banks' exposure to this sector is very low.	
Vulnerabilities within the financial system		
Developments in mortgage lending	Resident mortgage lending gained momentum and is expected to remain strong, in line with the robust domestic RRE market. Such dynamics have led to a positive mortgage credit gap, potentially signalling excessive credit. However, risks related to the RRE market are somewhat mitigated by prudent bank lending practices and the implementation of macroprudential policies.	
Developments in NFC lending	While resident corporate credit slowed slightly, the deceleration was less pronounced than expected and remained above the recent five-year average. As a result, the private corporations credit gap remained in positive territory, driven primarily by the construction and real estate sectors.	
Concentration in sectoral lending	Banks' lending towards property-related loans increased further, given the robust property market, fuelling concentration risks in their loan portfolios.	
Credit quality of the loan portfolio	Asset quality improved further, driven by both mortgages and corporate loans, and was accompanied by a lower forbearance ratio. However, Stage 2 loans increased, indicating potential rising risks going forward, partly due to the still high interest rate environment.	
Developments related to net income	The banking sector reported mixed developments, with overall profitability declining emanating from international bank branches and non-core domestic banks. However, the profitability of the core domestic banks continued to improve, with net income on the rise. While risks remained limited, some deterioration may occur going forward, as net income could be negatively impacted by lower interest income from Eurosystem placements and corporate loans.	
Liquidity developments	Banks' liquidity positions remained ample, despite a marginal decline in liquidity ratios and limited growth in customer deposits, largely due to more attractive investment opportunities owing to the still high-yield environment. However, this pressure on liquidity is expected to ease going forward as interest rates decline and bond yields retreat.	
Operational risk	While digitalisation presents exciting opportunities for growth and innovation, such process may lead to negative repercussions on banks' operational framework, primarily through an increase in cyber threats.	
Domestically-relevant insurances	Both life and non-life insurances reported balance sheet growth and robust capital. Life insurances continued to operate on the back of robust liquidity, alongside a recovery in gross written premia driven by index- and unit-linked products. However, alternative investment opportunities continued to exert pressure on with-profit products, which strained underwriting profitability, even though overall profitability increased. Meanwhile, in the non-life sector, liquidity continued to decline due to their investment holdings, yet strong profitability was reported, driven by solid underwriting and investment returns.	
Domestically-relevant investment funds	Domestically-relevant investment funds registered growth in assets. This rebound was largely driven by the recovery in the equity market and a slight increase in fixed income securities. Investments continued to be concentrated in liquid assets, although cash and deposit levels remained low. Redemptions stayed close to historical averages, and leverage remained low and stable. However, risks going forward persist due to the potential for higher risk premia reassessment amid challenging macroeconomic conditions and geopolitical headwinds.	
<p>Risk level as at end June 2024: Limited Moderate Elevated</p> <p>Risk direction within the first half of 2024: Increased  Stable  Decreased </p>		

1.2 Macroprudential regulatory developments

This section reports the main developments in macroprudential policy measures during the first half of 2024.

1.2.1 Capital-based macroprudential measures

In accordance with the Capital Requirements Directive and Capital Requirements Regulation, the Central Bank of Malta implements capital-based macroprudential measures to safeguard the stability of the Maltese financial system. The buffers shown in Figure 1.1 form part of the Combined Buffer Requirement, which also includes the Capital Conservation Buffer set at 2.5% of total risk-weighted assets (RWA) for banks operating within the Maltese financial system.



As per the 2025 other systemically important institutions (O-SIIs) statement of decision published in August, the scores of the four credit institutions identified as O-SIIs for 2025 and the buffer rates applicable from January 2025 are provided in Table 1.1.⁹

Table 1.1
LIST OF IDENTIFIED O-SIIs FOR 2025, CORRESPONDING O-SII SCORES AND EFFECTIVE BUFFER RATES

Institution	Size	Importance	Complexity	Interconnectedness	Total	Fully Loaded Buffer Rate
APS Bank plc	175	480	27	66	748	0.50% ⁽¹⁾
Bank of Valletta plc	694	1,676	189	361	2,921	2.00%
HSBC Bank Malta plc	334	939	84	141	1,498	1.25%
MDB Group Limited	239	205	576	354	1,374	1.00% ⁽¹⁾

Source: Central Bank of Malta.

⁽¹⁾ APS Bank plc and MDB Group Limited are currently following the transitory provisions outlined in Section 2 of the 2025 O-SII Statement of Decision until reaching their fully loaded O-SII buffer.

⁹ The [2025 statement of decision](#) on the identification of O-SIIs and the related capital buffers can be accessed from the Central Bank of Malta website.

1.2.2 Borrower-based measures

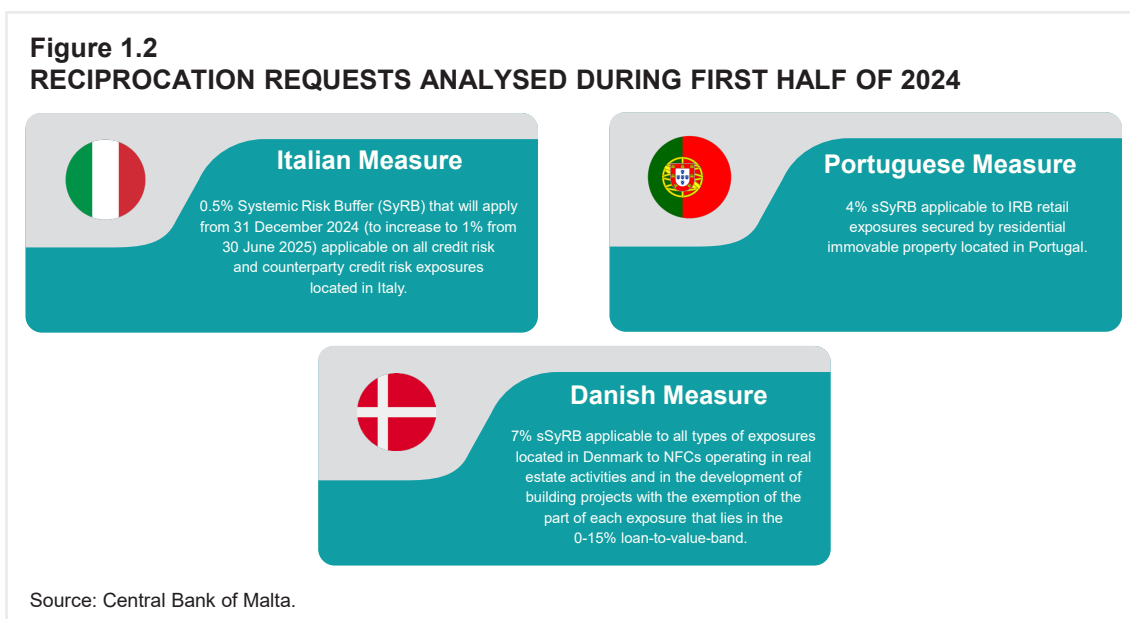
Central Bank of Malta Directive No.16 on borrower-based measures (BBMs) has now entered its sixth year in force. Despite no recent modifications having been implemented to the Directive, the Bank remains vigilant to developments in the domestic RRE market, which may require updates to the Directive to ensure ongoing financial stability.

In addition, during the first half of 2024, the banks successfully completed their internal audit exercises to verify compliance with the Directive as stipulated in the same Directive.

1.2.3 Other measures

Voluntary reciprocation

Reciprocation requests received in the first half of 2024 are summarized in Figure 1.2. A decision not to reciprocate was taken on the basis of inapplicability of the measures, given that Maltese credit institutions do not make use of internal ratings-based (IRB) models to quantify their capital allocation but rather use the standardised approach. Specifically, under the IRB approach, banks can use their internal models to quantify their regulatory capital requirements, in contrast to applying a standardized approach which uses a prescribed risk weight schedule for calculating RWA. Additionally, following internal assessments carried out by the Bank, it was determined that Maltese credit institutions do not have material exposures towards the respective markets. No other changes were affected on the reciprocation stance of the Bank with respect to previously communicated measures recommended for reciprocation by other Member States. These remain currently active.



2. DEVELOPMENTS IN THE BANKING SECTOR

2.1 Core domestic banks

During the first half of 2024, the balance sheet of core domestic banks grew by 0.4%, equivalent to 136.6% of GDP. Despite the modest growth, the balance sheet of core domestic banks continued to reflect an increase in debt securities holdings and a further expansion in the customer loan books. In contrast, these banks continued to decrease their claims with the Eurosystem, down by a third, to account for 9.0% of total assets. Meanwhile, interbank placements remained negligible, accounting for less than 4% of total assets, largely held in the form of deposits with related institutions (see Chart 2.1).

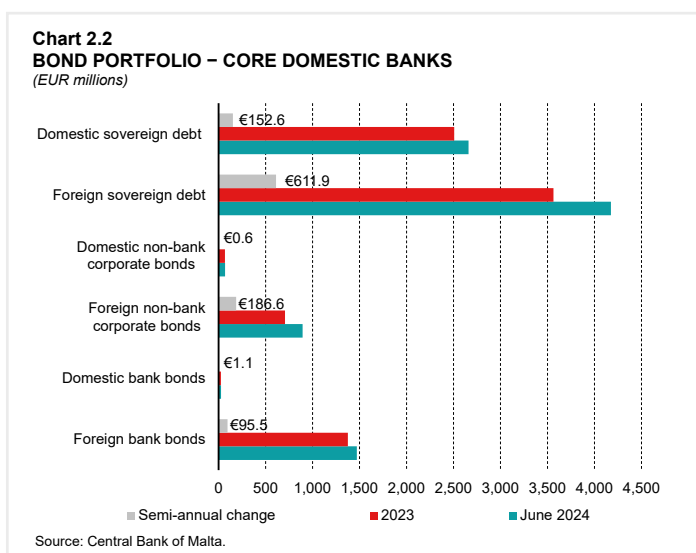
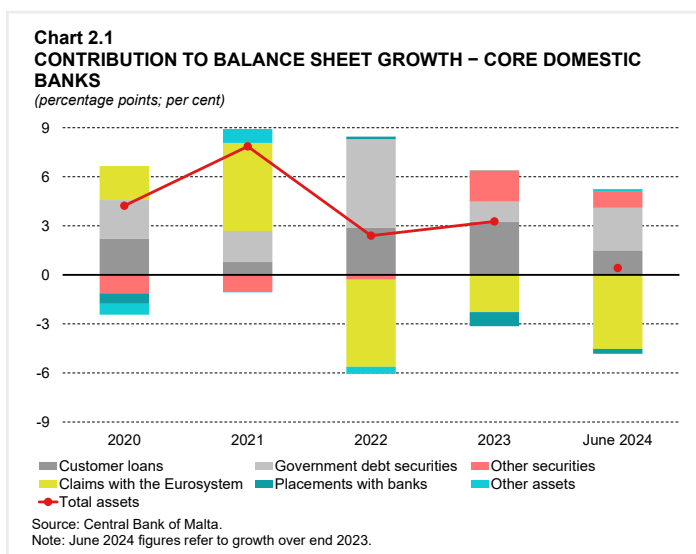
Sovereign bond holdings rose by 12.6% during the first half of the year, registering more than twice the growth rate of 2023. Such increase was mainly concentrated in foreign government bonds, largely issued by European governments, although these banks also increased their investments in domestic government bonds (see Chart 2.2). On aggregate, sovereign debt accounted for almost three fourths of overall bond holdings. Such development partly reflected the banks' bid to lock-in the higher bond yields in anticipation of the expected interest rate

cuts. Holdings of foreign corporate and bank bonds also rose during the first half of the year. In view of these developments, core domestic banks continued to increase their holdings of foreign bonds, which on aggregate accounted for just above 70% of the bond portfolios.

Core domestic banks continued to invest largely in high and medium-rated bonds, which together accounted for more than 90% of the debt securities holdings.¹ High-rated bonds rose by 16.3%, in part driven by the continued shift towards improving the quality of the bond portfolio. Concurrently, holdings of medium-rated bonds also increased, up by 9.7%. Although holdings of low-rated and speculative/unrated bonds also rose, up by 13.0% and 0.2%, respectively, these remained limited to just 7.4% and 1.5% of the overall bond portfolio.

Banks remain potentially vulnerable to sudden adverse movements in bond prices triggered by heightened geopolitical risks and, indirectly, through the broader market reactions for possible delays in central banks' monetary policy actions. However, most of these bonds are measured at amortised cost (AMC), reducing

¹ Investment-grade bonds carrying a rate of AA- or above are considered as 'high-rated bonds'. 'Medium-rated bonds' are those rated between A- and A+, whereas 'low-rated bonds' are those rated between BBB- and BBB+.



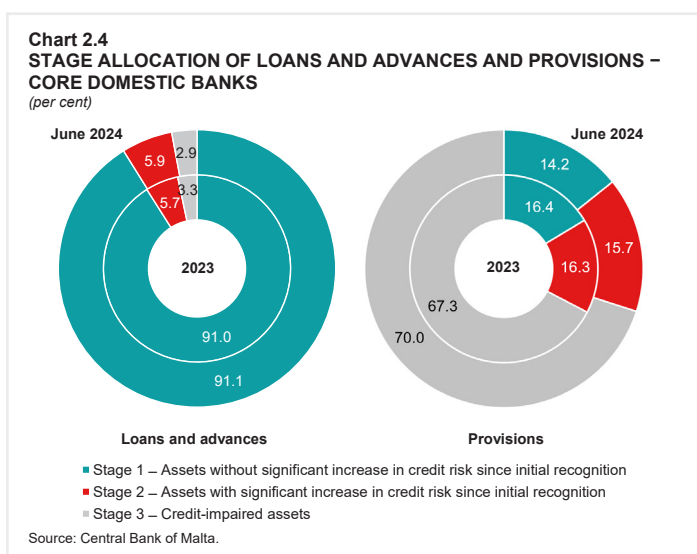
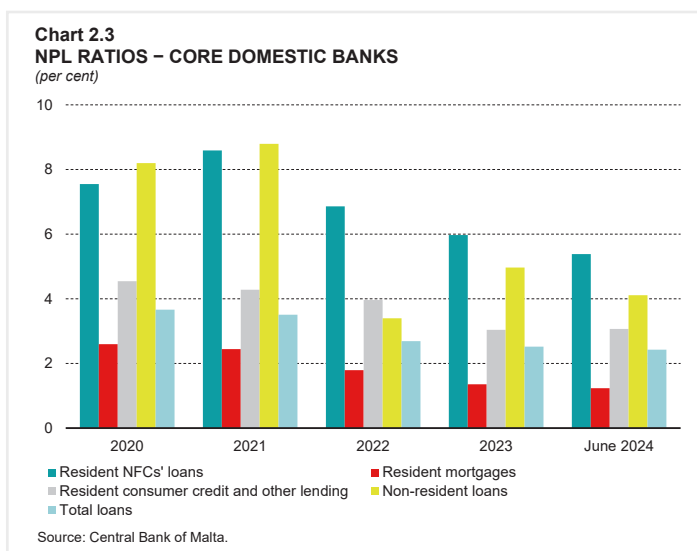
the sensitivity of banks' potential for realised losses owing to market movements. Equity holdings remained relatively stable during the first half of the year, representing just 1.5% of these banks' overall assets.

In the first six months of the year, customer loans grew by 3.1%, representing half of these banks' overall assets. Such growth was exclusively driven by higher resident lending, up by 3.4%, particularly mortgages, which rose by 4.5% in the first six months of the year, compared to the 3.7% in the same period last year. Resident mortgages continued to account for more than 55% of resident customer loans, reinforcing concentration risks in the banks' loan books. Concurrently, resident consumer credit grew at a faster pace when compared to the same period last year, up by 5.7%, although from a much smaller base. Growth in credit to resident NFCs rose by 1.1%, mainly driven by resident lending towards companies operating in real estate and construction activities, and wholesale and retail trade sectors. Meanwhile, non-resident lending fell by 5.5%, reflecting lower loans towards energy-related sectors.

The overall stock of NPLs for this group of banks continued to improve, dropping significantly by 8.4% in the first six months of the year. As a result, the NPL ratio went down by 0.1 percentage points to 2.4% in June 2024 (see Chart 2.3). The drop in the NPL ratio was contained, as overall loans and advances also dropped by 4.9% driven by the lower Eurosystem placements. In fact, excluding such placements, the overall NPL ratio improved by a larger scale, declining by 0.4 percentage points to 2.9%.

The drop in NPLs was largely driven by lower resident NPLs which fell by over 6%. However, as the total resident loans and advances shrank by almost 5%, the resident NPL ratio remained stable at 2.3%. The lower resident NPLs largely stemmed from NFCs, down by 7.4%, mainly those operating in accommodation and food services, as well as the real estate and construction sectors. Coupled with an increase in the outstanding loans, this led to the resident corporate NPL ratio to drop by 0.6 percentage points to 5.4%. Although to a lesser extent, the resident mortgage NPL ratio also declined by a mere 0.1 percentage points to 1.2%, while the NPL ratio for consumer credit and other lending rose marginally to 3.1%. Non-resident NPLs also dropped considerably, down by more than a fifth, largely related to other financial intermediaries (OFIs) and households to a lower extent, as otherwise non-resident corporate NPLs rose. This resulted in the non-resident NPL ratio to decrease by 0.9 percentage points to 4.1%.

The lower NPLs also meant that Stage 3 loans fell to represent just 2.9% of overall loans (see Chart 2.4). However, Stage 2 loans increased by 8.2% to represent



5.9% of the loan book, with the remaining share classified as Stage 1. Banks reduced their provisioning levels by 4.2% in the first half of the year. This drop was reported across all stages, largely those identified as Stage 1, which fell by 16.6% and to a lesser extent Stage 2 and Stage 3, decreasing by 7.7% and 0.4%, respectively. Notwithstanding, the coverage ratio improved by 2.0 percentage points to 45.5% in June 2024, as NPLs fell at a faster pace than provisions. Moreover, when considering the additional collateral securing NPLs, the coverage ratio exceeds the 100% mark, hence implying that credit risk for these banks is more than fully covered.

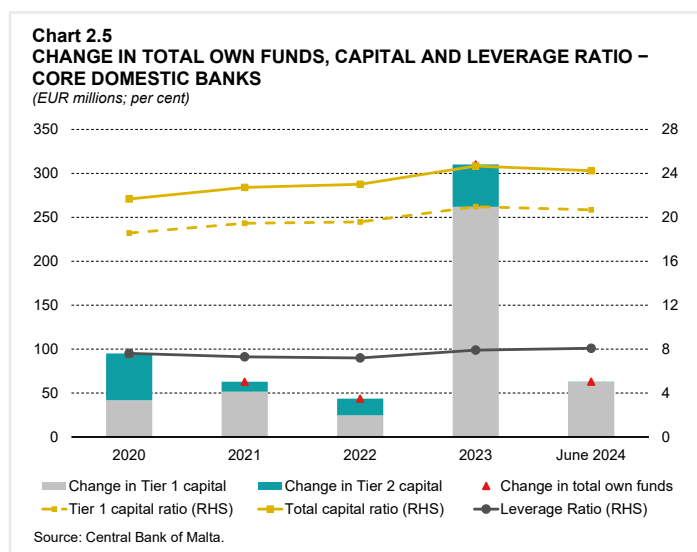
Concurrently, loans with forbearance measures decreased by 8.6% in the first six months of 2024, to now represent just 2.4% of total loans. This drop was entirely due to lower non-performing forborne loans which fell by a fifth, as otherwise still-performing forborne loans rose slightly by 2.6%, accounting for around 58% of overall forborne loans.

The monetary policy tightening had a somewhat negative effect on some banks' ability to attract retail funding, with limited growth in customer deposits reported in 2023 as higher-yielding investment alternatives, such as fixed-income instruments, proved more attractive.² Challenges persisted in the first half of 2024, with customer deposits increasing by only 0.2%. This marginal growth was solely driven by a 0.3% rise in resident customer deposits, primarily from households, while resident deposits from both financial institutions and NFCs declined. Meanwhile, representing just 7.4% of total customer deposits, non-resident deposits decreased by 1.7% primarily due to withdrawals by households.

The high-interest rate environment led the core domestic banks to increase their rates on term deposits, while demand deposits remained largely unremunerated. This affected the composition of deposits, with customers' preference shifting further towards term deposits. These grew by 4.4% in the first half of the year to represent 15.4% of overall deposits. Meanwhile, deposits withdrawable on-demand fell marginally by 0.7%. Customer deposits remained the main funding source, financing about 83% of core domestic banks' assets. However, interbank exposures and other liabilities also increased, although their share remained limited at around 5% collectively. On the other hand, repurchase agreements decreased considerably by three fifths, while Eurosystem funding and debt securities issued remained relatively stable, also in line with the ample liquidity buffers held by these banks.

Despite a notable drop of almost 18 percentage points in the LCR of core domestic banks, it remained robust at 351.2% in June 2024, significantly above the minimum threshold. The lower LCR is the result of higher net liquidity outflows, which increased by 3.4%, in conjunction with a drop of 1.7% in liquid assets, mainly owing to withdrawals of central bank reserves. The net stable funding ratio (NSFR) remained relatively unchanged at around 176%, which is also well-above regulatory requirements, and points towards a stable long-term funding position. The level of unencumbered central bank-eligible counterbalancing capacity (CBC) assets increased significantly by 13.4%. These accounted for almost a third of these banks' balance sheet and 3.2 times their total net liquidity outflows, implying funding could possibly be obtained to meet 110 days of net cash outflows in case of a stressed scenario, corroborating other indicators that signal ample liquidity.

Core domestic banks also maintained their strong capital position, with the total capital ratio still exceeding 24% by June 2024 (see Chart 2.5). However, a marginal



² See [Box 3: The impact of the ECB's monetary policy tightening on deposit flows and interest margins](#).

dip of half a percentage point was recorded in the first six months of the year due to higher RWAs, which increased by 4.1%. This increase partly offset a 2.3% increase in own funds, largely stemming from higher retained earnings. As a result, the risk profile was impacted marginally, with the share of RWAs in total assets increasing by 1.4 percentage points, albeit remaining conservative at 40.2% in June 2024. Meanwhile, at 8.1%, the leverage ratio stood well above the regulatory threshold.

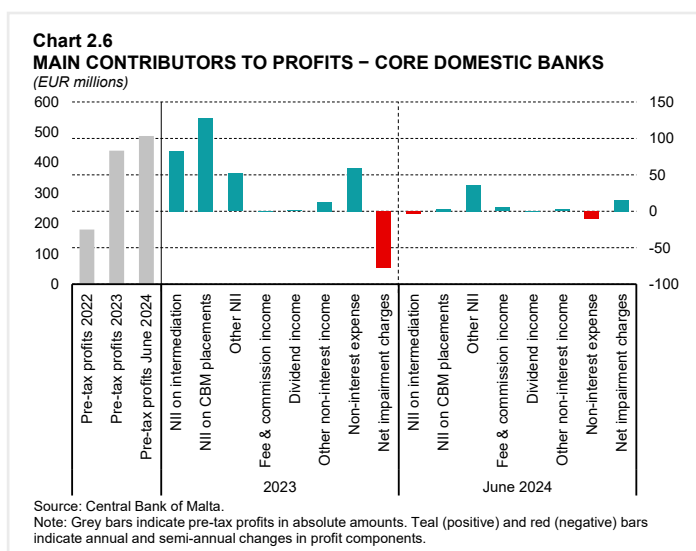
Following, a very profitable 2023, the core domestic banks continued to capitalise on the tight monetary policy, with their four-quarter pre-tax profits reaching almost €490 million as at June 2024 (see Chart 2.6).³

Consequently, the post-tax return on equity (ROE) and ROA for June 2024 stood at 12.4% and 1.1%, compared to 12.0% and 1.0% in December 2023, respectively. Such ratios exceeded those of European peers, which reported a weighted average ROE and ROA of 10.9% and 0.7%, respectively.⁴

The higher interest rate environment continued to boost NII, which rose by 5.0% in the first six months of the year, accounting for 78.9% of total gross income. However, in contrast with developments reported in 2023, whereby NII from placements with the Central Bank of Malta and intermediation activities was the main driver to NII growth, such growth this time stemmed from other NII sources, predominately from government securities. Indeed, during the period under review, NII from placements with the Central Bank of Malta grew by just 2.1% while NII from intermediation dropped marginally, albeit the latter still accounting for the largest portion of gross income. The drop from intermediation net income largely reflected lower interest income from corporates and higher interest expenses from households. On the contrary, NII from OFIs and insurance companies rose to partly reverse the drop in overall NII.

Non-interest income increased by 4.2%, owing to higher trading profits, fees and commissions, income and dividends received. Non-interest expenses rose by 2.3%, driven predominantly by higher staff expenses and other administrative expenses. Concurrently, these banks registered some reversals of net impairment charges, indicating that credit risk has somewhat improved when compared to 2023. The operational cost-to-income ratio decreased from 51.0% in December 2023 to just below 50% in June 2024.

During the first half of the year, this group of banks successfully maintained their profitability, despite ongoing global macroeconomic challenges. They effectively capitalised on the tight monetary policy by investing more heavily in government bonds, thereby securing higher yields. However, NII from intermediation fell slightly due to narrower interest margins. Looking ahead, the anticipated reversal of monetary policy is expected to have limited impact on loan interest rates, as these rates remained relatively stable during the tightening phase. A lower interest rate environment is likely to reduce interest income from Eurosystem placements. Asset quality remains benign, supported by conservative lending practices and robust domestic economy and labour market. Given the ongoing risks and vulnerabilities from external sources, including regulatory and potentially supervisory measures, banks should remain vigilant and continue to preserve capital and liquidity buffers.



³ Profits are based on four-quarter moving sums.

⁴ Source: EBA Risk Dashboard Q2 2024.

BOX 1: FORECASTING SOME KEY FINANCIAL INDICATORS FOR CORE DOMESTIC BANKS IN MALTA¹

This box documents a framework which was recently developed to forecast key balance sheet items of selected Maltese core domestic banks, with particular interest in bank profitability. A Factor-Augmented Vector Autoregression (FAVAR) and a Bayesian Vector Autoregression (BVAR) are employed to produce forecasts for both bank-level and aggregate variables, such as loans, deposits and profitability. Both the FAVAR and BVAR models used in this analysis possess numerous shared characteristics. While the former generates bank-level forecasts, allowing for the examination of dynamics within individual banks' balance sheets, the latter is based on aggregate bank time series and provides forecasts that serve as a cross-check for the FAVAR's output. Bayesian methods are used to estimate probabilistic density forecasts, and to overcome short data samples. The full methodology is explained in Andreani (2024).²

The Maltese core domestic banks represent a category of credit institutions with the highest domestic relevance for Malta's financial system, with balance sheets collectively equivalent to 151% of domestic GDP in 2023. Despite adverse conditions between 2020 and 2022,³ the core domestic banking sector continues to exhibit resilience and sustained recovery, with a 144% profit growth in 2023 compared to the previous year, and an increasing trend in domestic lending.⁴ On the other hand, deposits continue to constitute the primary funding source, financing more than 80% of overall core domestic banks' assets (Central Bank of Malta, 2024).⁵

The relationship between profitability of the international banking sector and financial stability has been extensively analysed and strengthened by various studies (Aspachs et al., 2006; ECB, 2016; TengTeng et al., 2019).⁶ Previous research related to the Maltese banking sector has analysed banks' heterogeneity in generating profits (Camilleri, 2005),⁷ and the significance of real activity cycles in determining banking activity performance (Attard, 2014).⁸

The analysis in this box employs key macroeconomic variables and confidential bank-level time series data to capture the interaction between real macroeconomic aggregates for both Malta and the euro area, along with bank-level information specific to selected Maltese core domestic banks.⁹ All data is in quarterly frequency, using a sample ranging from 2006Q4 to 2023Q3.¹⁰

¹ Written by Dr Michele Andreani, Principal Research Economist within the Financial Stability Research Office of the Central Bank of Malta. The author would like to thank Dr William Gatt Fenech, Ms Wendy Zammit, Mr Alan Cassar, Dr Aaron Grech, Mr Oliver Bonello and Mr Alexander Demarco for their helpful comments and suggestions.

² Andreani, M. (2024). [A forecasting framework for core domestic banks in Malta](#), Central Bank of Malta *Working Paper* WP/05/2024.

³ Such as the COVID-19 pandemic, the monetary policy tightening subsequent to the recent surge in inflation, and bank-specific events which likely have impacted the overall profitability of core domestic banks.

⁴ Placements with the Central Bank have recently emerged as a key component driving interest income and, consequently, banks' earnings.

⁵ Central Bank of Malta (2024). [Financial Stability Report 2023](#).

⁶ Aspachs, O., Goodhart, C., Segoviano, M., Tsomocos, D., Zicchino, L., et al. (2006). Searching for a metric for financial stability. Special paper-LSE financial markets group, 167. ECB (2016). *Financial Stability Review*. TengTeng, X., Kun, H., and Udaibir S, D. (2019). Bank Profitability and Financial Stability. IMF *Working Papers*, WP/19/5.

⁷ Camilleri, S. J. (2005). An analysis of the profitability, risk and growth indicators of banks operating in Malta. *Bank of Valletta Review*, (31).

⁸ Attard, A. A. (2014). Economic, business cycles and banks' profitability: evidence from Maltese banks from the periods 2003-2013. B.Com. thesis, University of Malta.

⁹ Only four core domestic banks out of six are considered in this study, as for two of these banks the data are available only for a shorter time period, which is not ideal for the estimation of a model.

¹⁰ I consider macroeconomic data starting from 2006Q4, as this aligns with the first observation available for bank-level data.

The macroeconomic block utilized in the models comprises real GDP and real house prices for Malta, real GDP and the HICP for the euro area, the monetary policy stance (measured by the Shadow Short Rate, as per Krippner (2020)),¹¹ and the Interest Rate Spread.¹² The inclusion of these variables captures the dynamics between economic activity of both the Maltese and euro area economies, the stance of conventional and unconventional monetary policy, and the banking sector.

Confidential bank-level data is collected for the Maltese core domestic banks and includes key balance sheet variables essential for contributing to the overall profitability of banks. The bank-level block includes a measure of profitability, interest income and expenses, loans to residents, total deposits, total assets, and capital plus reserves. Bank profitability in this context is calculated as the ratio of profits before tax (computed as a four-quarter moving sum of flows) to total assets, which can be conveniently interpreted as the ROA.

Forecasting models

These two models offer distinct perspectives on the core domestic banking environment: while the BVAR, despite being less computationally intensive, is estimated for and produces forecasts for aggregates, the FAVAR enables the examination of bank-level projections, that is, forecasts for each bank balance sheet included in the dataset. Both models are equipped with an identical macroeconomic block, with the main difference in the transformation applied to bank-level data. The BVAR model is estimated using *aggregated* bank-level series, whereas the FAVAR model utilizes four bank-level *factors* derived through Principal Component Analysis.¹³ Both the FAVAR and the BVAR are estimated using Bayesian methods, where *block exogeneity* is imposed on equations concerning euro area variables, under the small country assumption that domestic variables have neither contemporaneous nor lagged effects on the euro area block.

To evaluate the predictive accuracy of the two models, in-sample unconditional forecasts are estimated across many subsamples, and subsequently compared with the observed data, to obtain a metric to quantify forecast errors. To enhance the validation of this measure, a comparison is conducted between the forecasting accuracy of the Vector Autoregression (VAR) models and a naive benchmark model, namely the Random Walk (RW).¹⁴ This comparison assesses whether the VAR models provide added value to forecasts when compared to the simpler RW model. The forecasting evaluation exercise indicates that neither of the two models demonstrates superior performance over the other. While they may yield comparable outcomes from an aggregate perspective, it is noteworthy that one of the two models, namely the FAVAR, possesses the capability to forecast at bank-level. In this instance, the model generates interesting outcomes, demonstrating its capacity to provide reasonably accurate forecasts for selected Maltese core domestic banks' balance sheets items. However, results are heterogeneous across banks. Additional details regarding the forecast evaluation results can be found in Andreani (2024).¹⁵

Moreover, the two models are capable to provide out-of-sample predictions of selected balance sheet items of the banks included in the sample, conditional on the projected macroeconomic scenario and the monetary policy stance. An illustration of how these models can be used in practice follows. In this

¹¹ Krippner, L. (2020). Documentation for Shadow Short Rate estimates.

¹² Computed as the difference between the average interest rate on loans and deposits, which serves as a proxy for the interest rate margin for core domestic banks.

¹³ When estimated over the entire sample, the first four principal components cumulatively represent 61% of the dataset's cumulative explained variance.

¹⁴ The RW model extends the last observed value of a variable into the future.

¹⁵ See footnote 2.

Table 1
MACROECONOMIC CONDITIONING PATHS

Variables	Source
Real GDP (MT)	CBM projections
Real house prices (MT)	CBM projections
Real GDP (EA)	ECB projections, Dec. 2023
HICP (EA)	ECB projections, Dec. 2023
Shadow Short Rate	Capital market, short-term forecasts

Sources: Central Bank of Malta, Economic Analysis Department; ECB Macroeconomic projections; LJK macro finance analysis; ECB Data Portal.

Note: All conditioning paths are in quarterly frequency. Projection horizon: 2023Q4 - 2025Q4.

analysis, a forecasting horizon from 2023Q4 to 2025Q4 is adopted. In this scenario, HICP inflation for the euro area is assumed to reach the target level of 2% by mid-2025, while the real estate market in Malta is assumed to maintain its robust growth trajectory. The monetary policy is assumed to remain steady throughout 2024, with a possible easing in 2025.¹⁶ Finally, Malta's GDP is forecasted to grow at a rate below 5% from 2024 onwards.¹⁷ Table 1 lists the sources of the conditioning paths used to derive the conditional forecasts.

Cross-checking forecasts across models

The conditional forecasts from the two models are illustrated in Charts 1 to 4, specifically comparing the outlooks for selected core domestic banks provided by the FAVAR and the BVAR. The comparison between the two models' output aims to evaluate the extent to which they offer a similar outlook. Aggregated forecasts are computed for the FAVAR to directly compare bank-level forecasts with those from the BVAR.¹⁸ Since the models are estimated using data available up to 2023Q3, the charts also incorporate observations for 2023Q4 and 2024Q1 to further illustrate the forecasting performance.

Both models predict that profitability for the core domestic banks included in the sample will surpass the level recorded prior to the COVID-19 pandemic (see Chart 1), while the interest rate spread is projected to remain stable, although the FAVAR model predicts the spread to peak in 2025Q1 (see Chart 2). Additionally, both loans and deposits are expected to experience growth over the forecast horizon (see Charts 3 and 4, respectively). The credible sets, which represent probability distributions over expected outcomes, largely overlap, except for deposits in the very short-term forecast horizon, indicating similar forecast uncertainty between the two models. Notably, the median forecast for loans from the FAVAR (see Chart 3, black solid line) is strongly in line with actual data for 2023Q4 and 2024Q1 (see Chart 3, teal solid line).

To summarize, the two models predict a stable outlook for the sampled Maltese core domestic banks for the next two years. Profitability is expected to exceed 2019 levels, while the interest rate margin is forecasted to remain stable, accompanied by an increase in the growth of loans and deposits.

¹⁶ This assumption is based on the ECB forecasts for Capital markets – short-term interest rates – Winter, published in March 2024, and is used here for illustration purposes. However, it should be noted that this conditioning path is outdated by the time of this publication.

¹⁷ This indicates that the Maltese economy will continue to expand, albeit at a slower pace compared to the last two years.

¹⁸ In this case, ROA is the weighted average of bank-level ROA, where the weight is the share of total assets for each core domestic bank. Loans and deposits are the year-on-year growth rate of the sum of loans and deposits across banks, respectively.

Chart 1
ROA FORECASTS
(ratio; per cent)

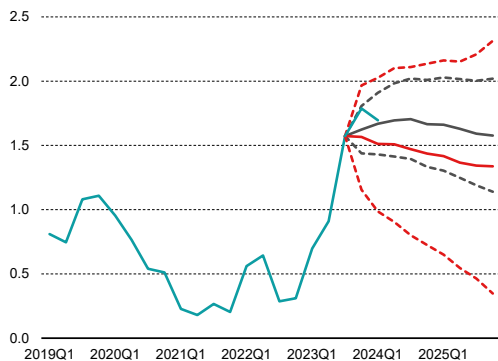


Chart 2
INTEREST RATE SPREAD FORECASTS
(per cent)

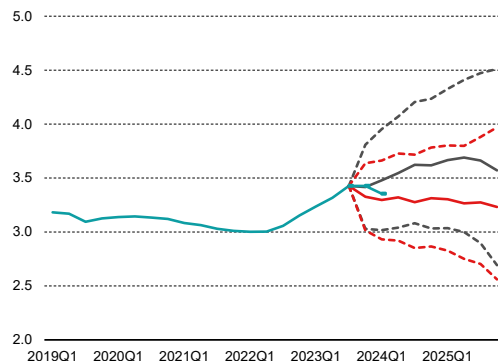


Chart 3
LOANS TO RESIDENTS FORECASTS
(year-on-year growth rate; per cent)

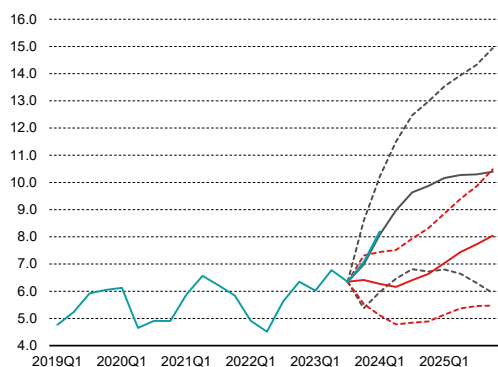
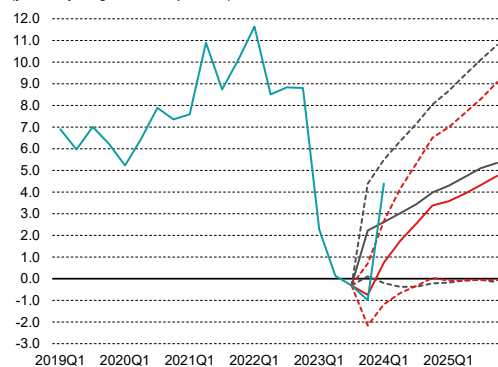


Chart 4
TOTAL DEPOSITS FORECASTS
(year-on-year growth rate; per cent)



— Actual data — FAVAR — BVAR

Note: the dashed lines in red and grey each represent 68% credible sets around the central forecast.

Applications of the framework

The framework presented in this box allows for the formation of an outlook for the core domestic banking system in Malta, which is useful as part of the Central Bank of Malta’s task to monitor and maintain financial stability. These models can be utilised to provide an outlook for the aggregate banking sector, focus on a specific bank of interest, and potentially inform stress testing scenarios. The estimated conditional density forecasts, driven by official macroeconomic projections, can offer a range of plausible trajectories for the Maltese core domestic banking system. Further extensions of these models could include additional balance sheet items and expand the sample of banks involved in the analysis. Finally, these models are sufficiently flexible to accommodate further developments in both local and euro area macroeconomic conditions, as well as future changes in monetary policy decisions.

2.2 Non-core domestic banks

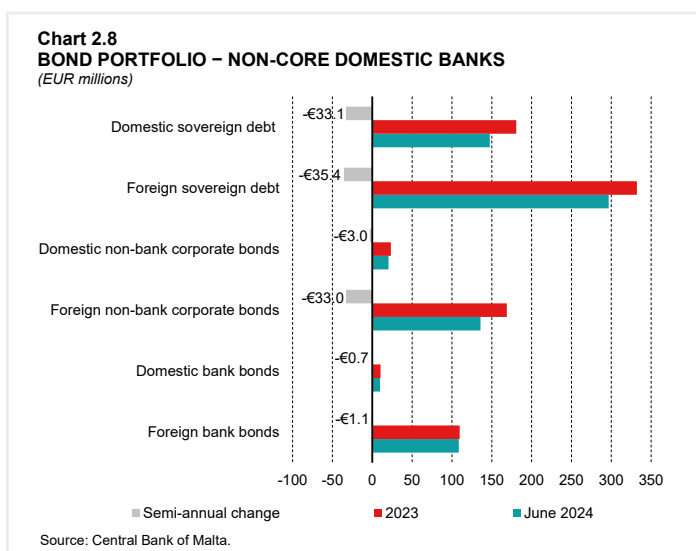
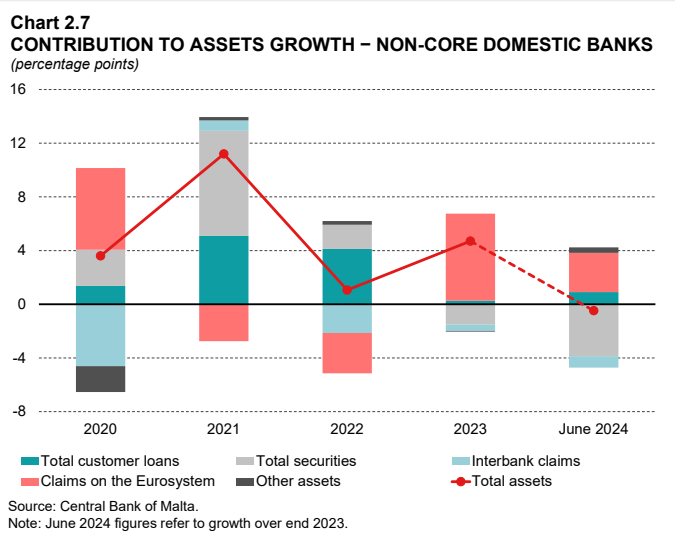
The balance sheet of the non-core domestic banks contracted marginally over 2023, with total assets equivalent to 16.5% of GDP in June 2024. The decline in assets was mainly driven by a reduction in the securities portfolio and, to a lesser extent, in interbank claims. Such developments were partially offset by increased placements with the Central Bank of Malta and customer loans (see Chart 2.7).

The securities portfolio contracted by 13.2%, representing just over a quarter of non-core domestic banks' overall assets. Such drop stemmed predominantly from their bond portfolio, driven mainly by sales, though their equity holdings also fell to represent just above a fifth of overall securities. As shown in Chart 2.8, the decrease in bond holdings occurred across all main components, with a significant drop reported in both foreign and domestic sovereign bonds. Nonetheless, despite falling by 13.4%, such sovereign bond holdings continued to represent most of the debt securities holdings, making up 61.8% of the total bond portfolio. In the first half of 2024, corporate bonds also declined by 18.7%, and so did bank bonds by 1.5%, accounting for 21.7% and 16.5% of the portfolio, respectively. Non-

core domestic banks continued to strengthen the quality of their bond holdings, with medium and high-rated bonds representing 43.2% and 42.8% of the overall bond holdings in June 2024. As a result, the share of investments in low and speculative/unrated bonds, on aggregate, fell compared to December 2023.

Interbank claims contracted by 13.2% in the first half of 2024, representing 5.6% of total assets, which were almost all held with unrelated parties. This decline was driven by lower placements with foreign unrelated banks, although placements with domestic credit institutions also declined. In contrast, they increased their placements with the Central Bank of Malta, up by 12.1% over 2023, to account for 27.3% of assets in June 2024.

In the first half of the year, the loan book expanded by 2.5%, to account for 37.8% of these banks' balance sheet. This growth was driven exclusively by higher resident loans, which increased by 9.0% to account for 52.8% of overall loans (see Chart 2.9). The most substantial contribution came from an increase of 10.3% of resident NFC loans, mainly driven by lending towards companies operating in the construction and real estate activities. Lending towards resident OFIs and households also rose, by a more modest rate, to account for 5.8% and 11.3% of overall customer loans, respectively. Conversely, non-resident customer loans fell



by 4.0% over 2023, driven by lower loans issued towards non-bank financial entities, as otherwise loans to foreign NFCs rose.

The asset quality of the non-core domestic banks' loan portfolio deteriorated slightly, with the NPL ratio rising by 0.1 percentage points to 1.3% in June 2024. This was primarily driven by a 12.5% increase in the stock of NPLs, which was in part offset by higher loans and advances. The increase in NPLs was driven by a significant growth in resident household NPLs of one bank, pushing the overall household NPL ratio to 4.0% in June 2024 from 0.3% six months earlier.

In contrast, NFC NPLs declined by 8.7%, driven exclusively by non-residents, which resulted in the share of overall NPLs to drop by 15.5 percentage points to 69.7%. As a result, the NFC NPL ratio fell by 0.5 percentage points to 3.0%. Excluding placements, the NPL ratio edged up by 0.2 percentage points to 2.2%.

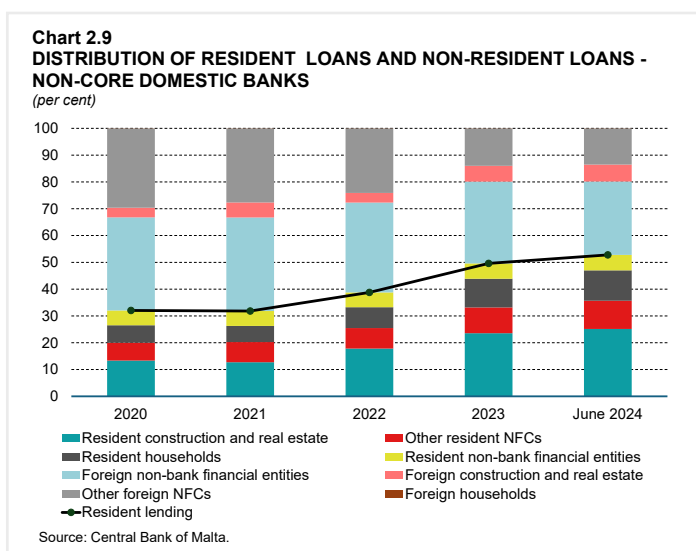
The increase in NPLs brought with it higher provisions, up by 10.8%, driven by higher Stage 2 and Stage 3 provisions. However, such increase fell short of the increase in NPLs, with the coverage ratio deteriorating by 1.0 percentage point to 59.1% in June 2024. At the same time, the forbearance ratio rose marginally to 1.2%, driven mainly by higher non-performing exposures with forbearance measures.

The funding of non-core domestic banks continued to be driven by customer deposits, which rose by 4.6% over 2023, to finance about 78% of their total assets. This growth was driven by resident household deposits, which increased by almost a fifth, reflecting customers' increased preference to place funds in banks offering more attractive returns. Indeed, the overall weighted average interest rate of non-core domestic banks stood at 2.9% in June 2024, much higher than the 0.4% offered by the core domestic banks. Nonetheless, resident customer deposits still accounted for less than a quarter of their total customer deposits, and a small fraction of the overall resident deposits in the banking system. Non-resident customer deposits also increased, although by a more modest rate of 0.8%, mainly on the back of higher NFC deposits. In terms of term structure, the growth in customer deposits was driven exclusively by an increase in withdrawable on-demand deposits, which rose by 12.5% over 2023. At the same time, term deposits declined by 1.7% to 52.6% of deposits by June 2024.

In contrast, interbank funding retreated by almost 30%, financing just 3.6% of total assets. This drop was largely driven by lower placements from unrelated banks, mostly foreign institutions. By June 2024, Eurosystem funding plummeted by around 90%, albeit from a relatively low base, accounting for just 0.3% of overall liabilities. This drop is mainly due to lower participation in the seven-day US dollar (USD) operations, and to a lower extent, other Eurosystem funding such as the main refinancing operations (MROs), longer-term refinancing operations (LTROs) and targeted longer-term refinancing operations (TLTRO III).

Non-core domestic banks maintained strong liquidity positions, with the LCR and NSFR improving by 23.1 percentage points and 1.0 percentage point, respectively, to 428.3% and 192.3%. These strong liquidity levels largely reflected higher liquid assets, mainly in the form of central bank assets.

At the same time, non-core domestic banks also remained well capitalised, with the total capital ratio and the Tier 1 capital ratio standing at 20.7% and 19.6% in June 2024, both down by a marginal 0.1 percentage points when compared to December 2023. This reflected a slightly higher increase in RWA, which was in turn mainly driven by higher credit risk. Consequently, the risk profile of this group of banks deteriorated marginally, with



the total RWA on total assets ratio increasing by a 0.5 percentage points to 50.1%. The leverage ratio stood unchanged at 9.5%.

During the first half of 2024, non-core domestic banks' pre-tax profits declined by 7.0%, leading to a drop in their post-tax ROE and ROA, to 5.2% and 0.5%, respectively. The reduction was primarily driven by a 7.1% drop in non-interest income, largely due to lower trading and non-trading gains, along with a contraction in fees and commissions income. Additionally, higher non-interest expenses also contributed to lower profitability, rising by 2.4% over 2023, mainly due to increased staff costs. On the other hand, NII rose by 2.6%, pushing up its share in total gross income by 2.2 percentage points to 68.4%. Such improvement stemmed exclusively on the back of non-intermediation activities, as otherwise NII earned from these banks' lending portfolio dropped by almost 19%. This came about because of a higher interest payable on household deposits, resulting in the operational cost-to-income ratio to rise from 66.6% in December 2023 to 68.7% in June 2024. Concurrently, net impairment charges dropped by 6.8%.

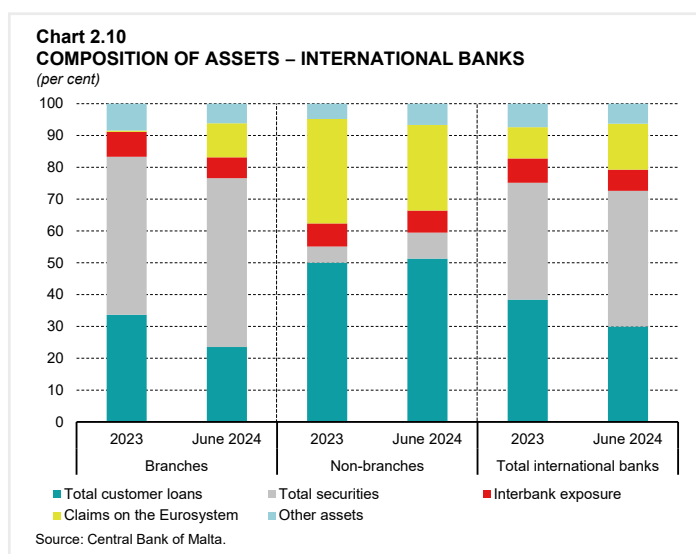
Non-core domestic banks are increasing their focus on the domestic economy in an effort to diversify their operations and better manage the uncertain global economic environment. Recently, these banks have grown their assets by leveraging on the robust economic developments, leading to a notable increase in loans to residents. To this end, ongoing oversight in this respect is crucial to maintain robust asset quality and a healthy balance sheet.

2.3 International banks

After six years of consecutive declines in international banks' assets, these institutions recorded an expansion of nearly 26% in the first half of 2024. As a result, their assets-to-GDP ratio increased by 9.8 percentage points to 57.9%. Most of the growth originated from the branches of foreign banks, as their assets expanded by 36.0%. At the same time, the assets of non-branches rose at a much more modest rate of 1.0% over the same period.

The growth of the branches' balance sheets was primarily driven by an increase in claims held with the Central Bank of Malta, which as at June 2024, represented 10.7% of their assets, an increase of 10.2 percentage points in the first six months of the year (see Chart 2.10). In contrast, the growth reported by the non-branches was spurred by a 62.6% increase in security holdings. Nevertheless, these assets accounted for only a modest 8.2% of their total holdings. Despite these developments, branches continued to hold the bulk of their assets in securities, while non-branches focused on customer loans, both making up over half of their respective total assets in June 2024. The share of interbank assets fell for both branches and non-branches, down by 1.3 percentage points to 6.6%, and by 0.3 percentage points to 6.9% of their respective assets.

Nearly 99% of the securities portfolio of the international banks consisted of debt securities, mostly issued by foreign sovereigns. This mainly reflected the strong investment in Turkish Government bonds by the branches. Notwithstanding, these same branches also increased their investments in US Government bonds. Higher holdings by non-branches were primarily driven by investments in bonds issued by foreign monetary financial institutions (MFIs) and OFIs, which make up the majority of their debt securities. Consequently, the share



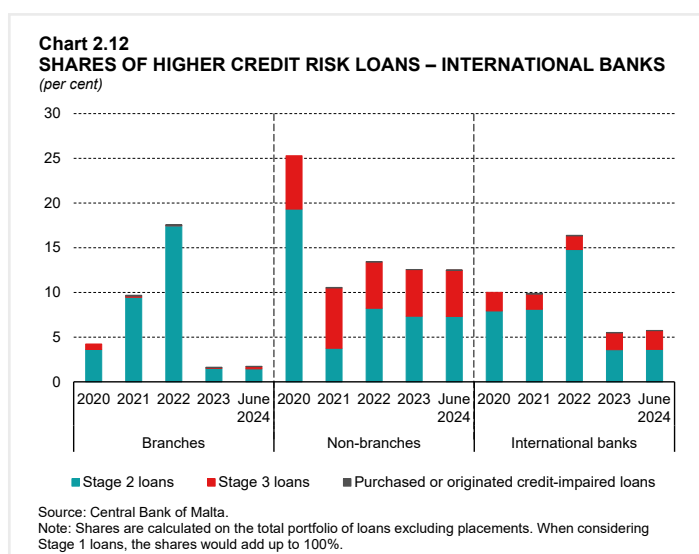
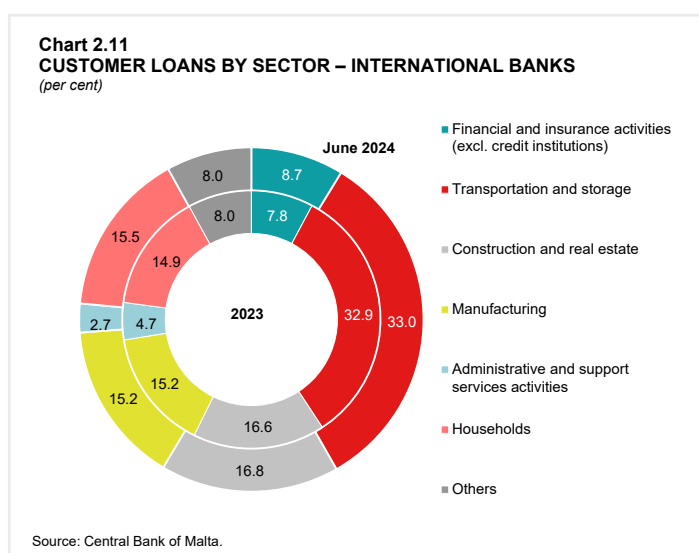
of medium and high-rated bonds among international banks increased slightly, representing 4.1% of the overall bonds held in June 2024.

The developments on the customer loan book were also driven by the branches, which resulted in this asset class to contract by 1.8% for all international banks in the first six months of 2024 (see Chart 2.10). This occurred despite the 3.5% growth reported by non-branches, which largely reflected an increase in loans to non-resident financial and insurance companies. The overall decline was mainly driven by reduced lending to non-resident firms operating in the administrative and support service activities. Otherwise, the composition of the loan book for international banks remained relatively unchanged, with the transportation and storage sector accounting for almost a third of the overall customer loans (see Chart 2.11). Lending remained predominantly focused on non-resident customers, with resident customers making up only 0.5% of total customer loans.

In terms of asset quality, although the NPL ratio improved marginally by 0.1 percentage points to 1.4%, the stock of NPLs grew by an additional 8.3% compared to the end of 2023. This increase was primarily driven by the branches, mostly relating to loans in the administrative and support service activities, and to a much lower extent, in the manufacturing sector. Household NPLs entirely relating to consumer credit rose by 1.9%, driven exclusively by the non-branches. Notwithstanding, the household NPL ratio remained stable at an elevated level of 13.4%, reflecting some of the banks' business models within this cohort. NPLs remained adequately backed by provisions, with a coverage ratio of 118.9%. However, this fell by 6.4 percentage points as the 2.7% increase in provisions, largely with respect to Stage 3 loans, fell short of the increase in NPLs.

Accounting for over 94% of total loans, the loan portfolio continued to be predominantly composed of loans classified as Stage 1, largely in line with the share reported in 2023. Otherwise, higher Stage 3 loans were reported, in part offset by lower Stage 2 loans (see Chart 2.12). After a sharp decline in 2023, the overall forbearance ratio fell further to stand at 1.2% in June 2024.

With respect to capital, non-branches reported a 1.7 percentage point decline in their total capital ratio in the first half of 2024. Despite this drop, at 37.1%, the ratio remained well above the regulatory minimum. The decline was driven by a faster increase in RWA, which rose by 7.5% compared to



total own funds, which expanded by 2.9%. The growth in own funds originated exclusively from Common Equity Tier 1 (CET1) capital. At the same time, the rise in RWAs was mainly due to higher foreign exchange and commodities risks, with a smaller contribution coming from credit risk. Meanwhile, the leverage ratio for international banks remained strong, standing at 29.6% in June 2024, an increase of a 0.8 percentage points compared to December 2023.

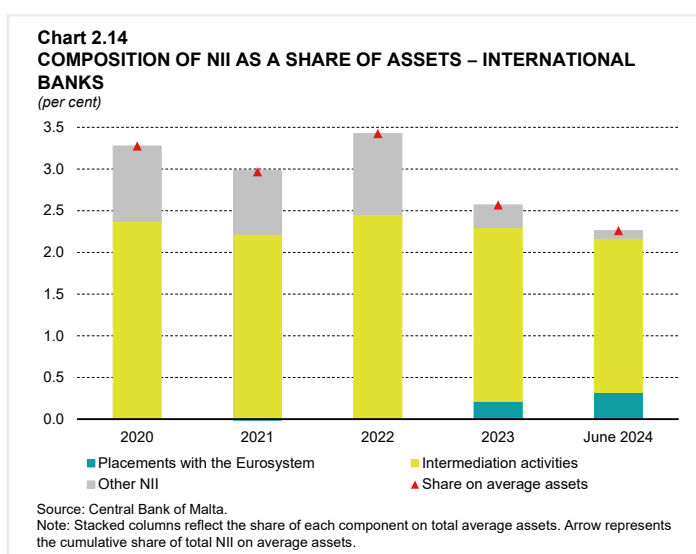
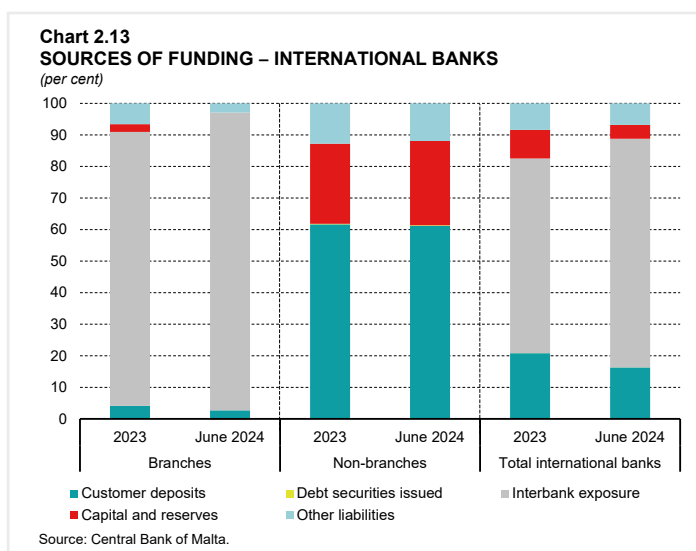
International banks continued to rely heavily on interbank funding to finance their balance sheets, with this source making up over 70% of total assets in June 2024 (see

Chart 2.13). This reliance was driven entirely by the branches as the non-branches continued to avoid this type of funding. Instead, the non-branches financed nearly 62% of their operations through customer deposits primarily from non-resident OFIs and households. Deposits continued to be predominantly time deposits, with withdrawable on-demand deposits making up a smaller share of 13.3% of overall deposits with all international banks in June 2024. This declining trend was observed in both branches and non-branches. Other sources of funding included capital and reserves and other liabilities.

While deteriorating during the first half of 2024, non-branches continued to operate with ample liquidity positions, as evidenced by a robust LCR of 396.8% and an NSFR of 124.7%. The drop in LCR was driven by a reduction in liquid assets, mainly central bank assets and reserves, along with increased liquidity outflows from operational and, to a lesser extent, non-operational deposits.

The overall profitability of international banks declined by 19.5% in the first six months of 2024, resulting in a 0.5 percentage point drop in their post-tax ROA to 2.0%. This contraction in profitability was driven by the branches, which reported a reduction in both NII and non-interest income, and higher non-interest expenses. In contrast, non-branches' profitability increased, driven by a 6.7% rise in NII and an 8.8% increase in non-interest income. Both offset the higher non-interest expenses and a 6.5% increase in net impairment charges.

The overall decline in NII occurred primarily due to lower net interest earned on intermediation activities, which continued to constitute the biggest component of NII for international banks, and equivalent to almost 2% of total average assets (see Chart 2.14). Other NII also fell,



driven by increased expenses from interbank exposures. These both outweighed the nearly 50% increase in net interest earned on placements with the Eurosystem. As expenses outgrew income earned, the cost-to-income ratio of international banks deteriorated by 7.5 percentage points to 63.3% in June 2024.

A possible continued deterioration in NII, potentially driven by further interest rate cuts, coupled with additional increases in operational costs, may continue to pose risks to profitability for international banks going forward. Despite declines in both capital and liquidity positions, these continued to remain robust, providing the resilience needed to absorb potential shocks on their balance sheets. The sustainability of long-term liquidity still warrants close monitoring given that the NSFR stood closer to the minimum regulatory requirement. As a result, exercising a high degree of prudence in these banks' liquidity and credit risk management policies remains vital to mitigate growing risks.

3. STRESS TESTS

The Central Bank of Malta employs various stress testing frameworks to assess the resilience of the banking sector in terms of both solvency and liquidity and against various shocks. These frameworks are always being adapted to reflect the prevailing outlook on risks and vulnerabilities and regulatory changes. In addition, the frameworks are enhanced to explore different risk channels and profiles. To this end, this chapter provides an update on the results of the tests that were run in the *FSR 2023* highlighting any significant changes that occurred in the first half of 2024. The chapter also includes Box 2 which comprises an RST on liquidity.

3.1 Scenario-based solvency stress tests

The macro stress testing (MST) framework is a scenario-based exercise that is run on an annual frequency. The findings of banks' resilience from improved profitability, which is susceptible to inflation and changes in interest rates as reported in the *FSR 2023*, remains relevant.

However, since there have been some developments in the composition of bond holdings and to test for possible weaknesses in these holdings, the credit quality deterioration framework provides an update of the results from the modules of the MST related to bonds. It quantifies credit risk for debt securities held at AMC against a three-notch downgrade in their official credit rating, while sovereign and non-sovereign non-AMC debt securities are assessed via a widening in the credit spread and the application of valuation haircuts, respectively.

3.1.1 Credit quality deterioration in the bond portfolio

During the first half of 2024 there have been some changes in the composition of bond holdings. Table 3.1 summarises the main characteristics of the bond holdings for December 2023 and June 2024.

The overall share of bonds to total assets has increased from 28% in December 2023 to 32% in June 2024 for core domestic banks while that of non-core domestic banks has decreased from 23% to 21%. For international banks, bond holdings remain an insignificant share of total assets, increasing from 0.2% to 3%, mainly through bonds acquired in the first half of 2024 accounted for at fair value (FV). Consequently, while core and non-core domestic banks retain a comparable share of bonds held at AMC of 83% and 71%, respectively, the international banks' share swung from 100% to 5%.

Nevertheless, banks continue to invest in highly rated bonds with over 96% of the holdings at investment grade for non-core domestic banks and 100% for the other two bank categories.

Chart 3.1 presents the results for December 2023 and June 2024 following the credit quality deterioration. In June 2024, the Tier 1 capital ratio would drop by 0.23, 0.37 and 0.13 percentage points, respectively for core domestic, non-core domestic and the three international banks in scope of the test. The Tier 1 capital ratio would

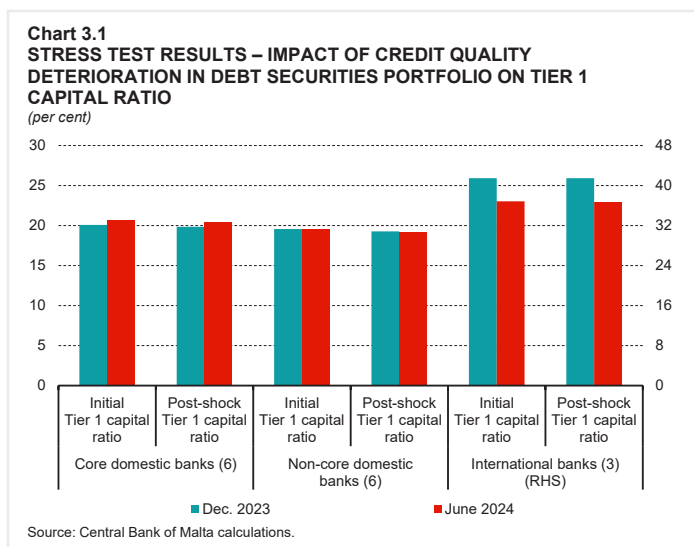
Table 3.1
MAIN CHARACTERISTICS OF THE BOND PORTFOLIO

	Core domestic banks		Non-core domestic		International banks	
	Dec. 2023	June 2024	Dec. 2023	June 2024	Dec. 2023	June 2024
Bonds as a share of total assets	28%	32%	23%	21%	0.2%	3%
Bond held at AMC	84%	83%	77%	71%	100%	5%
Bond held at FV ⁽¹⁾	16%	17%	23%	28%	0%	95%
Bonds at investment grades	100%	100%	95%	96%	100%	100%

Source: Central Bank of Malta.

⁽¹⁾ Bonds at FV can either be accounted for at fair value through profit and loss (FVTPL) or at fair value through other comprehensive income (FVOCI). In June 2024, most bonds were measured at FVOCI, with only two banks making use of the former valuation approach, amounting to around 1% of their respective holdings of bonds.

drop from 20.69% to 20.45%, from 19.61% to 19.24% and from 36.84% to 36.71% for the three respective bank categories. The situation is comparable to that observed in December 2023 for core and non-core domestic banks, with drops in the Tier 1 capital ratio of 0.24 and 0.30 percentage points, respectively. The international banks would not have experienced an impact on their Tier 1 capital ratio in December 2023 but would experience a slight impact in June 2024 due to the change in portfolio composition outlined above. At an individual level, all banks in scope would be able to absorb this impact with the resulting capital ratio exceeding the respective capital requirements.



3.2 Liquidity

The following subsections present an update on the results for June 2024 from the three frameworks assessing the liquidity position of banks. These frameworks are complementary as they focus on different time horizons and benchmarks. The persistent deposit withdrawals (PDW) framework assesses the impact of a bank-run lasting four weeks on the CBC generated from the assumed hierarchy for the liquidation of assets. It has also been extended to act as an RST as presented in Box 2. The LCR and NSFR frameworks assess the absorption of the liquidity requirements over the short-term (less than 30 days) and longer-term (beyond one year), respectively, against the minimum requirement that the respective ratio remains above 100%.

3.2.1 Persistent deposit withdrawals

The PDW framework simulates a bank-run type deposit withdrawals to assess the ability of the CBC to satisfy the liquidity needs of the assumed deposit outflows. Figure 3.1 presents the assumed hierarchy for the composition of CBC made up of liquid assets such as cash, the pledging of eligible bonds as collateral for standard monetary policy operations and, as a last resort, the fire-sale of unencumbered and ineligible bonds. The hierarchy is based on the associated cost of liquidating such assets with cash being ranked as lowest cost due to no remuneration being earned while sale of bonds is deemed high cost as not only are bonds sold at a discount, but any future coupon earnings would also be forgone. Therefore, banks are assumed to make full use of one asset class before liquidating the next in the hierarchy. For more details on

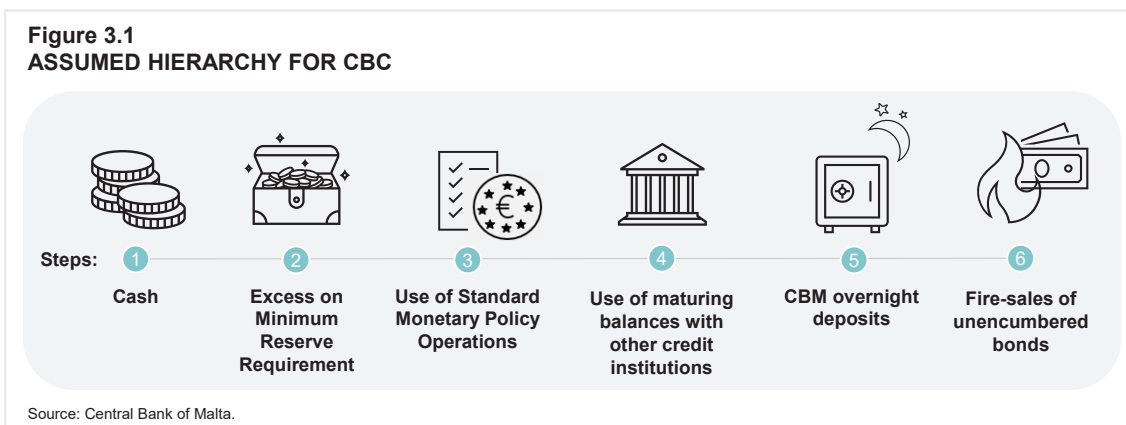


Table 3.2
ENCUMBRANCE AND ECB ELIGIBILITY OF THE BOND

	Core domestic banks		Non-core domestic banks		International banks	
	Dec. 2023	June 2024	Dec. 2023	June 2024	Dec. 2023	June 2024
Unencumbered and eligible	69%	71%	20%	0.5%	38%	19%
Unencumbered and ineligible	16%	13%	29%	46%	62%	0%
Encumbered	15%	16%	51%	53%	0%	81%

Source: Central Bank of Malta.

the framework's methodology and the associated costs considered in ranking asset classes in the assumed hierarchy for the CBC, refer to Section 3.2.1 of the *FSR 2023*.

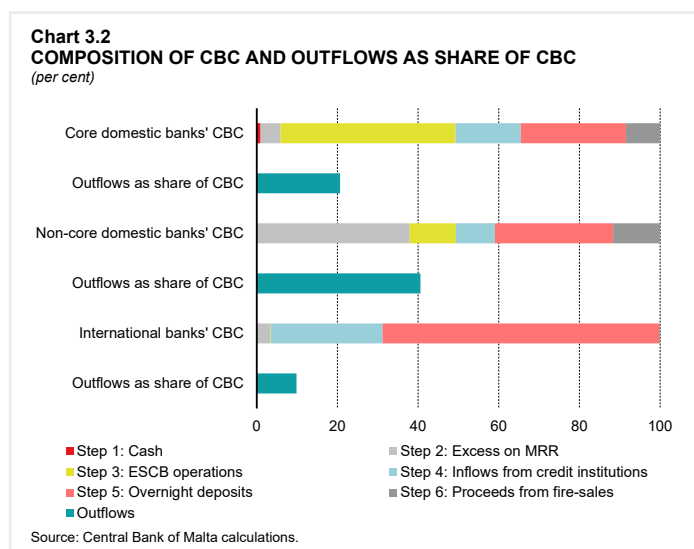
To note that the placements with the Central Bank of Malta have been separated into two steps due to the associated cost of making use of them. Specifically, the excess on the minimum reserve requirement (MRR) is non-remunerated and ranks second after cash, while overnight deposits attract the Deposit Facility Rate and as a major source of income for banks, ranks fifth in the hierarchy.

Moreover, banks can make use of bonds either in step 3 if these are unencumbered and eligible or sold in step 6 if unencumbered but not eligible. Table 3.2 assesses the composition of the bond portfolio in terms of encumbrance and ECB eligibility.

Core domestic banks retain a high share of unencumbered and eligible bonds, increasing from 69% to 71%. These bonds could be pledged for standard monetary policy operations to receive liquidity assistance in the form of short-term loans and thus represent a lower risk in terms of availability of liquidity. The other two categories recorded a reduction in the share of unencumbered and eligible bonds, as a result of the changes in the composition outlined in Table 3.1. Non-core domestic banks reduced their overall holdings, mainly via the sale of eligible bonds while the acquisition of bonds by an international bank has changed the overall distribution of bonds in terms of encumbrance and eligibility. As at June 2024, these two bank categories hold higher shares of bonds that are already encumbered, thereby reducing their capacity to generate liquidity. Non-core domestic banks could generate additional liquidity via the sales of 46% in unencumbered and ineligible bonds (step 6) while international banks could pledge the 19% of unencumbered and eligible bonds (step 3).

The bank-run scenario aims at assessing a bank in isolation and thus features an instantaneous 100% withdrawal of all credit lines and deposits with parent/subsidiaries as well as other credit institutions. It then assumes a steady and regular outflow from sight deposits and fixed term deposits maturing within the test horizon. In general, the PDW framework assumes a run-off of 10% of sight deposits and 25% of fixed term deposits maturing within the test horizon with a higher outflow of 30% for retail deposits sourced from online deposit platforms (ODPs).

Chart 3.2 shows each bank category's composition of the CBC in terms of liquid assets considered in



the hierarchy along with the simulated outflows as a share of CBC. In terms of composition, core domestic banks could rely on 43% of their CBC originating from standard monetary policy operations by pledging ECB eligible assets and a further 31% from the use of placements held with the Central Bank of Malta (5 percentage points in excess on the MRR and a further 26 percentage points from overnight deposits). The CBC of non-core domestic and international banks relies more on placements with the CBM at an overall 67% and 72%, respectively.

The combined outflows of the bank-run scenario for June 2024 amount to 21%, 41% and 10% of the CBC available to the respective category of banks. This is comparable to the results for December 2023 when outflows amounted to 20%, 41% and 11% of CBC. Therefore, banks retain the same ability to withstand the outflows assumed in this framework.

At the individual bank level, two non-core banks run out of CBC due to the assumed full withdrawal of placements within the group and by other credit institutions. The remaining banks would retain an excess of CBC of at least 31%, allowing them to withstand further withdrawals beyond the four-week horizon considered.

While households and, to a lesser extent, NFCs would be the main depositors withdrawing funds in a bank-run scenario, there are various episodes of liquidity strains that could cause groups of depositors to simultaneously withdraw their funds. Box 2 introduces an RST based on the PDW framework that assesses the break point withdrawal rate for specific sectors, both in isolation and combined, that would cause banks to run out of CBC and become illiquid.

BOX 2: REVERSE STRESS TESTS¹

Introduction

Stress tests rely on pre-set hypothetical stressed scenarios and quantify the outcome or impact of this scenario on a particular bank or a group thereof. In an RST, the outcome is pre-determined, and the adversity of the hypothetical scenario keeps changing until the target outcome is reached. This outcome could be a breach of capital requirements, exhausting liquidity buffers or any other events that could cause significant cost to an institution. Hence a failure or a negative outcome for a bank always occurs at the end of an RST. In other words, an RST seeks to discover what it would take for a particular bank to fail or to breach a regulatory target. The aim is to then strengthen banks' resilience through a backward analysis of the vulnerabilities that could lead to this outcome.

RSTs are nowadays embedded in risk management, initially as part of the measures adopted in Regulation (EU) 575/2013 on capital requirements in response to the Great Financial Crisis, and thereafter in any guidelines on best practices. In the respective guidelines issued by the ECB in 2018 on the [Internal Capital Adequacy Assessment Process](#) and [Internal Liquidity Adequacy Assessment Process](#), RSTs are not only a tool to assess vulnerabilities but also act as the starting point for assessing the viability of recovery plans.

This box considers two sets of RSTs that build on the PDW framework to identify the break-point withdrawal rate that would cause banks to run out of their CBC. The first set of scenarios assumes withdrawals from deposits held by households, NFCs and/or financial institutions – both in isolation and combined – to detect the severity of bank-run scenario necessary to cause systemic risks. The second set of scenarios assumes withdrawals from deposits sourced from ODPs to assess the risk that these funds may be temporary in nature, whereby depositors do not roll-over their investment but instead deposit these funds elsewhere after maturity.

RST 1: Depletion of CBC from withdrawals of short-term deposits

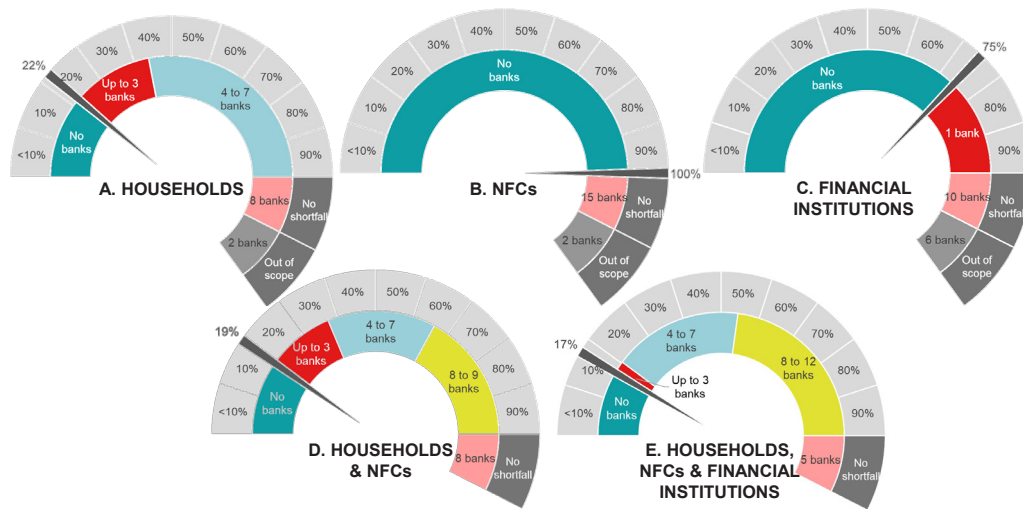
The first set of RSTs presented in this box assumes as outcome that banks run out of the CBC as defined in the PDW framework upon consequent deposit withdrawals. The aim is to work backwards the breakpoint run-off rate from different clusters of depositors that would cause banks to deplete their liquidity buffer. The analysis focuses on short-term deposits, that is sight and term deposits fixed for less than three months, as these can be withdrawn with relative ease.

Figure 1 is composed of five gauges, with the top row showing results for the withdrawals by the three depositor clusters in isolation and the bottom row showing their combined impact. Each gauge represents buckets of withdrawal rates (from below 10% till up to 100%) and the gauge's needle indicates the breakpoint withdrawal rate at which the first bank would run out of CBC.

The top left gauge in panel A shows the impact from withdrawals of short-term household deposits, which amount to 58% of total deposits. The withdrawal of 22% of short-term household deposits would cause the first bank to run out of CBC. Increasing this rate to 44% would cause up to three banks to run out of their respective CBC (red segment of gauge). Out of the 17 banks subject to the RST, there are eight banks that would be able to withstand the full withdrawal of household deposits without depleting the CBC (pink segment). The latter banks have high-levels of CBC that would be able to withstand the full withdrawal of their respective short-term household deposits. A further two banks in the sample would not be impacted, as these do not hold any deposits sourced from households (grey segment). This implies that these two banks do not rely on short-term household deposits as a source of funding.

¹ Prepared by Mr David Stephen Law, Senior Expert and Ms Julieth Paola Vasquez Vargas, Quantitative Analyst, both within the Policy Crisis Management and Stress Testing Department. The authors would like to thank Ms Christine Balzan – Manager, Policy Crisis Management and Stress Testing Department and Mr Alan Cassar – Chief Officer, Financial Stability and Statistics Division for their valuable suggestions.

Figure 1
RST – BREAKPOINT WITHDRAWAL RATE FOR FIVE GROUPS OF DEPOSITORS



Panel B shows the results for the RST applied to deposits by NFCs which amount to 14% of total deposits. In this case, none of the banks would run out of the CBC as 15 banks have a CBC that is greater than the volume of short-term NFC deposits, in addition to two banks that do not have any deposits placed by NFCs.

Panel C shows instead the results for the RST applied to deposits placed by financial institutions which amount to 15% of total deposits. In this case one bank would run out of CBC with run-off rates of 75% or higher, ten banks would not deplete their CBC even assuming a full withdrawal of deposits from financial institutions and five banks do not have deposits sourced from this sector.

Panel D shows the impact from withdrawals of deposits by households and NFCs which amount to 72% of total deposits. Nevertheless, the picture is not substantially different from the impact of households alone as only 20% of these deposits originate from NFCs. The breakpoint run-off rate stands at 19% (instead of 22%), affecting up to three banks at run-off rates at 37% (red segment) and up to seven banks at run-off rates of at least 66% (light blue segment).

Finally, panel E shows the combined impact from withdrawals of short-term deposits by households, NFCs and financial institutions, which combined amount to 87% of total deposits.² The run-off rates required to deplete the CBC are lower at 17% for the breakpoint, 20% for up to the three banks (red segment) and 54% for up to seven banks (light blue segment). The higher impact in this scenario can once again be attributed to the larger deposit base being considered, as the volume of outflows are not substantially different than those in panel A with withdrawals from household deposits only. Consequently, the resulting breaking point is lowered further from 22% to 17%. The only exception in which deposits withdrawals are higher than those for household only, is for one of the ten banks that could withstand, in isolation, the full withdrawal of either deposits by NFCs or financial institutions as well as over 65% of deposit withdrawals by households; but would experience a breakpoint run-off rate of around 20% in this scenario combining all three groups of depositors.

² The RST focuses on three clusters which combined amount to 87% of total deposits. The remaining 13% are mainly long-term deposits or additional short-term deposits to other clusters of depositors.

The results therefore show that banks have a higher reliance on short-term household deposits as a main source of funding amounting to 59% of total deposits or 82% of household deposits, i.e. only 18% of household deposits are fixed for a term beyond three months. However, under the severe scenarios of combined withdrawals from NFCs and more so with financial institutions, banks could experience additional liquidity strains to fund these outflows. Therefore, to account for this sensitivity to financial institutions, the PDW framework regularly tests the bank-run scenario targeting mainly households and NFCs but also assuming the full withdrawal of interbank and intragroup funding to assess the resilience of credit institutions in isolation. This would be one of the more extreme assumptions in the PDW framework, which is essential for the detection of any underlying systemic risks.

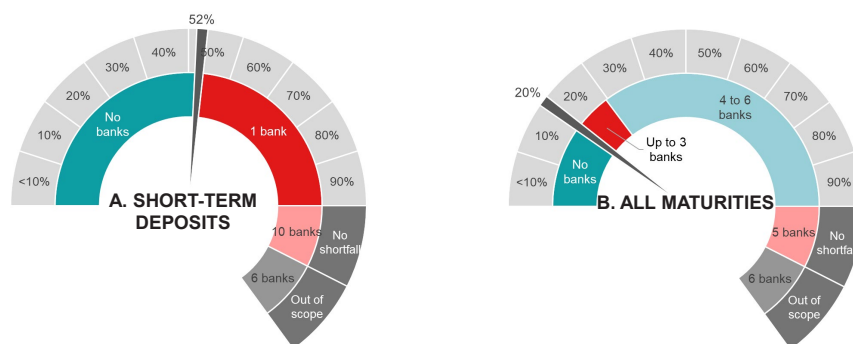
RST 2: Depletion of CBC from withdrawal of deposits sourced from ODPs

The second set of RSTs assumes as an outcome that any deposits sourced from ODPs would be withdrawn. The severe outcome being assessed here is roll-over risk, with potentially one of the sources of funding for banks being discontinued. The risk of immediate withdrawal is highest for short-term deposits (sight deposits and term deposits fixed for up to three months). As at June 2024, only 10% of total deposits from ODPs, or 1% of total deposits, are short-term. The remaining 90% of deposits sourced from ODPs, or 7% of total deposits, have a fixed term beyond three months. The risk of immediate withdrawals can be extended to all maturities by assuming that clients want immediate access to their funds and are willing to incur any costs associated with early withdrawal of term deposits. If upon maturity banks retain a similar composition of CBC, the latter scenario can also be interpreted as an assessment for roll-over risk whereby these depositors would move their funds elsewhere upon maturity, reflecting the temporary nature of deposits sourced from ODPs.

Figure 2 presents the outcome of the exercise for short-term deposits (sight and term deposits fixed for up to three months) and across all maturities.

There are 11 banks that source deposits from ODPs, ranging between 1% and 30% of their total deposits. As shown in panel A of Figure 2, only one bank would run out of CBC if at least 52% of short-term deposits were withdrawn. Moving to panel B and assuming withdrawals across all maturities, the number of banks with CBC in excess of deposits sourced from ODPs goes down from ten to five (pink segment in both panels), with run off rates of 20% for the breakpoint shown by the speedometer's needle, 30% for the first three banks (red segment) and higher for the remaining banks (light blue segment). However, since most of these deposits are fixed for a term exceeding three months, banks would have enough time to plan ahead for these maturities and ensure alternative sources of funding.

Figure 2
RST – BREAKPOINT WITHDRAWALS FROM ODPs



Source: Central Bank of Malta.

3.2.2 Liquidity coverage ratio

The LCR framework further assesses the impact of deposit outflows occurring over a 30-day horizon against the 100% minimum regulatory requirement for the LCR. The LCR is defined as the ratio of the buffer of HQLA to net liquidity outflows. Table 3.3 summarises the scenarios which consist of a baseline and three adverse scenarios with a comparison of the results for December 2023 and June 2024.

The results of the framework for core domestic banks for June 2024 are comparable to those for December 2023, across both the baseline and all adverse scenarios. The initial LCR is slightly lower at 360% compared to 369% in December due to a decrease of 2% in the HQLA buffer and a slight increase of under 1% in the net liquidity outflows. This discrepancy in the starting point trickles down into the impact of the adverse scenarios with comparable but slightly lower resulting LCR under the adverse scenario. The largest drop in the ratio is observed under scenario 3 with the LCR dropping at most to 142% from the withdrawal of committed facilities under Adverse Scenario 3, compared to 156% in December.

Meanwhile, non-core domestic banks experienced an increase in their initial LCR at 458% compared to 397% in December. This is due to an increase in the HQLA buffer of 9.5% while the net liquidity outflows remains stable. This growth in the starting point LCR directly affects the improvement observed under all adverse scenarios with the largest drop in the LCR occurring under adverse scenario 2, which is characterised by higher withdrawals from resident and non-resident time deposits, reaching 208% compared to 159% in December.

International banks also experienced a decline in the baseline scenario from 578% in December 2023 to 448% in June 2024. This is due to the combined impact of a 17% reduction in the liquidity buffer and an 18% increase in net liquidity outflows. Similar to other bank categories, the change in baseline is mostly responsible for the changes in results under the adverse scenarios for the two reference dates. The largest drop in the LCR is observed under adverse scenario 2 to reach 241% from 292% in December.

At the individual bank level, weaknesses are identified across three banks. Compared to December 2023, one bank has improved its initial LCR in June 2024 and would now be able to sustain an LCR above the minimum requirement in all adverse scenarios.

Scenario	Description	Core domestic banks		Non-core domestic banks		International banks	
		Dec. 2023	June 2024	Dec. 2023	June 2024	Dec. 2023	June 2024
Baseline	Haircuts and outflow/inflow rates as prescribed by the (EU) 2015/61	369%	360%	397%	458%	579%	448%
Adverse: Scenario 1	Higher outflows compared to the (EU) 2015/61	200%	196%	241%	279%	338%	264%
Scenario 2	Scenario 1 with additional withdrawals from both resident and non-resident time deposits	181%	177%	159%	208%	292%	241%
Scenario 3	Baseline scenario with full withdrawal of committed facilities to NFCs and households	156%	142%	334%	407%	553%	423%

Source: Central Bank of Malta.

3.2.3 NSFR

The NSFR framework complements the findings of the previous two liquidity stress tests by focusing on the longer-term liquidity position. The ratio assesses the available stable funding (ASF) as capital instruments and liabilities that will remain with the institution for more than one year and the required stable funding (RSF) as assets and off-balance sheet exposures requiring liquidity. Table 3.4 summarises the scenarios of the NSFR framework and compares the results of June 2024 with December 2023.

Like the LCR results, the changes in the baseline are mainly responsible for the impact observed under the adverse scenarios. For core domestic banks the initial NSFR improves by only 1 percentage point from 177% to 178% and has similar results across adverse scenarios 1, 2 and 3 with a divergence of at most a percentage point. Under adverse scenario 4, the NSFR drops to 129% compared to 131% in December due to a slight increase in committed facilities.

Similarly for non-core domestic banks, the initial NSFR improves by 6 percentage points to 206% from 198% and drops at most to 157% under adverse scenario 3 (which builds on 1 and 2) compared to 154% in December 2023.

The starting NSFR for international banks has decreased by 63 percentage points to reach 139% in June 2024 down from 202% in December 2023. The drop can be attributed to the increase in the RSF of 15% compared to the previous year and is mainly linked to the acquisition of bonds discussed in Section 3.1. The NSFR drops at most to 116% under adverse scenario 3 compared to 156% in December and, while remaining above the minimum requirement, is closer to the 100% threshold.

At the individual bank level, there are updates in the results for two banks compared to December 2023. The first retains a comparable initial NSFR and impact under adverse scenario 4, which assumes the full withdrawal of committed facilities. The other bank improved its starting NSFR substantially and would surpass the NSFR requirement under all adverse scenarios.

Table 3.4

DESCRIPTION OF NSFR FRAMEWORK'S BASELINE AND ADVERSE SCENARIOS

Scenario	Description	Core domestic banks		Non-core domestic banks		International banks	
		Dec. 2023	June 2024	Dec. 2023	June 2024	Dec. 2023	June 2024
Baseline	ASF and RSF factors as prescribed by the Regulation (EU) 2019/876	177%	178%	198%	206%	202%	139%
Adverse:							
Scenario 1	A higher run-off for retail and wholesale deposits impacting the availability of stable funding	164%	165%	182%	189%	185%	132%
Scenario 2	Adverse scenario 1 with some loans become non-performing requiring more stable funding to support them impacting the RSF	144%	144%	158%	161%	160%	118%
Scenario 3	Adverse scenario 2 with pressure in the market reducing the value of bonds and equities (Level 1, 2A and 2B HQLA and other securities) implying the need for further stable funding	142%	142%	154%	157%	156%	116%
Scenario 4	Baseline with full withdrawal of committed facilities to NFCs and households (Similar to LCR adverse scenario 3)	131%	129%	157%	162%	158%	134%

Source: Central Bank of Malta.

3.3 Interest rate risk in the banking book

The interest rate risk in the banking book (IRRBB) framework analyses the impact of changes in interest rates under the six scenarios prescribed in Annex 2 of the [2016 Basel Committee on Banking Supervision standards](#). These scenarios are also incorporated in the EBA Implementing Technical Standards (ITS) on IRRBB ([EBA/ITS/2023/03](#)) and corresponding templates as part of EBA [reporting framework 3.4](#).

These scenarios consist of a parallel shift upwards and downwards of the yield curve as at the reference date, an increase and a decrease in the short rate end of the curve and two composite shifts in the short and long-term rates referred to as the *steepener* and *flattener* scenarios. All six scenarios affect the term structure of the yield curve and differ in terms of the currency in which the instruments are denominated. The exercise focuses only on EUR, GBP and USD as the material currencies in which the banking book is denominated, the latter two being the most relevant non-EUR currencies for all three banking categories. Indeed, 99%, 97% and 85% of the banking book of core domestic, non-core domestic banks and international banks is denominated in these three currencies. These are comparable to the respective shares of these three currencies reported in December 2023 at 99%, 98% and 88% of the banking book. EUR remains the most relevant currency representing 96%, 79% and 78% of the banking book of these three bank categories, respectively.

The framework assesses the immediate impact of changes in interest rates under these scenarios to profitability via the NII and the revaluation of bonds held by banks measured at FV.

Table 3.5 presents the impact on the three bank categories' Tier 1 capital ratios from changes in NII and bond revaluations under the three scenarios, after applying the corporate tax rate of 35% on banks' profits.¹

		Core domestic banks	Non-core domestic banks	International banks
Initial Tier 1 capital ratio		20.69	19.61	36.84
Parallel up	<i>NII</i>	2.31	1.91	1.79
	<i>Revaluations</i>	-0.59	-1.07	-0.20
	Post-shock Tier 1 capital ratio	22.41	20.45	38.44
Parallel down	<i>NII</i>	-1.84	-1.81	-1.64
	<i>Revaluations</i>	0.67	1.40	0.22
	Post-shock Tier 1 capital ratio	19.51	19.20	35.42
Flattener	<i>NII</i>	2.16	1.70	1.70
	<i>Revaluations</i>	-0.13	0.07	-0.05
	Post-shock Tier 1 capital ratio	22.72	21.38	38.50
Steepener	<i>NII</i>	-1.38	-1.31	-1.26
	<i>Revaluations</i>	0.03	-0.24	0.01
	Post-shock Tier 1 capital ratio	19.33	18.07	35.60
Short rate up	<i>NII</i>	2.72	2.14	2.13
	<i>Revaluations</i>	-0.30	-0.30	-0.10
	Post-shock Tier 1 capital ratio	23.10	21.45	38.87
Short rate down	<i>NII</i>	-2.15	-2.03	-1.95
	<i>Revaluations</i>	0.32	0.31	0.11
	Post-shock Tier 1 capital ratio	18.85	17.89	35.00

Source: Central Bank of Malta calculations.

¹ Banks may apply a lower tax rate if in previous years they have accumulated deferred tax assets; however, for the scope of this stress test, deferred tax assets are not being considered. Revaluations for FVOCI are not subject to taxes but charged directly to capital.

While core domestic banks retain a stable share of bonds at FV at 17% of total bonds, there has been a change in the share of bonds accounted at FV for non-core domestic and international banks increasing from 23% and 0% in December 2023 to 28% and 95% in June 2023. This increase in FV bonds is mainly due to the acquisition of bonds that occurred in the first half of 2024. Consequently, unlike the results for December 2023 which showed negligible contributions of revaluations to the overall impact of each scenario, the results shown in Table 3.5 are also affected by revaluations of bonds held at FV.

The three scenarios featuring short-term increases in interest rates yield positive results for all three bank categories. The most positive impact is experienced under the *short rate up* scenario under which the Tier 1 capital ratio increases by 2.41, 1.84 and 2.03 percentage points for core domestic, non-core domestic and international banks, respectively. Conversely, the scenarios featuring drops in short-term interest rates yield a lowering of the capital ratio compared to the June 2024 position. The least positive impact is experienced under the *short rate down* scenario, where the Tier 1 capital ratio drops by -1.83, -1.72 and -1.85 percentage points, respectively. Nevertheless, the capital ratios remain well above the applicable capital requirements.

4. INSURANCE COMPANIES AND INVESTMENT FUNDS

4.1 The domestic insurance companies

In the first half of 2024, the insurance sector experienced little change in terms of licensing, with the number of licensed companies remaining at 68. The number of domestically-relevant insurers remained unchanged at ten, with their assets expanding by 2.2%, reaching €3.8 billion, or 17.5% of GDP.¹

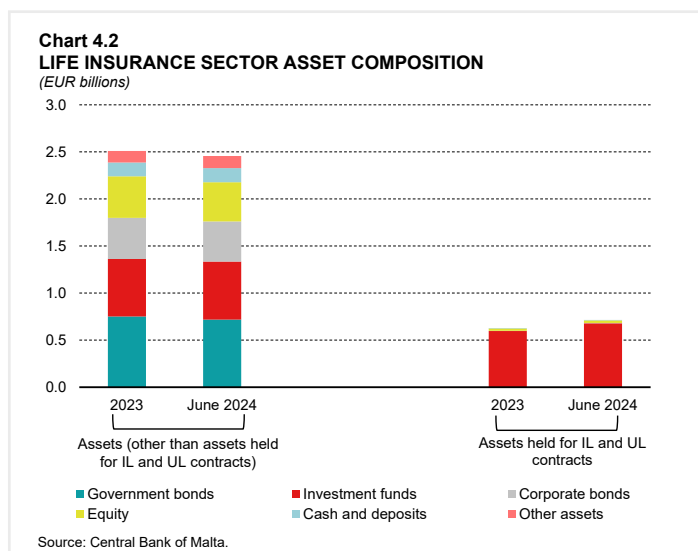
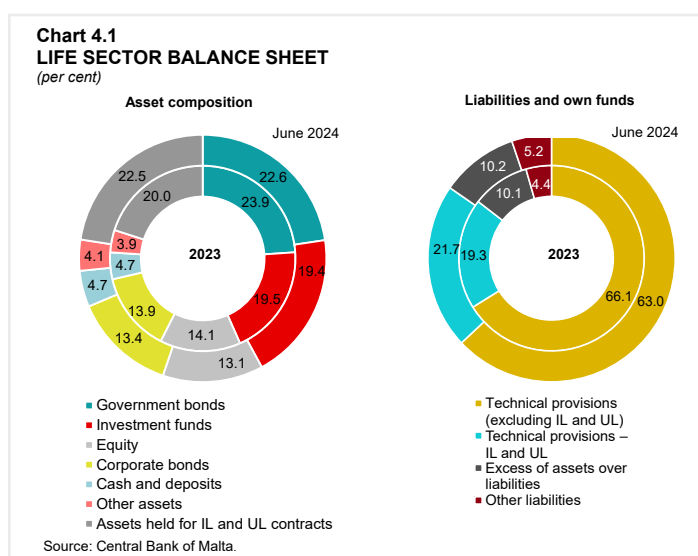
4.1.1 Domestically-relevant life insurance companies

The life insurance sector's balance sheet grew by 1.0%, reaching €3.2 billion, which is equivalent to 14.7% of GDP. This growth was driven by index-linked (IL) and unit-linked (UL) contracts, with assets held on behalf of these contracts rising by 13.6% to €715 million.² Meanwhile, assets excluding IL and UL holdings totalled €2.5 billion, representing a 2.1% decrease compared to December 2023 (see Chart 4.1).

Asset composition

Most assets allocated to IL and UL contracts were primarily invested in investment funds, which constituted 95% of their holdings (see Chart 4.2). The remaining investments were allocated in equities and, to a lesser extent, in bond holdings. While all asset classes have grown compared to December 2023, the value of the participations in investment funds for these contracts increased by 13.7%. This increase was largely driven by domestic debt funds and equity funds from outside the euro area.

Assets excluding IL and UL contracts consisted of holdings for other classes of life insurance, and assets held on behalf of the insurers themselves. Approximately 47% of such assets are invested in fixed-income securities (see Chart 4.2). However, in the first half of 2024, holdings in government bonds declined by 4.5%, driven primarily by a significant 19.5% drop in Malta Government Stocks (MGS). Similarly, corporate bond holdings fell by 2.2%, particularly in non-euro area markets.



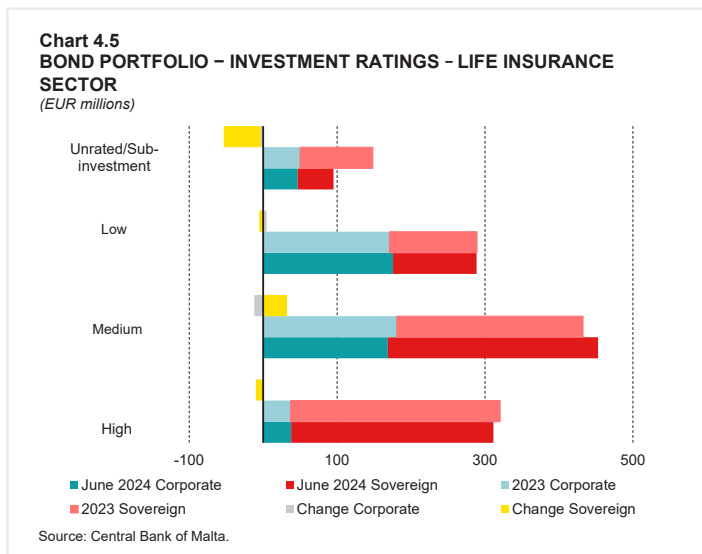
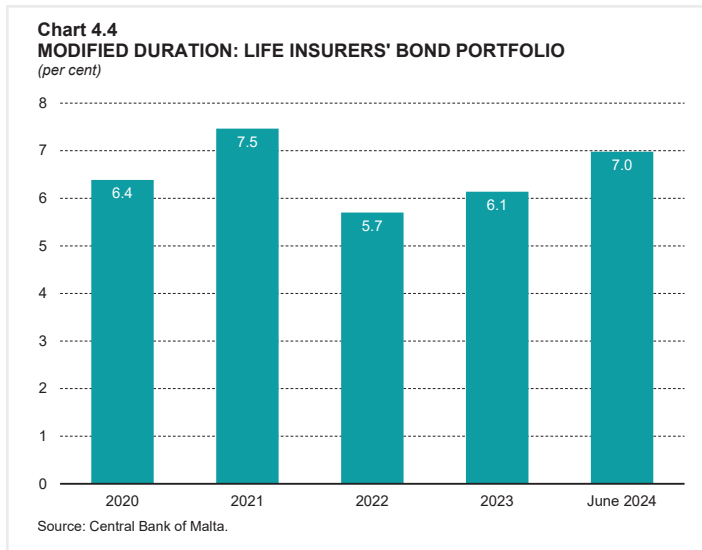
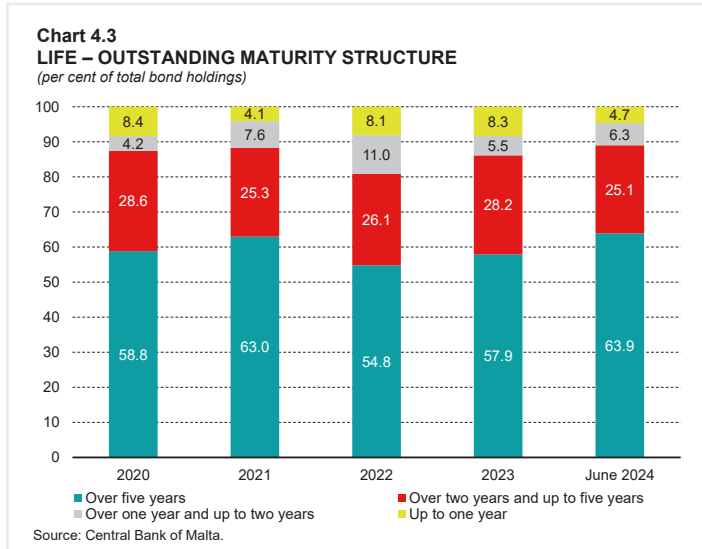
¹ Four specialise in life insurance, four in non-life insurance, and two are composite insurers, meaning they offer both life and non-life insurance products. However, for the composite insurers, life insurance operations account for less than 4% of their total gross written premiums.

² The performance of linked contracts fluctuates with underlying investments, placing all investment risk on policyholders, while traditional life insurance offers guarantees, with insurers absorbing some market risk. For this reason, these contracts are analysed separately when assessing the sector's financial position and stability risks.

Looking at bond maturities, holdings of bonds maturing in over five years grew by 6.4% (see Chart 4.3). In contrast, bonds maturing in two to five years fell by 14.1%, while shorter-dated bonds experienced the steepest decline, dropping by 23.7%. These changes resulted in the modified duration to increase by 0.8 percentage points to 7.0% by June 2024 (see Chart 4.4). This development aligns with the life insurance business model; due to the long-term nature of life insurance contracts where insurers tend to favour long-term bonds to match their liabilities. At the same time, this increase in longer-term bonds likely reflected the insurers' effort to lock in higher yields that were available before interest rates started to decline and to benefit from potential price appreciation of longer-dated bonds as rates fall further.

The quality of the life insurers' bond portfolios has changed minimally since December 2023, with medium and high-rated bonds accounting for about two-thirds of the total portfolio (see Chart 4.5). The corporate bond portfolio is nearly evenly split, with about half invested in high and medium-rated bonds and the remainder in low-rated and unrated/sub-investment grade bonds. In contrast, the sovereign bond portfolio is more concentrated in higher quality bonds, with more than three-quarters allocated to high and medium-rated bonds.

Excluding those pertaining to UL and IL contracts, participation in investment funds increased by 1.0% during the first half of 2024, accounting for about one-quarter of total assets. This growth was largely due to higher allocations to euro area equity funds, reflecting optimism in regional equity markets, as lower interest rates often



support equity valuations. On the other hand, direct equity holdings fell by 5.8%, reflecting a more cautious approach, likely driven by concerns over volatility and a preference for diversified exposure through investment funds rather than direct equity positions.

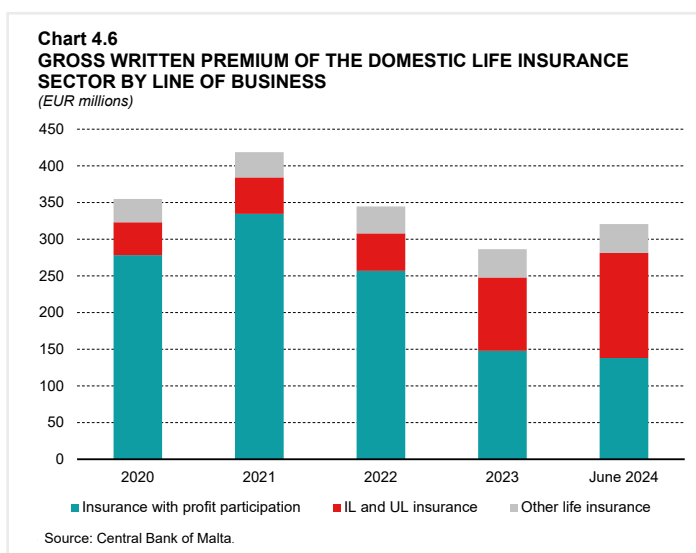
Excluding UL and IL contracts, cash holdings rose by 2.5% during the same period, reaching approximately 6% of total assets. This increase enhances life insurers' flexibility in navigating uncertain market conditions, allowing them to respond swiftly to new investment opportunities. At the same time, life insurers maintained a modest allocation to alternative assets, including collateralised securities, real estate, mortgages, and loans, which collectively accounted for 5.2% of their overall portfolio.

Liabilities and own funds

By June 2024, technical provisions for IL and UL contracts rose by 13.3%, making up over one-fifth of total liabilities (see Chart 4.1). However, most provisions remained allocated to other life insurance activities, which fell by around 3.8% to 63% of overall liabilities. The excess of assets over liabilities remained stable, representing about one-tenth of liabilities, and forming the regulatory own funds under the Solvency II Directive.³ This financial buffer acts as a safety net for life insurers in event of having to absorb unexpected losses or pay future claims beyond what it has set aside in reserves.

Gross written premium and claims

Gross written premiums rebounded in the first half of the year, increasing by 12.0%. This growth was largely driven by IL and UL products, which experienced a substantial rise of 43.2% and have now become the primary line of business, representing 44.7% of the overall life insurance premiums (see Chart 4.6). In contrast, 'insurance with profit participation' products declined further by 6.7% to account for 43.0% of total premiums, as demand shifted toward higher-yielding alternatives, diverting interest from traditional life insurance offerings. Meanwhile, 'other life insurance products', including mortgage life insurance, saw an increase of 2.7% reflecting the still robust developments in the property market.



In the first half of the year, gross claims incurred rose by 5.2%, totalling €357 million. While most claims were attributed to 'insurance with profit participation' products, the increase was driven by claims related to IL and UL products and 'other life insurance products'.

Liquidity and capital

The liquid asset ratio of the life insurance sector decreased slightly by 0.2 percentage points, reaching 59.3% (see Chart 4.7). This decline is primarily attributable to the reduction in government bond holdings, which are considered highly liquid, although they still make up the largest share of liquid assets. The ratio continued to exhibit considerable variability among individual companies, reflecting the inherent heterogeneity within the sector.

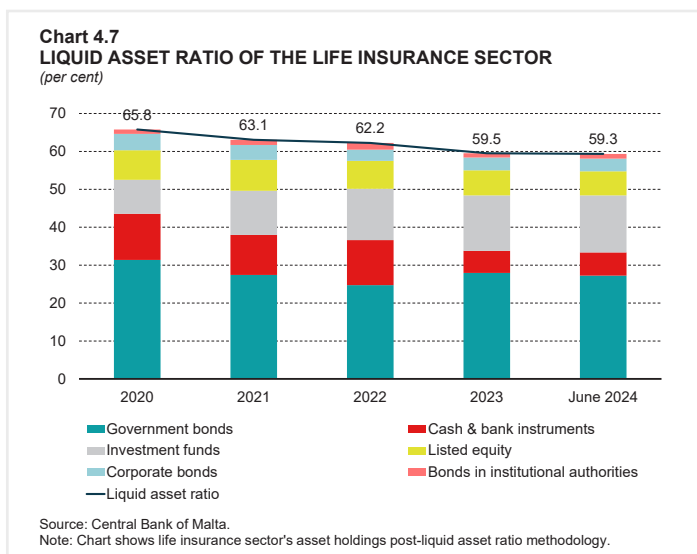
³ Total eligible own funds under the Solvency II directive include the excess of assets over liabilities, along with other funds that meet the requirements for Tier 2 and Tier 3 capital.

Life insurers continued to uphold strong capital buffers, boasting an overall Solvency Capital Requirement (SCR) coverage ratio of 267.5%, representing a notable increase of nearly 50 percentage points since December 2023. Moreover, the quality of own funds remained robust, predominantly composed of Tier 1 capital, the highest-quality category.⁴

Profitability

The life insurance sector remained profitable, with a pre-tax ROA of 0.8%, slightly higher than in December 2023, although performance varied among companies.⁵

From an underwriting standpoint, the sector experienced a decrease in insurance revenue and an increase in insurance expenses. However, this negative performance was offset by a significant reduction in net reinsurance expenses, resulting in overall positive returns from the insurance business. While investment returns declined, they remained substantial. This decline was largely offset by significantly lower financial expenses. As a result, the sector achieved a modest positive net financial result, ultimately contributing to an improvement in the sector's profit after tax.



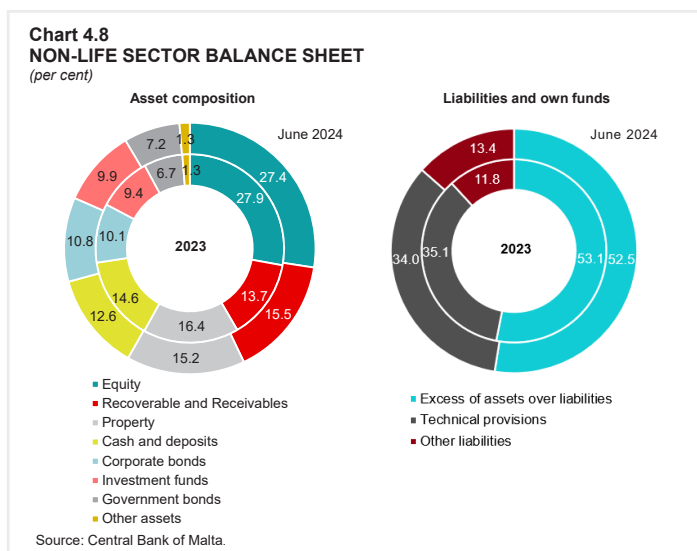
4.1.2 Domestically-relevant non-life insurance companies

The mild contraction experienced in 2023 was more than offset during the first half of 2024, as the aggregate balance sheet of domestically-relevant non-life insurance companies expanded by 9.0%, reaching €612 million, equivalent to 2.8% of GDP.

Asset composition

Changes in asset composition were generally modest, though some asset classes experienced varying trends. Favourable stock market performance drove a 7.3% increase in equity holdings, which continued to represent a significant 27.4% of total assets (see Chart 4.8). These remained mainly concentrated in related insurance companies, underscoring a high level of interconnectedness through cross-ownership.

Unlike the life insurance sector, non-life insurers adopted a more proactive strategy in the fixed-debt securities market, reporting a



⁴ Total eligible own funds under Solvency II consist of the excess of assets over liabilities, along with other qualifying forms of capital that meet the criteria for Tier 2 and Tier 3 capital definitions.

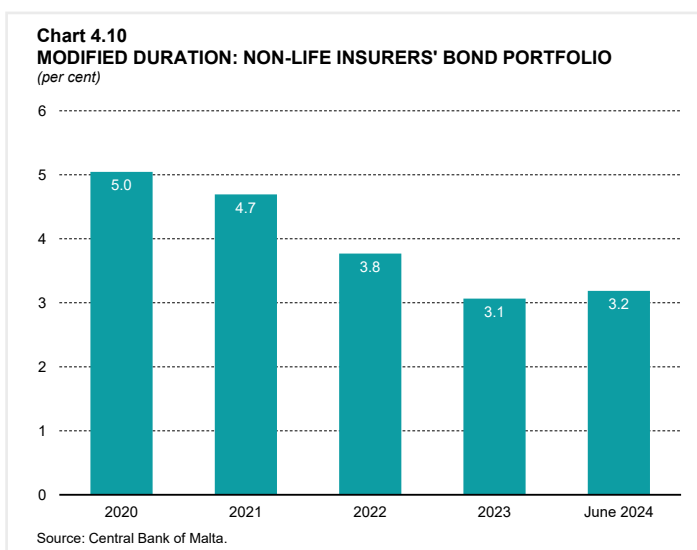
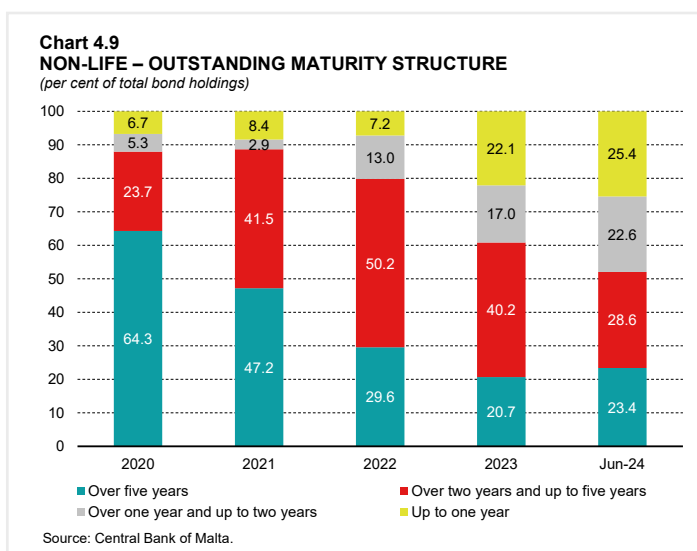
⁵ This profitability analysis excludes one life insurance company that did not submit its June 2024 IFRS 17 returns in time for inclusion in this Report.

17.2% increase in their total bond holdings, which now constituted about 18% of total assets. Government bond holdings increased by 18.3%, primarily of euro area sovereigns, while holdings of domestic government bonds decreased. Corporate bonds grew by 16.4%, primarily related to firms in the euro area but they also invested in financial bonds issued in the United Kingdom and the United States.

Given the prospect of further interest rate cuts, which would make long-dated bonds more attractive, non-life insurers took a balanced approach by increasing both their short-term and long-dated bond exposures. Short-term bonds, maturing within two years, rose sharply by 43.5%, constituting 48.0% of holdings, a significant increase from the 12.0% in 2020 (see Chart 4.9). This development is in line with the non-life insurance business model, where the short-term nature of contracts prompts insurers to favour short-term bonds to better align with their liabilities. At the same time, holdings in long-term bonds with a maturity of over five years, increased by 32.6% to 23.4% of total holdings, indicating a recognition of the potential for capital gains as interest rates fall further. Meanwhile, bonds maturing between two and five years decreased by 16.5% to account for the remaining share. This dual increase in both short-term and long-term bonds indicated a deliberate effort to balance immediate liquidity needs with long-term investment opportunities. The rise in long-term holdings has contributed to a slight increase in the overall modified duration to 3.2% as of June 2024 (see Chart 4.10).

The rise in fixed-income investments was largely driven by medium and high-rated bonds, significantly enhancing the quality of the portfolio. Medium and high-rated corporate bonds accounted for 52.7% of these holdings, representing a 12-percentage point increase, while similarly rated sovereign bonds made up a substantial 90%, reflecting a 30.4 percentage point rise.

Additionally, non-life insurers have increased their participation in investment funds by 15%, bringing their share to almost 10% of total assets. This diversification is likely with the aim to spread risk across a wider range of asset classes, with non-life insurers investing primarily in debt and equity funds. Recoverables and receivables have risen by 23.0% to account for 15.5% of total assets, with a significant portion being reinsurance recoverables.



In contrast, cash and deposit holdings decreased by 5.8% as of June 2024, accounting for 12.6% of total assets. This could reflect a reallocation towards higher-yielding investments, most likely to take advantage of shifting bond market conditions. While property investments rose marginally, their overall share of total assets has fallen to around 15%.

Liabilities and own funds

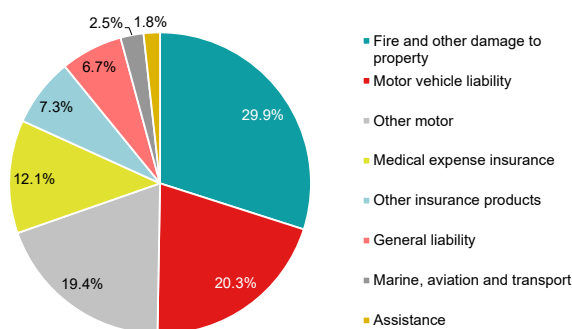
As of June 2024, technical reserves rose by 5.6%, making up approximately a third of the balance sheet, while other liabilities grew by 24.4%, representing 13.4% (see Chart 4.8). The excess of assets over liabilities increased by 7.8%, comprising more than half of the balance sheet, which corresponds to the regulatory own funds as defined by the Solvency II Directive.

Gross written premium and claims

In the first half of the year, the non-life insurance sector sustained its growth momentum, with gross written premiums growing by 6.8% compared to December 2023, reaching €374.9 million. Growth was noted in nearly all business lines, particularly in property damage insurance, which increased by 8.8% to account for almost 30% of the sector's total premiums (see Chart 4.11). This segment has consistently increased over the past six years, largely driven by sustained interest in the property market. Motor-related categories also grew by 5.4%, maintaining their position as the largest business line, with 39.7% of gross written premiums.⁶

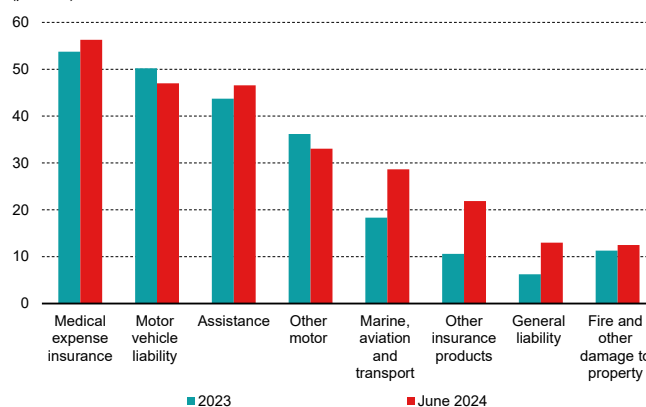
Conversely, gross claims incurred rose by nearly 13%, causing a slight uptick in the payout ratio to 30.7%. The most notable increase in the payout ratio was seen in marine aviation and transport insurance, as well as in the miscellaneous financial loss line of business within the other insurance products category (see Chart 4.12). In contrast, the average payout ratio for the two-motor related business declined by 3.3 percentage points to 40.2% during the review period, indicating that recent pricing adjustments are starting to have an effect.

Chart 4.11
GROSS WRITTEN PREMIUM OF THE DOMESTIC NON-LIFE INSURANCE SECTOR BY LINE OF BUSINESS
(per cent)



Source: Central Bank of Malta.
Note: Solvency II Reporting. Other insurance products include workers' compensation, income protection, miscellaneous financial loss, other life insurance and profit participation, IL and UL insurance.

Chart 4.12
GROSS PAYOUT RATIO BY LINE OF BUSINESS
(per cent)



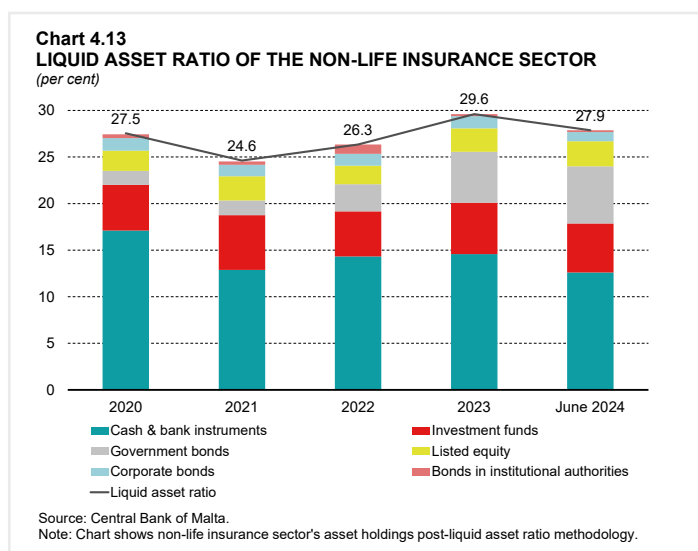
Source: Central Bank of Malta.
Note: Solvency II reporting. Other insurance products include income protection, miscellaneous financial loss and workers' compensation insurance.

⁶ The difference between motor vehicle liability insurance and other motor insurance lies in their coverage. "Motor vehicle liability insurance" covers liabilities arising from motor vehicle accidents, encompassing bodily injury and property damage to third parties. In contrast, "Other motor insurance" focuses on protecting the vehicle itself, covering damages or loss incurred, but does not cover liability for accidents caused to others.

Liquidity and capital

In June 2024, the liquid assets ratio for the non-life insurance sector decreased by 1.7 percentage points to 27.9%, driven by a slower increase in liquid assets compared to the growth in the overall balance sheet. This reflected a reduction in cash holdings, as other assets, including sovereign bonds, equities, and fund investments, increased. All these assets have a stricter factor (see Chart 4.13). Notably, there remains significant variability in the liquid asset ratios across individual companies.

Non-life insurers continued to maintain a robust capital position, with an SCR coverage ratio of 242%, reflecting a slight decrease of 0.9 percentage points since December 2023. This ratio remained well above regulatory requirements, highlighting the high quality of eligible own funds, predominantly held in Tier 1 capital.



Profitability

The non-life insurance sector maintained strong profitability despite some variability in insurers' performance, with a pre-tax ROA increasing to around 11%.⁷ This solid performance was mainly driven by robust underwriting results, highlighted by substantial growth in insurance revenue, which combined with lower reinsurance costs, more than compensated for the increased underwriting expenses. As a result, overall underwriting performance improved significantly compared to December 2023. Furthermore, the sector benefited from improved investment returns, which further bolstered profitability.

4.1.3 Risk outlook

In the first half of the year, both life and non-life insurance sectors experienced balance sheet growth and strong capital positions. Life insurers benefited from a recovery in gross written premiums driven by IL and UL products, despite pressures stemming from with-profit products. In contrast, the non-life sector faced declining liquidity but maintained strong profitability through solid underwriting performance and favourable investment returns. Looking ahead, the ongoing macro-financial and geopolitical uncertainty may weigh on the sector's earnings growth potential. In this environment, diversification across asset classes and regions will be crucial for managing risk and seizing growth opportunities. Additionally, evolving customer needs and behaviours are intensifying competition across traditional industry lines. In this context, insurers that adopt purposeful and differentiated strategies, such as climate insurance, will be better positioned to enhance customer engagement and address emerging risks. Indeed, as climate-related shocks become more frequent and severe, the risk of economic and financial losses is bound to rise. Climate insurance is essential in mitigating these risks by addressing immediate threats and fostering adaptation.

4.2 Domestically-relevant investment funds

In the first half of 2024, the overall assets of domestically-relevant sub funds rose by 2.8%, marking the highest growth recorded in the past five years. Standing at €1.6 billion, assets were equivalent to 7.4% of GDP. The number of domestically-relevant sub funds remained unchanged at 36, of which 35 were licensed as retail Undertakings for the Collective Investment in Transferable Securities (UCITS) and one as a Professional Investor Fund.

⁷ This profitability analysis excludes one non-life insurance company that failed to submit its June 2024 IRSR 17 returns in time for inclusion in this Report.

The expectation of interest rate cuts by major central banks, along with a more stable macroeconomic environment, contributed to the strong performance of the domestically-relevant investment funds. Markets experienced significant gains, including a notable recovery in the bond market, which recovered the losses incurred in previous years.

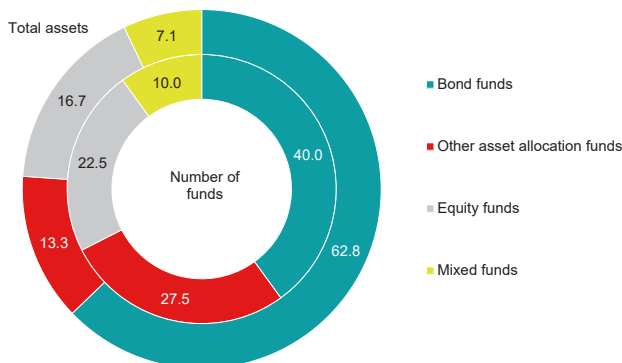
Developments by fund strategy

The robust performance of equity markets led to an expansion in the assets of sub-funds with greater exposure to these instruments. Equity funds registered the highest growth, surging by 15.4%, with their share increasing by 1.8 percentage points to 16.7% of total assets. Similarly, other allocation sub-funds reported a positive trend, rising by 3.2% to represent 7.1% of the overall portfolio (see Charts 4.14 and 4.15). Units in bond funds increased marginally by 0.3%, making up just under 63% of the overall assets.

4.2.1 Asset composition and investment strategies

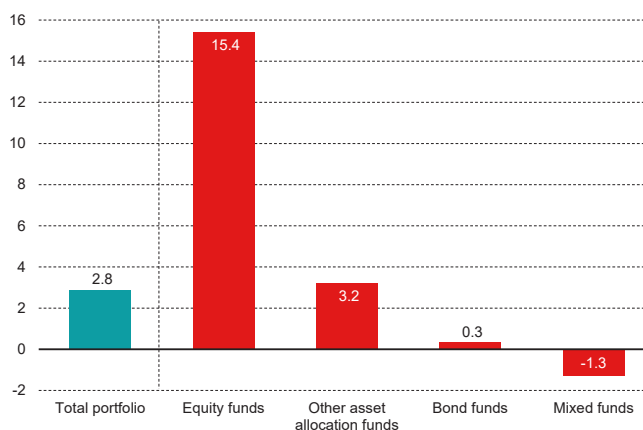
By June 2024, the value of bond holdings grew by a marginal 1.1%, mainly reflecting the modest rise in bond prices in the first quarter of the year. However, such growth was slower than for other assets, with the share in overall assets decreasing by 1.1 percentage points to 65.2% (see Chart 4.16). Concurrently, exposure towards equities continued to rise steadily to represent 31.8% of the overall share in assets. At 2.6% of overall assets, cash and deposits stood relatively stable, following declines reported in previous years.

Chart 4.14
DOMESTICALLY-RELEVANT INVESTMENT FUNDS BY MAIN STRATEGY
AS AT JUNE 2024
(per cent)



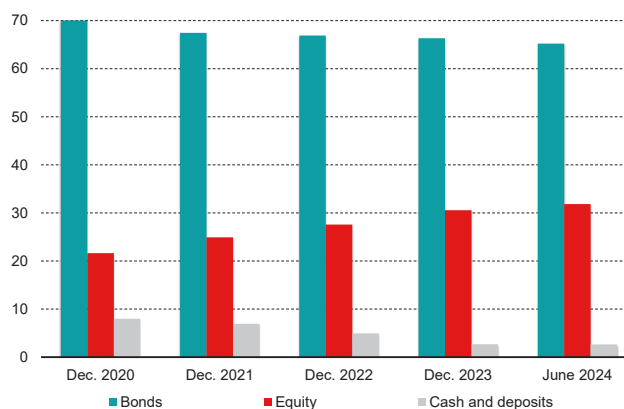
Source: Central Bank of Malta.

Chart 4.15
CHANGES IN OVERALL ASSETS BY MAIN STRATEGY
(per cent)



Source: Central Bank of Malta.

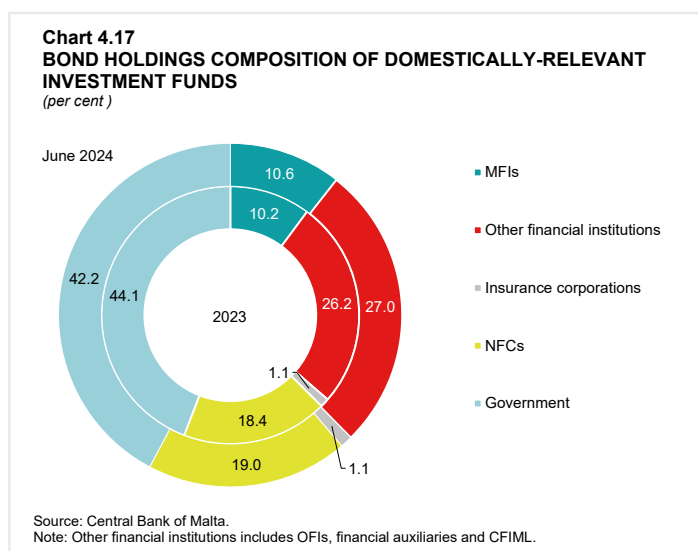
Chart 4.16
ASSETS COMPOSITION OF THE DOMESTICALLY-RELEVANT
INVESTMENT FUNDS
(per cent)



Source: Central Bank of Malta.

Bond holdings

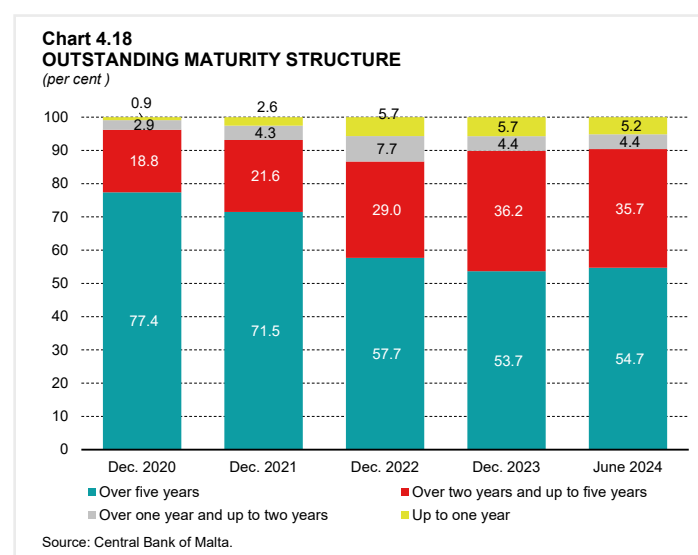
The increase in the overall bond holdings was mainly driven by financial corporate⁸ bonds, which rose by 4.4% to account for 38.5% of the overall bond portfolio (see Chart 4.17). Specifically, holdings of bank bonds rose by 5.1%, with more than 60% of these holdings relating to Maltese banks. The increase in bonds issued by OFIs was more modest, at 4.2%. Bonds of insurance companies, mainly foreign, remained limited, making up just around 1% of the bond portfolio. Holdings of NFC bonds also increased, up by 4.5% to reach 19.0% of the overall bond portfolio. A large part of the corporate bonds related to firms in other euro area countries and the United States, while domestic corporate bonds accounted for just over a quarter of the corporate bond portfolio.



Meanwhile, sovereign bond holdings decreased by 3.4%, with their share in the overall bond portfolio dropping by 1.9 percentage points to 42.2%. Although this decline was largely attributed to holdings of domestic sovereign bonds, the portfolio remained heavily concentrated in domestic assets, with MGS accounting for nearly 80% of sovereign bond holdings. Meanwhile, foreign sovereign bond holdings grew, with bonds issued by euro area countries increasing by a fifth, while those outside the euro area, including the United States, rose by 15.5%.

Focusing on geographical exposure, despite remaining predominantly exposed to domestic debt securities, overall bond holdings saw a 2.2 percentage-point drop in the share of domestic holdings, representing 57.5% of the fixed-income assets. The reduction aligns with the trend observed in the last five years, where fund managers gradually shifted their exposures mostly towards euro area, which accounted for 19.4% of the debt portfolios as of June 2024. The remaining of the portfolio consisted of bonds issued outside the euro area, with a significant concentration in US bonds.

In anticipation of interest rate cuts, investment managers chose to pause the reduction of longer-dated bonds. Consequently, the share of bonds maturing over five years increased by 1.0 percentage point to 54.7% of the portfolio (see Chart 4.18). In contrast, both medium



⁸ Financial Corporate Bonds comprise securities issued by OFIs, MFIs, and insurance companies.

and short-dated bonds, maturing between two and five years, and under two years, respectively, saw their shares drop by 0.5 percentage points each, to 35.7% and 9.6%, respectively. Despite these changes in the bond maturity distribution, estimates for the modified duration remained stable at 5.5%, largely consistent with December 2023 (see Chart 4.19).

Equity holdings⁹

The strong performance of the equity market contributed to a 7.1% increase in equity holdings. This growth was primarily driven by a 7.8% rise in NFC equities, maintaining their share at around 30% (see Chart 4.20). Increases were also reported for equities issued by other financial institutions and insurance corporations, although they continued to represent a limited portion of the overall holdings, at 6.3% and 1.8%, respectively. In contrast, bank equities fell by 0.6%, with their share declining by 1.0 percentage point to 16.6%.

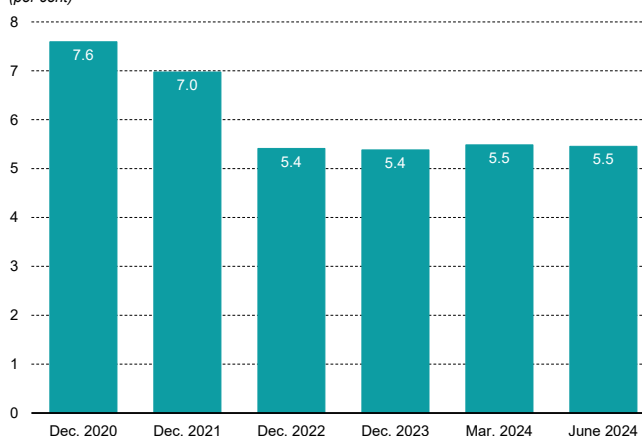
Concurrently, exposures to non-money market funds (MMF) investment funds also surged, with holdings rising by 6.0% to reach 45.2% of the overall equity portfolio.

Focusing on geographical exposure, value of investment in domestic equities continued to decline, with holdings falling by 2.5%, primarily driven by the lower exposure to Maltese banks. As a result, the overall domestic share fell by 3.0 percentage points to 37.0% of the equity portfolio. Meanwhile, securities issued by other euro area entities grew by 6.4%, raising their overall share by 0.5 percentage points to 46.2%. Holdings of equities issued by US firms surged by 40.0%, reaching 11.3% of the total equity portfolio, the highest level recorded since 2016. The exposure to other countries remained limited to 5.5% of the overall holdings.

4.2.2 Investors

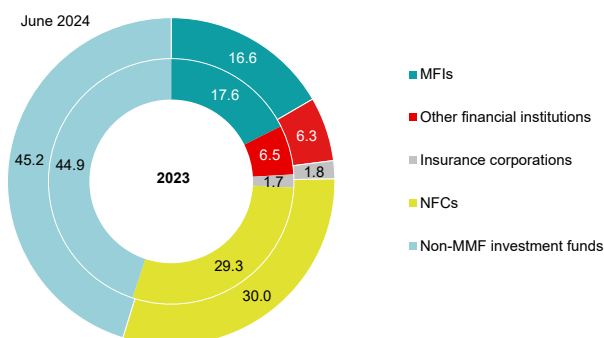
Maltese households remained the largest investors in domestically-relevant investment sub-funds, holding almost 55% of the net asset value (NAV). This represented an increase of 0.6 percentage points, while participation by domestic OFIs contracted by 1.2 percentage points to 22.2% (see Chart 4.21). Participations by other investors remained relatively contained, with domestic NFCs, insurance companies and banks accounting for

Chart 4.19
MODIFIED DURATION OF THE PORTFOLIO
(per cent)



Source: Central Bank of Malta.

Chart 4.20
EQUITY HOLDINGS COMPOSITION OF DOMESTICALLY-RELEVANT INVESTMENT FUNDS
(per cent)



Source: Central Bank of Malta.

Note: Other financial institutions includes OFIs, financial auxiliaries and captive financial institutions and money lenders.

⁹ Equity holdings include investment in other non-MMF investment funds.

8.0%, 7.2% and 3.2% of the overall NAV, respectively. The remaining 4.5% pertains to other investors, largely foreigners.

4.2.3 Liquidity and leverage

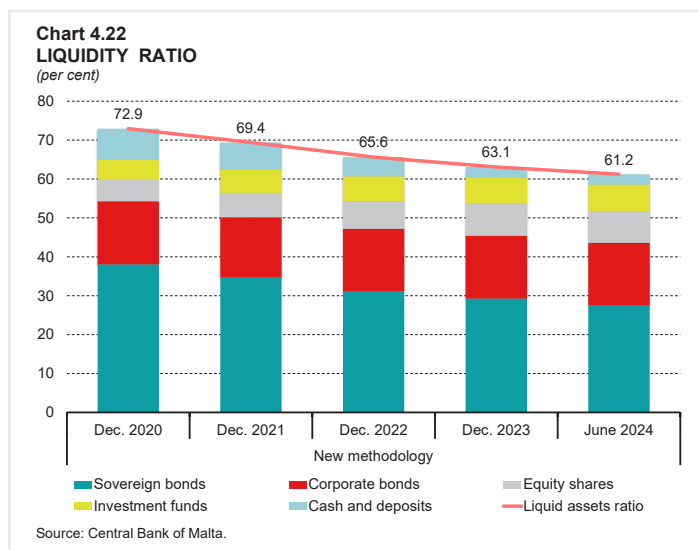
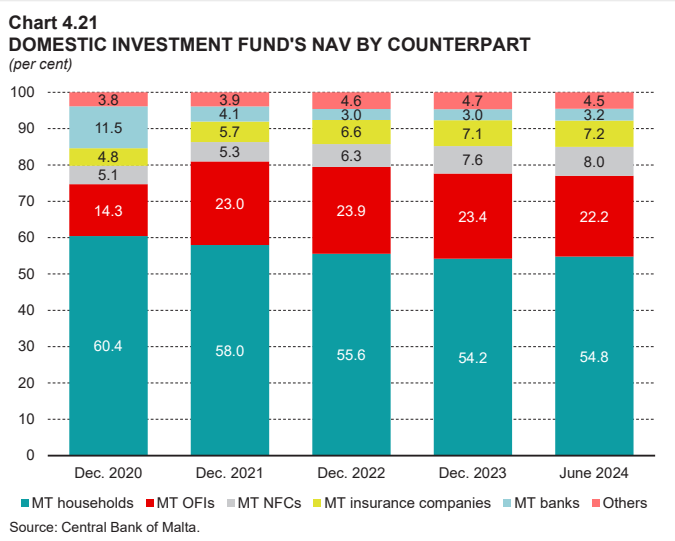
By June 2024, the overall liquidity ratio for domestically-relevant investment funds declined by 1.9 percentage points to 61.2% of total assets (see Chart 4.22). This decline was primarily attributed to a larger allocation towards equities, for which a 50% factor is applied. Nevertheless, a substantial portion of the portfolios remained invested in high-rated corporate bonds and stocks. The level of cash and deposits remained contained at 2.6% of total assets, somewhat below the average since 2016.

During the first half of the year, redemptions increased by 0.5 percentage points to approximately 3.1% of the NAV, close to average levels since 2016. This was largely driven by a large outflow from one bond fund.

Meanwhile, leverage of domestically-relevant sub-funds remained limited with the AUM-to-NAV ratio standing at 100.6%, in line with previous years. This is partly because most of them are licensed and regulated under the UCITS Directive.¹⁰

4.2.4 Risk outlook

The market performance in the first half of 2024, with gains reported across both equity and bond markets, played a significant role in consolidating the recovery of domestically-relevant investment funds. Liquidity risks remained relatively contained, as entities maintained a large share of HQLA and continued to operate with low leverage levels. However, this sector is experiencing lower levels of cash and deposits. Some sub-funds have begun to adjust their allocations, reverting to levels closer to historical averages. Systemic risks are somewhat mitigated by the availability of liquidity management tools, such as redemption gates and fees. If in the short-term, fund managers gradually shift their strategies, to potentially increase both the modified duration and the share of longer-dated fixed-income securities, such a scenario would result in the funds becoming more exposed to interest rate volatility. Another potential risk could arise if the sub-funds continue to increase exposure to foreign equities, driven by expectations of positive performance despite ongoing economic uncertainties. This is likely to increase further risks driven by volatility and should the expected positive performance fail to materialise, sub-funds could face significant losses.



¹⁰ UCITS Directive Article 83 restricts borrowing for retail to up to 10% of their assets and only on a temporary basis (as found in [Directive 2009/65/EC of the European Parliament and of the Council](#)).

The structural connection between most sub-funds and core domestic banks persists, as asset management companies are owned by these banks. However, these companies operate as distinct legal entities. Moreover, approximately 10% of the overall assets consist of investments in domestic financial companies, largely bonds and equities issued by core domestic banks. Domestic banks and insurance companies also hold investments in these sub-funds, with exposure of around 10% of the NAV. As a result, any potential losses incurred by domestically-relevant sub-funds could impact the banks' profitability, although such effects are not expected to be systemic.

BOX 3: AN INTRODUCTION TO PENSION FUNDS REGISTERED IN MALTA¹

Introduction

Pension funds play an important role in ensuring financial security for households during retirement while contributing to the stability of the financial system. They also facilitate the efficient allocation of long-term capital across firms. As the population ages, pension funds are becoming increasingly important domestically, emphasising the need for sustainable retirement income. Pension funds pool contributions from individuals, employers or any other participants, and invest them in a diversified portfolio of assets with the aim to generate long-term returns. This approach provides retirees with a steady income stream, while simultaneously supporting economic growth, influencing capital markets, and contributing to financial market resilience.

The turbulence in the UK Gilt Market in late September 2022 underscored the significant role pension funds play as active market participants, demonstrating how the sector's development can potentially trigger and amplify market volatility during periods of financial stress. While the private pension system in Malta is still evolving, estimates from financial accounts data shows that these remained very limited at just 0.11% of overall financial assets.²

This Box aims to discuss the growth of Malta-registered pension funds, shedding some light on their potential financial stability implications.

Overview of the pension funds sector

Between 2019 (when pension funds data first became available) and 2024, the number of domestically registered pension funds remained roughly stable, amounting to 48 as at June.³ Of these, 45 were classified as non-occupational schemes, which are set up independently with voluntary contributions that are not tied to any specific employment. The remaining three were categorized as occupational pension funds, which are provided by employers, with contributions made by both parties of the employment relationship. In terms of size, non-occupational pension funds hold most of the assets managed by the sector, standing at around 98.7% of the overall assets. All these funds are defined contribution (DC) pension schemes, where members contribute to a fixed amount or percentage of income to an individual account and the final benefit depends on the contributions made and the overall investment performance.⁴

Despite the limited developments in the number of pension funds registered, these still expanded their presence, both in terms of overall assets as well as participation.

Between 2019 and 2023, the sector registered over 25% increase in the number of members enrolled (see Chart 1). Growth, however, diverged among the composition of such members. Active individual members grew by 88.5%, to account for 46.0% of overall membership, from 30.7% in 2019. Retired members, being those receiving regular pension payments from the fund, also grew, up by 51.1% and accounted for 30.2% of overall members. In contrast, deferred members, who are those that stopped contributing but are yet to draw their pension benefits fell to account for around 23.8% of the overall members, compared to 44.3% in 2019.

¹ Prepared by Mr Renan Dos Santos Carinha, Analyst, from the Financial Stability Surveillance Office. The author would like to express his gratitude to Mr Andrew Spiteri, Manager within the same office, and Ms Wendy Zammit, Head of the Financial Stability Surveillance and Research Department, for their invaluable suggestions.

² Source: ECB.

³ Out of these 48 pension funds, 46 are licenced as Retirement Schemes, with the remaining two licenced as Retirement Funds.

⁴ Another type of fund commonly found in other EA countries is the defined benefit plan, which guarantees a specific retirement benefit, based on factors other than the investment performance. Nevertheless, there are no pension funds currently registered in Malta operating under this scheme.

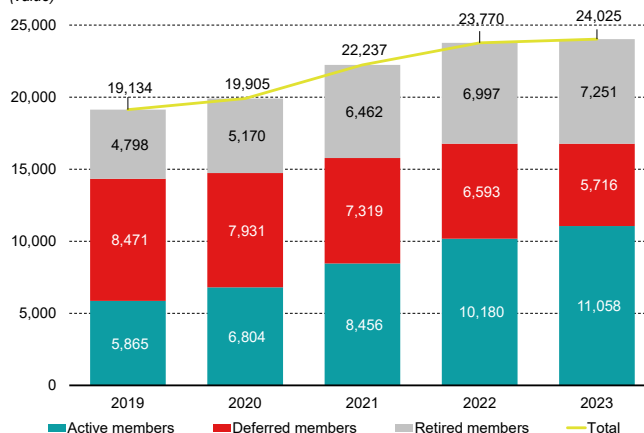
The change in the composition of the members resulted in the active-to-retired members ratio rising from 1.22 in 2019 to 1.53 in 2023, suggesting the pension funds' increased ability to sustain payouts with ongoing contributions. Concurrently, the active-to-deferred ratio stood at 1.9, growing steadily since 2019. This also indicates that pension funds are increasingly reporting higher inflows of contributions compared to their future liabilities, which is the deferred pensions. By the end of 2023, about 85%

of overall members were non-resident. Despite the limited domestic participation, since 2019, the number of domestic members has grown exponentially, up by more than eightfold. As a result, their share of the total membership has risen by 12.7 percentage points compared to 2019. This increase is driven by the growing interest in pension plans by domestic households, possibly also driven by the tax benefit schemes on offer.⁵ The rise in domestic members was almost exclusively among active members, where just over a third are resident. In contrast, non-resident beneficiaries accounted for all the retired members and represented 98.1% of the total deferred policyholders. Nonetheless, it is worth noting that resident members are entirely concentrated in four pension funds, which currently have no retired members.

Assets and liabilities composition

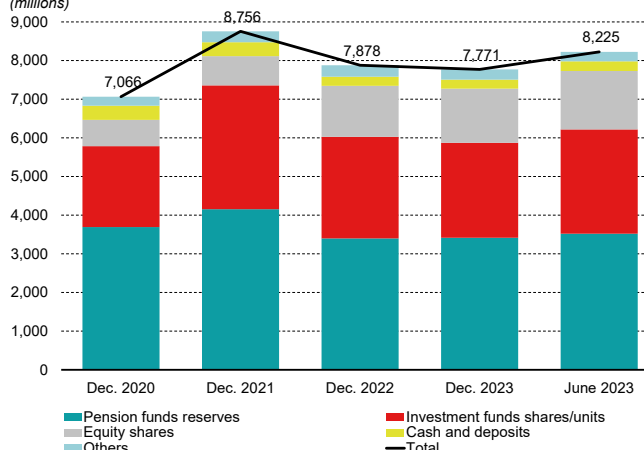
The increased interest in pension funds in the last few years meant that their overall assets grew by nearly 20% between end 2019 and June 2024. Total assets under management (AUM) by the domestic pension funds reached over €8.2 billion in mid-2024, equivalent to around 38% of GDP (see Chart 2). Overall assets held by pension funds peaked in 2021 at €8.8 billion. In the subsequent two years the assets held by pension schemes declined owing to

Chart 1
AMOUNT OF PENSION FUNDS MEMBERS BY TYPE
(value)



Source: Central Bank of Malta.

Chart 2
DOMESTIC PENSION FUND'S ASSET SHARES
(millions)

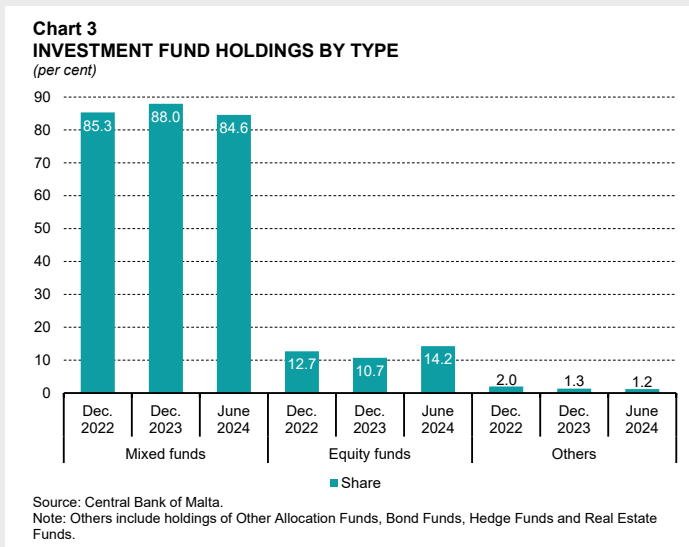


Source: Central Bank of Malta.

⁵ An annual tax credit of 25% on a contribution ceiling of a maximum of €3,000 is available. This means that a maximum annual tax credit of €750 can be obtained. Source: [Buying private pension retirement products](#).

the monetary tightening and the decline in financial markets. Nevertheless, recent results have demonstrated robust growth with the aim of recovering from the losses registered. As a result, the overall value of total assets expanded by 5.8% during the first half of 2024.

The composition of the overall assets remained relatively stable during the period assessed. Pension funds' reserves were consistently the main asset component, standing at 42.8% of overall assets by June 2024. These consist of a pool of assets which reflect the contributions, the investment returns and any adjustments due to market performance which are set aside to ensure that pension funds can meet their future obligations to retirees and other beneficiaries. Such reserves act as a safety net to manage the risk of underfunding, which could happen if contributions and investment returns are insufficient to cover future pension liabilities. These are followed by holdings of investment funds units which accounted for 32.8% of the balance sheet by June 2024. The vast majority were allocated towards non-MMFs categorized as mixed funds (see Chart 3). Equity sub funds followed with 14.2% as the remaining were limited to just 1.2% of the share.



Meanwhile, direct equity exposures stood at 18.4% of the overall asset holdings as of June 2024. Cash and deposits represented just 3.0% of the total assets, while on aggregate, other assets such as loans granted, debt securities held, and non-financial assets remained together limited to around 3.0%.

Nonetheless, it is worth noting that although the direct holdings of debt securities were limited, the exposure of the pension fund sector to the fixed-income market remained present largely through the holdings of mixed investment funds units.

In terms of geographical exposure, the largest share of assets were securities issued by entities based in countries other than the euro area, the vast majority situated in British Crown Dependency territories, the United States and the United Kingdom, representing around 63% of the total assets by mid-2024. Parallel to that, euro area accounted for 25.4% of the overall assets. Meanwhile, domestic assets were limited to 12.0% of the overall portfolios, largely in equities.

Pension funds' technical reserves, which are the estimated present value amount required to cover future pension obligations to policyholders, account for most of the liabilities (see Chart 4). In line with the balance sheet developments, following the decline reported in 2022 and 2023, such reserves rose by 5.4% during the first half of 2024, accounting for 90.8% of total liabilities. The remaining 9.2% of liabilities consisted almost entirely of equities, which share increased during the period assessed.

Geographically, the largest part of technical reserves' entitlements was towards beneficiaries based in the euro area, which accounted for 40.0% of the total share. Entitlements from the rest of the

world represented 39.2% of all technical reserves, most notably with policyholders predominantly based in the United Kingdom. Concurrently, US residents represented 20.1% of the total technical reserves. Maltese beneficiaries were limited to 0.7% of the total entitlements.

Key financial metrics for pension funds

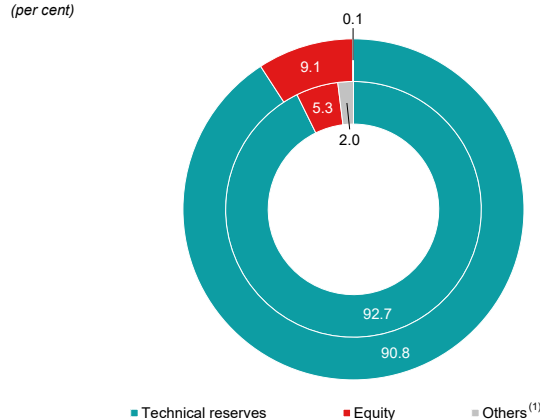
This section introduces a number of metrics which are key for evaluating the financial health and performance of pension funds in meeting their long-term obligations to beneficiaries. These include the funded ratio, which compares the fund's total amount of assets to its liabilities. It indicates the fund's ability to meet its pension obligations. A ratio above 100% indicates that pension funds have a solid position to meet current and future obligations to their members. During the period assessed the funded ratio remained relatively stable, reaching 110% in June 2024. In comparison, pension funds in the euro area reported a higher funded ratio of 123%⁶ for the same period.

When looking at the contribution-to-benefit ratio, which measures the balance between the contributions made into the fund by its active members to the benefits being paid out to its retired members, data for 2023 indicates a healthy ratio standing at 1.4. This ratio indicates that the flow of contributions significantly exceeded the benefits currently being paid out. During the first six months of 2024, the contribution-to-benefit ratio registered a slight increase to 1.5. These high ratios, however, also point to the fact that pension funds are still in their infancy, reflective of the fact that they have limited retirees.

Data available from 2020 shows that pension funds were generally profitable, as highlighted by the ROA, which is measured as the four-quarter moving sum of profits or losses as a share of the average AUM (see Chart 5). The only exception was in 2022. However, profitability quickly recovered

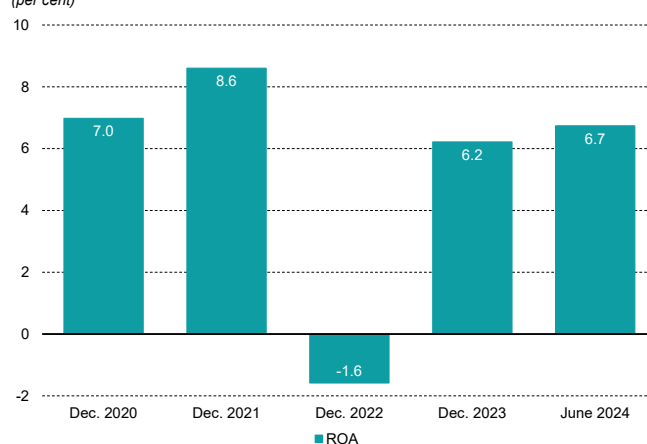
⁶ Source: ECB.

Chart 4
COMPOSITION OF PENSION FUNDS LIABILITIES
(per cent)



Source: Central Bank of Malta.
⁽¹⁾ Loans, other payable.

Chart 5
RETURN ON ASSET
(per cent)



Source: Central Bank of Malta.

along with the gains observed across financial markets by the end of the third quarter of 2023. By mid-2024 the ROA stood at 6.7%.

Meanwhile, the expense ratio,⁷ which measures the evolution and performance of operating and management costs of pension funds as a proportion to their total assets, increased marginally since 2020, standing at 0.58% in June 2024. Such a level generally points towards moderate expenses.

The rate of return for pension funds is defined as:

$$\text{Rate of Return} = \frac{\text{Net Return}}{\text{Beginning Value of Fund}} \times 100$$

Where: Net Return = Ending Value of Fund - (Beginning Value of Fund + Contributions – Withdrawals)

Using this metric, pension funds recorded a negative return of 2.8% for 2023, mainly reflecting lower valuations of overall assets coupled with net withdrawals. However, the positive performance of financial markets prompted a significant expansion in assets with the rate of return rising to 4.6% in the first half of the year.

Liquidity

The primary liquidity risk for pension funds arises from the potential inability to meet short-term obligations, particularly benefit payments, without the risk of selling assets at a loss due to insufficient liquidity. However, in June 2024, the aggregate indicators such as the active-to-retired members and the contributions-to-benefits ratio support a positive outlook for the sector in the medium term. In addition, assets are primarily composed of relatively liquid assets, including technical reserves, investment funds units, and shares.

Outlook

The consistent growth in membership and assets of domestically-registered pension funds underscores the sector's resilience and its potential for further development. While most members were non-residents, the share of resident members has been steadily increasing throughout the years. This presents a promising opportunity for ensuring financial security in retirement, particularly in the face of an ageing population and increasing demand for sustainable income solutions, serving as another important component for the broader social safety net.

Positive metrics, such as the funded ratio and contribution-to-benefit ratio, indicate that the funds are well-positioned to meet their obligations. The challenges posed by market volatility, as seen in recent years, highlight the necessity for prudent investment strategies and regulatory analysis. With units in investment funds comprising more than a third of total assets, pension funds need to keep watch for potential exposures to risks and vulnerabilities originating from the funds industry, such as liquidity mismatches and leveraged portfolios. The profitability and the rate of return has started increasing again, consolidating the rebound of the sector from the losses experienced in previous periods.

As the private pension system continues to mature, accompanied by increased domestic participation, ongoing monitoring of the key indicators is essential in assessing this sector long-term stability and sustainability in Malta.

⁷ The expense ratio includes expenditures listed as administration expenses, investment advisory fees, investment management expenses, legal and professional fees, bank charges, custodian fees, and trustee expenses. It does not include disbursements listed as taxation and other expenses.

APPENDIX

**Appendix
FINANCIAL SOUNDNESS INDICATORS**

	Core Domestic Banks					Non-Core Domestic Banks					International Banks					Total Banks					
	2020	2021	2022	2023	June 2024	2020	2021	2022	2023	June 2024	2020	2021	2022	2023	June 2024	2020	2021	2022	2023	June 2024	
Capital⁽¹⁾																					
Regulatory capital to RWAs	21.7	22.7	23.0	24.7	24.2	20.2	20.3	20.4	20.8	20.7	52.5	46.3	41.1	38.7	37.1	25.8	25.6	24.9	26.0	25.5	
Regulatory Tier 1 capital to RWAs	18.6	19.5	19.6	21.0	20.7	19.9	20.0	19.3	19.7	19.6	52.4	46.3	40.7	38.5	36.8	23.4	23.1	22.1	23.0	22.7	
Leverage ratio	7.6	7.3	7.2	7.9	8.1	9.5	10.0	9.5	9.5	9.5	42.4	34.2	32.3	28.8	29.6	10.5	9.6	9.0	9.5	9.7	
Large exposures to total own funds	69.6	66.1	83.3	60.6	59.2	175.8	173.0	184.7	133.2	129.7	83.3	67.9	75.6	65.4	53.7	81.8	76.4	91.6	68.3	64.6	
RWAs to total assets	42.9	39.1	38.0	38.8	40.2	49.0	50.9	50.5	49.6	50.1	82.8	74.9	70.8	67.3	71.8	46.6	43.0	41.5	42.1	43.6	
Profitability																					
ROA ⁽²⁾	0.0	0.4	0.4	1.0	1.1	-1.5	0.2	-0.4	0.6	0.5	2.2	1.5	2.6	2.5	2.0	0.6	0.7	0.9	1.3	1.3	
ROE ^(1,2)	-0.3	4.3	5.4	12.0	12.4	-12.7	2.4	-3.4	5.7	5.2	6.2	11.6	6.0	11.3	13.6	0.4	6.0	4.5	11.2	11.9	
Operational cost-to-income ratio	68.0	75.2	82.3	51.0	49.9	95.8	82.2	81.0	66.6	68.7	35.1	47.2	44.5	55.8	63.3	51.7	61.8	62.9	53.9	56.3	
Interest margin to gross income	73.2	72.1	71.8	78.8	78.9	48.9	40.9	54.0	66.2	68.4	64.8	56.4	49.2	36.0	33.1	67.8	62.7	59.3	60.0	59.9	
Non-interest expense to gross income	70.0	77.0	83.2	51.5	50.3	97.5	83.4	81.3	67.4	69.4	35.2	47.3	44.5	55.8	63.3	52.7	62.7	63.3	54.2	56.5	
Personnel expenses to non-interest expenses	45.8	41.2	36.4	46.6	47.0	48.3	48.5	47.3	49.1	49.9	12.7	10.8	10.0	9.2	9.6	34.2	30.3	27.6	30.4	30.3	
Non-interest income to gross income	26.9	27.9	28.2	21.3	21.1	51.1	59.1	46.0	33.8	31.6	35.2	43.6	50.8	64.0	67.0	32.3	37.3	40.7	40.0	40.1	
Net impairment charges to gross income	29.2	-3.4	-11.5	0.4	-1.1	79.5	6.3	35.2	5.8	5.4	18.7	18.9	14.5	5.5	3.7	25.6	8.1	4.2	2.9	1.2	
Asset Quality																					
NPLs to total own funds ⁽¹⁾	28.9	29.4	21.5	17.9	16.0	53.1	34.2	27.8	8.0	9.0	13.2	12.1	11.5	11.8	12.4	26.4	25.7	20.1	15.8	14.7	
NPLs to total gross loans	3.7	3.5	2.7	2.5	2.4	7.1	5.1	4.3	1.2	1.3	1.9	1.4	1.3	1.5	1.4	3.5	3.1	2.5	2.2	2.1	
Overall NPL ratio excluding CBM placements	5.1	5.3	3.7	3.3	2.9	12.6	8.5	6.4	2.0	2.2	2.2	1.9	1.6	1.9	2.1	4.7	4.6	3.4	2.9	2.7	
Non-performing exposures to total gross exposures	2.8	2.7	2.0	1.8	1.6	5.6	3.8	3.0	0.9	1.1	1.3	1.0	0.9	0.9	0.8	2.6	2.4	1.8	1.5	1.3	
Total coverage ratio	49.7	44.3	46.5	43.5	45.5	47.6	59.8	72.7	60.1	59.1	91.4	147.5	189.6	125.3	118.9	55.2	57.9	66.1	55.7	57.9	
Unsecured loans to total lending	23.2	20.1	18.7	18.0	18.0	80.8	71.9	55.3	47.1	49.1	19.7	21.5	23.6	27.9	27.9	25.6	23.8	22.4	22.1	22.1	
Share of Stage 3 provisions to total provisions	66.7	70.2	69.6	67.3	70.0	93.0	90.2	88.3	56.6	54.5	44.6	27.9	26.5	45.3	47.2	65.1	60.5	58.4	59.9	61.7	
Forborne loans to gross loans	3.0	4.5	3.5	2.5	2.4	0.5	0.8	0.6	1.1	1.2	3.3	7.4	7.4	1.3	1.2	2.9	4.9	4.1	2.2	2.0	
Liquidity																					
LCR ⁽¹⁾	328.2	359.9	380.0	369.1	351.2	325.4	356.8	316.0	405.2	428.3	686.6	2469.6	383.7	566.9	396.8	332.7	379.0	373.8	381.9	361.0	
Liquid assets to total assets ^(1,3)	33.3	35.6	36.3	34.6	33.9	40.3	33.2	30.8	36.1	39.3	11.8	27.3	26.9	30.5	25.1	32.3	34.7	35.1	34.4	33.8	
Customer loans to customer deposits	58.4	55.2	56.0	58.9	60.6	46.5	52.2	54.4	49.3	48.3	462.3	267.0	230.6	184.6	183.9	75.4	67.5	67.2	67.0	68.1	
CBC on net cash outflows	169.9	189.3	251.0	292.2	320.5	238.1	300.8	240.7	272.0	273.1	326.3	601.9	58.6	189.1	107.9	180.2	204.0	239.8	285.4	304.6	
NSFR ⁽¹⁾		174.0	187.1	175.8	175.5		178.4	174.2	191.3	192.3		155.3	118.4	137.7	124.7		172.8	180.4	173.8	172.2	
Balance Sheet																					
Assets-to-GDP	179.5	166.6	155.9	142.2	136.6	21.2	20.3	18.8	17.3	16.5	80.7	68.5	55.4	48.1	57.9	281.4	255.4	230.0	207.7	211.0	
Domestic debt securities to total assets	8.3	8.8	9.4	8.9	9.3	7.2	7.9	7.9	6.0	5.0	0.1	0.2	0.2	0.0	0.0	5.9	6.4	7.1	6.6	6.4	
Foreign debt securities to total assets	13.8	12.4	16.5	19.2	22.2	12.2	15.9	18.0	17.1	15.2	25.2	24.0	29.8	35.9	42.1	16.9	15.8	19.8	22.9	27.1	
Customer loans to total assets	48.2	45.4	47.2	48.8	50.1	33.2	34.5	38.2	36.7	37.8	43.9	36.9	41.7	38.4	30.0	45.8	42.3	45.1	45.4	43.6	
Interbank exposures to total assets	5.3	4.9	4.9	3.9	3.6	9.7	9.4	7.2	6.4	5.6	12.3	17.8	10.0	7.7	6.7	7.6	8.7	6.3	5.0	4.6	

⁽¹⁾ Data for international banks excludes the branches of foreign banks.

⁽²⁾ Based on profits after tax.

⁽³⁾ Liquid assets defined in line with the EBA LCR DA Methodology.