

2025 Stress Testing of Maltese Insurance Undertakings

Application of the 2024 EIOPA Insurance Stress Test Narrative to the Maltese Insurance Industry

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Executive Summary

The Financial Stability Function conducted the 2025 Insurance Stress Test (IST-2025) to evaluate the resilience of Maltese insurance and reinsurance undertakings under a severe yet plausible adverse macro-financial scenario. The exercise applies, in a fully top-down manner, the narrative and calibrations of the European Insurance and Occupational Pensions Authority (EIOPA) 2024 Insurance Stress Test to the Maltese market, using Solvency II Quantitative Reporting Templates as at year-end 2024. **The scenario reflects a re-intensification of geopolitical tensions and persistent supply-side pressures**, leading to subdued growth, an inverted yield curve with short-term rates rising more than long-term rates, widening credit spreads, significant equity and commercial real estate corrections, and inflation-driven increases in claims and operating expenses. A total of 64 insurance undertakings¹ were included in this exercise.

Under the adverse scenario, the aggregate balance sheet of Maltese undertakings is projected to contract by around 7%, largely driven by an estimated 13% decline in investment portfolios. Bonds, the largest asset class, are expected to register the largest losses, followed by unit-linked and index-linked assets, collective investment undertakings and equities. **Total liabilities are expected to increase by approximately 5%, primarily reflecting higher technical provisions due to inflationary pressures on claims and expense**, with health business showing notable increases. These upward pressures are partially offset by reductions in market-sensitive life insurance provisions.

The capital assessment, centred on the Minimum Capital Requirement (MCR) to ensure robustness under a top-down approach, indicates a material erosion of eligible own funds and only modest changes in requirements. Eligible own funds to meet the MCR decline by 28% reflecting the combined effect of asset valuation losses and liability increases. The aggregate MCR remains stable, as many undertakings' linear MCR continues to be constrained by the regulatory floor or cap. **The median MCR coverage ratio drops by 48 percentage points, from 420% under the baseline to 371% in the stressed scenario.** Despite experiencing the sharpest deterioration in capital, consistent with the greater exposure to market-linked portfolios and market-sensitive liabilities, life insurers would nevertheless remain in a very solid position, with the median MCR coverage ratio staying well above 328%.

Liquidity positions remain broadly sound at the sector level, notwithstanding significant stress-induced outflows. The net liquidity position is projected to decline by 42%, reflecting lower premium inflows, higher claims and operating expenses, and the impact of mass lapse assumptions on surrender outflows. At the aggregate level,

¹ The exercise includes the insurance undertakings for which complete data was available at the reference date of the analysis.

the liquidity sustainability indicator (which comprises net flows, cash and equivalents and other liquid assets after haircuts) demonstrates sufficient sector wide capacity to meet short term obligations. The liquid asset ratio, after haircuts, remains relatively stable, attributed to the predominance of high-quality debt instruments.

Results by insurer type reveal differentiated transmission channels. Life undertakings experience a larger median asset contraction, but benefit from offsetting declines in certain liabilities, while non-life undertakings show more contained asset effects and greater liability pressure from inflation, particularly for longer-tail business. This heterogeneity underscores the importance of looking beyond investment losses to the inflationary and interest-rate dynamics affecting technical provisions.

Overall, the Maltese insurance sector demonstrates resilience to a severe macro-financial shock, with capital and liquidity buffers generally sufficient to absorb sizeable market and inflation stresses. Nevertheless, vulnerabilities are present among smaller and more concentrated undertakings and in segments with pronounced market-linkages, warranting continued supervisory engagement. The MFSA will integrate the findings of IST-2025 into its regular macroprudential monitoring and supervisory priorities, and will pursue further methodological enhancements, particularly on liability modelling granularity and liquidity flow measurement, to strengthen future stress-testing exercises and the sector's preparedness for adverse scenarios.

Introduction

Stress testing has become an indispensable supervisory instrument for financial regulators worldwide. Its primary purpose is to identify potential vulnerabilities within the financial system, evaluate systemic risks, and design targeted policy measures aimed at strengthening overall stability and resilience. Within the European context, the European Insurance and Occupational Pensions Authority (EIOPA) play a central role in this process by conducting regular stress tests to assess the robustness of the insurance sector under severe yet plausible adverse financial and economic conditions.

In Malta, the Financial Stability function within the Malta Financial Services Authority (MFSA) has embraced this approach to ensure that the resident insurance sector remains resilient in the face of market and macroeconomic shocks. The MFSA first undertook an insurance sector stress test in 2021 (IST-2021), marking a significant step toward proactive risk management.

In response to the ongoing geopolitical fragmentation and the heightened macroeconomic uncertainty surrounding it, the Financial Stability function at the MFSA decided to conduct a new stress testing exercise in 2025 ('IST-2025'), using December 2024 as the reference date. The scenario design for IST-2025 draws continuity from the EIOPA 2024 Insurance Stress Test ('EIOPA 2024 IST'). That exercise focused on the economic repercussions of a re-intensification or prolonged duration of geopolitical tensions, a theme that remains highly relevant given the current global environment marked by trade barriers, political instability, and heightened tensions in the Middle East, particularly with regard to energy markets.

IST-2025 introduced two key methodological enhancements relative to IST-2021: an expanded scope covering all licensed insurance and reinsurance undertakings in Malta, and the adoption of EIOPA 2024 IST's predefined scenarios instead of internally calibrated shocks, improving consistency and alignment with the EU supervisory framework. This initiative aimed to assess their resilience in terms of capital and liquidity under adverse conditions, while also enabling benchmarking against European peers.

A key methodological difference between IST-2025 and the EIOPA 2024 IST concerns the implementation approach. While the EIOPA exercise required insurers to apply prescribed shocks using standardized methodologies and reporting templates, the Financial Stability function adopted a fully top-down approach for IST-2025, relying exclusively on existing Solvency II supervisory data to avoid additional reporting burdens.

The top-down approach also entails limitations, as it relies on assumptions and approximations in the absence of entity-specific inputs. To mitigate the impact of these assumptions and enhance robustness, the analysis focused on the Minimum Capital Requirement (MCR) rather than the more model-sensitive Solvency Capital Requirement (SCR). While this approach cannot capture potential management

actions, such as portfolio rebalancing or capital injections, it remains a valuable and efficient supervisory tool for assessing systemic vulnerabilities in a consistent manner.

The EIOPA 2024 IST examines the economic impact of a renewed or prolonged escalation of geopolitical tensions. The scenario foresees renewed supply chain disruptions, leading to weaker growth and elevated inflation, amplified by second-round effects such as a wage-price spiral and a reassessment of interest-rate expectations. The resulting macro-financial environment features an inverted yield curve, widening credit spreads, reduced corporate profitability, declining asset prices, and tighter financing conditions, alongside heterogeneous increases in government bond yields.

The calibration of both market and insurance-specific shocks within this framework ensures a comprehensive assessment of insurers' balance sheets, rigorously testing both asset and liability components under severe but plausible conditions. Liquidity flows are also stress-tested to evaluate insurers' ability to meet obligations in a deteriorating financial landscape.

Methodology

The insurance stress test conducted in this exercise adopts a strictly top-down approach. To minimise the reporting burden on supervised entities, the analysis relies exclusively on data already submitted through the Solvency II Quantitative Reporting Templates (QRTs)².

The EIOPA adverse scenario and corresponding methodology are applied through the following steps:

- 1) Application of shocks to asset-side instruments:** Market shocks are applied to the financial instruments reported on the asset side of the undertakings' balance sheets.
- 2) Revaluation of projected future cash flows:** Future cash flows are subjected to stress conditions and re-discounted to reflect their present value under the stressed environment.
- 3) Recalculation of technical provisions:** Technical provisions are recalculated at a granular level, segmented by line of business, to capture the impact of the shocks on insurance liabilities.
- 4) Balance sheet recomposition:** A full revaluation of the balance sheet is undertaken, incorporating shocks to both asset and liability sides.
- 5) Estimation of capital metrics:** The Minimum Capital Requirement (MCR), eligible own funds, and the corresponding coverage ratio are recalculated to assess the new solvency position.
- 6) Liquidity risk assessment:** The liquidity profiles of the undertakings are reassessed to evaluate their capacity to meet short-term obligations under stressed market conditions.

1. Shocks to the Asset Side

EIOPA and the ESRB translated the scenario of renewed or prolonged geopolitical tensions into a coherent set of market and insurance-specific shocks. The scenario assumes supply chain disruptions, subdued growth, and persistent inflation, reinforced by second-round effects that push up short-term interest rates and deepen the yield-curve inversion. Weak growth and higher rates would erode corporate profitability, increase credit risk, and widen credit spreads.

Elevated risk-free rates would keep government bond yields high, tightening public and private financing conditions and raising concerns about sovereign debt sustainability. Households would face higher borrowing costs and unemployment, leading to mortgage defaults and falling real estate prices. Rising rates would also trigger a

² The list of the QRT templates used to map the methodological requirements set out by EIOPA are listed in Appendix 1.

disorderly repricing of commercial real estate, with spillovers to structured finance markets, while financial markets would experience higher volatility, falling equity valuations, liquidity stress in funds, and rising commodity prices³.

This scenario resulted in the shocks described in Appendix 2. Such shocks are then applied to all the instruments on the assets side reported by the undertakings, translating each shock in monetary terms based on each instruments' Complementary Identification Code (CIC)⁴.

Since the returns submitted by insurance undertakings lacks sufficient granularity to support a full look-through of investment funds, supplementary data on CIU strategies and underlying holdings are obtained where available. For CIUs classified as money market funds, a 3% shock is applied, representing a reasonable upper-bound loss threshold based on the results of the ESMA MMF Stress Test⁵. For all other CIUs, shocks are derived by aggregating the shocks applied at the level of the funds' individual holdings. These underlying assets are subjected to the market shocks prescribed by EIOPA's stress scenario narrative, with the aim of maximizing coverage across each CIU's total asset base.

For any residual portions of CIUs where look-through data is unavailable, a conservative proxy shock of 49% is applied. This ensures a prudent treatment of exposures not otherwise captured in the look-through analysis⁶.

2. Shocks to Future Cash Flows

The computation of the present value of insurers' future cash flows is influenced by two opposing effects. Elevated inflation increases projected claims, particularly in non-life and health lines, and raises operating expenses across both life and non-life business. Conversely, higher swap rates translate into increased risk-free discount rates, which reduce the present value of future cash outflows and partially offset the inflation-driven rise in liabilities. EIOPA calibrated both excess claims and expense inflation within this framework.

For the IST-2025, the shocked risk-free rate curve is constructed by applying the same shocks derived in the EIOPA 2024 IST to the updated December 2024 risk-free rate

³ Further information can be found at the INSURANCE STRESS TEST 2024 TECHNICAL SPECIFICATIONS

⁴ Further detail in Appendix 3.

⁵ ESMA 2023. Stress testing MMFs in the EU – First evidence from fund reporting. https://www.esma.europa.eu/sites/default/files/2023-07/ESMA60-1389274163-2560_TRV_risk_analysis_article_-_MMF_stress_tests.pdf

⁶ The EIOPA Narrative prescribes, for Hedge Funds, REIT, and Private Equity Funds shocks which vary between 47% to 65%. Hence, 49%, which is the shock identified for global hedge fund, is deemed a reasonable compromise.

curve, which serves as the baseline. The most pronounced deviations occur at the short end of the curve, reflecting heightened near-term uncertainty.

3. Technical Provisions

Incorporating the effects of excess inflation on both claims and expenses, along with the revised risk-free rate curves, enables the re-estimation of technical provisions under the stressed scenario.

For life insurance cash flows, the following shocks are applied to the undiscounted future cash flows:

- Cumulative excess expense inflation for all future expenses and other cash outflows
- Cumulative excess claims inflation for future guaranteed benefits and future discretionary benefits (Health Insurance and Reinsurance)
- A shock proportional to the loss in the investment portfolio, excluding index-linked and unit-linked (IL-UL) products and shareholder funds, affecting future discretionary benefits (Insurance with profit participation).
- A shock proportional to the loss in the IL-UL portfolio impacting future guaranteed and discretionary benefits (Index-linked and unit-linked insurance).

For the Non-Life cash flows, the following shocks are applied to the undiscounted future cash flows:

- Cumulative excess expense inflation for all future expenses and other cash outflows
- Cumulative excess expense inflation affecting all future benefits

EIOPA prescribes an instantaneous lapse shock equivalent to a temporary discontinuance of 20% of non-mandatory life policies, assumed to have no asset-side impact for capital purposes. In the top-down exercise, this is modelled as a 20% reduction in premium inflows from with-profit and index- or unit-linked policies in the first projection year, reflecting delayed policyholder payments that are assumed to fully resume after one year.

Finally, cash flows recoverable from reinsurance on non-life or health policies are adjusted by the cumulative excess claim inflation, under the assumption that insurers will be able to partially pass these additional costs on to their reinsurers.

Shocked cash flows are discounted using stressed risk-free curves to derive revised best estimates of technical provisions and reinsurance recoverables. Calculations are performed at a granular level to accurately capture shock impacts and enable a consistent re-calculation of the MCR. Changes are then expressed as percentage differences between the present value of shocked cash flows discounted at stressed rates and that of baseline cash flows discounted at baseline rates, ensuring internal consistency where baseline present values may differ from QRT-reported figures.

4. Balance Sheet Reassessment

After applying shocks to assets and future cash flows, each insurer's balance sheet is recalculated to reflect the stressed scenario. Asset-side shocks are aggregated by CIC to derive loss rates, which are then applied to the relevant balance-sheet categories, including property held for own use, all investment sub-components, index- and unit-linked assets, and loans and mortgages.

Additionally, reinsurance recoverables are recalculated as the present value of future reinsurance cash inflows discounted using stressed risk-free curves. Owing to limited granularity in the solvency templates, a uniform proportional shock—derived from the aggregate impact—is applied to both non-life (excluding health) and health (similar to non-life) reinsurance recoverables. All other asset-side items are assumed to remain unchanged under stress.

On the liabilities side, adjustments are limited to technical provisions. Best estimates are recalculated to reflect changes in the present value of future cash flows under the stressed scenario, while the risk margin is updated using a simplified approach allowed under EIOPA specifications, whereby it is assumed to remain a constant percentage of the corresponding best estimate. In the few cases where technical provisions are reported as a whole, and these are exclusively related to index-linked and unit-linked business, they are adjusted proportionally to the losses observed in the underlying investment portfolios.

5. Computation of Stressed MCR and Stressed MCR Coverage Ratio

Calculation of the Minimum Capital Requirement

Following the application of shocks to future cash flows in line with EIOPA's scenario narrative and the subsequent restatement of the balance sheet, it is possible to estimate the MCR and the corresponding MCR coverage ratio under the stressed conditions.

The calculation begins with the determination of the linear MCR, using the standard formula specified under the Solvency II framework. The linear MCR is computed as the sum of the linear MCR for the general insurance and reinsurance obligations, and the linear MCR for long-term insurance and reinsurance obligations⁷. Each component is derived based on the updated post-shock technical provisions and written premiums, as applicable.

⁷ Full details at Chapter VII of https://publications.europa.eu/resource/cellar/e0c803af-9e0f-11e4-872e-01aa75ed71a1.0006.03/DOC_477

Linear MCR for general insurance and reinsurance obligations

The linear MCR for general insurance and reinsurance obligations is calculated as a weighted sum of two components, each assessed by business segment and subject to a floor of zero:

- The technical provisions (excluding the risk margin), net of reinsurance recoverables (in the formula below identified as TP)
- The gross written premiums over the previous 12 months (WP)

Both components are aggregated across all relevant lines of business, applying the prescribed weights defined in the Solvency II Delegated Regulation. This approach ensures that the linear MCR captures both the volume of liabilities and recent underwriting activity, in a risk-sensitive manner. More formally it is computed as:

$$MCR_{(linear,gi)} = \sum_s (\alpha_s \cdot \max(TP_{gi,s}, 0) + (\beta_s \cdot \max(WP_s, 0))$$

Where α_s and β_s are weights for the business segment s calibrated by EIOPA.

As the future cash flows related to general insurance and reinsurance obligations are reported in aggregated form, it is assumed that the relative distribution of technical provisions across business segments under the stressed scenario remains consistent with that observed in the baseline.

Furthermore, the volume of premiums written over the preceding 12 months is held constant under the stressed scenario, in line with the assumption that the shocks do not retrospectively affect historical premium volumes.

Linear MCR for long-term insurance and reinsurance obligations

The linear MCR for long-term insurance and reinsurance obligations is based on the technical provisions without risk margin, and after deduction of the reinsurance recoverables, with a floor equal to zero, and it is computed as:

$$MCR_{(linear,l)} = 0.037 \cdot \max(TP_{(l,1)}, 0) - 0.052 \cdot \max(TP_{(l,2)}, 0) + 0.007 \cdot \max(TP_{(l,3)}, 0) + 0.021 \cdot \max(TP_{(l,4)}, 0) + 0.0007 \cdot CAR$$

where $(l, 1)$ relates to guaranteed benefits provided for long-term insurance obligations with profit participation, and reinsurance obligations where the underlying long-term insurance obligations include profit participation; $(l, 2)$ relates to future discretionary benefits for long-term insurance obligations with profit participation; $(l, 3)$ relates to linked long-term liabilities; $(l, 4)$ relates to long-term insurance and reinsurance obligations other than those mentioned in $(l, 1)$ to $(l, 3)$. Finally, CAR denotes the total capital at risk, and it is assumed to remain unchanged.

Stressed MCR and computation of the Stressed MCR Coverage Ratio

Once the linear MCR is calculated, the combined MCR is derived by applying an upper and lower bound expressed as percentages of the undertaking's SCR, in line with the Solvency II framework. As the SCR is not recalculated under the stress scenario, these cap and floor constraints are assumed to remain at their baseline levels. The final MCR is then obtained by applying the absolute floor prescribed under Commission Delegated Regulation⁸.

Once the stressed MCR and restated balance sheet are calculated, the impact on the MCR coverage ratio can be assessed. The denominator reflects the stressed MCR, while the numerator, eligible own funds, is adjusted for balance-sheet impacts by reducing reported eligible own funds by the change in the excess of assets over liabilities following the application of shocks.

6. Undertakings' Liquidity Profiles Assessment

The second stage of the stress testing exercise focuses on evaluating the deterioration of the liquidity profiles of all the Maltese insurers under stressed market conditions.

The liquidity assessment closely follows the methodology of the EIOPA 2024 Insurance Stress Test, drawing on EIOPA's second methodological paper, lessons from the 2021 exercise, and ongoing liquidity monitoring practices. It applies a hybrid stock-and-flow approach to assess baseline and stressed liquidity positions by comparing available liquidity buffers with projected outflows over the stress horizon.

For consistency and transparency, the analysis is conducted using EIOPA's dedicated liquidity templates, populated on a top-down basis for each undertaking. Where Solvency II QRT data are insufficient, reasonable assumptions are applied to ensure completeness and methodological coherence. An overview of the completed templates is provided in Appendix 3.

Stocks Liquidity Component

The liquidity stock analysis assesses how the undertaking's balance-sheet liquidity profile is affected under stress. Asset-side liquidity is evaluated in both baseline and stressed scenarios by applying class-specific liquidity haircuts, calibrated to international standards (e.g. IAIS⁹), to the asset composition reported in Table XX. While haircut levels are assumed to remain unchanged across scenarios, the adverse

⁸ Article 129(1)(d) of Directive 2009/138/EC and Article 253 of Commission Delegated Regulation (EU) 2015/35

⁹ IAIS (2022) Liquidity metrics as an ancillary indicator – Level 2 document

scenario affects liquidity through the reduction in asset values driven by EIOPA-specified market shocks.

On the liability side, instead, the estimation of the liquidity profile is based on the type of business of the policy from which the technical provisions emanate. Starting from the life insurance business, the technical provisions are categorised between the ones related to unit-linked or index-linked products, and MA portfolios or RFF portfolios, and other remaining life businesses. Then, different weights are applied to the best estimates and the surrender values based on their surrender options.

Similarly to the asset side, the weighted sum of the technical provisions is computed to analyse how much the stressed scenario impacts the liquidity of the liability side.

Flows

Net liquidity flows are assessed over a 90-day horizon from 31 December 2024. Given the top-down nature of the exercise, baseline flows do not reflect actual first-quarter 2025 movements but are extrapolated from annual changes between 2023 and 2024 and converted into quarterly flows by dividing by four. Stressed positions are then obtained by adjusting these projected cash flows for the prescribed market and insurance-specific shocks. Given the short horizon, net flows are calculated as the undiscounted sum of inflows and outflows.

The analysis primarily focuses on two key sources of cash flows: (i) those arising from insurance underwriting activities (namely, premium inflows and outflows related to claims payments and operating expenses); and (ii) cash flows generated by the insurance undertaking's investment portfolio.

For the cash flows from Premiums and Claims, in accordance with EIOPA specifications, the shocks in Figure 1 have been applied to each line of business, to compute the new cash flows arising from the different segments and portfolios.

Figure 1: Insurance specific shocks

Excess claims inflation assumption (based on forward rates)	Excess expense inflation assumption (based on forward rates)	Reinsurance in-flows	Written premia	Surrenders
5.00%	1.50%	-5%	-10%	20%

Unlike the capital component, the EIOPA Guidelines prescribe that the 20% mass lapse shock should be reflected in the liquidity component as a discontinuance of 20% of all with-profit and index- or unit-linked policies, triggering the payment of their surrender values as reported by the insurance undertakings.

With respect to the cash flows arising from the investment activities, for the purposes of this analysis, it is assumed a) the level of dividend and coupon income remains unchanged between the baseline and stressed scenarios b) the investment income received during the first 90 days of 2025 is equivalent to one quarter of the total dividends and coupons received over the course of 2024.

In addition to recurring investment income, the liquidity flow analysis includes cash flows from asset purchases and sales. Trading volumes for the first quarter of 2025 are assumed to equal one quarter of total 2024 transactions. Volumes are held constant across baseline and stressed scenarios, with stressed cash flows reflecting only valuation effects from the prescribed market shocks, ensuring proportionality and consistency with available data.

Scope and Coverage of the Stress Test

For the stress test, all Maltese insurance and reinsurance undertakings that submitted the 2024 Annual Quantitative Reporting Templates (AQRT) were included in the analysis. For undertakings whose financial year-end does not fall in December, the relevant AQRT (and, where necessary, the corresponding Quarterly QRT) was used, assuming the financial position remained unchanged as of December 2024 to ensure consistency across the sample.

Following this approach, 64 insurance undertakings were identified as a sample for the stress test. Non-Domestic insurance undertakings operating in the non-life business represent the main category, accounting for 45 entities and 45% of the sample in terms of assets, followed by the reinsurance sector which accounts for 28% of the sample's assets.

At year-end 2024, the total assets of the 64 participating Maltese insurance and reinsurance undertakings amounted to approximately EUR 17.1 billion. Bonds constituted the largest asset class, accounting for 42% of total assets. While debt securities account for around one-third of assets for both life and non-life insurers, life insurers display greater diversification, reflecting their longer-term liabilities. Unit- and index-linked assets represent nearly 20% of life insurers' assets, alongside significant holdings in CIUs (15%) and equities (10%). In contrast, non-life insurers' portfolios are more concentrated, with reinsurance recoverables comprising the second-largest asset class at around 30% of total assets.

On the liabilities side, total liabilities amounted to approximately EUR 10.4 billion. Technical provisions represented the largest component, accounting for around 70% of the total. The remaining liabilities were primarily made up of various types of payables, which collectively represented an additional 22% of the total. Borrowing remains negligible across the Maltese insurance sector, indicating limited reliance on debt financing to support core activities.

Figure 1 - Asset Composition by insurer type

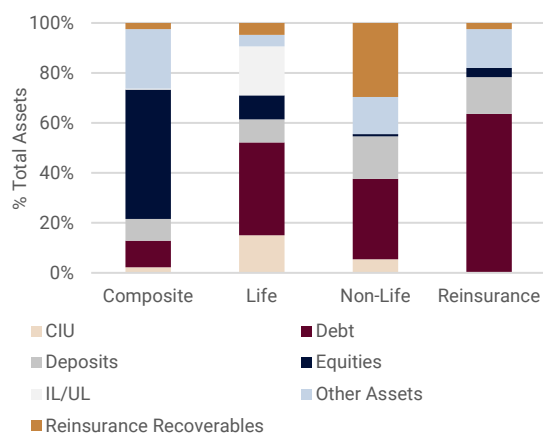
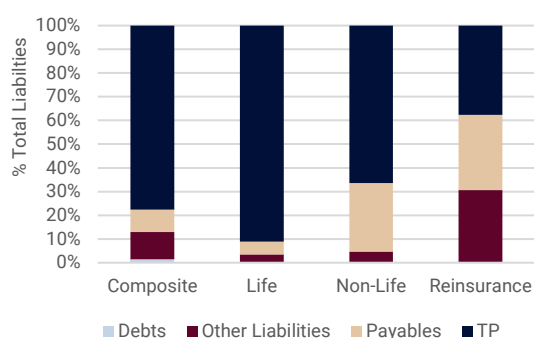


Figure 2 - Liabilities Composition by insurer type



Results

Under the adverse stress scenario, the total asset base of Maltese insurers would contract by around 7%, driven primarily by a 13% decline in investment portfolios.

Bond holdings account for the largest losses in absolute terms, though their value declines by a relatively moderate 9%. In contrast, equities and CIUs experience sharper relative losses of 42% and 22%, respectively. Unit- and index-linked portfolios would also fall by nearly 40%. Although the losses on unit-linked and index-linked portfolios would be fully borne by policyholders, thus limiting the direct financial stability implications for insurers, they may nonetheless weigh on household wealth, confidence, and consumption, amplifying the broader economic impact.

Under the stress scenario, total liabilities are projected to increase by 5% compared to the baseline. This increase is primarily driven by inflation-induced growth in technical provisions. Notably, technical provisions related to health insurance, encompassing both life-like and non-life components, are expected to experience the largest increase in monetary terms, followed by technical provisions for other non-life insurance, reflecting higher anticipated claims costs due to persistent inflationary pressures.

These upward pressures on liabilities are partly offset by reductions in life insurance technical provisions, particularly for market-sensitive business lines. The declines reflect losses in the underlying investment portfolios linked to index- and unit-linked policies, as well as with-profit policies, under stressed market conditions.

Notable differences emerge between life and non-life insurance undertakings in terms of the balance sheet impact under the adverse scenario. Life undertakings are projected to experience a significantly larger median decline in asset values, amounting to approximately 11%, nearly 10 percentage points higher than the median asset contraction observed among non-life insurers. However, this pronounced reduction in assets is partially offset by a substantial median decrease in liabilities of around 6.5%, largely attributable to the fall in market-sensitive technical provisions.

Figure 4 - Change in assets by insurer type

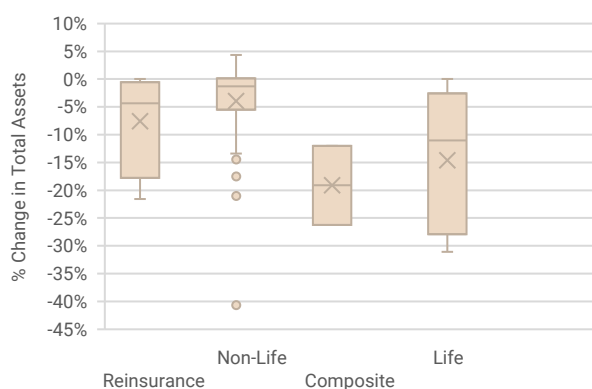
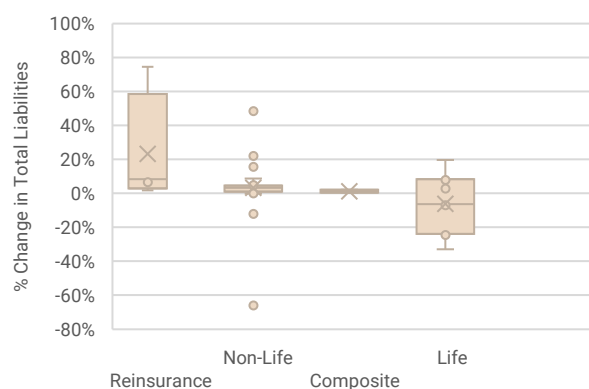


Figure 5 - Change in liabilities by insurer type



In contrast, non-life insurers exhibit relatively more stable asset positions, with a comparatively moderate median decline, owing to adjustments in reinsurance recoverables linked to inflationary pressures. Nevertheless, these undertakings are

more adversely affected on the liability side, where persistent inflationary pressures are projected to result in a median increase of approximately 4.5% in technical provisions. This reflects the inflation-driven escalation in expected claims costs, particularly for long-tail business lines.

The offsetting effects across liability categories highlight the differentiated impact of the stress scenario across insurance segments. While life undertakings face more pronounced asset shocks, they benefit from liability adjustments that cushion the overall balance sheet effect; conversely, non-life undertakings are relatively more resilient on the asset side but are exposed to upward pressure on liabilities due to inflation.

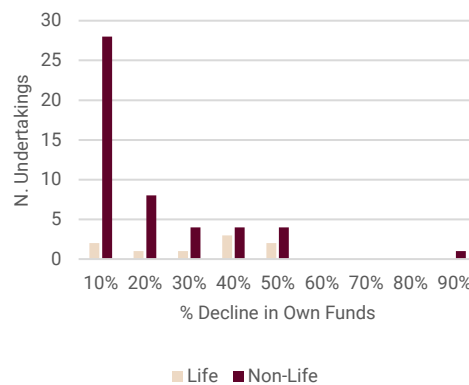
Capital

As a result of the pronounced decline in asset values combined with rising liabilities, the total eligible own funds available to Maltese insurance undertakings to cover the MCR are projected to decline by 28% under the stress scenario, while the median decline in own funds is more contained at just above 10%. Life insurers appear more exposed due to the losses in their investment portfolios, with a median reduction in own funds of 35%, nearly 28 percentage points higher than that observed among non-life insurers.

In contrast, the aggregate MCR is projected to remain broadly stable. This limited change reflects the fact that, for many undertakings, the linear MCR remains either below the regulatory floor or well above the regulatory cap, thereby mitigating the impact of the stress scenario on the overall MCR requirement.

The results of the stress testing exercise are broadly encouraging. Despite the severity of the adverse scenario, most of the participating undertakings are projected to preserve a robust capital position. The median Minimum Capital Requirement (MCR) coverage ratio is expected to decline by 48 percentage points, from 420% under the baseline scenario to 371% under stress.

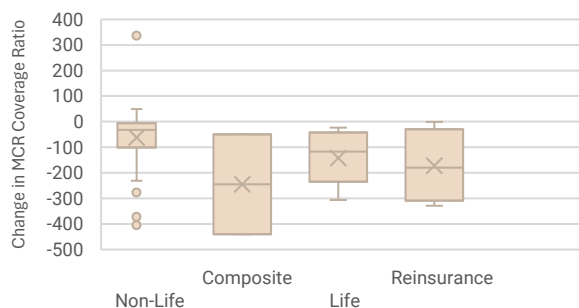
Figure 6 – Percentage Decline Eligible Own Funds



While life insurers are projected to experience the sharpest decline in the median MCR coverage ratio, falling from 535% to 328%, this is still well above the 100% threshold. On the other hand, non-life undertakings would experience a median decrease in coverage ratio of just 47 percentage points, to 356%.

Although the life insurance segment is overall the most affected by the stress scenario due to market shocks, some non-life undertakings are projected to experience the largest declines in coverage ratios. This underscores the importance of looking beyond investment portfolio losses and accounting for the substantial effects of inflation and interest-rate shocks on insurers' liabilities when conducting stress testing.

Figure 7 - Change in MCR Coverage Ratio by insurer type



Liquidity

Stocks

Overall, the level of liquid assets and liabilities remained stable after the prescribed shocks, considering the impact of liquidity haircuts on asset portfolios and liability holdings. The liquid asset ratio, defined as the ratio of liquid assets after the application of haircuts over total assets remained stable in the stressed scenario, from 38% in the baseline (December 2024) to 34% in the stressed scenario. The comparison between the baseline (December 2024) and the stressed scenario in March 2025 encompasses both the changes due to the application of the market shocks prescribed by the technical specifications but also the changes driven by the insurance specific shocks reflected in the new cash holdings.

The value of the liquid assets are projected to decrease by 13% due to the market shock, which is translated, once the haircuts are applied, to a decrease by 10% when compared to the baseline scenario, with the 3% difference which is explained by the fact that more illiquid assets are also the ones which are expected to suffer the largest hit.

The liquid liabilities ratio for life, UL/IL, defined as the ratio of liquid liabilities (after haircuts) to total liabilities, decrease by 3 percentage points in the stressed scenario, from 28% to 25%, where the greater the liquidity of the liabilities¹⁰, the more exposed to outflows the insurer is.

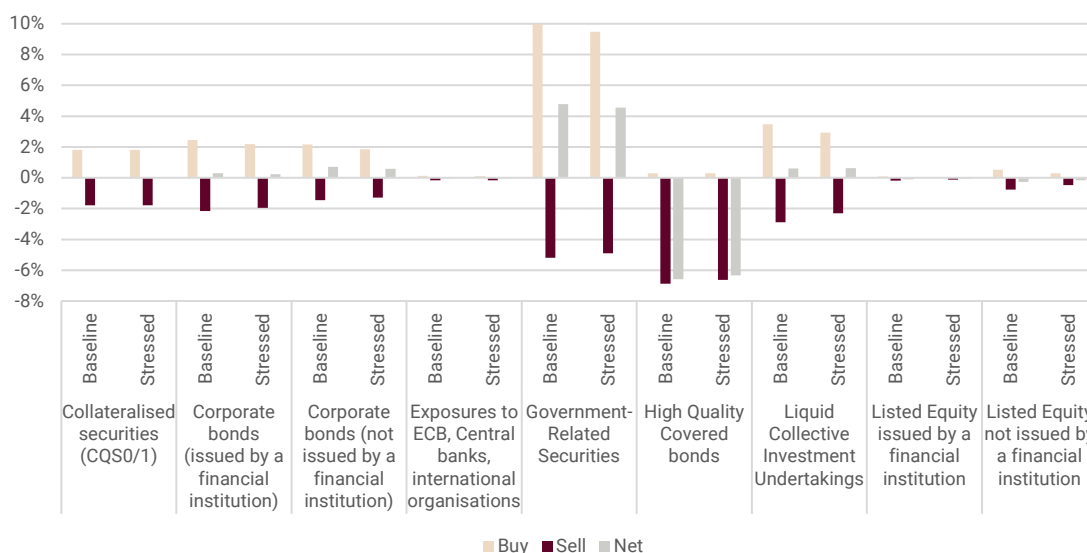
¹⁰ Liquid liability depends on the extent they can be surrendered by policyholders.

Flows

The main strain on **technical flows** for both traditional life and non-life business would be represented by the shock on the surrenders, followed by premiums and claims. The surrender value increase significantly, due to the mass lapse shock. Premia are projected to decrease by 10% in the shocked scenario, while the claims are expected to increase by just below 4%, in line to the prescribed shock. Finally, changes in reinsurance flows were negligible.

The **investment net flows** for both life and non-life portfolios are projected to remain relatively stable under the stress scenario. In the baseline, the combined effects of purchase and sales of assets would result in a modest net selling of position¹¹. Under stress, these figures shift slightly with the net selling position increasing marginally. This change remains minimal when compared to the overall size of the investment portfolios. Similarly, the impact on unit-linked and index-linked (UL/IL) portfolios is also contained, indicating limited effect of the stress scenario on the insurance undertakings' turnover.

Figure 8: Liquid investment flows (excluding UL/IL and MA/RFF portfolios) relative to holdings in the Baseline.



Sustainability of the cash flows

The ample source of available liquid assets present in the baseline scenario allows Maltese insurers to cover the negative net flows generated by the shocks. The cash holdings in December 2024 alone are enough to cover the outflows expected in the first quarter of 2024 in the stressed scenario, which would cause nevertheless a material reduction in the liquidity position (total net flows plus cash and cash equivalent) under the stressed scenario. The sustainability indicator projected for

¹¹ As explained in the Methodology section, the projected sales and purchases of assets reflect the relative portfolio turnover observed during 2024.

March 2025 would be steadily positive even in the stressed scenario, indicating an overall soundness of the Maltese undertakings.

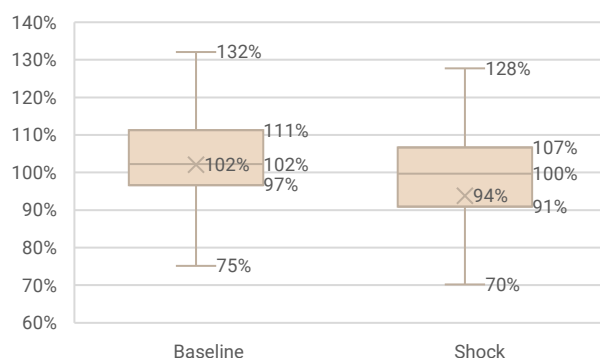
Figure 9: Impact of the adverse scenario on the main liquidity indicators

	Stressed Δ (Baseline)
Liquidity position (Net-flows + Cash and equivalent)	-42%
Other liquid Assets with Haircut	-14%
Sustainability (Net-flows + Cash and equivalent + Other liquid Assets with Haircut)	-23%

The distribution of the liquidity position in March 2025 computed as the total Net cash flows plus the Cash and cash equivalent as of December 2024, showed that the aggregate cash shortage is mainly driven by the 25th percentile of the distribution in the shocked scenario, as most of the undertakings would still maintain a positive liquidity position. Overall, the median liquidity position remains positive in the shocked scenario.

The sustainability indicators show that all participants are able to withstand the liquidity shocks in both the baseline and stressed scenarios. The indicator, defined as the liquidity position plus other liquid assets, captures available liquidity sources up to March 2025, including net investment flows, and assesses whether undertakings can cover net outflows over the period. Results indicate that all insurers can absorb negative net cash-flows with other liquid assets¹², in both the baseline and in the stressed scenario, with the median sustainability indicator declining only marginally at the individual level.

Figure 10: Sustainability indicator scaled by liquid assets in December 2024



The sustainability indicator scaled by liquid assets at December 2024 (Figure 10) measures how liquid assets in March 2025 evolve relative to their initial level, taking into account the prescribed adverse shocks. It assesses whether insurers hold sufficient liquid assets to meet net cash outflows over the period from December 2024

¹² “Other liquid assets” refers to the assets different from cash that are deemed liquid accordingly to their liquidity haircut, as reported in paragraphs 73 and 74 of the Technical Specification.

to March 2025¹³. This indicator is a supervisory analytical tool and is not part of the regulatory framework. As shown in Figure 10, the median ratio is projected to decline from 102% in the baseline to 100% under stress, suggesting that even in adverse conditions, at least half of the undertakings are expected to maintain stable or improving liquidity positions over the quarter.

¹³ A ratio above 100% indicates an increase in liquid assets, while a ratio between 0% and 100% signals a decline; a negative ratio would imply insufficient liquidity to cover outflows.

Conclusions

The 2025 stress testing exercise provides a structured and informative assessment of the Maltese insurance sector's resilience to a severe but plausible adverse macro-financial scenario. The results indicate that, while the sector is generally well-capitalised and maintains adequate liquidity buffers, some vulnerabilities are present, among smaller and more concentrated undertakings.

On the capital side, the stress scenario led to a notable decline in eligible own funds and only a moderate increase in Minimum Capital Requirements (MCR), driven mainly by market losses and inflation-related adjustments to technical provisions. The results suggest that some insurers may be more sensitive to market volatility and inflationary pressures, especially those that tend to maintain relatively low capital levels during normal times.

Liquidity positions remained broadly sound across the sector. Even under stress, insurers were generally able to meet short-term obligations, supported by existing cash holdings and liquid assets. Only a small number of undertakings showed signs of potential liquidity strain, and even in these cases, broader liquidity buffers were sufficient to cover projected outflows.

Looking ahead, the Financial Stability function will integrate this stress testing exercise into its regular macroprudential monitoring cycle. The results will serve as a valuable complement to ongoing surveillance of the insurance sector, helping to identify emerging risks and inform supervisory priorities. Building on this full implementation of the EIOPA-aligned framework, the methodology will be further refined in future iterations.

Appendix

Appendix 1 – Templates used

Template	Description
S.02	Balance Sheet – Asset and Liability breakdown
S.05	Premiums, claims and expenses, and surrender of policy
S.06	Detailed list of assets
S.13	Projection of future cash flows related to the life business, for the calculation of the technical provisions
S.14	Analysis of the obligation arising from the life business
S.18	Projection of future cash flows related to the non-life business, for the calculation of the technical provisions
S.23	Own funds
S.28	Computation of the Minimum Capital Requirement

Appendix 2 – EIOPA Narrative’s shocks

Figure A.1 - Shock to equity instruments

Shocks to stock prices - relative changes (percentage points)		
Country/region	Country/region	Shock
EU	European Union	-42
UK	United Kingdom	-49
CH	Switzerland	-39
NO	Norway	-44
US	United States	-49
JP	Japan	-42
Other advanced economies	Other advanced economies	-44
Emerging markets	Emerging markets	-47

Figure A.2 - Shock to swap rates

Shocks to swaps - absolute changes (basis points)														
Country/region	Currency	1Y	2Y	3Y	5Y	7Y	10Y	15Y	20Y	25Y	30Y	35Y	40Y	50Y
EA	EUR	168	157	137	96	71	46	45	44	43	43	42	41	39
BG	BGN	202	197	191	161	150	136	125	115					
CZ	CZK	174	168	162	134	123	104	92	81	70	59			
HU	HUF	297	289	281	252	238	214	214	214					
RO	RON	220	214	208	177	164	150	138	126					
PL	PLN	184	180	176	150	141	132	118	104	90	75			
DK	DKK	161	131	111	78	63	46	45	44	43	43			
CH	CHF	128	113	99	65	49	48	46	44	41	39			
NO	NOK	172	162	151	116	94	62	59	57	55	54			
SE	SEK	168	157	145	108	85	57	57	56	55	54			
UK	GBP	174	163	152	111	88	56	54	52	50	48	46	45	41
AU	AUD	179	161	138	106	91	75	70	65	61	56			
CA	CAD	182	171	160	122	99	66	56	54	51	47			
CN	CNY	136	135	134	132	130	125							
HK	HKD	148	145	142	134	127	111	110	109					
JP	JPY	8	13	18	23	29	36	39	41	43	46			

MX	MXN	289	278	266	224	203	170	153	137					
NZ	NZD	174	165	157	131	114	88	85	82	79	77			
SG	SGD	162	136	125	99	93	85	82	78	75	72			
ZA	ZAR	193	189	185	168	161	150	146	143	140	137			
KR	KRW	188	176	163	134	109	90	72	70					
US	USD	188	175	162	119	93	57	56	55	52	51	50	48	47

Figure A.3 - Shocks to government bond spreads

Shocks to government bond spreads - absolute changes (basis points)								
Country/region	Country/region	1Y	2Y	5Y	10Y	15Y	20Y	30Y
AT	Austria	57	59	64	73	76	79	79
BE	Belgium	64	66	71	80	83	86	86
BG	Bulgaria	105	109	123	145	148	151	151
CY	Cyprus	106	111	124	146	149	152	152
HR	Croatia	92	95	107	127	130	133	133
CZ	Czech Republic	71	73	78	87	90	93	93
DK	Denmark	40	42	48	58	61	64	64
EE	Estonia							
FI	Finland	62	63	69	77	81	84	84
FR	France	45	47	54	66	69	72	72
DE	Germany	36	38	44	54	57	60	60
GR	Greece	110	114	127	149	152	156	156
HU	Hungary	99	103	116	138	142	145	145
IE	Ireland	55	57	62	70	73	77	77
IT	Italy	96	101	114	136	139	142	142
LV	Latvia	92	97	110	129	132	135	135
LT	Lithuania	96	100	113	135	138	142	142
LU	Luxembourg	48	51	58	69	72	75	75
MT	Malta	89	91	98	109	113	116	116
NL	Netherlands	44	46	53	65	68	71	71
PL	Poland	95	99	111	132	135	138	138
PT	Portugal	85	87	92	101	104	108	108
RO	Romania	99	103	116	139	142	145	145
SK	Slovakia	80	81	85	91	94	97	97
SI	Slovenia	84	86	91	100	103	106	106
ES	Spain	92	96	108	127	130	134	134
SE	Sweden	60	62	67	76	79	82	82
UK	United Kingdom	78	79	81	84	88	91	91
CH	Switzerland	43	45	51	61	64	67	67
NO	Norway	50	52	57	65	68	71	71
IS	Iceland							

BR	Brazil	236	240	252	272	275	278	278
US	United States	45	47	55	68	72	75	75
JP	Japan	41	43	48	56	59	62	62
Other advanced economies	Other advanced economies	53	55	60	70	73	76	76
Emerging markets	Emerging markets	171	177	194	222	226	229	229

Figure A.2 - Shocks to Corporate bond spreads

Shocks to corporate bond spreads - absolute changes (basis points)								
Country/region	Type	AAA	AA	A	BBB	BB	B	CCC
EU	Financial	147	170	194	253	397	424	484
	Non-financial	126	148	172	242	389	414	473
UK	Financial	153	177	201	258	405	433	492
	Non-financial	133	154	177	247	394	422	481
US	Financial	166	190	214	272	419	444	503
	Non-financial	159	180	204	261	408	433	492
Emerging markets	Financial	281	304	328	386	532	559	618
	Non-financial	264	286	309	375	522	548	607
Other advanced economies	Financial	156	179	203	261	407	434	493
	Non-financial	139	161	184	250	397	423	482

Figure A.3 - Shocks to covered bond and RMBS spreads

Country/region	Shocks to covered bond spreads - absolute changes (basis points)				Shocks to RMBS spreads absolute changes (basis points)			
	AAA	AA	A	BBB	AAA	AA	A	BBB
EU	109	131	163	219	157	187	230	287
UK	123	144	178	235	156	186	229	286
US	118	139	171	227	200	251	286	342
Asia	160	194	244	250	251	285	335	342
Emerging markets	252	277	314	358	316	352	395	439
Other advanced economies	127	152	189	233	191	227	270	314

Figure A.4 - Shocks to infrastructure assets

Shocks to infrastructure assets - relative changes (percentage points)					
Equity		Bonds		Other	
EU	Global	EU	Global	EU	Global
-40	-43	-22	-27	-31	-35

Figure A.7: Excess claims and expenses inflation assumptions

Tenor (in years)	Excess Claims Inflation	Excess Expense Inflation
1	5.00%	1.50%
2	3.50%	0.80%
3	2.50%	0.20%
4	1.50%	0.20%
5	1.00%	0.20%

6	0.50%	0.15%
7	0.50%	0.10%
8	0.25%	0.00%
9	0.25%	0.00%
10	0.00%	0.00%

Appendix 3 – Liquidity Templates

Figure A.8 – Classification of asset: Liquidity Weights

Table Stock.1	Assets	Baseline / Stressed	Weights
S.1	Cash & Bank Deposits & Bank Commercial Paper/Certificates of Deposits		1.00
S.1.1	of which stemming from repo agreements		1.00
S.2	Government-Related Securities (Central governments & affiliates)		
S.2.1	issued/guaranteed by EU member states (all CQSs) and issued by highly rated non-EU countries (CQS0/1)		0.95
S.2.2	Issued or guaranteed by highly rated non-EU countries (CQS2/3)		0.75
S.3	Exposures to ECB, Central banks, multilateral development banks & international organisations		
S.3.1	issued or guaranteed by ECB, EU central banks, supranational institutions (BIS, IMF, EC,...) or Multilateral Development Banks		0.95
S.3.2	issued or guaranteed by central banks of non-EU countries (CQS0/1)		0.85
S.4	High Quality Covered bonds		
S.4.1	Extremely high quality covered bonds - CQS0/1		0.65
S.4.2	High quality covered bonds - CQS2		0.60
S.5	Corporate bonds not issued by a financial institution or its affiliate		
S.5.1	Corporate debt securities (CQS0/1)		0.65
S.5.2	Corporate debt securities (CQS2/3)		0.60
S.6	Corporate bonds issued by a financial institution or its affiliate		
S.6.1	Corporate debt securities (CQS0/1)		0.55
S.6.2	Corporate debt securities (CQS2/3)		0.50
S.7	Listed Equity not issued by a financial institution or its affiliate		0.40
S.8	Listed Equity issued by a financial institution or its affiliate		0.30
S.9	Collateralised securities (CQS0/1)		0.55
S.10	Collective Investment Undertakings		
S.10.1	Liquid Collective Investment Undertakings		0.45
S.10.2	Illiquid Collective Investment Undertakings		0.20
S.11	Total Assets (excluding assets held for UL/IL, MA portfolios and Ring fenced Funds)		
S.12	Assets held for UL/IL		0.45
S.12.1	Cash for UL/IL		1.00
S.13	Assets held for matching adjustments portfolios and ring fenced funds		1.00
S.13.1	Cash for MA and RFF		1.00

Figure A.9: Composition of cash flows

	Table 1	Cash Flows
Life (excluding UL/IL, MA portfolios and RFF)	C.1.1	Premium (written)
	C.1.2	Claims and other technical outflows (excluding surrender)
	C.1.3	Surrender
	C.1.4	Reinsurance inflows
	C.1.5	Reinsurance outflows
	C.1	Net Cash Flows
UL/IL	C.2.1	Premium (written)
	C.2.2	Claims and other technical outflows (excluding surrender)
	C.2.3	Surrender
	C.2.4	Reinsurance inflows
	C.2.5	Reinsurance outflows
	C.2	Net Cash Flows
Matching adjustments portfolios and ring fenced funds	C.3.1	Premium (written)
	C.3.2	Claims and other technical outflows (excluding surrender)
	C.3.3	Surrender
	C.3.4	Reinsurance inflows
	C.3.5	Reinsurance outflows
	C.3	Net Cash Flows
Non-Life business	C.4.1	Premium (written)
	C.4.2	Claims and other technical outflows
	C.4.3	Reinsurance inflows
	C.4.4	Reinsurance outflows
	C.4	Net Cash Flows
Investments	C.5.1	Investment related income (e.g. coupons, dividends, fees)
	C.5.1 UL	Investment related income (e.g. coupons, dividends, fees) - Separate accounts
	C.5.1 MA	Investment related income (e.g. coupons, dividends, fees) - Separate accounts
	C.5.2	Investment related expenses (e.g. service fees, coupons paid, dividends paid)
	C.5.2 UL	Investment related expenses (e.g. service fees) - Separate accounts
	C.5.2 MA	Investment related expenses (e.g. service fees) - Separate accounts

	C.5.4	Purchase of assets*
	C.5.4 UL	Purchase of assets - Separate accounts*
	C.5.4 MA	Purchase of assets - Separate accounts
	C.5.5	Sales of assets*
	C.5.5 UL	Sales of assets - Separate accounts*
	C.5.5 MA	Sales of assets - Separate accounts
	C.5.6.1	Margin / collateral calls net flows inflows
	C.5.6.2	Margin / collateral calls net flows outflows
	C.5	Net cash flows
Total	C.7	Net cashflow at the end of the period

* From table flows 2a and 2b

Figure A.10 – Purchase and sales of assets

Table 2a 2b	Assets (2a non-ULIL, 2b ULIL)	Baseline/Stressed	
		Purchase of assets	Sales of assets
C.9.	Government-Related Securities (Central governments & affiliates)		
C.9.1.	issued/guaranteed by EU member states (all CQSs) and issued by highly rated non-EU countries (CQS0/1)		
C.9.2.	Issued or guaranteed by highly rated non-EU countries (CQS2/3)		
C.9.3.	Other Government-Related securities		
C.10.	Exposures to ECB, Central banks, multilateral development banks & international organisations		
C.10.1.	issued or guaranteed by ECB, EU central banks, supranational institutions (BIS, IMF, EC,..) or Multilateral Development Banks		
C.10.2.	issued or guaranteed by central banks of non-EU countries (CQS0/1)		
C.11.	High Quality Covered bonds		
C.11.1.	Extremely high quality covered bonds - CQS0/1		
C.11.2.	High quality covered bonds - CQS2		
C.12.	Other Covered bonds - CQS3/4/5		
C.13.	Corporate bonds not issued by a financial institution or its affiliate		
C.13.1.	Corporate debt securities (CQS0/1)		
C.13.2.	Corporate debt securities (CQS2/3)		
C.13.3.	Other Corporate debt securities (CQS4/5)		
C.14.	Corporate bonds issued by a financial institution or its affiliate		
C.14.1.	Corporate debt securities (CQS0/1)		
C.14.2.	Corporate debt securities (CQS2/3)		
C.14.3.	Other Corporate debt securities (CQS4/5)		
C.15.	Equity		
C.15.1.	Listed Equity not issued by a financial institution or its affiliate		
C.15.2.	Listed Equity issued by a financial institution or its affiliate		
C.15.3.	Unlisted Equity		
C.16.	Collateralised securities (CQS0/1)		
C.17.	Collateralised securities (CQS2/3/4/5)		
C.18.	Collective Investment Undertakings		
C.18.1.	Liquid Collective Investment Undertakings		
C.18.2.	Illiquid Collective Investment Undertakings		
C.19.	Other investments		
C.20.	Collateralized assets		
C.21.	Total Cash Flows		

Appendix 4 – Application of shocks to Maltese insurers' portfolios

Figure A.11: Shock calibration by instrument type

Instrument	CIC	Shock Calibration
Government Bonds	XX1X	$-Duration * (\Delta SWAP + \Delta Government Bond Spread)$
Corporate Bonds	XX2X excl. XX26 and XX27	$-Duration * (\Delta SWAP + \Delta Corporate Bond Spread)$
Covered Bonds	XX26 and XX27	$-Duration * (\Delta SWAP + \Delta Covered Bond Spread)$
Equity	XX3X	As per EIOPA table
Collective Investment Undertakings	XX4X	3% for MMF / Look-through when available / 49% otherwise
Structured Notes	XX5X	$-Duration * (\Delta SWAP + \Delta Corporate Bond Spread)$
Collateralised Securities	XX6X	$-Duration * (\Delta SWAP + \Delta RMBS Spread)$
Deposits	XX7X	No shock applied
Mortgages and Loans	XX8X	$-Duration * (\Delta SWAP + \Delta RMBS Spread)$
Property	XX9X	As per EIOPA table
Derivatives		Not included (minimal use of derivatives by Maltese insurers)