

4. INSURANCE COMPANIES AND INVESTMENT FUNDS

4.1 Domestically-relevant insurance companies

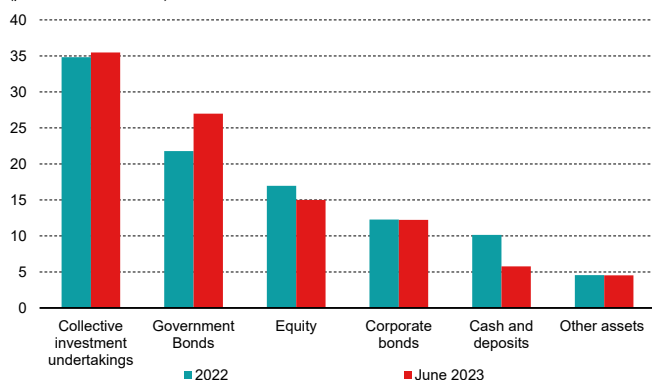
This edition of the *Financial Stability Report* includes a revised methodology for selecting domestically-relevant insurance companies which better captures insurance companies' links with the Maltese economy and the financial system (see Box 3). Based on this updated methodology, among the 68 licensed insurance companies in Malta, a total of ten insurance companies were assessed to have important domestic links. The previous four domestically-relevant life insurances were reconfirmed.¹ However, in addition to the five non-life insurance companies previously identified as domestically-relevant, another insurance company has been added to the list, bringing the total domestically-relevant non-life insurers to six. In the first half of 2023, the assets of these ten insurers increased by 2.8% to €3.7 billion, equivalent to 20.5% of GDP.

4.1.1 Domestically-relevant life insurance companies

During the first half of 2023, the domestic life insurance sector exhibited a modest recovery, with the aggregate balance sheet expanding by 1.6% to €3.1 billion, equivalent to 17.3% of GDP. The primary factor behind this improvement was the substantial surge in sovereign bond holdings, which increased by 25.9% (see Chart 4.1). Investments in MGS more than doubled, now comprising over one-third of the sovereign bond portfolio. Corporate bond holdings experienced a comparatively limited increase, up by 1.2%. As a result, the government bond holdings' share in the overall bond portfolio rose by 4.9 percentage points to 68.8%. Meanwhile, the share of corporate bond holdings decreased by an equivalent amount. Rising interest rates carry both opportunities and risks for insurance companies. On the one hand, they stand to benefit as they replace maturing bonds with higher coupon ones, potentially improving profitability in the medium to long term. However, higher interest rates can also decrease the value of their current holdings, leading to lower market prices if they are required to sell before maturity, which may result in reduced overall returns.

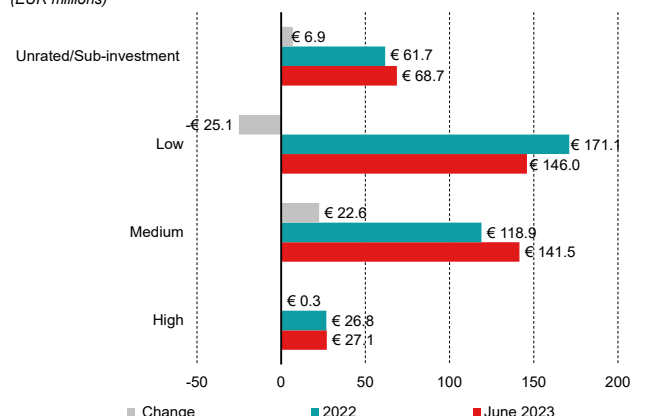
The credit rating of corporate bond portfolios continued to improve as insurance companies offloaded some of their lower investment-grade bonds, part of which, however, were reclassified within unrated/sub-investment category (see Chart 4.2).

Chart 4.1
COMPOSITION OF ASSETS HELD BY THE DOMESTIC LIFE INSURANCE SECTOR
(per cent of total assets)



Source: Central Bank of Malta.
Note: Other assets mainly include deferred tax, property, recoverables and receivables, collateralised securities, structured notes, mortgages and loans.

Chart 4.2
CORPORATE BOND PORTFOLIO – INVESTMENT RATINGS – LIFE INSURANCE SECTOR
(EUR millions)



Source: Central Bank of Malta.

¹ Two of these companies hold composite licenses, allowing them to sell life insurance products, although their life insurance business constitutes just 5% of their total gross written premiums.

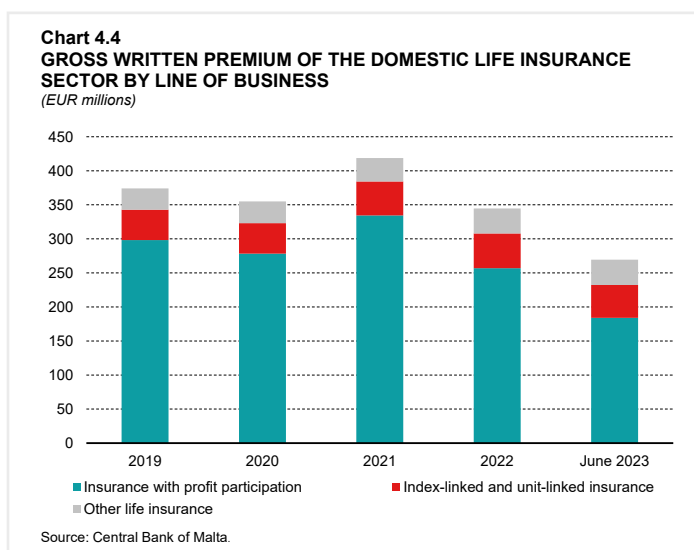
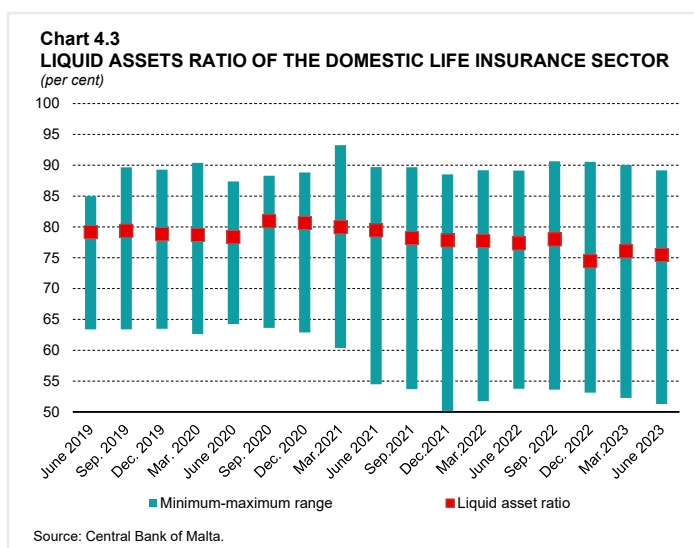
Meanwhile, holdings of medium-rated bonds rose. As a result, by June 2023, high and medium-rated bonds comprised 44.0% of corporate bond portfolios, up from 38.5% in December 2022. Nonetheless, despite decreasing, low and unrated/sub-investment grade corporate bonds maintained a dominant share of the overall corporate bond holdings.

During the first half of 2023, life insurers also increased their participation in Collective Investment Undertakings (CIUs), up by 3.5% to represent 35.5% of overall assets. This mainly reflected higher exposures to euro area debt funds and real estate funds. Conversely, despite the recovery in equity markets, life insurance companies lowered their investments in equities by 10.2%, notably in US NFC equities. Nevertheless, the bulk of their outstanding equity holdings remained concentrated in US and euro area NFCs, with domestic equities accounting for 21.7% of their equity portfolios, primarily consisting of shares in NFCs and banks.

The investment strategies outlined above, particularly the increased investments in government bonds, led to a substantial decrease in cash holdings, which now accounted for only 5.8% of their total assets. This constituted an important share of the decline in resident deposits by financial corporations experienced by core domestic banks as highlighted in Chapter 2. Other asset categories, including loans and real estate holdings, remained limited and relatively stable, comprising less than 5% of their overall assets.

Despite the drop in cash and deposits, the liquidity of the life insurance sector improved. The liquid asset ratio increased by one percentage point to 75.5% (see Chart 4.3), primarily attributed to higher government bonds and CIU holdings. Nonetheless, heterogeneity persisted, with ratios ranging from slightly above 50% to just below 90%.

While the shift from a low-yield environment to one marked by higher interest rates presents opportunities from a treasury management perspective, it also presents fresh challenges for the life insurance sector. In the first half of 2023, gross written premia for life insurers continued to decline, registering a sharp drop of 21.8% compared to December 2022 (see Chart 4.4). This drop can be attributed to the appeal of higher yields in government and corporate bonds, as well as other local financial products offering attractive interest returns. The most significant drop occurred in 'insurance with profit participation' products, where premia decreased by 28.4% compared to December 2022. Consequently, their overall share dropped by 6.2 percentage points, although at 68.3% they still constituted the primary line of business in terms of



premia. Meanwhile, ‘index and unit-linked policies’ also reported a fall of 5.8%, but their share of gross written premia increased by 3.0 percentage points to 17.9%. On the other hand, ‘other life insurance products,’ which include mortgage life insurance, rose by 1.5% to account for 13.8% of gross written premia, reflecting the sustained growth in mortgages.

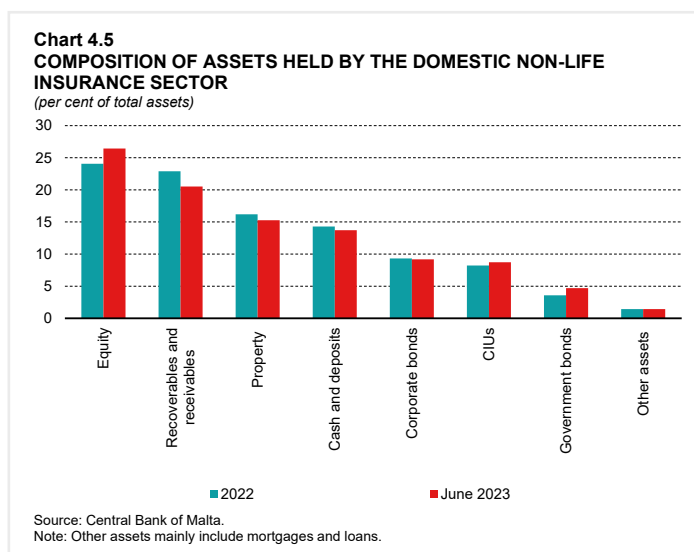
In terms of profits, while individual performance varied, the life insurance sector remained profitable in the first half of 2023. A consolidated analysis of profits developments is currently not feasible due to the different accounting treatments being reported.²

Life insurers maintained strong capital buffers, with an overall Solvency Capital Requirement (SCR) coverage ratio of 226.1%, representing a substantial recovery of 46 percentage points compared to December 2022. Although the improvement was not widespread, all insurers remained adequately capitalised and well above regulatory requirements. Furthermore, the quality of own funds remained robust, primarily composed of Tier 1 capital, which is the highest quality category.³

4.1.2 Domestically-relevant non-life insurance companies

In the first six months of the year, the balance sheet of domestic non-life insurers grew by 1.2% to €571 million, equivalent to 3.2% of GDP. The increase was mainly driven by developments in their equity portfolios, which expanded by 11.2%, mainly reflecting positive valuation effects (see Chart 4.5). This resulted in the non-life insurers’ equity holdings to represent 26.4% of equity portfolios, a 2.4 percentage point increase since December 2022.

Additionally, non-life insurers saw a notable 9.0% increase in their bond portfolios, to account for 13.9% of their overall assets. This growth was mainly driven by increased investments in government bonds, particularly MGS, while corporate bond holdings remained relatively unchanged. Non-life insurers have further increased their holdings of high-rated corporate bonds by 27.1% during the first half of 2023. However, this substantial increase reflected some base effects, considering the still limited holdings, which account for just 9.6% of their overall bond portfolios. There has also been an increase in medium-rated bonds to represent 26.3% of the bond holdings. Conversely, the proportion of corporate bond holdings rated in the lowest investment-grade category or unrated/sub-investment has fallen but remains substantial, accounting for 33.6% and 30.4% of total portfolios, respectively.



² In accordance with the adoption of IFRS 17 Insurance Contracts and IFRS 9 Financial Instruments, effective January 1, 2023, insurance companies initiated the application of these standards for the first time. These standards introduced notable changes in the accounting procedures for insurance, reinsurance contracts and financial instruments. Accordingly, the Quarterly National Specific Templates (QNSTs) and Annual National Specific Templates (ANSTs) underwent revisions to incorporate the adjustments introduced by IFRS 17. These templates serve as the reporting framework used by the Bank for analytical purposes. Given that the effective date of IFRS 17 was January 1, 2023, the MFSA provided Insurance Undertakings the flexibility to utilise the previous IFRS 4 QNSTs until the third quarter of 2023 in the financial year. As of the fourth quarter of 2023 in the financial year, all insurance undertakings are mandated to employ the new IFRS 17 QNSTs for reporting. Source: [Circular on the Reporting Requirements under IFRS 17 - Insurance Contracts \(mfsa.mt\)](#). Nevertheless, certain insurance undertakings opted not to implement the new IFRS 17 QNSTs starting from the first quarter of 2023. This resulted in a discontinuity in the data series for profitability analysis. Consequently, at this juncture, there is a data series break for profitability, and further public analysis is not feasible.

³ The Solvency II Directive stipulates that insurance companies must maintain own funds equal to or exceeding the SCR, thereby establishing a minimum SCR coverage ratio of 100%.

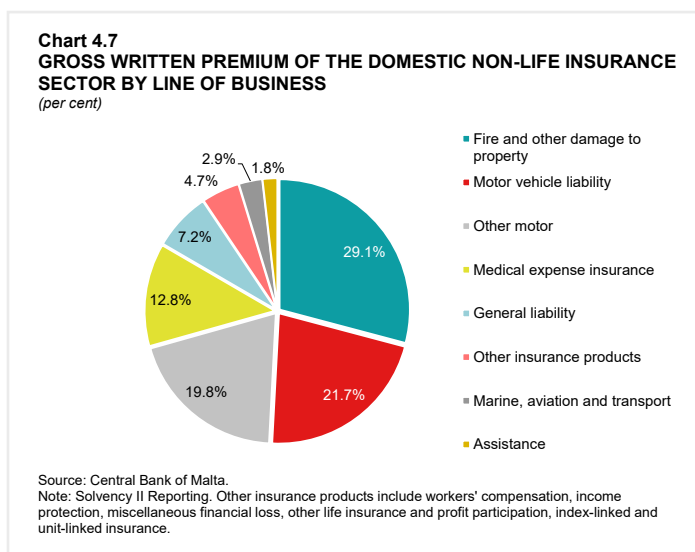
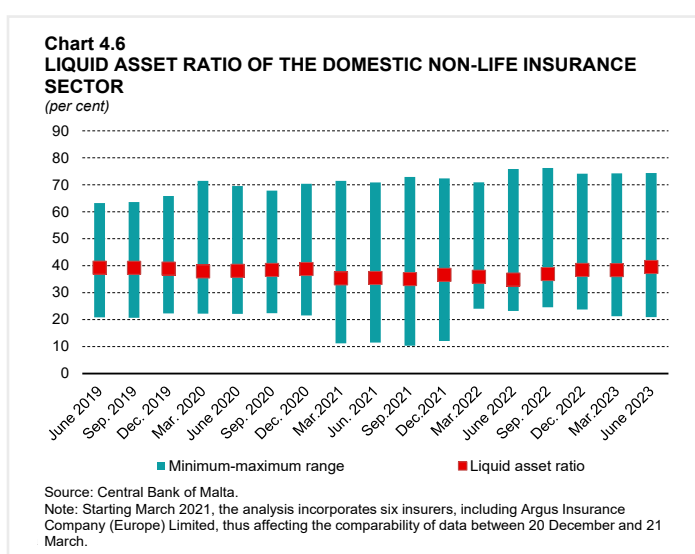
Investments in CIUs increased by 7.4%, representing 8.7% of their assets. In contrast, recoverables and receivables experienced a notable decrease of 9.3%, accounting for 20.5% of assets. Meanwhile, cash and cash equivalents decreased by 2.9% to 13.7% of the total assets, which was also reflected in a drop in resident deposits by financial institutions held in the core domestic banks. In addition, property holdings declined by 4.6%, accounting for 15.3% of the total assets.

In June 2023, the non-life sector recorded a 1.1 percentage point increase in its liquid asset ratio, reaching 39.5%. This increase was primarily driven by the higher holdings of equities, government bonds, and CIUs as discussed above (see Chart 4.6). Although heterogeneity within the non-life sector persisted, it did not result in significant fluctuations during the first half of the year.

The non-life business continued to grow rapidly, with gross written premia increasing by 7.9% by June 2023. This reflected varying degrees of growth across all lines of business, with notable growth in the fire and other property damage segment, marking a 7.8% increase over the six-month period to roughly 30% of gross written premia (see Chart 4.7). Nonetheless, boasting a 7.5% increase, the motor-related category solidified its standing as the primary non-life business segment, representing 41.5% of total written premia.⁴

The non-life insurance sector reported enhanced performance due to reduced gross claims, resulting in an improvement in the payout ratio, which decreased from 48.0% in December 2022 to 39.5% in June 2023. The most significant cutback was observed in the fire and other property damage insurance, primarily driven by reductions in provisions,⁵ leading to approximately a 23 percentage points decrease in its payout ratio (see Chart 4.8). Meanwhile, the motor vehicle liability category still recorded the highest payout, with nearly 60% of the premia being disbursed as claims. However, this reflected an improvement of 8.0 percentage points compared to December 2022.

Non-life insurers, on aggregate, remained profitable during the first half of 2023, although there were significant variations in performance among individual companies. A consolidated profit analysis is not possible for the period assessed

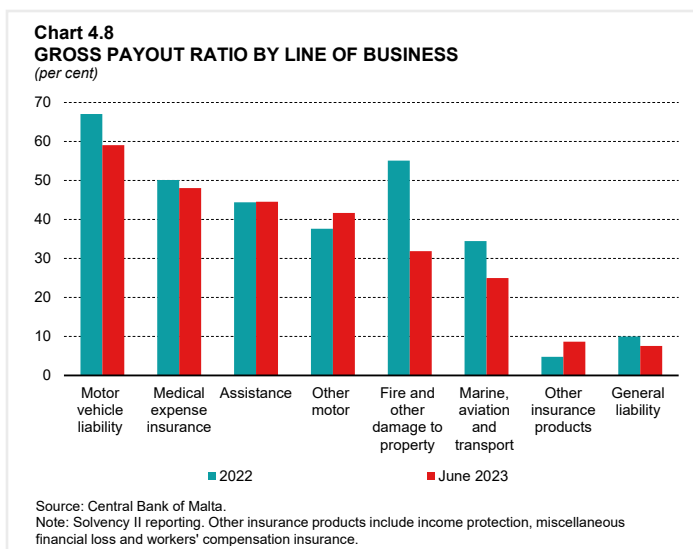


⁴ In this context, the motor-related category includes both motor vehicle liability and other motor lines of business.

⁵ Claims incurred reflect the total of claims paid and changes in provisions for claims throughout the financial year, related to insurance contracts from both direct and reinsurance activities.

given the different accounting treatments being reported.⁶

Non-life insurers maintained a strong capital position, boasting an overall SCR coverage ratio of 230.9%. This however represented a drop of approximately 8 percentage points when compared to December 2022. This was primarily due to SCRs which grew at a faster pace than total eligible own funds. Notwithstanding, this remained significantly above regulatory requirements and continued to reflect high quality of eligible own funds, the majority of which are held in Tier 1 capital.



4.1.3 Risk outlook

In the first six months, insurers exhibited resilience and growth in their balance sheets, driven primarily by improvements in their investment portfolios and favourable valuation effects. This growth was accompanied by strengthened liquidity and robust capital positions. However, potential challenges could be linked to a sustained decline in gross written premia being experienced by the life insurance segment. This decline can be attributed to lower demand, as the shift to a high interest rate environment resulted in policy holders having higher yielding alternative investment opportunities. These alternative investments are expected to persist and may continue to impact premia going forward. While non-life insurers reported a decrease in claims incurred during the first half of the year, attributed in part to reduced provisions, inflationary pressures could potentially raise costs if the number of claims were to increase. In an international economic environment characterised by persistent high inflation, insurers must remain vigilant in risk management while capitalising on growth and profitability opportunities. Notably, as climate-related shocks become more frequent and severe, the potential for sudden economic and financial losses intensifies. Catastrophe insurance is a crucial tool to mitigate such losses. It is thus important for insurers to craft contracts that not only mitigate risks but also encourage adaptation and reduce vulnerability to climate-related catastrophes, all while managing moral hazard. The sector's ability to navigate these complexities will be essential in shaping its future performance.

⁶ Refer to footnote 2.

BOX 3: REVISITING THE METHODOLOGY FOR SELECTING DOMESTICALLY-RELEVANT INSURANCE COMPANIES¹

Insurance companies play a vital role in upholding the stability of financial systems. Their primary business of risk management for both individuals and businesses helps in the effective redistribution of risks, actively contributing to safeguarding financial stability. They are also significant investors in financial markets, while having important links with domestic banks further highlight their importance in the local context. When challenges arise for an insurer, the repercussions could trickle beyond their policyholders and could affect financial markets due to their investment actions. Similarly, they could negatively impact banks and other financial institutions through direct and indirect linkages. This underscores the importance of robust macroprudential oversight of insurance companies.²

Malta has positioned itself as an attractive destination for insurance companies, granting them direct entry to the EU internal market and pioneering innovative legislative frameworks, such as the possibility to have protected and incorporated cell companies. As at end June 2023, Malta hosted a total of 68 insurance companies, comprising 52 non-life insurers, ten specializing in life insurance, four in reinsurance, and two operating as composite insurers. Most of these entities' operations are focused overseas, with only a few oriented towards the domestic market. Given this landscape, it is essential for the Bank to determine the domestic relevance of these insurance companies. This assessment is crucial for implementing a risk-based approach to monitor sectoral developments and identify potential systemic risks to domestic financial stability.

Previous methodology

In 2011, the Central Bank of Malta published a methodology that utilised the following four indicators for the identification of domestically-relevant insurance companies:³

- Indicator 1: Whether the institution is a subsidiary of a core domestic bank;
- Indicator 2: The amount of domestic investment assets held;
- Indicator 3: Gross premia written for risks situated in Malta;
- Indicator 4: Gross claims paid for risks situated in Malta.

The scoring methodology is aimed at assigning a quantitative value to each indicator, and thereby distinguishing between domestically-relevant insurance companies and others. For Indicator 1, a binary value of 1 indicated ownership by a core domestic bank, while a value of 0 indicated otherwise. For Indicators 2-4, the insurer with the highest value in each category received a score of 1, while other scores were scaled proportionally, based on their respective values. As a result, all indicator values were constrained within a range of 0 to 1, providing a normalized basis for comparison. The maximum attainable composite score stood at 4, signifying the highest level of alignment with the evaluated criteria. This approach was employed separately for life and non-life insurers. The composite score was subsequently derived through the summation of the scores across each respective indicator, resulting in a comprehensive assessment of the insurer's performance in the defined indicators.

Revised methodology

While the new methodology maintains its foundation as an indicator-based approach, the first two indicators have been updated to capture the links with the domestic economy more effectively. This

¹ Prepared by Ms Luana Camilleri, Officer II within the Financial Stability Surveillance and Research Department. The author extends her gratitude to Mr Andrew Spiteri, Manager Financial Stability Surveillance Office, and Ms Wendy Zammit, Head of the Department within the Financial Stability Surveillance and Research Department, for their invaluable suggestions.

² European Central Bank Financial Stability Review 2009. [The Importance of Insurance Companies for Financial Stability](#).

³ Central Bank of Malta Financial Stability Report 2011. [Special feature: Methodology to categorise institutions for financial stability purposes](#).

is outlined as follows:

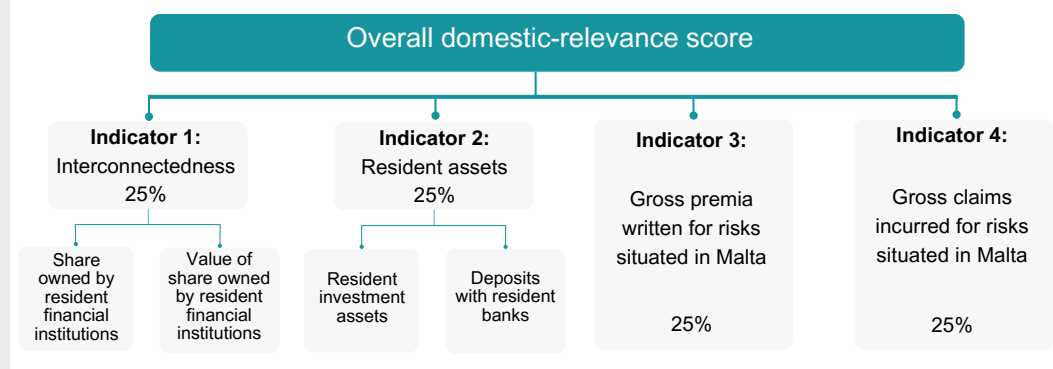
- Indicator 1: Interconnectedness between the insurers and other domestic financial institutions;
- Indicator 2: The amount of domestic investment assets and bank deposits held;
- Indicator 3: Gross premia written for risks situated in Malta;
- Indicator 4: Gross claims incurred for risks situated in Malta.

Indicator 1 is a comprehensive measure of interconnectedness with two primary components. The first component evaluates the extent to which resident financial institutions are investors or equity holders in the insurer. This component seeks to determine the share of ownership in each insurance company by resident financial institutions. The second component also considers the size of each insurance company, specifically focusing on the total value of equity issued and the proportion of it held by resident financial institutions. This aspect allows for assessing the potential ramifications in investment terms. These two equally weighted components are then combined to form a single indicator, which carries a weight of 25%, consistent with the weighting applied to the other indicators in this methodology (see Figure 1).

Indicator 2 is also now composed of two sub-components. In line with the previous methodology, the first sub-component considers holdings of resident investment assets. The second also accounts for links through deposits with domestic banks. Indicators 3 and 4 remained the same, looking at the gross premia written, and claims incurred for risks situated in Malta. For Indicators 2-4, each insurance company's specific indicator is divided by the total value of the respective category. For instance, the domestic gross written premia of each life insurance company are divided by the total value of gross written premia across all life insurers. The scores are then combined to calculate the overall score for each insurer. Moreover, to mitigate the risk of over-reliance on a single indicator, expert judgement is used to identify insurers as domestically-relevant when a minimum of two out of four indicators indicate important domestic ties.

This updated methodology improves our assessment of interconnectedness of the insurance sector by also evaluating its ownership and size (Indicator 1), and by introducing additional links within the assets side through the holdings of deposits in domestic banks (Indicator 2). The implementation of this methodology thus aims to improve the accuracy of the overall score in reflecting an insurer's market share within the entire sector. This improvement is achieved by assessing each insurer's indicator in relation to the total value within each specific category, rather than solely comparing them

Figure 1
CLASSIFICATION OF INSURERS – INDICATORS AND WEIGHTING



to the largest insurance company. This approach also closely aligns with the methodology applied for classifying banks, a framework that underwent its latest update in the *Financial Stability Report* of 2020.⁴ The methodology is applied separately to the different categories of insurers, including life and non-life.

Results

Based on the newly adopted methodology, the previously selected list of domestically-relevant insurance companies was reaffirmed. These companies hold the most significant linkages with the domestic economy. This includes four life insurance companies previously identified as domestically-relevant. However, within the non-life business, Argus Insurance Company (Europe) Limited was observed to have important ties with the Maltese economy, and thus was included within the list of domestically-relevant non-life insurance companies. Table 1 shows the revised list of domestically-relevant insurers by their respective lines of business, which will apply as from this edition of the *Financial Stability Report*.

Table 1
DOMESTICALLY-RELEVANT INSURANCE COMPANIES

Life Insurance Companies	Non-life Insurance Companies⁽¹⁾
HSBC Life Assurance (Malta) Limited	Argus Insurance Company (Europe) Limited
IVALIFE Insurance Limited	Atlas Insurance PCC Limited
LifeStar Insurance plc	Citadel Insurance plc
MAPFRE MSV Life plc	Elmo Insurance Limited
	Gasamamo Insurance Limited
	MAPRE Middlesea plc

⁽¹⁾ Citadel Insurance plc and MAPFRE Middlesea plc are composite insurers with licenses for both life and non-life insurance, but life insurance makes up only a small part of their total gross written premia.

⁴ Central Bank of Malta Financial Stability Report (2020). [The Categorisation of Banks According to Domestic Relevance](#).

4.2 Domestically-relevant investment funds

In the first half of 2023, the number of domestically-relevant sub-funds remained unchanged, with 36 licensed as retail Undertakings for the Collective Investment in Transferable Securities (UCITS) and one as a Professional Investor Fund. During this period, their overall assets rose by just half a percentage point, following a period of over 18 months of declines. Standing at €1.5 billion, the total assets represented 8.4% of GDP.

Although the news of failing US banks and the takeover of another European bank rocked capital markets, the fallout was short-lived such that the equity market recorded significant gains as evidenced by both the Euro Stoxx 600 and the S&P 500 (see Chapter 1). Similarly, euro area corporate and sovereign bond indices posted gains of just under 2% throughout the period, following the significant losses reported in 2022 (see Chart 4.9). Such developments also reflected the pricing in by the market of prospective rate moves by major central banks, amid unusually low volatility. As a result, European investment funds recorded positive results in the first half of the year.

In line with the above developments, equity funds, which represented 14.2% of the domestically-relevant investment funds' overall assets, registered the largest increase in terms of assets, rising by 10.2% during the first two quarters of 2023 (see Charts 4.10 and 4.11). The positive result was also followed by an increase in assets of 4.6% in other strategy funds, and a 2.6% growth in mixed funds, to stand at 13.1% and 6.8% of the overall portfolio assets, respectively. Meanwhile, the 15 bond funds which accounted for

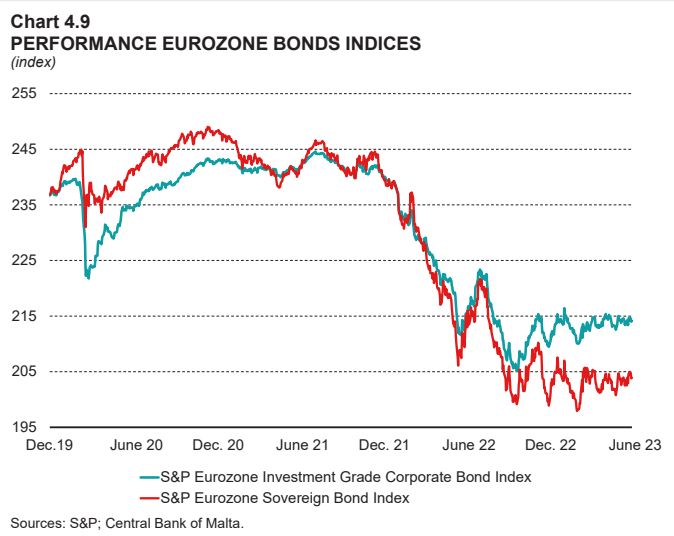


Chart 4.10
DOMESTIC INVESTMENT FUNDS BY MAIN STRATEGY AS AT JUNE 2023
(per cent)

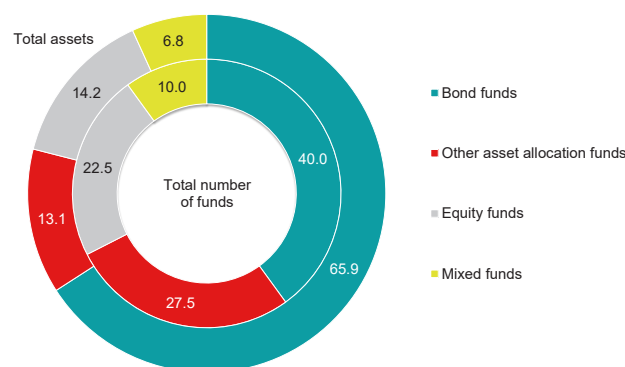
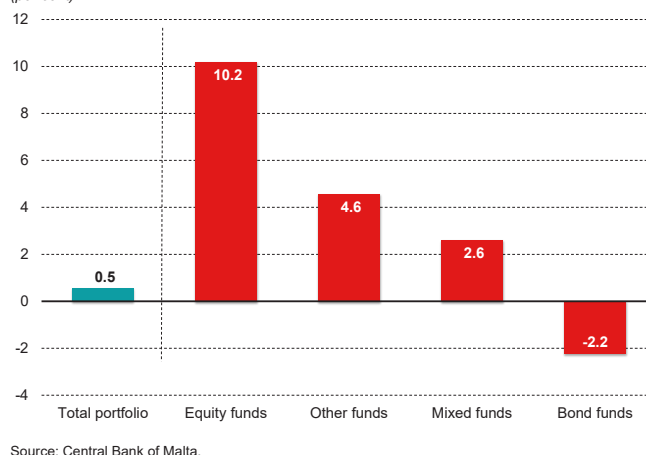


Chart 4.11
CHANGES IN OVERALL ASSETS BY MAIN STRATEGY
(per cent)



about 66% of the overall assets, contracted by a further 2.2%, mainly due to redemptions by one large bond fund.

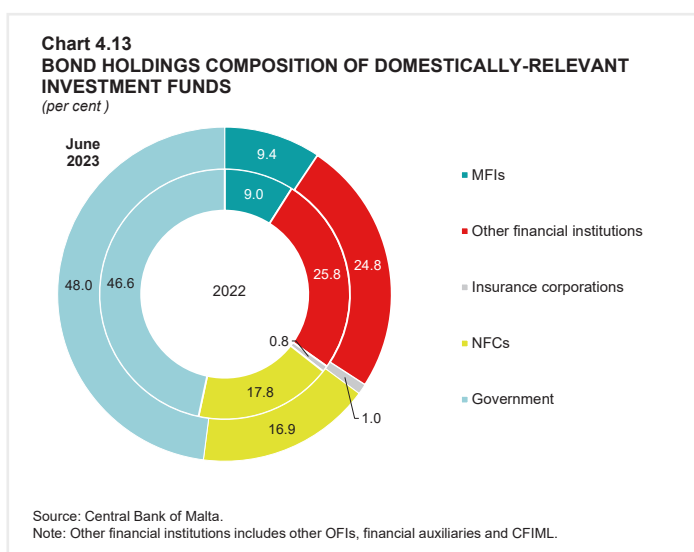
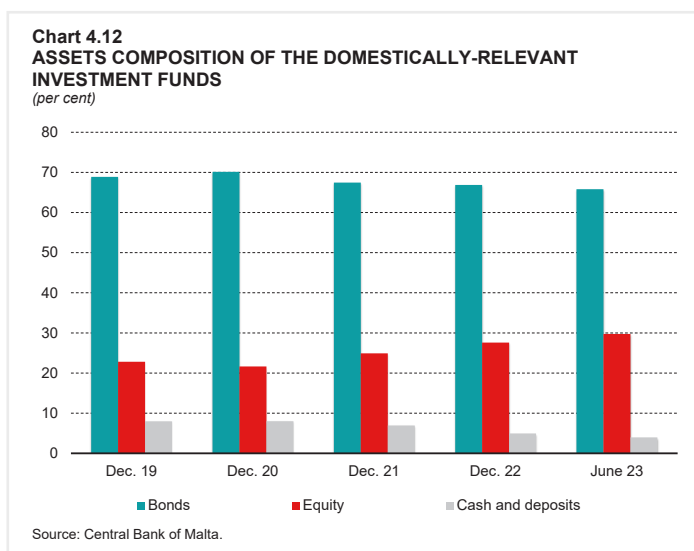
4.2.1 Asset composition and investment strategies

The overall portfolio for domestically-relevant investment funds remained largely allocated into debt instruments, which by June 2023 accounted for almost two-thirds of the overall assets (see Chart 4.12). Since December 2020, bond holdings contracted by 21.1%, with their share narrowing by 4.3 percentage points, in part due to rise in bond yields since 2022. Such a drop was mainly experienced during 2022, albeit bonds also fell marginally by around 1% in the first half of 2023. These developments prompted fund managers toward a higher equity exposure. Indeed, during the first half of the year, equity holdings increased by 2.2 percentage points to about 30% of overall assets. Meanwhile, cash and deposits dropped by 1.0 percentage point, standing at 4.0% of overall assets (see Section 4.2.3).

Sovereign bonds remained the largest component in bond portfolios, rising by 1.9% to represent 48.0% of the overall bond portfolio (see Chart 4.13). The increase was mainly driven by the recovery in market prices of some government securities. Holdings of euro area government bonds nearly doubled to almost 10% of the overall share, as otherwise holdings of US sovereign bonds remained more contained at just 3.2% of the overall assets. Meanwhile, MGS holdings fell 3.4% reflecting the maturity of some bonds and the liquidation of other long-term holdings. Nevertheless, these continued to represent the bulk of sovereign bonds, accounting for 80.8% of the overall share of sovereign bonds.

Holdings of corporate bonds declined by 5.8% to about 17% of the bond portfolios. Domestic corporate bonds accounted for only a third of NFC bonds with the rest skewed towards corporates in other euro-area countries and the US.

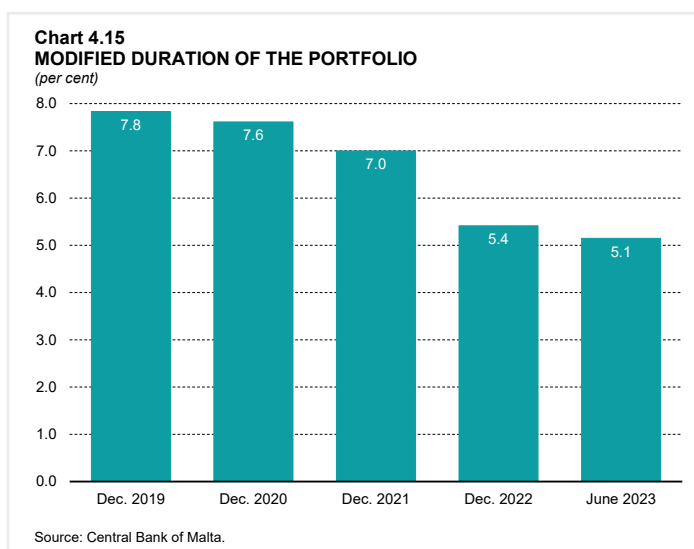
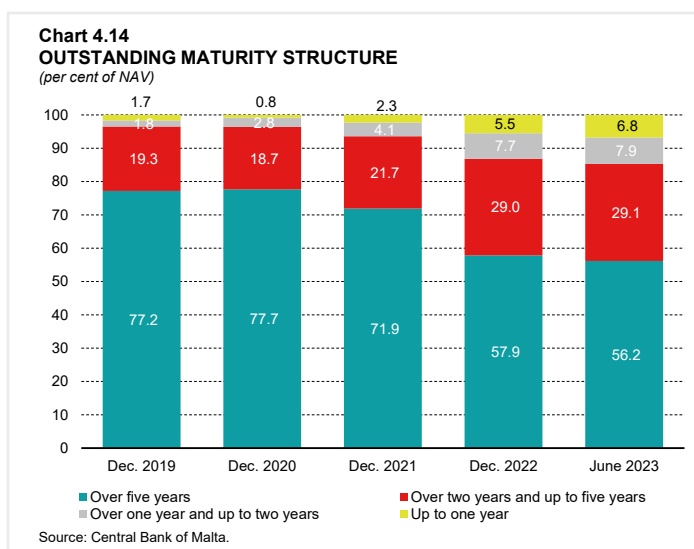
Financial corporate bonds also declined by 2.2%, although their aggregate share remained relatively stable at 35.1%. While holdings of other financial institutions fell by 4.9%, bonds issued by monetary financial institutions (MFIs) rose by 3.1%, driven exclusively by the increase in the exposure towards domestic banks, which represented just above half of such holdings. Meanwhile, investment in insurance companies remained limited, standing at around 1% of the bond portfolio, and entirely allocated towards



foreign institutions, largely in other euro area countries.

On aggregate, the bond portfolio remained biased towards domestic exposures, which represented approximately 60% of debt securities, largely reflecting the investment in MGS. Meanwhile, around 18% of the bonds were exposures to other euro area countries, with the remaining share representing bonds issued by entities based outside the euro area, largely dominated by US bonds.

Fund managers continued to naturally hedge against interest rate volatility by maintaining a smaller share of long-dated bonds, although such change mainly took place in 2022, with the modifications in the maturity structure of the bond portfolios slowing down during the first half of 2023 (see Chart 4.14). The share of long-term bonds with an outstanding maturity of over five years fell further to 56.2%, while that of bonds maturing between two and five years remained relatively stable at 29.1%. In contrast, shorter-dated bonds rose by 21.8% for a combined share of 14.7%, with the majority maturing within one year. As a result, the estimates for the modified duration⁷ fell further to 5.1% by June 23 (see Chart 4.15).



Equity holdings rose by 8.8% in the first half of 2023, reflecting both increased holdings and price gains, largely of stocks issued by NFCs, which rose by 11.2%, reaching 30.0% of the overall equity holdings (see Chart 4.16). Despite the fallout earlier in the year, bank equities rose by 18.4%, with their share in the overall equity portfolio increasing by 1.2 percentage points to 14.5%. Meanwhile, holdings of stocks of other financial institutions remained relatively stable, which drove the share down to only 6.8% of the overall equity. Although stocks of insurance corporations rose by 9%, these remained limited to just 2.1% of the portfolio.

Although participation in non-MMF investment funds increased by 6.4%, their share on overall equity holdings fell by 0.2 percentage point to 46.7%. While classified as equity exposure, it is important to highlight that exposure to non-MMF investment funds incorporates a variety of investments, including bonds. Indeed, anecdotal evidence indicates that more than one third of such funds are bond funds, primarily euro area-based funds, resulting also in a significant correlation to fixed income security markets.

⁷ The modified duration is a financial metric to measure the bond's price sensitivity to a 1% change in interest rates. Meaning, that a given 100-basis-point movement in yield, a security with a Modified Duration of 5.1, would inversely move in price-by-price by 5.1%.

In terms of geographic exposure, just over half of the equities were issued by other euro area entities. Meanwhile, holdings of domestic equities fell by 17.7%, driven by the lower exposure of NFCs and banks, resulting in the share of overall equities to drop by 7.2 percentage points to 22.3%. In contrast, equity holdings of entities based outside the euro area more than doubled, with its share of overall equities increasing by 7.2 percentage points to 27.5%. This largely reflected the growth in US bank shares as well as US non-MMF investment funds. This resulted in the exposure to the US to expand by 5.3 percentage points, to about 12.1% of the overall equities. Furthermore, the exposure to other countries also strengthened, reaching around 15.4% of the overall equity holdings.

4.2.2 Investors

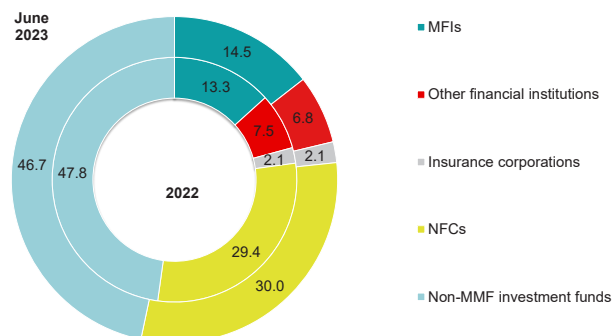
Although participation by Maltese households declined marginally, they remained the principal investors in domestically-relevant sub-funds accounting for 55.2% of the total NAV (see Chart 4.17). Following the significant increase in investment by Maltese OFIs in recent years, this remained relatively stable in the first half of 2023, to represent the second largest segment of investors at 23.9% of the overall NAV. Participations by other investors such as insurance firms, banks, investment funds, and foreigner investors also remained relatively stable, with their share accounting for a small part of the overall NAV.

4.2.3 Liquidity and leverage

During the first half of 2023, the overall liquidity ratio of domestically-relevant investment funds hovered around the historical average of 71.4%. Despite the decrease in cash, funds' liquidity remained sustained, as the portfolios mainly consisted of high-rated sovereign debt and equities. Nevertheless, some element of risk exists as the level of cash and deposits reached the lowest level since 2016.⁸ At 4.0% of assets, these were over 4 percentage points below the five-year average, in part also reflected in the outflow of deposits by core domestic banks. Such low levels may pose some challenges in case of a sudden increase in redemptions, leading to possible fire sales. However, of note is that as the result of a recovery in markets, redemptions declined, to about 4.8% of the NAV. This is lower than the average of 5.7% registered between 2017 and 2021, whereby the anticipation of tighter financial conditions resulted in a spike in redemptions, reaching an all-time high of nearly 10% of the NAV by June 2022.

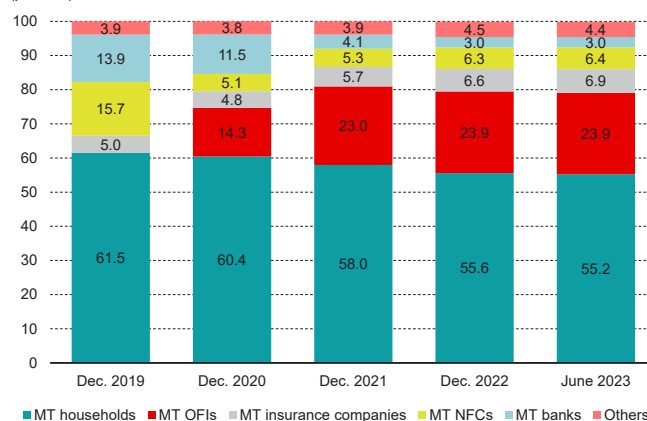
⁸ 2016 reflects the first data availability for such analysis.

Chart 4.16
EQUITY HOLDINGS COMPOSITION OF DOMESTICALLY-RELEVANT INVESTMENT FUNDS



Source: Central Bank of Malta
Note: Other financial institutions includes OFIs, financial auxiliaries and captive financial institutions and money lenders.

Chart 4.17
DOMESTIC INVESTMENT FUND'S NAV BY COUNTERPART
(per cent)



Source: Central Bank of Malta.

Meanwhile, leverage of domestically-relevant sub-funds remained limited with the AUM-to-NAV ratio standing at 100.5%, marginally higher than the 100.3% registered on the end of 2022. This is partly because most of them are licensed and regulated under the UCITS Directive.⁹

4.2.4 Risk outlook

During the first six months of 2023, the overall positive result observed was because of a more stable, albeit still weak, economic environment, and a rapid recovery in financial markets following the stress in the US banking sector. As a result, both equity and bond prices registered gains from the losses experienced in the previous year. However, as monetary policy tightening works with a lag, and given a more challenging macroeconomic backdrop, this may give rise to a further reassessment of already-compressed risk premia.

Any potential risk regarding liquidity and capability of meeting redemptions remained relatively contained for domestically-relevant investment funds as they continued to operate with low leverage rates and high liquidity levels. Nonetheless, the lower level of cash and deposits reported highlights the need for sub-funds to replenish these going forward to ensure their continued ability to meet redemptions. However, in the event of significant market distress, several liquidity management tools (LMTs) such as redemption gates and fees are available for most of the funds to mitigate runs and exit positions at increasingly unfavourable prices.

The strategies largely adopted in 2022 of reducing the exposure to interest rate volatility through a lower modified duration, and a reduction of fixed-income securities with longer term maturities, contributed to a less sharp drop in the assets value. This was particularly the case for bond funds in the first half of 2023, and to lower interest rate risk going forward. However, fund managers are likely to reduce the pace of reduction in the modified duration, as seen by the more moderate decrease between December 2022 and June 2023 (see Chart 4.15). Parallel to that, sub-funds may continue to enhance their exposure towards foreign equities, mainly due to their positive performance registered in the first half of 2023, despite the still uncertain economic outlook, with the increased risk of recession in some EU countries.

With respect to interconnectedness with the domestic financial system, around 15% of the total assets were allocated towards domestic financial and insurance activities. Most of these bonds and equities were issued by the core domestic banks. A structural connection between domestically-relevant investment funds and core domestic banks lies in the fact that most of these sub-funds are managed by asset management companies owned by these banks. Additionally, these domestic banks hold some investments in the domestically-relevant sub-funds, but these are limited to approximately 3% of the NAV. Therefore, while potential losses by the domestically-relevant sub-funds may impact bank's profitability, this is perceived to be limited. Furthermore, such companies are set up as separate legal entities, subject to the provisions of the Maltese Companies Act and the Investment Services Act.

⁹ [UCITS Directive Article 83](#) restricts borrowing for retail to up to 10% of their assets and only on a temporary basis.