ASSESSING THE RESILIENCE OF FINANCIAL INSTITUTIONS

Stress testing remains a core element of BNM's financial stability surveillance framework. Each year, BNM conducts a multi-year, top-down macro solvency stress test to evaluate the impact of severe and prolonged adverse macroeconomic, financial and liquidity conditions on banks, insurers and the broader financial system. In line with previous BNM Financial Stability Reviews, the latest macro solvency stress test applies two adverse scenarios over a three-year horizon from early 2026 to end-2028. These scenarios are designed to capture both a sharp but temporary deterioration in economic conditions, and a more moderate yet protracted downturn, reflecting heterogeneous paths of stress that could affect credit quality, profitability and capital buffers across the banking and insurance sectors. The scenarios are not forecasts of Malaysia's economic outlook, but rather plausible tail-risk events intended to test the resilience of financial institutions under extreme but credible shocks.

The deep but temporary shock scenario (adverse scenario 1, AS1) involves a sharp contraction in domestic economic activity in 2026 followed by a rapid recovery in 2027 and a normalisation of GDP thereafter. In the moderate but more persistent downturn scenario (AS2), the situation is characterised by a milder yet prolonged contraction in 2026 and 2027 before economic conditions gradually recover beginning 2028. For both scenarios, GDP paths are calibrated between the severe conditions observed during the Asian Financial Crisis and the COVID-19 pandemic. Key assumptions and shock parameters applied in AS1 and AS2 are summarised in Table 2.1.

These macroeconomic and financial shocks remain broadly aligned with those used in the 2025 exercise.[15] The severity of assumptions under AS1 and AS2 reflects heightened global risk aversion arising from geopolitical risks that contribute to elevated inflationary pressures through supply chain disruptions and rising commodity prices amid global trade uncertainties. In domestic financial markets, bond yields are assumed to rise sharply, with increased momentum for a longer period under AS2. Equity market performance is also assumed to weaken, with the FBM KLCI losing about one-third of its value under both scenarios. A sharper rebound of the index is projected from early 2027 under AS1 while recovery remains more gradual under AS2. The ringgit is assumed to depreciate against the US dollar to levels below historical lows under both scenarios, with larger adjustments occurring in 2026 under AS1. Headline inflation is projected to surge, leading to OPR hikes in both scenarios despite the recessionary environment.

The stress test exercise applies a deliberately conservative set of assumptions, prioritising downside risk recognition over strict coherence with the broader macroeconomic scenario. The higher OPR is assumed to weigh on borrowers' debt-servicing capacity without conferring any corresponding uplift to banks' profitability. To capture potential confidence effects, banks exhibiting persistent financial weaknesses during the stress horizon are further subjected to additional liquidity shocks arising from adverse

Table 2.1: Macro Stress Test – Key Assumptions and Shock Parameters Applied Under Assumed Adverse Scenarios

Key Assumptions	AS1	AS2
Annual domestic real GDP growth	Up to -6.0%	Up to -3.5%
Annual unemployment rate	Up to 5.4%	Up to 6.0%
Market risk shocks - Increase in 10Y MGS yield - Increase in 10Y AAA corporate bond yield - Decline in FBM KLCI	 Up to 300 basis points Up to 420 basis points Up to 30%	 Up to 270 basis points Up to 370 basis points Up to 30%
OPR hike[1]	Up to 100 basis points	Up to 100 basis points
MYR depreciation against USD	Up to 30%	Up to 20%
Quarterly headline inflation[2]	Up to 7.5%	Up to 5.4%

[1] The assumption of an OPR hike may not, in certain circumtances, be consistent with the broader macroeconomic scenarios but is assumed by design to account for potential downside risks.
[2] The assumption for the quarterly headline inflation reflects stress from global shocks that could exert upward pressure on commodity prices, particularly energy, and downward pressure on the ringgit.

Source: Bank Negara Malaysia

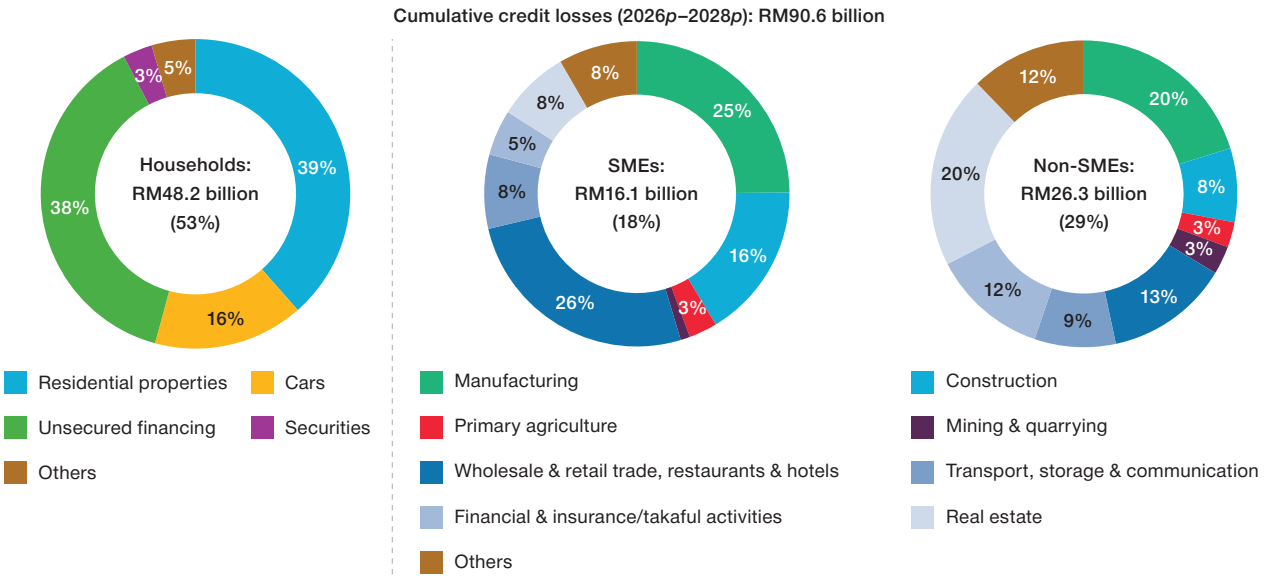
[15] Refer to the macro solvency stress test exercise published in the BNM Financial Stability Review for Second Half 2024.

deposit outflows. The modelling framework also incorporates a strict cross-default assumption under which non-SME borrowers that fail the simulation are treated as triggering group-wide defaults, regardless of the financial strength of any member of the corporate group. A similar conservative cross-default assumption is applied to household borrowers where defaults are assumed to extend across all loan facilities. No improvements in loan staging are assumed throughout the stress horizon, even if borrowers' repayment capacity subsequently improves. In addition, the exercise does not incorporate any policy interventions or support measures for distressed borrowers or financial institutions. Projected losses from material overseas operations of domestic banking groups (DBGs) are also taken into account, ensuring a comprehensive assessment of group-wide vulnerabilities. For this purpose, the shock parameter will be adapted to reflect the situation in the host jurisdiction.

Financial institutions demonstrated financial resilience even under severe simulated shocks.

Under the severe macroeconomic conditions assumed in the stress scenarios, the Malaysian banking system is expected to remain resilient. Over the three-year stress test horizon, the banking system is projected to incur sizeable losses arising mainly from higher credit risk and valuation adjustments on securities classified as fair value through other comprehensive income (FVOCI). The cumulative credit costs are estimated to be RM78.9 billion and RM90.6 billion under AS1 and AS2 respectively (equivalent to 59% and 63% of total losses respectively) (Chart 2.25). This estimated rise in credit losses results from an increase in defaults among household borrowers, particularly from impaired loans in the residential property loans segment. Several large corporates with existing financial vulnerabilities are also projected to default, while prolonged economic weakness continues to affect the debt-servicing capacity of SMEs. Credit losses from the overseas operations of DBGs are expected to account for 24.5% of total credit costs, driven mainly by defaults involving several large non-SME borrowers. Meanwhile, the projected sharp and rapid rise in bond yields is anticipated to lead to significant revaluation losses on banks' FVOCI bond holdings. These estimated losses amount to RM53.6 billion and RM49.7 billion under AS1 and AS2 respectively (or 40% and 35% of total losses under AS1 and AS2 respectively) (Chart 2.26). The valuation adjustments directly reduce banking system capital buffers throughout the horizon. In contrast, market risk losses from securities classified as fair value through profit or loss (FVTPL) remain contained. These FVTPL losses, driven by movements in bond, equity and foreign exchange positions, contribute 1.3% and 2.2% of total losses under AS1 and AS2 respectively.

Chart 2.25: Macro Stress Test: Banking System – Drivers of Cumulative Credit Losses Under Adverse Scenario 2

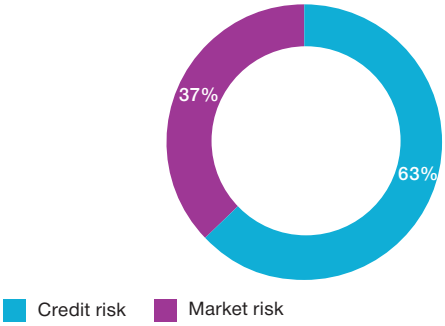


p Projected

Note: 1. (...) refers to % of overall cumulative credit costs.
2. Figures may not add up due to rounding.

Source: Bank Negara Malaysia

Chart 2.26: Macro Stress Test: Banking System – Key Loss Drivers under Adverse Scenario 2



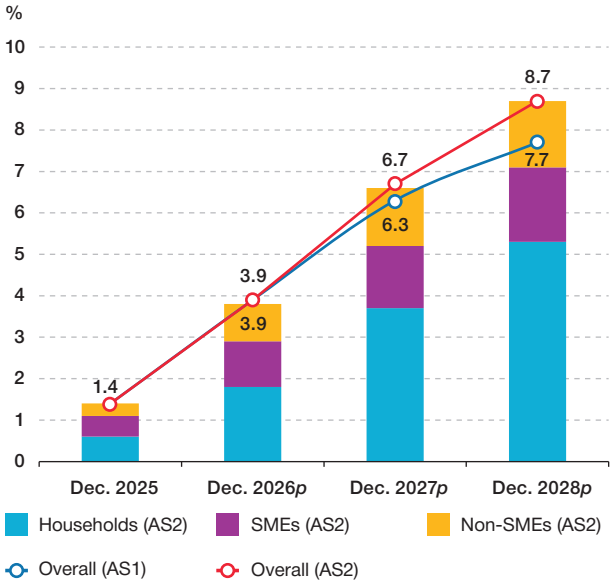
Note: Market risk refers to revaluation losses on bonds held in the fair value through other comprehensive income (FVOCI) portfolio and market risk losses from fair value through profit and loss (FVTPL).

Source: Bank Negara Malaysia

By the end of the stress horizon in 2028, overall impairments are projected to increase to 7.7% and 8.7% of total banking system loans under AS1 and AS2 respectively, driven mainly by household impairments (Chart 2.27). Household borrowers earning less than RM5,000 per month account for the largest share (59%) of borrowers at risk of defaulting given their thinner financial buffers (Chart 2.28). In value terms, however, these borrowers form a smaller share (34%) of new impairments, reflecting the lower loan amounts typically held by this income group relative to higher income borrowers. Meanwhile, vulnerabilities continue to be evident among borrowers with a debt service ratio exceeding 60%, who account for the bulk of new impairments. These borrowers constitute up to 74% of borrowers at risk of defaulting and 84% of new impairments by value. For businesses, SMEs account for the bulk (58%) of business impairments, with projected defaults rising more sharply under AS2 as compared to AS1. This is consistent with the erosion of SMEs' limited financial buffers during a prolonged economic downturn, which increases the likelihood of default. Meanwhile, non-SMEs, given their relative financial strength, accounted for the lower share (42%) of the projected increase in business impaired loans under AS2. The non-SMEs defaults were mainly attributed to several borrowers with pre-existing weak financials.

The aggregate banking system profitability is expected to decline sharply in the initial year of stress, driven mainly by higher credit costs. Net interest income would also fall significantly amid elevated funding costs without the corresponding gains in interest income that would typically arise from OPR increases. In the following years, net interest income is expected to gradually recover, supporting a rebound in profits and a rebuilding of capital buffers. Losses incurred from overseas operations, while notable for large DBGs, are not expected to pose material risks to overall resilience at the group level. This reflects the healthy capital buffers maintained by the respective overseas entities.

Chart 2.27: Macro Stress Test: Banking System – Impaired Loans Ratio Under Adverse Scenarios 1 and 2

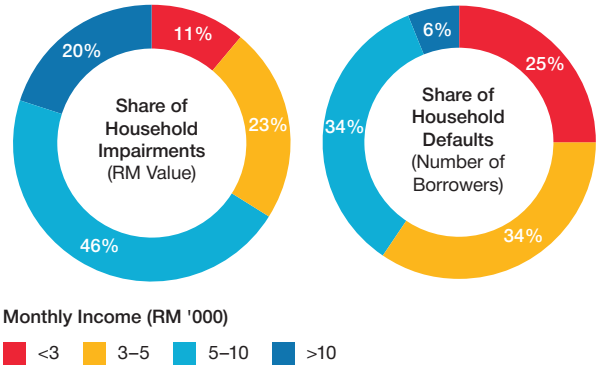


p Projected

Note: Impairment figures are inclusive of exposures from selected DBGs' overseas operations.

Source: Bank Negara Malaysia

Chart 2.28: Macro Stress Test: Household Sector – Impairment Profile Under Adverse Scenario 2



Note: Figures may not add up due to rounding.

Source: Bank Negara Malaysia

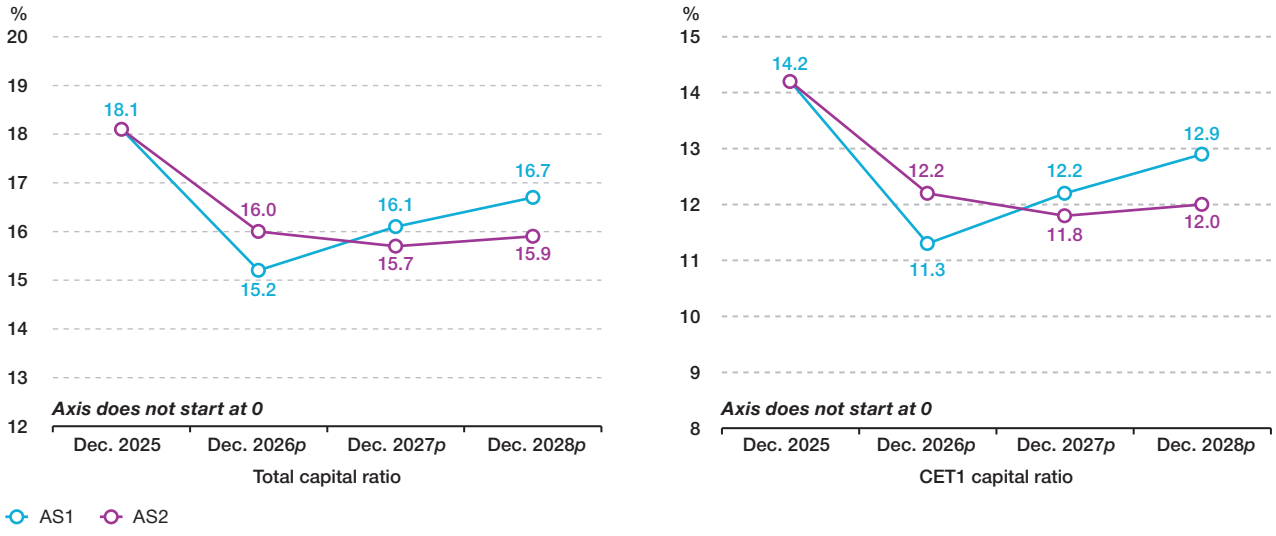
Overall, the banking system capital ratios are projected to remain above the regulatory minima under both scenarios (Chart 2.29). Five banks,[16] however, are projected to breach the minimum regulatory capital requirements. These banks, which account for less than 6% of total banking system assets, share common characteristics of higher impairment ratio, together with a larger proportion of FVOCI bonds exposed to revaluation losses (Chart 2.30). The post-shock capital shortfall of these banks accounts for less than 1.5% of total banking system capital. An additional 11 banks may require additional capital to maintain their internal capital targets under AS2. Nevertheless, these banks would continue to meet the minimum regulatory capital requirements.

Banks facing persistent financial weaknesses[17] or whose capital ratios have dipped below regulatory minima are also assumed to experience an additional liquidity shock[18] in the form of deposit outflows. Under this scenario, most banks maintain sufficient stock of unencumbered high quality liquid assets (HQLA) to meet the heightened cashflow demands. This reflects the banking system's strong starting liquidity position, with the system-wide LCR at a robust 154.8% as of December 2025. While stressed LCR outcomes for some banks temporarily fall below the regulatory minimum,[19] this reflects the severity of the stress scenario rather than weaknesses in their underlying liquidity positions. In line with regulatory requirements, banks may draw down their liquidity buffer and allow their LCR to fall below 100% during periods of stress, with an expectation that buffers are rebuilt within a reasonable timeframe. BNM continues to expect all banks to maintain prudent liquidity buffers under normal conditions.

Taken together, the solvency and liquidity stress test exercises continue to affirm that banks remain resilient in the face of severe macroeconomic, financial and liquidity shocks. Banks are expected to retain sufficient capacity to support lending to the economy even during periods of downturn.

The macro solvency stress test for insurers incorporates similar AS1 and AS2 scenarios, with additional insurance-specific assumptions. These assumptions, updated for recent developments including interim measures by insurers to limit premium revisions to medical and health insurance business, remain largely consistent with those applied in the 2025 exercise (Table 2.2). Under both scenarios, the insurance

Chart 2.29: Macro Stress Test: Banking System – Capital Ratios Under Adverse Scenarios 1 and 2



p Projected

Note: Capital ratio data shown in this section may be different from data cited in 'The Banking Sector' section as the macro stress test exercise was conducted using December 2025 preliminary data.

Source: Bank Negara Malaysia

[16] Refers to the banking group or standalone bank if it does not belong to a larger banking group.

[17] Refers to banks that incurred at least two consecutive quarters of losses, or a minimum two years of annual losses.

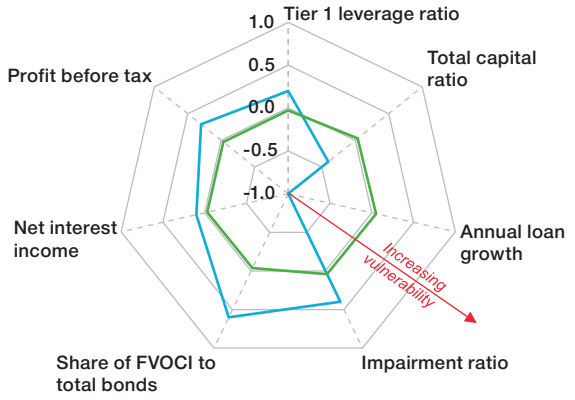
[18] Stressed outflows applied on the deposits of each bank are assumed to be at least 16% based on benchmarking of recent global distressed banks' experience. Additional transmission channels are incorporated this year to reflect greater global uncertainty.

[19] Under a severe liquidity shock scenario, 14 banks are projected to record LCR levels below 100%.

sector is assessed to maintain an aggregate capital adequacy ratio (CAR) above the regulatory minimum of 130% (Chart 2.31). Market risk remains as the primary loss driver for both life and general insurers, reflecting the impact of higher bond yields and weaker equity market performance on their significant financial asset holdings (Chart 2.32). The updated insurance specific assumptions resulted in more subdued projected premium increases despite higher claims, particularly for the existing medical portfolio. As a result, life insurers are expected to sustain net underwriting losses throughout the stress horizon. Consequently, insurance risk emerged as a more significant driver of losses compared to the previous year's stress test (2026: 39%; 2025: 35%). Notwithstanding this, the downward revaluation of liabilities due to the increase in bond yields is expected to partly soften the impact on CAR.

Although the insurance sector remains broadly resilient, outcomes at the individual insurer level vary depending on investment strategies and

Chart 2.30: Macro Stress Test: Banking System – Common Characteristics of Failed Banks in Pre-Stress Position (2025)



Note: 1. Failed banks refer to banks which would breach the minimum regulatory capital requirements under stress test scenario.
2. Chart values are standardised using z-score, where larger values along a given axis signify more risks along that characteristic.
3. 'Tier 1 leverage ratio' refers to Tier 1 capital divided by total assets.

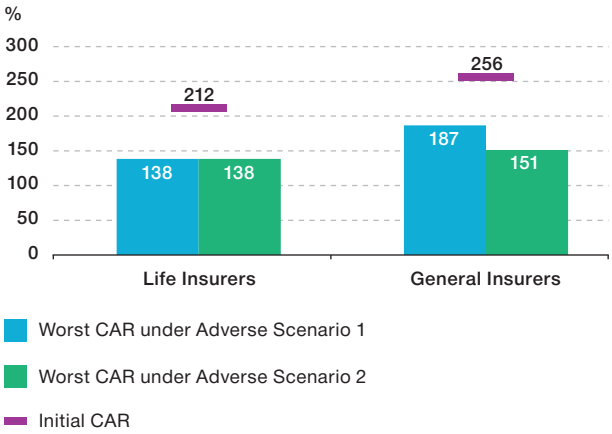
Source: Bank Negara Malaysia

Table 2.2: Macro Stress Test – Additional Assumptions in Insurance Stress Test

Life insurance medical and health premiums	Lower premium income growth due to constraints in life insurers' ability to reprice existing medical and health policies.
Payouts for medical and health insurance policies	Elevated claims payouts from medical and health insurance policies due to increasing incidence rate and size of claims, including surrenders.
General insurance premiums	Lower premium income due to intensified competition in the motor and fire segments and the hardening of the reinsurance market due to lower global reinsurance capacity.
General insurance claims	Elevated general insurance claims and expenses attributable to higher motor parts costs due to supply disruptions and increased import costs, coupled with significant flood events every year-end.

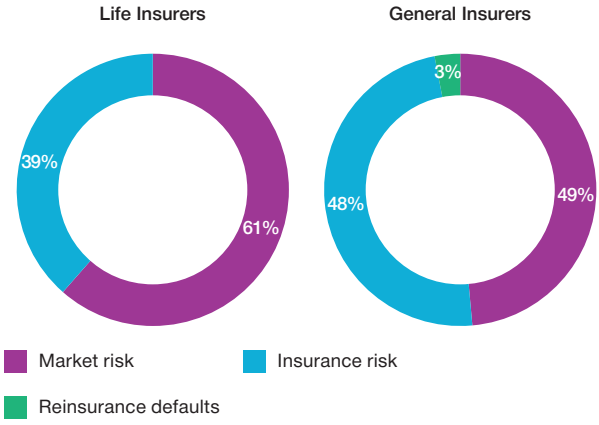
Source: Bank Negara Malaysia

Chart 2.31: Macro Stress Test: Insurance Sector – CAR Under Adverse Scenarios 1 and 2



Source: Bank Negara Malaysia

Chart 2.32: Macro Stress Test: Insurance Sector – Loss Drivers Under Adverse Scenario 1



Source: Bank Negara Malaysia

business profiles. Three life insurers, accounting for 16% of total insurance assets, are projected to breach the regulatory minimum following the shock, with the capital shortfall accounting for 7% of total insurance capital. Of these, two insurers are expected to remain below the regulatory minimum throughout the stress horizon. Constraints on premium adjustments despite higher medical claims have weighed on the pace of life insurers' recovery under the stress scenario. This highlights the importance of structural reforms in managing medical cost inflation. Such measures would support the long-term sustainability and affordability of MHIT products, as well as enhance insurers' financial resilience and safeguard consumers' access to financial protection.

For general insurers, capital positions are expected to remain resilient under assumptions of softer premium income and elevated claims across the motor and fire business segments. These assumptions reflect the adverse impact of rising claims frequency and severity, alongside intensified competition among insurers aimed at preserving or expanding their market share. The stress test exercise also incorporates potential spillovers from geopolitical developments that could contribute to a hardening of global reinsurance conditions. Under the stress scenarios, six general insurers, accounting for approximately 6% of total insurance assets, are projected to breach the regulatory minimum following the shock, with the capital shortfall accounting for 4% of total insurance capital.