MULTI-YEAR SOLVENCY STRESS TEST FOR BANKS AND INSURERS

Stress Test Affirmed Resilience of Financial Institutions

The Bank's multi-year solvency stress test exercise examines the potential impact of prolonged financial and macroeconomic strains on the resilience of individual banks and insurers, and the overall financial system. Similar to previous exercises, the latest stress test contains three scenarios, one baseline and two distinct adverse scenarios, over a four-year horizon (2020-2023). The scenarios were designed to be sufficiently severe, with low likelihood to occur (for details, refer to the Information Box on 'Solvency Stress Test Scenarios, Key Assumptions and Shock Parameters'). While unfolding developments surrounding COVID-19 have been unprecedented, the economic impact of these developments over the stress test horizon is likely to be captured by the range of shocks applied under the adverse scenarios. For added conservatism, the stress test exercise does not incorporate any additional policy intervention by the Government,[13] the Bank or other authorities, nor management actions by the financial institutions themselves that could be taken to preserve the resilience of financial institutions under stress. In all likelihood, should the stress scenarios materialise, financial institutions and authorities will take mitigating actions that would improve the outcome of the exercise.

Results from the latest exercise affirm that the banking and insurance sector is able to withstand extreme stress, with existing capital levels and earnings buffers sufficient to absorb potential losses and support lending activity. The capital buffers of banks and insurers in excess of the regulatory minima stood at RM121 billion and RM23.6 billion respectively,[14] more than double the buffers during the Global Financial Crisis in 2008. Given the continually evolving nature of the COVID-19 response both domestically and globally, the Bank will be updating the stress tests at individual bank level to ensure that they reflect relevant tail-end and major known risks as more clarity emerges on the duration and severity of the pandemic.

Financial system remains resilient under simulated adverse macroeconomic and financial conditions

At the end of the four-year stress horizon, the banking system's capital ratios remained above regulatory minima (Chart 2.13). Nearly 90% of losses are credit-driven, as loan impairments increase significantly under severe macroeconomic conditions (Chart 2.14). Similar to past exercises, banks incur limited losses from other risk drivers (Chart 2.15).

Similarly, the insurance sector is able to maintain capital adequacy ratios (CAR) above the regulatory minima (Chart 2.16). For life insurers, market risk shocks are the largest loss driver, reflecting their significant holdings of financial assets that are susceptible to market valuation changes. For general insurers, shocks related to higher motor claims contribute significantly to a reduction in capital through weaker operating profitability (Diagram 2.2).

[13] Including servicing guarantees extended for debt held by financial institutions.

[14] As at February 2020 for banks and as at end-2019 for insurers.

Chart 2.13: Banking System – Post-shock Total Capital Ratio

Post-shock capital ratios remain above regulatory minima

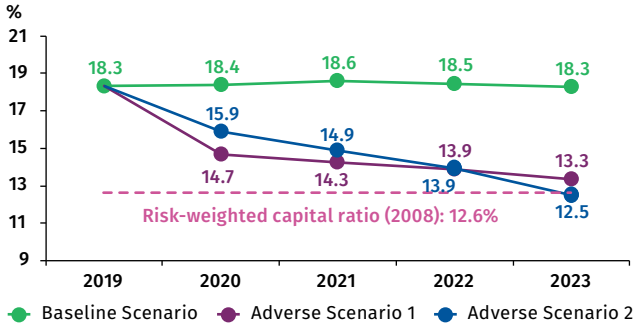


Chart 2.14: Banking System – Post-shock Gross Impaired Loans Ratio

Loan impairments expected to rise sharply under adverse conditions

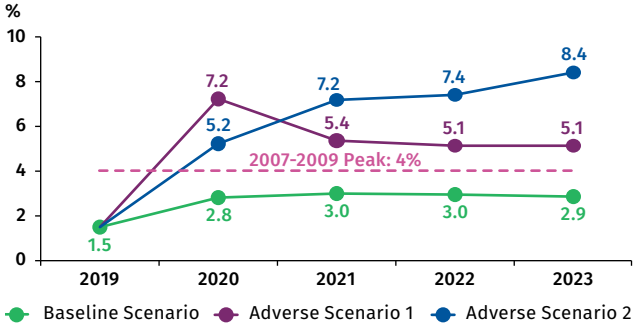


Chart 2.15: Banking System – Loss Drivers in Adverse Scenario 2

Nearly 90% of losses are credit-driven

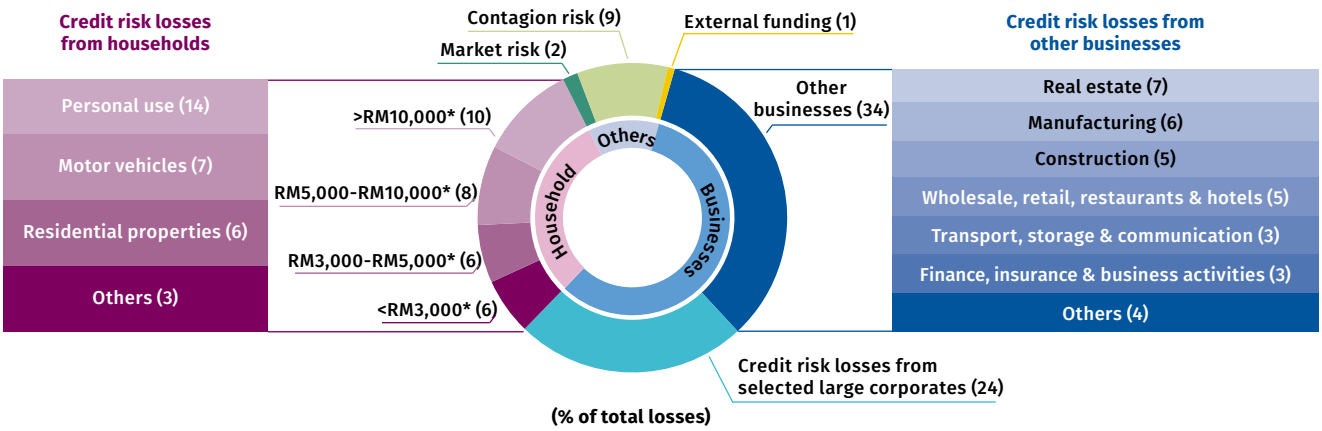


Chart 2.16: Insurance Sector – Post-shock Capital Adequacy Ratio

Post-shock CAR remain above regulatory minimum of 130%

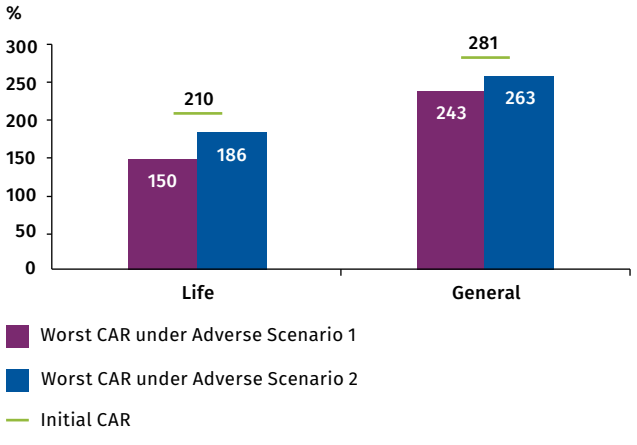
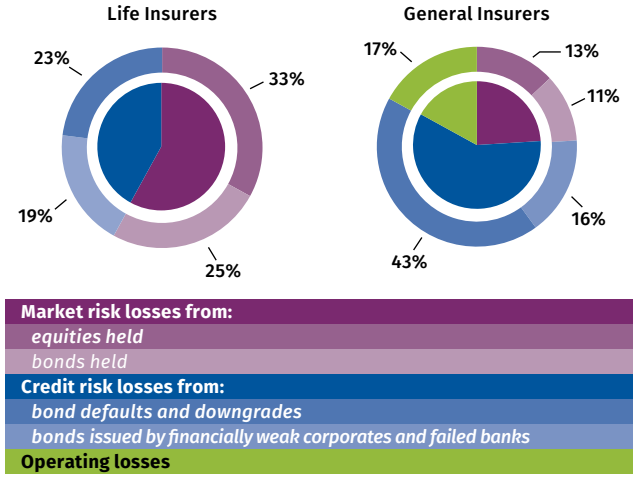


Diagram 2.2: Insurance Sector – Loss Drivers in Adverse Scenario 1



* Households monthly income groups

Source: Bank Negara Malaysia

Solvency Stress Test Scenarios, Key Assumptions and Shock Parameters

The first adverse scenario (AS1) simulates a V-shaped GDP growth path, in which Malaysia is assumed to experience a sharp recession with a magnitude equivalent to 2.5 standard deviations from the baseline growth in the first year of stress. This simulates a recession more severe than that experienced during the 2008 Global Financial Crisis. Under this scenario, shocks to global growth spill into the domestic economy, leading to lower income for households and firms, weaker business and consumer sentiments and severe stress in financial markets. This is followed by a strong rebound in the following years, amid positive counter-cyclical policy responses and improving sentiments.

In the second adverse scenario (AS2), an L-shaped growth path is simulated with a cumulative decline of 6 standard deviations spread across over four years. This scenario assumes an environment of prolonged sluggish growth, which will adversely impact income, wealth and sentiments over an extended period, as policy responses are either minimal or significantly underwhelming. Again, there is a deliberate focus on conservatism in this stress scenario, as the Government is likely to roll out sizeable measures to address the weakness in the economy.

Table 2.3

Solvency Stress Test Scenarios, Key Assumptions and Shock Parameters

Key Assumptions	AS1 – V-shaped Recession	AS2 – L-shaped, Protracted Recession
Balance sheet and income projections		
o Weaker annual loan growth	o Drops to as low as +0.5%	o Drops to as low as -2.1%
o Annual decline in banks' income growth, differentiated across segments	o Up to 48%	o Up to 21%
o Annual decline in insurers' premium income	o Up to 46%	o Up to 33%
Credit risk shocks		
o Probability of default (PD)		
• Business loans	• 5% to 10%	• 6% to 12%
• Household loans	• 1% to 14%	• 1% to 13%
o Loss given default (LGD)		
• Business loans	• 45% to 54%	• 46% to 58%
• Household loans	• 18% to 90%	• 17% to 89%
o Default of selected non-financial corporates with large borrowings from the financial system	o Corporations that have weak financial standings (below prudent thresholds) under simulated shocks	
Market risk shocks		
o Annual increase in MGS yields	o Up to 86 bps	o Up to 71 bps
o Annual increase in corporate bond yields	o Up to 103 bps	o Up to 79 bps
o Annual decline in FBM KLCI	o Up to 34%	o Up to 17%
o Annual depreciation against major currencies	o 10% to 19%	o 4% to 8%
External funding risk shock		
o Reversal of claims by non-resident banks	o Up to 30% of borrowings and deposits	o Up to 15% of borrowings and deposits
General insurance risk shock		
o Increase in claims ratio	o Up to 30%	o Up to 16%
Contagion risk shocks		
o Interbank o Banks to insurers	o Deterioration in counterparty bank's solvency o Deterioration in value of bonds issued by banks that failed the stress test under the adverse scenarios	

Source: Bank Negara Malaysia