

Risk Developments and Assessment of Financial Stability in 2018

OVERVIEW

Domestic financial stability continued to be preserved in 2018 supported by orderly financial markets and resilient financial institutions. Domestic financial markets experienced bouts of increased volatility due to external and domestic factors. The pace of monetary policy normalisation in the United States of America (US), escalating global trade tensions, rising geopolitical concerns and uncertainties in global oil prices were major themes that drove investor behaviour for most parts of the year, with emerging market economies (EMEs), including Malaysia, largely experiencing net portfolio outflows. Policy uncertainties immediately following the 14th General Election (GE14) also weighed heavily on investor sentiment. Domestic financial market conditions remained orderly, supported by strong domestic institutional investors, including financial institutions. In particular, financial institutions remained resilient with healthy profitability and strong capital and liquidity buffers. Improvements in asset quality continued to be observed. Liquidity and funding conditions also remained conducive for financial intermediation activities. These factors have contributed towards sustained public confidence in the Malaysian financial system.

Domestic financial stability was sustained and well-supported by sound institutions and orderly financial market conditions

The Financial Stability Committee (FSC) of the Bank met four times in 2018. While noting that risks to domestic financial stability are contained (Diagram 1.1), the FSC remained vigilant over elevated levels of domestic debt and imbalances in the property market that continued to be a source of potential vulnerability. Risks to financial stability from household and non-financial corporate debt are judged to

be largely mitigated by the sustained overall debt servicing capacity of borrowers and prudent credit underwriting and risk management practices of financial institutions. Further, cross-cutting measures, including macroprudential policies, implemented since 2010 have also led to more sustainable aggregate household debt accumulation. Pockets of vulnerabilities continue to persist among low-income borrowers, who are more vulnerable to adverse shocks given their low financial buffers. However, their share of household borrowings has continued to decline in recent years. Although businesses were slightly more leveraged amid weaker earnings, their overall debt servicing capacity remains strong relative to prudent thresholds. Business conditions in the oil and gas (O&G), property and construction sectors are expected to remain challenging. However, direct exposures of financial institutions to firms in these sectors are low. For the property sector, expectations of continued orderly adjustments to the mismatch in housing demand and supply will also mitigate risks of broader spillovers to the financial system. Importantly, banks continue to maintain strong financial buffers to weather against potential losses stemming from households, businesses and the property market, including under severe stress scenarios.

While market expectations of tighter global financial conditions appear to have eased somewhat going into 2019, close vigilance over the pace and level of debt accumulation and risk-taking behaviour is warranted to prevent a build-up of vulnerabilities that could expose the financial system to future risks. The FSC therefore continues to view current prudential measures to be appropriate to manage these risks and ensure that financial intermediation activities to support the economy will continue to be sustained. Strong and resilient financial institutions will remain a key strength underpinning domestic financial stability.

Diagram 1.1: Outlook of Risks to Domestic Financial Stability

Risk Area	Sector	Risk Outlook	Direction of Risks (2019 vs 2018)
Credit risk	Household	<ul style="list-style-type: none"> Pockets of risks are expected to persist among more leveraged borrowers that have taken loans to purchase higher-valued properties and for personal use. Borrowers who are more dependent on variable income and those earning lower income and living in urban areas may also face greater challenges servicing their debt. Government initiatives are expected to partly alleviate cost of living pressures, while stable income and employment prospects along with responsible lending practices will continue to support overall household debt servicing capacity. 	↔
	Property market	<ul style="list-style-type: none"> Continued soft market conditions amid affordability issues may see the level of unsold housing units rise further in the short term. However, adjustments in house prices are expected to be orderly given continued firm demand for affordable homes and housing by owner-occupiers, sustained lending by banks and policies by the Government aimed at better aligning housing demand and supply. Risks are expected to remain elevated in the office space and shopping complex segment, given the large incoming supply. Further unabated supply will increase future risks. 	↔
	Non-financial corporations	<ul style="list-style-type: none"> Business conditions are likely to remain challenging in the O&G, property-related and construction sectors. Volatility in global oil prices could adversely impact income and investment in the O&G sector but the gradual recovery from recent supply disruptions should provide some support to firms. Property developers may continue to record sluggish sales performance amid a soft property market. Businesses generally have healthy financial buffers. However, uncertainties from a prolonged trade war may impact businesses more broadly, resulting in lower profitability and investments, which could erode these buffers. 	↔
Market risk		<ul style="list-style-type: none"> The pace of US monetary policy normalisation, escalating trade tensions and rising geopolitical risks may lead to non-resident outflows from the region which could pose upward pressure on yields and reduce market liquidity. The presence of strong domestic institutional investors, including financial institutions, is expected to continue providing support and liquidity to domestic financial markets on the back of attractive valuations. 	↔
Liquidity and funding risk		<ul style="list-style-type: none"> Persistent and prolonged outflows may reduce overall liquidity to levels that could lead to market fragmentation and drive funding costs higher. Banks are expected to remain resilient to funding shocks, supported by adequate liquidity buffers and continued progress in accumulating stable sources of longer-term funding. 	↔
Contagion risk		<ul style="list-style-type: none"> Contagion risk from non-bank financial institutions (NBFIs) to the financial system is expected to remain low. Measures to strengthen the governance and management of some NBFIs will support improvements in performance and greater resilience to changes in financial market conditions going forward. 	↔

↔ Stable ↑ Increasing ↓ Decreasing

Note: Sectors shaded in purple indicate that risks are elevated at current levels.

Source: Bank Negara Malaysia

CREDIT RISK

Household Debt Continued to Expand at a Slower Pace

In 2018, the growth of household debt slowed further to 4.7%¹ (Chart 1.1), mainly driven by slower growth in loans extended by non-bank financial institutions (NBFIs). As a proportion of gross domestic product (GDP), total household debt declined to 83% as at end-2018 (Chart 1.2). Residential property loans remained the primary contributor to household debt growth (Chart 1.3), although lending has been curtailed by reduced housing affordability, particularly among low- to middle-income households. Meanwhile, loans for the purchase of securities² registered strong growth, bolstered by the sustained performance of ASNB funds which continued to offer attractive returns. At the same time, some banks were also rebalancing their exposures towards more secured lending, with more banks offering ASNB financing facilities. Growth in loans for consumption³ trended lower towards the end of 2018, as stronger demand for hire purchase and personal loans during the three-month tax holiday from June to August tapered off with the imposition of the Sales and Services Tax (SST) in September.

At the aggregate level, households continue to be well-placed to manage their debt repayments, supported by continued income and employment growth. The ratio of household assets to debt remained high at four times. Household financial assets expanded at a slower rate in 2018 but continued to outpace the growth of debt (Chart 1.4). The slower expansion of financial assets reflected lower valuations of equity holdings and unit trust funds, amid the weaker equity market performance in 2018. Notwithstanding this, households continued to maintain comfortable levels of financial assets and liquid financial assets (LFA) at 2.1 times and 1.4 times of debt, respectively. About two-thirds of household financial assets are liquid assets, mostly in the form of deposits and unit trust funds, which provide them with ready access to funds to meet debt obligations and adjust to unexpected changes in their financial circumstances. Individuals earning below RM3,000

per month, however, remained vulnerable, given their low financial buffers. With an LFA cover of less than one time (0.6 times) of outstanding debt, borrowers in this group face substantially higher risks of defaulting on their loans in the event of an income shock.

Following the implementation of responsible lending standards by banks, the share of vulnerable household borrowers has continued to decline over the years (Chart 1.5). Further, various government initiatives to alleviate cost of living pressures, such as the higher minimum wage, price ceiling on retail fuel prices and cash grants via *Bantuan Sara Hidup*, will lend some support to lower-income households.

Although household debt remains elevated, risks to financial stability are mitigated. Current macroprudential measures implemented since 2010 have guided a more sustainable pace of growth in household debt, with debt in recent periods expanding more in line with income. About two-thirds of household borrowings are secured by property or securities, thus substantially reducing the net exposures of financial institutions to households. Banks also continue to observe prudent lending and risk management practices, with loan affordability assessments in place to prevent an excessive build-up of debt by households. Debt service ratios⁴ (DSR) for the bulk (70%) of newly-approved loans have remained below 60%.

The quality of household debt remained intact, with risks largely limited to loans for the purchase of higher-valued properties and personal financing

The overall quality of lending by both banks and non-banks to households remained sound with the aggregate impairment ratio improving to 1.2%, and the aggregate delinquency ratio at a low and stable level (1.2%). Pockets of risks, however, remain. Borrowers with housing loans originated in earlier periods for the purchase of properties priced above RM500,000 and who experience greater variability in their income are showing some signs of difficulty in servicing their debt. Higher incidents of default in personal financing also continued to be observed among borrowers earning less than RM5,000 per month, and those living in urban areas who are experiencing higher costs of living (refer to the Info Box titled 'Insights on the Trends and Usage of Personal Financing'). This is consistent with data from the Credit Counselling

¹ Extended by banks, development financial institutions (DFIs) and major NBFIs.

² About 85% of outstanding securities loans are for the purchase of Amanah Saham Nasional Berhad (ASNB) units, the bulk of which are fixed price.

³ Primarily motor vehicles, credit card and personal use.

⁴ The ratio of total monthly bank and non-bank debt obligations to monthly disposable income (net of statutory deductions).

Chart 1.1: Household Sector – Annual Growth of Debt

Growth of household debt continued to moderate...

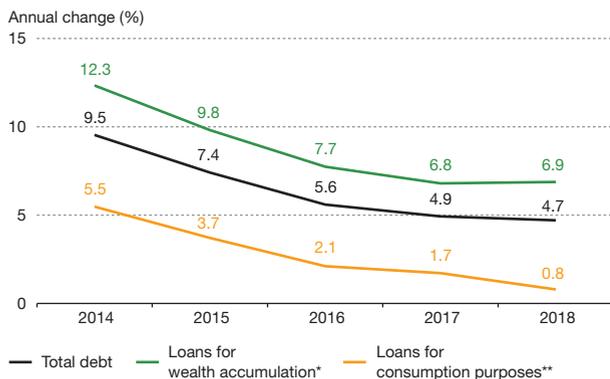


Chart 1.2: Household Sector – Key Ratios

...with debt-to-GDP ratios declining further

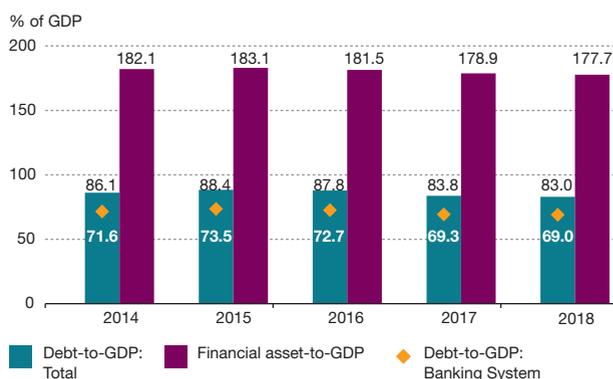


Chart 1.3: Household Sector – Contribution to Growth in Debt

Slower debt growth was driven mainly by moderation in residential property and motor vehicle loans

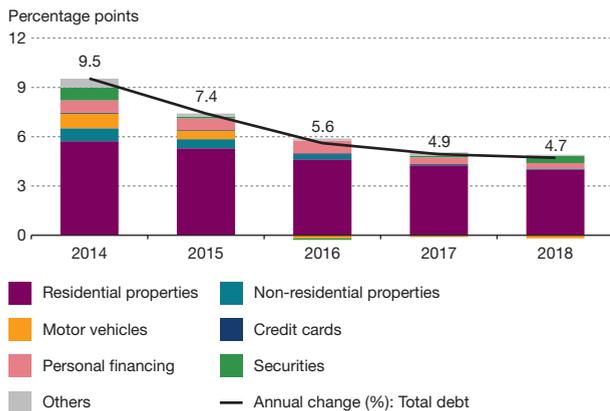


Chart 1.4: Household Sector – Debt and Financial Assets

Growth of financial assets continued to outpace that of debt

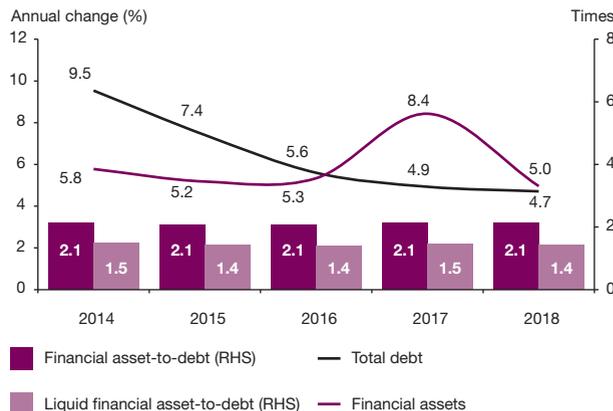


Chart 1.5: Household Sector – Debt by Monthly Income Group

Share of borrowings by vulnerable borrowers declined further

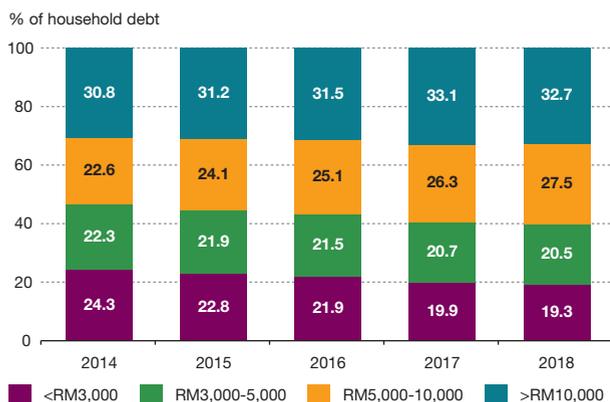
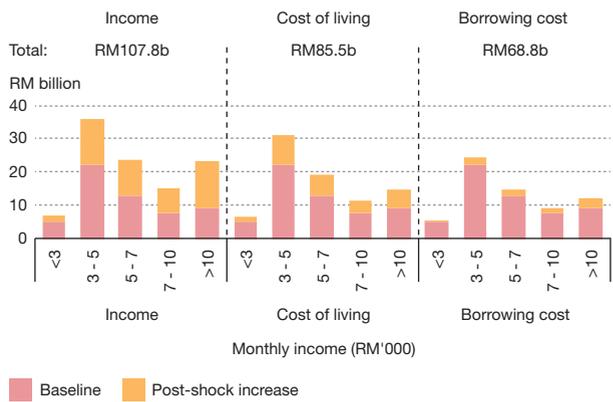


Chart 1.6: Household Sector – Potential Losses to Banks Under Pre- and Post-Shock Scenarios

Potential losses remain within banks' total excess capital buffer



* Residential properties, non-residential properties and securities
 ** Primarily motor vehicles, personal financing and credit card

Source: Bank Negara Malaysia, Bloomberg, Securities Commission Malaysia and Department of Statistics, Malaysia

Table 1.1

Shock Assumptions and Results of Sensitivity Analysis on Household Debt

Scenarios		Parameters (Magnitude)	Share of borrowers with negative FM (%)	Potential losses to the banking system (RM billion)
Baseline			6.4	60.3
Shocks	Income	Decline in total income ¹ (↓ 10%)	12.0	107.8
	Cost of living	Increase in basic expenditure ² (↑ 20%)	9.9	85.5
	Borrowing cost	Higher funding costs ³ (↑ 50bps)	7.4	68.8

Note:

¹ Larger than the decline in aggregate household disposable income of 8.7% during the Asian Financial Crisis in 1998

² Close to triple that of 2009 - 2016 CAGR of 7.3% for expenditures on basic necessities

³ Based on the increase in the average lending rate (ALR) following two consecutive increases in Overnight Policy Rate in 2006

Source: Bank Negara Malaysia, Department of Statistics, Malaysia and Oxford Economics

and Debt Management Agency's (*Agensi Kaunseling dan Pengurusan Kredit*, AKPK) Debt Management Programme (DMP) which showed that borrowers in this segment have grown as a share of overall DMP participants since 2017. Such borrowers account for about 80% of DMP participants and were found to commonly overestimate their ability to cope with higher costs of living and debt obligations due to poor financial planning. These developments underscore the continued relevance of existing macroprudential measures in strengthening household resilience.

Banks are expected to remain resilient to potential losses from household lending under stressed scenarios. Based on a sensitivity analysis that simulates the impact of income, cost of living and borrowing cost shocks on borrowers' financial margin (FM),^{5,6} potential losses to the banking system from borrowers with negative FM are estimated to remain within banks' excess capital buffers, which stood at RM143.1 billion as at end-2018 (Table 1.1). Income shocks would have the greatest impact in increasing the share of borrowers with negative FM and associated credit losses to banks (Chart 1.6).

Insights on the Trends and Usage of Personal Financing

The growth of personal financing (PF), which drove the earlier rapid expansion in household debt, has moderated significantly following the implementation of a series of cross-cutting measures¹ since 2012 [2018: 2.3%; 2017: 2.8%; 2008: 25.2% (peak)]. The moderation in growth was driven primarily by NBFIs, which accounted for more than 40% of total PF. As a result, the share of PF to total household debt has trended downwards to 14.5% as at end-2018 [2013: 16.4% (peak)]. While risks to financial stability from PF exposures are assessed to be limited given the low level of debt-at-risk² (2.7% of total household debt), rising default incidents in PF and a sharp increase in the share of bankrupt borrowers with PF from 2010 warrant continued vigilance (Chart 1.7). A survey³ conducted by the Bank of banking institutions and borrowers that sought assistance from AKPK provided further insights on the profile and use of PF by borrowers, including distressed borrowers.

¹ Guidelines on Responsible Financing (subsequently re-issued as Policy Document in 2013) and Policy Document on Personal Financing were implemented in 2012 and 2013, respectively.

² The proportion of PF debt held by borrowers with negative FM to total household debt.

³ The survey comprises two parts – (i) outstanding loans extended by major PF creditors; and (ii) distressed borrowers with PF who approached AKPK within a one-month period in September 2018.

⁵ Please refer to the Box Article in FSPSR 2017 titled 'Indebted to Debt: An Assessment of Debt Levels and Financial Buffers of Households' for details on the FM methodology.

⁶ Shocks are applied individually and calibrated to parameters that are more severe than that historically observed. The analysis does not account for the shocks to occur simultaneously as the likelihood of this is assessed to be very low.

About half of total outstanding PF is held by lower-income borrowers (that is, with monthly earnings below RM5,000). The share of PF to their total borrowings stood at 26.6%, almost double that of the average borrower (14.5%). PF is used mainly for consumption purposes (Chart 1.8). Notably, more than one-third of PF are for discretionary consumption expenditure to support lifestyle choices, which include the purchase of durable goods and expenses for weddings and festive seasons. This was similarly observed among distressed borrowers (Chart 1.9), which points to persisting behavior of spending beyond one's means (refer to additional information provided under 'Financial Capability and Inclusion Demand Side Survey 2018' in Chapter 4). A sizeable share of PF (15%) is also used for consumption of necessities which include emergency- and medical-related expenses, mostly by borrowers earning RM10,000 and below and living in urban centres. These borrowers face greater difficulty coping with living costs and unexpected expenses due to poor financial planning.

Close to half of PF were taken to accumulate assets, mainly to make down payments for house purchases and for business purposes. Notably, among distressed borrowers with PF, such borrowings included a significant share utilised for home renovations. Given that the appreciation of home values from such expenditure may not always correspond to amounts spent on renovation, highly-leveraged borrowers may find themselves in a negative equity position with debt burdens they cannot afford.

While incidents of impairment of PF have increased, the level remained low at 0.2% of total household debt as at end-2018. Reflecting strengthened underwriting practices of banks and NBFIs, DSRs for newly-approved PF have generally been below 60% with improvements observed in vintage default rates for PF in recent years.

Chart 1.7: Bankruptcy Cases by Purpose

Rising and significant share of personal financing among bankrupt borrowers

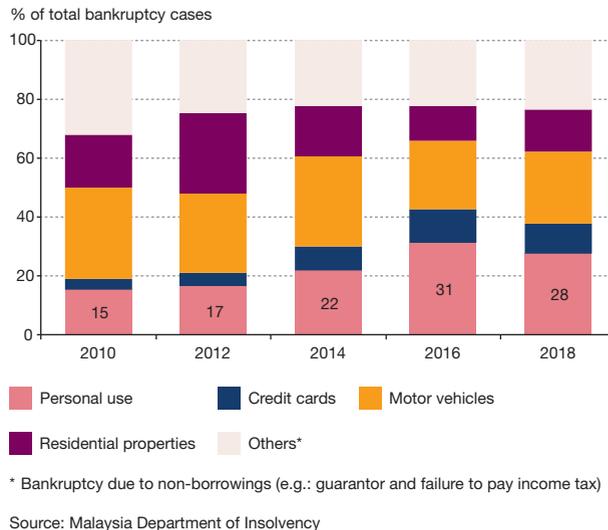
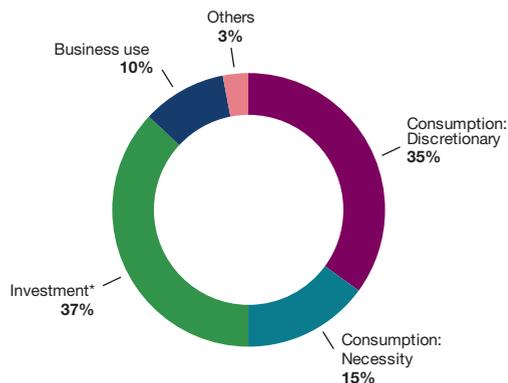


Chart 1.8: Outstanding Personal Financing by Usage

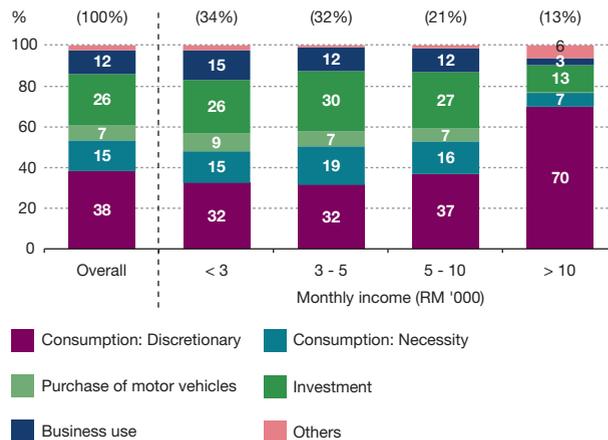
Sizeable PF was used to finance discretionary spending to support lifestyle...



* Includes PF used for the purchase of motor vehicles
Source: Bank Negara Malaysia

Chart 1.9: Composition of AKPK Customers with PF by Usage and Monthly Income Group

...with similar trend observed among the distressed borrowers, mainly those in the lower-income groups



Note: (..) denotes the share of total responses by income group
Source: Credit Counselling and Debt Management Agency (AKPK)

House Price Growth Continues to Moderate, While Oversupply Conditions Persist in the Non-Residential Property Market

House prices⁷ continued to grow more moderately in the first half of 2018 at 4%, with preliminary data for 3Q 2018 suggesting a further moderation to 1.1%. The easing in house price growth has been reflective of weaker demand for properties in the higher-priced segments which remain unaffordable for most buyers, and subdued activity in the housing market over the last six years. This is contributing to adjustments in housing supply towards more affordable segments in the past two years with an increasing share of new housing launches targeting properties priced below RM500,000. During the first nine months, despite fewer launches of new housing units, higher activity in this price segment across key states⁸ supported a marginal growth in the total volume of housing transactions. In other states, house prices at this level are, however, still unaffordable. This contributed to the further increase in the stock of unsold⁹ housing units by 22.5% in the nine months to September 2018. Despite this, a large and broad-based decline in house prices which could increase risks of a disorderly correction in the housing market is not expected for several reasons. Broad house price movements are largely driven by landed residential property transactions (76% of MHPI weightage) which continue to experience firm demand.¹⁰ Demand for housing is also expected to remain supported by continued income growth and formation of new households.

Affordability remains an issue in the residential property market, while oversupply of office and retail space persists in the non-residential property market

Houses priced above RM250,000 continued to form the bulk of new launches and total unsold housing units, adding to the housing supply and

demand mismatch in some locations. While the Government has introduced several measures¹¹ to address the structural mismatch, closer coordination with the private sector will be important to guide a smooth transition to a more sustainable housing market, while gradually reducing the level of unsold properties. With firm demand for affordable homes continuing to outstrip new supply in the foreseeable future, coupled with measures to improve financing affordability, the outlook for the housing market is expected to gradually improve along with greater alignment between demand and supply conditions.

In the non-residential property segment,¹² market activity was subdued in the first nine months of 2018. The commercial segment, which comprises shops, as well as office space and shopping complexes (OSSC), recorded higher transaction volumes and values, in particular for properties priced above RM500,000. Meanwhile, higher transactions in the industrial segment were driven mainly by properties priced RM1 million and above.

Notwithstanding the uptick in market activity in the commercial segment, the large incoming supply of new and planned office space in the Klang Valley and retail space nationwide is expected to exacerbate existing oversupply. This is despite the moderation observed in the loan approval rate for the construction of OSSC to 73.1% (2017: 79.7%). There remains a risk that these additional commercial spaces would remain unabsorbed, given the continued deterioration in vacancy rates even at current levels of supply, and potential headwinds to the domestic economy. With the average rental rate of office space in the Klang Valley remaining depressed, risks of property prices adjusting sharply lower remain elevated. Building owners continued to offer generous incentives to increase tenant demand, including rent holidays and discounts to asking rents. Such inducements will likely further depress effective rental rates.

⁷ Measured by the Malaysian House Price Index (MHPI).

⁸ Refer to Kuala Lumpur, Selangor, Johor and Penang.

⁹ Refers to unsold properties that have been completed (overhang) and unsold properties currently under construction. These properties encompass all residential properties as well as serviced apartments and small office home office (SOHO). (Source: National Property Information Centre).

¹⁰ The share of unsold landed residential properties has continued to decline from 46% in 1Q 2015 to 33% in 3Q 2018.

¹¹ Efforts include the creation of a single authority for affordable housing, integration of demand and supply database for planning purposes, adoption of more advanced and cost-efficient construction technology, and development of the rental market. Measures to promote home ownership and reduce the number of unsold housing units were also announced in Budget 2019, specifically aimed at enhancing affordability for first-time home buyers, lower-income households and civil servants.

¹² Consists of office space, shopping complexes, shops, hotels, land and factories.

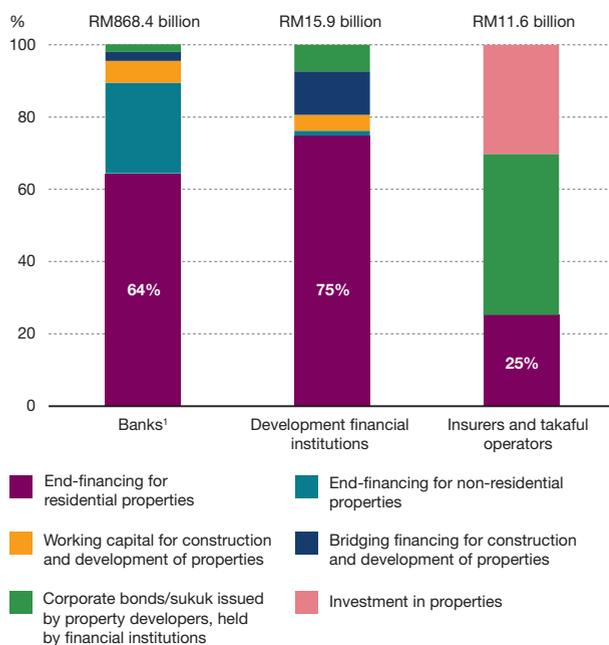
In 2018, total financial institutions' exposure¹³ to the domestic property market (RM901.3 billion, grew at a slower rate of 5.9% (2017: 7.1%), in line with reducing housing affordability and elevated risks associated with the oversupply in the non-residential property market. End-financing for residential properties remained the largest contributor to growth (Chart 1.11). Consistent with lower affordability, loan applications continued to be largely concentrated in loans for houses priced below RM500,000. First-time house buyers continued to account for the bulk (69%) of total residential property loan borrowers. Speculative activities also remained subdued (Chart 1.12).

Despite higher level of unsold properties, eligible first-time home buyers continued to have access to house financing

Overall loan approval rates have trended slightly lower at 71.3% (Chart 1.13). Based on a survey conducted by the Bank, the primary reason for loan rejections was

Chart 1.10: Property Market – Financial Institutions' Exposures to the Property Market

Financial institutions' exposures are mostly related to end-financing for the purchase of residential and non-residential properties



¹ Excludes MBSB Bank

Source: Bank Negara Malaysia

¹³ This includes exposures of banks, DFIs, insurers and takaful operators.

due to applicants being already too indebted or having insufficient income to meet scheduled loan repayments, even without considering the prospect of a future increase in interest rates.

The growth of bank financing to the non-residential property segment was stable at 2% in 2018, driven largely by end-financing to purchase shops. While end-financing for the purchase of OSSC continued to grow, banks remained largely cautious in lending to this segment. Similar to loans for the construction of OSSC, lower loan approval rates were also observed for the purchase of OSSC at 66.7% (2017: 76.8%).

Risks from property sector remain contained, with lending quality intact

Overall, the quality of banks' loans for the purchase of residential and non-residential properties remained sound, supported by prudent underwriting and valuation practices. On aggregate, impairment and delinquency ratios for such loans remained low (Chart 1.14) and vintage default rates have continued to improve in recent years (Charts 1.15 and 1.16). In line with enhanced credit risk management standards, more robust assessments by banks on the viability of property development projects have been observed. These include greater consideration of location-specific factors such as the impact of new developments on properties in the surrounding area in credit assessments.

Amid softer market conditions, the earnings performance of property developers has been under pressure from margin compressions and ongoing efforts to clear existing inventories. For the year, property developers continued to record lacklustre performance. While the liquidity position of firms in the sector, as measured by the median cash-to-short-term-debt ratio (CASTD), has been low at below one time (0.7 times) since 2016, the debt servicing capacity, as measured by the median interest coverage ratio (ICR), remained healthy at four times, which is comfortably above the prudent threshold of two times.

Risks to financial stability from developments in the property market remain contained. An orderly transition to a more sustainable housing market is a welcome development to reduce longer-term risks from high household debt and sharp housing market corrections. Banks' exposures to property developers with larger stocks of unsold housing units are estimated to be less than 2% of total credit exposures of banks.

Chart 1.11: Property Market – Annual Growth of End-Financing by Segment

End-financing to purchase residential and non-residential properties continued to grow albeit at a moderate pace



Chart 1.13: Property Market – Approval Rate for Loans by Purpose

Eligible home buyers continued to have access to house financing. Banks remained cautious amid oversupply situation in the OSSC segments

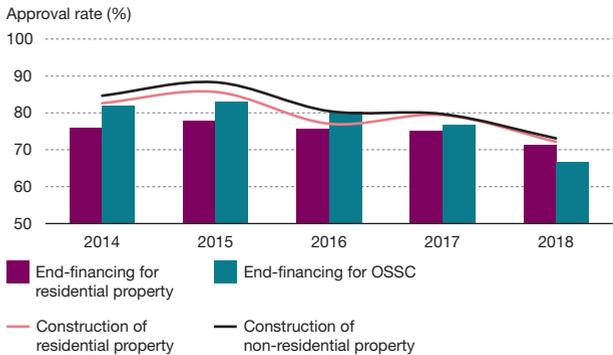
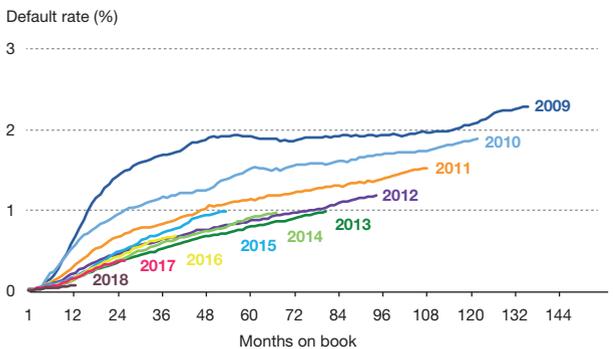


Chart 1.15: Property Market – Vintage Analysis for Residential Property Loans in the Banking System

Vintage default rates for residential and non-residential property loans originated in recent years continued to improve



Note: Data include impaired loans written off by banks

Source: Bank Negara Malaysia

Chart 1.12: Property Market – Borrowers with Three or More Housing Loans and Early Settlement of Housing Loans

Speculative activities in the residential property market remained subdued

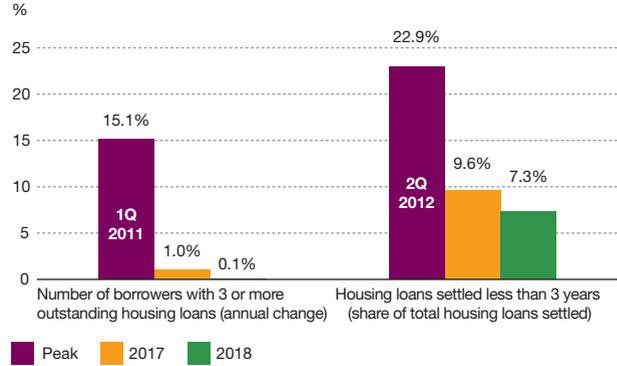


Chart 1.14: Property Market – Impairment Ratio for End-Financing by Segment

Asset quality remained sound

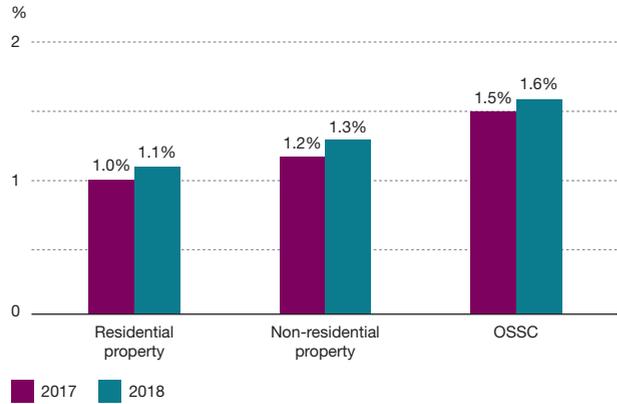
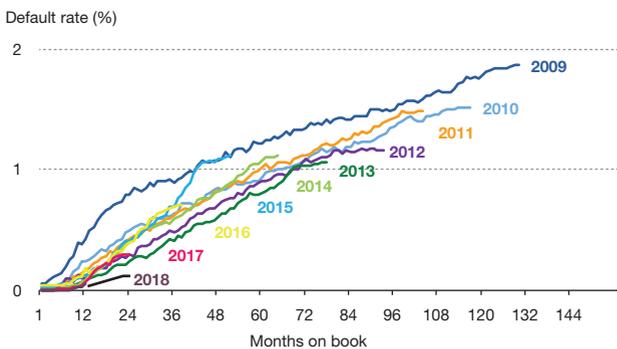


Chart 1.16: Property Market – Vintage Analysis for Non-Residential Property Loans in the Banking System



Similarly, exposures of banks to the OSSC segments remain small, accounting for 3.4% and 6.5% of banks' total outstanding loans and holdings of corporate bonds and sukuk, respectively. The Bank's sensitivity analysis also indicates that banks' capital buffers continue to be sufficient to withstand a broad price correction (50% decline in property prices) in the domestic property market, including its potential spillovers to other economic sectors. Financial stability risks from a more generalised downward correction in house prices are further mitigated by the bulk of residential property loans being extended to owner-occupiers. These borrowers have a strong incentive to maintain loan repayments in the event of financial stress or negative equity on their homes, compared to investment buyers. Further, 72% of outstanding housing loans have a loan-to-value ratio of 80% and below, thus limiting potential losses to the banking system.

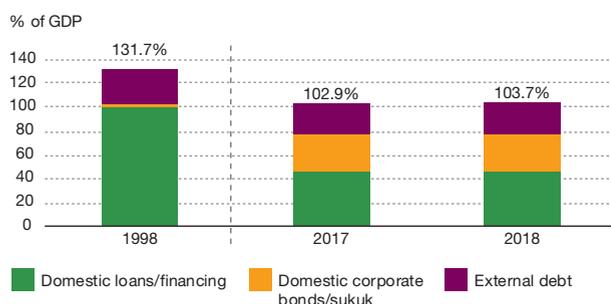
Debt Servicing Capacity of Overall Businesses Remains Healthy Despite Higher Leverage

In 2018, non-financial corporate (NFC) debt grew annually by 6.5% to 103.7% of GDP (Chart 1.17), driven by the construction, manufacturing and real estate sectors. Business activity continued to be primarily supported by domestic financing, which accounts for 74% of total NFC debt.

Outstanding bonds and sukuk¹⁴ recorded a strong expansion, supported by higher corporate bond issuances by businesses in the real estate, construction and utilities sectors. Meanwhile, loans extended by banks and DFIs

Chart 1.17: Business Sector – Non-Financial Corporate Debt-to-GDP Ratio

Higher debt driven by new bond and sukuk issuances



Source: Bank Negara Malaysia

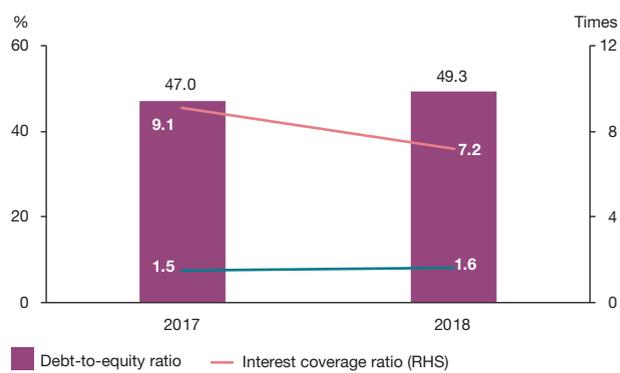
¹⁴ Corporate bonds and sukuk excluding issuances by Cagamas, financial institutions and non-residents.

recovered from very low growth in 2017, with positive and stronger loan growth recorded across most business sectors (4.6%; 2017: 1.3%). Financing to the wholesale and retail and manufacturing sectors, which account for about 36% of banks' business loans, was largely driven by higher business activity during the three-month tax holiday. Outside these sectors, credit supply by banks also remained supportive of business activity, with continued access to financing for small and medium enterprises (SMEs) as reflected by stable loan approval rates (refer to the Box Article in Chapter 2 titled 'Understanding Financing Through the Lens of SMEs').

Businesses recorded a slight deterioration in financial performance¹⁵ during the year (Chart 1.18), amid supply disruptions in the commodity sectors, the relatively weaker ringgit and uncertainties immediately after GE14. The higher overall leverage¹⁶ of businesses largely reflected lower retained earnings by plantation companies following the decline in crude palm oil prices. Amid more challenging business conditions, weaker earnings performance in most sectors resulted in a lower median ICR. Notwithstanding this, overall businesses continued to maintain comfortable debt servicing and liquidity positions that were well above prudent thresholds.¹⁷

Chart 1.18: Business Sector – Leverage, Debt Servicing Capacity and Liquidity Indicators

Healthy financials continued to support debt servicing capacity



Note: Prudent thresholds for ICR and CASTD are two times and one time, respectively

Source: Bloomberg and Bank Negara Malaysia estimates

¹⁵ Based on financial data of 120 companies listed on Bursa Malaysia, covering major economic sectors and about 85% of market capitalisation (excluding financial institutions).

¹⁶ Measured by the median debt-to-equity ratio.

¹⁷ Prudent thresholds for ICR and CASTD are two times and one time, respectively.

The overall quality of business borrowings from the banking system remained sound, with the ratio of impaired loans at a low and stable level (Chart 1.19). The year saw a higher number of downgrades in domestically-rated corporate bonds (2018: 8; 2017: 4), mostly reflecting firm- or sector-specific developments. These exposures posed little risks, accounting for only 0.4% of total corporate bonds/sukuk held by financial institutions. Firms in the O&G-related, real estate¹⁸ and construction sectors continued to face headwinds (Chart 1.20). While contract awards to O&G service providers have increased from 2017, the positive impact of new contracts on earnings will likely only materialise in the medium term. Most O&G players, particularly those in the upstream segment, have continued to rationalise their debt levels, as reflected in the lower median leverage ratio of 39.9%. This should improve future debt servicing capacity. While the impaired loans ratio for the O&G-related sectors remained elevated at 10.2%, banks have already largely provided against losses in this sector.

High overall quality of business borrowings, despite slight deterioration in financial performance

In the construction sector, the Government's cancellation or deferment of major infrastructure projects has had limited direct impact on asset quality given the low exposures of financial institutions to firms involved in such projects (3.6%

Chart 1.19: Business Sector – Gross Impaired Loans

Overall quality of lending remained sound

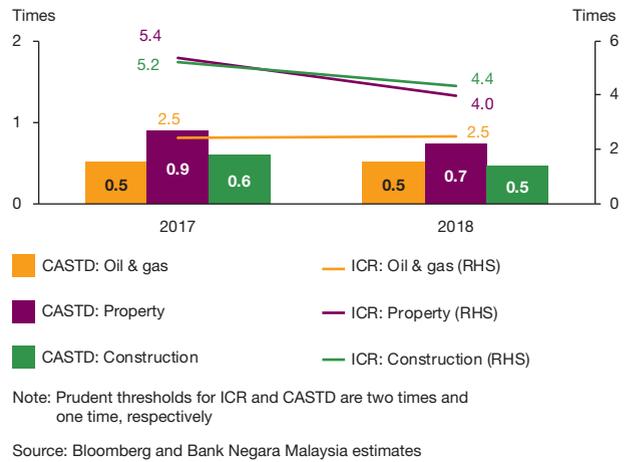


Source: Bank Negara Malaysia

¹⁸ For developments in the real estate sector and the performance of property developers, please refer to the credit risk assessment on the property sector.

Chart 1.20: Business Sector – Liquidity and Debt Servicing Capacity Indicators for Selected Sectors

Satisfactory debt servicing capacity of firms in sectors with weaker credit risk outlook



of total outstanding loans and bonds/sukuk held by banks). The impaired loans ratio for the construction sector increased but remained relatively low at 2.7%. This was mainly driven by firms in the civil engineering segment and SMEs involved in non-residential property development, which were affected by the slower public expenditure and oversupply in the OSSC segment.

Limited impact to banks from potential credit losses from severe shocks on Malaysian corporations

During the year, corporate external borrowings grew at a faster rate, primarily driven by firms in the manufacturing and construction sectors. The increase was also partly due to valuation effects from the weaker ringgit. On aggregate, risks to domestic financial stability from external foreign currency (FCY) borrowings continued to be mitigated by several factors. 76% of corporate external debt are medium- to longer-term debt, thereby limiting rollover risks. Three-quarters of external FCY debt are also hedged against currency risks, either through financial derivatives or FCY revenue streams from overseas operations. The lower risk profile of corporate external borrowings is further attributed to the share of debt (about half) represented by intercompany loans (mainly by resident firms that are part of multinational corporations) and trade credit facilities which are backed by export receivables.

Based on a sensitivity analysis of large NFC borrower groups,¹⁹ banks are able to withstand potential credit losses from severe shocks.²⁰ Cumulative potential credit losses from exposures to these borrowers are estimated to be about one-third of banks' excess capital buffers. Post-shock, large borrower groups may face short-term liquidity constraints, but are expected to be able to meet their debt obligations from earnings, with their ICR at 2.2 times.

In 2019, business activity is expected to be supported by sustained demand and continued income and employment growth. Continued growth in private sector investments will further support business performance. However, downside risks remain from slower global growth, an escalation of trade tensions between the US and People's Republic of China (PR China) and volatility in global oil prices which could adversely impact income and investments in the private sector. On the domestic front, firms in the commodity sectors are expected to recover from supply disruptions, while businesses more generally continue to adjust to changes in operating conditions arising from recent policies and greater competition. At current leverage and debt servicing levels, the debt servicing capacity of overall businesses is expected to remain generally healthy although firms in some sectors may be more vulnerable to financial strains. Any impact to the banking system will not be significant.

MARKET RISK

Domestic Financial Markets Remained Orderly Despite Continued Volatility

Domestic financial markets continued to experience bouts of volatility in 2018 due to both domestic and external developments. Similar to other regional financial markets, the domestic markets experienced cumulative portfolio investment outflows during the year amounting to RM44 billion. Nevertheless, orderly market conditions were preserved as

¹⁹ Large NFC borrower groups represent corporations with aggregate credit exposures (include direct financing and holdings of corporate bonds and sukuk) exceeding RM1 billion with Malaysian financial institutions. In 2018, financial institutions' exposure to these borrowers stood at 41.5% of exposures to businesses.

²⁰ Up to 30% depreciation in the ringgit, a 50% decline in operating profit, and a 50 and 100 basis points increase in borrowing costs for ringgit and FCY borrowings, respectively.

domestic institutional investors stepped in to take advantage of attractive valuations. Market stress, measured through the Financial Market Stress Index, peaked temporarily in June immediately after GE14 but has since declined back to the low levels observed in 2017 as greater policy clarity was provided with the tabling of Budget 2019 by the Government (Chart 1.21). Brief episodes of slightly higher equity and bond market volatility were, however, observed following sharp movements in crude oil prices and US equity markets in the last quarter of 2018. Investor sentiment in the region, including Malaysia, was also affected by uncertainties surrounding the pace of monetary policy normalisation in the US, escalating trade tensions between major economies and rising geopolitical risks. These external developments are expected to continue to weigh on investor sentiment in 2019.

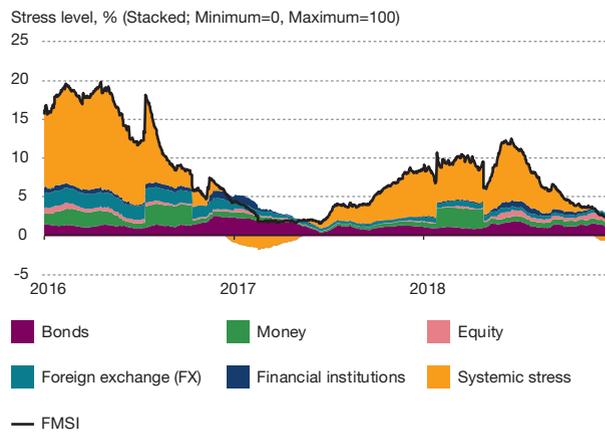
Market risk exposures of financial institutions remained manageable despite continued volatility in the financial markets

Banks

Banks' treasury portfolio expanded during the year, mainly attributed to higher holdings of government and corporate bonds in the banking book following the broad sell-off of government bonds by non-resident investors, a trend also observed across regional markets. Consequently, interest rate risk

Chart 1.21: Financial Market – Financial Market Stress Index (FMSI)

Overall market stress trended upwards, before declining back to around 2017 lows



Source: Bloomberg, Reuters and Bank Negara Malaysia estimates

in the banking book rose to 4.5% of total capital (2017: 3.5%). While the size of banks' trading book has also increased, it continues to remain relatively small (17.6% of total securities; 2017: 10.6%). Banks' foreign exchange (FX) net open position (NOP) declined to 5.8% of total capital (2017: 6.1%), reflecting more cautious positions taken by banks under uncertain market conditions that prevailed during the year. FX NOP exposures continued to be dominated by exposures to the US dollar. The contribution of net trading and investment gains to bank profits before tax remained largely unchanged at 17.9% (2017: 17.3%). Active risk management and hedging by banks continued to contain market risk exposures at manageable levels, well within prudent value-at-risk and loss limits set by individual banks.

Insurers and takaful operators

Holdings of financial assets by insurers and takaful operators similarly expanded in 2018 in tandem with the growth of insurance funds. For life insurers and family takaful operators, a substantial portion of their investment holdings remained in medium- to long-term corporate bonds to match their longer-term liability structure. In contrast, general insurers and takaful operators continued to hold largely cash and deposits as well as liquid structured products given the shorter-term liability structure.

Equity holdings declined from 2017 as insurers and takaful operators pared down their holdings amid the weaker equity market performance in the second half of the year. Correspondingly, capital allocated for equity risk decreased to 7.7% of total capital available as at end-2018 (2017: 9.1%). Investments in equities continued to comprise mainly blue-chip stocks and are well-diversified across different economic sectors.

The capital charge for interest rate risk carried by insurers and takaful operators remained stable at 3% of total capital available. Overall, insurers and takaful operators' trading activities delivered a weaker performance compared to the previous year, with recorded net losses from trading activities of RM6.5 billion. This was driven largely by the lower valuation of equities. Nevertheless, its impact on overall industry profitability remained manageable.²¹

²¹ For details on profitability drivers, please refer to the 'Resilience and Performance of the Insurance and Takaful Sector' section.

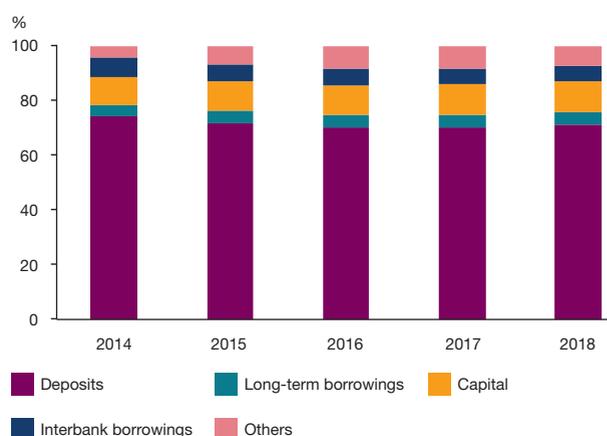
LIQUIDITY AND FUNDING RISK

Banks Maintained Sufficient Liquid Assets to Weather Periods of Uncertainties

Ample liquidity in the banking system remained supportive of financial intermediation. Banks' liquidity buffers to meet potential exigent needs continued to be largely supported by stable funding sources comprising deposits and long-term borrowings (Chart 1.22). This was reflected in the banking system's loan-to-fund (LTF) and loan-to-fund-and-equity (LTFE) ratios which have been sustained at levels around 80% and 70%, respectively (Chart 1.23). The industry Liquidity Coverage Ratio (LCR), which measures the amount of high-quality liquid assets (HQLA) that banks hold to meet liquidity needs in a stressed scenario over a 30-day period, has also been rising steadily in line with the transition towards full implementation of the strengthened liquidity requirements since 2015. Banking system surplus ringgit liquidity placed with the Bank²² rose in the second half of 2018 to RM171.8 billion (June 2018: RM156.2 billion; 2017: RM176.2 billion) as outflows from non-resident investors subsided. At current surplus liquidity levels, the Bank's stress tests continue to affirm the banking system's resilience to a large reversal of capital flows.

Chart 1.22: Banking System – Composition of Funding Liabilities by Instrument

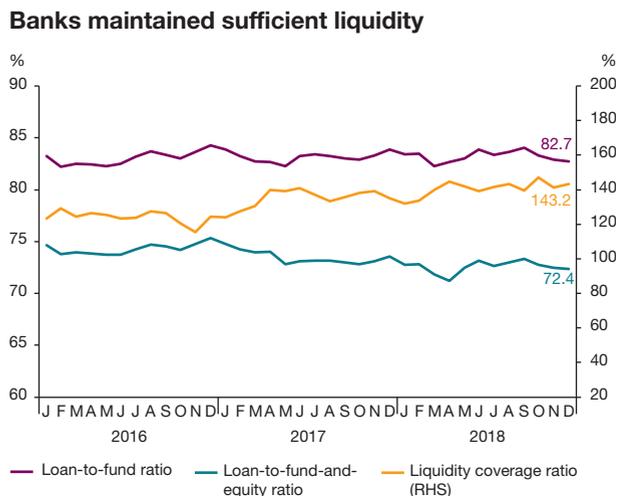
Deposits and long-term borrowings account for more than 70% of total funding liabilities



Source: Bank Negara Malaysia

²² Comprises placements, reverse repos and statutory reserves with the Bank.

Chart 1.23: Banking System – Liquidity Coverage Ratio, Loan-to-Fund Ratio and Loan-to-Fund-and-Equity Ratio



Banks' domestic activities continued to be funded predominantly by domestic funding sources, with deposits constituting the bulk (71%) of total funding liabilities. Growth in retail and corporate deposits remained firm and continued to account for 70% of deposit funding. Deposits from NBFIs also grew, reflecting higher cash holdings by these institutions amid continued uncertainty in global financial markets. Competition for deposits has been more restrained in response to supervisory measures to address year-end window dressing behaviour. As a result, funding conditions measured by the 3-month KLIBOR and weighted average cost of funds remained broadly stable since the increase in the Overnight Policy Rate (OPR) in January 2018.

Banks remained prudent in managing maturity and currency mismatches

Similarly, funding risks from banks' FCY activities (representing less than 15% of the total banking system balance sheet) remained low (Diagram 1.2). Deposits and long-term funds account for a significant share (60%) of total FCY funding. The share of external debt held by domestic banking groups (DBGs) and locally-incorporated foreign banks (LIFBs) has remained broadly stable over the years (Chart 1.24), with little signs of excessive reliance on external and cross-currency funding observed among these banks (refer to the Info Box titled 'FCY Liquidity Management Practices of Banks'). The FCY funding needs of LIFBs

are generally managed through intragroup borrowings from related parties abroad. These borrowings are typically matched to financing exposures in terms of amount, currency and tenure. Meanwhile, DBGs also took pre-emptive measures to build up additional FCY liquidity buffers in anticipation of maturing obligations and tighter global liquidity conditions (Chart 1.25). This contributed to the growth in short-term external debt of the banking system in the first half of 2018, which has since been on a declining trend as the borrowings were retired upon maturity amid improving market conditions. Overall, external funding comprised less than 10% of total banking system funding liabilities, with non-residents accounting for only 6% of total banking system deposits (Chart 1.26).²³

Only about a quarter of banks' FCY external debt constitute 'debt-at-risk'.²⁴ This comprised less-stable funding²⁵ sourced from unrelated non-resident counterparties which accounts for less than 3% of total banking system funds. Banks' holdings of liquid FCY assets²⁶ are more than double the level of external debt-at-risk, further bolstering their capacity to mitigate the impact of potential FCY funding shocks (Chart 1.27). Banks' FX NOP also remains low (Chart 1.28).

CONTAGION RISK

Contagion Risk from Non-Bank Financial Institutions Remained Contained

The risk profile of non-bank financial institutions²⁷ (NBFIs) and the nature of their interlinkages with the domestic financial system remained broadly unchanged (Chart 1.29). During the year, an NBFi was brought within the remit of formal regulation by the Bank, following its merger with a licensed bank. This resulted in a slightly lower share of household financing and deposits contributed by the activities of NBFIs. On aggregate, NBFIs' share of total

²³ For further information on Malaysian banks' external debt, please refer to the Box Article 'Malaysia's Resilience in Managing External Debt Obligations and the Adequacy of International Reserves' in Bank Negara Malaysia Annual Report 2018.

²⁴ Refers to the proportion of banks' external debt that is more susceptible to sudden withdrawal shocks.

²⁵ Refers to financial institutions' deposits, interbank borrowings and short-term loans.

²⁶ Comprise cash and cash equivalents, unencumbered debt securities held and interbank placements.

²⁷ Refer to NBFIs not regulated by the Bank. Their activities include credit provision, securitisation, facilitation of credit creation and management of retirement and public funds.

Diagram 1.2: Banks' External Debt – Use and Risk Profile

Risks arising from banks' external debt exposures are generally low due to 'back-to-back' nature

External debt is primarily used for:



The exposures broadly matched in terms of:



Chart 1.25: Banks' External Debt – by Type of Exposure and Instrument

47% of total external debt are intra-group exposures which are less susceptible to sudden withdrawal shocks

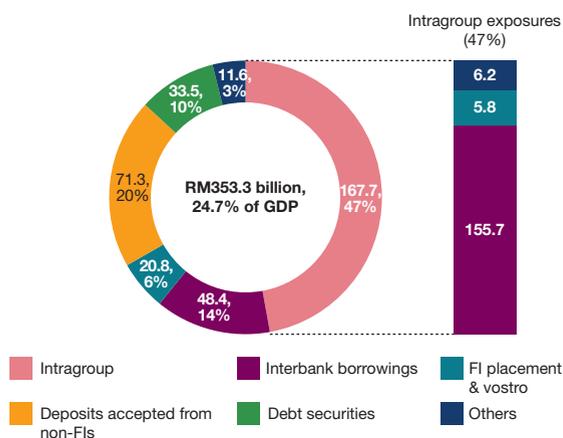
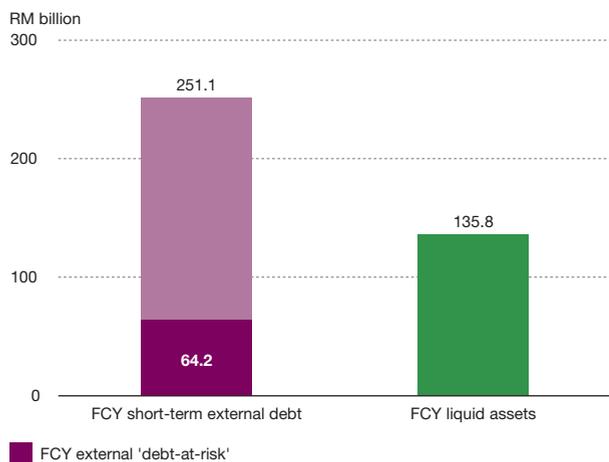


Chart 1.27: Banking System – Foreign Currency External 'Debt-at-Risk' and Liquid Assets

Banks maintain substantial FCY liquid assets of more than two times the FCY external 'debt-at-risk'



Note: 1. Banks' external debt in this context refers to external debt of DBGs, LIFBs and LIBFC banks
2. Banking system or onshore banks refer to only DBGs and LIFBs

Source: Bank Negara Malaysia

Chart 1.24: Banks' External Debt – by Type of Bank

41% of banks' external debt are attributable to foreign banks operating in LIBFC

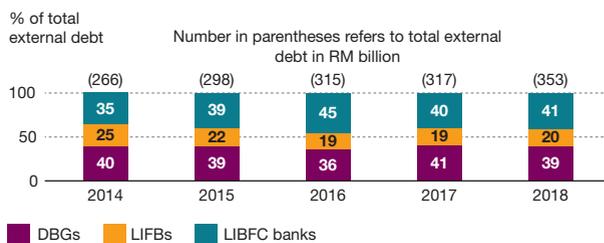


Chart 1.26: Banks' External Debt – by Instrument

External funding, however, remains small relative to total banking system funding

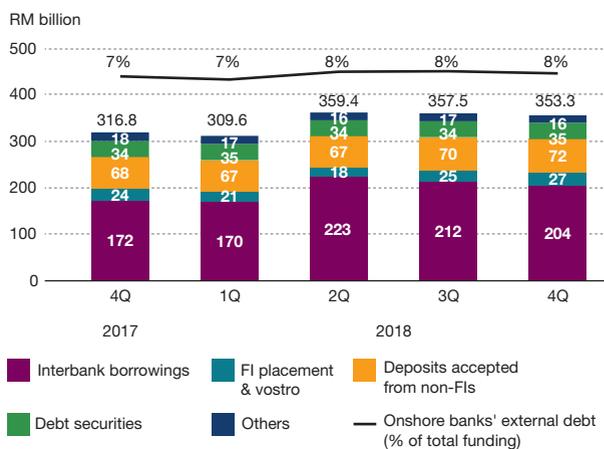
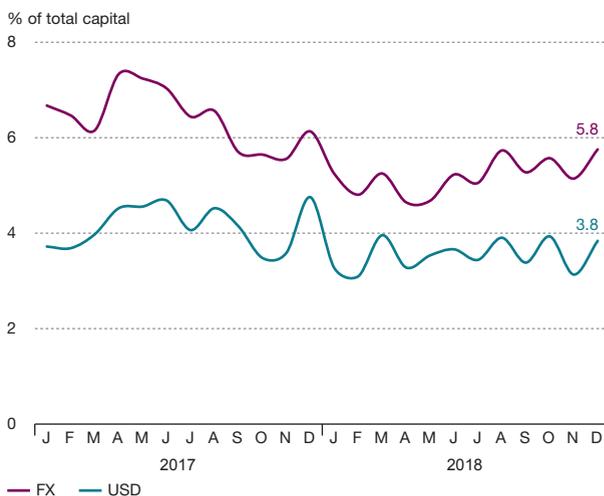


Chart 1.28: Banking System – FX and USD Net Open Position as Percentage of Capital

FX and USD net open positions remain low



FCY Liquidity Management Practices of Banks

The adoption of sound liquidity risk management practices has enabled Malaysian banks to weather more volatile FCY liquidity conditions in recent periods.

Banks have increasingly aligned their liquidity management and performance management frameworks to manage maturity mismatches when undertaking FCY exposures. The term liquidity premium factored in funds transfer pricing reflects the risk of sourcing such funds. In most banks, this premium is incorporated into the performance measurement of business units through risk-adjusted earnings to ensure the prudent use of FCY funds. Risk and incentive frameworks further promote better liquidity risk profiles by, among others, rewarding historically-stable depositors with better rates.

Banks also actively monitor the stability and diversity of existing funding sources to better anticipate and manage the volatility and timing of outflows using various internal risk metrics and limits. The proportion of stable medium- to long-term FCY funding, and less stable funding in the interbank market through currency swaps and short-term borrowings, are monitored at various levels in a bank. Risk limits are set and enforced through reporting to and oversight by the bank's risk management control functions to prevent an over-reliance on volatile short-term funding.

Banks also closely track maximum cumulative outflows (MCO) over various time periods. This is used to maintain a minimum survivability period limit ranging from 21 to 30 days to ensure that banks are able to survive continuous outflows over the specified timeframe. In addition, the LCR is monitored across various currencies to complement other liquidity measures. In most banks, the overall FCY liquidity positions, including positions of overseas operations, are escalated to, and deliberated by the Asset and Liability Committee (ALCO) at least on a monthly basis, while limits are deliberated and approved by the board of directors.

Apart from risk limits, banks regularly conduct stress tests to anticipate future outflows arising from bank-specific and market-wide shocks. Such shocks include (i) applying more conservative run-off estimates for large depositors; and (ii) simulating the non-rollover of wholesale funding from non-resident banks. Stress test results are then used to inform contingency funding plans and pre-emptive management actions. This may include actions to bolster FCY liquidity buffers as observed in the first half of 2018.

financial system assets remained broadly stable, with retirement funds and the fund management industry continuing to make up the bulk of total NBFIs' assets (Chart 1.30).

NBFIs' significant holdings of financial assets and equity interests in domestic banks continued to be the key channels for transmission of risks to the financial system. About 40% and 45% of financial assets held by large NBFIs are in bonds and equities, respectively. NBFIs' investments in the bond market are predominantly in long-term government debt securities and highly-rated corporate bonds.

On aggregate, risks from a rapid and large-scale disposal of financial assets by NBFIs remain low, given the medium- to long-term investment horizon of most NBFIs and the strategic nature of their shareholdings in domestic banks. Several large NBFIs have also gradually diversified their investment portfolio into foreign markets and currencies. This has supported the sustained overall profitability of NBFIs as a group. During periods of portfolio outflows,

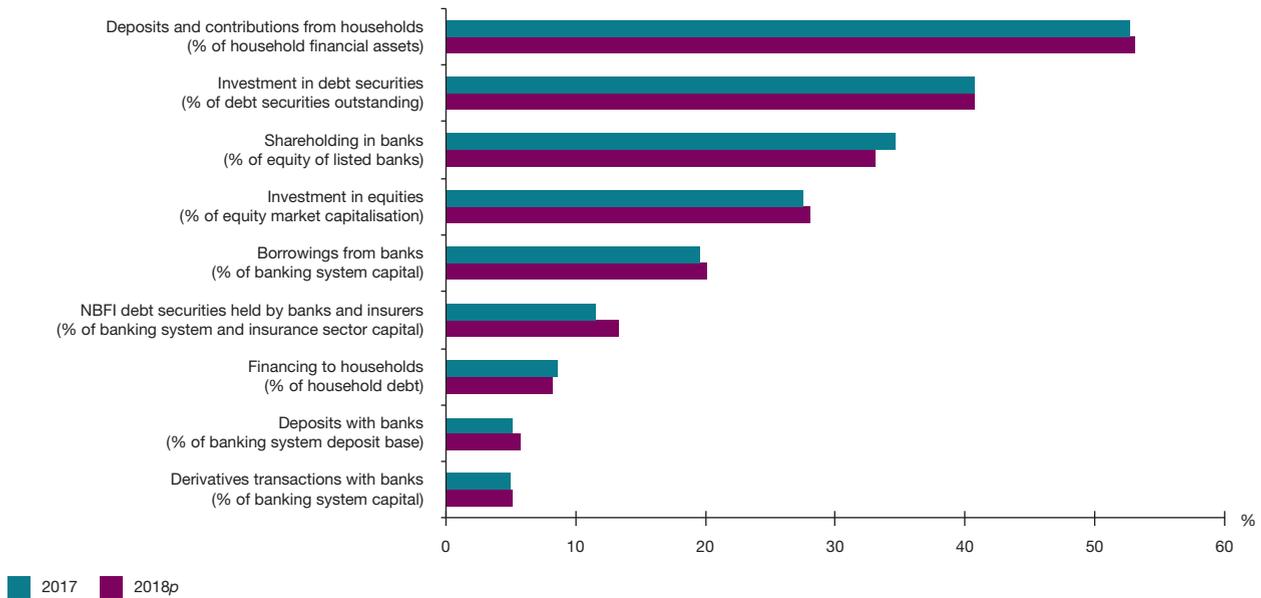
NBFIs continued to play an important role in providing liquidity in the domestic financial markets through their purchases of financial assets that were sold by non-resident portfolio investors.

NBFIs hold sufficient amount of liquid assets to manage liquidity risk

Risks to financial stability from NBFIs' maturity transformation activities remained well-contained. NBFIs that are more reliant on market funding have shown an increasing preference for longer-term funding over the past few years, with an average remaining maturity for bonds issued by NBFIs of 6.7 years as at end-2018, thus containing funding and rollover risks. However, a few NBFIs remained susceptible to higher withdrawal risk as they intermediate a sizeable amount of demand deposit-like liabilities. These entities continue to hold sufficient liquid assets in the form of cash, deposit placements and government securities to withstand liquidity shocks, including from sustained heavy withdrawals.

Chart 1.29: Non-Bank Financial Institutions – Interlinkages with the Financial System

No material change to channels and magnitude of NBFIs' interlinkages with the financial system

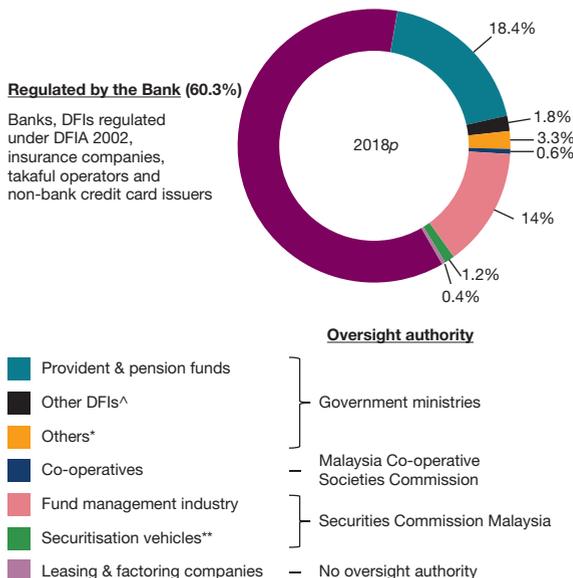


p Preliminary

Source: Bank Negara Malaysia, Securities Commission Malaysia, Malaysia Co-operative Societies Commission and published financial statements

Chart 1.30: Financial System – Composition of Assets

NBFIs accounted for about 40% of total financial system assets



p Preliminary

^ Development Financial Institutions (DFIs) that are not regulated by the Bank under the Development Financial Institutions Act 2002 (DFIA 2002)

* Refers to pawn brokers, money lenders, non-bank providers of credit and hire purchase financing, non-bank provider of education financing, non-bank providers of housing credit, government-owned trustee company, and social security organisation

** Refers to outstanding asset-backed securities and asset size of national mortgage corporation

Source: Bank Negara Malaysia, Securities Commission Malaysia, Malaysia Co-operative Societies Commission and published financial statements

Ongoing measures to encourage greater transparency and to strengthen the governance and integrity of NBFIs will further mitigate financial stability risks. The Bank also continues to enhance its surveillance of risks posed by NBFIs, supported by better data obtained from NBFIs and more frequent engagements with larger NBFIs and other regulators on emerging risks.

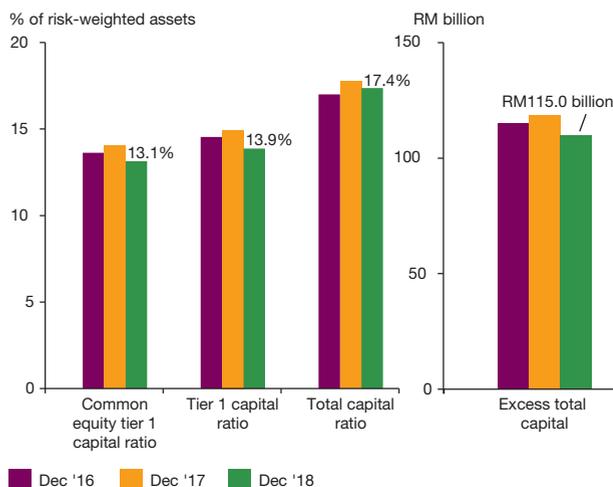
RESILIENCE AND PERFORMANCE OF THE BANKING SECTOR

Banks Continued to Maintain Healthy Capitalisation Amid Sustained Profits and Improved Asset Quality

Banks' capital position remained strong in 2018. The 'Day 1 impact' from higher provisions under new impairment standards in the Malaysian Financial Reporting Standards (MFRS 9) resulted in lower capital ratios compared to levels in 2016 and 2017. Notwithstanding this, banks continued to maintain sizeable excess capital buffers above the regulatory minimum (Chart 1.31). The bulk of bank capital (about three-quarters) is held in high quality loss-absorbing instruments comprising paid-up ordinary share capital, retained earnings and reserves.

Chart 1.31: Banking System – Capital Ratios

Banks maintained strong capitalisation



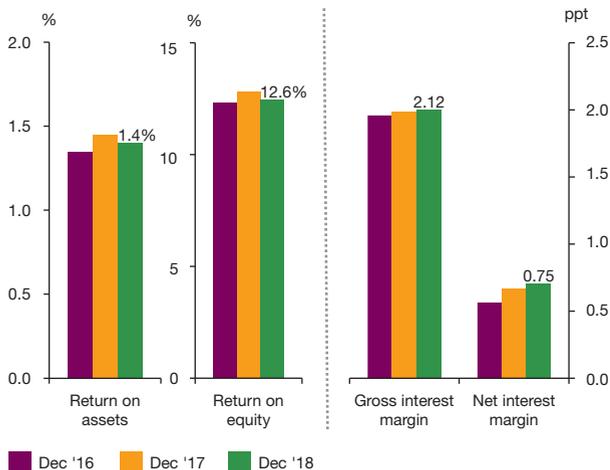
Note: Excess total capital refers to total capital above the regulatory minimum, which includes the 2018 capital conservation buffer requirement and bank-specific higher minimum requirements

Source: Bank Negara Malaysia

The banking system continued to record healthy profits in 2018, largely supported by income from financing activities and continued efficiency gains (Chart 1.32). Pre-tax profits grew at a slower pace, contributing to slightly lower annual returns on assets and equity. The slower profit growth was mainly due to higher provisions set aside by banks with the implementation of MFRS 9 and an increase

Chart 1.32: Banking System – Profitability

Banking profitability remained healthy



Note: Net interest margin is the financing margin net of impairment provisions and operating costs

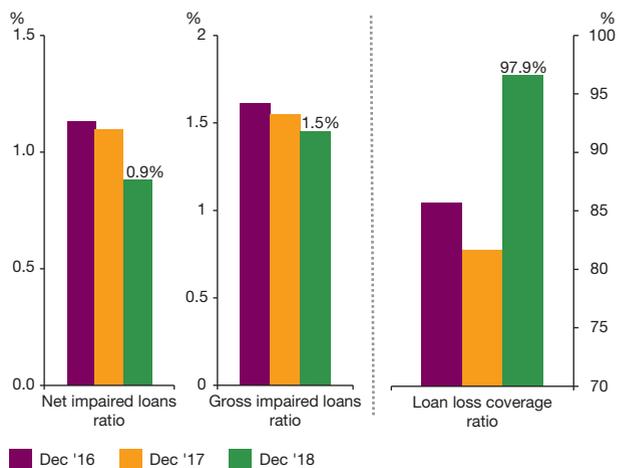
Source: Bank Negara Malaysia

in interest expenses on deposits, in line with the OPR hike in January. The impact from provisions was, however, cushioned by the regulatory reserves²⁸ which banks have been required to maintain since 2010. Financing margin (net of impairment provisions and operating costs) edged marginally higher, with a majority of banks reporting lower costs of operations. Trading and investment income also came in higher for the year, supported by favourable financial market conditions in the earlier part of the year.

Banks' asset quality remained sound and at an aggregate level continued to improve with gross and net impaired loans declining in both absolute value and as a share of total loans from the previous year (Chart 1.33). A closer examination of household loans, however, shows certain segments exhibiting higher incidents of impairment. In particular, impairments of loans for the purchase of higher-valued properties and personal loans have recently been on an increasing trend. The implementation of responsible financing standards is helping to ensure that newer loans granted since 2012 are of sound quality, as revealed by the improving vintage of loans granted in more recent years. Banks have also continued to be proactive in managing their credit risk. A number of banks

Chart 1.33: Banking System – Asset Quality and Loan Loss Coverage

Banking asset quality continued to improve



Source: Bank Negara Malaysia

²⁸ As part of the Bank's regulation, banks are now required to maintain, in aggregate, provisions for performing and underperforming credit exposures and regulatory reserves of no less than 1% of all credit exposures, net of provisions for those non-performing.

have intensified their monitoring and pre-emptive restructuring of accounts exhibiting signs of temporary repayment difficulties. Banks are also increasing the rigour of stress tests on exposures to vulnerable sectors and simulating the impact of major global or market events on banks' asset quality, capital and liquidity buffers. In addition, the loan loss coverage ratio of banks has strengthened further with the implementation of MFRS 9 which calls for a more forward-looking approach to provisioning.

Overseas Operations Maintained Sound Financial Position

The overseas operations²⁹ of DBGs continued to expand amid sustained growth in regional economies. Profitability from overseas operations increased, supported by continued improvements in asset quality, enhanced operational efficiency and higher income contribution from non-financing activities such as wealth management and bancassurance. Major overseas subsidiaries of banks also continued to maintain sound capital positions. The overall asset quality of overseas operations improved across all markets, in line with stronger group oversight by parent banks in Malaysia (Chart 1.34).

DBGs' overseas operations continued to be predominantly funded in local currency deposits (66%³⁰ of total funding), thus minimising the risks associated with cross-border funding and currency mismatches. The low reliance on wholesale markets or parent bank funding has also continued to shield DBGs from market volatility and liquidity shocks affecting overseas operations. The LCR ratios of major overseas subsidiaries remained well above 100%.

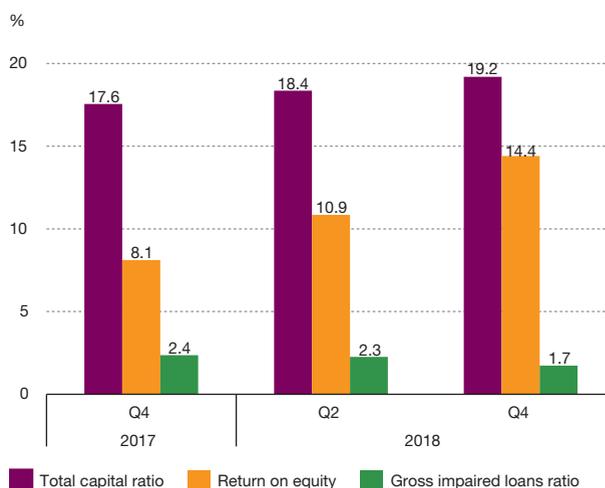
The Bank continues to monitor developments in DBGs' overseas operations as part of its consolidated supervision framework. Regular engagements with host regulators through supervisory colleges and bilateral meetings continued to be held throughout the year. Such engagements remain vital to the timely exchange of information and identification of emerging risks, as well as coordination of supervisory responses where relevant.

²⁹ Refers to DBG's overseas offices (branches and subsidiaries) operating outside of Malaysia and Labuan International Business and Financial Centre.

³⁰ Reflects the median share of customer deposits across all overseas operations.

Chart 1.34: Domestic Banking Groups – Key Financial Soundness Indicators of Overseas Operations

Financial performance of overseas operations remained sound



Note: Refers to median key financial soundness indicators of selected overseas operations

Source: Bank Negara Malaysia

RESILIENCE AND PERFORMANCE OF THE INSURANCE AND TAKAFUL SECTOR

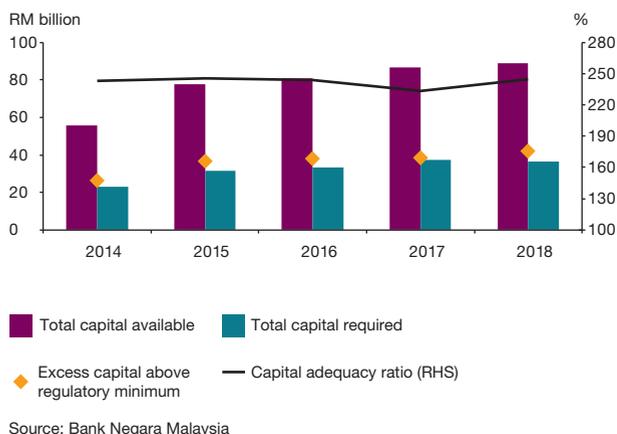
The Insurance and Takaful Sector Remained Resilient with Strong Capitalisation Despite Lower Profitability

The insurance and takaful sector remained resilient in 2018. The aggregate capital adequacy ratio (CAR) stood at 245%, well above the minimum regulatory level (Chart 1.35). Insurance and takaful risk,³¹ which accounted for half of total capital required, remained largely stable in line with the overall business mix which was broadly unchanged. Market risk exposures declined on lower equity valuations amid the weaker performance of the domestic equity market. Insurers and takaful operators also sold down equity as part of risk management strategies and this had an impact on profitability levels. Credit risk exposures remained relatively stable, with over 90% of corporate bonds held rated AA- and above or guaranteed by the Government. Counterparty risks from reinsurance arrangements, including external reinsurance exposures, remained limited on the back of sustained credit ratings of (re)insurers.

³¹ Refers to the risk of underestimation of insurance and takaful liabilities, adverse claims experience, expense and lapse.

Chart 1.35: Insurance and Takaful Sector – Capital Adequacy Ratio

Aggregate capital adequacy ratio (CAR) remained well above the regulatory minimum of 130%

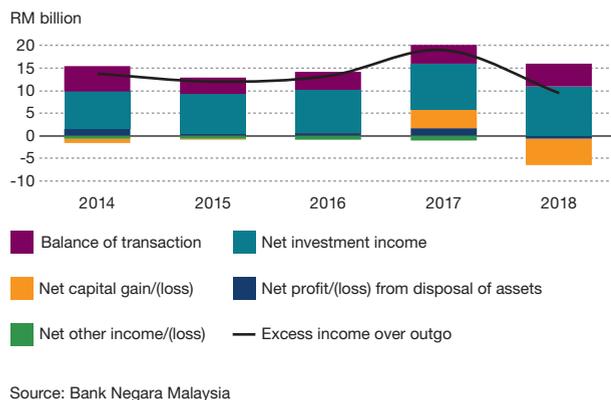


The insurance and takaful sector recorded lower profitability in 2018. This was largely due to life and family businesses (Chart 1.36), which experienced net unrealised investment losses from equity and bond holdings. Investment yields³² were also substantially lower at 2% (2017: 8.3%). Despite the weaker investment outturn, profitability continued to be supported by higher growth in total net premiums, particularly from existing policies, an improvement in overall expenses, and a slower increase in net policy benefits paid out.

New business of life insurers and family takaful operators grew at a slower pace as sales of new

Chart 1.36: Life Insurance and Family Takaful Sector – Composition of Income and Outgo

Lower excess income over outgo driven by unrealised losses



³² Sum of dividends, coupons received, realised and unrealised gains as a percentage of total investments.

investment-linked policies were impacted by the lower risk appetite of consumers given the weaker financial market performance (Chart 1.37). In contrast, new business of traditional policies recorded higher growth, largely driven by mortgage-related business on sustained demand for residential mortgages.

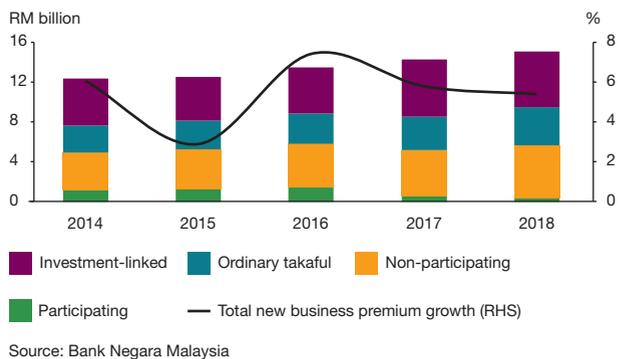
Insurers and takaful operators recorded lower profitability amid weaker financial market performance

Operating profits of general insurers and takaful operators improved, supported by higher underwriting profits (Chart 1.38). This was largely attributed to the higher growth in motor premiums, in line with increased sales of motor vehicles during the tax holiday period. The contribution of the motor segment to overall profitability also improved following pricing adjustments to better align premiums with risks from motor ‘Comprehensive’ and ‘Third Party, Fire and Theft’ policies.³³ Profitability was further supported by a release of reserves in the fire segment due to better claims experience.

Gross direct premiums expanded at a stronger pace (Chart 1.39). Apart from the motor business, the fire and medical and health segments also recorded higher premium growth, in line with the continued increase in medical costs and sustained demand for group medical policies. The marine, aviation and transit segment continued to contract on weak demand for offshore oil-related insurance. Nevertheless, the contraction, which

Chart 1.37: Life Insurance and Family Takaful Sector – New Business Premium Growth and Product Composition

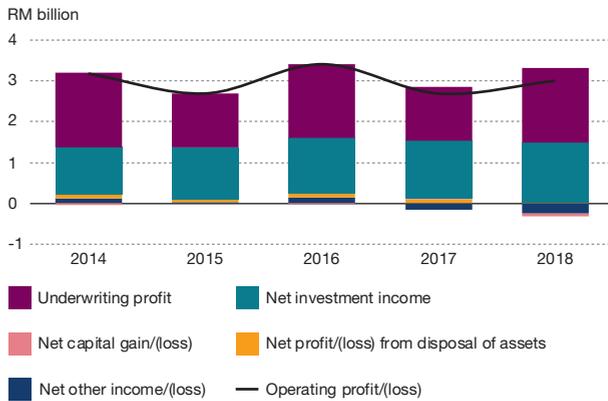
New business continued to grow albeit at a slower pace



³³ The liberalisation of the motor tariffs for these two motor segments commenced on 1 July 2017 as part of Phase II of the overall pricing reform.

Chart 1.38: General Insurance and Takaful Sector – Composition of Operating Profits

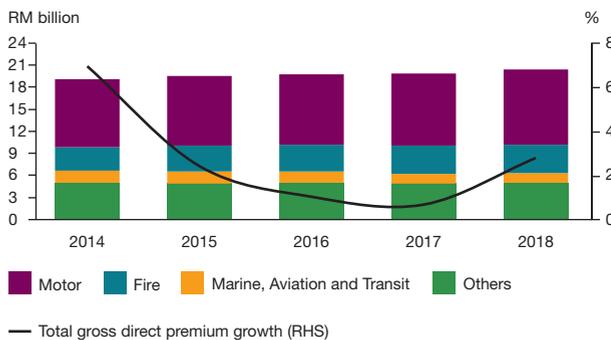
Higher operating profits supported by improved underwriting profits



Source: Bank Negara Malaysia

Chart 1.39: General Insurance and Takaful Sector – Gross Direct Premium Growth and Product Composition

Gross direct premium grew at a higher pace



Source: Bank Negara Malaysia

could be attributed to a slow recovery in the O&G sector, has limited impact to the general sector given its small share (6%) of total gross direct premiums.

MULTI-YEAR SOLVENCY STRESS TEST FOR BANKS AND INSURERS

The latest multi-year solvency stress test exercise conducted by the Bank continued to affirm the resilience of banks and insurers under simulated scenarios of severe macroeconomic and financial strains (refer to Info Box titled ‘Solvency Stress Test Scenarios, Key Assumptions and Shock Parameters’). Banks remain well-positioned to absorb potential losses using available capital and earnings buffers, with post-stress capital ratios of the banking system continuing to be well above regulatory minima (Chart 1.40).

A significant portion (more than 90%) of the banking system’s losses³⁴ are driven by credit risk under both adverse scenarios. Under severe macroeconomic conditions assumed in the adverse scenarios, loan impairments are expected to increase significantly throughout the stress test horizon. Gross impairment ratios rose up to 8.6% (Chart 1.41), comparable to the industry’s worst experience in the past decade. Under Adverse Scenario 2, 56% of the total losses are due to banks’ credit exposures to businesses (Chart 1.42). These are mainly driven by selected large NFC borrower groups with weak financial standing prior to the shocks or borrowers in sectors that have been identified as having weaker credit risk outlook. The remaining losses from businesses are largely attributed to smaller exposures in the general construction and real estate-related sectors. Exposures to households contribute to 35% of total losses, mainly from motor vehicle loans which account for 48% of total losses from household lending. Over a third of these losses are associated with borrowers earning less than RM5,000 per month. Credit losses from housing loans account for about a quarter of total household losses. Minimal impact is observed from market risk and external funding shocks. The impact of contagion risk arising from interbank exposures, an enhancement introduced in this year’s exercise, is also assessed to be limited at 6.3% of total losses (for more details, refer to Info Box titled ‘Assessing Contagion Risk in the Domestic Banking System’). Losses from contagion risks are estimated to be lower if related counterparty exposures are excluded.

Financial institutions remain resilient under simulated severe stress scenarios

At the institutional level, seven banks breached the minimum regulatory capital requirement, weighed down by relatively smaller earnings buffers, and more concentrated exposures to selected large borrowers. Nonetheless, these banks collectively account for only 9.7% of total banking system assets.

Similarly, the insurance sector is expected to remain resilient under stressed conditions with the aggregate CAR of both the life and general insurance sectors

³⁴ The exercise adopts a conservative approach to these exposures which disregards risk mitigants such as guarantees that could otherwise reduce the potential losses faced by banks.

Solvency Stress Test Scenarios, Key Assumptions and Shock Parameters

The stress test exercise models a series of tail-risk events under three scenarios (one baseline and two adverse), which assumes different GDP growth paths for Malaysia over a four-year horizon (2019-2022). The exercise excludes (i) any policy intervention by authorities and (ii) management actions by the institutions to allow the Bank to assess the immediate capacity of banks and insurers to withstand severe shocks without additional interventions or assistance.

The first adverse scenario (AS1) simulates a V-shaped growth path with the magnitude of recession equivalent to 2.5 standard deviations of the long-term GDP growth rate from the baseline. This scenario assumes heightened trade tensions that escalate into a multilateral trade war, a sharp economic slowdown in the US and PR China following tighter credit conditions, and an increase in financial market volatility due to a disorderly Brexit and uncertainties in European Union policies. Regional growth is assumed to weaken amid the sluggish external demand. Against this backdrop, Malaysia is assumed to experience an initial sharp recession in 2019, followed by a strong rebound before normalising to the baseline growth trajectory. The second adverse scenario (AS2) simulates an L-shaped growth path where a cumulative decline at the end of the stress test horizon of six standard deviations is calibrated from the baseline. In this scenario, a synchronised slowdown in the US and PR China, coupled with prolonged trade tensions and sustained capital outflows amid financial stress in EMEs are assumed to trigger an initially milder decline in growth, followed by a slow and weak recovery.

Table 1.2

Solvency Stress Test: Key Assumptions and Shock Parameters Applied under Assumed Adverse Scenarios

Key assumptions	AS1 – V-shaped recession	AS2 – L-shaped, protracted recession
Balance sheet and income projections		
o Decline in loan growth (compounded annual growth rate)	o 3%	o 6%
o Annual decline in banks' income growth, differentiated across segments (interest income, fee-based and other income)	o Up to 21%	o Up to 17%
o Annual decline in insurers' premium income	o Up to 30%	o Up to 28%
Credit risk shocks		
o Probability of default (PD) shocks		
• Business loans	• 5% to 10%	• 5% to 12%
• Household loans	• 1% to 11%	• 2% to 13%
o Loss given default (LGD) shocks		
• Business loans	• 44% to 56%	• 44% to 61%
• Household loans	• 18% to 76%	• 19% to 76%
o Default of top corporate borrowers 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 56 bps	o Up to 62 bps
o Annual increase in corporate bond yields	o Up to 72 bps	o Up to 71 bps
o Annual decline in FBM KLCI	o Up to 34%	o Up to 23%
o Annual depreciation against major currencies	o 13% to 30%	o 6% to 15%
External funding risk shocks		
o Reversal of claims by non-residents	o Up to 30% of interbank borrowing and deposits	o Up to 15% of interbank borrowing and deposits
General insurance risk shocks		
o Increase in claims ratio	o Up to 30%	o Up to 16%
Contagion risk shocks		
o Interbank	o Deterioration in counterparty bank's solvency	
o Banks to insurers	o Deterioration in value of bonds issued by banks that fail the stress test under the adverse scenarios	

Source: Bank Negara Malaysia

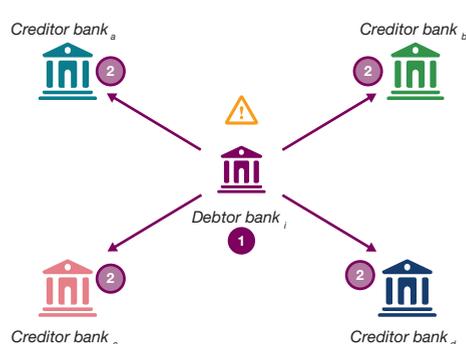
remaining above the regulatory minimum throughout the stress test horizon (Chart 1.43).

In comparison to the first half of 2018 exercise, credit risk shocks have been revised to reflect differentiated probability of defaults by economic sector and losses from holdings of bonds issued by financially-weak large corporates, consistent with parameters used for banks' stress test. In addition, losses arising from exposures to banks that fail the stress test under the adverse scenarios

are also accounted for. With these refinements, the credit risk impact accounts for the largest component of total losses for both life and general insurers in the assumed economic stress scenarios, accounting for up to 58% and 82% of total losses, respectively. For life insurers, valuation losses arising from adverse financial market conditions continue to significantly impact the capital level (up to 42% of total losses). For general insurers, the second largest contributor to total losses is attributed to shocks related to higher claims (Diagram 1.4).

Assessing Contagion Risk in the Domestic Banking System

Diagram 1.3: Illustration of Contagion Risk in the Domestic Interbank Market



1. Initial losses suffered by banks

- Banks incur direct losses from credit, market and external funding risk shocks under each adverse scenario, placing them under distress.
- A distressed bank's capacity to repay counterparties in the domestic interbank market is then assumed to decline as its creditworthiness deteriorates.

2. Additional losses due to contagion

- Banks that lend to a distressed bank(s) will incorporate information about the reduced creditworthiness into the valuation of their interbank lending exposure to distressed bank(s), thereby incurring losses.
- The losses incurred by the creditor bank is assumed to be proportionate to the relative loss of capital incurred by the debtor bank. For example, if the debtor bank incurs x% of loss in capital, the creditor bank is assumed to experience an equal relative loss of x% on their interbank lending exposure to the debtor bank.

As banks' operations become increasingly interconnected, any distress faced by, or default of a bank can generate broader spillover effects and increase the likelihood of distress in other banks. To assess the potential impact of such contagion in the domestic banking system, a network simulation module has been incorporated into the Bank's macro solvency stress test. This module is developed based on the DebtRank algorithm which was first introduced in a study on a group of global financial institutions that received emergency liquidity assistance from the US Federal Reserve between 2008 to 2010 and adapted to Malaysian banks' domestic interbank lending exposures.

Reference

Battiston, S., Puliga, M., Kaushik, R., Tasca, P. and Caldarelli, G. (2012): 'DebtRank: Too Central to Fail?' Financial Networks, the FED and Systemic Risk. Scientific Reports, 2(1).

Bardoscia, M., Barucca, P., Codd, A. and Hill, J. (2017): 'The Decline of Solvency Contagion Risk', Staff Working Paper No. 662. Available at: <https://www.bankofengland.co.uk/-/media/boe/files/working-paper/2017/the-decline-of-solvency-contagion-risk>.

Severe Pandemic and Flood Events Simulation on Insurance and Takaful Industry

For insurers and takaful operators, the multi-year solvency stress test exercise is also supplemented by an industry-wide stress test to assess the resilience of the insurance and takaful industry against prescribed severe but plausible insurance risk events, namely severe pandemic and flood events over a one-year time horizon. This year, the pandemic scenario has been refined to reflect a more severe influenza-type pandemic event with spillover effects to financial markets; while the impact of a flood scenario is modelled to better reflect geographical locations with significant financial exposure to flood risk. Results from this industry-wide stress test also affirm the industry's overall resilience against the prescribed scenarios. Post-stress, aggregate capital adequacy ratios for both life and family sector and general sector remain above the regulatory minimum of 130%.

Chart 1.40: Banking System – Post-Shock CET1 Capital Ratios

Post-stress capital ratios are well above regulatory minima

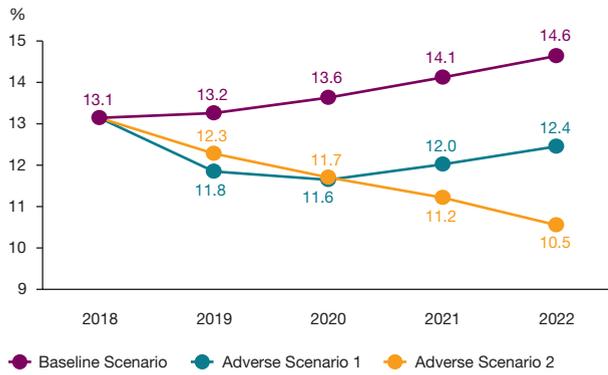


Chart 1.41: Banking System – Gross Impaired Loans Ratio

Asset quality expected to deteriorate across the stress test horizon

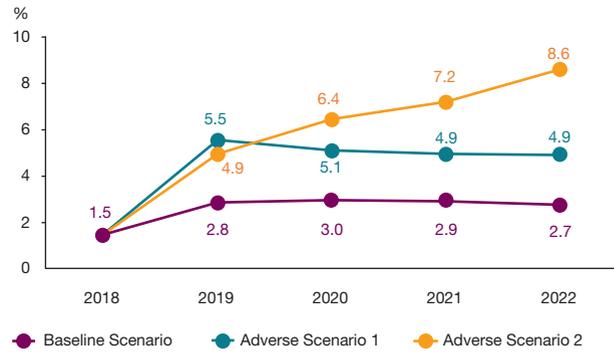


Chart 1.42: Banking System – Loss Drivers in Adverse Scenario 2

Credit risk losses comprise about 90% of total losses

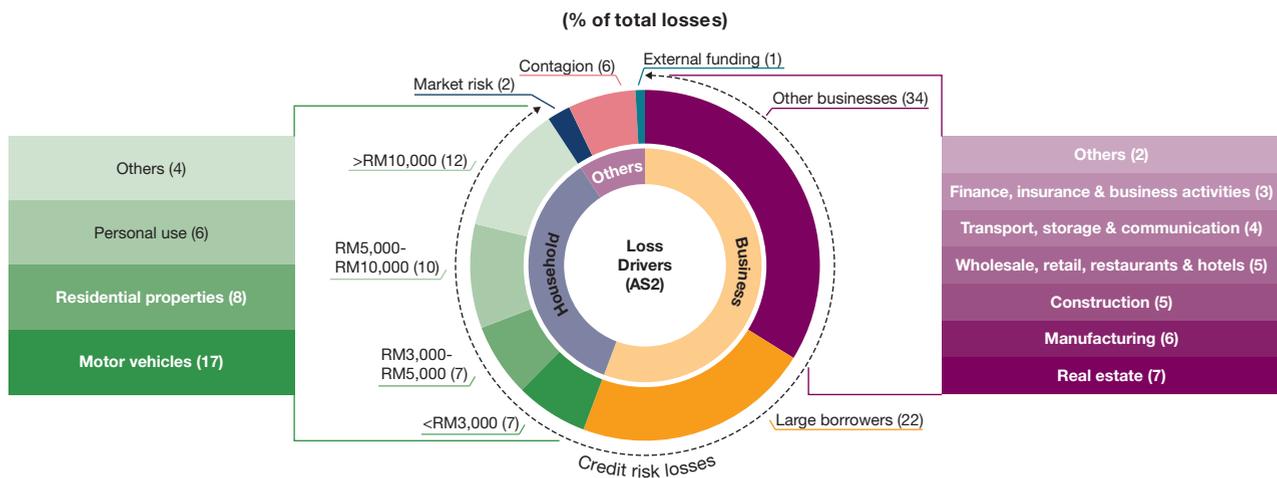


Chart 1.43: Insurance Sector – Post-Shock Capital Adequacy Ratio

Post-stress CAR remain above regulatory minimum of 130%

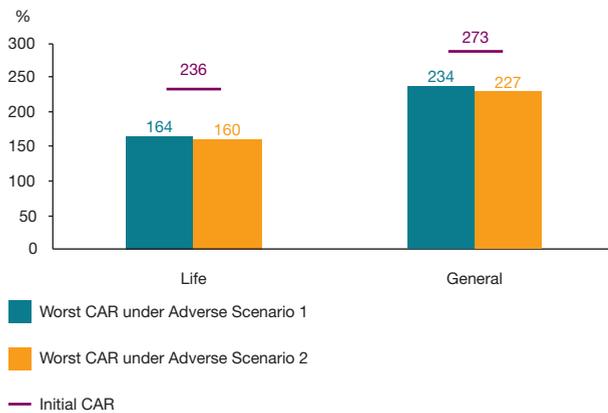
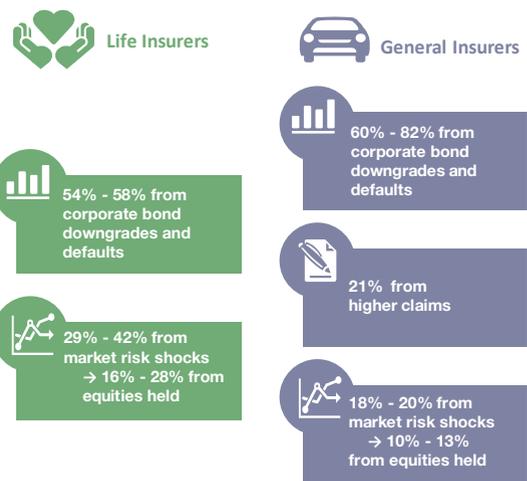


Diagram 1.4: Insurance Sector – Key Loss Drivers under Adverse Scenarios



Source: Bank Negara Malaysia