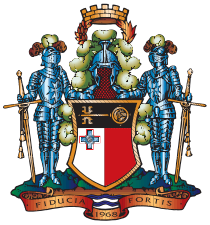

BANK ĊENTRALI TA' MALTA
EUROSISTEMA
CENTRAL BANK OF MALTA

SEVENTEENTH FINANCIAL STABILITY REPORT

2024

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Unless otherwise stated, the cut-off date for regulatory and prudential returns is 21 February 2025. The general risk assessment in this edition of the Financial Stability Report primarily focuses on developments in 2024, although in some cases it has been updated to reflect more recent events. Unless otherwise indicated, the source of data in the tables and charts is the Central Bank of Malta.

ISSN 2312-5918 (print)
ISSN 2074-2231 (online)

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ABBREVIATIONS

ADC	Acquisition, Development and Construction
AMC	Amortised cost
ARDL	Autoregressive Distributed Lag
ASF	Available Stable Funding
AUM	Assets under Management
BBMs	Borrower-based measures
BCBS	Basel Committee on Banking Supervision
BLS	Bank Lending Survey
CBC	Counterbalancing capacity
CBM	Central Bank of Malta
CCR	Central Credit Register
CCoB	Capital conservation buffer
CCyB	Countercyclical capital buffer
CET1	Common Equity Tier 1
CMU	Capital Markets Union
CRE	Commercial real estate
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
DGS	Deposit Guarantee Scheme
DSTI	Debt Service-to-Income
EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
ECL	Expected Credit Loss
EERE	Energy Efficiency and Renewable Energy
EU	European Union
EPC	Energy Performance Certificate
ESG	Environmental, social, and governance
ESRB	European Systemic Risk Board
FV	Fair value
FVTPL	Fair value through profit and loss
FVOCI	Fair value through other comprehensive income
FX	Foreign exchange
GBP	Great Britain Pound
GDP	Gross domestic product
HQLA	High-quality liquid assets
HRF	Hamilton regression filter
IFRS	International Financial Reporting Standards
IL	Index-linked
IRRBB	Interest rate risk in the banking book
LAA	Loss Absorption Amount
LCR	Liquidity Coverage Ratio
LHS	Left-hand scale
LTV	Loan-to-value
MCC	Market Confidence Charge
MFI	Monetary financial institution
MFSA	Malta Financial Services Authority
MMF	Money market funds
MREL	Minimum Requirement for Own Funds and Eligible Liabilities
MRR	Minimum Reserve Requirement
MST	Macro-stress testing

MT	Malta
NACE	Nomenclature générale des Activités économiques dans les Communautés Européennes
NAV	Net asset value
NFC	Non-financial corporation
NGFS	Network of Central Banks and Supervisors for Greening the Financial System
NII	Net interest income
NN	Nearest Neighbour
NNII	Net non-interest income
NTI	Net trading Income
NPL	Non-performing loan
NSFR	Net Stable Funding Ratio
ODP	Online deposit platform
O-SIIs	Other Systemically Important Institutions
OFI	Other financial intermediaries
P2G	Pillar 2 Guidance
PDW	Persistent Deposit Withdrawals
RCR	Redemption Coverage Ratio
RHS	Right-hand scale
ROA	Return on assets
ROE	Return on equity
RRE	Residential real estate
RSF	Required Stable Funding
RW	Risk weights
RWA	Risk-weighted assets
SCR	Solvency Capital Requirement
sDSTI	Stressed debt-service-to-income
SME	Small to Medium Enterprises
SRB	Single Resolution Board
SREP	Supervisory Review and Evaluation Process
SSM	Single Supervisory Mechanism
sSyRB	Sectoral systemic risk buffer
TLTRO	Targeted Longer-Term Refinancing Operations
UCITS	Undertakings for the Collective Investment in Transferable Securities
UL	Unit-linked
US	United States
WAIR	Weighted average interest rate

THE DOMESTIC FINANCIAL SECTOR

Banks

Core Domestic Banks	Non-core Domestic Banks	International Banks
APS Bank plc	FCM Bank Limited	Akbank T.A.S. (Branch)
Bank of Valletta plc	FIMBank plc	Credit Europe Bank NV (Branch)
BNF Bank plc	IIG Bank (Malta) Limited	European Depositary Bank SA (Malta Branch)
HSBC Bank Malta plc	Izola Bank plc	ECCM Bank plc
Lombard Bank Malta plc	Merkanti Bank Limited	Lidion Bank plc
MeDirect Bank (Malta) plc	Sparkasse Bank Malta plc	Multitude Bank plc
		Novum Bank Limited
		The Access Bank Malta Limited
		Turkiye Garanti Bankasi A S (Branch)

Domestic Investment Funds

BOV Asset Management Limited	Calamatta Cuschieri Investment Management Limited	Jesmond Mizzi Financial Advisor Limited
BOV Balanced Portfolio Fund	Balanced Strategy Fund	Merill Global Equity Income Fund
BOV Conservative Portfolio Fund	Emerging Market Bond Fund	Merill High Income Fund
BOV Growth Portfolio Fund	Global Balanced Income Fund	Merill Total Return Income Fund
Vilhena Euro Income Fund	Global Opportunities Fund	
Vilhena Euro Liquidity Fund	Growth Strategy Fund	**Reaps Asset Management Limited**
Vilhena European Multi Manager Fund	High Income Bond Fund	APS Diversified Bond Fund
Vilhena Global Themed Fund	Income strategy Fund	APS Income Fund
Vilhena High Yield Fund	Malta Government Bond Fund	APS Ethical Adventurous Fund
Vilhena Malta Bond Fund	Malta High Income Fund	APS Ethical Cautious Fund
Vilhena Malta Fund		APS Ethical Balanced Fund
Vilhena Malta Government Bond Fund	**HSBC Global Asset Management (Malta) Limited**	
Vilhena Maltese Opportunities Fund	Equity Growth Fund	**Self-managed**
Vilhena Sterling Income Fund	International Bond Fund	Amalgamated Growth and Income Fund
Vilhena US Multi Manager Fund	Malta Bond Fund	
	Malta Government Bond Fund	
	Maltese Assets Fund	

Domestic Insurance Companies

Life Insurance Companies	Non-life Insurance Companies
HSBC Life Assurance (Malta) Limited	Argus Insurance (Europe) Limited
IVALIFE Insurance Limited	Atlas Insurance PCC Limited
LifeStar Insurance plc	Citadel Insurance plc
MAPFRE MSV Life plc	Elmo Insurance Limited
	GasanMamo Insurance Limited
	MAPFRE Middlesea plc

This edition of the *Financial Stability Report* is based on the above categorisation of banks, domestically-relevant insurance companies and investment funds.

EXECUTIVE SUMMARY

In 2024, euro area inflation moderated. However, the international macro-financial environment remained subdued, reflecting weak growth prospects, particularly in the euro area. Uncertainty intensified further in 2025 in view of the new US administration's international trade policy. Geopolitical developments have also prompted plans for higher defence spending by several euro area governments, which could add further strain on debt sustainability, particularly in countries with already elevated debt levels. Financial markets exhibited heightened volatility and fragility, amid concerns over stretched valuations. Nevertheless, the euro area financial sector has thus far demonstrated notable resilience in the face of these challenges.

Despite structural vulnerabilities associated with its small size and high degree of openness, the Maltese economy continued to grow robustly, supported by strong domestic demand and further robust growth in the tourism sector. By the end of 2024, inflation declined to below the European Central Bank's (ECB) 2% medium-term target. The domestic financial sector remained resilient, with banks maintaining adequate capital and liquidity buffers as well as healthy profitability levels. Resident lending moderated, on the back of lower lending to non-financial firms. However, the continued strength of the residential real estate market drove up lending to property-related activities, adding further concentration risks in domestic banks' loan portfolios. Meanwhile, asset quality continued to improve with the overall non-performing loan (NPL) ratio falling to 1.9%. In response to the ongoing cyclical and structural risks related to credit concentration, the Bank continued with its analysis to consider extending the sectoral systemic risk buffer (sSyRB) to cover all lending backed by real estate collateral, and initiated a consultation process with the banks.

The domestic non-bank financial sector also maintained a solid performance, underpinned by robust capital buffers and ample liquidity positions. Domestically-relevant life insurers experienced a rebound in premia. However, profitability remained under pressure due to elevated claims and increasing servicing costs. Non-life insurers recorded sustained growth in premia, particularly in property insurance, with investment income partially offsetting rising expenditure. Domestically-relevant investment funds also benefitted from the positive performance in the equity market and continued to operate with low leverage and stable liquidity levels.

The *Report* also highlights other cross-cutting risks that could threaten financial stability. These include cyber-threats that could disrupt critical financial infrastructure, erode trust in institutions, and trigger liquidity or credit risks. Climate-related risks are another concern, with the potential to impair asset values, increasing credit and insurance losses, and triggering further market volatility.

The Bank conducts stress tests focused on the domestic banking sector to evaluate resilience to systemic risks and identify potential vulnerabilities. Banks' solvency and liquidity positions are tested under a range of severe adverse scenarios designed to capture risks that could impact multiple institutions. The solvency stress test scenario reflects escalating geopolitical risks, while the liquidity stress tests consider increased outflows, including a scenario of a bank-run on deposits. Although some vulnerabilities are identified, these remain isolated to a very limited number of banks and the identified banks vary across the scenarios tested, indicating that the overall banking sector remains broadly resilient.

The *Report* also includes several boxed articles relevant to financial stability. These include an update on the financial cycle and credit gaps, as well as an article on the policy case for the potential extension of the sSyRB. Other articles include insights from the quarterly bank lending surveys (BLSs) and findings from a survey on the core domestic banks' sustainability efforts and the implications for lending and investment practices. The *Report* also introduces further insight on the assessment of the domestic commercial real estate (CRE) market. Moreover, it includes an update on the expected credit loss (ECL) model, as well as the preliminary findings on the effects of Directive 16 are also presented.

1. MACROPRUDENTIAL RISK ASSESSMENT

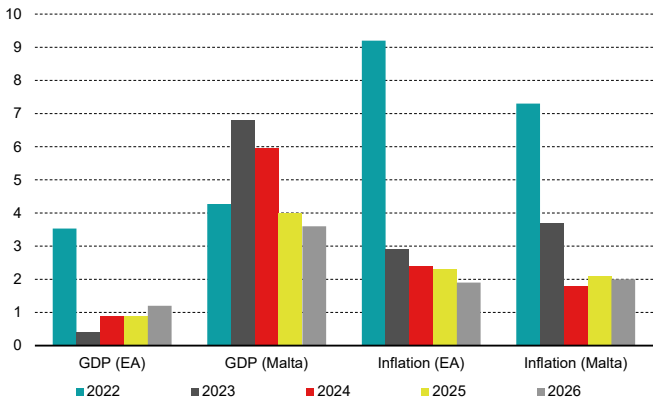
The domestic financial sector continued to operate within a fragile and uncertain external environment, with policymakers' concerns shifting from inflationary pressures to risks of a weaker euro area economy, marred by heightened geopolitical risks. While bouts of market volatility were reported, particularly in the summer of 2024, these were brief with limited impact on the financial sector. Financial market volatility is expected to stay high in 2025, posing challenges for investors in risk management, portfolio rebalancing and strategy shifts. High price fluctuations could trigger panic selling and margin calls, impacting overstretched asset classes.

Both the domestic and euro area banking sectors remained highly profitable, backed by strong capital and liquidity buffers. However, bank profitability is set to moderate as net interest income (NII) is expected to weaken further on the back of continued easing of monetary policy. Domestically, asset quality remained healthy but deteriorated in the euro area especially in certain segments such as those related to CRE and consumer credit.[1]

1.1 Vulnerabilities outside the financial system

Euro area economic growth remained sluggish in 2024, with real gross domestic product (GDP) edging up by only 0.5 percentage points to 0.9% (see Chart 1.1). The effects of the pandemic, the energy price shocks to already-high oil prices triggered by the war in Ukraine, and the tightening of monetary policy, have all weighed down on growth in all European countries. In contrast, the Maltese economy continued to grow at a strong pace of 6.0%, albeit slowing down from the previous year. Inflation in both the euro area and Malta continued to trend downwards, standing at 2.4% and 1.8%, respectively in 2024.

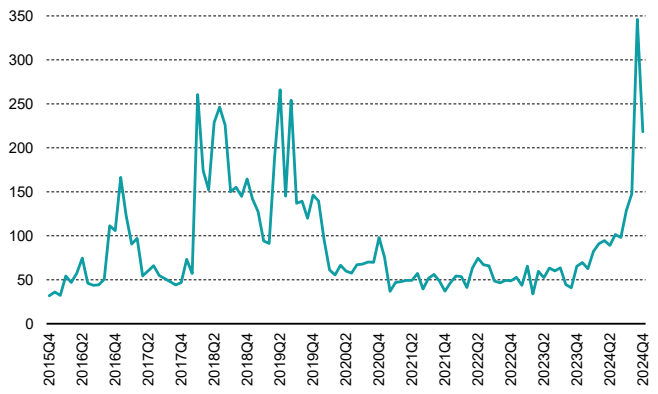
Chart 1.1
ECONOMIC GROWTH AND INFLATION DEVELOPMENTS
(annual growth rate; per cent)



Sources: Eurostat; ECB; Central Bank of Malta.
Note: Yellow and light grey bars for 2025 onwards represent forecasts.

In addition to the ongoing conflicts, geopolitical risks rose further on the back of political uncertainty in some EU member states, as well as intensified trade uncertainty due to policy shifts under the new US administration. Indeed, the trade policy uncertainty index reached a new peak following the decision by the United States to impose new tariffs on several countries, including the EU (see Chart 1.2). Tariffs usually disrupt trade flows, reignite short-term inflationary pressures, and weaken investor and consumer

Chart 1.2
TRADE POLICY UNCERTAINTY INDEX

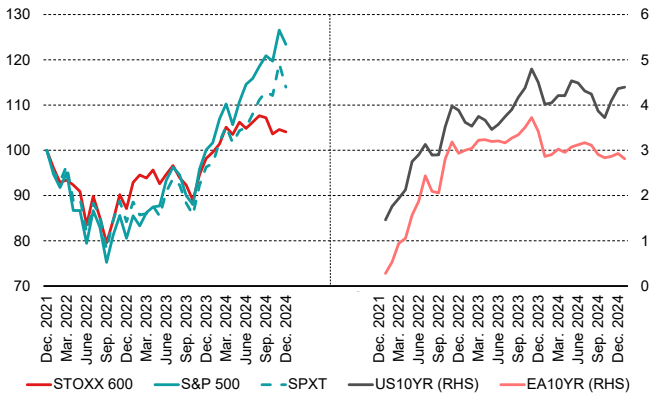


Sources: Caldara, Dario, Matteo Iacoviello, Patrick Molligo, Andrea Prestipino, and Andrea Raffo (2020), "The Economic Effects of Trade Policy Uncertainty".

[1] See ECB *Financial Stability Review*, November 2024: https://www.ecb.europa.eu/pub/pdf/fsr/ecb.fsr202411~dd60fc02c3.en.pdf.

confidence, with adverse implications for economic growth. These measures, especially if accompanied by uncertainty surrounding them, are likely to give rise to financial and currency market volatility and shifts in capital flows, with possible retaliatory measures by the affected countries, which weakens further economic conditions.

Chart 1.3
FINANCIAL MARKET DEVELOPMENTS
(Index, 2021 = 100, per cent)



Sources: Investing.com; ECB.
Note: SPXT is a US-listed ETF tracking the S&P 500 excluding information technology companies, including software, technology hardware and equipment, and semiconductor companies.

Notwithstanding the short-lived volatility episodes, driven by the confluence of factors including geopolitical events, disappointing economic data, coupled with the interest rate hikes by the Bank of Japan, and the failed software update by a leading cybersecurity company, financial markets remained resilient. The EU equity market recorded moderate growth, with the STOXX 600 adding 6.0% in 2024 (see Chart 1.3). Diverging performance across different markets was however reported, with Germany's DAX index rising by 18%, while France's CAC 40 declined by 2.2%, primarily due to political uncertainties in that country during the year. Meanwhile, the UK's FTSE rose by a more moderate 6%. In contrast, US equities, represented by the S&P 500, surged by over 23%, fuelled largely by the artificial intelligence (AI) boom. Still, the SPXT also witnessed staggering growth of over 18%.[2] The cross-continental differences also reflected the better economic growth and earnings prospects in the United States. Still concerns regarding overstretched valuations and high market concentration in the mega-cap tech stocks in the US equity market, persisted. This was also compounded by the fact that trade tariffs by the new US administration are expected to increase volatility in financial markets. Indeed, stock markets experienced a brief but sharp decline in April following the announcement of new tariffs.

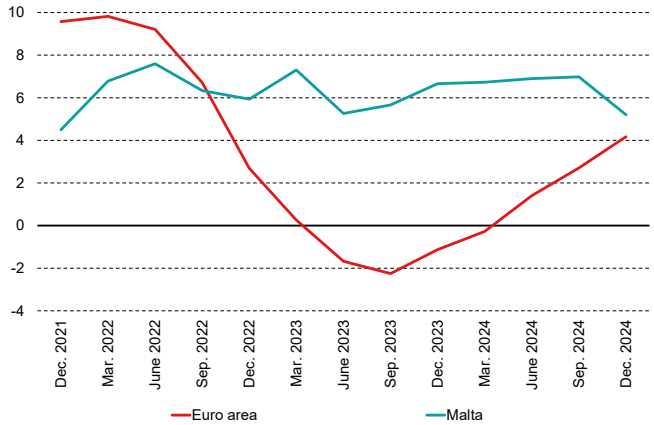
Regardless the multiple interest rate cuts by both the ECB and the Federal Reserve, bond yields remained contained throughout 2024. Although the US ten-year bond yield increased by just 0.4 percentage points to 4.4%, it masked the bouts of volatility throughout the year. These were largely driven by inflation developments and expectations of interest rate cuts coupled with the news of an electoral victory for the new US Republican administration. This occurred as investors demanded higher yields on long-term government debt in response to the anticipated expansionary fiscal measures. In the euro area, the ten-year bond yield decreased by a mere 0.05 percentage points to 2.8%, after rising in the first half of the year amidst the political instability in Germany and France. It subsequently retracted as the ECB maintained a more dovish monetary policy stance. The diverging economic conditions between the two cross-continental economies may require different monetary policy interventions going forward, possibly depreciating the euro against the US dollar and hence increasing imported inflation for the euro area. However, market developments in 2025 have rapidly propelled the euro to higher levels reflecting loss of confidence of investors in US assets as a result of trade policies and uncertainties surrounding them.

Despite the policy rate cuts, the interest burden on sovereign debt is expected to remain elevated as maturing debt is rolled over at higher interest rates than those at which it was originally issued. Furthermore, the euro area government debt-to-GDP ratio remained broadly unchanged over the previous year at 87.5% in 2024, largely due to higher government spending and structural primary deficits in countries such as Italy

[2] The SPXT excludes information technology companies, including software, technology hardware and equipment, and semiconductor companies.

and France.[3] Elevated debt levels limit the fiscal space available to mitigate future economic shocks, which could result in a vicious cycle where sluggish economic growth undermines sovereign debt sustainability. This may be of concern as some EU governments may feel the need to stimulate growth and increase spending on defence.[4] Domestically, government debt-to-GDP ratio remained contained at 45.3%, with the primary deficit standing at 2.9% in 2024.[5]

Chart 1.4
RESIDENTIAL REAL ESTATE PRICES
(per cent)



Source: Eurostat.

Euro area corporates, especially small to medium enterprises (SMEs), continued to face pressures on profitability due to slower-than-expected demand and still elevated cost of external funding, despite the reduced cost of new debt. Domestically, firms' debt position improved somewhat, with the consolidated corporate debt-to-GDP ratio standing at 66.6% in 2024, down from 67.5% in 2023, and in line with the euro area average. Meanwhile, the downward trend in non-financial corporation (NFC) leverage persisted to reach an all-time low of 23.5%. Euro area household vulnerabilities remained limited, driven largely by improvements in households' debt servicing capacity on the back of a robust labour market and better financing conditions. Similarly, the domestic household sector remained strong with the household debt-to-GDP ratio trending further downwards to 49.4% in December 2024 and remaining below the euro area average of 51.4%. Nevertheless, the domestic households' leverage ratio continued rising to around 24%, the highest level in the last decade. This may potentially pose financial stability risks, whereby households, especially low-income groups, struggle to meet their financial obligations, with repercussions on banks' asset quality. Such tail-end credit risks are visible for the euro area as well, especially should economic growth falter.

The recovery in the euro area residential real estate (RRE) market appears to be underway, with house prices growing by 4.2% annually in 2024, compared to a fall of 1.1% in 2023 (see Chart 1.4). However, the slowdown in the CRE market persists, with the outlook remaining especially bleak for office space and low-quality CRE. Domestically, the RRE cycle remained buoyant, with house prices rising steadily by 5.2%. These developments were supplemented by an almost 10% increase in the value of final deeds registered and a 2.3% increase in promise of sale agreements.

1.2 Vulnerabilities within the financial system

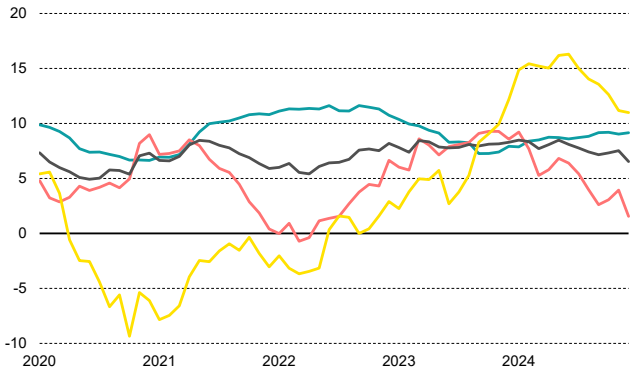
Euro area banks' profitability improved further in 2024, with the return on assets (ROA) reaching 0.73% in December 2024, up from 0.69% as at end 2023. This reflected increases in both non-interest income, and net interest rate margin which peaked mid-year. The margin however retracted somewhat in the second half reflecting the ongoing interest rate cuts by the ECB, which coupled with weak loan volumes could result in lower income going forward. Euro area banks also remained well capitalised and liquid, with a total capital ratio of 20.2%, while the LCR and Net Stable Funding Ratio (NSFR) stood at 163.4% and 127.1%, respectively. Asset quality remained healthy, with the NPL ratio stable at 1.9%.

Domestically, banks reported mixed profitability results. International banks incurred losses, mainly due to the operations of the branches, while non-core domestic banks reported a decline in profits. Otherwise, core

[3] See footnote 1.
[4] In March 2025, the EU unlocked up to €800 billion as part of the ReArm Europe Plan/Readiness 2030 defence package.
[5] Data based on four-quarter moving sums.

domestic banks' profits increased further as they managed to maintain stable NII, with lower net impairment charges outweighing the growth in non-interest expenses. However, within this group there were diverging trends, as some banks have already experienced lower profitability, primarily due to reduced NII. Overall, the core domestic banks' ROA increased by 0.1 percentage points to 1.1%, while that of all domestic banks stood at 0.7%.

Chart 1.5
ANNUAL GROWTH RATE OF RESIDENT LOANS
(per cent)



Source: Central Bank of Malta.

Resident lending grew at a slower pace in 2024, with the annual growth standing at 6.5% compared to the 8.3% in 2023, reflecting slower growth in credit to NFCs (see Chart 1.5). This grew by just 1.6%, compared to the 8.6% in 2023. While lending to property-related sectors such as the construction, real estate and accommodation sectors remained strong, up by 8.8% in 2024, overall lending to other sectors declined. Meanwhile, resident mortgage growth picked up momentum, up by 9.2% from 7.9% a year earlier. This is an indication of the still buoyant domestic RRE cycle. Thus, the strong growth in property-related loans continued to augment the already-existent concentration risks for these banks' loan books. Potential signs of excessive credit are better examined through credit gaps. As indicated in Special Feature A, a number of sub-sectors have positive credit gaps, which may indicate potential signs of exuberance. Nonetheless, asset quality continued to improve, with the overall NPL ratio falling by 0.3 percentage points to 1.9%, reflecting improvements in both the households' and NFCs' loan books. The overall forbearance ratio reached its lowest level since data became available in 2016 to stand at 2.0%, whilst the coverage ratio edged higher to 57.5%. Meanwhile, domestic banks continued to operate with strong capital buffers and ample liquidity, with the total capital ratio, LCR and NSFR standing at 26.5%, 375.9% and 180.7%, respectively.

The euro area's life insurance sector recovered in 2024, supported by higher gross premia which contributed to improved underwriting profitability, and stable solvency positions with the median solvency capital requirement (SCR) ratio at 216.0%.[6,7] Additionally, non-life insurers continued to perform well, benefiting from stronger underwriting results and investment returns. The sector's resilience was further reflected in a stable liquidity position, with a median liquid assets ratio of 47%. Domestically, life insurers mirrored the euro area trends, with premium volumes rebounding, particularly for index-linked (IL) and unit-linked (UL) products. However, higher claims and rising service costs weighed on profitability. By December 2024, the life insurance SCR ratio stood at 249.5%, exceeding the euro area median. Meanwhile, non-life insurers saw sustained premium growth, especially in property insurance, while investment returns helped counter rising expenses. The net combined ratio of 72.3% significantly exceeded the EU median of 97.0%, reflecting stronger underwriting performance. Overall, the insurance sector's liquidity remained solid across both life and non-life segments, with liquid assets comprising around 43% of total assets, closely aligning with the euro area median.

Concurrently, the euro area investment funds sector experienced substantial asset growth of nearly 15%[8] in 2024, primarily driven by the strong performance of equity markets and positive returns in the fixed-income securities market. The net asset value (NAV) of domestically-relevant investment funds expanded at

[6] See footnote 1.
[7] See EIOPA risk dashboard, April 2025, https://www.eiopa.europa.eu/tools-and-data/insurance-risk-dashboard_en.
[8] Source: ECB Data Portal: https://data.ecb.europa.eu/publications/financial-corporations/3030648.

a slower pace, but at 5.6% this was the highest increase since 2019. This comparatively lower growth can be attributed to differences in portfolio composition, with euro area sub-funds' portfolios having a larger share of equity securities and investment fund units, standing at approximately 58% of assets compared to about one-third for domestically-relevant investment funds' portfolios.

Domestically-relevant investment funds maintained a relatively stable high-quality liquid assets (HQLA) ratio of around 60%, while redemption levels declined. While cash and deposit levels saw a slight increase compared to the previous year, they remained below historical average levels, which could limit liquidity in response to market volatility and an increase in redemptions. Meanwhile, they continued to operate through low leverage, with the Assets Under Management (AUM) to NAV ratio standing at 100.6%, significantly lower than the 109% ratio observed in euro area sub-funds. Profitability also remained stable compared to the previous year.

1.3 Cross-cutting risks

Aside from geopolitical risks, cybersecurity remains a top concern for banks, as cyber threats are increasingly becoming more sophisticated, particularly with the rise of AI. Should a cyberattack on a major financial institution be successful, a ripple effect could result in widespread disruptions in the financial system, potentially leading to loss of confidence. In 2024, the number of cyber incidents reported to the ECB by significant banks has risen, marking the highest level in the eight years of available data.[9] While the increased use of AI and digitalisation pose significant advantages of efficiency and cost reduction, they also create risks of security and fraud, lack of transparency on how decisions are reached and the potential of over-reliance with less human oversight. Financial services providers are increasingly resorting to the transformative power of AI, but despite its advantages, its application in finance remains relatively limited. Investment funds that promote the use of AI still represented a minor share of the industry's business, with investment managers generally using generative AI primarily to support investment decisions driven by humans.[10] As the adoption of AI continues to grow, its integration into financial systems also increases potential vulnerabilities, making it essential to address the rising concerns around cyber incidents. In view of this increasing risk, the Digital Operational Resilience Act (DORA) came into effect in 2025, with the aim to strengthen the digital operational resilience within the European Union through an enhanced incident reporting framework, increased crisis preparedness, and more advanced security testing. This should bolster the sector's ability to prevent, respond to, and recover from various types of digital and cyber risks. Financial institutions should continuously enhance their defences to mitigate attacks and data breaches and adhere to international cybersecurity standards.

Although climate-related risks tend to be considered a longer-term threat, these have increasingly become of concern, posing risks to financial institutions. Extreme weather events have become more frequent and severe, potentially leading to direct financial losses for banks, insurances and financial institutions. Transition risks also persisted, with changes in policies possibly leading to asset devaluations or even loan defaults. Domestically, banks have increasingly incorporated climate elements, including physical and transition risk considerations in their lending and investment strategies (see Box 2). Still, banks need to continue strengthening their climate-related and environment risk management, to better integrate these risks with more traditional risk categories.[11] The pace at which the global transitions towards a more greener environment is however more uncertain presently, as the new US administration recently pulled out for the second time from the Paris Agreement, and also from two other initiatives; namely from the fund for responding to loss and damage and an international climate financing agreement to help developing countries transition away from fossil fuels. Furthermore, the United States is expected to boost the oil and gas industries, diverging from their EU counterparts which aim to adopt more climate-friendly policies, with possible negative repercussions on the global carbon footprint.

[9] Refer to the article 'Operational resilience in the digital age' by Anneli Tuominen.
[10] ESMA: Artificial intelligence in EU investment funds: adoption, strategies and portfolio exposures.
[11] MFSA Urges Banks to Strengthen Climate-Related and Environmental Risk Management - MFSA

The financial deregulation under the new US administration is aimed at rolling back rules established after the 2008 financial crisis. Some EU countries are also lobbying with the European Commission to deregulate particularly to water down the Basel standards for banks using the "competitiveness" of the sector argument. The current comprehensive regulatory framework was introduced in response to the great financial crisis and weakening it could have negative repercussions on global financial stability, making institutions more vulnerable to financial shocks. Financial stability and competitiveness are not necessarily opposing forces as better capitalised banks are better equipped to lend to the real economy. Complexity in the regulatory framework could be addressed by further streamlining, simplifying and harmonising regulation, though not at the expense of capital requirements, that have improved the resilience of European banks to withstand crisis events since the pandemic.

1.4 Risk horizon

The euro area remains susceptible to macro-financial risks mostly due to heightened geopolitical instability. Rising political polarisation and nationalism, security issues, and economic uncertainties are further exacerbating an already volatile political environment. Euro area GDP growth is expected to reach modest rates of 0.9% and 1.2% in 2025 and 2026, respectively. At the same time, inflation is expected to moderate to 2.3% and 1.9%.[12] Nonetheless, such forecasts remain subject to downside risks, including potential trade disruptions and policy divergences triggered by the new US administration. Against this backdrop, the ECB has continued with its less restrictive monetary policy stance. Other persistent challenges include the still high energy costs, although these have declined somewhat during the first half of 2025 amidst the turmoil in financial markets, and weaker productivity, which may impact competitiveness and, consequently economic growth.

The Maltese economy is expected to grow at a more moderate pace, with GDP growth estimated at 4.0% and 3.6% for 2025 and 2026, respectively. Private consumption is expected to remain the main driver of growth, together with an uptick in net exports in 2025, and higher government spending and investment in 2026.[13] Inflation is also expected to reach 2.1% in 2025 and in line with the ECB's medium target in the following years with food and imported inflation expected to moderate, as supply-chain conditions normalise. Still, the risk of supply-chain disruptions remains present due to the ongoing geopolitical and trade tensions.

Despite these challenges, the euro area and domestic financial sector remained resilient, but profitability may have peaked. Domestically, bank profitability could be impacted by the lower NII, especially due to declining returns from placements with the Central Bank of Malta and intermediation activities, underscoring the possible need of venturing into other income-generating activities. Cyclical and concentration risks are expected to remain present, as lending to property-related activities remain strong. In the insurance industry, inflationary concerns derived from growing tariff threats could adversely impact claims costs, while escalating climate-related challenges are prompting insurers to reevaluate their underwriting strategies and risk models. Similarly, domestically-relevant investment funds remain vulnerable to the challenging international macroeconomic conditions and geopolitical uncertainties which could impact their outlook, particularly as exposure to foreign securities, notably towards the United States continued to increase. Against this volatile environment, prudent financial and risk management practices remain crucial.

[12] See ECB staff macroeconomic projections for the euro area, March 2025.
[13] See Central Bank of Malta: *Outlook for the Maltese Economy* 2025:1, https://www.centralbankmalta.org/site/Publications/Outlook-2025-1.pdf.

Table 1.1
SUMMARY OF RISKS

Main vulnerabilities and risks to financial stability		Risk assessment and Outlook
Vulnerabilities outside the financial system		
Geopolitical uncertainties	Geopolitical risks have escalated further as tensions from the ongoing conflicts have been exacerbated by policy shifts under the new US administration. The latter has introduced measures, including new tariffs and a more assertive stance on global conflicts, prompting EU governments to boost defence spending. Additionally, policy changes such as financial sector deregulation could threaten financial stability. Recent EU elections have also heightened uncertainty, fuelled by concerns over rising nationalism.	
Inflationary pressures	Inflationary pressures have eased significantly, prompting major central banks to ease their monetary policies. However, escalating geopolitical risks, particularly trade tariffs, could potentially introduce new challenges and reignite inflationary concerns.	
Reassessment in risk premia	Despite occasional sell-offs in financial markets, volatility is expected to linger. Heightened geopolitical risks, the increased concentration in technology-driven sectors, and the deregulation of crypto markets in the US could amplify concerns over stretched valuations equity markets.	
Economic conditions in the euro area and public debt sustainability	Although the risk of an economic recession in the euro area remains low, downside risks persist. Economic growth in the region's two largest economies, Germany and France, remains sluggish. Additionally, higher public defence spending could raise further concerns about public debt sustainability, while the interest burden is expected to remain high as maturing debt is refinanced at still high rates.	
Domestic macroeconomic developments	In 2024, the domestic economy was able to weather the external macroeconomic volatility. Although economic growth softened slightly, it remains significantly higher than the euro area average, supported by a resilient labour market and solid private consumption. While debt remains manageable, deficit continues to exceed the EU's 3% threshold.	
Real estate market developments	The domestic RRE market remained strong and is expected to remain buoyant supported by an overall healthy household financial position. However, some anecdotal concerns in the CRE sector persist, with a particularly bleak outlook for offices and low-quality properties. Nevertheless, systemic implications are contained due to banks' limited exposure.	
Climate related risks	While climate-related risks are often considered as long-term threats, both transition and physical risks have intensified, with the latter encompassing both chronic and acute risks. These risks disrupt business models and undermine banks' loan portfolios by causing abrupt fluctuations in asset values, posing significant concerns for financial stability.	
Vulnerabilities within the financial system		
Developments in mortgage lending	Although resident mortgage lending has not yet reached double-digit growth rates, it has gained further momentum, reflecting the robust domestic RRE market. These dynamics have contributed to a widening positive mortgage credit gap, adding to the existing risk of concentration and raising concerns of potential excessive lending. However, prudent bank lending practices and the implementation of macroprudential policies help mitigate some of these risks.	
Developments in NFC lending	NFC lending decelerated in 2024, primarily due to a decline in loans to non-property-related sectors. In contrast, property-related loans, including construction, real estate, and accommodation sectors, remained strong. This trend exacerbates cyclical risks, as positive credit gaps in these sectors indicate the potential for excessive credit growth.	
Concentration in sectoral lending	The significant growth in property-related loans continues to pose significant concentration risks for the banks' loan portfolios, with resident mortgage lending, and lending to the construction, real estate and accommodation sectors accounting for nearly three-fourths of all resident lending.	
Credit quality of the loan portfolio	Credit quality continued to improve, driven by lower NPL ratios for both mortgage and NFC lending, a decline in forbearance ratios, and strong coverage through provisioning and collateral. Additionally, the reduction in Stage 2 and Stage 3 loans signals a positive outlook for asset quality.	
Developments related to net income	Heterogeneous trends within the banking sector saw international banks reporting losses, while non-core domestic banks experienced a decline in profits. In contrast, core domestic banks registered higher earnings, although some banks posted lower profits. Looking ahead, profit levels are expected to moderate as further interest rate cuts reduce interest income from Eurosystem placements and other interest-bearing assets.	
Liquidity developments	Despite a decline, banks' liquidity positions remained ample. Customer deposit growth has rebounded as yields on alternative investments have begun to decline, easing pressure on banks' deposit funding costs. This trend is expected to persist, driven by further projected interest rate cuts leading to lower bond yields.	
Operational risk	While rapid digitalisation within the financial system, driven by advancements in AI and complex IT systems, has created new opportunities, it also heightened banks' operational risks. As banks increasingly rely on these sophisticated technologies for automation and decision-making, they face a greater risk of cyber threats, data breaches, and system vulnerabilities that could disrupt operations.This is exacerbated on the back of the intensified geopolitical risks.	
Domestically-relevant insurances	Both life and non-life insurers experienced balance sheet growth and maintained strong capital positions, with increased liquidity, particularly among life insurers. The latter also reported a recovery in gross written premia from IL and UL products, though profitability declined due to higher underwriting expenses. Meanwhile, non-life insurers saw further profitability gains, supported by underwriting improvements and investment returns. However, some vulnerabilities persist due to market volatility and insurer-specific challenges.	
Domestically-relevant investment funds	Domestically-relevant investment funds recorded asset growth, driven primarily by the recovery in equity markets and a modest increase in fixed-income securities. Investments remained concentrated in liquid assets, with cash and deposit levels rising slightly, albeit still low. Redemptions remained close to historical averages, while leverage stayed low and stable. Profits remained elevated, broadly in line with the previous year. However, risks persist, particularly due to the potential reassessment of risk premia amid challenging macroeconomic conditions and geopolitical uncertainties.	

Risk level: Limited | Moderate | Elevated

Risk direction: Increased Stable Decreased

SPECIAL FEATURE: CYCLICAL RISK DYNAMICS

Introduction

Since the Global Financial Crisis, addressing risks to the financial system became a key priority for macroprudential policymakers. Their ultimate goal is to strengthen the system's resilience by mitigating its procyclical tendencies, while ensuring that the financial sector continues to support sustainable economic growth in the medium to long term. To achieve this, the Central Bank of Malta has expanded its macroprudential toolkit, developing alternatives to the traditional Basel credit-to-GDP gap to better assess credit dynamics. These new frameworks offer crucial insights into potential cyclical vulnerabilities that could threaten financial stability.

In this Special Feature, Panel A explores the dynamics of the financial cycle using an aggregate measure, specifically the Bank's semi-structural credit gap. Additionally, a risk heatmap is presented to support macroprudential policy by visually summarizing both aggregate and sectoral risk developments. Meanwhile, Panel B presents alternative sectoral credit gaps derived using the Hamilton Regression Filter (HRF) for household lending, distinguishing between mortgages and consumer credit. It also presents sectoral gaps for private NFC credit.

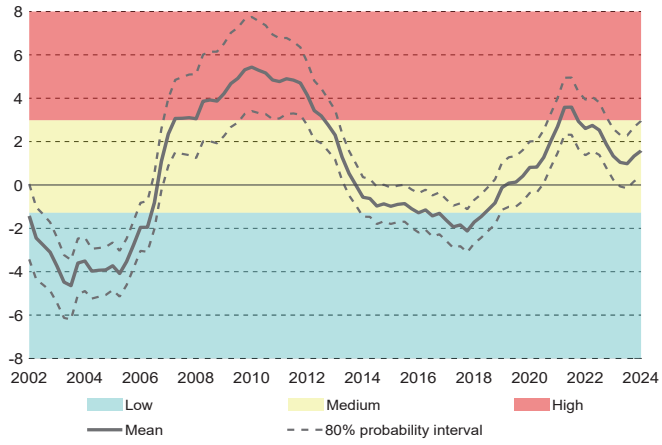
Panel A: Tracking the state of the financial cycle[1]

This panel discusses recent developments in cyclical risks, drawing on recent estimates of the semi-structural credit gap. This indicator aims to track the inherently unobservable financial cycle in Malta. However, studies indicate that the key variable under study, specifically credit, provides valuable insights for determining the financial cycle.[2] This indicator is model-based and relies on National Accounts data, which are provisional for recent years, and therefore some of the estimates presented in this panel are potentially subject to revision.

Several studies show that the leading cause of financial distress is excessive borrowing, and that historically economic downturns around the world have been significantly deeper when housing booms were fuelled by credit.[3] In the local context, measures based purely on credit developments have been signalling a resurgence of cyclical risks for several quarters.

Chart 1 shows the semi-structural credit gap, which was obtained using a model that decomposes several observed variables, including bank credit, into trend and cycle

Chart 1
THE CREDIT GAP AND RISK THRESHOLDS
(% of trend)



Source: Author's estimates.

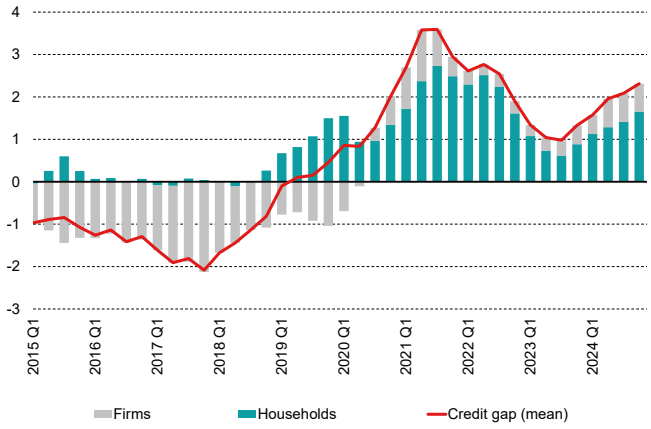
[1] Written by Dr William Gatt Fenech, Manager of the Financial Stability Research Office. The author would like to thank Mr Alexander Demarco, Mr Oliver Bonello, Mr Alan Cassar, Dr Aaron G. Grech and Ms Wendy Zammit for helpful comments, and Ms Sarah Vella for her assistance in preparing some of the material shown in this panel.

[2] See Minsky, H. P. (1977). The financial instability hypothesis: An interpretation of Keynes and an alternative to "standard" theory. *Challenge*, 20(1), pp. 20-27., Borio, C. E. and Lowe, P. W. (2002). Asset prices, financial and monetary stability: exploring the nexus. *BIS Working Paper No. 114.*, and Schularick, M. and Taylor, A. M. (2012). Credit booms gone bust: Monetary policy, leverage cycles, and financial crises, 1870-2008. *American Economic Review*, 102(2), pp. 1029-1061.

[3] See Dell'Ariccia, G., Igan, D., Laeven, L., Tong, H., Bakker, B., & Vandenbussche, J. (2014). Policies for macrofinancial stability: How to deal with credit booms. In S. Claessens, M. A. Kose, L. Laeven, & F. Valencia (Eds.), *Financial Crises – causes, consequences and policy responses* (pp. 325-364). International Monetary Fund, Greenwood, R., Hanson, S. G., Shleifer, A., and Sørensen, J. A. (2022). Predictable financial crises. *The Journal of Finance*, 77(2), pp. 863-921, and Albuquerque, B., Cerutti, E., Kido, Y., & Varghese, R. (2025). Not all Housing Cycles are Created Equal: Macroeconomic Consequences of Housing Booms. *IMF Working Paper WP/25/50*.

components (Gatt, 2024).[4,5] This aggregate measure is a weighted average of developments in credit issued to households and firms, using outstanding shares as weights. The credit gap is estimated with uncertainty, and therefore the chart shows the 80% probability interval of this measure at each point in time. The chart also shows the corresponding risk regimes, and based on these thresholds, cyclical risks are judged to have been high in the late 2000s and in the early 2020s and are currently at medium levels.

Chart 2
SECTORAL DECOMPOSITION OF THE CREDIT GAP
(% of trend)



Source: Author's estimates.

However, the credit gap has been widening since the third quarter of 2023, and the upper end of the probability interval breached the high-risk threshold at the start of 2024. This indicates rising aggregate cyclical risks driven by continued private sector credit growth that is above trend rates, given prevalent macroeconomic conditions including output growth and real borrowing costs, which are factored into the model.

Chart 2 decomposes the mean credit gap into contributions from household and firm credit over the past decade. The main driver of the positive credit gap since 2019 was household credit, which became increasingly composed of lending for house purchase.[6] Credit to firms contributed negatively during the first half of this period, following a process of deleveraging and disintermediation from bank credit to alternative sources of financing. However, credit growth to firms turned positive and contributed to the widening gap from mid-2020. It should be recalled that mortgage growth during this period was supported by strong activity in the housing sector, following the introduction of fiscal incentives during the COVID-19 pandemic. At the same time, credit guarantees to firms, as well as strong activity in the construction and real estate market due to the same fiscal incentives likely explain this rising contribution. Nevertheless, credit to firms continued to grow and has recently accelerated, such that by the end of 2024 this contributed to about 30% of the overall credit gap.

Therefore, the widening of the credit gap is driven by both household and firm credit and suggests increasing cyclical risks at an aggregate level. These observations however do not shed light on any sub-sectoral differences in NFC credit activity. The extent of homogeneity across different business activities is a very important aspect of risk analysis, as it makes inference on the nature and source of cyclical risks, particularly on whether these are widespread or more localised. This issue is explored further in Panel B.

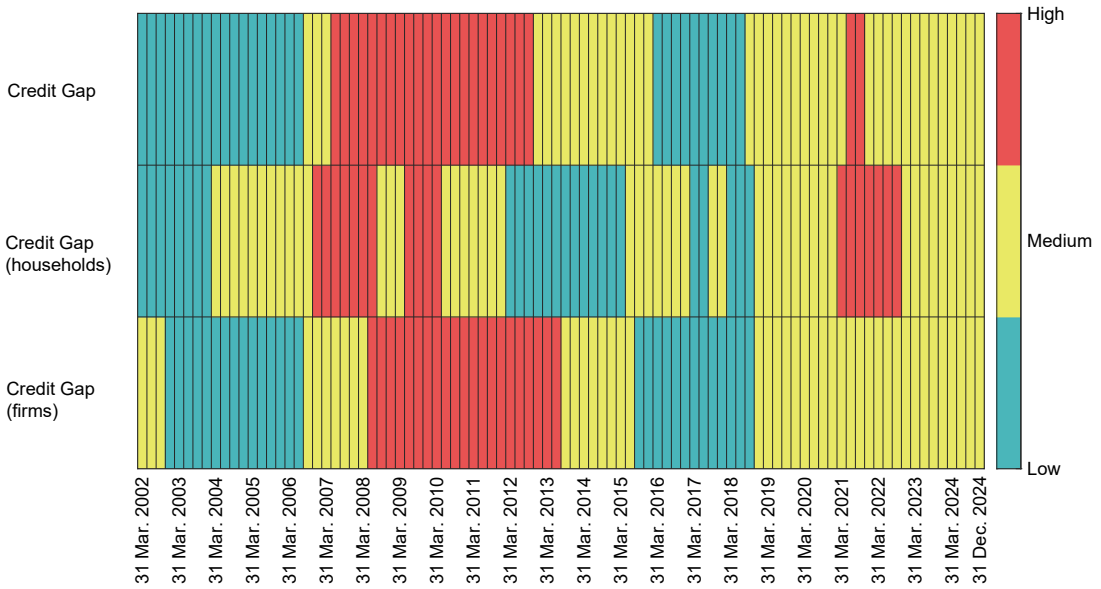
A heatmap for risk developments

This section presents a risk heatmap, an effective communication tool which helps to inform the conduct of macroprudential policy through its ability to identify the nature and timing of cyclical risks by distinguishing between sectoral and broad-based developments simultaneously. A further set of tools, discussed in the next panel, allow for a deeper exploration of potential credit excesses at a sub-sectoral level, allowing for a potentially more targeted policy response when this is warranted.

Chart 3 shows the risk regimes flagged by the aggregate credit gap, as well as the two sectoral credit gaps that make up the aggregate credit gap. The cut-offs for the risk regimes are estimated individually for each

[4] Gatt, W. (2024), A semi-structural credit gap for Malta: A multivariate filter approach, Central Bank of Malta *Working Paper* WP/04/2024.
[5] The model includes 11 observed variables, including GDP, inflation, unemployment, household and firm credit, household and firm lending interest rates, house prices, and euro area GDP, inflation and the policy rate.
[6] Mortgages comprised about 92% of total lending to households in 2024.

Chart 3
A RISK HEATMAP



Source: Author's estimates.

indicator to cater for potentially different signalling properties. In each case, the risk characterisation requires that the indicator has crossed a given threshold for at least two quarters. This avoids short-lived transitions which are due to volatility in an indicator rather than a genuine signal of changing risks. Although the switch from one regime to the next is not totally homogeneous across the indicators, the heatmap shows a broad characterisation of the financial cycle which transitioned from the medium to the high risk regime in the late 2000s and again in the early 2020s, while it resided in the low risk regime during the mid-to-late 2010s.[7] This peak-to-peak duration is in line with studies which document a financial cycle typically lasting between 13 to 20 years.[8] All three indicators have been in the medium risk regime since at least 2023.

Panel B: Estimating Sectoral Credit Gaps[9]

As shown in Panel A, domestic credit to the private sector followed distinct phases of the credit cycle. However, these aggregate measures do not reveal which specific sub-sectors are driving the cycle, nor do they capture the positive credit gaps associated with them. The aim of this panel is to provide an update of the analysis on private firms' sectoral credit gaps using the HRF,[10] while expanding further this methodology to also focus on households' credit gaps, specifically differentiating between mortgages and consumer credit gaps. Furthermore, this panel provides complementary evidence that substantiates the findings presented in Panel A, where credit gaps were estimated through a semi-structural modelling approach.

[7] The credit gap for firms remained in the high-risk regime for a longer period, up to 2013, and hence transitioned to the medium and low risk regimes some years later, due to an absolute decline in outstanding firm credit in the mid-2010s. The latter was driven by credit deleveraging and a shift by firms to alternative sources of finance. This affects the estimation of the trend level of credit, which also falls, leading to a more persistent positive gap. See Darmanin, J. (2017). The financing of companies in Malta. *Policy Note,* Central Bank of Malta, July 2017 and Central Bank of Malta (2018). Box 3: A review of the corporate bond market in Malta. *Financial Stability Report* 2017, for more information on developments in firm financing in the mid-2010s.

[8] See Drehmann, M., Borio, C. and Tsatsaronis, K. (2012). Characterising the financial cycle: don't lose sight of the medium term! *BIS Working Paper No. 380.*, and Barbone Gonzalez, R., Lima, J. and Marinho, L. (2015). Business and Financial Cycles: an estimation of cycles' length focusing on Macroprudential Policy. *Banco Central Do Brasil Working Paper No. 385.*

[9] Written by Mr Christian Mamo, Principal Economist from the Financial Stability Surveillance Office. The author would like to thank Mr Alexander Demarco, Mr Oliver Bonello, Mr Alan Cassar, Dr Aaron G. Grech, Ms Wendy Zammit and Mr Andrew Spiteri, for their invaluable comments and suggestions.

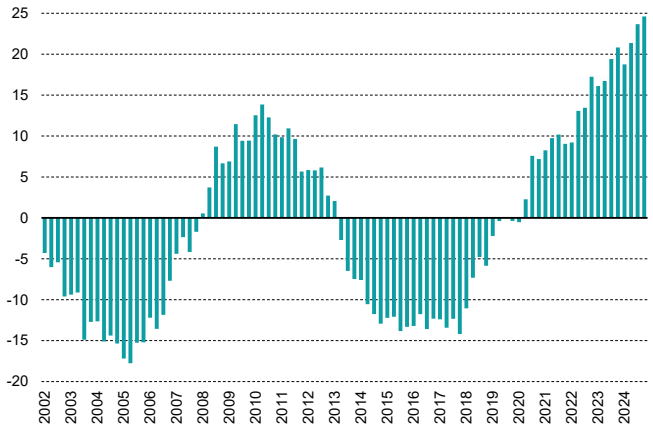
[10] Refer to the boxed article in the *Financial Stability Report* 2023: Measuring the credit gap for Maltese private corporations using the Hamilton filter.

Sectoral private firms' credit gaps

The firms' credit gaps were re-run using the HRF with the overall firms' credit gap widening further to reach 24.6%, up from 20.8% in 2023 (see Chart 4).[11] These developments are generally in line with the results from Panel A of this boxed article. Furthermore, based on the Bank's internal credit growth forecasts, initial estimates of the NFC credit gap indicate that it is expected to remain positive at least until 2027.

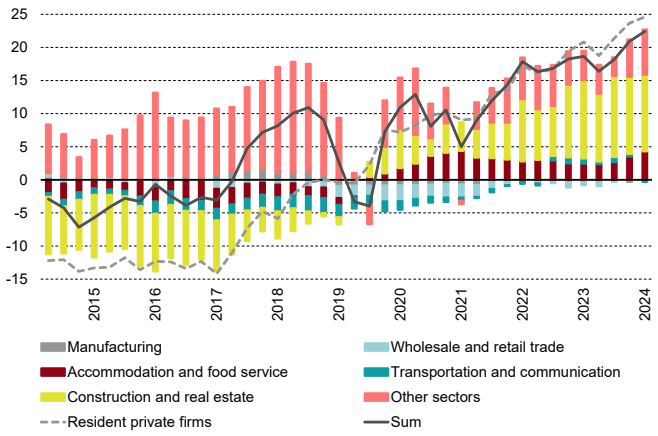
The widening of the firms' credit gap in 2024, was mainly attributed to the accommodation and food services sector, which gap stood at 36.8%, reflecting the strength of the tourism sector. However, given that this sector accounts for a relatively low share of 11% of overall private credit, its contribution to the overall credit gap remains limited to 4.1 percentage points (see Chart 5). In contrast, the credit gap of the construction and real estate sector reached 30.8%, with a weighted contribution of 11.6 percentage points of the overall gap in December 2024. This substantial impact largely reflects this sector's significant share of total private firms' credit, which stood at 37.5%.

Chart 4
CREDIT GAP OF RESIDENT PRIVATE FIRMS BASED ON THE HRF
(per cent of trend)



Sources: Author's estimates and Central Bank of Malta.

Chart 5
SECTORAL CREDIT GAPS BASED ON THE HRF – CORPORATES
(per cent)



Sources: Author's estimates and Central Bank of Malta.

The 'others' sector remained an important contributor, adding another 6.8 percentage points to the overall gap. However, in line with previous estimates, this is largely driven by the strong credit to the financial sector. Excluding this sector, the 'others' sector would have contributed negatively to the overall gap.[12] This mainly reflected credit gap developments for the administrative and support services sector which being the second largest component in the 'others' sector witnessed a substantial narrowing of the credit gap, albeit remaining slightly positive. Meanwhile, the credit gap for the energy and water sector which also accounted for a substantial share, stood in significant negative territory.

The credit gap of the manufacturing sector turned positive for the first time in five years during the last quarter of 2024 to stand at 4.5%. However, the share of lending to this sector is just 4.4%, having limited impact on the overall credit gap. Meanwhile, the credit gap of both the wholesale and retail trade and the

[11] Adjusting for the COVID-19 pandemic, the credit gap would largely remain unchanged. See FSR 2023 Box 1.
[12] The credit gap of the 'others' sector excluding the financial sector was generated from 2003Q1 onwards due to data availability issues for financial loans.

transportation and communication sectors stood negative in 2024Q4, albeit their contribution to the overall private firms' credit gap is also tiny.[13]

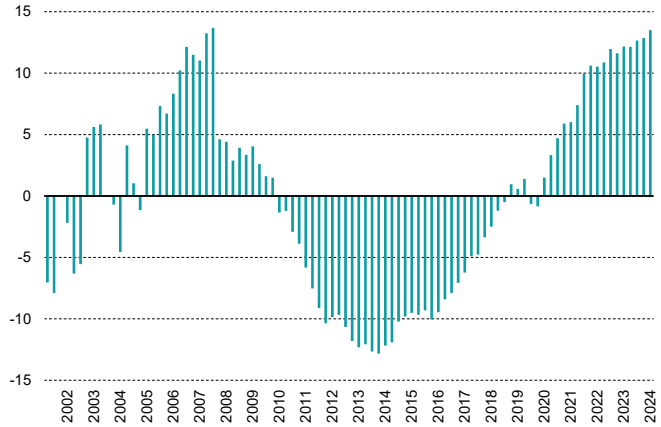
Households' credit gaps

Lending to the household sector constitutes a significant portion of banks' lending portfolio, accounting for nearly 60% of total resident lending by end 2024. Since 2002, household credit experienced two distinct periods of positive credit gaps.[14] The first spanned from around 2005 to mid-2011, while the second began in 2020, and persists, ending the year at 13.5% (see Chart 6). Based on internal credit growth forecasts, initial estimates indicate that such credit gap is expected to remain positive at least until 2027. This ongoing trend corroborates the findings observed in Panel A of this article.

The HRF was also estimated separately for mortgages and consumer credit. As expected, mortgages remained the main driver of cyclical developments primarily because they make up the largest share of resident household credit, standing at 92% as at end 2024. After almost a decade of negative gaps, the mortgage credit gap turned positive in mid-2019, to increase steadily thereafter, reaching 12.1%, slightly less than the peak of 14.6% in 2008.

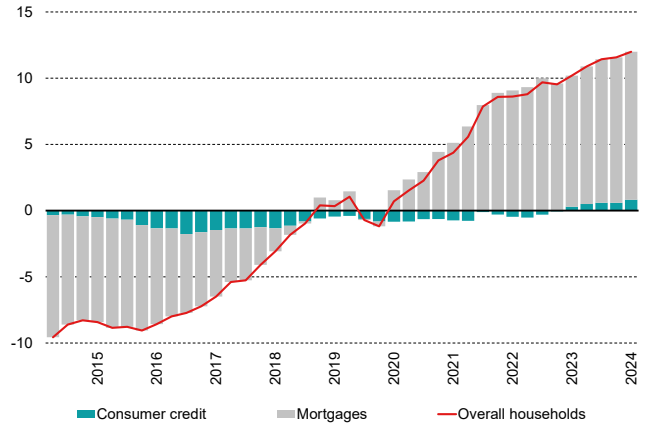
The consumer credit gap remained in negative territory until the end of 2023, reflecting subdued credit developments. However, as this picked up and entered double digit territory for most of 2024, the gap turned positive to reach 10.7% as at end 2024. Surveyed responses indicated that the increased consumer lending by banks was in part driven by initiatives to finance green products (see Box 2). While the credit gaps for both components were similar as at the end 2024, their impact on the overall household credit gap differed significantly, standing at 11.2 percentage points and 0.8 percentage points, respectively (see Chart 7).

Chart 6
CREDIT GAP OF RESIDENT HOUSEHOLDS BASED ON THE HRF
(per cent of trend)



Sources: Author's estimates and Central Bank of Malta.

Chart 7
SECTORAL CREDIT GAPS DERIVED USING HRF – HOUSEHOLDS
(per cent)



Sources: Author's estimates and Central Bank of Malta.

Concluding remarks

A synthesis of the findings in Panels A and B point to a Maltese financial cycle which is being driven primarily by a persistently expanding credit cycle as depicted in Chart 1. The

[13] The former sector's credit gap has been in negative territory since 2017, while the latter sector's gap only turning positive between 2023Q2 and 2024Q3.

[14] Due to data unavailability, the household credit gap is estimated from 2001. This differs from the corporate credit gap, which is estimated from 1998.

expansion in the credit cycle is in turn being driven almost exclusively by real estate-related credit demand, from both the household and NFC sectors. As illustrated in Panel B, the positive credit gap is largely driven by the construction and real estate sectors.

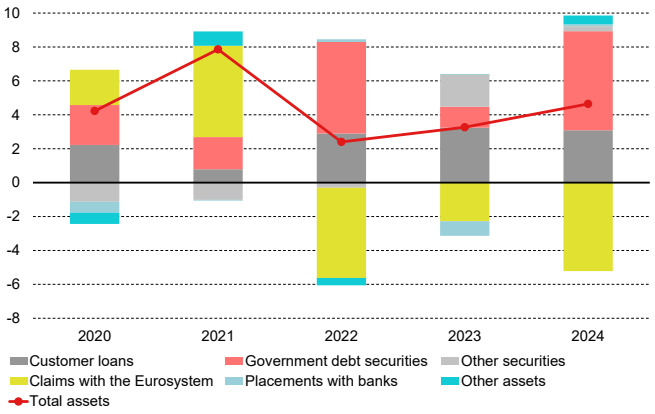
The Bank, in collaboration with the MFSA, will continue to monitor real estate-related risks and assess the ongoing appropriateness of existing policies in this regard, and adjusting them if necessary when needed. The review of such policy measures occurs at least every two years, as per the provisions of CRD VI and as transposed in CBM Directive No.11.

2. DEVELOPMENTS IN THE BANKING SECTOR

2.1 Core domestic banks

The balance sheet of the core domestic banks grew by 4.6%, equivalent to 136.8% of GDP (see Chart 2.1). This expansion was primarily driven by increased holdings of government paper, up by 28.3% to account for just over a quarter of total assets. Although interest rates began to ease in mid-2024, government bond yields remained elevated, largely due to the ongoing global geopolitical tensions. Customer loans remained central to these banks' business model, which rose by 6.3% and constituted almost half of total assets. Meanwhile, core domestic banks continued to reduce their placements with the Eurosystem, down by 38.6%, despite the still elevated deposit facility rate.

Chart 2.1
CONTRIBUTION TO BALANCE SHEET GROWTH – CORE DOMESTIC BANKS
(percentage points)

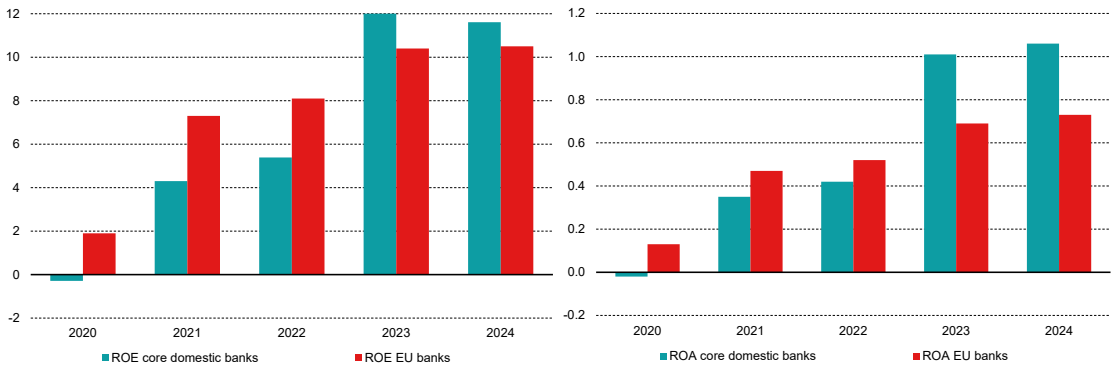


Source: Central Bank of Malta.

2.1.1 Profitability

Following the strong increase in profitability reported in 2023, net profit before tax continued to grow in 2024, albeit at a more moderate pace of 10.1%. Whilst the post-tax ROA edged marginally higher to 1.1%, the return on equity (ROE) stood lower, down by 0.4 percentage points to 11.6%, as equity rose at a faster pace than profits (see Chart 2.2). Nonetheless, this group of banks continued to fare better than their EU counterparts.[1] The slowdown in profits reflected the ongoing monetary policy easing, which led to lower NII from intermediation activities (see Chart 2.3). Interest margins narrowed, largely due to a 52 basis-point decline in the weighted average interest rate (WAIR) on resident NFC loans, which in turn, reflected the share of market-linked lending developments. The WAIR on mortgages also declined by 9 basis points,

Chart 2.2
PROFITABILITY RATIOS
(per cent)



Sources: Central Bank of Malta; EBA.

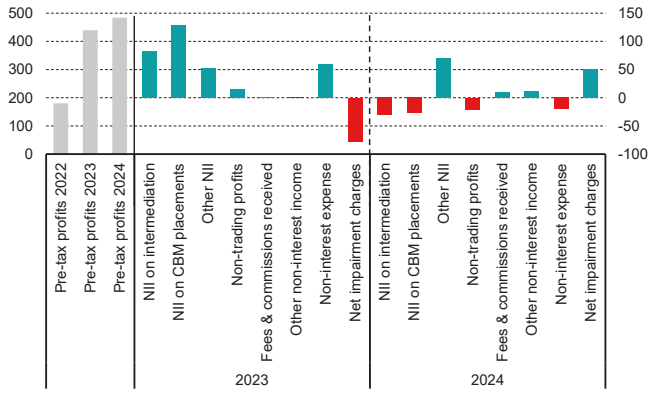
[1] European Banking Authority (EBA) risk dashboard 2024Q4.

whilst that on deposits increased by 7 basis points (see Chart 2.4). NII on placements with the Central Bank of Malta also declined, mainly due to much lower volumes. Nonetheless, overall NII still edged up by 1.7% as other NII sources, such as earnings from fixed-income assets, almost doubled. These developments reflected these banks' strategy to step up their investment in government securities, in a bid to lock in higher yields before further rate cuts took place. Meanwhile, non-interest income remained stable as higher fees and commission income, and other non-interest income, were almost offset by lower non-trading profits. Separately, these banks recovered almost €50 million worth of impairments which contributed to both higher profits and improved the credit quality of their loan portfolio. Operating expenses increased, primarily due to higher staff expenses. Combined with the more modest growth in gross income, the operational cost-to-income ratio rose by 1.5 percentage points to 52.5%.

2.1.2 Credit dynamics

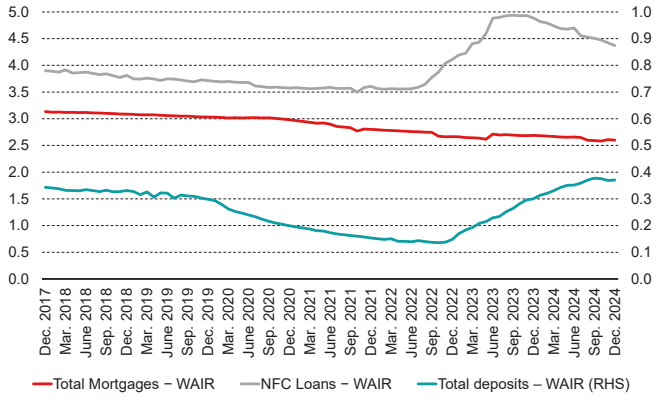
Despite slowing down somewhat, growth in resident credit remained strong at 6.4%. This moderation was primarily driven by the NFC sector, with its growth rate decelerating to merely 1.0% (see Chart 2.5). This mainly reflected lower loans to the transportation and storage sector, amongst others. On the contrary, lending to the construction, real estate and accommodation sectors rose by almost 10% to account for almost 17% of resident loans and more than half of the loans to resident NFCs (see Chart 2.6). Meanwhile resident mortgage growth picked up momentum, up by 9.3%, adding further concentration risks in these banks' loan books. After

Chart 2.3
MAIN CONTRIBUTORS TO PROFITS – CORE DOMESTIC BANKS
(EUR millions)



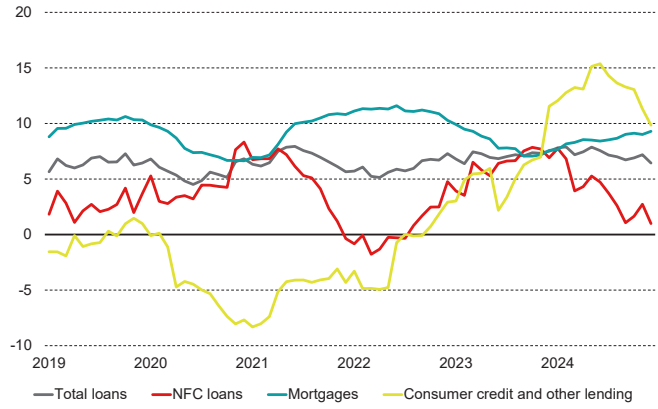
Source: Central Bank of Malta.
Note: Grey bars indicate pre-tax profits in absolute amounts. Teal (positive) and red (negative) bars indicate yearly contributions to profits.

Chart 2.4
INTEREST RATE DEVELOPMENTS – CORE DOMESTIC BANKS
(per cent)



Source: Central Bank of Malta.
Note: Data refers to the annualised agreed WAIR on outstanding resident exposures by core domestic banks.

Chart 2.5
ANNUAL GROWTH RATE OF RESIDENT LOANS – CORE DOMESTIC BANKS
(per cent)



Source: Central Bank of Malta.

growing at double-digit rates, in large part driven by lending towards green products offered at favourable rates, consumer credit growth moderated to 9.8% by the end of the year (see Box 2).

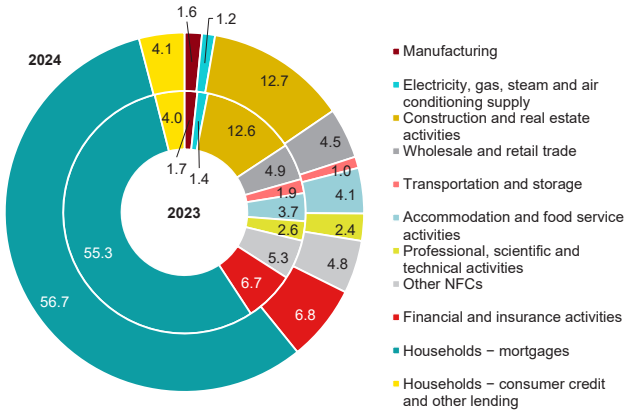
2.1.3 Credit quality

The quality of these banks' loan books improved further, supported by a strong domestic economy and conservative lending policies, which were further supported by the slow pass-through of lending rates. The overall NPL ratio improved by 0.4 percentage points to 2.1%, with recoveries in both the resident and non-resident loan portfolios (see Chart 2.7). Excluding the placements with the Central Bank of Malta, the NPL ratio also remained low at 2.6%.

The resident mortgages' NPL ratio trended further down to 1.1%, driven by both lower outstanding NPLs and higher credit volumes. Although resident consumer credit NPLs grew over 2023, the growth in consumer credit loans kept its NPL ratio stable at 3.0%. The resident NFCs NPL ratio also witnessed a significant improvement in these last years to remain below pre-COVID levels, declining to 4.5% by end 2024. Such improvement was registered across all the main sectors, most notably in the construction, real estate and the accommodation and food services sectors. This was driven by both a drop in the outstanding level of NPLs and an increase in credit (see Chart 2.8). As a result, the collective NPL ratio for these sectors fell to around 4%. Nonetheless, NPLs towards these sectors still accounted for almost a quarter of total NPLs.

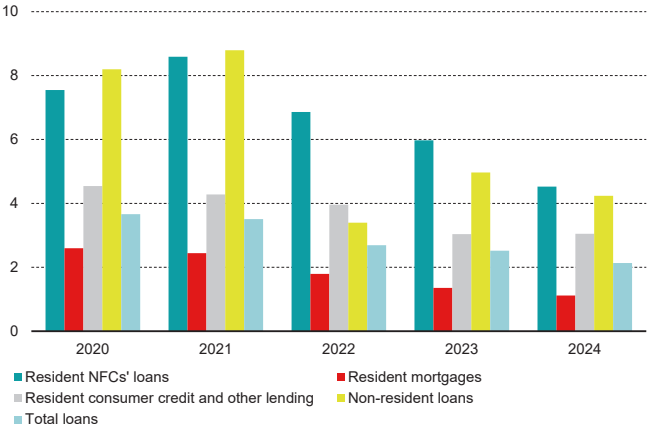
The overall improvement in the asset quality was confirmed by lower Stage 2 and Stage 3 loans,

Chart 2.6
RESIDENT LOANS BY NACE – CORE DOMESTIC BANKS
(per cent)



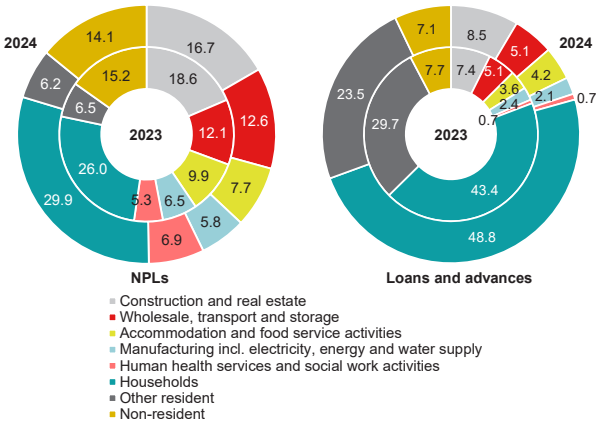
Source: Central Bank of Malta.

Chart 2.7
NPL RATIOS – CORE DOMESTIC BANKS
(per cent)



Source: Central Bank of Malta.

Chart 2.8
SECTORAL ALLOCATION OF LOANS AND ADVANCES AND NPLs – CORE DOMESTIC BANKS
(per cent)



Source: Central Bank of Malta.

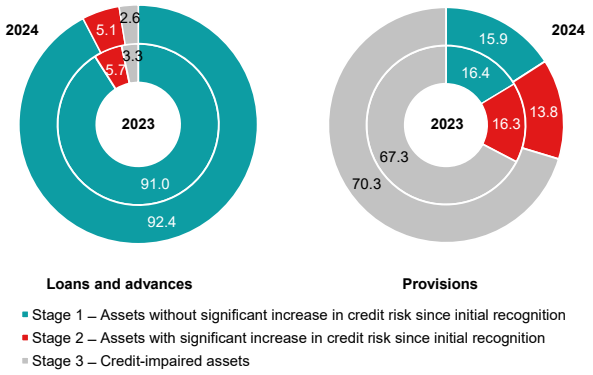
down by 5.3% and 17.8% to 5.1% and 2.6% of total loans, respectively. Conversely, Stage 1 loans increased by 7.8% to account for 92.4% of total loans (see Chart 2.9). Meanwhile, overall provisions dropped by just over a fifth, and consequently, the coverage ratio contracted by 1.3 percentage points to 42.3% (see Chart 2.10). Nonetheless, taking into consideration the collateral underlying such exposures, credit risk is almost fully covered.

Forborne loans also dropped by 12.1%, exclusively driven by non-performing exposures with forbearance measures, as otherwise performing exposures rose slightly. As a result, the forbearance ratio declined by 0.2 percentage points to 2.3% (see Chart 2.11).

2.1.4 Securities portfolio

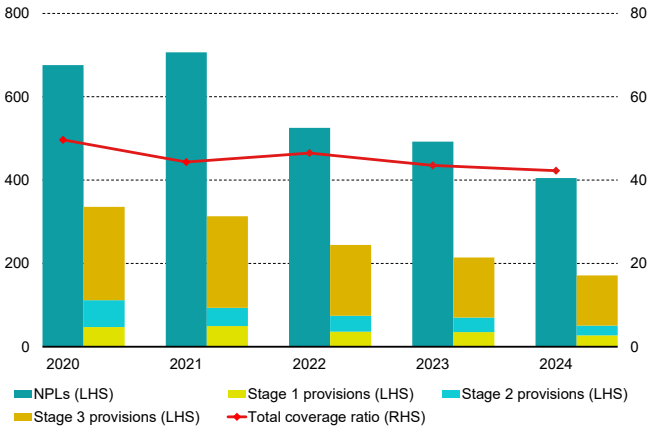
Despite the monetary policy easing in the latter half of the year, euro area government bond yields remained relatively stable, reflecting the geopolitical instability. This prompted banks to take advantage of still elevated bond yields and invested more heavily in such an asset class (see Chart 2.12). Debt securities rose by over a fifth, reaching nearly a third of assets. This was primarily driven by higher sovereign debt holdings, which accounted for almost 80% of the overall debt securities portfolio. The increase was primarily in both domestic and major EU sovereigns, while exposures to non-EU governments remained limited. The bulk of debt securities remained concentrated in medium or high-rated instruments, accounting for around 92% of total holdings, largely unchanged from the previous year. In contrast, the share of low and unrated debt

Chart 2.9
STAGE ALLOCATION OF LOANS AND ADVANCES AND PROVISIONS – CORE DOMESTIC BANKS
(per cent)



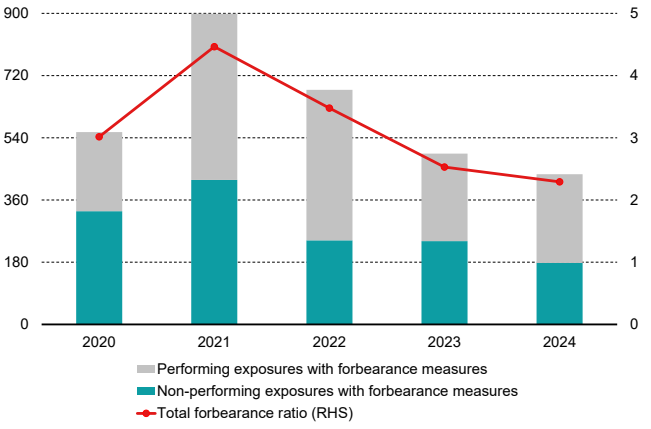
Source: Central Bank of Malta.

Chart 2.10
COVERAGE RATIO – CORE DOMESTIC BANKS
(EUR millions; per cent)



Source: Central Bank of Malta.

Chart 2.11
FORBORNE LOAN EXPOSURES – CORE DOMESTIC BANKS
(EUR millions; per cent)



Source: Central Bank of Malta.

securities fell even further (see Chart 2.13). Meanwhile, equity holdings remained limited to just 1.5% of total assets.

2.1.5 Funding and liquidity

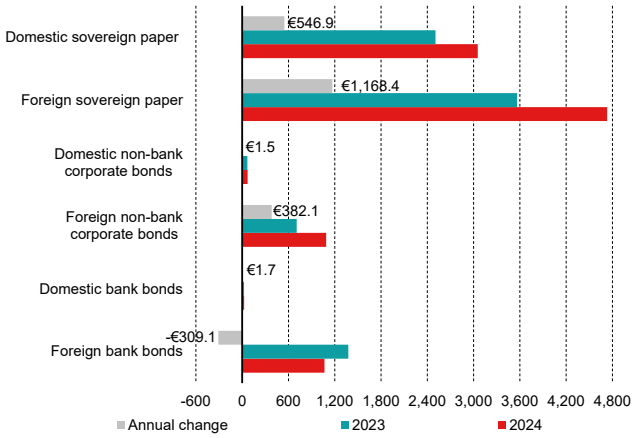
Customer deposits

The growth in customer deposits regained momentum in 2024, rising by almost 6%, compared to 1.6% in 2023 (see Chart 2.14). The increase was entirely driven by resident customer deposits, up by almost 7% to account for over 93% of total customer deposits, as otherwise non-resident customer deposits fell by 5.9%. Resident household deposits, which represented more than two-thirds of total customer deposits, increased by 5.9% (see Chart 2.15). Meanwhile, after contracting during the previous year, resident corporate deposits grew by over 15%, largely coming from firms operating in the transportation and storage sector, public administration and defence, as well as arts and entertainment sectors, amongst others. Resident deposits from general government also increased, up by over a fifth, as otherwise resident deposits from the financial and insurance activities sector fell.

Wholesale funding

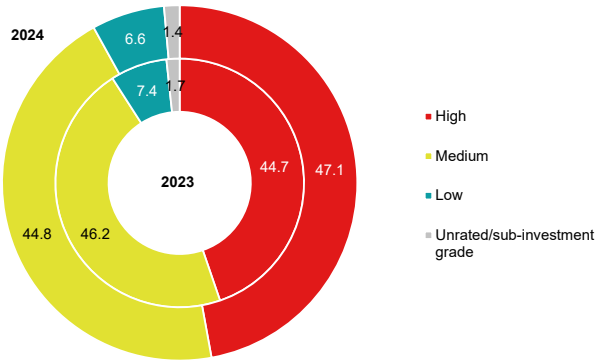
Wholesale funding remained limited, financing just 3.3% of total assets. This remained largely concentrated in debt securities issued, which increased by 14.7%, reflecting the issuance of subordinated debt aimed at further strengthening the Minimum Requirements for Own Funds and Eligible Liabilities (MREL) (see Chart 2.16). By the end of the year, interbank funding remained relatively stable, while funding from repurchase agreements declined. Eurosystem funding also remained limited.

Chart 2.12
TOTAL DEBT SECURITIES – CORE DOMESTIC BANKS
(EUR millions)



Source: Central Bank of Malta.

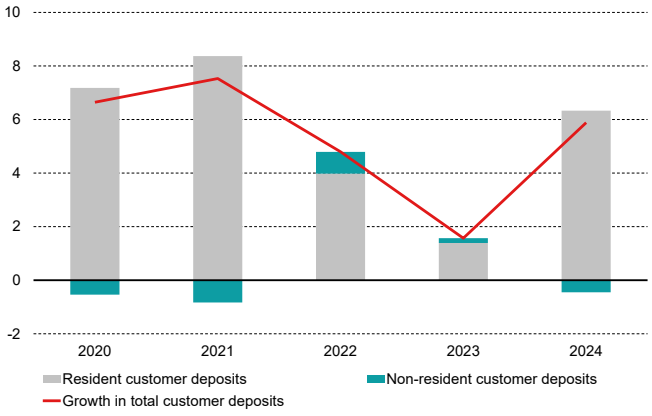
Chart 2.13
TOTAL DEBT SECURITIES BY RATING – CORE DOMESTIC BANKS
(per cent)



Source: Central Bank of Malta.

Note: Investment-grade debt securities carrying a rating of AA- or above are regarded as 'high-rated bonds'. 'Medium-rated debt securities' are those rated between A- and A+, whereas 'low-rated debt securities' are those rated between BBB- and BBB+. Sub-investment grade debt securities are rated lower than BBB-.

Chart 2.14
CONTRIBUTION TO GROWTH IN CUSTOMER DEPOSITS – CORE DOMESTIC BANKS
(percentage points; per cent)



Source: Central Bank of Malta.

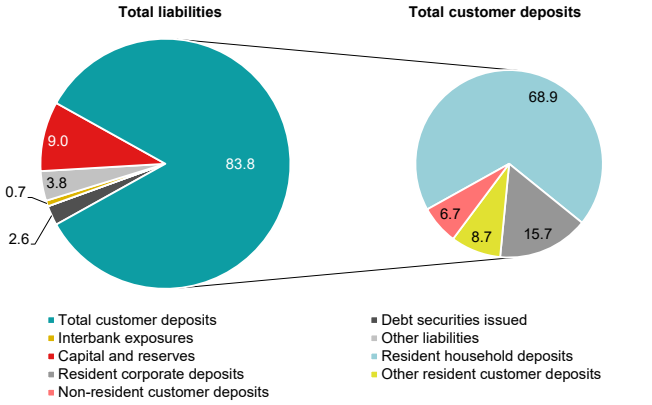
Liquidity

The short-term liquidity position of this group of banks remained abundantly healthy, as evidenced by the robust LCR of 366.6% which remained largely unchanged in 2024 (see Chart 2.17). Higher net liquidity outflows were counterbalanced by an increase in HQLA, primarily due to more holdings of central government assets, and to a lesser extent of multilateral development banks and international organisations' assets. This is a continuation of a trend of banks shifting from central bank reserves to highly liquid government paper. Meanwhile, the NSFR, which looks at liquidity from a longer-term perspective, rose by 8.6 percentage points to almost 185%. The customer loans-to-deposits ratio remained relatively stable at 59.2%, well below the weighted average of 104.9% for euro area banks.[2]

2.1.6 Capital and leverage

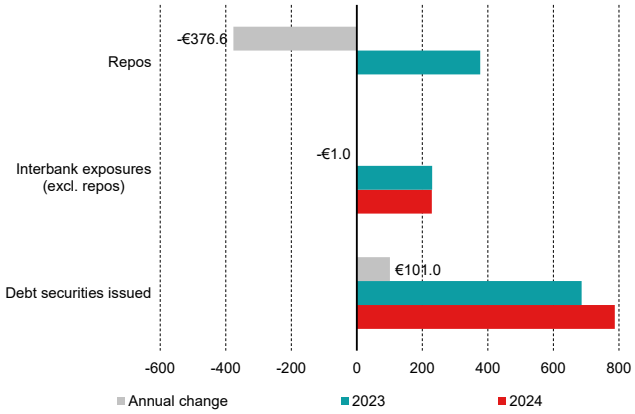
Total own funds rose somewhat by 9.5%, largely driven by an increase in Tier 1 capital on the back of higher retained earnings (see Chart 2.18). Moreover, Tier 2 capital also increased considerably following the issuance of subordinated bonds. Total risk exposures also went up, but to a lesser extent. In this regard, the total capital ratio edged up by 0.6 percentage points to 25.3%. Core domestic banks remained mostly exposed to credit risk, with the related risk-weighted assets (RWA) increasing by 5.6% in 2024 (see Chart 2.19). However, the share of credit risk exposures diminished by 1.1 percentage points to 88.2% of total risk exposures by end 2024, due to a faster increase in operational risk exposures. The latter rose by almost a fifth to 11.7% of total risk exposures. To this end, banks

Chart 2.15
BANKS' LIABILITIES COMPONENTS – CORE DOMESTIC BANKS (2024)
(per cent)



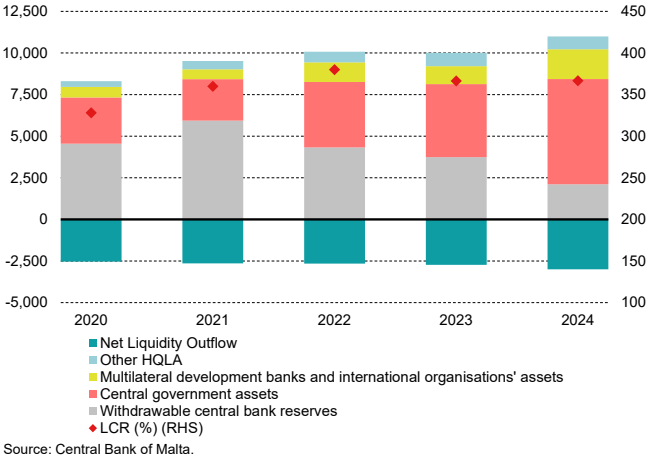
Source: Central Bank of Malta.
Note: Total customer deposits pie chart represents the 83.8% in the total liabilites pie chart. This adds up to 100%.

Chart 2.16
DEVELOPMENTS IN WHOLESALE FUNDING – CORE DOMESTIC BANKS
(EUR millions)



Source: Central Bank of Malta.

Chart 2.17
LCR – CORE DOMESTIC BANKS
(EUR millions; per cent)

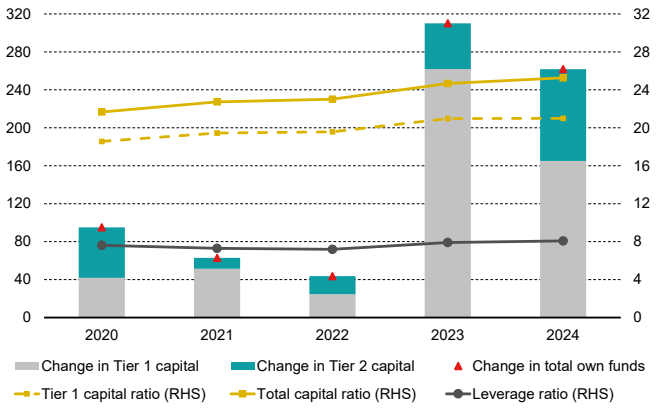


Source: Central Bank of Malta.

[2] Source: EBA Risk Dashboard 2024Q4.

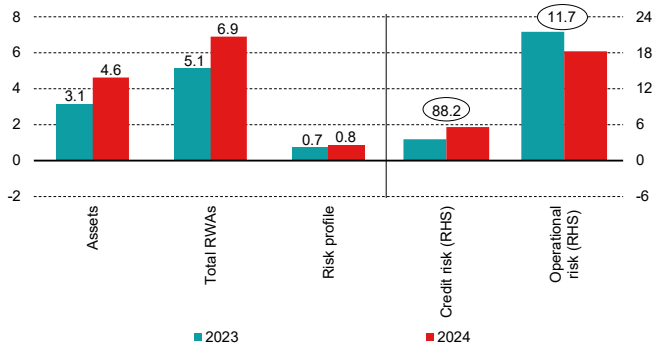
are being increasingly focused on managing potential operational risks, particularly those related to digitalization and cyber threats. Looking at the overall risk profile of these banks, a slight deterioration was reported, as total risk exposures rose at a faster pace than total assets. At 39.6%, this ratio is somewhat above the EU average of 35.6%.[3] Meanwhile, the leverage ratio strengthened further, up by 0.2 percentage points to 8.1%.

Chart 2.18
CHANGE IN TOTAL OWN FUNDS, CAPITAL AND LEVERAGE RATIOS – CORE DOMESTIC BANKS
(EUR millions; per cent)



Source: Central Bank of Malta.

Chart 2.19
GROWTH IN ASSETS AND TOTAL RISK EXPOSURE – CORE DOMESTIC BANKS
(per cent)



Source: Central Bank of Malta.
Note: Asset growth figures within the chart are obtained from FINREP returns, differing slightly from the BR/06 Statutory Financial Information on which balance sheet developments is based. Percentages in circles represent the share of total risk exposure in 2024. Other percentages refer to the annual growth rate.

2.1.7 Risk outlook

Building on trends observed in previous years, this group of banks continued to invest heavily in sovereign securities, as government bond yields remained elevated. The current environment is marked by heightened uncertainty, driven by complex geopolitical dynamics, evolving monetary policy stances, and shifting global trade patterns. Indeed, policy developments in various areas, ranging from trade tariffs and defence spending, will impact inflation and economic growth, and could keep bond yields elevated. As a result, this could also have an adverse impact on the future flow of retail funding. Meanwhile, mixed results in NII are expected to persist, highlighting the importance for banks to maintain diverse income streams. Domestic credit growth weakened slightly but the concentration in property-related loans endured, highlighting the need to ensure adequate capital buffers. Asset quality remained sound; however, domestic banks should continue to uphold prudent lending practices and actively pursue effective NPL recovery strategies, while preserving robust capital and liquidity buffers.

Looking ahead, it is important that banks remain at the forefront of two defining cross-cutting risks, namely climate change and digital resilience. The financial sector must not only continue to embed climate risk considerations into its decision-making processes and frameworks but must actively channel funding to continue facilitating the green transition (see Box 2). Simultaneously, as cyber threats grow in scale and sophistication, banks must step up their investment in cutting-edge technologies while continue implementing robust cybersecurity frameworks. This will ensure that protection of sensitive data, preserve trust in the system while continue ensuring the operational continuity of the financial system.

[3] Source: EBA Risk Dashboard 2024Q4

BOX 1: INSIGHTS FROM THE BANK LENDING SURVEY[1]

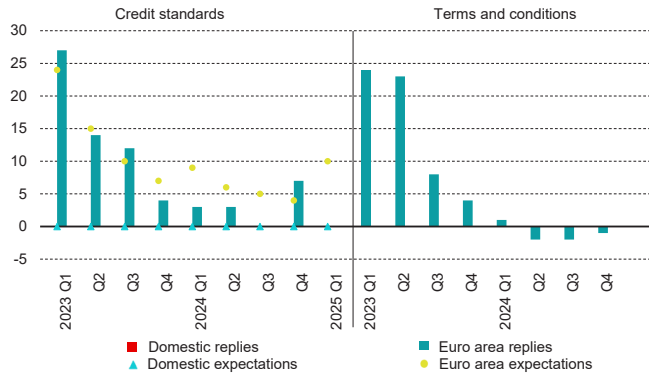
In 2024, around 150 euro area banks participated in the quarterly round of the BLS. This included four Maltese banks, which accounted for around 88% of resident bank credit. The BLS provides insights into recent trends and future expectations of euro area banks' lending standards and credit demand of enterprises and households.[2] The survey also includes ad hoc questions which aim to provide perspectives on topical issues, such as funding conditions, the impact of new regulatory and supervisory measures, climate-related risks, and the effects of changes in the ECB's monetary policy stance.

Loans to enterprises

The overall credit standards for new loans to enterprises by Maltese banks remained stable during 2024, in line with the banks' expectations (see Chart 1). Similarly, overall terms and conditions remained unchanged across all banks, despite one bank reporting a slight tightening in lending rates and margins on both average and riskier loans.

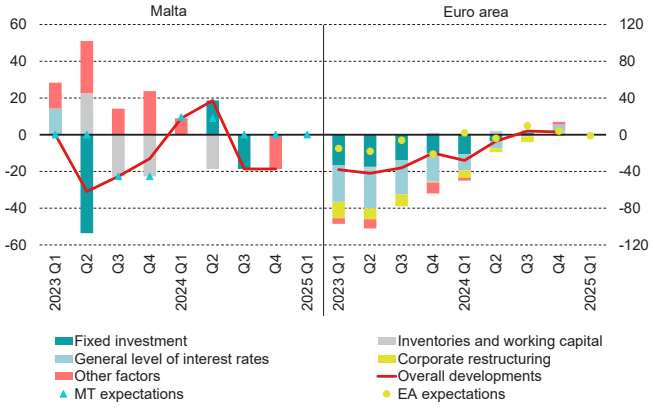
After a general drop in demand for corporate loans in 2023, domestic banks reported an increase in demand in the first half of 2024, aligning with their expectations (see Chart 2). In the first quarter, one bank observed rising demand for corporate loans, as some competing banks increased their lending rates particularly for the real estate sector. In the following quarter, another

Chart 1
CORPORATE CREDIT STANDARDS AND TERMS AND CONDITIONS
(+ indicates net tightening/- indicates net easing)



Sources: ECB; Central Bank of Malta calculations.
Note: Given domestic replies indicate no change in lending standards, no domestic developments are visible in the chart. Banks' expectations are for one quarter ahead.

Chart 2
CORPORATE CREDIT DEMAND
(+ indicates increase/ - indicates decrease)



Sources: ECB; Central Bank of Malta calculations.
Note: Domestic and euro area developments are plotted on the left and right axis, respectively. Stacked columns show the factors impacting corporate credit demand. Banks' expectations are for one quarter ahead.

[1] Prepared by Ms Ariana Bartolo and Mr Shaun Zaffarese, Senior Analysts within Financial Stability and Surveillance Office. The authors would like to thank Mr Christian Mamo, Principal Economist and Mr Andrew Spiteri, Manager within the same office, Ms Wendy Zammit, Head, Financial Stability Surveillance and Research Department and Mr Alan Cassar, Chief Officer Financial Stability and Statistics Division, for their valuable suggestions.

[2] Lending policies include credit standards and terms and conditions. Credit standards refer to the bank's internal guidelines or loan approval criteria, established prior to the actual loan negotiation. These specify the required borrower characteristics such as income levels, age, and employment status which banks consider in their credit scoring methods. Credit terms and conditions refer to the conditions of a loan that a bank is willing to grant, namely the interest rate, loan size, fees, collateral requirements, maturity terms and other conditions.

bank reported higher demand for funding fixed investments especially in the manufacturing, and to a lesser extent, in the wholesale and retail trade sectors. However, this uptick was partly offset by reduced inventories and lower working capital requirements. In the second half of the year, while most domestic banks reported stable demand in line with their expectations, one bank reported a decline, particularly for large corporate loans. This was due to lower fixed investment in the manufacturing sector.

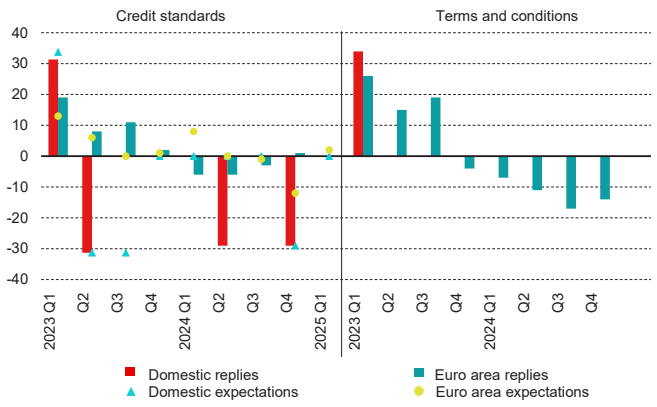
The credit standards of euro area banks continued to tighten in 2024, albeit by a lower extent than in the previous year. Such tightening resulted from the banks' risk perceptions and tolerance levels, influenced by concerns on the general economic outlook as well as more industry or firm-specific situations and borrowers' creditworthiness. These developments were largely aligned with their expectations and further tightening was expected in the first quarter of 2025.

The tightening on terms and conditions for corporate loans reported in 2023 slowed down. After a marginal tightening in the first quarter of 2024, euro area banks reported an easing of conditions in the subsequent quarters. Competitive pressures spurred the net easing, with euro area banks narrowing the margins on average loans, while lowering lending rates on new loans. On the other hand, banks employed stricter collateral requirements and tighter loan conditions, including loan covenants and size to mitigate higher perceived risks. Net demand for corporate loans continued to improve in 2024, with the decline in demand for euro area corporate loans slowing down to turn slightly positive in the second half of 2024, in line with expectations. This improvement was driven by the diminishing negative impact of previous higher interest rates, which had a positive effect in the second half. Additionally, the decline in fixed investment began to taper off. For the first quarter of 2025, banks anticipated demand for corporate loans to remain broadly unchanged.

Loans to households for house purchase

Domestic banks eased their mortgage credit standards in both the second and fourth quarters of the year, with the latter aligning with expectations (see Chart 3). This easing was largely due to one bank's partial reversal of the tightening measures introduced in early 2023. The bank's higher risk tolerance allowed for increased loan-to-value (LTV) ratios for borrowers with low debt service-to-income (DSTI) ratios, while still adhering to the Directive 16 limits. In the same quarters, the same bank also eased some of its terms and conditions. However, this did not significantly affect the overall terms and conditions, which remained stable across all domestic banks in 2024. Net demand for mortgages remained positive, with increased demand reported in the second quarter of 2024, driven by attractive interest rates offered by one bank. This was partly offset by a drop in demand due to competitive bank pressures from another bank

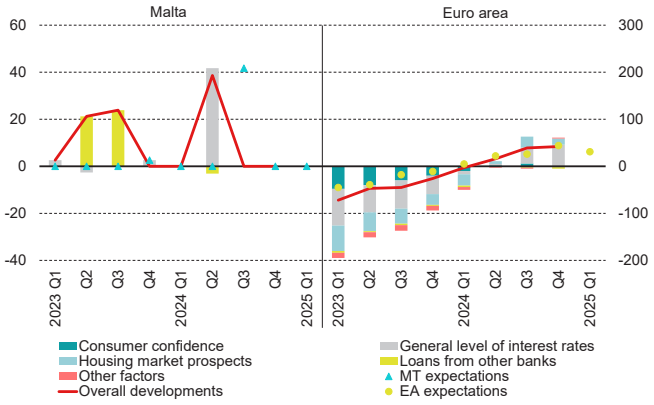
Chart 3
MORTGAGE CREDIT STANDARDS AND TERMS AND CONDITIONS
(+ indicates net tightening/- indicates net easing)



Sources: ECB; Central Bank of Malta calculations.
Note: Banks' expectations are for one quarter ahead.

(see Chart 4). Throughout the year, banks' expectations on credit standards and demand for mortgages were generally stable and expected to remain so in the first quarter of 2025.

Chart 4
MORTGAGE CREDIT DEMAND
(+ indicates increase/ - indicates decrease)



Sources: ECB; Central Bank of Malta calculations.
Note: Domestic and euro area developments are plotted on the left and right axis, respectively. Stacked columns show the factors impacting mortgage demand. Banks' expectations are for one quarter ahead.

In 2024, euro area participating banks reported easing of mortgages credit standards as well as more favourable terms and conditions. This was primarily driven by increased competition among banks, which resulted in narrower margins on average loans. However, this easing of credit standards was slightly offset by a marginal tightening in the last quarter of 2024, driven by banks' lower risk tolerance and heightened risk perceptions. Looking ahead, euro area banks expect credit standards on housing loans to tighten slightly in the first quarter of 2025.

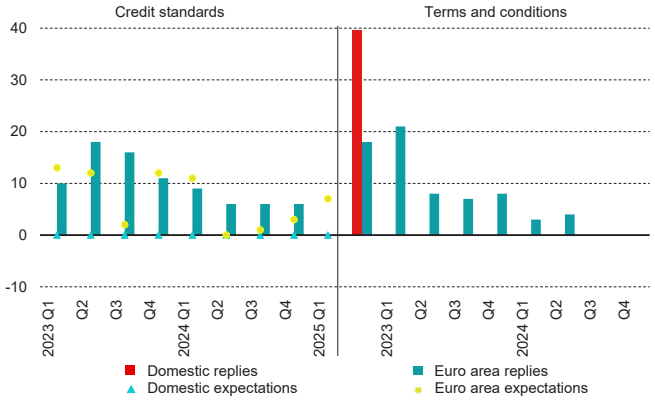
After a couple of years of lower mortgage demand, it began to recover in the second quarter of 2024. This recovery was expected to continue into the first quarter of 2025, with lower interest rates and favourable housing market prospects being the main drivers.

Consumer credit and other lending to households

In 2024, domestic banks maintained stable lending policies, while demand for consumer credit and other forms of household lending remained unchanged. This aligned with banks' quarterly expectations for credit standards and demand, which were also expected to remain stable over the first quarter of 2025 (see Chart 5 and Chart 6).

Euro area banks tightened further their credit standards for consumer credit in 2024 and were expected to continue tightening them in the first quarter of 2025. The tightening was slightly more than initially anticipated but still less severe than in 2023. This reflected higher risk perceptions and lower risk tolerance by banks, given the uncertain economic outlook and weaker borrowers' creditworthiness. This led to wider loan margins and tighter terms and conditions for most of

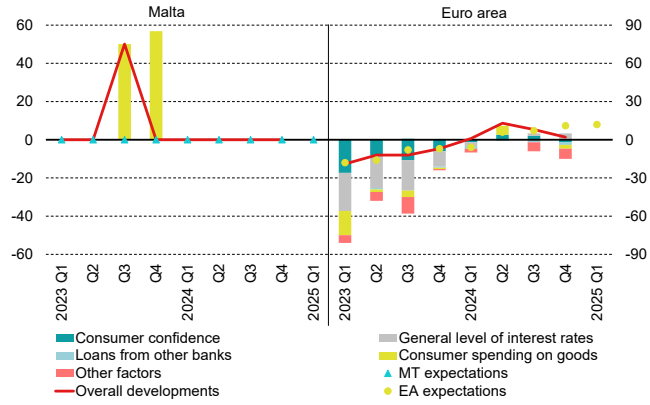
Chart 5
CONSUMER CREDIT STANDARDS AND TERMS AND CONDITIONS
(+ indicates net tightening/- indicates net easing)



Sources: ECB; Central Bank of Malta calculations.
Note: Banks' expectations are for one quarter ahead.

the year. However, in the last quarter of 2024, terms and conditions remained stable as the above tightening effect was offset by increased competitive pressures. Meanwhile, higher demand for consumer credit was reported in line with banks' expectations, particularly in the second quarter of 2024, owing to the declining interest rates coupled with higher spending on durable goods, with further increases in demand expected in the first quarter of 2025.

Chart 6
CONSUMER CREDIT DEMAND
(+ indicates increase/ - indicates decrease)



Sources: ECB; Central Bank of Malta calculations.
Note: Domestic and euro area developments are plotted on the left and right axis, respectively. Stacked columns show the factors impacting consumer credit demand. Banks' expectations are for one quarter ahead.

Ad hoc questions

The survey also included ad hoc questions. The first one explored development in banks' wholesale and retail funding. In the first half of 2024, some domestic BLS banks reported a decline in retail funding access due to higher competitive pressures from local banks and higher coupon rates offered on bonds and other investment opportunities, which made deposits less attractive. As a result, banks faced higher costs to secure term deposits, which impacted liquidity and pressured net interest margins, especially with the almost no pass-through of interest rate on loans in Malta. In the second half of the year, the situation improved as the ECB's interest rate cuts prevented any further deterioration in retail funding access. Throughout the year, access to wholesale funding remained unaffected. Euro area banks experienced fluctuating access to wholesale and retail funding. Early in the year, wholesale funding, particularly from debt securities and money markets, improved due to declining yields as the ECB lowered interest rates. However, towards the end of the year access to wholesale funding showed signs of deterioration as geopolitical risks intensified. Retail funding access became more challenging, particularly for the short term, due to high deposit rates and lower overnight deposit volumes. Looking ahead to the first quarter of 2025, domestic banks anticipated stable conditions, while euro area banks expected slight improved conditions in euro area money markets, with some continued pressure on retail funding.

Another ad hoc question examined the effects of new regulatory and supervisory actions on banks' assets, capital position, and lending policies. MREL requirements and the expected impact of Capital Requirements Regulation (CRR) III on risk weights prompted some domestic banks to issue debt to further strengthen their capital base, while also maintaining ongoing expansion of their business activities. Further capital injections are also expected in 2025. Euro area banks reported a net increase in Common Equity Tier 1 (CET1) capital requirements, in line with the ECB's Supervisory Review and Evaluation Process (SREP) exercise. As a result, banks relied on both retained earnings and capital issuance to meet their required capital position. Euro area banks also indicated that regulatory or supervisory measures also led to higher liquid assets possibly due to heightened regulatory scrutiny after the 2023 banking turmoil, as well as higher RWAs in line with 2024's supervisory focus on strengthening resilience to macro-financial and geopolitical shocks. The increased capital and liquid assets contributed to a net tightening of credit standards across all loan categories, particularly on loans to enterprises. However, euro area banks also reported that regulatory or supervisory

requirements had a moderate easing effect on their funding conditions. Similar developments were expected for 2025.

A separate question focused on the impact of NPLs and other credit quality indicators during 2024. Although no direct impact was reported throughout the year, the continued improvement in NPLs along with the general improvement in firms' performance, led one domestic BLS bank to anticipate a net easing of credit standards on corporate loans for the first half of 2025. In contrast, euro area banks experienced a net tightening impact on credit standards for loans to enterprises and consumer credit. The main factors driving this tightening were heightened risk perceptions, reduced risk tolerance, and pressures from supervisory or regulatory requirements. Similar trends were expected in the euro area for the first half of 2025.

In a bid to better understand sectoral developments, a bi-annual ad-hoc question was included to cover lending conditions and demand across key economic sectors during 2024. Domestic BLS banks reported higher demand from firms in the manufacturing sector, particularly from those operating in the energy-intensive industries. At the same time, banks also reported net tightening of credit conditions for loans in the construction and CRE sectors due to the perception of an oversupply of units, as demand for office space declined, reflecting the increased work-from-home practices. Such property-related developments were anticipated to persist in 2025. In the euro area, banks reported a consistent tightening of credit standards particularly for lending to CRE, the wholesale and retail trade, construction as well as to the energy-intensive manufacturing sectors. This tightening was primarily driven by heightened risk perceptions and a cautious approach amid economic uncertainties. Such factors, along with still-elevated interest rates and subdued investment activities in the first half of 2024, affected negatively credit demand. Although it improved in the second half of the year, changes were muted, with stable developments also expected for the first half of 2025.

Throughout the year, the survey posed a number of questions which touched upon different aspects of the ECB's monetary policy. One question explored the impact of the phasing-out of the Eurosystem's targeted longer-term refinancing operations (TLTRO) III, which had no effect on the domestic banks' financial situation or lending policies, in view of their ample liquidity. On the other hand, euro area banks reported that such phasing-out continued to affect negatively their liquidity positions. However, since most of the TLTRO III was repaid prior to 2024, banks reported only a small tightening impact on their overall funding conditions, with a neutral effect on lending conditions and loan volumes.

The surveys for the March and September rounds also included a question to identify the impact of the ECB's key interest rate decisions on bank profitability. Domestically, heterogenous responses were observed among banks. During the six months ending March 2024, amid a recent peak in ECB key interest rates, some banks reported faster growth in NII due to wider loan-to-deposit margins. In contrast, others stated that increased deposit remuneration, driven by heightened competition, resulted in narrower margins. In the six months ending September 2024, as the ECB cut its key interest rates, most banks reported a negative impact, signalling lower NII growth via narrower margins. Expectations in the same survey round however indicated that although the same banks foresaw a continued negative impact, one bank was more optimistic, as the rate cuts were expected to reduce its costs on retail deposits. In the euro area, the previously strong positive impact of rising interest rates began to reverse from the second quarter of 2024. As the monetary policy easing took hold, margins were compressed, and the continued decline in the volumes of interest-bearing assets and liabilities further weighed on profitability. Looking ahead, banks anticipated that the negative impact on margins would deepen further.

In a related question examining the impact of the ECB's monetary policy asset portfolio, domestic BLS banks reported a net increase in euro area sovereign bond holdings, as the ECB continued to reduce its own holdings. This shift contributed to higher NII, a trend which was expected to persist. The increased demand for sovereign bonds was also driven by the declining remuneration on the ECB's overnight deposit facility rate, making sovereign bonds relatively more attractive. On balance, domestic banks also reported improved capital ratios owing to lower risk weights assigned to sovereign bond holdings, and thus reducing overall credit risk. Meanwhile, euro area banks reported a slight negative impact on their market financing conditions during 2024, primarily due to the reduction of asset purchase programmes holdings, which also led to a minor tightening of credit standards, notably for mortgages, and a small decrease in lending volumes to households. Notwithstanding, such banks experienced a moderate positive effect on profitability through increased NII. Looking ahead, such developments in the euro area were expected to persist.

Another question related to the ECB's monetary policy stance asked about the impact of excess liquidity held with the Eurosystem. Replies by domestic banks show that such holdings had no effect on their lending policies or volumes, with no changes foreseen in this regard. Euro area banks reported that a gradual reduction in such excess liquidity had only a limited impact on bank lending conditions. In the first half of the year, euro area banks reported a small net tightening effect on credit conditions, and a slight negative impact on loan volumes, with the latter partly reversed in the second half of the year. Going forward, euro area banks anticipated a continuation of relatively muted impacts.

Touching upon a different topic, the July 2024 survey round asked about the impact of climate-related risks on the banks' lending behaviour during the previous 12 months, with both domestic and euro area respondents reporting similar developments. A net easing in credit conditions for loans to firms with low carbon emissions (green) and those demonstrating significant progress in their green transition was reported, with brown firms experiencing a net tightening. Some domestic banks indicated that their pricing models offer reduced rates for green lending, while imposing restrictions on polluting sectors. This also resulted in higher demand from green and in-transition firms. Such developments were in part spurred by the ongoing fiscal support to renewable energy and energy-efficient products, such as the Energy Efficiency and Renewable Energy (EERE) interest rate scheme which was available until December 2023. Banks in general anticipated that the influence of climate-related risks on lending practices will intensify over time, partly due to stricter supervisory and disclosure requirements.

Conclusion

The 2024 BLS showed that the euro area banks were responsive to the ECB's monetary policy easing. Tighter credit standards and terms and conditions, previously reported in 2023, were either held back, as in the case for consumer credit and corporate credit standards, or eased as in the case for mortgages and corporate terms and conditions. Developments within credit standards were generally in line with expectations. Still, economic uncertainty continued to play an important role, as reflected by the still-low risk tolerance and higher risk perceptions. This led euro area banks to report improved demand for all loan categories on the back of the continuous interest rate cuts, again generally aligned with expectations. Meanwhile, Maltese banks reported unchanged lending policies due to a limited pass-through, with credit demand improving mainly for mortgages and to some extent for corporates. Climate-related risks had an important influence on banks' lending standards, with banks favouring green investments while imposing stricter conditions on high-emission firms. Monetary policy decisions, including interest rate changes and liquidity adjustments, had mixed effects on profitability and lending dynamics. Looking ahead to 2025, banks remained cautious in the shaping of their credit standards on the back of regulatory changes and economic challenges.

BOX 2: HOW GREEN ARE MALTESE BANKS' PORTFOLIOS?[1]

Introduction

Climate-related threats, once viewed as distant concerns, are now emerging with increasing urgency. The Network of Central Banks and Supervisors for Greening the Financial System (NGFS) has emphasised that such risks are materialising.[2] Extreme weather events, including more intense storms, frequent flooding, larger wildfires, and prolonged droughts are becoming common. Heatwaves are also more severe, with 2024 being the hottest year in recorded history, after exceeding the record set in 2023. Global temperatures have risen by 1.55°C above the pre-industrial average, breaching the 1.5°C threshold set by the Paris Agreement.

The economic consequences of these climate trends are profound and multifaceted. The growing incidence of physical risks is already translating into higher operational costs, surging insurance premia, frequent and prolonged disruptions to global supply chains, and increased volatility in commodity markets.[3] Asset valuations are increasingly being re-priced to reflect exposure to climate-related risks. Furthermore, damage to infrastructure could reduce productivity, especially in vulnerable sectors such as the agriculture, and real estate sectors. Financial markets may also face volatility as investors reassess risks in carbon-intensive industries, potentially leading to stranded assets in the fossil fuel sector.

Banks play a crucial role in financing the transition to a sustainable economy. As key providers of finance to households and businesses, banks' business models directly influence the accessibility and expansion of sustainable finance. Lending policies are increasingly prioritising sustainability-linked loans, as green financing mechanisms continue to gain momentum across global financial markets. Similarly, investment strategies are evolving, with green bonds becoming more prevalent, reflecting the growing demand for sustainability-focused financial products.[4] Moreover, banks are increasingly expected to integrate environmental, social, and governance (ESG) considerations into their strategies and risk management frameworks. Regulatory developments such as the Capital Requirements Directive (CRD) VI and the EBA's Guidelines on the Management of ESG Risks are setting clearer expectations for the financial sector. Institutions will be required to integrate climate-related risks holistically across all prudential risk categories, including credit, market, operational, and liquidity risks, and align these with their overall business models and risk appetite. This shift underscores the financial sector's commitment to addressing climate-related risks while aligning with regulatory expectations and investor preferences.

Notwithstanding progress across the EU remains uneven. The ECB's 2022 thematic review on climate and environment risk management highlighted significant variation in implementation levels across jurisdictions, particularly among smaller banking sectors where supervisory capacity and internal expertise are often more limited.[5] The EBA's 2025 report further underscored the challenges banks face in collecting reliable data, hindering their ability to measure exposures and assess the financial impact of climate-related risks effectively.[6]

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[1] Written by Mr Andrew Spiteri, Manager from the Financial Stability Surveillance Office, and Mr Stefan Scerri, Senior Economist Analyst within the same office. The authors would like to thank Ms Wendy Zammit, Mr Alan Cassar, Dr Aaron G. Grech, Mr Oliver Bonello, and Mr Alexander Demarco, for their invaluable comments and suggestions.

[2] Source: https://www.ngfs.net/en/publications-and-statistics/publications/annual-report-2023

[3] Sources: Assessing the costs and benefits of climate change adaptation — European Environment Agency; Climate risk and response | McKinsey; sigma 1/2024: Natural catastrophes in 2023 | Swiss Re
Climate change's impact on commodity prices: a new challenge for monetary policy | Portuguese Economic Journal

[4] Source: Indicators on sustainable finance – ECB.

[5] Source: Presentation: Results of the 2022 thematic review on climate-related and environmental risks

[6] Source: Report on data availability and feasibility of common methodology for ESG exposures.pdf

Owing to the importance of these developments, further comprehensive research on how domestic banks are integrating climate considerations, particularly in relation to the issuance of green loans and bonds, as well as the adaptation of their policies to reflect climate-related considerations was considered necessary. To address this knowledge gap, a targeted survey was conducted by the Central Bank of Malta in 2024 with core domestic banks. This box evaluates the Maltese core domestic banks' engagement with green financing instruments, providing an assessment of the sector's current progress and identifying areas for further development. Following a brief overview of the survey methodology, the analysis presents the qualitative findings, followed by a detailed examination of the quantitative data. The box then concludes with suggestions on how banks could further support the transition to a greener economy.

Survey overview

In August 2024, the Central Bank of Malta distributed a survey among Malta's six core domestic banks with the aim to better understand these banks' adaptation strategies to incorporate climate risk. The survey included both qualitative and quantitative sections, examining these banks' lending and investment strategies, risk assessment practices, sustainability targets, and green financial products. The quantitative section focused on green loans and securities held by the banks in June 2023 and June 2024, in a bid to evaluate the extent to which Maltese banks' portfolios are green.

Qualitative analysis

a. Adaptation of lending policies to climate risks

A key focus of the qualitative survey was to assess whether banks have adapted their lending policies to address climate-related risks. Five out of six banks, representing 95% of loans granted by core domestic banks, confirmed that they had implemented such changes which include the integration of climate or ESG monitoring into their risk assessment processes and the introduction of green financial products offering preferential lending conditions (see Charts 1a and 1b). Four banks, which together accounted for 88% of overall lending, have also established formal green lending targets. The bank which indicated it had not adjusted its lending policies replied that it was considering implementing changes following the completion of its Double Materiality Assessment. A deeper insight of banks' adjustments follows.

Chart 1a
ADAPTATION OF LENDING POLICIES TO CLIMATE RISKS
(number of respondents)

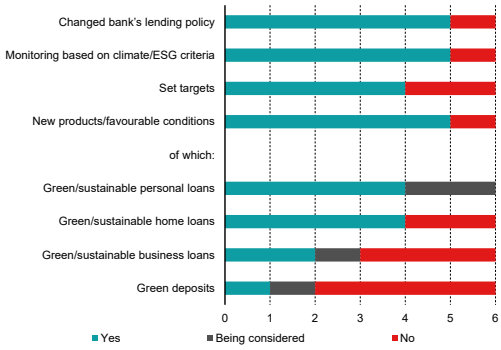
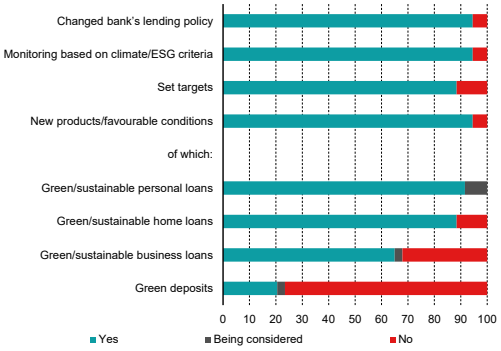


Chart 1b
ADAPTATION OF LENDING POLICIES TO CLIMATE RISKS
(responses according to loan share granted)



Source: Central Bank of Malta.

Climate and ESG monitoring

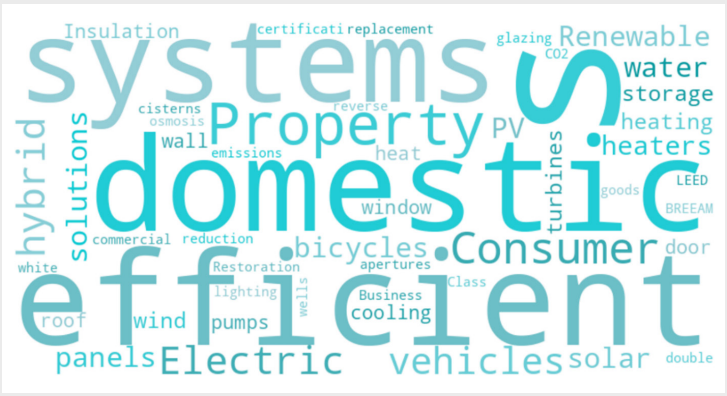
Climate risk and ESG considerations are increasingly being integrated into banks' credit evaluation processes, for corporate and high-value lending as well as for home loans and property valuations. Most banks indicated that they are also conducting climate stress tests, sensitivity analyses, and other forms of risk assessment to evaluate both physical and transition risks. These include inflation risks from extreme weather, scenario modelling for higher risk weights on high-carbon sectors, and downgrades for climate-sensitive clients and retail borrowers in flood-prone villages. For domestic lending, most institutions are implementing climate and environmental questionnaires as part of their assessment process. Additionally, the banks are increasingly requiring the Energy Performance Certificates (EPCs) to be tracked for collateral purposes, with some banks assessing these metrics through dedicated ESG dashboards. One bank is developing an internal Aide Memoire to assist relationship managers in ESG discussions with corporate clients during annual reviews. Others are actively engaging with their high-emission clients to align their transition plans with the requirements of the Corporate Sustainability Reporting Directive (CSRD). For international lending, some banks are incorporating ESG ratings from established agencies.

Green lending targets

To mitigate climate risks, some banks have imposed lending caps or set up specific ESG risk tolerance criteria, aimed to limit exposures to climate policy-relevant sectors and high-emission industries such as mining, petroleum, chemicals, basic metals, and motor vehicle manufacturing. Others have set specific green lending targets. Two banks have committed to allocate approximately 5% of total lending towards green loans, while another bank has set a lending target in absolute euro terms.

New green financial products with preferential lending conditions

To prioritise lending towards green and sustainability-linked projects, banks have introduced a range of green products, as indicated in the word cloud below. Survey results show that green personal loans are the most commonly offered, with four banks, representing 92% of outstanding loans, currently provide them, with the remaining two banks considering their introduction. These loans typically finance various energy-efficient products, including electric and hybrid vehicles, solar water heaters, photovoltaic panels, and energy-efficient appliances. Furthermore, four banks together responsible for 88% of total loans, offer green home loans.[7] These focus on properties meeting specific EPC thresholds, which range between 25-50 kilowatt-hours per square metre (kWh/m²). Meanwhile, two banks accounting for nearly two-thirds of overall lending, also offer green business loans, with a third exploring this possibility. These sustainability-linked loans are being used to finance CO_2 emissions reduction projects and increase renewable energy investments. One bank indicated that it had introduced green deposit products, while another plans to do so in the near future.[8]



[7] Three banks offer both green personal and home loans, while one bank offers only green home loans, and another bank offers solely green personal loans.

[8] Green deposits are deposits whose proceeds are used exclusively to finance projects that meet defined sustainability criteria and qualify as green.

b. Assessment of green credentials for firms

The survey also explored how banks assess the 'greenness' of firms. A common practice involves the use of an annual climate and environmental questionnaire targeting companies most exposed to climate-related risks. These firms typically have funding needs exceeding €5 million and operating within NACE sectors deemed as high climate risk. These questionnaires assess factors such as emissions, energy usage, and sustainability goals. These are often supplemented with additional ESG data, such as EPC or other international certifications. With this information, banks develop climate scores that combine internal assessments with external data sources, enabling the classification of companies into low, medium, or high-risk categories.

Some credit institutions are also enhancing client engagement through engagement questionnaires and other structured assessments to support commercial decision-making, pricing, and capital allocation.

c. Investment strategies and climate considerations

With regards to securities holdings, two-thirds of surveyed banks have revised their investment strategies to integrate climate-related considerations. This adjustment has been primarily achieved through the establishment of defined targets and the introduction of specific criteria for the identification and selection of green securities. Some banks have implemented minimum green bond allocations, ranging between 3% and 7%, while others have introduced stricter screening measures for high climate-risk sectors. The definition of green bonds is generally based on international standards such as Bloomberg's green bond label. Nevertheless, a number of banks have yet to establish formal green investment targets.

d. Monitoring physical climate risks

Banks are increasingly recognising the material impact of physical climate risks on their loan portfolios and collateral values. As a result, banks have started to monitor both acute and chronic physical risks, with the most common being sea level rise, flooding and extreme weather events. Their approaches vary from conducting stress testing and materiality assessments to more traditional sectoral monitoring, including evaluations of mortgage portfolio exposure to high-risk flood zones. There is a growing awareness of the financial implications of climate risks, particularly in relation to real estate, supply chains, and overall economic stability.

e. Measures implemented

The survey also highlights that four banks have implemented measures that go beyond the minimum regulatory requirements, while two banks rely solely on mandated regulatory minimum assessments. The approaches range from sophisticated risk frameworks and analytical solutions to more basic monitoring and lending policies, reflecting an ongoing shift towards integrating climate risks into financial decision-making.

Quantitative insights

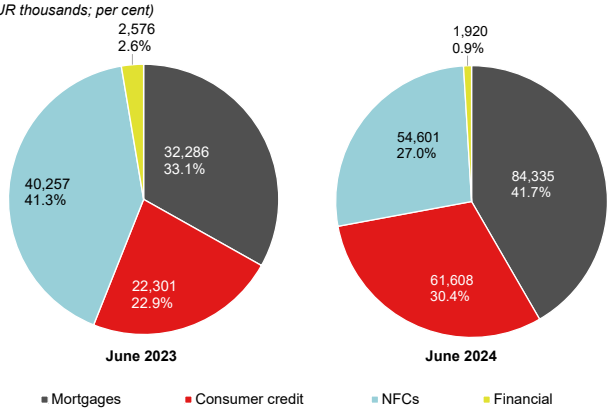
a. Green lending

Between June 2023 and June 2024, the total outstanding value of green loans granted by the core domestic banks more than doubled, reaching €202.5 million (see Chart 2). Most of the increase in green loans was primarily driven by household-related loans, issued almost entirely to residents. These were particularly in the form of green mortgages, and to a lower extent consumer credit, which accounted for 41.7% and 30.4% of total green loans by mid-2024, respectively. Green loans issued to NFCs, also predominantly to resident entities, rose by 35.6% year-on-year, reaching €54.6 million. However, their share on total green loans dropped to 27.0% in June 2024, from 41.3% a year earlier.

Despite such increase, green lending still represents a relatively small share of the overall outstanding loans, accounting for 1.4% as at June 2024, up from 0.7% a year earlier. However, this masks

significant divergences across banks. While some banks reported negligible or no green exposures in their loan portfolios, others have shown greater involvement, with the share in the most active bank standing at 3.4%. Divergencies are also evident across sectors, with just above 10% of consumer credit loans being reported as green, with cross-bank heterogeneity also evident, with one bank having a quarter of the overall green consumer credit loans (see Chart 3).

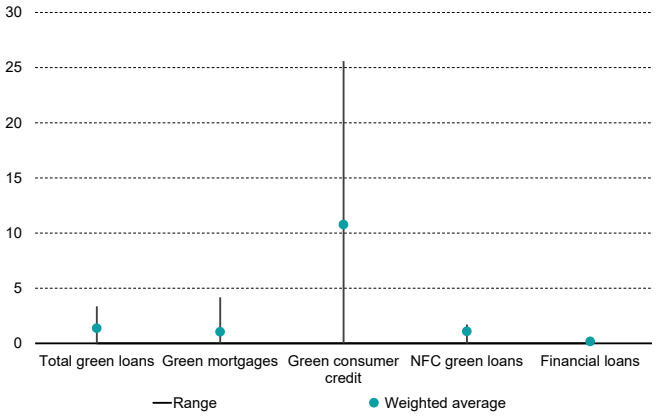
Chart 2
DISTRIBUTION OF GREEN LOANS – CORE DOMESTIC BANKS
(EUR thousands; per cent)



Source: Central Bank of Malta.
Note: The labels shown on the pie charts refer to the outstanding amount of green loans per category and the share of each category on total green loans.

By mid-2024, the number of green loans stood at 4,140, representing 1.7% of total loans issued by this category of banks. Almost 97% of such loans were granted to the household sector, mainly in the form of consumer credit, which grew to 3,550 green loans from 1,920 loans in June 2023. Otherwise, green mortgage loans were limited to 444 while NFC green loans were even more contained, with just 139 green loans granted by June 2024. The remaining 7 loans were granted within the financial sector.

Chart 3
BANK DISPERSION OF GREEN LOANS EXPRESSED AS A SHARE ON TOTAL LOANS AS AT JUNE 2024 – CORE DOMESTIC BANKS
(per cent)



Source: Central Bank of Malta.

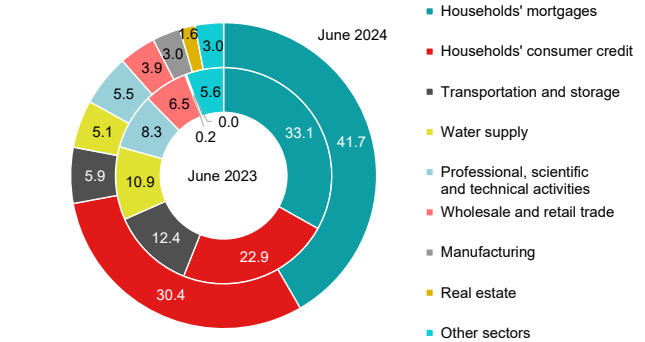
The average size of a green loan was approximately €50,000, although this too varied significantly across different loan categories. For consumer credit, this was limited to about €17,000. However, this rose to €190,000 for mortgages, and further to €387,000 for NFCs.

Although green loans still represent a small fraction of the overall loan portfolio, their contribution to overall growth has been notable, with 11.2% of the increase in lending attributed to green loans. This was particularly relevant for consumer credit, where more than half of the increase in consumer credit loans was towards environmentally-sustainable products.

This trend reflects a combination of factors, including heightened environmental awareness among households, and the availability of targeted green financial products offered by core domestic banks. Notably, the EERE scheme in Malta in collaboration with the European Investment Fund, enabled interest-free loans for the first ten years for loans taken by end 2023. These efforts were supported by government incentives encouraging sustainable consumption, such as grants for the purchase of

electric vehicles and renewable energy systems such as solar panels. While the contribution of green mortgages to overall mortgage growth remained modest, accounting for 8.2%, this still signals a shift in borrower preferences towards more energy-efficient residential real estate.

Chart 4
DISTRIBUTION OF GREEN LOANS BY ECONOMIC SECTOR – CORE DOMESTIC BANKS
(per cent)



Source: Central Bank of Malta.

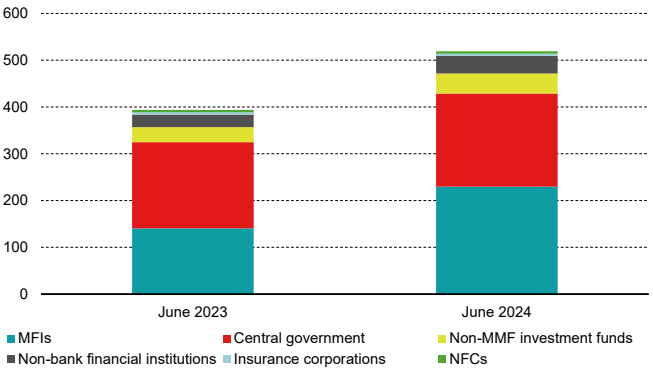
With regards to NFC lending, green loans contributed to 7.6% of the overall growth in credit by core domestic banks, although in terms of outstanding loans, green NFC loans are still contained to only 1.1% of overall NFC loans. From a sectoral perspective, the green NFC loan portfolio is largely composed of loans issued towards the transportation and storage sector, followed closely by professional, scientific and technical activities, and water supply services (see Chart 4). On the other hand, the increase in green loans from the core domestic banks was primarily driven by a new loan issued to a foreign company operating in the manufacturing sector. Additionally, though more moderate, contributions came also from resident companies engaged in real estate activities, professional, scientific, and technical, and the wholesale trade sector. In contrast, the financial sector experienced a decline, with green loan exposures contracting by 25.5% to €1.9 million, thereby accounting for less than 1% of the total.

b. Green securities holdings

Investment in green bonds rose by almost a third between June 2023 and June 2024, although the share of green bonds in the overall bond portfolio of the core domestic banks remained stable at around 5%. The degree of exposure to green bonds varied considerably across the core domestic banks. Indeed, some banks reported no green bond holdings, while others reached a share as high as 11.5%, reflecting diverse investment strategies.

The increase in green bond holdings was predominantly driven by investments in debt securities issued by monetary financial institutions (MFIs), which accounted for nearly half of the green bonds held by the core domestic banks in June 2024 (see Chart 5). As a result, green MFI bonds represented 15% of overall MFI bonds held by core domestic banks.

Chart 5
GREEN DEBT SECURITIES BY ECONOMIC SECTOR – CORE DOMESTIC BANKS
(EUR millions)



Source: Central Bank of Malta.
Note: 'Non-bank financial institutions' includes other financial intermediaries (OFIs), financial auxiliaries, captive financial institutions and money lenders.

Government-issued green bonds were also a major contributor, up by 8.0%, representing around 42% of the green bond portfolio. These included a diverse mix of sovereign and other international issuances aimed at financing large-scale environmental infrastructure projects. Notable examples include Italy's BTP Green bonds, the EU's NextGenerationEU Green Bonds, and instruments issued by the European Investment Bank and other development-oriented institutions. Nonetheless, their share within the overall sovereign bond holdings declined from 3.2% in June 2023 to 2.8% a year later, owing to a faster increase in conventional, non-green government bonds.

Green securities issued by the remaining sectors accounted for the remaining 9.1% of total green bonds, largely issued by OFIs and to a much lower extent by securities issued by NFCs.

Conclusion

The survey highlighted the initiatives taken by the core domestic banks, reflecting a progressive approach to integrating climate risk considerations into lending policies through favourable green lending conditions, sectoral restrictions, and ESG assessments. Findings also indicated a growing trend towards integrating environmental considerations into risk assessments, with banks moving towards more data-driven sustainability practices. However, despite steady growth in green lending and investment, the survey showed that exposure to green assets remained limited. As of June 2024, only 2.8% of core domestic banks' assets were classified as green, covering loans, debt securities, and equity holdings. Institutional exposure ranged from 0% to 4%. This finding aligns with European trends, as a report on 20 major European banks showed an average Green Assets Ratio of around just 2% by the end of 2023.[9]

While these developments are encouraging, the potential for further advancement remains significant. The Malta Financial Services Authority's (MFSA) Dear CEO letter published in January 2025, urges banks to strengthen climate-related risk management and incorporate climate risks into traditional risk categories, contributing to a more sustainable financial future.[10] This aligns with the supervisory priorities for 2024-2026 outlined by the ECB Single Supervisory Mechanism (SSM), which seeks to accelerate the effective remediation of shortcomings in governance and the management of climate-related and environmental risks,[11] as well as with the fresh set of guidelines listed by the EBA on the management of ESG risks, which stress the importance of a holistic and forward-looking approach to managing climate risks across the financial system.[12]

Finally, the survey also revealed an imbalance in the distribution of green lending, with corporate green lending still lagging household green lending. This presents a clear opportunity for banks to diversify their sustainable lending portfolios and focus on supporting the transition to a greener economy. At present, only two core domestic banks have targeted green and sustainability business loans. More banks may begin offering specialised products, while also leveraging initiatives by the Malta Development Bank such as the Tailored Facility for Businesses or newly-developed schemes designed to further boost the green transition.[13] This echoes concerns raised from a Central Bank of Malta survey conducted among local businesses, which underscores the difficulties firms face in securing financing for green initiatives.[14] To accelerate this shift, sustained efforts and further collaboration are essential.

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9 Source: https://www.crif.com/knowledge-events/resources/an-overview-of-european-banks-green-asset-ratio-disclosure-for-2024/

10 MFSA Urges Banks to Strengthen Climate-Related and Environmental Risk Management - MFSA

11 Source: ECB Banking Supervision: SSM supervisory priorities for 2024-2026

12 Source: Final Guidelines on the management of ESG risks.pdf

13 Sources: https://mdb.org.mt/eib-vice-president-kakouris-unveils-green-gateway-report-during-mdb-visit/; https://mdb.org.mt/tailored-facility-for-businesses/

14 See: Warren Deguara (2024), The impact of mitigating climate change on Maltese firms, Research Bulletin 2024, pp. 17-22.

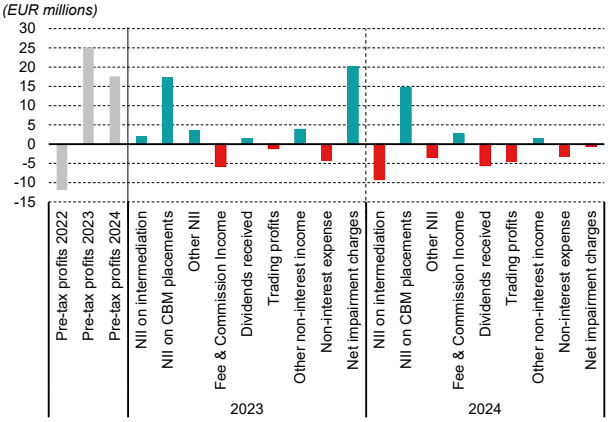
2.2 Non-core domestic banks

The balance sheet of the non-core domestic banks contracted by 6.5% to 14.9% of GDP, mainly driven by developments of one bank, as otherwise the remaining non-core domestic banks overall reported growth. This drop in assets mainly reflected lower holdings of foreign securities as well as non-resident customer loans. On the other hand, domestic ties strengthened further, with resident assets increasing to 53.8% of overall assets, largely due to higher placements with the Central Bank of Malta and customer loans. At the same time, these banks are increasing their reliance on the domestic retail market to finance their operations.

2.2.1 Profitability

In 2024, these banks' pre-tax profitability declined by almost 30%, with their post-tax ROE and ROA deteriorating by 1.5 and 0.2 percentage points, respectively to 4.2% and 0.4% (see Chart 2.20). This was primarily driven by lower non-interest income in the form of lower dividends receivable and higher trading losses, which were partly offset by higher fees and commission income. Non-interest expenses also rose by 5.3% mainly due to higher staff and operating costs, which contributed further to lowering profits. Meanwhile, total NII rose by 3.4%, exclusively driven by higher interest income on placements with the Central Bank of Malta, as otherwise NII from intermediation activities fell significantly. This as interest expenses payable on deposits of OFIs, households and to a lesser extent corporates grew at a faster rate than the interest earned from loans to NFCs and OFIs. Concurrently, other NII fell by 25.1%, reflecting the reduction in securities. Although growth in NII slowed down, it remained the primary source of income accounting for 71.2% of overall gross income. The higher expenses coupled with lower gross income pushed the operational cost-to-income ratio to 73.3%, up from 66.6% in the previous year.

Chart 2.20
MAIN CONTRIBUTORS TO PROFITS – NON-CORE DOMESTIC BANKS
(EUR millions)



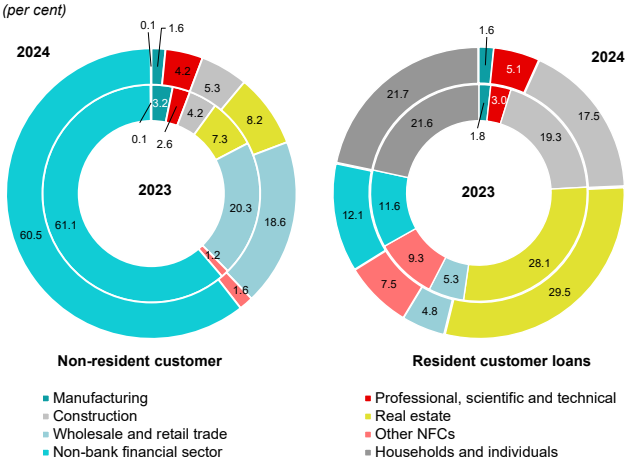
Source: Central Bank of Malta.
Note: Grey bars indicate pre-tax profits in absolute amounts. Teal (positive) and red (negative) bars indicate yearly contribution to the change in profits.

2.2.2 Credit dynamics

Customer loans granted by non-core domestic banks contracted by 3.9%, yet they continued to represent a significant share of total assets at 37.9%. This drop was entirely driven by a sharp drop in non-resident customer loans, which fell by around 14%. Consequently, for the first time, the share of non-resident lending fell below half of the overall loan portfolio, reaching 45.3%. The drop was mainly driven by lower lending to foreign OFIs, which remained the largest non-resident loan category (see Chart 2.21). Additionally, lending to foreign NFCs contracted by 12.7% primarily reflecting lower loans to the wholesale and retail trade and manufacturing sectors. Meanwhile, loans to foreign households remained minimal.

These banks' continued effort to diversify their loan activities led to a 6.8% expansion in resident customer

Chart 2.21
CUSTOMER LOANS BY SECTOR – NON-CORE DOMESTIC BANKS
(per cent)



Source: Central Bank of Malta.

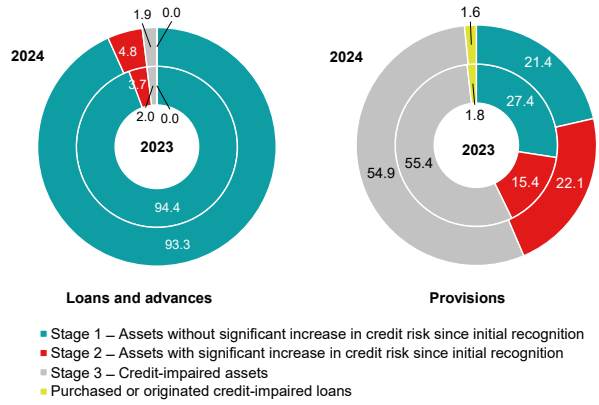
loans, with their share in total customer loans reaching almost 55%. This growth was mostly driven by corporates operating in the real estate sector and the professional, scientific and technical activities (see Chart 2.21). Loans to Maltese households also increased, up by 7.5%, constituting almost 22% of resident customer loans, largely driven by the active participation of one bank in the domestic consumer credit market. Meanwhile, loans issued to resident OFIs rose by 11.6%, making up 12.1% of the resident loan portfolio.

2.2.3 Credit quality

The asset quality of non-core domestic banks' loan portfolio remained sound, although some emerging challenges were observed. The NPL ratio improved marginally by 0.1 percentage points to just 1.1%, as NPLs fell while outstanding loans and advances rose marginally driven by placements with the Central Bank of Malta. Excluding placements with the Central Bank of Malta, the NPL ratio stood unchanged at 2.0%. The overall NFC NPL ratio fell by 0.3 percentage points to 3.2%, mainly reflecting significant improvements in the quality of manufacturing loans, as otherwise other sectors such as real estate and construction activities reported higher NPLs. In contrast, the household NPL ratio increased on account of higher NPLs of both mortgages and consumer credit, albeit remaining low at 0.8%. These developments led to a drop of 8.1% in Stage 3 loans to account for nearly 2% of the overall loans (see Chart 2.22). Furthermore, Stage 2 loans expanded by around 21%, mainly from NFCs, pushing their share by 1.1 percentage points to 4.8% of total loans. At the same time, Stage 1 loans declined by 7.8% to represent the remaining share. Meanwhile, the forbearance ratio edged up by 0.2 percentage points to 1.3% in December 2024, driven by both higher performing and non-performing exposures with forbearance measures. Outstanding performing forborne loans made up a slightly higher share of almost 55% of all forborne loans.

Provisions rose by 10.3%, resulting in a 9.2 percentage points enhancement in the coverage ratio, which rose to 70.3%. This improvement was driven by higher Stage 2 and Stage 3 provisions, to represent around 22% and 55% of the overall provisions, respectively, coupled with lower NPLs.

Chart 2.22
STAGE ALLOCATION OF LOANS AND ADVANCES AND PROVISIONS – NON-CORE DOMESTIC BANKS
(per cent)

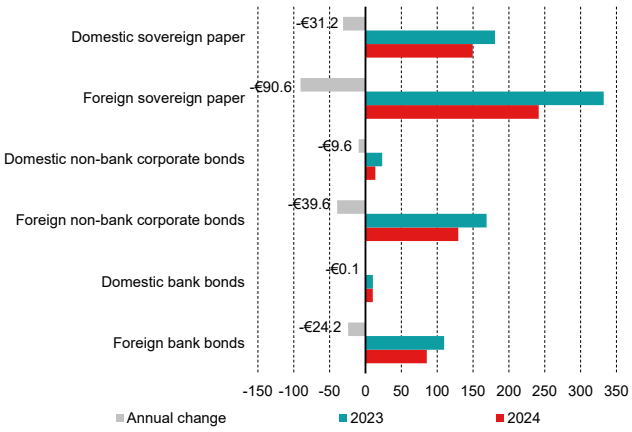


Source: Central Bank of Malta.

2.2.4 Securities portfolio

In 2024, equities held by non-core domestic banks dropped by 13.5%, accounting for almost a quarter of the overall securities portfolio. This reflected the reduction of equity holdings by one bank owing to the cancellation of shares. Although bond yields remained elevated, non-core domestic banks shed their debt securities holdings by almost a quarter. This drop was mainly driven by lower foreign sovereign paper, particularly of the euro area, as a result of significantly lower T-Bill holdings, and to a lower extent reduced holdings in non-resident corporates and bank bonds (see Chart 2.23). While the drop in debt

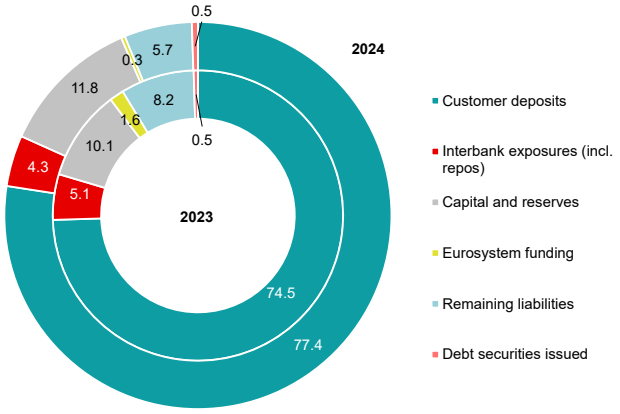
Chart 2.23
DEBT SECURITIES PORTFOLIO – NON-CORE DOMESTIC BANKS
(EUR millions)



Source: Central Bank of Malta.

securities was recorded across the entire credit quality spectrum, it was more pronounced in the low and unrated debt securities. As a result, the share of high and medium-rated debt securities rose to 89.4% of the overall securities.

Chart 2.24
FUNDING STRUCTURE – NON-CORE DOMESTIC BANKS
(per cent)



Source: Central Bank of Malta.

2.2.5 Funding and liquidity

The decline in the balance sheet of non-core domestic banks was partly driven by a 2.8% decline in customer deposits. Despite this, deposits remained the preferred funding source for this group of banks, financing more than three-quarters of their assets (see Chart 2.24). The overall drop was largely attributed to a contraction of around 12% in non-resident customer deposits, largely of households and, to a much lower extent, non-money market funds (MMF). Conversely, deposits of non-resident OFIs solidified their significance, accounting for almost 30% of total retail funding. Resident customer deposits grew by almost a third, with their share increasing by 7.4 percentage points to around 28% of overall customer deposits. This mainly reflected the banks' ability to attract further resident household deposits by offering more competitive rates. As a result, such deposits now accounted for more than half of the resident customer deposits held with these banks.

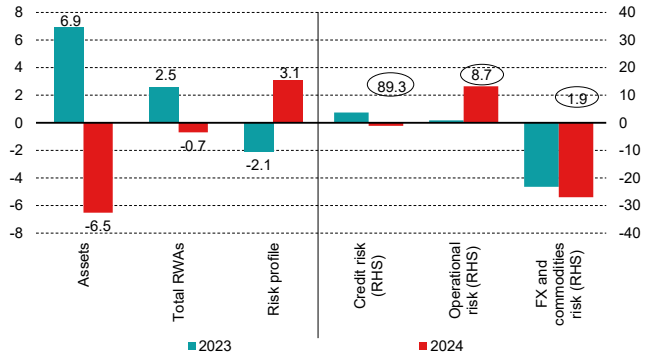
Meanwhile, interbank placements decreased further and continued to play a minor role in overall funding, financing just 4.3% of total assets. Moreover, non-core domestic banks reported reduced participation in Eurosystem operations, reflecting the decline in TLTRO and USD operations, which financed 0.3% of overall assets as at end 2024. Capital and reserves remained an important source of funding, which rose to represent almost 12% of total assets.

The non-core domestic banks maintained a robust liquidity position, particularly in the short-term, as reflected by a significant 31.1 percentage points increase in the LCR to 436.3%. This improvement was due to higher liquid assets in the form of withdrawable central bank reserves, as net liquidity outflows increased marginally. Meanwhile, the NSFR declined by 7.5 percentage points to 183.7%, albeit it remained well above the regulatory requirements, indicating continued resilience in longer-term funding.

2.2.6 Capital and leverage

Total own funds of these banks increased by 6.6%, primarily driven by higher Tier 1 capital, while the total RWAs fell marginally. Consequently, the total capital ratio edged up by 1.5 percentage points, reaching 22.3% in 2024, indicating banks' capital resilience. However, the risk profile of these banks deteriorated slightly to 52.6%, as total assets fell at a faster pace than the overall risk exposures. The drop in RWA reflected developments within credit risk – which however remained the predominant type of risk exposure – and in the foreign exchange (FX) risk category (see Chart 2.25).

Chart 2.25
GROWTH IN ASSETS AND TOTAL RISK EXPOSURE – NON-CORE DOMESTIC BANKS
(per cent)



Source: Central Bank of Malta.
Note: Asset growth figures are obtained from FINREP returns, differing slightly from the BR/06 Statutory Financial Information on which balance sheet developments is based. Percentages in circles represent the share of total risk exposure in 2024. Other percentages refer to the annual growth rate.

Meanwhile, operational risk exposures rose by 13.2% to account for 8.7% of total risk exposures. This group of banks strengthened further their leverage ratio, reaching 10.5%.

2.2.7 Risk outlook

While credit risks for the non-core domestic banks remained relatively contained, there are signs of potential upward pressure largely driven by higher Stage 2 loans amid an increasingly uncertain macro-financial environment, influenced primarily by heightened global geopolitical tensions. Nonetheless, these banks' continued efforts to diversify their business model and deepen their engagement with the resident market may help mitigate their risk exposure, while also contributing to increasing competition within the local banking sector. It remains crucial that these banks uphold prudent financial and credit risk management practices. Although profitability declined during the year, this group of banks continue to hold a robust asset portfolio, supported by sound liquidity and capital positions, which enhance resilience against potential shocks.

2.3 International banks

During 2024, one international bank voluntarily surrendered its banking licence as it sought to focus on payment services, while a new subsidiary was granted a license towards the end of the year, keeping the overall number of international banks unchanged at nine, of which four are branches of foreign banks. Total assets of this bank category grew by 30.9%, equivalent to 57.8% of GDP. This expansion was driven predominantly by the branches of foreign banks, with their total assets increasing by 41.7%, while the other banks saw a more modest rise of 4.4%.

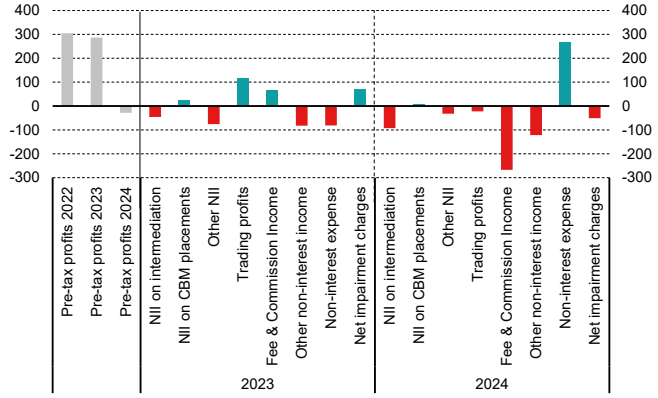
Although the share of resident assets of overall assets increased by 9.1 percentage points to 18.8% in 2024, this was primarily driven by a more than twofold increase in placements with the Central Bank of Malta by the branches of foreign banks. Other resident assets remained limited, reaffirming that the international banks' business model remained centred on non-resident activities with limited ties to the domestic economy.

2.3.1 Profitability

In 2024, international banks reported pre-tax losses for the first time in two decades, with an ROA of -0.2%. The losses were driven by one branch, which recorded a sharp drop in operating income, primarily due to a decline in NII and, to a lower extent, non-interest income, largely from FX revaluation. As a result, the branches' post-tax ROA fell from 2.3% to -1.1%. Meanwhile, subsidiaries and stand-alone banks remained profitable, but their earnings dropped by nearly 25%. This decline was spurred by two banks, including the aforementioned licence surrender. This led to the subsidiaries and stand-alone banks' post-tax ROA and ROE to fall by 0.6 and 2.7 percentage points, respectively, to 2.3% and 8.7% in 2024.

As seen in Chart 2.26, the main component impacting profitability was the lower non-interest income which fell by almost 87%. This was mainly driven by a significant drop in net fees and commission income, largely because of the surrendering of the licence. Indeed, excluding such bank, net fees and commission income would have fallen only marginally by 0.4%. Other non-interest income also fell, driven by FX revaluation losses from the above-mentioned branch and lower trading profits by some other banks. This resulted in the share of non-interest income to overall operating income to fall to almost 30%

Chart 2.26
MAIN CONTRIBUTORS TO PROFITS – INTERNATIONAL BANKS
(EUR millions)



Source: Central Bank of Malta.
Note: Grey bars indicate pre-tax profits in absolute amounts. Teal (positive) and red (negative) bars indicate yearly contribution to the change in profits.

in 2024 from around 64% a year earlier. Meanwhile, a significant decline in non-interest expenses was also reported, again as a result of the bank which surrendered its licence, largely offsetting the negative impact this bank had on international banks' operating income. In contrast, the rest of the international banks posted increases in non-interest expenses. These developments led to the cost-to-income ratio to rise from 55.8% in 2023 to around 70% in 2024.

At the same time, overall NII dropped by 45.0%, driven exclusively by foreign bank branches mostly due to higher interest expenses from increased interbank funding, largely due to repurchase agreements. In contrast, subsidiaries and stand-alone banks reported a 4.7% rise in NII, supported by higher net income from NFCs and placements with the Eurosystem. Additionally, net impairment charges more than doubled, driven by fewer reversals from foreign bank branches and increased charges from subsidiaries and stand-alone banks.

2.3.2 Credit dynamics

The customer loan portfolio of international banks expanded by 3.7%. Nonetheless, as a share of overall assets, it fell by 8.0 percentage points to 30.4%, due to the banks' balance sheet growth being driven by higher placements with the Central Bank of Malta. The growth in customer loans was entirely attributable to subsidiaries and stand-alone banks, up by 14.3%; whereas branches reported a contraction of 2.7%. As a result, although the branches continued to account for the bulk of international banks' loans, this share fell to 58.4% in 2024 from 62.2% in the previous year.

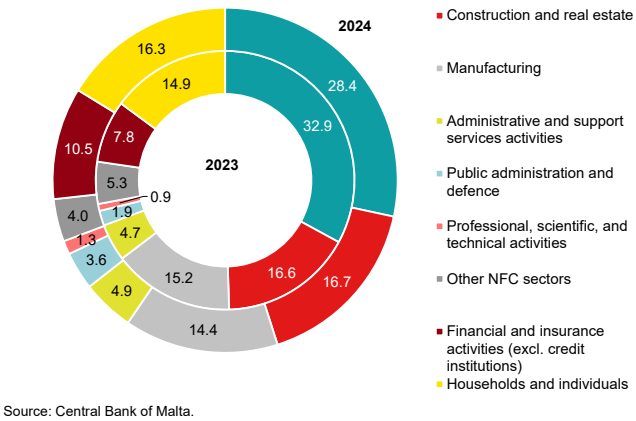
Overall, loans to OFIs saw the strongest growth, rising by 39.6% to 10.5% of total customer loans, up from 7.8% a year earlier, largely driven by the subsidiaries and stand-alone banks. Additionally, higher consumer credit by the subsidiaries and stand-alone banks also contributed to the overall increase. Conversely, lending to NFCs declined by 1.8%, to account for 73.3% of customer loans. This drop, driven exclusively by the branches, was particularly notable in the transportation and storage sector. In contrast, subsidiaries and stand-alone banks increased their lending to both foreign and resident NFCs, up by 5.0%. As a result, loans to residents granted by the non-branches rose by 86.5% over the past year but still accounted for a mere 0.6% of the overall customer loans of international banks (see Chart 2.27).

Interbank placements continued to decline, down by 11.3%, with their share in total assets decreasing from 5.8% in 2023 to 3.9% in 2024. This was driven by lower placements with unrelated credit institutions by the subsidiaries and stand-alone banks. To a lower extent, branches also reported lower interbank placements with related entities, as otherwise their placements with unrelated foreign banks rose by 4.8% to partly offset this decline.

2.3.3. Credit quality

The asset quality of the international banks' loan portfolio deteriorated in 2024, with the NPL ratio increasing by 0.2 percentage points to 1.7%. The NPL ratio would rise to 2.7% if the placements with the Central Bank of Malta are excluded from total lending. The increase was driven by an almost two-fifths

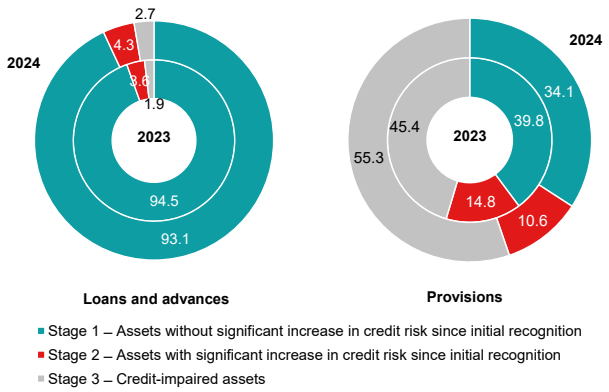
Chart 2.27
CUSTOMER LOANS BY SECTOR – INTERNATIONAL BANKS
(per cent)



Source: Central Bank of Malta.

rise in NPLs, partly mitigated by the expansion of the loan book. NPLs remained largely driven by consumer credit, which now make up the majority of total NPLs. Consequently, the household NPL ratio rose by 3.3 percentage points to 16.6% in 2024. NPLs related to NFCs rose significantly, however from a very low base, with their NPL ratio standing at just 0.1%. Concurrently, the NPLs of OFIs also rose, however, their NPL ratio stood at a low of 1.3% also contributing to keep the overall NPL ratio modest.

Chart 2.28
STAGE ALLOCATION OF LOANS AND ADVANCES AND PROVISIONS – INTERNATIONAL BANKS
(per cent)



Source: Central Bank of Malta.

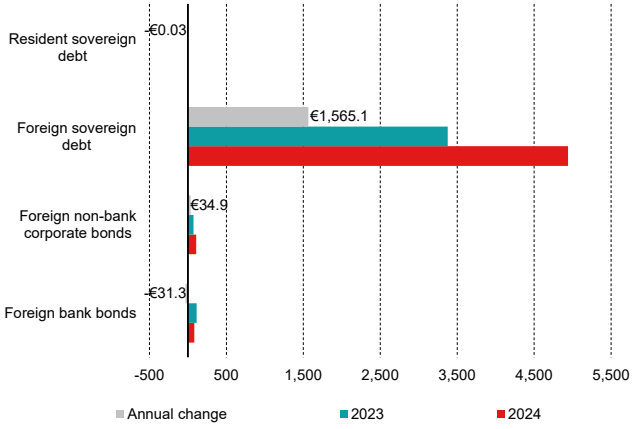
In line with the increase in NPLs, Stage 3 loans rose by 40.4% over 2023, representing 2.7% of total loans (see Chart 2.28). The deteriorating asset quality was also evident from the increase in Stage 2 loans to account for 4.3% of total loans. On the other hand, Stage 1 loans fell by 3%. As asset quality deteriorated, banks stepped up their provisions by almost a fifth over 2023. This mainly reflected higher provisions for Stage 3 loans, and to a lower extent for Stage 1 loans. Meanwhile, Stage 2 provisions fell by 14.8%, pushing down its share on total provisions to 10.6% in 2024. While overall provisions rose by 19.3% over 2023, this increase lagged the rise in total NPLs, leading to a decline in the coverage ratio from 125.3% in 2023 to 107.3% in 2024. Thus, outstanding NPLs remaining fully covered.

The overall forbearance ratio increased slightly to 1.4%, as loans with forbearance measures rose by 36.7%. The increase was mainly driven by performing forborne loans, which grew by 35.2%, while non-performing forborne loans rose by 65.1%. However, the latter still accounted for just 6.0% of total forborne loans.

2.3.4. Securities portfolio

During 2024, the securities portfolio held by international banks expanded by 41.6% to account for almost 40% of overall assets. This increase was entirely driven by higher bond holdings, largely reflecting investments by the branches. Otherwise, investment in equity instruments, exclusively held by the subsidiaries and stand-alone banks, contracted to account for just 0.6% of the international banks' securities portfolio.

Chart 2.29
BOND PORTFOLIO – INTERNATIONAL BANKS
(EUR millions)

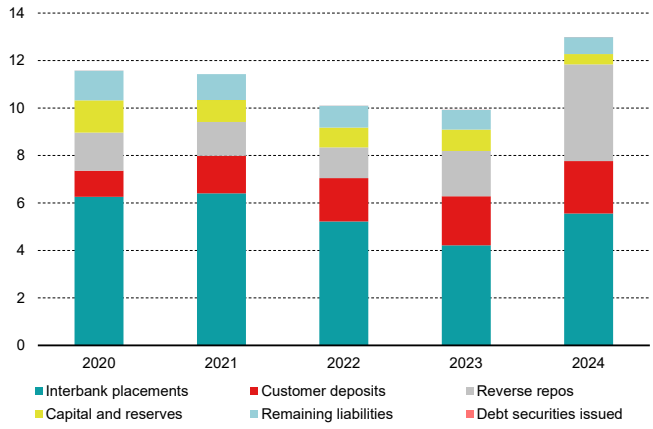


Source: Central Bank of Malta.

The growth in bond holdings was solely driven by foreign sovereign bonds, particularly Turkish sovereign paper held by the branches (see Chart 2.29). These holdings expanded by 46.4%, and at 96.3% accounted for the lions' share of the bond portfolio in 2024. As a result, a large part of the bond portfolio was rated as speculative grade. The growth in the bond portfolio mainly reflected higher purchases which

were partly offset by unfavourable market valuations. Investments in bonds issued by foreign NFCs also rose, up by 48.3%, though these only accounted for 2.1% of total bond holdings. At the same time, investments in foreign bank bonds declined by 27.5% to just 1.6% of the total bond portfolio.

Chart 2.30
DISTRIBUTION OF LIABILITIES – INTERNATIONAL BANKS
(EUR billions)



Source: Central Bank of Malta.

2.3.5. Funding and liquidity

The growth in assets was predominantly funded through the wholesale market, driven exclusively by the branches of foreign banks. This was mainly in the form of repurchase agreements which rose by more than twofold to 31.4% of the overall international banks' total assets (see Chart 2.30). Interbank placements also grew, reversing the drop reported in the last couple of years, up by nearly one-third to fund approximately 43% of international banks' overall assets. This expansion was primarily steered by increased placements from related banks, which accounted for 70.0% of total interbank placements.

In sharp contrast, the subsidiaries and stand-alone banks continued to refrain from wholesale funding and instead targeted the retail market and increased their dependence on customer deposits. Indeed, customer deposits held by the international banks rose by 6.8%, exclusively from the non-branches as otherwise customer deposits held by the branches dropped by more than a quarter over 2023. Despite the increase, the share of total customer deposits on total assets dropped by 3.8 percentage points to 17.0%. Overall, the largest increase stemmed predominantly from deposits by foreign households, which increased by 13.4%, representing more than two-fifths of the overall customer deposits. Deposits from private NFCs also rose, up by more than a quarter, owing exclusively to higher residents' deposits. This contributed to the expansion of resident customer deposits, which as at end 2024 accounted for 7.7% of overall customer deposits, but just 1.3% of the total balance sheet. Although overall deposits by OFIs fell by 5.8%, such deposits are still significant and make up 41.3% of overall customer deposits.

In terms of maturity structure, the overall increase in customer deposits was exclusively in the form of withdrawable on-demand deposits, which rose by around a third, to account for 40.5% of overall customer deposits. Meanwhile, term deposits fell by 5.9% over 2023, but at almost 60% of total customer deposits, remained most preferred deposit option.

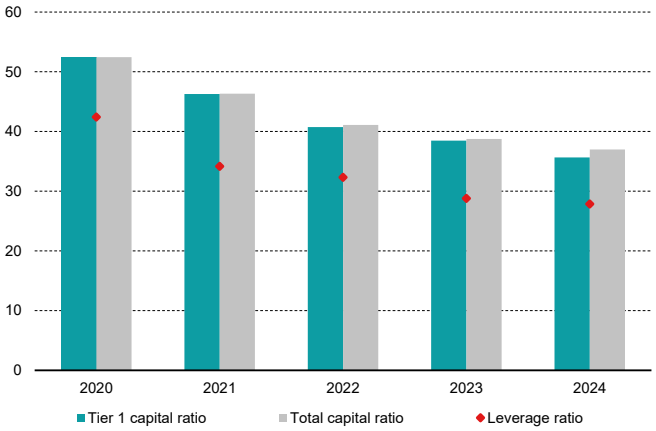
During 2024, the subsidiaries and stand-alone banks continued to operate with ample liquidity. Indeed, although the LCR fell by 144.3 percentage points to 422.6%, it stood significantly above the minimum regulatory requirement. Such deterioration was entirely driven by higher net outflows, as otherwise liquid assets rose by 4.4%, on the back of higher central bank assets. Meanwhile, the NSFR strengthened from 137.7% in 2023 to 143.0% in 2024, indicating stable long-term liquidity.

2.3.6. Capital and leverage

The capital position of the subsidiaries and stand-alone banks remained robust, with the total capital ratio and the Tier 1 capital ratio standing at 37.0% and 35.7% in 2024, respectively, compared to 38.7% and 38.5% in the previous year (see Chart 2.31). This decline was solely due to an increase in RWA, which rose by 9.1%, outpaced the 4.2% growth in total own funds. The rise in RWA was largely driven by a substantial increase in market risk, particularly commodities risk, with related RWA more than doubling to

11.5% of overall RWA. Credit risk also contributed to higher RWA. This risk category increased by 9.2% to account for 65.3% of the total RWA. On the other hand, RWA for operational risks dropped by 19.7% over 2023. The overall increase in RWA led to an increase in the risk profile of these group of banks, with the share of RWA on total assets increasing by 3.2 percentage points to 70.5% in 2024. This group of banks maintained a stable and high leverage ratio of 27.9%.

Chart 2.31
CAPITAL AND LEVERAGE RATIOS – INTERNATIONAL BANKS
(per cent)



Source: Central Bank of Malta.

2.3.7 Risk outlook

As with other financial institutions, international banks face a challenging outlook, particularly within the context of heightened geopolitical risks and prospects of sluggish growth. Profitability is expected to remain under pressure unless banks take proactive steps to diversify their income streams. The increased placements with the Central Bank of Malta during a period where the ECB's deposit facility rate continued to decline could further constrain income. Asset quality remains a critical concern, with rising NPLs putting further strain on banks' balance sheets, as the private sector could be adversely impacted from international macroeconomic risks. In terms of funding, the branches that rely heavily on the repo market, risk facing higher costs and funding pressures if market conditions tighten, making them more vulnerable to liquidity shocks. Meanwhile, the subsidiaries and stand-alone banks need to focus on maintaining a stable customer deposit base to ensure liquidity in the face of ongoing economic uncertainties. Nonetheless, international banks' capital and liquidity buffers remain robust, positioning them well to absorb any unforeseen shocks. Additionally, despite the increase in resident deposits, exposure to resident activities remains limited. Therefore, possible systemic contagion to the domestic economy remains minimal, ensuring that potential disruptions are less likely to pose a threat to domestic financial stability.

BOX 3: AN ANALYSIS OF BANK-FINANCED COMMERCIAL REAL ESTATE IN MALTA[1]

Introduction

The real estate market usually plays a central role in banks' business models, especially locally. While residential property often takes centre stage, CRE is also very important from a financial stability perspective. Compared to residential lending, CRE lending introduces additional and different risks to lending institutions. It is more sensitive to economic downturns, exposing banks to both market and credit risks when CRE prices decline, as it can lead to under-collateralised loans and loan defaults. Banks with high exposures to CRE lending also face liquidity risks, as these loans are typically long-term and may be difficult to sell or securitise in times of market stress or a downturn. CRE loans often tend to be large and concentrated among fewer borrowers or projects. This heightens borrower and project concentration risk. From a revenue perspective, CRE lending is more exposed to business cycles, industry-specific downturns, and tenant risk. Furthermore, risks in the CRE market are often cyclical. During downturns, investors are incentivised to sell, adding further pressure on CRE prices and possibly resulting in increasing adverse effects on financial stability. Thus, CRE lending is more sensitive to financial conditions and monetary policy shifts. Consequently, banks should adopt more prudent risk management practices when granting loans to the CRE market due to its high cyclicality and potential exposure during downturns.

Growing concerns about CRE prompted the European Systemic Risk Board (ESRB) to issue a recommendation in 2022 aimed at enhancing systemic risk assessment, promoting sound CRE financing practices, and strengthening the resilience of financial institutions.[2] This initiative was spurred following a decline in demand and heightened risks in the CRE sector, largely driven by the COVID-19 pandemic, lockdown measures, and the widespread shift to remote working. Furthermore, the ECB's monetary policy tightening, which began in July 2022, led to increased borrowing costs across the euro area, negatively impacting real estate firms' profits. This has increasingly strained firms' repayment capacity, raising further concerns on a sustained downturn in the CRE market and its potential spillover effects.[3] While more recent evidence suggests some signs of stabilisation amid the ongoing monetary policy easing, risks persist due to the elevated macroeconomic and geopolitical uncertainties. These concerns are even more pronounced for non-prime and non-sustainable buildings, which reported the sharpest declines in capital values and increases in vacancy rates.[4] Literature also indicates that investors have applied a penalty to CRE properties exposed to climate-related physical and transition risks, with such penalty increasing over the years.[5] These structural pressures are likely to mount, also as the European Union's Energy Performance of Buildings Directive, updated in 2024, enforces minimum energy performance criteria even for non-residential buildings, influencing demand for CRE, investor behaviour, and tenant preferences across the euro area.[6]

Domestically, anecdotal evidence points to a negative price impact on the CRE market stemming from the pandemic, which is also in line with developments in the rest of the euro area.[7] These developments were also reflected in the domestic BLS rounds, where since 2021 banks generally reported

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[1] Prepared by Ms Ariana Bartolo and Mr Shaun Zaffarese, Senior Analysts within Financial Stability and Surveillance Office. The authors would like to thank Mr Christian Mamo, Principal Economist and Mr Andrew Spiteri, Manager within the same office, Ms Wendy Zammit, Head, Financial Stability Surveillance and Research Department and Mr Alan Cassar, Chief Officer Financial Stability and Statistics Division, for their valuable suggestions.

[2] See: ESRB/2022/9

[3] Source: ECB Financial Stability Review, November 2024 – Rents or rates: what is driving the commercial real estate market?

[4] Source: ECB Financial Stability Review, May 2025

[5] Source: Pricing or panicking? Commercial real estate markets and climate change

[6] Source: Directive (EU) 2024/1275 on the energy performance of buildings

[7] Source: Times of Malta - Price of office rentals down a fifth as sector enters troubled waters

net tightening of credit conditions for CRE loans. The respondents cited a possible oversupply of property units, as well as lower demand particularly for office space.[8]

Against this backdrop, this boxed article aims to provide an analysis of the domestic banks' exposures to the CRE market. This is important from a financial stability standpoint, as it helps identify potential areas of vulnerabilities related to domestic banks' exposures to the CRE market. After a brief explanation of the data and methodology, the box proceeds with an assessment of characteristics of the domestic banks' CRE loan portfolio. This is followed by an evaluation of financial stability considerations, concluding with key takeaways and recommendations for further research.

Data and methodology

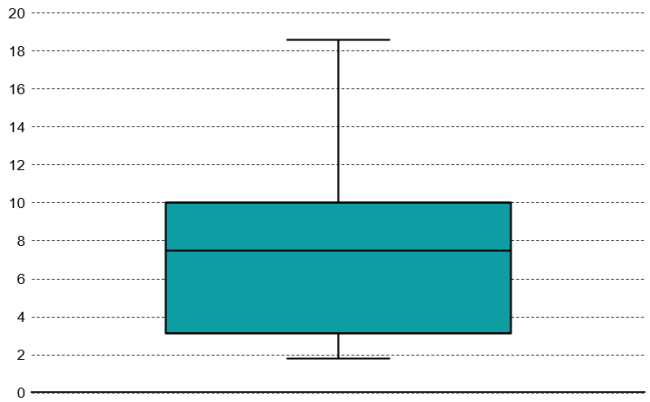
This analysis makes use of granular data acquired from two sources, the Real Estate Data Template and the Central Credit Register (CCR). The Real Estate Data Template provides detailed information on borrowers' characteristics, such as their residence and whether they are a natural person or a legal entity. It also includes property-specific details, such as location, current market value and state of repair, along with loan attributes including the credit limit, current LTV ratio and the purpose of the loan. The CCR supplements this by offering additional insights such as the borrowers' NACE category, default status and forbearance measures.

All outstanding real estate loans reported in the Real Estate Data Template as at the end of 2024 amounted to almost 72,000. These were then filtered to isolate CRE-related loans and then mapped with the CCR through a unique exposure identifier. This resulted in a final dataset of around 1,500 CRE loans used for this analysis.

Characteristics of the CRE loan portfolio

As at the end of 2024, the credit value of the identified CRE loans stood at about €1.3 billion, representing 13.0% of the overall outstanding value of real estate loans reported in the Real Estate Data Template.[9] Compared with regulatory reporting, CRE loans were limited to 6.5% of the banks' overall loan portfolio, which apart from loans for real estate purposes includes also consumer credit as well as corporate loans for other purposes. However, CRE lending is highly concentrated in core domestic banks, which accounted for over 95% of the overall CRE loans identified for this analysis. For these institutions, CRE loans make up 8.3% of their combined loan portfolios. Significant variations exist among these institutions, with the highest individual bank's CRE exposure reaching 18.6% of its respective loan portfolio (see Chart 1).

Chart 1
DISTRIBUTION OF OUTSTANDING CRE LOANS AS A SHARE OF OVERALL LOANS
(per cent)



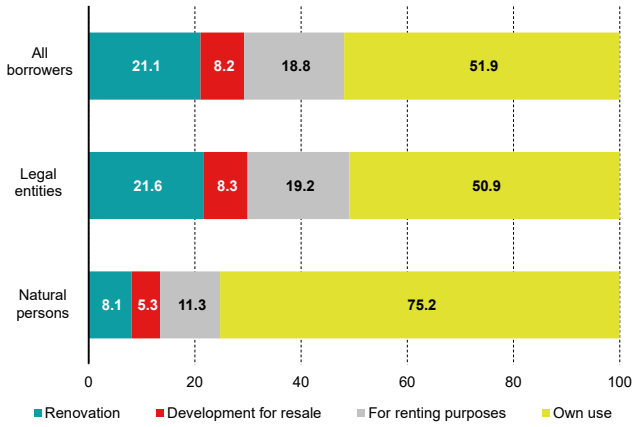
Source: Central Bank of Malta.

[8] Please refer to Box 2 – Update on the Bank Lending Survey for 2024 developments.

[9] It is worth noting that around €1.3 billion of corporate bonds listed on the Malta Stock Exchange were related to CRE, largely for domestic projects, including commercial and residential mix projects. These bonds account for around 55% of corporate bonds issued, excluding those by the banking sector.

The vast majority of outstanding CRE loans were granted to legal entities, with only 4% of CRE loans issued to natural persons. Among the legal entity borrowers, nearly 90% were NFCs, with the remainder consisting mainly of captive financial institutions and money lenders. Furthermore, almost all legal entities were classified as SMEs.

Chart 2
PURPOSE OF OUTSTANDING CRE LOANS BY BORROWER TYPE
(per cent)

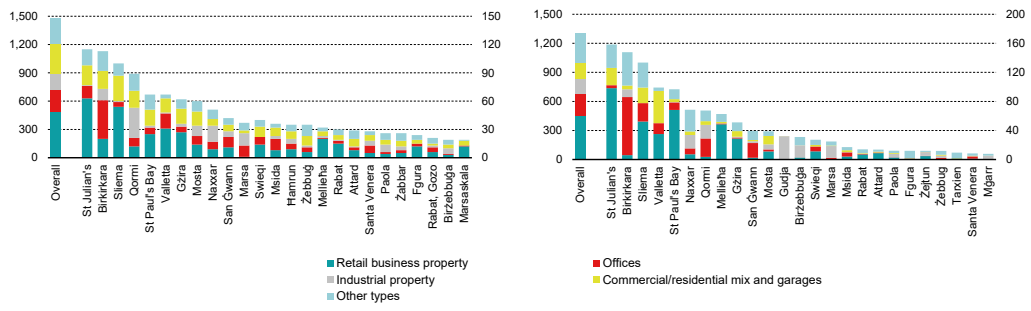


Source: Central Bank of Malta.

Just over half of all outstanding CRE loans were granted to purchase CRE for own use, a purpose even more prominent among natural persons compared to legal entities (see Chart 2). This was followed by loans for property renovation and for renting purposes, which accounted for around 21% and 19% of outstanding CRE loans, respectively. These purposes were more common among legal entities compared to natural persons. A smaller share was issued for resale purposes.

The data also provides insights on the types of commercial properties for which credit was granted. Retail business properties, including hotels, restaurants, and shopping malls, formed the largest segment. With nearly €450 million in loans, these accounted for just over a third of the total outstanding CRE loans (see Chart 3). Such loans provide a positive direct role in supporting economic growth and job creation. Offices followed with €236.0 million in loans, representing almost 18% of the CRE portfolio. Industrial properties used for production, distribution, and logistics purposes accounted for 11.0% or almost €150 million. Mixed-use commercial and residential properties along with garages, collectively represented approximately 12%, amounting to €163.1 million. Meanwhile, other types of CRE accounted for 23.1%.[10]

Chart 3
CRE LOANS BY PROPERTY TYPE AND LOCALITY
(left panel: number of loans, right panel: EUR millions)



Source: Central Bank of Malta.
Note: Figures for the overall CRE loans are plotted on the left-hand axis and figures by locality are plotted on the right-hand axis, for both panels. This chart presents the 25 leading localities in terms of both the number and value of CRE loans, respectively.

[10] Other types of CRE property include agricultural and plots of land, properties falling under the educational and institutional sector, airspace for commercial purposes, and other types of commercial property such as petrol stations and car parks amongst others, or else unspecified. In addition to the above split, 1.7% of the overall number of CRE loans has no information on the type of property, and another 0.7% has no details on locality.

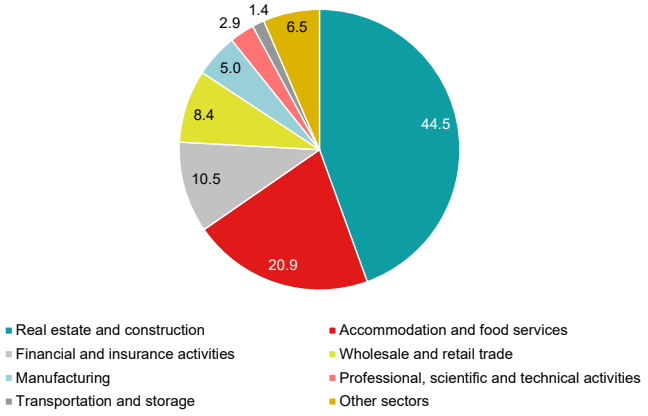
The most popular locations for CRE were in St Julian's, Birkirkara and Sliema, which together accounted for 21.8% of the total number of CRE loans, and 32.9% of the total outstanding CRE loans as at the end of 2024 (see Chart 3). Other notable locations were Qormi, St. Paul's Bay and Valletta. Different locations however serve for different hubs of commercial activities. St Julian's and Sliema, alongside St. Paul's Bay, Mellieħa and Valletta, have an active role as central hubs for the retail sector, hosting a high concentration of establishments such as hotels and shopping outlets. In contrast, less touristic areas like Birkirkara and Qormi tend to be prevalent for office spaces and/or industrial properties.

CCR data enhances the analysis by offering insights into the main economic sectors of firms behind CRE loans. Companies in real estate and construction were the most common, borrowing almost €600 million and accounting for around 45% of all CRE lending (see Chart 4). The accommodation and food services activities sector followed with €280 million, amounting to just over a fifth of CRE loans. Other common sectors include the financial and insurance industry, as well as the wholesale and retail trade sector.

As at the end of 2024, around 83% of CRE loans were for finished and/or furnished properties, while the rest were for properties sold on plan, under development or in shell form. The share of unfinished properties is larger among loans granted from 2020 onwards (see Chart 5). This trend may reflect the natural progression of property completion, since property details submitted by banks are updated periodically. It could also be the result of an increase in the tendency for borrowers to purchase a property on plan or in shell form. Anecdotal evidence suggests that this has become a more common practice to benefit from comparatively lower prices, while allowing developers to finance works through instalments by buyers.

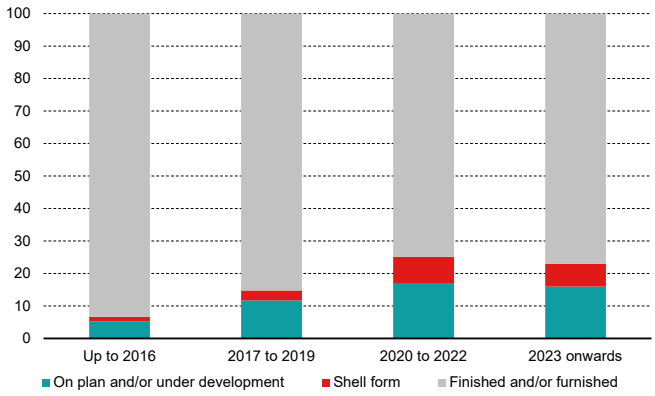
More than two-fifths of outstanding CRE loans carry a maturity at origination of

Chart 4
OUTSTANDING CRE LOANS BY NACE
(per cent)



Source: Central Bank of Malta.

Chart 5
NUMBER OF CRE LOANS BY PROPERTY STATE AND PERIOD
(per cent)



Source: Central Bank of Malta.
Note: The x-axis indicates the years in which the loans were granted by period brackets. Each period bracket contains approximately a quarter of the stock of CRE loans.

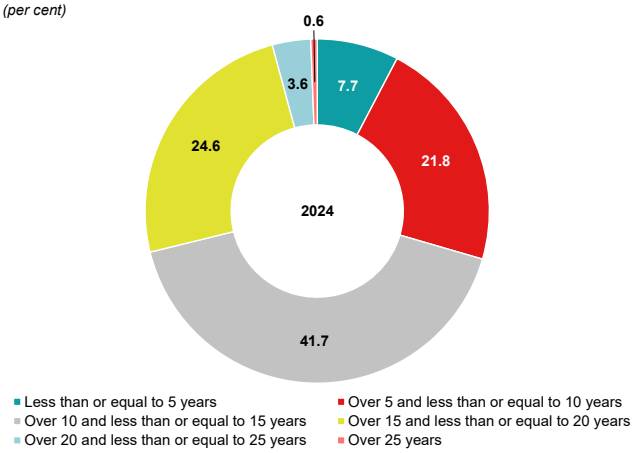
between ten and 15 years (see Chart 6). This is followed by loans with original maturities of 15 and 20 years and five to ten years, at 24.6% and 21.8%, respectively. The large share of longer-maturity loans partly reflects the natural progression, as shorter-dated loans granted several years ago mature and drop off the banks' books. Indeed, loans granted up to 2016 have on average a term to maturity of 16 years, noticeably longer than the 12 to 13 years average for loans granted between 2020-2022 and 2023 onwards.

At 90.0%, the vast majority of CRE loans have a variable interest rate, followed by 8.7%, which carry a fixed rate for an initial period and then switch to variable rate, while the rest are at fixed interest rates. Most loans currently carry an annual interest rate of between 3% and 5%, followed by those in the 5% to 7% range (see Chart 7). This led to a WAIR of 4.6% for all outstanding loans, very similar to the weighted average coupon rate of 4.5% for all corporate bonds listed on the MSE for CRE purposes.

Financial stability considerations

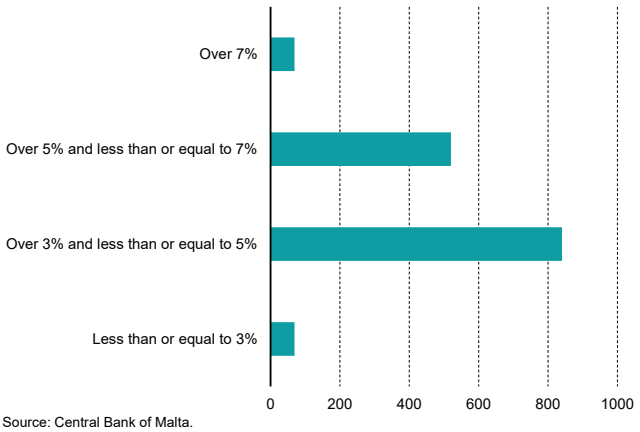
From an asset quality perspective, 97.4% of the CRE loans were reported as non-impaired, indicating limited credit risk in the domestic banks' loan books (see Chart 8). Only 2.4% of loans have defaulted, whilst a mere 0.2% are impaired but not in default. These figures

Chart 6
NUMBER OF CRE LOANS BY MATURITY PERIOD
(per cent)



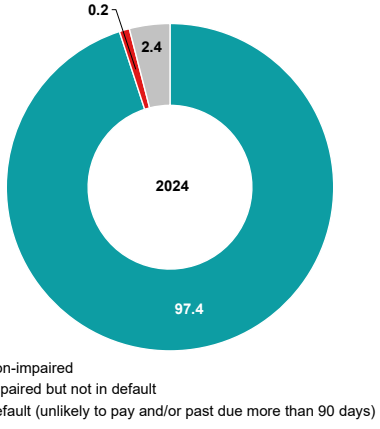
Source: Central Bank of Malta.

Chart 7
NUMBER OF CRE LOANS BY INTEREST RATE BRACKET
(number of loans)



Source: Central Bank of Malta.

Chart 8
OUTSTANDING CRE LOANS BY DEFAULT STATUS
(per cent)



Source: Central Bank of Malta.

closely mirrored the overall loan portfolio reported in the CCR, where 97.7% were not impaired, 2.2% in default, while 0.1% were impaired. Notably, the manufacturing and the accommodation, food and services activities sectors recorded the highest shares of defaulted loans, at 7.4% and 3.7%, respectively. In terms of property types, offices accounted for the largest share of defaulted CRE loans at 3.7%.

By December 2024, the forbearance ratio for CRE lending stood at 5.9%, significantly higher than the overall forbearance ratio of about 2% reported across all banks according to FINREP data. This suggests that CRE loans are more likely to undergo adjustments to their repayment schedule. Of note, however, is that almost 90% of forborne CRE loans remained performing.

Furthermore, all outstanding CRE loans are secured by collateral. At 98.4%, these loans are collateralised by real estate, largely that being financed, of which about 10% also have additional collateral backing. The remaining 1.6% is secured by other types of assets rather than real estate. This high level of collateralisation mitigates potential losses for banks, as it allows them to foreclose and sell the property in the event of borrower default. Notably, most loans in default or impaired are secured by the same real estate being financed. Nonetheless, under the CRR III implemented in 2025, CRE loans generally attract higher risk weights due to their inherently higher credit and market risks. Therefore, banks with higher concentration in CRE loans will face increased capital requirements, due to elevated RWA.

The ability to recover the outstanding loan amount also depends on CRE loan leverage. For this reason, the current LTV ratio sheds important insights into the risk profile of banks' CRE loan portfolio. This ratio assesses the outstanding loan balance to the property's current market value. Overall, the current weighted average LTV ratio stood at a healthy level of 47.4%.[11] This modest ratio, however, partly reflects the natural progression of loans. As repayments gradually reduce the outstanding balances, the current LTV would naturally decline. Furthermore, property valuations are generally revised upwards in Malta, typically through assessments made by independent external or internal appraisers over time. This too contributes to lower LTV as valuation increases. Indeed, the current weighted average LTV varies significantly depending on the different time periods when the loan was granted. Loans granted up to 2016 reported an average current LTV of just 27.1% (see Table 1). As expected, this ratio increases for more recent loans, reaching a still moderate LTV of 68.4% for those loans granted in 2023 and 2024. The conservative lending standards for CRE were also confirmed by the EBA through its cross-country assessment of distribution of LTV. EBA supervisory reporting data

Table 1

WEIGHTED AVERAGE CURRENT LTV RATIO BY PERIOD

Period brackets when the loans were granted by year	Weighted average current LTV
Up to 2016	27.1%
2017 to 2019	40.5%
2020 to 2022	44.2%
2023 onwards	68.4%

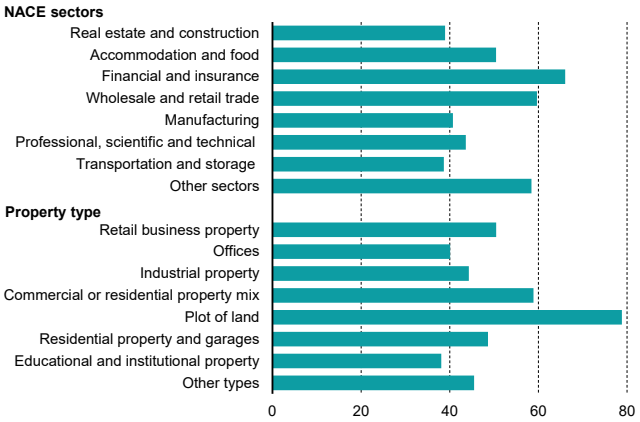
Source: Central Bank of Malta.

Note: Loans granted up to 2016 account for 23.1% of the total number of CRE loans, with another 26.4% issued between 2017 and 2019. An additional 29.4% were granted from 2020 to 2022, with 21.4% issued in the most recent period of 2023 to 2024.

[11] The current average LTV ratio is weighted using the current outstanding credit amount.

as at June 2024 shows that Malta has the lowest share of CRE loans with an LTV ratio exceeding 80%, standing at a share of just 2.9%, significantly lower than that of the EU which stood at almost a fifth of loans.[12]

Chart 9
WEIGHTED AVERAGE CURRENT LTV BY NACE AND PROPERTY TYPE
(per cent)



Source: Central Bank of Malta.

The current LTV ratio also varied by the economic sectors in which the borrowing firms operated, although it remained conservative across the board. Firms in the real estate and construction sectors, which accounted for almost half of all CRE loans, reported a limited ratio of just under 40% (see Chart 9). Meanwhile, this ratio for CRE loans granted to financial institutions stood at 66.0%. In addition, LTVs also differed according to the type of property purchased. The two most common property types, being retail properties and offices, had average LTVs of around 50% and 40%, respectively. Loans for the acquisition of plots of land, and to a much lower extent, commercial or residential mix properties, exhibited higher ratios of around 79% and 59%, respectively, though the lending volume within these categories remained relatively small.

Concluding remarks

Although domestic CRE lending remained relatively modest compared to the residential real estate market, it holds greater significance among core domestic banks. Exposures vary across banks, with some banks more exposed than others. Overall, domestic CRE lending remained resilient. The current average LTV ratio remaining contained, with all CRE loans collateralised, primarily by the property being financed. This offers a level of comfort in safeguarding against potential defaults, although it introduces an element of concentration risk for certain banks. To date, only a limited share of CRE loans is impaired or in default, limiting immediate credit risk within the domestic banks' loan books. Nevertheless, prudent credit risk management remains essential, supported by accurate and updated collateral valuations. Robust CRE risk monitoring requires both granular loan-level vigilance combined with system-wide portfolio analysis, and forward-looking stress tests. Key risk drivers such as income sensitivity, market dynamics, and refinancing pressures must be actively monitored. Given the sectors' interconnectedness with the broader financial system, significant stress in CRE markets could have far-reaching repercussions for both the domestic banks and the wider economy. Additionally, the inherent illiquidity of CRE assets, and the challenges in obtaining reliable valuations increase the risk of mispricing and the potential underestimation of credit risk.

Looking ahead, the assessment of CRE-related risks could be further strengthened by incorporating data on building sustainability, especially for the largest exposures, to better evaluate potential climate-related risks. Additionally, information on physical attributes, such as occupancy, age and condition of the building would provide a more comprehensive view of the environment in which the CRE market operates. In this context, the development of dedicated CRE price and rental indices,

[12] Source: Risk Assessment Report, November 2024 – Asset side | European Banking Authority.

in line with the ESRB recommendation on closing real estate data gaps,[13] is essential for enhancing market transparency and supporting robust risk assessments by enabling a more accurate tracking of property value fluctuations and rental income trends across the sector. Furthermore, they are key in macroprudential oversight, allowing for more effective stress testing and policy interventions. The continued enhancement of CRE-related data remains essential to support the early identification of emerging risks and help safeguard financial stability.

[13] See ESRB/2016/14 and ESRB/2019/3.

3. STRESS TESTS

Stress testing is an essential tool for institutions to assess their own resilience to extreme yet plausible shocks, for assessing capital adequacy and to maintain the confidence of regulators, investors and the public. Individual institutions that remain stable under pressure are conducive to a sound banking sector. The Central Bank of Malta runs its own suite of frameworks to stress test the banking sector as a whole and assesses banks' performance against emerging vulnerabilities. The aim is to determine the adequacy of supervisory, regulatory and management buffers in the event that systemic risks materialise.[1]

This chapter reports on the methodology and findings of the CBM's stress tests and consists of three sections. The first covers the scenario-based solvency test which translates scenario-based shocks to the macroeconomy onto the balance sheet of the banks in scope. The framework employs several modules to quantify different forms of risks under two scenarios and a three-year horizon. Box 4 describes the extension of the ECL module used for quantifying credit risk, which is one of the modules tested within the framework. Originally the module designed to assess transitions across loan classifications was modelled for the overall loan portfolio but has now been extended to individual models for household mortgages, consumer credit, and loans to NFCs.

The second section reports the results of the liquidity stress testing frameworks – assessing the available liquidity buffers against elevated volumes of withdrawals. One of these frameworks assumes a bank-run scenario and assesses banks' ability to survive the assumed deposit withdrawals over a four-week period. This framework additionally features a liquidity-to-solvency channel, whereby the assumed liquidity event would also deteriorate the capital position. The other two frameworks, assess the impact of a range of adverse scenarios on both short -term and longer-term liquidity against the regulatory minimum liquidity requirement.

Finally, the third section reports the results of the framework that features six scenarios based on changes in interest rates and how these would affect the interest-sensitive income and expenses, as well as the market-based valuation of bonds.

3.1 Scenario-based solvency stress test

Outlook and scenario design

The macro-stress testing (MST) framework adopts a baseline scenario to assess the likely outcome and a hypothetical extreme but plausible adverse scenario to identify any systemic weaknesses within the domestic banking sector under a three-year horizon. Reference is made to balance sheet data for six core domestic banks and six non-core domestic banks as at December 2024.

The MST scenario draws from the shocks applied in the 2025 EBA EU-wide stress test. The baseline scenario has been partially updated to reflect the Bank's economic projections of March 2025 which point to strong economic activity despite the uncertain external environment. Economic growth is expected to moderate from the very high rates experienced in the last four years, inflation is expected to remain stable around the ECB's inflation target, while real disposable income is expected to grow, thereby supporting private consumption. However, following the stock market volatility triggered by US trade policy in April, the baseline scenario features an exogenous shock to equity prices of 20% and a corresponding reduction in dividend income earned in 2025 also at 20%.[2]

The MST adverse scenario draws from that of the EBA, which is characterised by a severe escalation of geopolitical tensions and major trade restrictions that disrupt supply chains and cause an increase in energy and commodity prices, resulting in a worldwide contraction in economic activity. The adverse scenario is further reinforced by increasing volatility in the financial markets which leads to a drastic adverse correction of asset

[1] The Bank does not comment on stress test results for individual banks as the aim is to assess the overall resilience of the system. Individual bank findings are discussed with the relevant authorities. Moreover, the number of banks considered for each category may vary as some banks may fall out of scope of specific stress tests. In particular, this is the case for branches of foreign banks, given that they do not hold capital locally, and other banks that would not hold the specific classes of instruments being assessed in any given framework.

[2] The shock to equity prices applied in the baseline scenario was calibrated on the basis of the peak to trough for 2025 in major equity indices, such as the S&P 500 (-19% between 19 February and 8 April) and the DAX index (-16% between 6 March and 9 April). The shock to dividend income was set at the same value of the shock to equity prices.

Table 3.1
SCENARIO-BASED MACROECONOMIC PROJECTIONS FOR 2025 TO 2027

	Baseline scenario			Adverse scenario		
	2025	2026	2027	2025	2026	2027
MT GDP growth	4.0	3.6	3.3	-1.8	-4.7	1.6
MT inflation rate	2.1	2.0	2.0	2.8	4.1	2.3
Residential real estate prices	4.4	4.0	3.9	-1.9	-6.5	-4.5
Short-term rate	2.1	2.0	2.2	3.8	3.4	3.3
Sovereign spread	0.9	0.8	0.8	1.7	1.3	1.1

Sources: Central Bank of Malta; European Banking Authority.

prices from the return of inflationary pressures, the expectation of higher market rates and low market liquidity. Equity prices in the EU are assumed to drop, corporate bond yields increase while sovereign debt sustainability concerns amplify.[3] The extent of severity in the calibration of the EBA's hypothetical adverse scenario could be attributed to the later imposition of trade tariffs by multiple countries as these are also expected to drive a shift towards more protectionist global trade policies, further intensifying trade fragmentation – as assumed in the scenario narrative. Table 3.1 summarises the projections for the three-year horizon of the baseline and adverse scenarios considered for the MST. Such shocks are estimated to affect banks' profitability and capital position via the respective risk satellite models, with the shock to GDP, inflation and house prices mainly impacting banks' credit risk with the latter two shocks mainly driving the results for NII and market risk modules.

Under the baseline scenario and over the three-year horizon, GDP is expected to grow cumulatively by 11.3%, residential real estate prices are expected to increase by 12.8% while inflation is expected to continue to increase by 6.2%.[4] The sovereign spread is forecasted to narrow from 0.9 percentage points to 0.8 percentage points. Additionally, the short-term interest rate is anticipated to drop slightly to 2.0% in 2026 before rising to 2.2% in 2027 under the baseline scenario. Under the adverse scenario, real GDP is expected to contract cumulatively by 4.9% whilst inflation increases by a further 9.5% over the test horizon and property prices drop by 12.4%.[5] Furthermore, short-term rates and sovereign spreads are expected to increase to 3.8% and 1.7 percentage points, respectively in 2025 before declining to 3.3% and 1.1 percentage points under the adverse scenario.

Methodology

The MST framework adopts the same methodology as per its preceding run, using a static balance sheet assumption, to assess the impact of macroeconomic shocks onto the balance sheet of core and non-core domestic banks.[6] Losses by risk type are projected via dedicated satellite models or modules.

The only change in methodology relates to an extension of the ECL module. This module now projects the loan portfolio separately for household mortgages, household consumer loans and NFCs to measure the sensitivity of each segment to macroeconomic shocks and better understand the main drivers of the deterioration in the respective loan portfolio qualities. These three portfolios are projected in reaction to five domestic macroeconomic variables, namely the paths for GDP growth, inflation, residential real estate price inflation, short-term interest rates and the sovereign spread under the respective scenario, as per Box 4.

[3] The shock to equity prices applied in the adverse scenario consists of a drop by 50% in the first year and remain low within minimal recovery over the test horizon, as prescribed by the EBA 2025 adverse scenario.

[4] The baseline projections have been updated in accordance with the March 2025 economic projections to feature the economic uncertainty experienced in the first quarter of 2025 for all variables, excluding residential real estate prices. Nevertheless, the EBA baseline projections (based on December 2024) show a similar cumulative growth rate of 11.3% for GDP and 6.3% for inflation. Moreover, despite the revisions in the Bank's latest projections for June 2025, the cumulative growth remains comparable at 11.2% for GDP and at the same level of 6.3% for inflation.

[5] In terms of severity, the current adverse scenario is comparable but slightly milder than the one applied in the FSR 2023, particularly for inflation. Both versions apply a cumulative shock to GDP growth of -5%, albeit the decline is spread over the first two years of the current test horizon. In contrast, the previous trajectory assumed almost no growth in the first and third years, with the decline being concentrated in the second year. Finally, the cumulative shock for inflation is milder at 9.5% in FSR 2024 compared to 12.6% in FSR 2023.

[6] The static balance sheet assumption ensures ease of comparison across banks results by requiring banks to retain the same composition of assets and liabilities over the test horizon. In practice, this is achieved by replacing instruments which mature between 2025 and 2027 with similar instruments in terms of type, credit quality and residual maturity as observed in December 2024, adapted to the prevailing market conditions assumed in each scenario.

BOX 4: UPDATE TO EXPECTED CREDIT LOSS MODEL[1]

The MST's ECL model employs the Z-factor as a single-parameter representation of the transitions across the three IFRS 9 loan stages, calculated using the methodology developed by Gross et al. (2020) and Belkin et al. (1998a).[2] The Z-factor was introduced in Box 3 of the 2022 *Financial Stability Report* (FSR) and condenses the 3-by-3 transition matrix with nine probabilities of transitions across Stages 1, 2 and 3 loans, into a single value for each observation period. The Z-factor for each matrix can be interpreted as the number of standard deviations relative to the historical transition matrix. A positive Z-factor indicates an improvement in the credit quality of the loan portfolio compared to this benchmark transition matrix as it is characterised by higher *cure rates*, i.e. higher transitions back from Stage 2 into Stage 1 and from Stage 3 into Stage 2 or Stage 1. Conversely, a negative Z-factor signals deterioration in credit quality compared to the benchmark matrix, with more loans migrating down to Stage 2 or Stage 3. If the Z-factor is equal to zero, then there are no deviations from the historical transition matrix.

In contrast to previous FSR reports where the Z-factor was estimated for the entire loan portfolio, this analysis has been improved by modelling ECL separately for three distinct segments. i.e. loans to NFCs, loans for house purchase, and loans for consumer credit. This segmentation allows for a more granular assessment of how each portfolio responds to macroeconomic shocks and helps identify the key sources of risk in the banking sector.

The ECL models are based on quarterly data covering the period from Q4 2016 to Q4 2024 with projections up to Q4 2027 for a baseline and adverse scenario. In total, five macroeconomic variables, detailed in Table 1, are used to estimate the relationship between the Z-factor and macroeconomic conditions for the respective models. These include the three variables considered in the previous run of the framework, along with GDP growth and the residential real estate price index. To ensure theoretical consistency and interpretability, appropriate sign restrictions are applied to each variable within the estimation framework.

The process for projecting the loan portfolio consists of the following steps. First, the historical time series of transition matrices is converted into a Z-factor for each loan segment. Next, the relationship of these Z-factors with the macroeconomic indicators in Table 1, is estimated using the Autoregressive Distributed Lag (ARDL) approach.[3] These are then projected for the three-year horizon according to the trajectory of the macroeconomic variables under the baseline and adverse scenario

Table 1
SIGN CONSTRAINTS FOR MACROECONOMIC VARIABLES

Variable	GDP growth rate	Inflation rate	Residential real estate price index	Short-term interest rate	Sovereign spread
Sign constraints	+1	-1	+1	-1	-1

Source: Central Bank of Malta.

[1] Prepared by Mr David Stephen Law, Principal Expert and Mr Kanan Musayev, Senior Economist both within the Policy, Crisis Management and Stress Testing Department.

[2] IFRS 9 classifies loans into three stages, namely: Stage 1 as loans retaining their original credit quality, Stage 2 as loans which have experienced a significant increase in credit risk and Stage 3 as loans which have experienced a default event. Stage 1 and Stage 2 loans are considered as performing loans while Stage 3 loans are non-performing.

[3] Separate models for the Z-factors by segment are required as their computation is based on additional portfolio-specific parameters, namely: rho, upper bounds and lower bounds as detailed in the aforementioned Box 3 of the 2022 FSR. These parameters reflect the underlying "riskiness" of each portfolio and would translate into different transition rates for different portfolios, even when the Z-factor is the same.

adopted in the Macro Stress Testing Framework in Chapter 3.1. Finally, the Z-factors are translated back into the credit transition matrices for the three models.

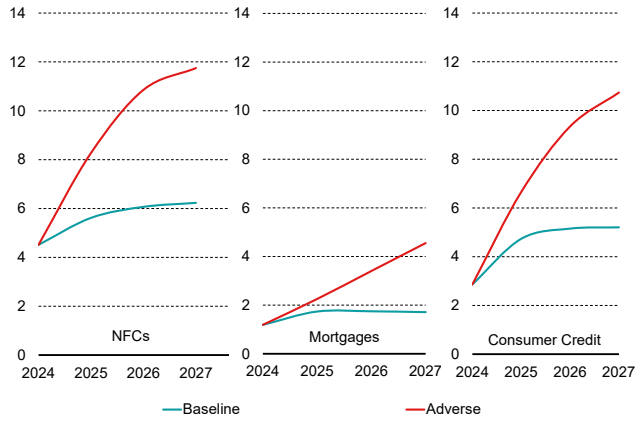
When applied to the volume of loans classified as Stage 1, Stage 2 and Stage 3 as at the reference date, the transition matrices project the composition of the loan portfolio, from which the ratio of Stage 3 loans is extracted. To note that the ratio of Stage 3 loans differs from the traditional NPL ratio as the composition of the loan portfolio is projected under a static balance sheet assumption, i.e. it remains stable, and focuses on the transition of existing loans across the IFRS 9 stages, disregarding maturity (as maturing instruments are immediately rolled-over), write-offs or the issuance of new loans, amongst other factors affecting the NPL ratio. Therefore, by design, the ratio of Stage 3 loans tends to increase over the stress test horizon.

Chart 1 presents the ratio of Stage 3 loans based on the classification of loans as at December 2024 for the banks in scope and scenarios adopted in Chapter 3.1 of the 2024 FSR.

Under the baseline scenario, the ratio of Stage 3 loans increases over the test horizon from 4.5% to 6.2% for NFCs, from 1.2% to 1.7% for mortgages and from 2.9% to 5.2% for consumer credit. This increase in defaults in the baseline can be attributed to the change in GDP growth, which although positive is slower than previous years. Moreover, given the static balance sheet assumption and that the ECL framework is designed for stress testing purposes and not for forecasting, the outcomes tend to be more conservative by design especially given the static denominator.

Under the adverse scenario, which features worse economic conditions triggered by geopolitical tension resulting in negative GDP growth across all EU countries, the ratio of Stage 3 loans increases to 11.7% for NFCs, 4.6% for mortgages and 10.7% for consumer credit.

Chart 1
PROJECTED SECTORAL RATIO OF STAGE 3 LOANS
(per cent)



Source: Central Bank of Malta calculations.

The projected impact from additional provisions arising from the ECL module is reported under *credit risk* in Charts 3.1 to 3.4. Moreover, the newly classified NPLs affect the income stream as this is reduced due to missed monthly repayments, reflected in the narrowing of the contribution of NII. Similarly, the increase in RWA from the additional risk-weight on newly classified NPLs is shown separately in the charts with results.

The market risk module mainly quantifies the impact arising from changes in interest rates on the valuation of marketable debt securities, as well as losses arising on remaining instruments. Specifically, bonds held at fair value (FV) are repriced at the scenario-based market prices with unrealised gains or losses charged to the Statement for Profit and Loss for bonds accounted for at fair value through profit and loss (FVTPL) or directly to capital for bonds accounted for at fair value through other comprehensive income (FVOCI). For the remaining bonds, although there is no repricing since these are valued at amortised cost (AMC), the market risk module feeds back into the credit risk module by factoring in the discrepancy between the AMC and the scenario-based market value.[7] The market risk module also quantifies the impact on banks' income stream after adjusting interest earned on floating rate notes, as well as adjusting coupons at the prevailing market rates for the roll-over of maturing instruments, while it applies an exogenous shock of 24% for equities issued by non-affiliated companies. These impacts are reported under the market risk component in Charts 3.1 to 3.4, except for the impact on AMC bonds which is added to the results of the ECL under credit risk.

The NII and net non-interest income (NNII) module mainly revises the income and expenses generated from interest-bearing instruments according to the scenario-based changes in interest rates. It also draws from the other modules, mainly credit and market risk, to assess changes in income stream arising from floating rate notes, forgone income from NPLs and defaulted bonds, and adjusts the income earned and expenses incurred from the remaining stock of assets and liabilities according to the scenario.

The net trading income (NTI) module quantifies market risk on derivatives and economic hedges and is based on the simplified approach of the market risk methodology adopted in the 2016 EBA EU-Wide Stress Test (described in Section 3.6 of the 2016 methodological note).

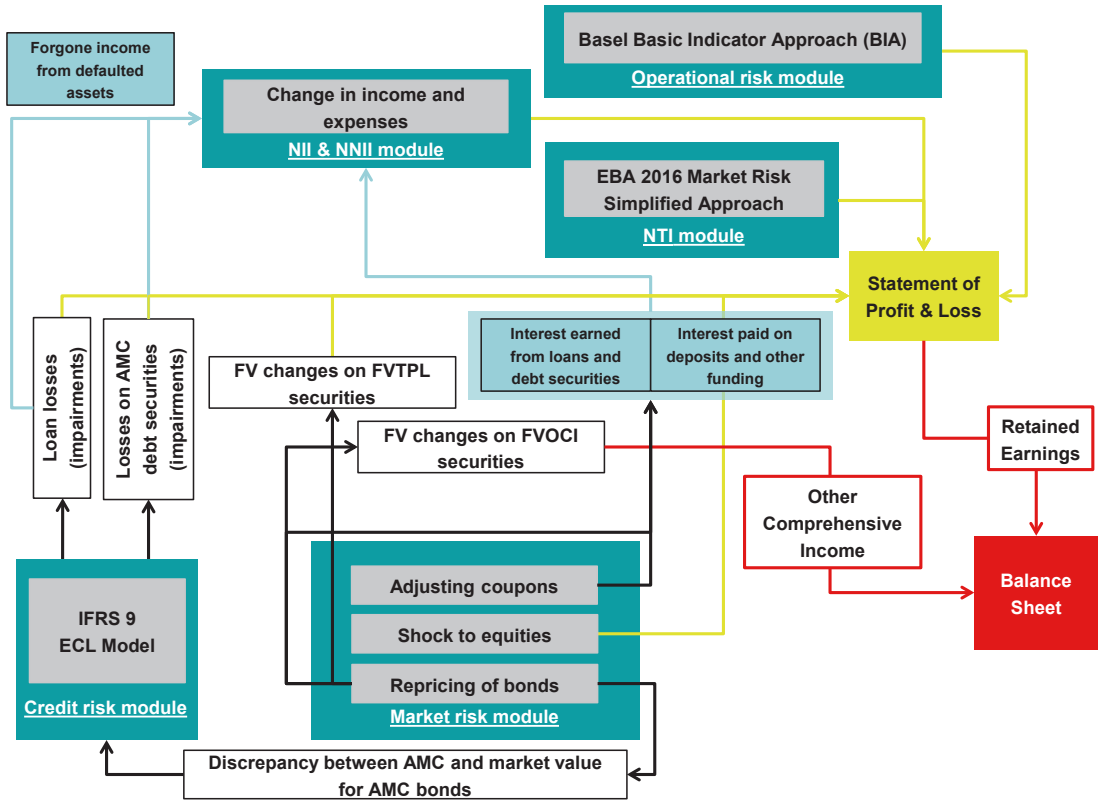
Finally, the operational risk module assumes a materialisation of risk equal to a share of the capital requirements set aside for operational risk. These capital requirements are calculated according to the Basic Indicator Approach (BIA) of the CRD and the loss events are assumed at 40% of the requirement under the baseline and 100% under the adverse scenario. The impact of these events is equally distributed over the three years of the test horizon.

The impact arising from the NII & NNII, NTI and operational risk modules are all charged to the P&L and shown in the respective items in Charts 3.1 to 3.4.

Figure 3.1 provides a schematic overview of the interactions and contributions of the risk modules in translating the scenario-based macroeconomic environment onto the relevant instrument classes of banks, and their ultimate impact on profitability and solvency. The market risk module provides input to the credit risk module and in turn both provide input to the NII and NNII module. Apart from unrealised revaluations on FVOCI bonds which are charged directly to capital via other comprehensive income, each module's outcome affects the composition of the statement of Profit & Loss. The combined gains or losses ultimately determine if the bank generates profits, which are transferred to capital via retained earnings after deducting taxes and any dividend payouts, or losses which would need to be compensated by the release of retained earnings as accumulated from profits set aside in previous years.

[7] For more details on the accounting treatment and valuation of bonds, refer to Box 4 of the 2022 FSR.

Figure 3.1
SCHEMATIC OVERVIEW OF THE MST FRAMEWORK

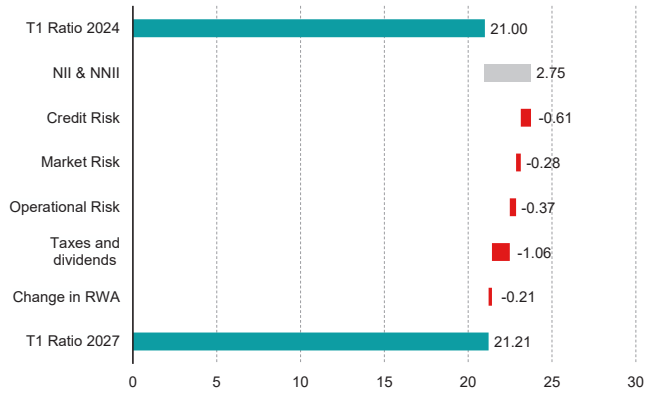


Results

Charts 3.1 and 3.2 present the three-year cumulative contributions of the various risk modules on the Tier 1 capital ratio for core and non-core domestic banks under the baseline scenario.

As a main source of income for banks, NII and NNII have a combined positive contribution to the Tier 1 capital ratio. This contribution is estimated on banks' potential to generate income and incur expenses based on the composition of assets and liabilities, as at December 2024, with scenario-specific hinderances from achieving this potential. As an example, while banks are assumed to receive all loan repayments from loans classified as performing by end December 2024, the credit risk module identifies new non-performing loans over the test horizon and reduces the potential

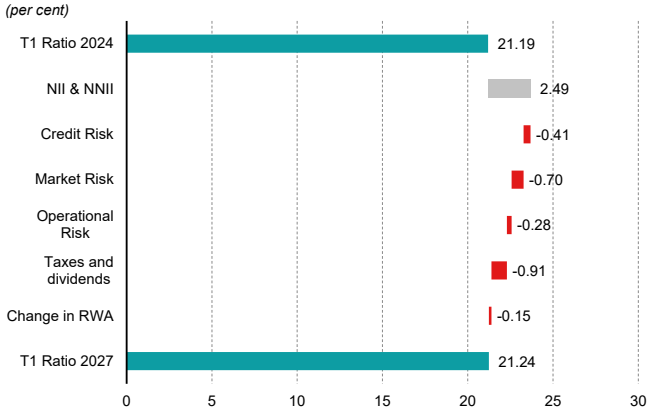
Chart 3.1
STRESS TEST RESULTS – MACRO STRESS TEST BASELINE SCENARIO – RELATIVE CONTRIBUTION OF THE IMPACT ON CORE DOMESTIC BANKS' TIER 1 CAPITAL RATIO
(per cent)



Source: Central Bank of Malta calculations.

income stream accordingly. Moreover, the assumed reduction in dividend income corresponding to the exogenous shock to equity prices, results in a further reduction in the potential income stream.

Chart 3.2
STRESS TEST RESULTS – MACRO STRESS TEST BASELINE SCENARIO – RELATIVE CONTRIBUTION OF THE IMPACT ON NON-CORE DOMESTIC BANKS' TIER 1 CAPITAL RATIO
(per cent)

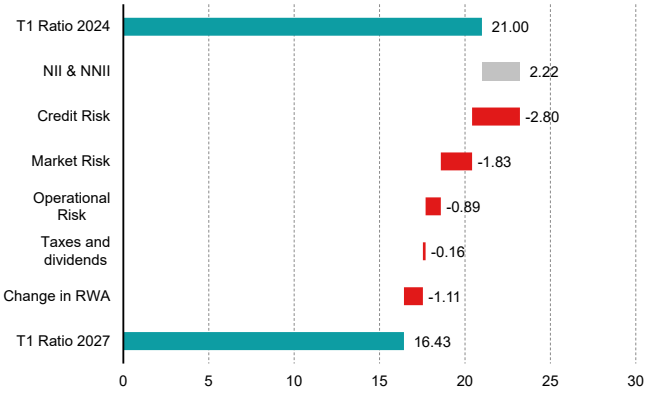


Source: Central Bank of Malta calculations.

The NII and NNII contribution is lower than the results reported in the FSR 2023 as that year was characterised by exceptionally improved profitability from rising interest rates, including the income earned from deposits with the Central Bank of Malta. The decline in interest rates, particularly the deposit facility rate, has narrowed this contribution and its magnitude is more aligned to the results of previous editions of the FSR. The positive contribution from NII and NNII which acts as a first safeguard against the losses arising from exposure to the various risk categories, such as additional loan loss provisions required under credit risk, unrealised losses on bonds at FV from market risk and the assumed operational risk event costing banks 40% of the allocated capital requirements. Nevertheless, the overall contribution of NII and NNII offsets these losses, leading to an increase in capital from the transfer of retained earnings, after being subject to the corporate tax rate of 35% and the assumed dividend pay-out ratio of 30%. The Tier 1 capital ratio of core domestic banks increases by 0.21 percentage points from 21.00% to 21.21%, while that of non-core domestic banks increases by 0.05 percentage points from 21.19% to 21.24%.

Charts 3.3 and 3.4 show the relative contributions to banks' Tier 1 capital ratio under the adverse scenario. The adverse projections assumed for the macro variables that explain the dynamics of the loan portfolio in Box 4, give rise to more loans classified as Stage 3. In the case of households, the share of insolvencies is higher on loans for consumer credit than for house purchase (mortgages). These elements result in more scenario-based "hinderances" compared to the baseline scenario, resulting in a less positive contribution of NII and NNII, larger provisioning needs captured under credit risk and the increase in RWAs from higher loan defaults. In addition, the assumed operational risk event is more adverse at 100% of the capital allocation. Combined, these lead to the Tier 1 capital ratio for core domestic banks to fall by 4.57 percentage points to reach 16.43% while that of non-core domestic banks falls by 4.48 percentage points to reach 16.71%. Although the banks have slightly higher capital ratios compared to the previous year, the narrowing of the positive contribution of NII and NNII, results in higher capital depletions when compared to the adverse scenario results of 1.50 and 1.67 percentage

Chart 3.3
STRESS TEST RESULTS – MACRO STRESS TEST ADVERSE SCENARIO – RELATIVE CONTRIBUTION OF THE IMPACT ON CORE DOMESTIC BANKS' TIER 1 CAPITAL RATIO
(per cent)

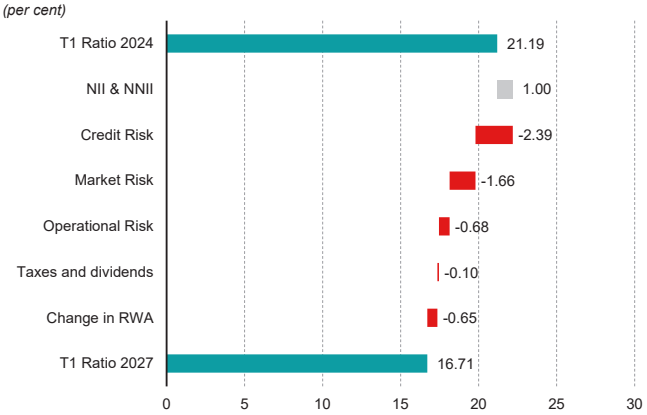


Source: Central Bank of Malta calculations.

points for the respective bank category, as reported in FSR 2023.

The results that are obtained from the MST framework are then benchmarked against banks' supervisory and regulatory capital requirements, so as to determine the extent of erosion in banks' capital buffers.[8] The test also assumes that banks do not avail themselves of any deferred tax assets, and dividend payouts can only take place for banks having positive profits.

Chart 3.4
STRESS TEST RESULTS – MACRO STRESS TEST ADVERSE SCENARIO – RELATIVE CONTRIBUTION OF THE IMPACT ON NON-CORE DOMESTIC BANKS' TIER 1 CAPITAL RATIO
(per cent)



Source: Central Bank of Malta calculations.

As shown in the above charts, the core and non-core banks on aggregate retain strong Tier 1 capital ratios with buffers that exceed the regulatory minimum. Moreover, at the individual bank level, all the core and non-core domestic banks surpass the respective capital requirement thresholds under both the baseline and the adverse scenarios, except for one non-core domestic bank which registered losses at the end of 2024. The results from these frameworks are presented to the Financial Stability Committee and shared with the MFSA before further discussions with banks, as deemed necessary. This collaboration supports ongoing monitoring of the financial system – both at the overall and individual institution level – providing an additional dimension in the endeavours for preserving financial stability.

3.2 Liquidity stress tests

This section presents the findings of three complementary frameworks that stress test the liquidity position of banks. The first is the persistent deposit withdrawals (PDW) framework which shocks the liquidity position of banks against a bank-run type scenario over a survival period of four weeks. This framework has been recently enhanced to include a liquidity-to-solvency dimension whereby the impact of the bank-run translates also into an impact on capital. The second framework shocks some of the components of the liquidity coverage ratio (LCR) and entails a baseline and three adverse scenarios simulating high outflows during its 30-day horizon. The third framework is based on the NSFR framework and assesses four adverse scenarios affecting longer-term liquidity.

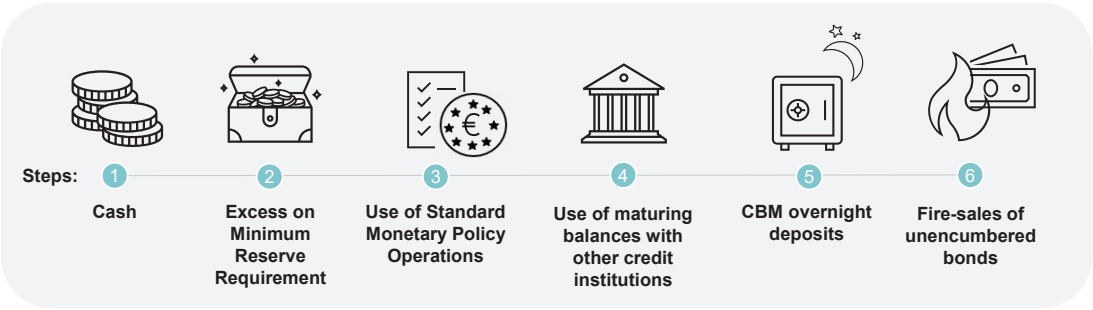
3.2.1 PDW framework

The PDW framework simulates a bank-run type deposit withdrawals to assess the ability of banks' liquidity buffer, defined as the counterbalancing capacity (CBC), to satisfy the liquidity needs arising from an increase in the volume of deposit outflows. Figure 3.2 presents the assumed hierarchy for the composition of CBC made up of liquid assets such as cash, the pledging of bonds as collateral for standard monetary policy operations and, as a last resort, the fire-sale of unencumbered and ineligible bonds, as first introduced in Section 3.2.1 of the FSR 2023.[9]

[8] As a first line of defence against losses, banks hold management buffers made up of the amount of capital that banks voluntarily hold over and above their supervisory and regulatory capital. In cases where the management buffer is insufficient, banks would dip into their Pillar 2 Guidance (P2G) and be subject to additional supervisory scrutiny. Should the capital levels fall below the P2G, banks breach the combined buffer requirement and would trigger the Maximum Distributable Amount threshold, with further supervisory reaction to restore capital to the adequate levels.

[9] Securities pledged are subject to liquidity haircuts which are regularly updated in line with revisions to the ECB framework. Only banks that are a signatory to the Central Bank of Malta Directive No. 8 can make use of these operations. Eligible debt securities refer to any marketable assets held by banks which, as at the reference date, are included in the database of eligible assets for Eurosystem monetary operations.

Figure 3.2
ASSUMED HIERARCHY FOR CBC



Source: Central Bank of Malta.

Overview of composition of liquid assets

To respect this assumed ranking, banks would make full use of one asset class before liquidating the next class in the hierarchy.

Table 3.2 assesses the composition of the bond portfolio in terms of rating, valuation approach and overall encumbrance and eligibility for ESCB standard monetary policy operations. As explained above, 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.

Second to the loan portfolio, the acquisition of bonds is a relatively major component of the composition of assets of core and non-core domestic banks, amounting to 33% and 19% of the respective total assets in December 2024. For international banks, bond holdings are insignificant at under 0.1% of aggregated total assets. Indeed, only one international bank holds bonds, and these accounted for only 0.8% of its individual total loans. Overall, the three bank categories hold very high proportions of bonds at investment grade, standing at 96% for non-core domestic banks and 100% for both core domestic and international banks. The three bank categories also hold a high proportion of bonds which are valued at AMC. The latter valuation approach is only applicable to bonds acquired with the intention of being retained until maturity to earn back the principal and any coupons due during the lifetime of these bonds. The remaining bonds (20% and 31% of total bonds for core and non-core domestic banks, respectively) are practically all measured at FVOCI with only two banks making use of FVTPL, amounting to around 1% of their respective

Table 3.2
MAIN CHARACTERISTICS OF THE BOND PORTFOLIO

	Core domestic banks		Non-core domestic banks		International banks	
	Dec. 2023	Dec. 2024	Dec. 2023	Dec. 2024	Dec. 2023	Dec. 2024
Bonds as a share of total assets	28%	33%	23%	19%	0%	0%
Bonds at investment grade	100%	100%	95%	96%	100%	100%
Bonds held at AMC	84%	80%	77%	69%	100%	100%
Bonds held at FV[(1)]	16%	20%	23%	31%	0%	0%
Encumbered	15%	11%	51%	45%	0%	0%
Unencumbered and ESCB eligible	69%	80%	20%	24%	38%	78%
Unencumbered and ESCB ineligible	16%	9%	29%	31%	62%	22%

Source: Central Bank of Malta.

(1) Bonds at FV can either be accounted for at FVTPL or at FVOCI. In December 2024, practically all FV bonds were measured at FVOCI as the share of FVTPL amounted to less than 0.1%.

holdings of bonds. FVTPL is applied to bonds acquired with the sole intention of being sold while FVOCI is applied to bonds acquired with the intention of being retained until maturity whilst remaining open to the possibility of selling them in favourable market conditions. Whilst instruments accounted for at AMC are insulated against market value changes, instruments accounted for at FV are exposed to fluctuations to their market prices.

In terms of asset encumbrance, the share of bonds already encumbered as collateral for other activities fell for the core and non-core domestic banks in December 2024. The respective share for the two bank categories decreased to 11% and 45%, from 15% and 51% in December 2023. Moreover, all three bank categories have improved the share of unencumbered and eligible bonds at 80%, 24% and 78%, respectively, up from 69%, 20% and 38% in the previous year. The availability of these bonds allows banks to pledge such instruments for standard monetary policy operations and receive liquidity assistance in the form of short-term loans, thereby providing easy access to boosting liquidity in times of need (step 3 of the hierarchy). Alternatively, banks can generate additional liquidity via the sale of the 9%, 31% or 22% of unencumbered and ineligible bonds (step 6), while already encumbered assets cannot be used to generate liquidity.

Simulating the liquidity outflows linked to the bank-run scenario

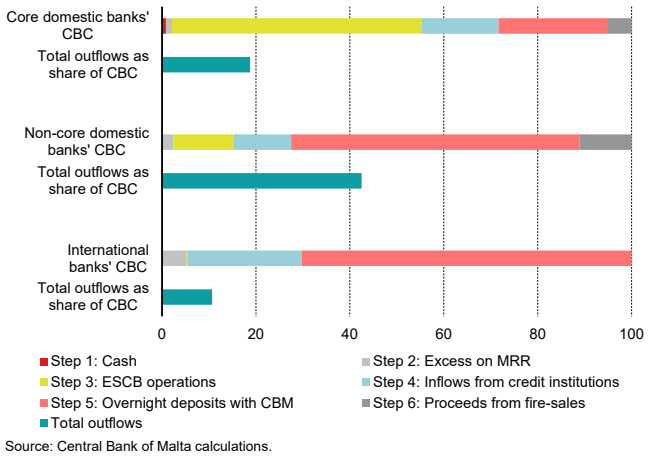
The hierarchy of liquid assets is then assessed against a bank-run scenario which aims to assess banks in isolation and thus features an instantaneous 100% withdrawal of all credit lines and deposits with parent/subsidiaries as well as other credit institutions. The scenario then assumes a steady and 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).

As at December 2024, the share of deposits sourced from ODPs stood at 0.4%, 25% and 36% of total deposits for the respective bank category. However, not all banks have active participation in ODPs, with only two core domestic bank having deposits sourced from ODPs equal to only 1.8% and 9% of the respective total deposits, four non-core domestic banks (ranging between 24% and 48% of total deposits) and three international banks (ranging between 26% and 78% of total deposits). The higher participation rates observed for non-core domestic banks and more so for international banks are consistent with the classification of banks into the three bank categories of domestic relevance. Overall, deposits sourced from ODPs are fixed term deposits, with around a quarter fixed for a minimum term to maturity of one month. Since these deposits are not withdrawable upon demand, banks have time to plan for alternative sources of funding in case these deposits are not rolled over for additional periods.

Chart 3.5 shows each bank category's composition of the CBC in terms of liquid assets considered in hierarchy along with the simulated outflows as a share of CBC.

Core domestic banks could rely on 53% of their CBC originating from standard monetary policy operations by pledging ECB eligible assets (step 3) and a further 24%

Chart 3.5
COMPOSITION OF CBC AND TOTAL OUTFLOWS AS SHARE OF CBC
(per cent)



Source: Central Bank of Malta calculations.

from the use of placements held with the Central Bank of Malta (1 percentage point from the excess on the Minimum Reserve Requirement (MRR) in step 2 and a further 23 percentage points from overnight deposits in step 5). The CBC of non-core domestic and international banks relies more on placements with the CBM at an overall 61% and 70%, respectively.

The combined outflows of the bank-run scenario for December 2024 amount to 19%, 43% and 11% of the CBC available to the respective category of banks. This is comparable to the results for December 2023 when outflows correspondingly amounted to 20%, 43% and 11% of CBC. Therefore, banks retain the same ability to withstand the outflows assumed in this framework.

At the individual bank level, all banks, except one, would retain an excess of CBC of at least 13%, allowing them to withstand further withdrawals beyond the four-week horizon considered. The exception is a non-core domestic bank which would run out of CBC before this four-week horizon due to the assumed full withdrawal of placements by other credit institutions. However, assuming a standard bank run scenario driven by households and NFCs only, i.e. disregarding the withdrawals by credit institutions, this non-core domestic bank would survive the bank run scenario with an excess CBC of 9%.

3.2.2 LCR framework

The European Commission (EC) Delegated Regulation (EU) 2015/61 confines the LCR, defined as the ratio of the buffer of HQLA to net liquidity outflows occurring over a 30-day horizon, to a 100% minimum requirement. This framework adopts the prescribed haircuts in this regulation in the baseline scenario for benchmarking the three adverse scenarios considered. Adverse scenario 1 applies higher outflows from the prescribed ones for instruments within the LCR's 30-day horizon, while adverse scenario 2 builds upon it by adding on withdrawals from term deposits fixed for a term exceeding 30 days. Adverse scenario 3 reverts to the baseline and additionally assumes the full withdrawal of committed facilities. All adverse scenarios target higher outflows while both the HQLA buffer and inflows remain constant. In so doing, the scenarios simulate the materialisation of unplanned outflows, some occurring beyond the 30-day horizon envisaged by the Delegated Regulation, to assess the HQLA buffer's ability to absorb liquidity demands.

Table 3.3 provides a summary of all the scenarios considered in the LCR framework.[10]

Table 3.3
DESCRIPTION OF LCR FRAMEWORK'S BASELINE AND ADVERSE SCENARIOS

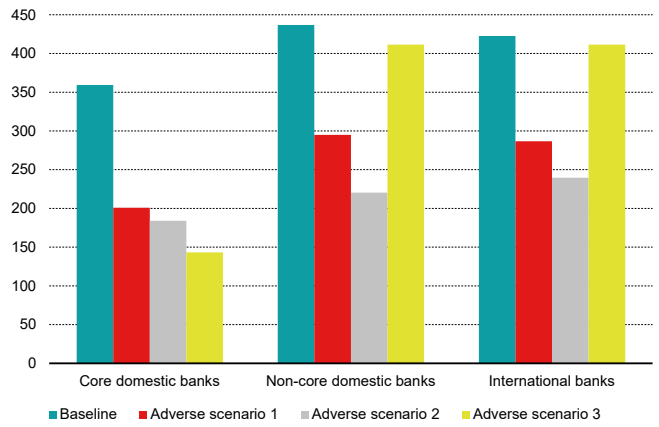
Scenario	Description
Baseline	Haircuts and outflow/inflow rates as prescribed by the (EU) 2015/61
Adverse:	
Scenario 1	Higher outflows compared to the (EU) 2015/61
Scenario 2	Scenario 1 with additional withdrawals from both resident and non-resident time deposits
Scenario 3	Baseline scenario with full withdrawal of committed facilities to NFCs and households

Source: Central Bank of Malta.

[10] The magnitude of the shocks for adverse scenarios 1 and 2 are outlined in Box 4 of the 2018 FSR. Originally in the Box, the impact from the withdrawal of resident and non-resident term deposits was reported separately (under former scenarios 2 and 3) so adverse scenario 2 reports the combined impact considered under former scenario 4. Finally, adverse scenario 3 retains the baseline shocks and targets committed facilities by adjusting only the outflow rate on this category of exposures to 100%.

As at December 2024, the LCR reported by core domestic banks, non-core domestic banks and international banks stood at 359%, 437% and 423%, respectively (see Chart 3.6). Compared to December 2023, the LCR stood at 369%, 397% and 579%, respectively. While for international banks the decline in the LCR is due to an increase in the volume of outflows, core and non-core domestic banks experienced a shift in the composition of HQLA from a predominance of cash and central bank reserves in 2023, to a predominance of sovereign assets in 2024.

Chart 3.6
LCR FRAMEWORK – RESULTS BY BANK CATEGORY
(per cent)



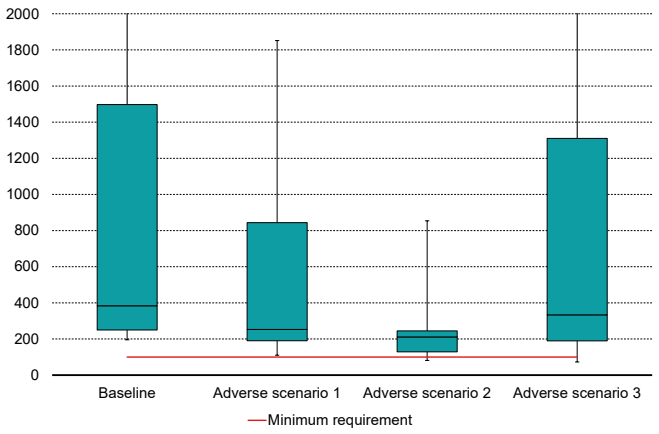
Source: Central Bank of Malta calculations.

Under adverse scenario 1, the LCR declines by 159, 142 and 136 percentage points, to reach 201%, 295% and 287% for core domestic banks, non-core domestic banks and international banks, respectively. The dip in the ratio under Adverse Scenario 1 demonstrates a reliance on short-term funding as the scenario increases the outflow rates for instruments within the 30-day time horizon compared to the baseline. Given the banks' business model, the additional outflows mainly originate from retail deposits for core domestic banks, operational deposits for non-core domestic banks and non-operational deposits for international banks.

Under adverse scenario 2, which combines the previous scenario with withdrawals from time deposits fixed for a term exceeding 30 days, the LCR dips further by a total of 175, 216 and 183 percentage points, to reach 184%, 220% and 240% for the respective bank categories. The impact is mainly driven by the withdrawal of resident deposits for core domestic banks and non-resident deposits for international banks. For non-core domestic banks, the impact is a combination of both types of depositors with a larger impact from the withdrawal of non-resident deposits given their higher share of non-resident deposits.

Under adverse scenario 3, the LCR reaches 143% for core domestic banks and 412% for both non-core domestic banks and international banks, dropping by 216, 25 and 11 percentage points, respectively. The results reflect the biggest impact on core domestic banks given its higher share of committed facilities, which represent 17.2% of total unweighted outflows in scope of the LCR, while for non-core banks and international banks these amounted to only 6.2% and 1.3%, respectively. Similar results are obtained under the NSFR's adverse scenario 4.

Chart 3.7
LCR FRAMEWORK – BOX PLOT OF INDIVIDUAL BANK RESULTS
(per cent)



Source: Central Bank of Malta calculations.

Chart 3.7 shows the distribution of results at the individual bank level. The chart has been trimmed from values exceeding 2000% and shows that some banks would not be able to surpass the 100% requirement under at least one of

the adverse scenarios due the severity to the shocks applied to assess potential systemic risk. For instance, under adverse scenario 3, the outflow rate for committed facilities is assumed to increase from 0% for retail and 10% for NFCs to 100% in both cases and under such adverse scenario only two banks have difficulty sustaining their LCR above 100%. Reverse stress tests indicate that these two banks would be able to sustain withdrawals of up to 60% of committed facilities to both retail and NFCs. Should such a scenario materialise, the Regulation allows banks to temporarily operate below this requirement.

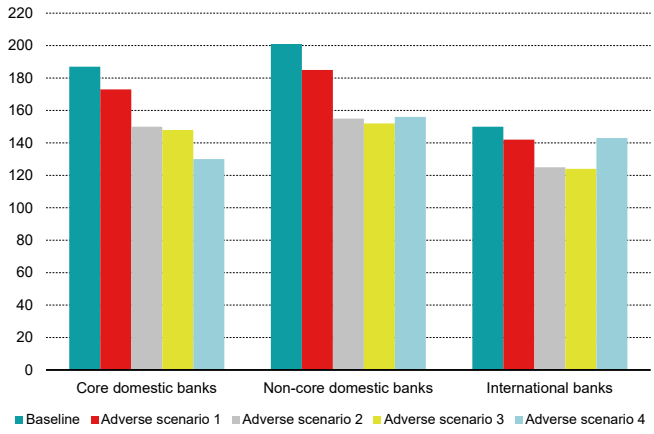
3.2.3 NSFR framework

Regulation (EU) 2019/876 introduced the NSFR to ensure that banks maintain a long-term sustainable liquidity position under a stable funding structure and minimize potential mismatches between longer-term assets and short-term funding sources. The NSFR is defined as the ratio of the Available Stable Funding (ASF) and the Required Stable Funding (RSF), which must exceed the minimum requirement of 100%. The regulation prescribes the factors to be applied to capital and liabilities to compose the ASF that will remain with the institutions for more than one year. Similarly, it prescribes the factors to be applied to assets and off-balance sheet exposures to compose the RSF.

The NSFR stress testing framework was introduced in a Special Feature of the FSR 2021 and adopts a baseline and four adverse scenarios to stress the components of the NSFR. The baseline scenario adopts the ASF and RSF factors as set in the regulation and serves also to monitor the NSFR as reported by banks. The four adverse scenarios are composed of different assumptions and components of the banks' ASF and RSF, as summarized in Table 3.4.[11]

Chart 3.8 shows the results of the NSFR framework for the three bank categories under the baseline and four adverse scenarios as at December 2024.

Chart 3.8
NSFR FRAMEWORK – RESULTS BY BANK CATEGORY
(per cent)



Source: Central Bank of Malta calculations.

Table 3.4
DESCRIPTION OF NSFR FRAMEWORK'S BASELINE AND ADVERSE SCENARIOS

Scenario	Description
Baseline	ASF and RSF factors as prescribed by the Regulation (EU) 2019/876
Adverse:	
Scenario 1	A higher run-off for retail and wholesale deposits impacting the ASF
Scenario 2	Adverse scenario 1 with some loans become non-performing requiring more stable funding to support them impacting the RSF
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
Scenario 4	Baseline with full withdrawal of committed facilities to NFCs and households (similar to LCR adverse scenario 3)

Source: Central Bank of Malta.

[11] The magnitude of shocks applied in adverse scenarios 1, 2 and 3 are detailed in the Special Feature, while adverse scenario 4, retains the baseline shocks and targets committed facilities by adjusting only the RSF of this category of exposures to 100%.

Under the baseline scenario, the NSFR remained relatively stable at 186%, 200% and 149% for the respective bank category, compared to the ratios of 177%, 198% and 155% reported in December 2023.

Adverse scenario 1 targets the ASF. Under this scenario, which assumes higher outflows from retail and wholesale deposits, the NSFR drops by 14, 16 and 8 percentage points to reach 172%, 184% and 141%, respectively. The impact is low as all three bank categories continue to retain a similar composition of the ASF, comprising mainly of retail deposits, followed by capital items and instruments. Specifically, retail deposits, which attract lower ASF-factors than wholesale deposits, accounted for 72%, 43% and 45% of the total ASF of core domestic banks, non-core domestic banks and international banks, respectively.

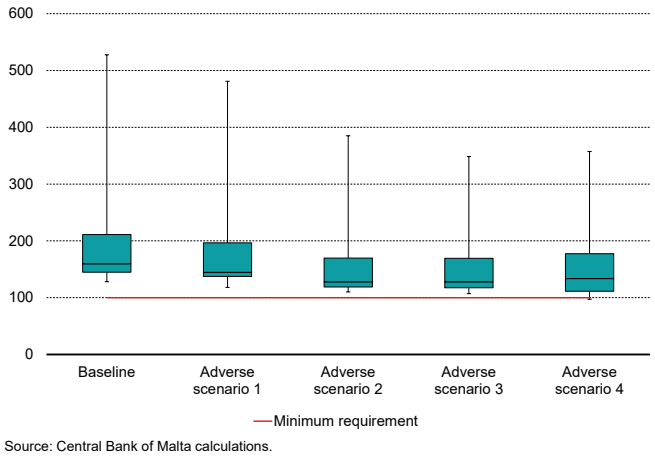
Adverse scenario 2 builds on the previous scenario and increases RSF requirements on loans which remained the primary component of the available RSF, representing 81%, 63% and 63.5% of total for core domestic banks, non-core domestic banks and international banks, respectively. Under this scenario, the NSFR drops by a further 22, 29 and 17 percentage points to reach 150%, 155% and 124%, respectively.

Adverse scenario 3 also builds on the previous two scenarios, by adding on further RSF requirements on bonds and equities. However, since loans are the main component of the RSF, the resulting NSFR under Adverse Scenario 3 are at most only 4 percentage points lower than those for Adverse Scenario 2, or cumulatively at 38, 49 and 25 percentage points relative to the baseline, at 148%, 151% and 124% for the respective bank category.

Adverse scenario 4 returns to the baseline shocks and targets instead the full withdrawal of commitments to mimic adverse scenario 3 under the LCR framework and compare how these affect banks' liquidity in both the short and longer term. In this case, the NSFR for core domestic banks, non-core domestic banks and international banks would reduce by 56, 45 and 6 percentage points to reach 130%, 155% and 143%, respectively. The stronger impact from the full withdrawal of commitments can also be noticed in the short-term for core domestic banks from the results of the LCR framework under adverse scenario 3.

At an individual bank level, Chart 3.9 shows that all banks are operating with excess liquidity and manage to retain an NSFR with ample margin above the 100% minimum requirement in all adverse scenarios, except for two banks under adverse scenario 4. As remarked on the individual results in section 3.2.2, the assumptions under this scenario are severe also in the NSFR framework with the outflows of committed facilities increasing to 100% from the 5% prescribed in the regulation. A reverse stress test confirmed that these banks would be able to surpass the NSFR requirement with outflows from committed facilities of up to 93%.

Chart 3.9
NSFR FRAMEWORK – BOX PLOT OF INDIVIDUAL BANK RESULTS
(per cent)



Source: Central Bank of Malta calculations.

3.3 Interest rate risk in the banking book

The interest rate risk in the banking book (IRRBB) framework analyses the impact stemming from different shocks affecting the shape of the yield curve on the banks' business model. The framework assesses the immediate impact of changes in interest rates to profitability via the NII and the revaluation of bonds held by banks measured at FV. The six scenarios adopted are prescribed in Annex 2 of the 2016 Basel Committee on Banking Supervision (BCBS) standards and 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.

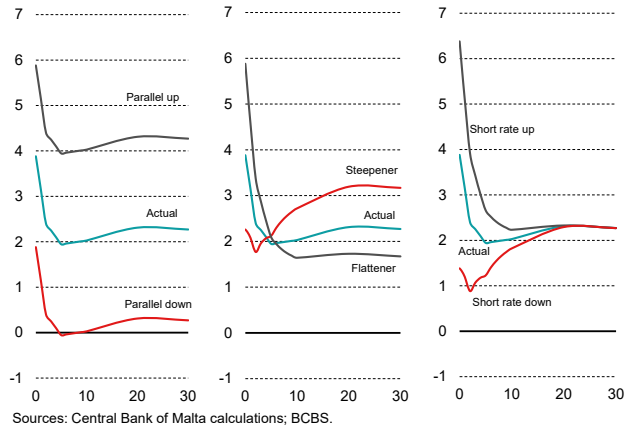
These scenarios consist of a *parallel shift upwards* and *downwards* of the yield curve as at the reference date, an *increase* and a *decrease in the short rate* end of the curve and two composite shifts in the short and long-term rates referred to as the *steepener* and *flattener* scenarios. All 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%, 87% and 87% of the banking book of core domestic, non-core domestic banks and international banks is denominated in these three currencies, with EUR being the most relevant currency representing 96%, 67% and 81% of the banking book of these three bank categories, respectively. Chart 3.10 shows the shift in the EUR term structure under the six different tested scenarios as at December 2024. The GBP and USD yield curves would experience similar shifts under the respective scenarios.

By design, the test assesses the impact of interest rate risk over a one-year horizon. A static balance sheet approach is considered whereby maturing instruments are rolled over with similar instruments having similar characteristics but at the prevailing yield, while no impact is assumed on demand for credit or deterioration in asset quality from higher debt servicing costs via additional NPLs, thus loan portfolio composition remains consistent. To note that the IRRBB framework applies the interest rate changes directly to the interest-bearing loans and deposits' reference rate. For most banks, the reference rate on loans is determined internally, i.e. a base rate as a margin over the deposit rates, with the exception of a few exposures typically associated with NFC loans, being linked with the market rates. This has been one of the reasons why interest rates on loans have remained rather stable despite the changes in policy rates.

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.[12]

Based on the balance sheet composition in December 2024, the respective bank categories continue to hold low shares of bonds priced at FV at 20%, 31% and 0%

Chart 3.10
STRESS TEST SCENARIOS – CHANGE IN THE EUR TERM STRUCTURE OF INTEREST RATES UNDER THE SIX BCBS SCENARIOS
(per cent)



Sources: Central Bank of Malta calculations; BCBS.

[12] 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.

Table 3.5
STRESS TEST RESULTS – IRRBB FRAMEWORK – RELATIVE IMPACT OF CHANGES IN INTEREST RATES ON THE TIER 1 CAPITAL RATIO
(per cent)

		Core domestic banks	Non-core domestic	International banks
	Initial Tier 1 capital ratio	20.97	21.19	34.86
Parallel up	*NII*	*2.19*	*1.58*	*1.85*
	Revaluations	*-0.81*	*-0.89*	*0.00*
	Post-shock Tier 1 capital ratio	22.36	21.88	36.71
Parallel down	*NII*	*-1.75*	*-1.50*	*-1.68*
	Revaluations	*1.15*	*1.28*	*0.00*
	Post-shock Tier 1 capital ratio	20.37	20.97	33.19
Flattener	*NII*	*2.05*	*1.38*	*1.77*
	Revaluations	*-0.05*	*0.06*	*0.00*
	Post-shock Tier 1 capital ratio	22.97	22.63	36.63
Steepener	*NII*	*-1.31*	*-1.07*	*-1.30*
	Revaluations	*-0.07*	*-0.19*	*0.00*
	Post-shock Tier 1 capital ratio	19.59	19.93	33.56
Short rate up	*NII*	*2.57*	*1.73*	*2.22*
	Revaluations	*-0.32*	*-0.25*	*0.00*
	Post-shock Tier 1 capital ratio	23.23	22.67	37.09
Short rate down	*NII*	*-2.04*	*-1.66*	*-2.02*
	Revaluations	*0.33*	*0.26*	*0.00*
	Post-shock Tier 1 capital ratio	19.26	19.79	32.84

Source: Central Bank of Malta calculations.

of their total bond holdings. Indeed, international banks do not register any revaluation changes as they do not hold any bonds priced at FV.

The scenarios featuring short-term increases in interest rates, namely: parallel up, flattener and short rate up, 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 2.25, 1.47 and 2.22 percentage points for core domestic, non-core domestic and international banks, respectively. Conversely, the scenarios featuring drops in short-term interest rates yield a negative impact on NII. The least positive impact is experienced under the short rate down scenario as it results in the lowest interest rates for the near-term horizon of up to 1 year. Under this scenario, the Tier 1 capital ratio of the bank categories drops by -1.71, -1.40 and -2.02 percentage points for the respective category of banks.

4. INSURANCE COMPANIES AND INVESTMENT FUNDS

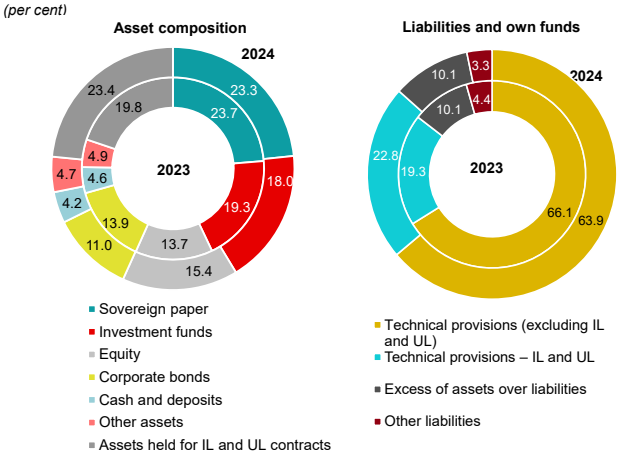
4.1 Domestic insurance companies

By the end of 2024, the number of licensed insurance undertakings in Malta remained stable at 68, as the surrender of one license was offset by the issue of a new one. In parallel, the number of domestically-relevant insurers remained stable at ten, with their assets growing by 4.1% to €3.9 billion, equivalent to 17.1% of GDP.[1] The life insurance segment continued to dominate, accounting for nearly 85% of the assets of insurers relevant to the domestic market.

4.1.1 Domestically-relevant life insurance companies

The life insurance sector's balance sheet expanded by 2.7%, reaching €3.2 billion, or 14.3% of GDP. This growth was largely driven by IL and UL contracts, with assets held in relation to these policies increasing by 21.3% to €763 million.[2] In contrast, assets excluding IL and UL holdings totalled €2.5 billion, reflecting a 2.0% decrease compared to December 2023 (see Chart 4.1).

Chart 4.1
LIFE SECTOR BALANCE SHEET
(per cent)

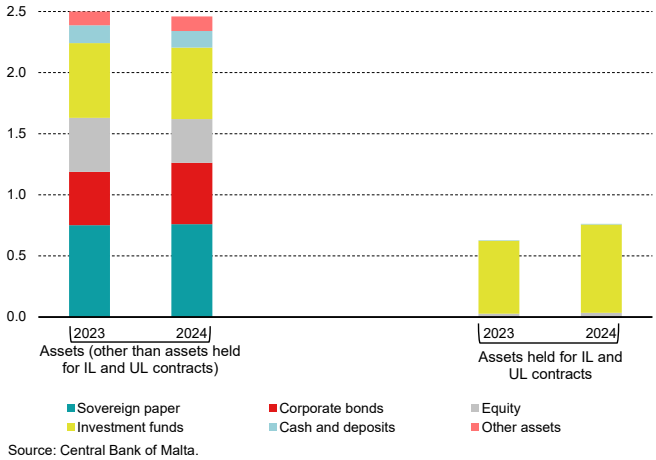


Source: Central Bank of Malta.

Asset composition – IL and UL policies

The majority of assets allocated to IL and UL contracts are primarily invested in investment funds, which make up nearly 95% of their holdings (see Chart 4.2). The remainder is almost entirely held in equities, with debt securities only representing a marginal share. While all asset classes have grown compared to the previous year, the value of investments in funds for these policies rose by 21.1%. This growth was largely driven by domestic debt funds, along with equity funds from both local and euro area markets.

Chart 4.2
LIFE INSURANCE SECTOR ASSET COMPOSITION
(EUR billions)



Source: Central Bank of Malta.

Asset composition – excluding IL and UL policies

Assets excluding IL and UL contracts consisted of holdings for other life insurance classes and assets held for the insurers' own

[1] Four companies specialise in life insurance, four in non-life insurance, and two are composite insurers, providing both life and non-life products. However, for the composite insurers, life insurance makes up just 4.1% of their total gross written premia.

[2] The risks and rewards of IL and UL contracts are held by policyholders, in contrast with traditional life insurance policies where insurers assume a portion of the market risk. Consequently, IL and UL contracts are analysed separately when evaluating the sector's financial position and stability risks.

interests. Over half of these assets are invested in fixed-income securities, with a continued preference for sovereign paper (see Chart 4.2). In 2024, holdings of sovereign paper rose by 1.1%, driven by other euro area sovereign paper, while exposure to domestic and non-euro area sovereign paper declined. Corporate bond holdings increased by 15.1%, largely driven by investments in securities issued by firms in the euro area and the United States.

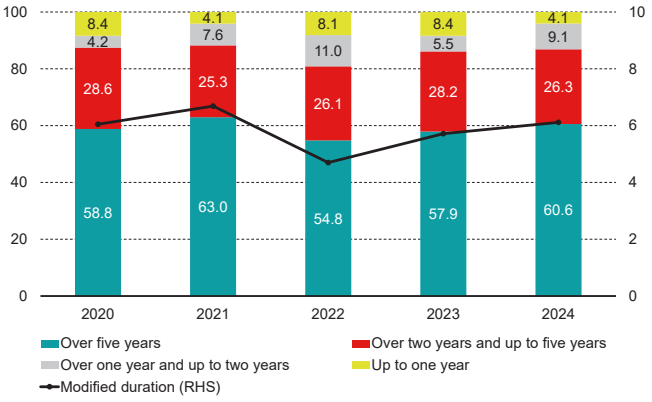
As major central banks reduced policy rates, life insurers adjusted their portfolios to capitalise on the potential for capital gains as yields fell. As a result, holdings of debt securities maturing beyond five years increased by 11.3%, while those maturing in two to five years declined by 0.8%, and shorter-dated debt securities increased by just 0.6% (see Chart 4.3). This shift raised the modified duration by 0.4 percentage points to 6.1% by December 2024. This strategy aligns with the life insurance business model, as insurers typically favour long-term debt securities to match their long-duration liabilities, helping them to better manage interest rate risk.

Life insurers' overall debt securities portfolios remained largely oriented towards medium and high-rated debt securities, which increased by around 10% to account for approximately two-thirds of holdings (see Chart 4.4). Meanwhile, the increase in low-rated debt securities was more than offset by lower unrated and sub-investment grade debt securities. Holdings of sovereign paper continued to be concentrated in higher-quality instruments, with over three-quarters allocated to medium- and high-rated securities. In contrast, the corporate bond portfolio is almost evenly split, with just over 55% invested in medium and high-rated fixed-income securities, and the remainder is in low-rated or unrated/sub-investment grade debt securities.

Holdings in investment funds, excluding those related to UL and IL contracts, decreased by 4.2% during 2024 to represent around a quarter of total assets, primarily due to investments in euro area MMF. Direct equity holdings saw a more significant drop of 19.3%, led by reductions in holdings of domestic and euro area equities, particularly those issued by NFCs. Overall, this adjustment aligns with the broader trend towards fixed-income investments, as insurers seek to secure higher yields and mitigate exposure to market fluctuations.

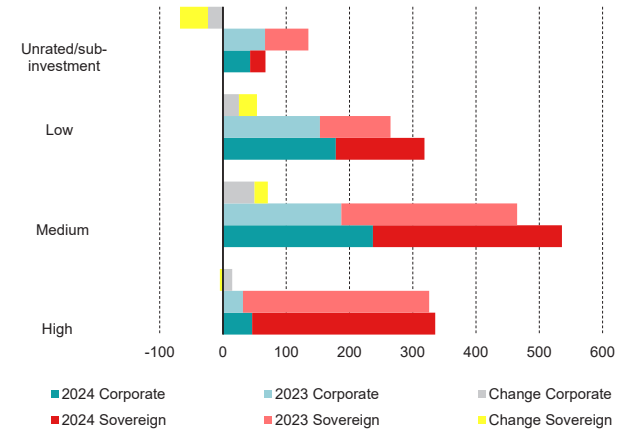
Cash holdings decreased by 7.5% to account for 5.4% of total assets. Meanwhile, life insurers' allocation to alternative investments, including collateralized securities, real estate, mortgages, and loans, remained modest, representing about 6% of their overall asset portfolio.

Chart 4.3
LIFE – MATURITY STRUCTURE AND MODIFIED DURATION OF DEBT SECURITIES
(per cent of total debt securities holdings; per cent)



Source: Central Bank of Malta.

Chart 4.4
LIFE – DEBT SECURITIES PORTFOLIO – INVESTMENT RATINGS
(EUR millions)



Source: Central Bank of Malta.

Liabilities and own funds

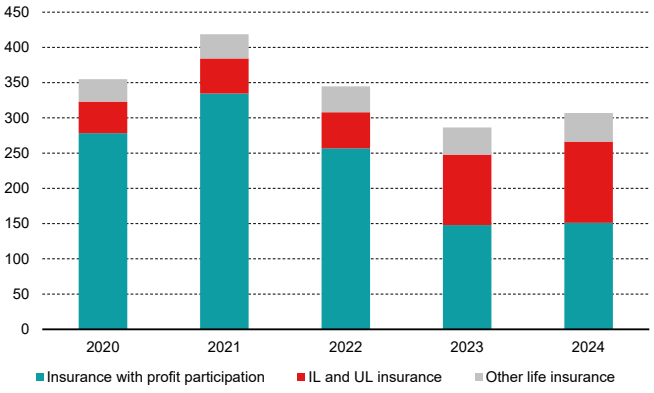
Developments in technical provisions mirrored those in assets, with IL and UL contract provisions rising by 21%, exceeding one-fifth of total liabilities (see Chart 4.1). However, the majority of provisions remained allocated to other life insurance activities, which declined marginally by 0.9% while still accounting for nearly 64% of total liabilities. The excess of assets over liabilities remained stable at around one-tenth of total liabilities, forming the regulatory own funds under the Solvency II Directive.[3] This financial buffer serves as a safety net, allowing life insurers to absorb unexpected losses or meet future claims beyond the reserves set aside.

Gross written premium and claims

Gross written premia rebounded in 2024, rising by 7.2% after two consecutive years of decline, with growth observed across all business lines (see Chart 4.5). Demand for IL and UL products remained strong, driving premium growth by 15.1% and raising their share to 37.5% of total premia. While demand for 'Insurance with profit participation' products remained below historical levels, it showed signs of stabilisation, with a modest growth of 2.2%. 'Other life insurance' products expanded by 5.6%, supported by a resilient mortgage market, as demand for life protection policies domestically remains closely tied to home loan activity.

In 2024, gross claims incurred declined by half a percentage point to €338.1 million, due to lower claims associated with 'insurance with profit participation' products, which, however, still accounted for 83.5% of total claims. In contrast, claims for IL and UL products, as well as 'other life insurance' products increased.

Chart 4.5
GROSS WRITTEN PREMIA OF THE DOMESTIC LIFE INSURANCE SECTOR BY LINE OF BUSINESS
(EUR millions)

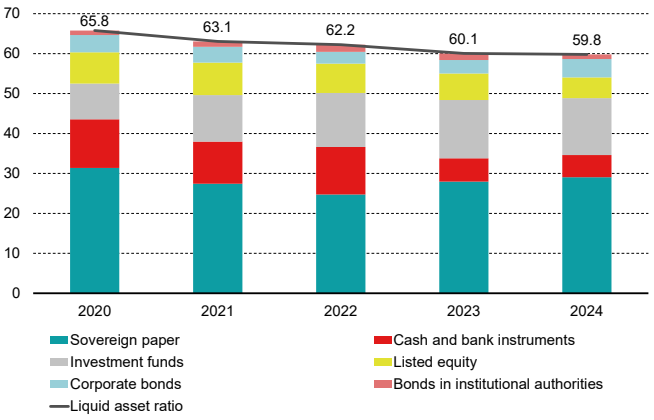


Source: Central Bank of Malta.

Liquidity and capital

The liquid asset ratio in the life insurance sector decreased marginally to 59.8% (see Chart 4.6). This decline was primarily attributed to reductions in listed equity holdings, participations in investment funds, and cash holdings, all of which contribute to the liquid assets base. Nevertheless, the ratio continued to exhibit notable variability across individual companies, underscoring the sector's inherent heterogeneity.

Chart 4.6
LIQUID ASSET RATIO OF THE LIFE INSURANCE SECTOR
(per cent)



Source: Central Bank of Malta.
Note: Chart shows life insurance sector's asset holdings post-liquid asset ratio methodology.

[3] Total eligible own funds under the Solvency II directive include the excess of assets over liabilities, which generally corresponds to Tier 1 capital, along with other funds that meet the requirements for Tier 2 and Tier 3 capital.

Life insurers maintained strong capital buffers in 2024, with the overall SCR coverage ratio rising to 249.5%, representing an increase of 29.8 percentage points. This is supported by the high quality of own funds, as a significant proportion was composed of Tier 1 capital, the highest-quality category.

Profitability

The life insurance sector remained profitable, with a pre-tax ROA of 0.9%, a slight improvement over the previous year, although profitability continued to vary across companies. Underwriting performance weakened, as the increase in insurance revenue, driven by higher gross written premia, was more than offset by a sharper rise in incurred claims and contract servicing costs. Although investment income declined, a more significant reduction in financial expenses improved the net financial result, which in turn supported the overall increase in ROA.

The expense ratio, which assesses an insurer's operational efficiency by comparing total operating costs, excluding claims, to net premia earned, declined by nearly one percentage point to 15.7% as of December 2024.

4.1.2 Domestically-relevant non-life insurance companies[4]

In 2024, the total balance sheet of domestically-relevant non-life insurance companies expanded by 11.9% to €629 million, accounting for 2.8% of GDP.

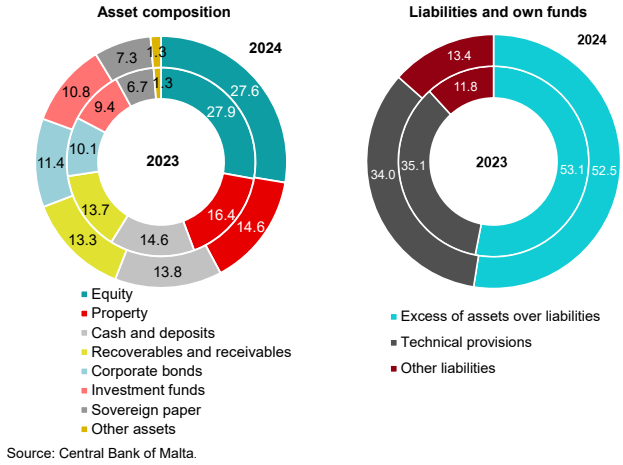
Asset composition

Nearly all asset classes grew throughout the year with the exception of a slight decline in property holdings. Equity holdings increased by 11% to account for 27.6% of total assets (see Chart 4.7). However, a significant portion reflects holdings in related insurance companies, highlighting a high degree of interconnectedness through cross-ownership. Participations in investment funds also rose by 28.7%, bringing their share to 10.8% of total assets, primarily focused on debt and equity funds.

Non-life insurers were more active in the fixed-debt securities market, reporting a nearly 25% increase in such holdings to make up 18.7% of total assets. Holdings of sovereign paper, largely from the euro area, rose by 23.3%, while holdings of domestic sovereign debt decreased. Corporate bond holdings grew by 25.6%, primarily attributable to NFCs in the United States and euro area, as well as financial bonds issued in the euro area and in other major global markets.

The portfolio shifts towards short-term debt securities maturing within two years continued in 2024, as such holdings increased sharply by 40% to account for 46.8% of total holdings (see Chart 4.8). At the same time, holdings of long-term bonds with maturities exceeding five years rose by 45.9% to 25.8%. These developments came at the expense of medium-term securities maturing between two and five years which declined by 20.2%. The simultaneous increase in both short-term and long-term securities reflects a strategic approach to balancing liquidity needs, inherent

Chart 4.7
NON-LIFE SECTOR BALANCE SHEET
(per cent)

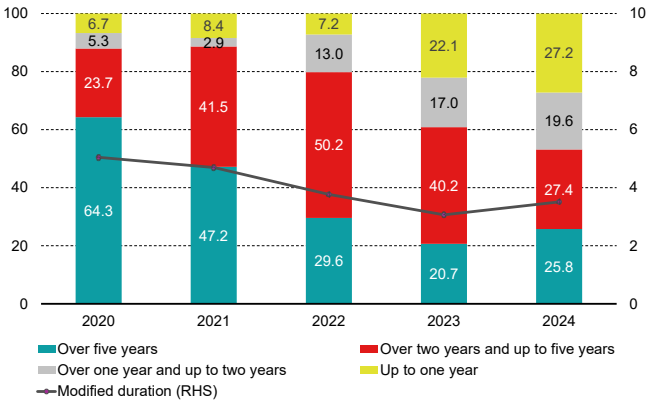


Source: Central Bank of Malta.

[4] For one non-life insurance company, September 2024 data, the latest available, was used as a proxy for December 2024, as year-end figures were not available by cut-off date.

to the short-term nature of non-life insurance contracts, with long-term positioning to lock in higher yields and benefit from potential price appreciation as interest rates decline. This shift toward long-term holdings brought with it a halt to the drops in the overall modified duration previously reported, which increased to 3.5% as of December 2024.

Chart 4.8
NON-LIFE – MATURITY STRUCTURE AND MODIFIED DURATION OF DEBT SECURITIES PORTFOLIO
(per cent of total bond holdings; per cent)



Source: Central Bank of Malta.

The growth in fixed-income investments was primarily driven by medium and high-rated debt securities, leading to a significant improvement in the quality of the overall portfolio. Medium and high-rated corporate bonds made up for 47.4% of these holdings, marking a 6.1 percentage-point increase. Similarly rated sovereign paper rose by 21.5 percentage points, reaching 86.3% of total sovereign paper holdings.

Recoverables and receivables rose by 8.1% to 13.3% of total assets, driven mainly by amounts due from reinsurance recoveries. Cash and deposits also grew by 5.8%, representing 13.8% of total assets, while properties held for own use declined slightly to 14.6% of total assets.

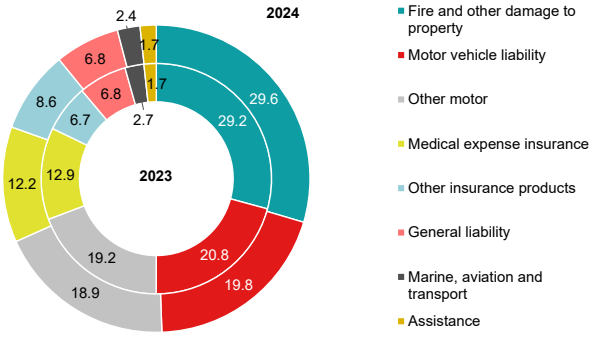
Liabilities and own funds

As of December 2024, technical reserves increased by 4.4%, representing approximately one-third of the balance sheet, while other liabilities rose by 27.3%, constituting 13.4% of the balance sheet (see Chart 4.7). More than half of the balance sheet meanwhile continued to be held as excess of assets over liabilities which grew by 13.5%. This aligns with the regulatory own funds' requirements set forth by the Solvency II Directive.

Gross written premia and claims

In 2024, the non-life insurance sector maintained strong growth, with gross written premia rising by 13.2%. Motor, property and health insurance continued to be the dominant business lines, together accounting for over 80% of the gross written premia. However, the expansion was observed across all segments, with property insurance leading the growth, up by 14.6%, while motor-related insurance saw a growth of 9.5% (see Chart 4.9).[5] At the same time, gross claims incurred surged by 37.3%, with property insurance alone accounting for nearly half of this increase.

Chart 4.9
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.

[5] Motor vehicle liability insurance covers liabilities arising from accidents, including bodily injury and property damage to third parties. In contrast, other motor insurance protects the insured vehicle against damage or loss but does not cover liability for accidents caused to others.

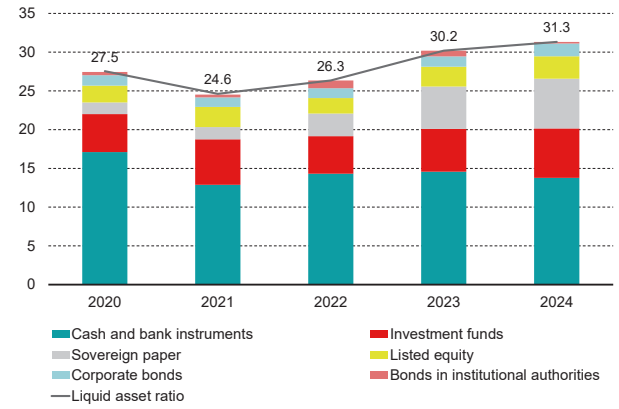
Non-life insurers made significant use of reinsurance to transfer risk and reduce earnings volatility. In total, 35.5% of non-life business was ceded to reinsurers, underscoring the central role of reinsurance in underwriting risk management. Property insurance was the most heavily reinsured line, with approximately 72% of the business ceded. This underscores the inherent risk profile of property insurance, which involves exposure to infrequent but severe events, such as natural catastrophes, as well as more frequent and potentially costly claims arising from structural damages and third-party liability. As a result, although gross claims in the property line increased, the use of reinsurance effectively limited the insurers' exposure, leading to a reduction in net claims (see Profitability section below).

Liquidity and capital

In 2024, the liquid assets ratio increased to 31.3%, primarily driven by a rise in holdings of sovereign paper and investment funds (see Chart 4.10). Notably, there remains significant variability in the liquid asset ratios across individual companies.

Non-life insurers maintained a strong capital position in 2024, with an SCR coverage ratio of 242.8%, virtually unchanged from the previous year. This ratio remained significantly above regulatory requirements, underscoring the high quality of eligible own funds, which were primarily held in Tier 1 capital.

Chart 4.10
LIQUID ASSET RATIO OF THE NON-LIFE INSURANCE SECTOR
(per cent)

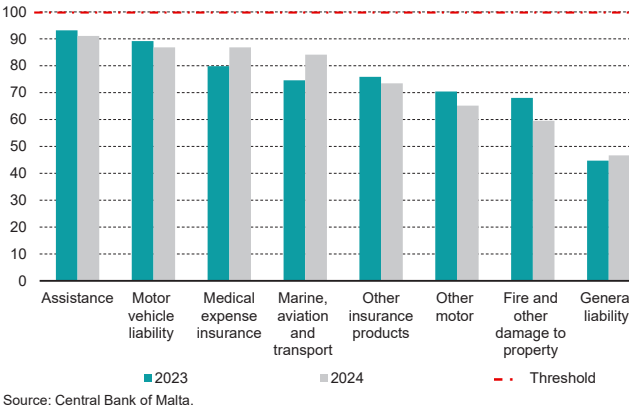


Source: Central Bank of Malta.
Note: Chart shows non-life insurance sector's asset holdings post-liquid asset ratio methodology.

Profitability

The non-life insurance sector maintained strong profitability, with pre-tax ROA rising to 11.2% by December 2024. This improvement was largely driven by robust underwriting results, as higher insurance revenue and lower reinsurance costs more than offset increased underwriting expenses, leading to a significant enhancement in underwriting performance. This operational strength was reflected in the net combined ratio, which measures incurred expenses and net claims as a proportion of net premia written. The ratio declined by almost two percentage points to 72.3%, as the increase in net premia outpaced the rise in net claims and expenses, underscoring improved efficiency, pricing adequacy, and a reinsurance strategy that helped contain net claims. A key contributor to this performance was the property line, which saw its combined ratio drop by 8.5 percentage points, driven by higher net premia and lower net claims (see Chart 4.11). Motor insurance, on average, showed a 3.8 percentage-point improvement

Chart 4.11
NET COMBINED RATIO BY LINE OF BUSINESS
(per cent)



Source: Central Bank of Malta.
Note: Solvency II reporting. Other products include income protection, miscellaneous financial loss and workers' compensation insurance. Bars are ranked by 2024 net combined ratio, from highest to lowest.

in its combined ratio, reflecting positive developments in both the liability and other motor lines. However, certain lines, such as medical expense faced challenges, with claims and expenses rising faster than premia, leading to a deterioration in their combined ratios.

Alongside improved underwriting performance, stronger investment returns also bolstered overall profitability, reinforcing the sector's solid financial position.

4.1.3 Risk outlook

In 2024, both life and non-life insurance sectors experienced balance sheet growth, increased premia and maintained strong capital positions. Heading into 2025, the sector could face challenges from geopolitical tensions and the resulting macro-financial uncertainty, technological, regulatory, and climate-related shifts. These challenges can affect insurers across strategic, financial, and operational dimensions potentially affecting margins, market share, capital strength, and relevance. The recent market volatility triggered by the threat of a trade war adversely affected IL units, whose values declined in line with the broader market downturn, while UL insurance products have similarly experienced fluctuations in fund values, exposing policyholders to greater variability in the value of their investment-linked benefit. In turn, this volatility in financial markets and shifting economic conditions could challenge insurers' ability to manage risks effectively and maintain profitability unless they adapt more quickly to data-driven, customer-centric, and resilient strategies. Cyber, climate, and supply chain risks require further data capabilities and modelling approaches. In view of this challenging environment, insurers should continue to focus on diversifying their portfolios across various asset classes and regions. At the same time, adapting more to evolving customer demands, such as the increasing need for climate and cyber insurance. Insurers that innovate in such areas can respond more quickly to changing risk landscapes and strengthen customer engagement. The sector's strong solvency position provides a solid foundation to navigate emerging risks and capitalise on new opportunities.

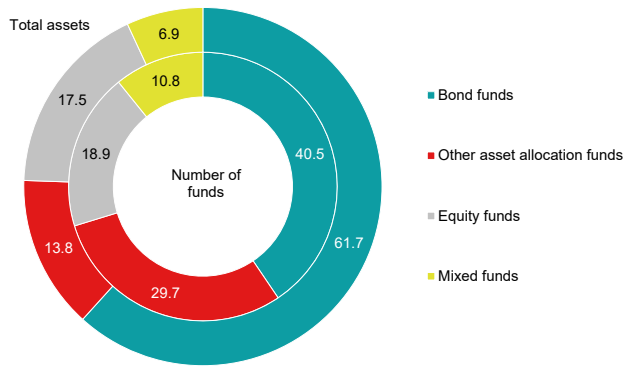
4.2 Domestically-relevant investment funds

By the end of 2024, the assets of domestically-relevant sub-funds rose by 5.6% to an equivalent of 7.3% of GDP, marking the highest growth recorded since 2019. One sub-fund started operating in the last quarter of 2024, bringing the total number of domestically-relevant sub-funds to 37. Of these, 36 were licensed as retail Undertakings for the Collective Investment in Transferable Securities (UCITS) while one was registered as a Professional Investor Fund.

Developments by fund strategy

Stronger economic activity combined with declining inflation and more favourable financing conditions, supported the robust performance of financial markets in 2024, with indices such as the S&P 500 Index recording noticeable gains over the year. These favourable developments drove growth across sub-funds, depending on their investment strategy. Equity funds experienced the most significant increase, surging by 24.0%, with their share of total assets rising by 2.6 percentage points to 17.5%. Meanwhile, other asset allocation sub-funds expanded by 10.1% to account for 13.8% of the overall portfolio (see Charts 4.12 and 4.13). Bond funds grew by 1.2%, representing 61.7% of the total assets, while mixed funds contracted by

Chart 4.12
DOMESTICALLY RELEVANT INVESTMENT FUNDS BY MAIN STRATEGY AS AT DECEMBER 2024
(per cent)



Source: Central Bank of Malta.

1.5%, to represent just 6.9% of overall assets.

4.2.1 Asset composition and investment strategies

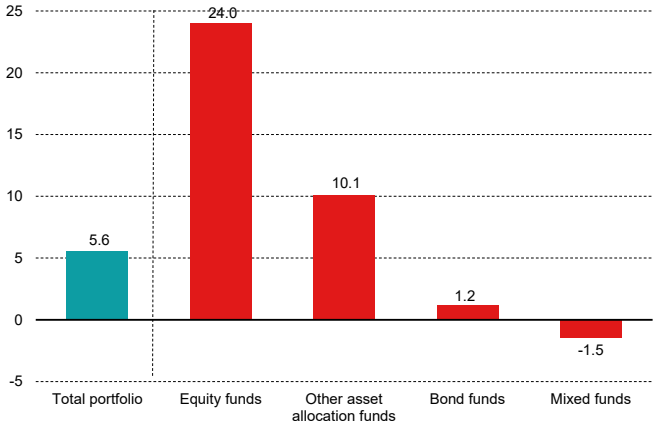
Across the whole portfolio, certain asset classes grew mainly due to market performance. Exposure to equity and investment funds grew by 15%, pushing their combined share to approximately a third of the total assets. Meanwhile, debt securities holdings increased by a modest 0.8%, primarily driven by a slight rise in bond prices along the year. As a result, its share in overall assets contracted by 3.0 percentage points to 63.3% (see Chart 4.14). Cash and deposits, accounted for 3.1% of overall assets, a slight increase following the declines in previous years.

Equities and participations in investment funds

The growth in equity holdings was primarily driven by a sharp 19.2% rise in bank equities, which boosted their share to 18.2% of the overall holdings in equity and participations in investment funds (see Chart 4.15). Although other types of equities registered gains, their growth was more modest, causing their share to contract or remain stable. Holdings of equities issued by NFCs grew by 8.9% accounting for 27.7% of the combined portfolios. Meanwhile, those issued by other financial institutions and insurance corporations remained limited to 6.1% and 1.7%, respectively. At the same time, exposures to non-MMF investment funds surged significantly, rising by 18.9% to reach 46.3% of the overall equities and investment funds portfolio.

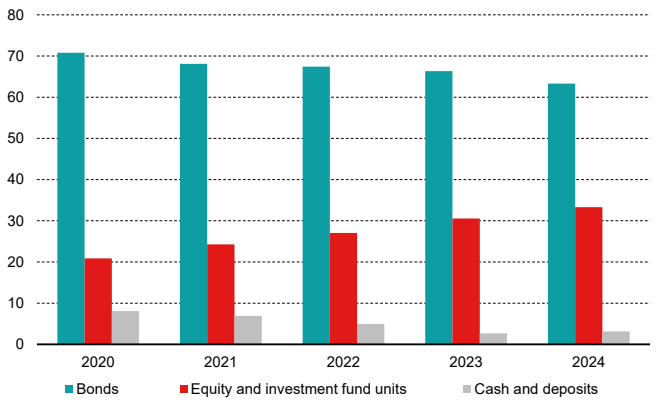
From a geographical perspective, growth was predominantly driven by increased holdings in non-resident entities. Equities and non-MMF investment funds holdings in other euro area entities grew by

Chart 4.13
CHANGES IN OVERALL ASSETS BY MAIN STRATEGY
(per cent)



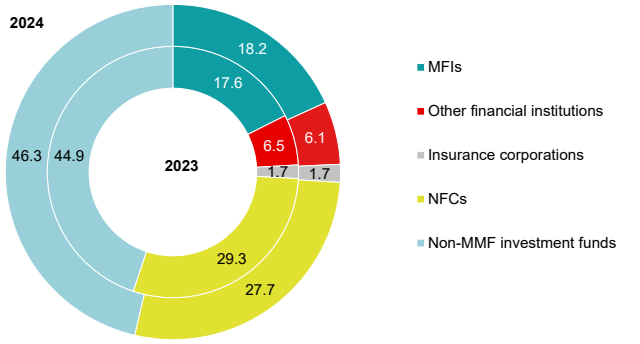
Source: Central Bank of Malta.

Chart 4.14
ASSETS COMPOSITION OF THE DOMESTICALLY-RELEVANT INVESTMENT FUNDS
(per cent)



Source: Central Bank of Malta.

Chart 4.15
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.

18.8%, making up 47.1% of overall holdings. Exposures to US-based firms surged by 67.7%, pushing up their share by 3.9 percentage points to 12.4%. In contrast, exposure to the rest of the world declined by 5.0%, reducing the share to 4.8%. Although domestic equities rose by 2.8%, their share decreased by 4.3 percentage points to 35.7%.

Debt securities holdings

The modest increase in debt securities holdings was mainly driven by NFC bonds which rose by 15.8%, to account for 21.0% of the total fixed-income portfolio. This growth was mainly attributed to an increase in market value, primarily for debt-securities issued outside the euro area. A significant share of these NFC bonds was issued by firms based in other euro area countries and the US, while domestic NFC bonds made up just above 22% of the NFC bond segment.

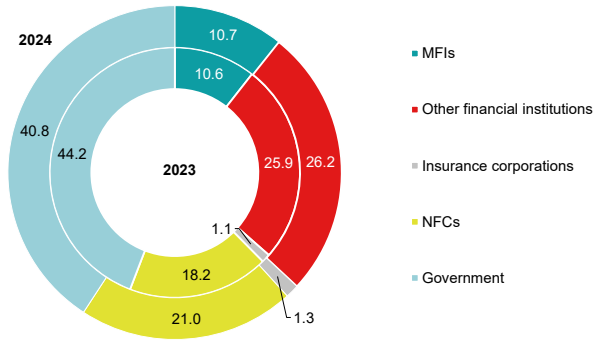
Concurrently, bonds issued by financial entities grew by 2.4%, to cumulatively represent 38.3% of the overall bond portfolio (see Chart 4.16). Within this segment, bonds issued by OFIs remained the dominant component, increasing by 2.1% to reach 26.2% of bond holdings. Bank bonds rose at a similar rate, up by 2.0%, with nearly 60% of these instruments issued by Maltese banks. Although bonds issued by insurance companies experienced a notable rise of 17.0%, predominantly issued by foreign entities, their share remained limited to only 1.3%.

In contrast, domestically-relevant investment funds reduced their holdings of sovereign paper by 6.9%, resulting in their share in the overall debt portfolio to contract to 40.8%. This decline mainly reflected lower holdings of domestic sovereign papers , though at 77% these continued to account for the bulk of such investments. Meanwhile, foreign sovereign paper holdings grew. Debt securities issued by euro area Member States rose by 15.2% to 7.7%, while US sovereign paper remained limited to just 2.6%. In contrast, other foreign sovereign paper increased by a sharp 53.1% to representing 12.8%. This growth reflected increased holdings of sovereign paper of other EU countries, notably Romania, as well as Latin American and the Middle Eastern countries. However, UK Gilts remained the largest exposure.

These developments indicated that, although the debt portfolio remained largely skewed towards domestic debt securities, the degree of this concentration continued to decline. Specifically, the share of domestic debt fell by 4.1 percentage points to 55.5% of the overall debt securities held. The reduction aligns with the trend observed in the last five years, where fund managers gradually diversified their portfolio, primarily increasing exposures to the euro area, accounting to 19.2% of the debt portfolios. The rest of the portfolio consisted of fixed-income securities issued outside the euro area, with a significant portion in US Treasuries.

In response to interest rate cuts, investment managers adjusted their portfolio strategies by increasing their exposure to longer-dated bonds, marking a reversal of the consolidation trend that prevailed during the period of monetary policy tightening. As a result, the share of bonds with maturities of over five years rose by 0.6 percentage points to 54.3% of the portfolio (see Chart 4.17). This came at the expense of medium-term bonds, maturing between two and five years, which share declined by 2.8 percentage points to 33.3%. Meanwhile, short-term debt securities with maturities of less than two

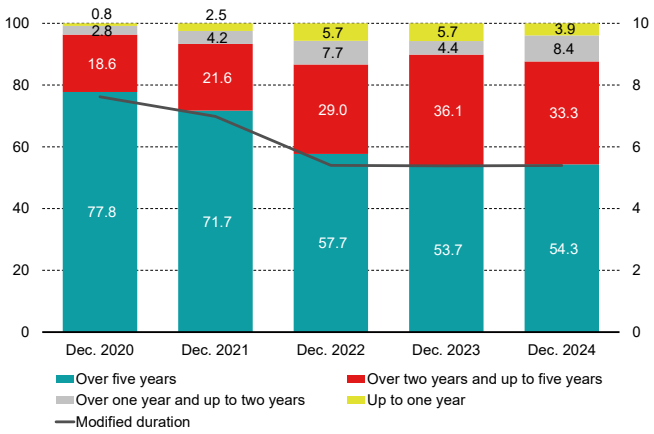
Chart 4.16
BOND HOLDINGS COMPOSITION OF DOMESTICALLY-RELEVANT INVESTMENT FUNDS
(per cent)



Source: Central Bank of Malta.
Note: 'Other financial institutions' includes OFIs, financial auxiliaries and CFIML.

years increased by 2.2 percentage points to 12.3%, likely driven by a hold-to-maturity strategy applied to fixed-income securities acquired in previous years. Despite shifts in maturity bands, the changes broadly offset one another, leaving the portfolio's estimated modified duration stable at 5.4% (see Chart 4.17). This may reflect a cautious outlook on the future direction of monetary policy and macroeconomic developments.

Chart 4.17
OUTSTANDING MATURITY STRUCTURE AND MODIFIED DURATION
(per cent)



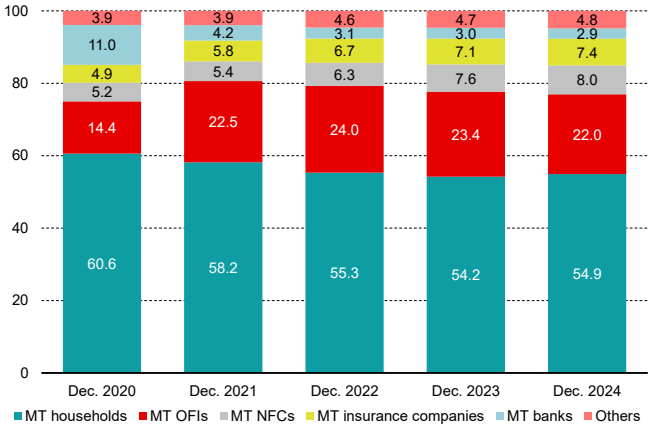
Source: Central Bank of Malta.

In terms of asset quality, approximately 7.8% of securities were concentrated in high-rated debt securities, under the upper tranche of the investment-grade spectrum (AA- to AAA). Meanwhile 39.4% were held in the mid tranche of investment-grade (A- to A+) and 17.5% of the fixed-income securities were low rated (BBB- to BBB+). A further 14.1% were allocated to speculative-grade debt securities. The remaining 21.2% were unrated instruments. Compared to previous year, the overall share of investment-grade rated debt securities (high to low-rated) declined by 2.9 percentage points but remains significant at 64.7%.

4.2.2 Investors

Maltese households remained the largest investors in domestically-relevant sub-funds, holding about 55% of the NAV, representing an increase of 0.7 percentage points over a year ago. Meanwhile, domestic OFIs reduced their participation, with their share contracting to 22.0% (see Chart 4.18). Participation by other investor categories remained relatively stable and limited. Domestic NFCs and insurance companies raised their share to 8.0% and 7.4%, respectively, while the share held by banks declined marginally to 2.9%.

Chart 4.18
DOMESTIC INVESTMENT FUND'S NAV BY COUNTERPART
(per cent)



Source: Central Bank of Malta.

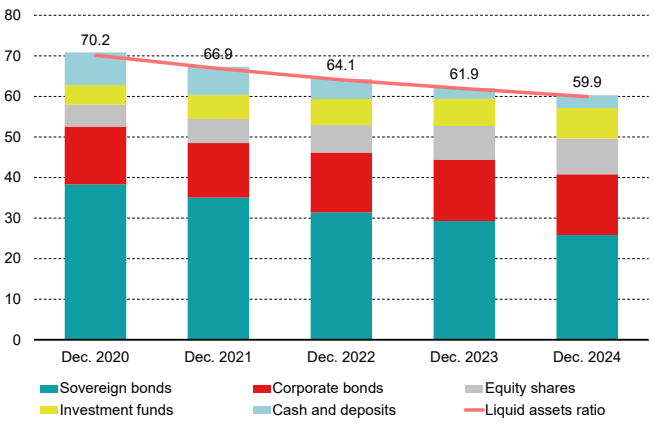
Within the 'others' component, pension funds – though still a small segment – continued their steady expansion, increasing to 0.5% from 0.2% in the preceding year. The remaining share is almost entirely held by foreign investors, including those from the euro area and the rest of the world, whose combined contribution declined to 4.2% of NAV from 4.4% in 2023.

4.2.3 Liquidity and leverage

By December 2024, the liquidity ratio for domestically-relevant investment funds declined by 2.0 percentage points to 59.9% of total assets (see Chart 4.19). This decrease was primarily driven by a higher

concentration in equities, which are subject to a stricter liquidity factor compared to debt securities. Meanwhile, the share of cash and deposits increased slightly to 3.1% of total assets, which however is still below the historical average.

Chart 4.19
LIQUIDITY RATIO
(per cent)

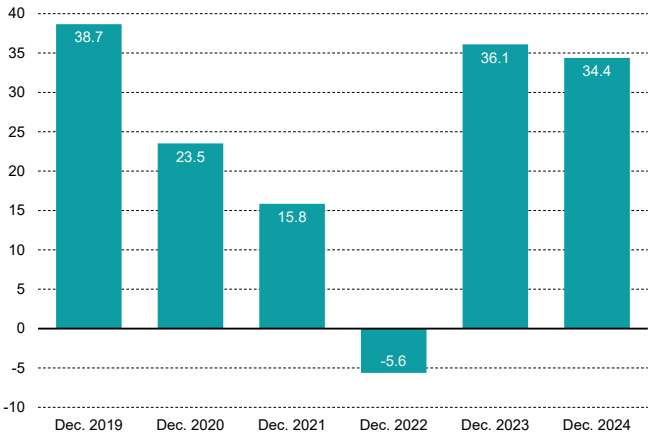


Source: Central Bank of Malta.

Towards the end of the year, the Redemption Coverage Ratio (RCR) – which compares the stock of HQLA to the largest quarterly outflow recorded since the inception of the time series in December 2016 – declined marginally by 0.05 percentage points to approximately 3.0 times. This was largely due to a slight reduction in HQLA holdings. Nevertheless, it remains healthy, suggesting an element of high resilience since this ratio covers more than a year's worth of estimated redemptions.

Leverage by the domestically-relevant sub-funds remained low, with the AUM to NAV ratio standing at 100.6%, suggesting minimal leverage also implying a conservative approach as in preceding years. This is partly attributable to the fact that most of these funds are licensed and regulated under the UCITS Directive.[6]

Chart 4.20
NET PROFIT MARGIN
(per cent)



Source: Central Bank of Malta.

4.2.4 Profitability

In terms of profitability, the net profit margin ratio, defined as the funds' net profit as a share of total revenue, declined slightly from 36.1% in 2023 to 34.4% in 2024 (see Chart 4.20). This decline occurred despite a 16.5% increase in overall revenues, which include interest income from investments, dividend income, service fees, and other sources. Indeed, the decrease was driven by a more pronounced rise in expenses, which rose by 19.5% over the same period.

4.2.5 Risk outlook

The strong market performance in 2024 contributed to a notable expansion in the assets of domestically-relevant investment funds. However, the increased exposure towards sectors that are more likely to be affected by the possible imposition of tariffs may introduce further volatility, especially given the uncertainty surrounding corporate earnings. This could prompt investors to reassess their positions should global trade frictions escalate further. Additionally, the increased allocation towards debt securities issued outside the euro area

[6] UCITS Directive Article 83 restricts borrowing for retail to up to 10% of their assets and only on a temporary basis (as found in https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32009L0065).

and in the United States brings some currency and interest rate risks. Nonetheless, this trend coincides with a shift towards investment-grade sovereign instruments, reflecting a growing investors' preference for more stable returns amid ongoing global uncertainty.

The structural links between domestically-relevant investment funds and core domestic banks persist. Although these funds operate as separate legal entities, their ongoing investment in domestic financial companies, including bonds and equities issued by core domestic banks, suggests a strong degree of financial interconnectedness. However, the exposure of banks and insurance companies to these funds remained limited to around 10% of NAV, limiting potential systemic risks in the event of market turmoil. Another important element in terms of links is the fact that domestically-relevant investment funds remained an important source of funding for domestic corporations, holding approximately 8% of the total market capitalization of corporate bonds issued on the Malta Stock Exchange, maintaining the same level as the previous year.

The liquidity management tools in place including redemption gates and fees continue to provide important safeguards against excessive outflows. While liquidity indicators recorded a slight drop, they remained at comfortable levels, ensuring adequate buffers to meet redemptions. At the same time, leverage-related risks remained contained, further supporting the overall resilience of the funds sector.

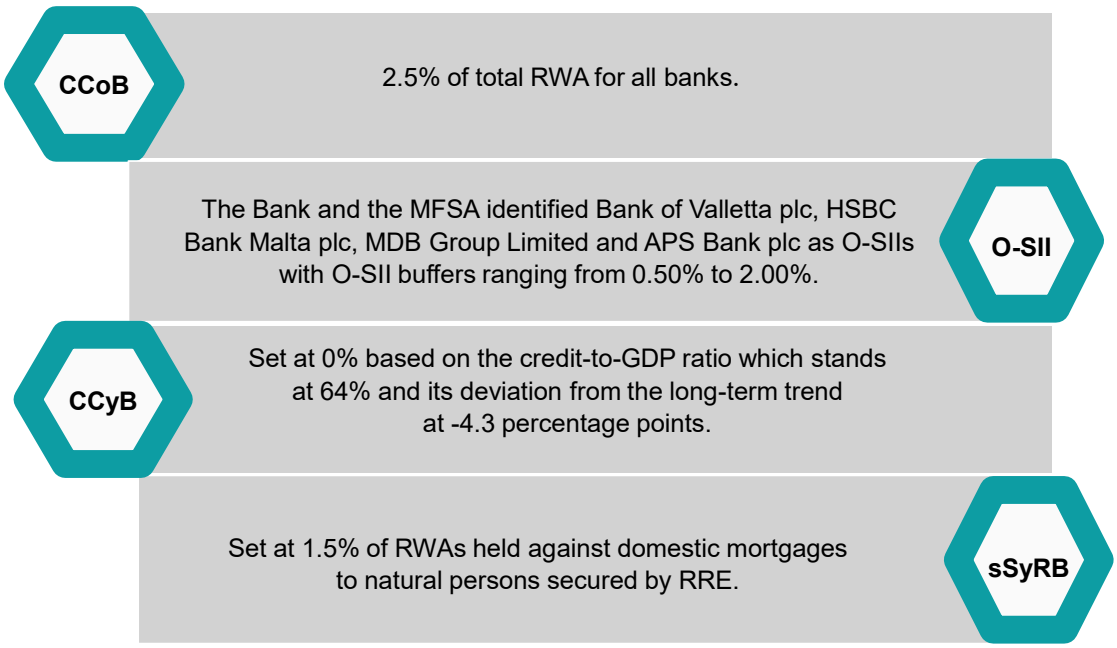
5. MACROPRUDENTIAL POLICY RESPONSE

During 2024, the Bank continued to support its financial stability objective in creating sufficient macroprudential policy space with the aim of increasing financial stability resilience. This chapter examines the main macroprudential policies in place during 2024 and provides an overview of other notable macroprudential developments at both domestic and European levels.

5.1 Capital-based macroprudential measures

Capital-based macroprudential measures play a crucial role in the regulatory framework designed to maintain financial system stability. These measures enhance the resilience of financial institutions by mitigating systemic risk and reducing potential losses in the event of adverse shocks materialising. Figure 5.1 below illustrates the capital buffers applicable to domestic banks in 2024. Emerging signs of vulnerabilities within the corporate sector, particularly sectors exposed to real estate beyond residential property, initiated discussions on the potential broadening of the current sSyRB – currently targeted towards residential mortgages – to cover both households and NFCs involved in real estate borrowing. More information on the policy case for the possible extension of this buffer can be found in Box 6.

Figure 5.1
CAPITAL-BASED MEASURES IN MALTA IN 2024



Source: Central Bank of Malta.

5.1.1 O-SII Buffers

The Central Bank jointly with the MFSA conduct an annual assessment to identify and apply a capital buffer to those domestic institutions that are identified as other systemically important institutions (O-SIIs). The methodology that is used for this assessment can be found in the CBM-MFSA O-SII policy document.[1] Table 5.1 below presents the O-SII scores of the four credit institutions identified as O-SIIs for the period under review. This is the first iteration where the O-SII exercise is being conducted using end of year data

[1] The CBM-MFSA O-SII policy document can be accessed via the following link: https://www.centralbankmalta.org/site/Financial-Stability/O-SII/o-sii-policy-document.pdf

Table 5.1
LIST OF IDENTIFIED O-SIIs FOR 2025 AND CORRESPONDING O-SII SCORES

Institution	Size	Importance	Complexity	Intercon-nectedness	Total
Bank of Valletta plc	694	1,676	189	361	2,921
HSBC Bank Malta plc	334	939	84	141	1,498
MDB Group Limited	239	205	576	354	1,374
APS Bank plc	175	480	27	66	748

Source: Central Bank of Malta.

as the reference date. During early 2024, the Authorities agreed to change the reference date from June to December, with decisions communicated to stakeholders approximately six months before the application date. This approach ensures that banks will have sufficient time to prepare for any adjustments to their buffer rates.

Further to the above scores, Table 5.2 below presents the applicable O-SII buffer rates to be held in 2025 for the institutions identified as O-SIIs, which remain unchanged for the period under review. These buffers are determined on the current calibration methodology, incorporating expert judgement where applicable. Details can be found in the latest published statement of decision.[2]

The Bank also monitors the appropriateness and effectiveness of the applied O-SII buffers by looking into banking sector activity, cumulative O-SII scores and the contribution of O-SII buffers to domestic banking sector resilience. This buffer helps internalise part of the costs of a defaulting O-SII, serving as a first line of defence against any potential losses.

Table 5.2
APPLICABLE O-SII BUFFER RATES FOR 2025 AND PHASING-IN ARRANGEMENTS

Institution	2025 Applicable O-SII buffer rate	Fully phased-in buffer rate	End of phasing-in period
Bank of Valletta plc	2.00%	2.00%	N/A
HSBC Bank Malta plc	1.25%	1.25%	N/A
MDB Group Limited	1.00%	1.00%	2025
APS Bank plc	0.437%	0.50%	2026

Source: Central Bank of Malta.

5.2 Borrower-based measures

The year 2024 marked the sixth year since CBM Directive 16 on borrower-based measures (BBMs) came into force in July 2019. Throughout 2024, the policy stance on BBMs remained unchanged, continuing to play a crucial role in safeguarding the financial resilience of both borrowers and lenders amid the prevailing economic conditions.

In 2024, banks submitted internal audit reports as required in accordance with Paragraph 19 of the Directive, providing a detailed assessment of their compliance. All banks successfully completed this exercise. As per Paragraph 19 of the Directive, banks are required to submit external audit reports every three years, with the second reporting of this nature planned for 2025.

[2] The 2025 statement of decision on the Identification of O-SIIs and the related capital buffer calibration can be accessed via the following link: https://www.centralbankmalta.org/site/Financial-Stability/O-SII/2025-O-SII-Statement-of-Decision.pdf

BOX 5: ANALYSING DIRECTIVE 16, FIRST INSIGHTS FROM DATA[1]

Introduction

The introduction of Directive 16, announced on 29 March 2019 and implemented on 15 July 2019, has marked a significant achievement in the development of a robust macroprudential framework for the Maltese banking sector. The Directive introduced BBMs designed to reduce the extent of systemic-risk accumulation by boosting the resilience of borrowers while limiting the approval of loans that pose a higher risk of default in the residential real estate (RRE) market.

Directive 16 applies to all borrowers who obtain a new RRE loan secured by immovable property. The measures laid out in the Directive distinguish between two borrower categories. Category I borrowers, primarily identifies first-time buyers and purchases of primary residences, provided the customer has no additional outstanding loans. Category II borrowers, represents a residual category encompassing all other loans under the Directive's scope, including loans to finance the purchase of property for letting.[2] The Directive sets limits on the LTV ratio, the stressed debt-service-to-income (sDSTI) ratio and loan maturity, which vary depending on the borrower's classification, as detailed in Table 1 below.

The introduction of Directive 16 in Malta fits into a broader European policy context. As of 2018, more than half of Eurozone economies had introduced BBMs within their legal framework as a tool to address the excessive build-up of systemic risk.[3]

This box presents preliminary findings from a policy evaluation exercise that makes use of a machine learning technique to assess the potential effects of Directive 16 on credit provision. By combining

Table 1
LIMITS IMPOSED BY DIRECTIVE 16

	LTV	sDSTI	Maturity
Category I	90% LTV at origination cap with a Speed Limit of 10% on the volume of loans, for loans with a market value in excess of €175,000.(1)	A stressed DSTI at origination of 40% for loans with a market value in excess of €175,000 with a shock to interest rates of +150 basis points.	Shall not exceed the horizon of 40 years or the official retirement age, whichever occurs first.
Category II	75% LTV at origination cap with a Speed Limit of 20% on the volume of loans (85% LTV cap for the first year).	A stressed DSTI at origination of 40% with a shock to interest rates of +150 basis points.	Shall not exceed the horizon of 25 years or the official retirement age, whichever occurs first.

Source: Central Bank of Malta.

(1) *Speed Limit* refers to the restriction of the volume (in terms of number of loans) of new RRE lending at LTV at origination over the thresholds stipulated in Directive 16.

Notes: In response to COVID-19, the Bank postponed the phased LTV limit of 75% to July 2021, which is outside the period of interest covered in this box.

1 Written by Sarah Vella and Matteo Panfilo, Senior Research Economists within the Financial Stability Research Office of the Central Bank of Malta. The authors would like to thank Mr Alexander Demarco, Mr Oliver Bonello, Dr Aaron G. Grech, Mr Alan Cassar, Ms Wendy Zammit, Dr William Gatt Fenech, Mr David Stephen Law and Ms Dominique Francica for their helpful comments and suggestions.

2 The full text of Directive 16 can be viewed here.

3 See ECB *Financial Stability Review*, May 2020.

data from the CCR with supplementary information from core domestic banks, this box offers a deeper insight into how this Directive may have influenced behavioural changes in credit provision across different buyer and property characteristics.

The core of this analysis adopts a comparative approach, dividing borrowers into two distinct groups: those likely constrained by the introduction of credit limits, and those who were likely not affected by these new provisions. By using a machine learning algorithm to perform a matching exercise using a Nearest Neighbour (NN) approach, the borrowers who were most likely constrained by the limits in the Directive can be identified.[4] Specifically, borrowers close to these limits after the implementation of the Directive are matched to their closest borrower from before the announcement of the Directive, based on observed similar age and income characteristics. This technique allows the detection of nuanced patterns in credit provision and to identify potential causal effects of Directive 16 on credit supply. This exercise not only enhances the understanding of the immediate impacts of Directive 16 but also provides a foundation for future policy evaluations.

Preliminary findings

Directive 16 came into effect in July 2019, after its announcement in March of that year. To rule out potential anticipation effects from influencing the results, the analysis focuses exclusively on the six months which precede the announcement and six months since the implementation. The provisions of the Directive modified the behaviour of banks by altering the loan terms under which they granted credit. Notably, the proportion of transactions associated with an LTV at origination higher than 90% for Category I borrowers fell very slightly, from 4.9% to 4.5%, well below the 10% speed limit option. Most LTVs at origination, even prior to the Directive's announcement, were already below 90% for Category I borrowers. This reflects the CBM's strategy to maintain conservative borrower parameters. These cautious lending practices had already been adopted by banks well before the Directive's introduction, ensuring a solid risk mitigation framework in place prior to the Directive. Subsequently, there was a slight reduction in the share of transactions exceeding the 85% LTV threshold to Category II borrowers, which fell from 28.8% to 24.8%. Although this share is above the 20% speed limit for this category, it likely includes loans for which borrowers pledged additional collateral, which is not captured in the calculation of the LTV ratio since this includes only the property that is being acquired.

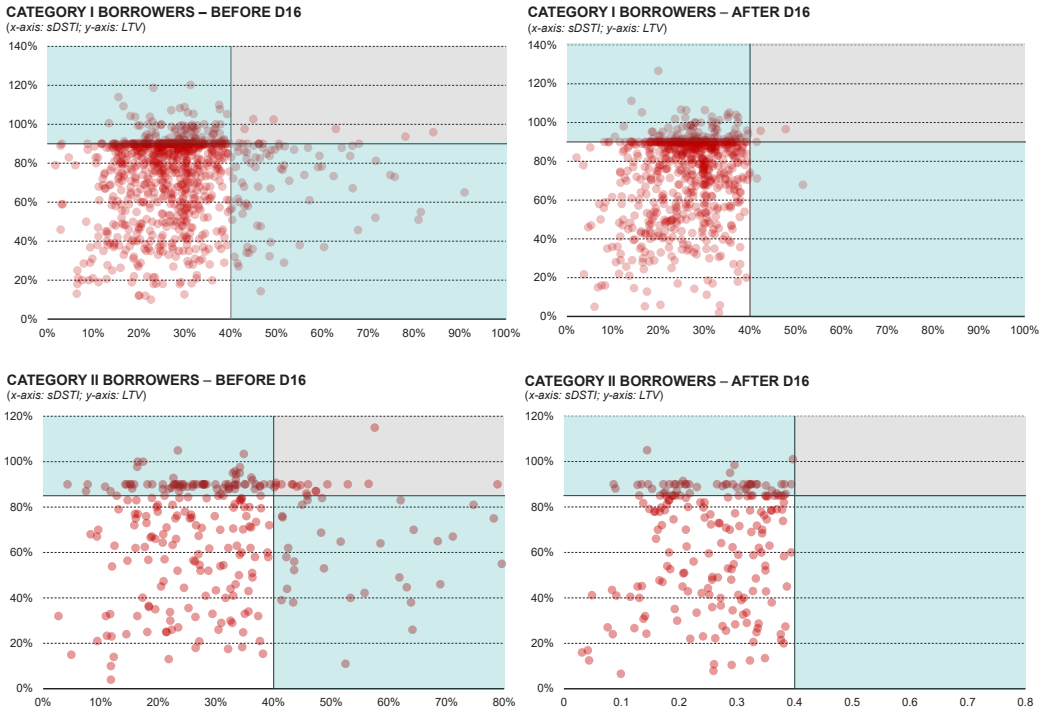
Chart 1 shows the empirical distributions of the LTV and sDSTI ratios, highlighting a nuanced concentration around the regulatory thresholds, which are identified by the shaded regions.

The introduction of Directive 16 marked a shift in the risk indicators subject to the newly introduced limits and to the overall level of leverage. While the average LTV ratio for both categories remained largely unchanged before and after the implementation of Directive 16, one can observe a significant change for both categories, with the average sDSTI ratio falling from 31.3% to 26.0%, with observations above 40% virtually disappearing completely. These changes reveal that these loan metrics became more concentrated around the imposed caps.[5] This indicates that the Directive successfully reduced the dispersion of certain loan parameters, steering them towards the low-risk quadrant defined by the new limits. By curbing excessive risk-taking, the Directive contributed to a more stable and controlled lending environment. For a larger proportion of Category I borrowers, banks seem to have opted for higher loan maturities, probably to drive the monthly sDSTI ratio down to maximise the size of the loan. In fact, the median maturity rose slightly from 32.5 to 33.5 years. Nonetheless, it is worth noting that the median maturity granted for Category I borrowers prior to the Directive was

[4] See Nitzan Tzur-Ilan, Adjusting to Macroprudential Policies: Loan-to-Value Limits and Housing Choice, *The Review of Financial Studies*, Volume 36, Issue 10, October 2023, pp. 3999-4044. The NN algorithm implemented in this box uses the Mahalanobis Distance to account for both variance and correlations in the data.

[5] A comparative analysis shows an increase in the average nominal amount of newly issued loans, amid increasing house prices. If preferences toward housing choices remain unchanged, low-income borrowers with a fixed budget for the downpayment likely demanded a higher effective LTV at origination to compensate for higher prices.

Chart 1
THE JOINT DISTRIBUTION OF LTV AND SDSTI RATIOS BEFORE AND AFTER DIRECTIVE 16



Source: Authors' calculations.
Notes: Coloured areas represent quadrants that do not meet at least one of either the LTV or the sDSTI regulatory requirements. After the introduction of Directive 16, observations falling in these areas are due to speed limits or exemptions. Missing observations for the sDSTI for Category II borrowers have been imputed to increase the sample size.

well below the 40-year cap, possibly suggesting that these borrowers were already exercising some restraint or lenders were applying conservative lending practices even in the absence of the maturity limits specified by the Directive. On the other hand, the median maturity of loans to Category II buyers fell from 26.4 to 24.4 years, showing a marked leftward shift of the whole distribution, driven by the 25-year maturity cap.

Identifying borrowers impacted by Directive 16

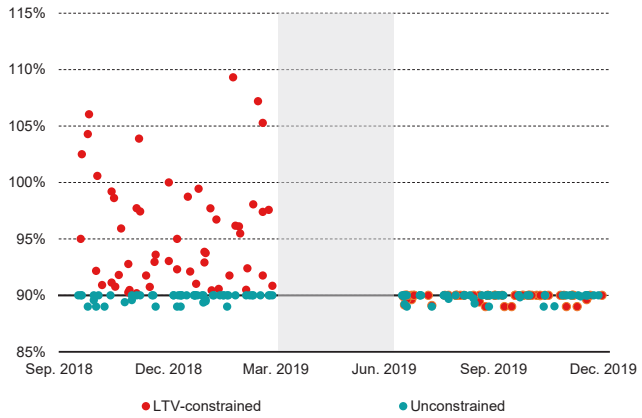
It is not possible to directly distinguish between borrowers constrained by the new BBMs and those who are not after the introduction of the Directive. This is because the data only reflect actual LTV or sDSTI outcomes, which may not reveal what borrowers and banks would have preferred to agree to otherwise. In the literature on causal analysis this is referred to as the identification challenge. To address it, a machine learning algorithm known as Nearest Neighbour (NN) was applied, allowing the study to focus on borrowers who were impacted. The results from this matching exercise presented in this box are preliminary but shed light on the likely impact, if any, of Directive 16.

Borrowers whose loan metrics fell just below the regulatory caps after the *implementation* of Directive 16 were selected, as they were the most likely to be affected by the new limits. These individuals were matched with similar borrowers – based on age and yearly income – who had been granted loans prior to the Directive's *announcement*. This exercise, conducted for both the LTV and sDSTI

limits, enabled the identification of those whose borrowing behaviour was likely influenced by the new regulations.[6] The matching process produced pairs of borrowers with comparable profiles, one from before the *announcement* of Directive 16 and one from after its *implementation,* resulting in an unequal number of constrained and unconstrained borrowers, for both the LTV and sDSTI limits, respectively.[7]

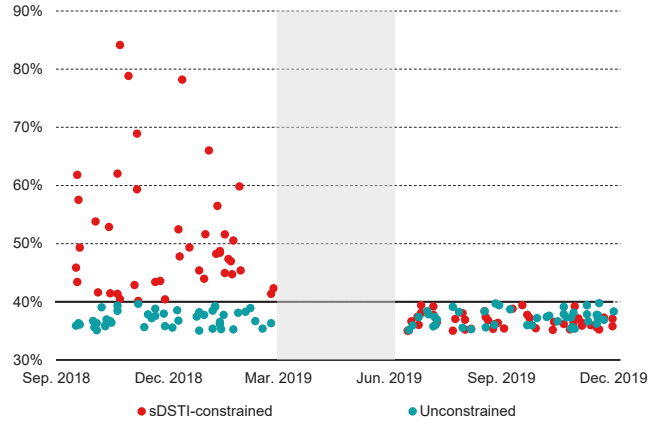
Based on this, the customer pairs produced by the matching algorithm whose loan indicators are below the limits of the Directive are classified as not impacted, or unconstrained. The remaining pairs are classified as impacted, or constrained, by Directive 16. Banks may have been in a better position to grant higher loan amounts had the Directive not come into effect. Charts 2 and 3 provide a visual representation of these groups before the *announcement* and after Directive 16's *implementation*.

Chart 2
LTV RATIO, CATEGORY I BORROWERS
(*percentages*)



Source: Authors' calculations.

Chart 3
sDSTI RATIO, ALL BORROWERS
(*percentages*)



Source: Authors' calculations.

The effect of the LTV ratio constraint

Chart 4 shows some insights for LTV-constrained Category I borrowers in a box plot. This set of results focuses on Category I borrowers. Insights on Category II borrowers and the potential impact of Directive 16 require further analysis due to the small sample size from which it is hard to draw conclusions.

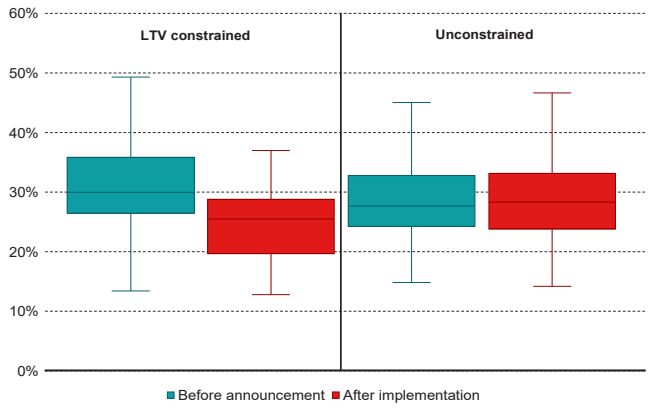
After the implementation of Directive 16, Category I borrowers constrained by the LTV cap, had a lower median sDSTI ratio. This is likely due to a reduction in their borrowing capacity or the need to adjust

[6] The underlying assumptions of this methodology are that the joint distribution of borrower age and income remained unchanged after the Directive, and that borrowers did not exit the credit or housing markets as a result of the Directive. These assumptions allow for the analysis of the distribution of one borrower-based limit, conditional on the other being binding.

[7] These matching processes rely on small sample sizes as they include borrowers whose loan metrics fell just below 1 percentage point of the LTV limit and 5 percentage points of the sDSTI limit following the implementation of Directive 16, respectively. In addition, only Category 1 borrowers are included for the LTV limit exercise (both borrower categories are considered for the sDSTI exercise). Furthermore, the sDSTI limit exercise is also limited by missing observations. Ongoing work is being carried out to explore new thresholds that would lead to larger sample sizes in both exercises.

their debt levels due to the constraint. This can be seen in Chart 4 as a fall in both the median (represented by the horizontal line in the middle of the red box) as well as the upper 75th percentile, represented by the top whisker. On the other hand, unconstrained borrowers had about the same servicing burden after implementation when compared to their matched borrowers before the announcement. This can be seen on the right side of Chart 4, where the range and medians of the two box plots largely overlap.

Chart 4
sDSTI DISTRIBUTION, CATEGORY I BORROWERS
(*percentages*)



Source: Authors' calculations.
Note: The boxes show the interquartile range; the line inside the boxes represents the median. Whiskers represent the date range.

Table 2 provides further insights by showing group averages for a set of variables of interest, together with a statistical test between means.[8] Unconstrained borrowers appear to have experienced an increase in average loan amounts, although this difference is not statistically significant and may be due to variation within the sample, while the average LTV ratio is the same across the matched unconstrained borrowers. This pattern aligns with a narrative that highlights the impact of rising house prices on borrowing decisions: as prices increased, this group of buyers was likely able to compensate for real estate inflation by increasing nominal loan amounts and their downpayments proportionally. They were able to do this while keeping about the same loan servicing commitments as a percentage of their income, likely due to rising incomes which kept up with the rise in house prices (refer to Table 2). In contrast, the constrained borrowers after the implementation have a

Table 2
SUMMARY STATISTICS, CATEGORY I BORROWERS
Cluster averages

	LTV-constrained		Unconstrained	
	Pre-Mar. 2019	Post-July 2019	Pre-Mar. 2019	Post-July 2019
sDSTI (%)	31.2%***	24.7%***	27.6%	29.0%
LTV (%)	97.1%***	89.8%***	89.8%	89.9%
Maturity (years)	33.2*	31.1*	35.1	35.0
Loan amount (EUR)	244,035.3	237,511.9	230,979.6	235,415.3
Property appraisal (EUR)	261,148.6	283,354.7	278,228.0	280,357.1
Annual gross income at origination (EUR)	54,824.0	55,043.8	47,722.3	48,558.3

Source: Authors' calculations.
Notes: asterisks represent 1% (***), 5% (**) and 10% (*) statistical significance of a t-test run over the two periods under study.

[8] The absence of asterisks near number pairs indicates that the difference is not statistically significant. The average LTV and sDSTI ratios reported in the Table may not be directly computable from the averages reported, as the figures reported are impacted by differences in skewness due to the small sample sizes used.

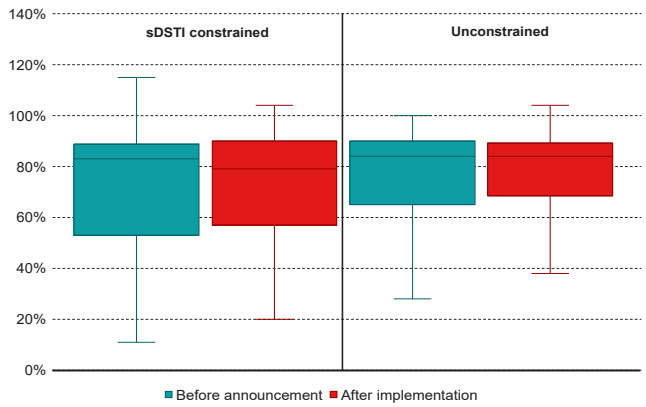
smaller average LTV ratio. This difference is statistically significant and accompanied by a smaller average nominal loan amount.[9] This probably explains the difference in the sDSTI ratio between the matched constrained borrowers by approximately 6.5 percentage points. Meanwhile, the average maturity for Category I LTV constrained borrowers after implementation is moderately shorter, by about two years, compared to the constrained borrowers before announcement.

The effect of the sDSTI limit

The box plots shown in Chart 5 focus on the main changes in the LTV ratio across the two groups of borrowers which were constrained by the sDSTI cap, and those not constrained. This set of results focuses on both Category I and Category II borrowers given that they are constrained by the same sDSTI limit. It is worth noticing the reduction in LTV levels, both in terms of median levels as well as the narrowing in the interquartile range of the constrained group. Once again, the LTV ratio distributions for the matched borrowers not affected by the sDSTI limit of the Directive are very similar.

Table 3 shows the corresponding summary statistics for borrowers who were constrained by the sDSTI cap.[10] The reduction in the average sDSTI ratio for the constrained group from

Chart 5
LTV DISTRIBUTION, ALL BORROWERS
(*percentages*)



Source: Authors' calculations.
Note: The boxes show the interquartile range; the line inside the boxes represents the median. Whiskers represent the date range.

Table 3
SUMMARY STATISTICS, ALL BORROWERS
Cluster averages

	sDSTI-constrained		Unconstrained	
	Pre-Mar. 2019	Post-July 2019	Pre-Mar. 2019	Post-July 2019
sDSTI (%)	51.1%***	36.8%***	37.0%	37.3%
LTV (%)	72.8%	72.2%	76.6%	75.3%
Maturity (years)	27.8	28.6	31.1	31.0
Loan amount (EUR)	271,295.2	248,010.2	250,600.7	216,815.1
Property appraisal (EUR)	392,286.8	394,539.4	361,270.0	303,094.7
Annual gross income at origination (EUR)	50,536.2	51,036.4	47,157.0	48,369.1

Source: Authors' calculations.
Notes: asterisks represent 1% (***), 5% (**) and 10% (*) statistical significance of a t-test run over the two periods under study.

[9] The decrease in the average loan value before and after the implementation of the Directive has a probability value of 11.5%, just shy of the conventional 10% level of significance used in statistical inference.
[10] The absence of asterisks near number pairs indicates that the difference is not statistically significant. The average LTV and sDSTI ratios reported in the Table may not be directly computable from the averages reported as the figures reported are impacted by differences in skewness due to the small sample sizes used,

51.1% to 36.8% is sizeable and statistically significant, while the unconstrained group did not experience any notable changes in their average sDSTI and LTV ratios, and maturity. Both groups experienced a reduction in the average loan amount although borrowers who were constrained by the sDSTI cap purchased property which was similarly priced on average. Furthermore, the difference in the size of the average loan is not statistically relevant, likely due to high sampling variability from a small sample.[11] When taken at face value, these results align with the narrative highlighted by the previous findings presented in the box. Further work will explore ways to extend the sample size to extract clearer patterns.

Concluding remarks

The introduction of Directive 16 was aimed to curb the accumulation of systemic risk and enhance borrowers' resilience by implementing BBMs to prevent excessive leverage. The exercise to assess the effectiveness of these tools presented in this box unveils an increased extent of borrower resilience through a reduction in key debt metrics, which bolstered an already prudent risk management and credit allocation policy pursued by banks even before the introduction of the Directive. This research has uncovered both a reduction in high-leverage exposures (for constrained borrowers) and a general adoption of lending speed-limits thereby avoiding undue constraints on the banks' business models. These preliminary results suggest that borrowers affected by the LTV limit potentially reduced both their sDSTI and loan maturity. In contrast, borrowers constrained by the sDSTI limit generally had the same LTV ratios and loan maturities. In both cases, the corresponding reduction in average loan amounts is indicative of the likely effect of the policy but is not statistically significant. Moderating LTV levels can potentially impact other key metrics, namely the sDSTI ratio and loan maturity, while the effects of the sDSTI limit on other key metrics are less clear. These results could be sensitive to methodological assumptions and therefore require further investigation.

The policy evaluation exercise discussed in this box therefore yields indicative causal effects of the borrower-based macroprudential policy which has been in place since mid-2019. In terms of future work, this analysis can be complemented with formal econometric techniques to control for possible determinants of the changes reported in this box, hence yielding a more accurate quantification of the effect of the policy. Further analysis is also required to understand better the potential impact of the LTV limit on Category II borrowers which is limited by a very small sample size. It would then be fruitful to compare these findings with results reported for other countries within and outside the euro area.

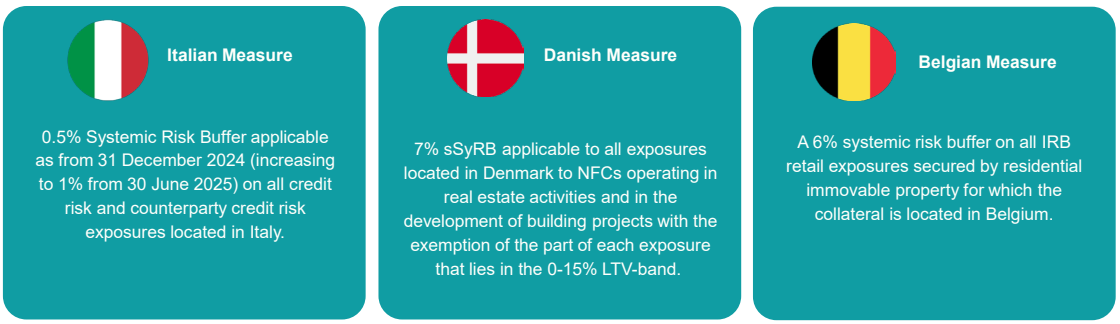
[11] Due to the constraining number of customers having credit ratios close to Directive 16 limits, the matching procedure creates low-population samples, whose associated averages are more sensitive to data variability and potential outliers.

5.3 Other domestic measures

5.3.1 Voluntary reciprocation

Figure 5.2 below summarizes the reciprocation requests received during 2024. The Central Bank of Malta decided not to reciprocate these measures due to inapplicability and immateriality of exposures of the domestic banking system towards the activating countries. In addition, for those measures aimed towards Internal Ratings-Based (IRB) exposures, it should be noted that MT banks follow the standardized approach for capital allocation and therefore such measures remain inapplicable. No other changes were effected on the reciprocation stance of the Bank with respect to previously communicated measures recommended for reciprocation by other Member States and as such, these remain currently active.

Figure 5.2
RECIPROCATION REQUESTS ANALYSED DURING 2024



Source: Central Bank of Malta.

5.3.2 Material third countries

The identification of a third country as material is based on three criteria: (i) Risk-Weighted Exposures, (ii) Original Exposures, and (iii) Defaulted Exposures, as indicated in Article 4 of the ESRB Decision on the assessment of materiality of third countries (ESRB/2015/3). For the period from Q2 2025 to Q2 2026, the Bank has identified the same material third countries for Malta as in the previous 12-month period namely **United Kingdom** and the **United Arab Emirates**. As part of the third country notification process, the Bank notifies the ESRB and domestic banks about its decision that the countercyclical capital buffer (CCyB) rates set by the respective authorities of these countries are appropriate and that no additional top-ups in their respective macroprudential capital requirements are required domestically.

BOX 6: THE POLICY CASE FOR AN EXTENSION OF THE SECTORAL SYSTEMIC RISK BUFFER[1]

The case behind policy intervention

The concentration risk of the Maltese banking sector to the real estate sector, combined with the sustained cyclical expansion of this asset class documented in the special feature, depicts both a stock (structural) and a flow (cyclical) manifestation of the same risk source. Put differently, an already heightened concentration risk is being further augmented by cyclical flows further reinforcing and contributing to increasing future structural risks from higher exposure. The inherent structural vulnerability which continues to be amplified with cyclicality from the same risk source, was the basis on which the Bank opted for the sSyRB as the most appropriate tool to address such risks back in 2023. Indeed, following regulatory changes adopted in the CRR II, the sSyRB is a tool that can be used to target both cyclical and structural elements of a given risk source without having a dampening effect on remaining exposure classes, hence minimising unintended policy impacts.

As a result of the intensification of concentration risk within the real estate sector and given that persistent credit growth has extended to real estate activities beyond the residential segment, the Bank is of the view that the same tool could be used to address these developments, and it is being proposed to extend the cover to all real estate-related credit activity.

Complementarity of the measure and the case for macroprudential space

The sSyRB complements the existing BBMs, which target only the flow of new loans. Whilst the BBMs are capital neutral, the sSyRB acts also as a complement to the BBMs by targeting capital allocation and hence the loss absorption capacity of banks. Another important feature of some capital-based measures such as the sSyRB, is that they introduce releasable buffer space. This space could be released in time of unexpected downturns in the cycle or external shocks, hence safeguarding the credit provision capacity of banks to keep financing the economy. Releasable buffers are a key component in mitigating systemic risk, preventing the procyclical tightening of credit conditions, and maintaining confidence in the banking sector. Within the broader macroprudential policy toolkit, the sSyRB contributes to the resilience of the financial system to potential adverse shocks. The objective for the accumulation of more releasable buffers form also part of the strategic macroprudential targets of the ECB.[2]

Overview of the proposed measure

1. Scope of the proposed measure

The Bank initiated a consultation process with the banking sector on the proposal to extend the scope of the sSyRB. While the sSyRB rate is currently being proposed to remain fixed at 1.5%, its application would be extended to cover all real estate related activities. As per the CRR, the buffer is to be estimated on the basis of risk exposure amount, which in this case is being proposed to be reflected on the value of risk weighed assets secured by immovable property in Malta, both residential and commercial in nature.

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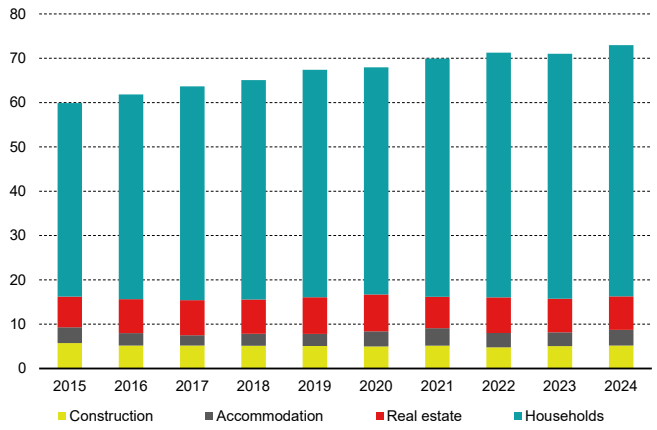
[1] Written by Mariah Dimech, Principal Economist within the Financial Stability Policy Department. The author would like to thank Christine Balzan and Stephen Attard, Manager and Head respectively within the same Department, Alan Cassar Chief Officer Financial Stability and Statistics for their suggestions; and David Stephen Law expert within Stress testing and Models Office for his assistance in the data collection process.

[2] An ECB Governing Council statement that highlights the importance for macroprudential policies to enhance macroprudential space can be accessed from the following link: https://www.bankingsupervision.europa.eu/press/other-publications/publications/govcstatement/html/ssm.govcstatement202406~db174e6450.en.html

Moreover, as seen in Chart 1, the share of exposures related to real estate reached an all-time high of 72.7% of resident lending, further exacerbating risk to the banking system as it remains highly susceptible to the real estate sector's performance. Indeed, banks' elevated concentration in the real estate sector – both through their loan portfolios and the collateral backing those loans – poses significant systemic vulnerabilities as a shock in the real estate market or the bank's counterparties exposed to this sector would have a very significant impact on bank profitability.

Chart 1
EXPOSURES TO SECTORS RELATED TO REAL ESTATE ACTIVITIES
(per cent)



Source: Central Bank of Malta.

2. Calibration methodology

The buffer rate was calibrated using the Bank's house price correction stress test.[3] This methodology is consistent with the approach used for the calibration of the sSyRB introduced in 2023 which could be extended to also encompass loans to NFCs that are secured by property-related collateral, therefore including property which is commercial or residential in nature. This sensitivity test assesses the impact of exogenous shocks to house prices on the core domestic banks' balance sheets over a one-year horizon. The magnitude of the assumed shocks to house prices is determined on the basis of historical standard deviations of the annual rate of change in the house price index.[4] The decline in house prices is assumed to translate directly into a corresponding reduction in the value of property-related collateral and a subsequent need to increase loan-loss provisions for adequate loan portfolio coverage.

The sensitivity analysis quantifies the loan-loss provisions that would occur under different magnitudes of an adverse shock to house prices; consisting of a 7.5%, 15%, 22.5% and 30% fall in residential real estate prices.[5] These shocks are equivalent to 1 to 4 standard deviations of the official house price index, respectively. The loss-absorbing buffer generated from the accumulation of the sectoral sSyRB rates is calibrated on the potential impact quantified in the sensitivity analysis.

Moreover, further internal robustness checks were carried out to determine the extent of resilience for banks generated by the buffer extension. This included an assessment of the adequacy of the buffer relative to the historical losses incurred by the banks over the past decade; as well as the simulation of severe adverse shocks to aggregate demand, synonymous with a recession where the framework also accounts for the Maltese economy being small and open. This was done to assess the proposed rate also in the context of second round effects emanating through loss of incomes and higher unemployment amongst others. This would in turn complement the effect from the house price sensitivity shocks applied in the house price stress test which act solely via the collateral channel. Indeed, this

[3] More information on the house price correction stress test can be found in section 3.2.1 of the 2020 Financial Stability Report: https://www.centralbankmalta.org/site/Publications/FSR-2020.pdf

[4] NSO Residential Property Price Index (RPPI) by period: https://nso.gov.mt/property/residential-property-price-index-rppi-q4-2024/

[5] Given that an index for commercial property prices is not available, the magnitude of the residential house price index is used as a proxy for shocks to commercial property prices.

further analysis continues to reinforce banks' loss absorption capacity against the financial system's vulnerability to the macro-economic environment.

3. Expected impact of the proposed measure

The results of the stress test show that an extension of the sSyRB of 1.5% on the risk weighted assets of all loans backed by real estate would adequately increase the loss absorption of the banks active in the domestic real estate market to withstand the simulated shocks. Internal assessments were carried out to evaluate whether institutions could internalise the cost associated with the extension of this measure, based on their existing voluntary capital buffers.

In evaluating whether banks have sufficient capital buffers, the Bank also considered the potential impact of the revisions to the calculation of risk weights arising from the implementation of CRR III, with particular attention to the revised requirements related to credit risk. In this regard, as part of a consultation process, the Bank launched a data collection exercise to assess the impact of the new risk weight requirements under CRR III. The Bank will continue to analyse the effect of the proposed measure once COREP data based on March 2025 reference date becomes available.

Conclusions and way forward

The proposed extension of the current sSyRB is intended to address the banks' inherent structural risks related to an elevated exposure to the real estate sector. This concentration in real estate related lending continues to be reinforced by an expansionary cyclical dimension. Indeed, the choice of tool can be justified solely on structural considerations. However, in the Maltese context, as highlighted earlier, such structural risks are being augmented by a persistently expanding real estate cycle which is in turn, interlinked with elevated credit dynamics as shown in Panel A of the Special Feature on cyclical risk dynamics.

Based on the impact assessments carried out so far, the proposed extension of the sSyRB can be accommodated from the existing voluntary capital buffer of the banks within scope of this measure. The proposed measure will also expand the releasable macroprudential space in Malta, which is a strategic objective of both the Bank as well as the ECB. The Bank will continue with its evaluation of new information and data received from the consultation process with the banks, and in collaboration with the MFSA, it will also continue to monitor real estate related risks and assess the ongoing appropriateness of any implemented policy with a view for adjusting it if necessary.

5.4 European regulatory developments

ECB Enhanced Framework for assessing O-SII capital buffers[1]	From 1 January 2025, the ECB will start using the enhanced floor methodology to assess O-SII buffers that takes into account the systemic importance for the banking union as a whole by treating cross-border exposures within the banking union partly equivalent to domestic exposures. This enhanced methodology will lead to a more consistent treatment of O-SIIs across the EU and deepens the financial integration within the banking union. Preliminary results by the ECB show that this enhanced methodology will not increase the O-SII buffers for MT O-SIIs. However, the CBM will keep monitoring the scores published by the ECB to determine any possible changes to the domestic context after each O-SII iteration.
SRB MREL Policy[2]	In May 2024, the Single Resolution Board (SRB) published its 2024 MREL policy, introducing three key updates as compared to the previous policy. i) A revised approach in calibrating the Market Confidence Charge (MCC) for both resolution and non-resolution entities. In the case of the former, the SRB will consider a bank's specific situation and resolvability progress, potentially applying a downward adjustment to the MCC, which could be set at 80% of the default level set in the legislative framework. In the case of the latter, the SRB will set the MCC when non-resolution entities are direct subsidiaries of a resolution entity or when necessary to sustain market confidence. In such case, possible adjustments in lowering the MCC could also be set to 80% of the statutory default level. ii) A revised approach on the monitoring of MREL eligibility whereby the SRB conducts ex-post monitoring of new MREL eligible liabilities issuances based on bank-provided self-assessments from a specified sample, using an SRB-provided template. iii) Reflect legislative changes as introduced by Directive 2024/1174 on certain aspects related to the MREL framework. Specifically, no MREL is set for liquidation entities in the new framework except where the SRB assesses that MREL is justified in an amount exceeding the loss absorption amount (LAA). This would be the case in instances where there is a potential impact on financial stability or in the financial capacity of deposit guarantee schemes (DGS).
Capital Markets Union (CMU)	On 7 March 2024, the ECB Governing Council issued a strong statement on advancing the CMU highlighting its importance in driving investment, innovation and stability. Five key reasons were provided: 1. **Boost Investment:** to achieve green and digital transitions as well as enhancing the EU's productivity and competitiveness in a shifting geopolitical landscape. 2. **Support Innovation:** allow European firms to expand and have access to risk capital and equity finance in the EU rather than having to seek funding abroad. 3. **Enhance Stability:** greater private risk-sharing to stabilize growth across the euro area, mitigating financial fragmentation and ensuring effective monetary policy transmission. 4. **Strengthen the Euro:** A well-developed financial market would strengthen the euro's international role and enhance the EU's ambition for open strategic autonomy in periods of increasing volatility around the world. 5. **Integrate Banking Sector:** A more unified capital market to help integrate the EU's banking sector; increase the resilience of European banks and help lower remaining barriers within the banking union.
Entry into force of CRR III	One of the most significant changes introduced by CRR III is the revised treatment of exposures secured by immovable property, applicable as from 1 January 2025. Banks must evaluate and comply with various qualitative criteria which include assessing the completion status of the collateralized property, ensuring the legal enforceability of the collateral, and adhering to prudent valuation standards, among other requirements. More details on the risk-weight measures under CRR III can be found in figure 5.3.

[1] The Governing Council statement on macroprudential policies – the ECB's framework for assessing capital buffers of O-SIIs can be found in the following link: https://www.ecb.europa.eu/press/govcstatement/pdf/ecb.govcstatement202412~b1f786e5f1.en.pdf.

[2] https://www.srb.europa.eu/en/content/srb-publishes-2024-mrel-policy-and-latest-mrel-dashboard

Figure 5.3
RISK-WEIGHT (RW) MEASURES ON IMMOVABLE PROPERTY (CRR III)

Residential Real Estate (RRE)	Commercial Real Estate (CRE)	Land Acquisition, Development and Construction (ADC)
• General RRE - RW split loan method: the part of the exposure with an LTV ≤ 55% will have a RW of 20%, remainder treated as unsecured. • Income producing RRE - RW full loan method: 30%-105% dependent upon exposure-to-value (unless hard test is met*)	• General CRE - RW split loan method: the part of the exposure with an LTV ≤ 55% will have a RW of 60%, remainder treated as unsecured. • Income producing CRE - RW full loan method: 70%-110% dependent upon exposure-to-value (unless hard test is met*)	• Loan to a company/SPV: 150% • Residential ADC loans subject to certain criteria: 100%

*Hard test: if the competent authority of the Member State where the property securing the mortgage is located has published evidence showing that the property market is well-developed and long-established with yearly loss rates which do not exceed certain thresholds, the same preferential risk weights may be applied to the exposures for the General RRE/CRE.

APPENDICES

Appendix A

IMPLEMENTED POLICY MEASURES[1]

CAPITAL-BASED MEASURES[2]

Capital Buffer for O-SIIs	2022	2023	2024	2025	Implementation date
MDB Group Limited*	0.625%	0.750%	0.875%	1.000%	1 Jan. 2016 Revised 1 Jan. 2020
HSBC Bank Malta plc**	1.500%	1.250%	1.250%	1.250%	
Bank of Valletta plc	2.000%	2.000%	2.000%	2.000%	
APS Bank plc***	0.125%	0.250%	0.375%	0.437%	

* MDB Group Limited's O-SII buffer rate is subject to a transitory period for the build-up of its fully-loaded O-SII buffer rate of 1%, in the year 2025.

** HSBC Bank Malta plc qualifies for the provisions of Article 131(8) of CRD, which results in the capping of its O-SII buffer rate from 1.50% to 1.25%.

*** APS Bank plc's O-SII buffer rate is subject to a transitory period for the build-up of its fully-loaded O-SII buffer rate of 0.5% in the year 2026 (and an interim rate of 0.4375% in the year 2025).

Sectoral Systemic Risk Buffer* (sSyRB)	2023	2024	2025	Implementation date
All credit institutions involved in mortgage lending	1.000%	1.500%	1.500%	1% as from end Sep. 2023 1.5% as from end Mar. 2024

* Effective as from 28 March 2023.

Countercyclical Capital Buffer (CCyB)	2022				2023				2024				2025	Implementation date
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	
All credit institutions	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1 Jan. 2016

BORROWER-BASED MEASURES

	2022	2023	2024	2025	Implementation date
BBMs	No changes occurred	No changes occurred	No changes occurred	No changes occurred	1 July 2019 (amended 29 November 2021)

OTHER POLICY MEASURES

Material Third Countries	2022	2023	2024	2025	Implementation date
Identification of Material Third Countries	United States of America, United Kingdom, United Arab Emirates	United States of America, United Kingdom, United Arab Emirates	United Kingdom, United Arab Emirates	United Kingdom, United Arab Emirates	June 2016

	2022	2023	2024	2025	Implementation date
Banking Rule 09 on measures addressing non-performing and forborne exposures (BR/09/2023)	Implementation of NPL Reduction Plan for banks which exceed the 6% NPL ratio threshold	New regulatory allocation and implementation of EBA guidelines (reduction strategies for banks with NPL ratio > 5%)	No changes occurred	No changes occurred	2 Jan. 2017. Revised in 2019. A revamped version of the Rule became effective on 1 Jan. 2023.

[1] List of implemented policy measures up to 2025 Q1.

[2] Risk weights for RRE exposures are stricter than imposed than Article 126(1) CRR, where a 35% risk weight is applied to exposures that have an LTV ratio up to 70% as opposed to 80% per CRR rules. Risk weights for CRE exposures are in line with Article 126(2) of the CRR. This measure was enacted in 2008 and is still applicable until end 2024 given the entry into force of CRR III which introduces new risk weights for exposures secured by immovable property: https://www.esrb.europa.eu/pub/pdf/other/Esrb.notification230308_Other_MT~c0edd3b7a8.en.pdf

Appendix B – Table 1
FINANCIAL SOUNDNESS INDICATORS – BANKING INSTITUTIONS

	Core Domestic Banks					Non-Core Domestic Banks					International Banks					Total Banks				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Capital[1]																				
Regulatory capital to RWAs	21.7	22.7	23.0	24.7	25.3	20.2	20.3	18.7	20.8	22.3	52.5	46.3	41.1	38.7	37.0	25.8	25.6	24.6	26.0	26.5
Regulatory Tier 1 capital to RWAs	18.6	19.5	19.6	21.0	21.0	19.9	20.0	17.6	19.7	21.2	52.4	46.3	40.7	38.5	35.7	23.4	23.1	21.9	23.0	22.9
Leverage ratio	7.6	7.3	7.2	7.9	8.1	9.5	10.0	8.9	9.5	10.5	42.4	34.2	32.3	28.8	27.9	10.5	9.6	8.9	9.5	9.7
Large exposures to total own funds	69.6	66.1	83.3	60.6	59.3	175.8	173.0	194.4	133.5	108.9	83.3	67.9	75.6	65.4	57.7	81.8	76.4	91.8	68.3	63.6
RWAs to total assets	42.9	39.1	38.0	38.8	39.6	49.0	50.9	51.7	49.5	52.6	82.8	74.9	70.8	67.3	70.5	46.6	43.0	41.6	42.1	43.2
Profitability																				
ROA[2]	0.0	0.4	0.4	1.0	1.1	-1.5	0.2	-0.4	0.6	0.4	2.2	1.5	2.6	2.5	-0.3	0.6	0.7	0.9	1.3	0.7
ROE[1,2]	-0.3	4.3	5.4	12.0	11.6	-12.7	2.4	-3.4	5.7	4.2	6.2	11.6	6.0	11.3	8.7	0.4	6.0	4.5	11.2	10.3
Operational cost-to-income ratio	68.0	75.2	82.3	51.0	52.5	95.8	82.2	81.0	66.6	73.3	35.1	47.2	44.5	55.8	70.0	51.7	61.8	62.9	53.9	57.0
NII to gross income	73.2	72.1	71.8	78.8	78.9	48.9	40.9	54.0	66.2	71.2	64.8	56.4	49.2	36.0	70.1	67.8	62.7	59.3	60.0	76.8
Non-interest income to gross income	26.8	27.9	28.2	21.2	21.1	51.1	59.1	46.0	33.8	28.8	35.2	43.6	50.8	64.0	29.9	32.2	37.3	40.7	40.0	23.2
Non-interest expense to gross income	70.0	77.0	83.2	51.5	52.8	97.5	83.4	81.3	67.4	73.8	35.2	47.3	44.5	55.8	70.0	52.7	62.7	63.3	54.2	57.3
Personnel expenses to non-interest expenses	45.8	41.2	36.4	46.6	47.4	48.3	48.5	47.3	49.1	49.8	12.7	10.8	10.0	9.2	11.5	34.2	30.3	27.6	30.4	33.3
Net impairment charges to gross income	29.2	-3.4	-11.5	0.4	-5.0	79.5	6.3	35.2	5.8	6.6	18.7	18.9	14.5	5.5	43.7	25.6	8.1	4.2	2.9	4.3
Asset Quality																				
NPLs to total own funds[1]	28.9	29.4	21.5	17.9	13.4	53.1	34.2	30.0	8.0	7.1	13.2	12.1	11.5	11.8	15.7	26.4	25.7	20.3	15.8	13.3
NPLs to total gross loans	3.7	3.5	2.7	2.5	2.1	7.1	5.1	4.3	1.2	1.1	1.9	1.4	1.3	1.5	1.7	3.5	3.1	2.5	2.2	1.9
Overall NPL ratio excluding CBM placements	5.1	5.3	3.7	3.3	2.6	12.6	8.5	6.4	2.0	2.0	2.2	1.9	1.6	1.9	2.7	4.7	4.6	3.4	2.9	2.6
Non-performing exposures to total gross exposures	2.8	2.7	2.0	1.8	1.4	5.6	3.8	3.1	0.9	0.9	1.3	1.0	0.9	0.9	0.9	2.6	2.4	1.8	1.5	1.2
Total coverage ratio	49.7	44.3	46.5	43.5	42.3	47.6	59.8	72.7	61.1	70.3	91.4	147.5	189.6	125.3	107.3	55.2	57.9	66.1	55.8	57.5
Unsecured loans to total lending	23.2	20.1	18.7	18.0	17.4	80.8	71.9	55.3	47.5	49.6	19.7	21.5	23.6	27.9	33.1	25.6	23.8	22.4	22.1	22.5
Share of Stage 3 provisions to total provisions	66.7	70.2	69.6	67.3	70.3	93.0	90.2	88.4	55.4	54.9	44.6	27.9	26.5	45.3	55.3	65.1	60.5	58.5	59.8	63.4
Forborne loans to gross loans	3.0	4.5	3.5	2.5	2.3	0.5	0.8	0.6	1.1	1.3	3.3	7.4	7.4	1.3	1.4	2.9	4.9	4.1	2.2	2.0
Liquidity																				
LCR[1]	328.2	359.9	380.0	366.4	366.6	325.4	356.8	316.0	405.2	436.3	686.6	2469.6	383.7	566.9	422.6	332.7	379.0	373.8	379.4	375.9
Liquid assets to total assets[1,3]	33.3	35.6	36.3	35.0	36.7	40.3	33.2	31.1	36.1	41.2	11.8	27.3	26.9	30.5	30.6	32.3	34.7	35.1	34.7	36.6
Customer loans to customer deposits	58.4	55.2	56.0	58.9	59.2	46.5	52.2	54.4	49.5	49.0	462.3	267.0	230.6	184.6	179.3	75.4	67.5	67.2	67.0	67.0
CBC on net cash outflows	169.9	189.3	251.0	287.2	335.4	238.1	300.8	240.7	272.0	313.3	326.3	601.9	58.6	189.1	131.0	180.2	204.0	239.8	281.2	321.5
NSFR[1]		174.0	187.1	175.8	184.4		178.4	172.9	191.3	183.7		155.3	118.4	137.7	143.0		172.8	180.3	173.8	180.7
Balance Sheet																				
Assets-to-GDP	179.2	166.6	155.7	143.0	136.8	21.2	20.3	18.7	17.5	14.9	80.6	68.5	55.3	48.3	57.8	281.0	255.4	229.7	208.8	209.5
Domestic debt securities to total assets	8.3	8.8	9.4	8.9	10.3	7.2	7.9	7.9	6.0	5.2	0.1	0.2	0.2	0.0	0.0	5.9	6.4	7.1	6.6	7.1
Foreign debt securities to total assets	13.8	12.4	16.5	19.2	22.4	12.2	15.9	18.0	17.0	13.6	25.2	24.0	29.8	35.9	39.5	16.9	15.8	19.8	22.9	26.5
Customer loans to total assets	48.2	45.4	47.2	48.8	49.6	33.2	34.5	38.2	36.9	37.9	43.9	36.9	41.7	38.4	30.4	45.8	42.3	45.1	45.4	43.5
Interbank exposures to total assets	5.3	4.9	4.9	3.9	3.9	9.7	9.4	7.2	6.4	5.9	12.3	17.8	10.0	7.7	4.7	7.6	8.7	6.3	5.0	4.2

[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 Delegated Act Methodology.

Appendix B – Table 2
FINANCIAL SOUNDNESS INDICATORS – NON-BANK FINANCIAL INSTITUTIONS

Domestically-relevant Insurance Companies	Life Insurance Firms					Non-life Insurance Firms					Overall Insurance Firms				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
SCR coverage ratio	186.8	218.0	180.2	219.7	249.5	248.2	240.1	233.6	242.9	242.8	211.1	227.0	200.2	230.1	246.2
Excess of assets over liabilities as a share of total liabilities	8.6	10.5	11.2	11.2	11.3	95.9	92.8	79.6	113.2	116.7	15.1	17.2	18.1	19.9	20.9
Technical provisions as a share of net written premia	862.6	754.8	788.5	983.2	954.6	128.3	131.4	124.7	86.2	78.1	632.8	573.9	541.4	573.7	538.8
Liquid assets ratio[1]	65.8	63.1	62.2	60.1	59.8	27.6	24.7	26.7	30.2	31.3	60.2	57.1	55.8	54.6	54.0
Modified duration	6.0	6.7	4.7	5.7	6.1	5.0	4.7	3.8	3.1	3.5	6.0	6.6	4.6	5.5	5.9
ROA[2]	0.1	0.3	1.0	0.8	0.9	6.1	6.3	2.5	11.3	11.2	0.9	1.1	1.3	2.4	2.5
Assets-to-GDP	23.3	21.3	17.0	15.3	14.3	3.4	3.3	3.1	2.7	2.8	26.7	24.5	20.1	18.0	17.1
Growth in premia	-5.1	17.9	-17.7	-16.9	7.2	0.4	8.9	15.2	16.6	13.2	-3.0	14.3	-5.0	-1.2	10.5
Growth in claims	15.0	25.8	-10.7	-8.5	-0.5	-4.1	-9.1	38.9	-24.7	37.3	0.0	0.0	0.0	0.0	0.0
Bond holdings as a share of total assets[3]	40.4	36.7	33.7	37.5	38.9	10.0	11.1	12.9	16.8	18.7	36.6	33.3	30.5	34.4	35.6
Equity holdings as a share of total assets[3]	17.1	18.2	16.8	14.7	11.9	25.4	30.5	24.1	27.9	27.6	18.1	19.8	17.9	16.7	14.4
Investment fund units as a share of total assets[3]	27.3	31.6	34.5	38.1	40.2	8.5	10.0	8.2	9.4	10.8	24.9	28.7	30.4	33.7	35.4

Domestically-relevant Investment Funds	Bond Funds					Equity Funds					Mixed Funds					Other Asset Allocation Funds					Overall Funds				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Leverage ratio	100.3	100.7	100.3	100.2	100.5	100.2	100.3	100.2	100.2	100.5	100.3	100.4	100.4	100.3	100.7	100.1	100.2	100.2	100.7	100.6	100.3	100.6	100.3	100.3	100.6
Liquid assets ratio[1]	74.8	71.2	68.2	66.0	63.3	50.9	51.6	52.5	51.2	51.4	61.5	61.2	59.6	59.3	57.3	59.4	57.2	55.6	55.6	57.2	70.2	66.9	64.1	61.9	59.9
RCR[4]	6.1	5.7	12.5	9.1	11.2	5.3	4.7	4.3	4.1	11.0	4.7	7.5	7.4	8.3	15.6	6.3	6.9	10.6	9.6	9.7	3.3	3.2	3.1	3.0	3.0
Modified duration	7.7	6.9	5.3	5.3	5.4	2.3	3.1	2.1	2.8	3.4	7.7	8.4	6.3	6.5	6.3	7.0	7.4	5.9	6.2	5.8	7.6	7.0	5.4	5.4	5.4
Net profit margin[5]	25.5	8.6	-7.5	37.9	38.3	21.5	33.0	-4.1	30.6	33.6	43.3	50.3	45.4	53.1	56.9	16.3	17.4	-7.1	33.7	20.2	23.5	15.8	-5.6	36.1	34.4
Assets-to-GDP	9.1	7.8	5.6	4.9	4.5	1.1	1.1	1.0	1.1	1.3	0.8	0.7	0.6	0.6	0.5	1.4	1.3	1.0	1.0	1.0	12.3	11.0	8.2	7.6	7.3
Growth in NAV	1.2	-0.8	-20.8	-1.9	0.8	-8.2	23.6	-3.2	26.8	23.7	-3.5	5.1	-14.2	15.0	-1.9	21.1	10.3	-14.3	8.2	10.1	1.9	3.0	-17.7	4.1	5.3
Share of NAV by resident households	62.3	59.9	56.7	56.0	58.8	32.2	33.6	32.1	31.3	32.3	73.3	72.5	71.7	72.6	69.1	64.4	61.6	61.6	61.0	59.4	60.6	58.2	55.3	54.2	54.9
Share of NAV by other resident sectors	32.8	35.3	38.1	38.8	36.7	67.1	63.7	64.0	65.4	64.2	25.1	26.0	24.7	24.6	26.4	34.9	37.7	37.1	36.4	37.0	35.5	38.0	40.2	41.4	40.9
Bond holdings as a share of total assets	86.8	86.3	88.2	90.3	88.8	0.5	0.3	0.9	7.2	6.2	52.3	51.7	52.3	47.9	45.9	30.8	28.1	27.6	26.9	30.6	70.8	68.1	67.4	66.3	63.3
Equity holdings as a share of total assets	2.3	2.4	2.5	2.4	2.1	60.9	59.2	60.2	63.2	63.2	36.5	38.3	38.1	44.4	44.0	16.1	15.0	17.8	19.6	17.9	11.1	12.1	13.9	16.9	17.9
Investment fund units as a share of total assets	2.9	3.6	4.2	4.5	5.8	34.7	36.5	33.0	27.1	27.7	7.1	4.4	4.8	5.1	5.9	37.2	45.5	46.2	48.1	47.5	9.8	12.1	13.1	13.7	15.4

(1) For info on the methodology refer to https://www.centralbankmalta.org/site/Reports-Articles/2024/FSR-2023-Box-4.pdf.
(2) Based on profit before tax. Figures from 2023 onwards are based on IFRS 17. Earlier data reflect IFRS 4 and are not directly comparable.
(3) In this table, the life sector is considered as a whole, without distinguishing between IL, UL and other policy types, in contrast to the approach taken in the main text.
(4) The RCR compares the stock of HQLA to the largest quarterly outflow recorded since the inception of the time series in December 2016.
(5) Defined as the funds' net profit as a share of total revenue.