Financial Institution Soundness and Resilience

THE BANKING SECTOR

Banks' strong funding and liquidity positions remained supportive of intermediation activities

Banks continued to maintain adequate liquidity buffers in the second half of 2022. The expiry of the SRR flexibility[1] at the end of 2022 had a limited impact on banking system liquidity. All banks had sufficient excess liquidity placed with the Bank to replace the MGS and MGII holdings that were used to comply with the SRR. The Net Stable Funding Ratio (NSFR) and Liquidity Coverage Ratio (LCR) remained healthy, at 118.2% and 154.0% as at December 2022, respectively (Chart 2.1 and Chart 2.2). The healthy funding position of the banking system supported lending to households and businesses amid the ongoing economic recovery while ensuring that banks remained resilient against liquidity shocks, both over the short- and longer-term horizon.

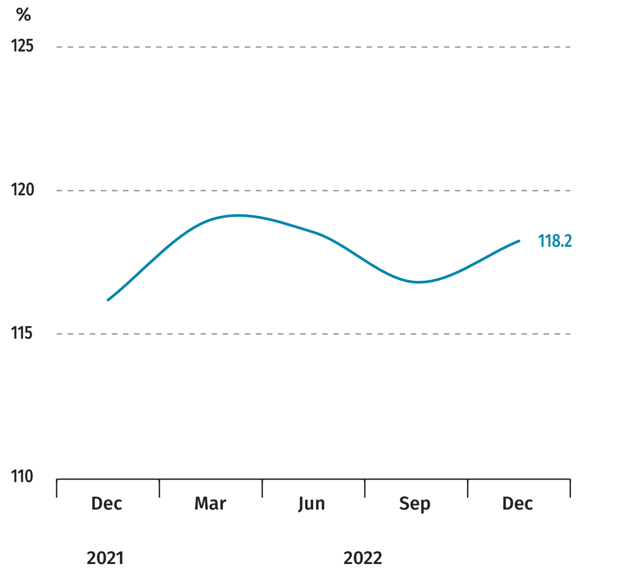
Banking system deposits continued to grow at a healthy pace of 5.9%, above pre-pandemic levels (2015-2019 CAGR: 4.4%) (Chart 2.3). Deposits also grew faster than loan growth, thus ensuring adequate funding to support intermediation activities. Deposits from individuals and businesses continued to account for the bulk of banking system deposits at 36.1% and 33.1%, respectively. While the rising interest rate environment has placed some pressure on the value of banks' high-quality liquid assets (HQLA),[2] banks continued to have sufficient HQLA (December 2022: RM753.4 billion) to meet stressed cash outflows over at least a 30-day period. More than 80% of these HQLA are in the form of placements with the Bank and government bonds, which banks can access and pledge in the interbank market or with the Bank for additional liquidity. All banks also have access to the standing facilities and Restricted Committed Liquidity Facility (RCLF)[3] with the Bank.

Expectations of rising rates are posing some challenges to banks from a widening maturity mismatch and rising cost of deposits as rate-sensitive depositors (businesses and NBFIs) shifted significantly towards shorter-term deposits (Chart 2.4) in anticipation of further increases in the OPR. These depositors also demanded higher deposit rates for longer-term deposits to compensate for the potential loss in deposit returns if the OPR rises further.

The changes in depositor behaviour and seasonal volatility in deposits typically observed at year-end saw some banks increasingly tap the interbank market, particularly for longer-term funding. This has placed some upward pressure on interbank rates, particularly in the fourth quarter of 2022 (3-month interbank rate: +62 bps). However, the impact on banks' cost of funds remained manageable, with the increase in cost remaining broadly in line with the increase in OPR during the period (OPR: +100 bps; banks' cost of funds: +98 bps) (Chart 2.5). More importantly, the increase has not resulted in any notable tightening in bank lending. Banks continued growing their loan portfolios at above pre-pandemic levels (5.7%; 2015-2019 CAGR: 5.3%) (Chart 2.6), while the pricing of new and existing outstanding loans broadly reflected changes in the OPR.

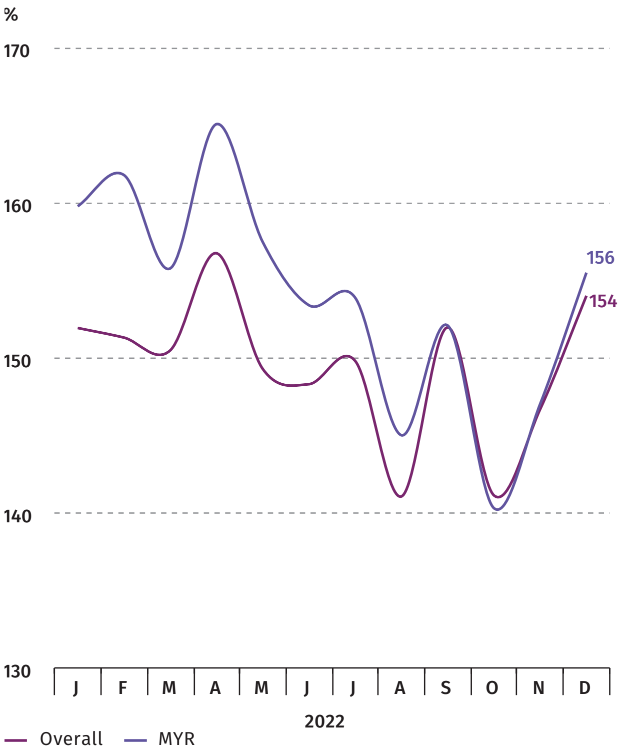
[1] The flexibility to allow banks to use MGS and MGII to meet the SRR compliance was introduced at the onset of the pandemic to provide greater flexibility for banks in their liquidity management and support the continued smooth functioning of the bond market.
[2] These HQLA are in the form of available unencumbered assets, and are valued at mark-to-market prices.
[3] The RCLF was introduced by the Bank in 2016 to allow banks to obtain liquidity for tenures greater than one month from the Bank. Banks that intend to use the RCLF will be charged a fixed facility rate and will be required to designate a pool of unencumbered eligible securities that would be sufficient to support the total size of the RCLF.

Chart 2.1: Banking System – Net Stable Funding Ratio



Source: Bank Negara Malaysia

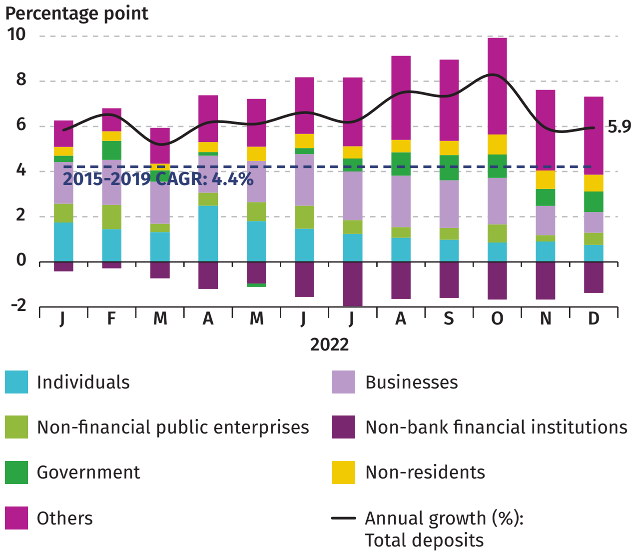
Chart 2.2: Banking System - Liquidity Coverage Ratio



Note: 1. MYR LCR is calculated based on HQLA and expected net cash outflows denominated in ringgit.
2. Overall LCR is calculated based on HQLA and expected net cash outflows denominated in all currencies.

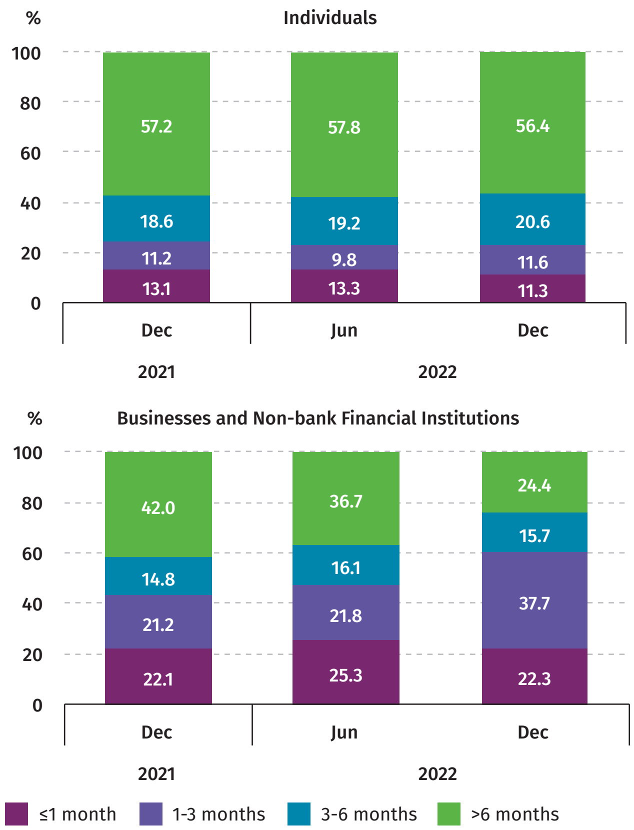
Source: Bank Negara Malaysia

Chart 2.3: Banking System – Contribution to Growth in Deposits Accepted



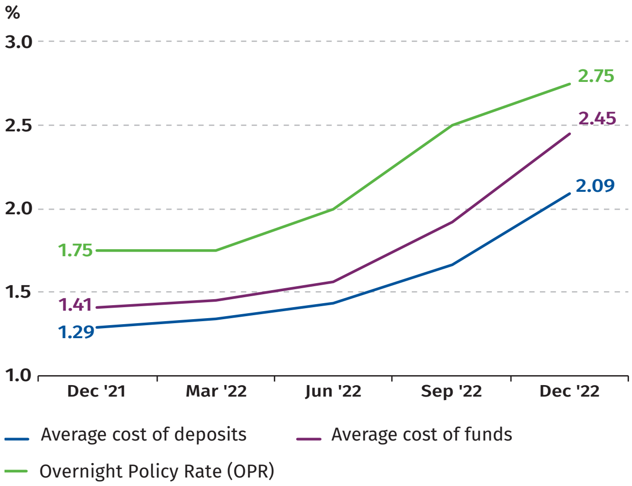
Source: Bank Negara Malaysia

Chart 2.4: Banking System – Composition of Fixed Deposits by Original Maturity



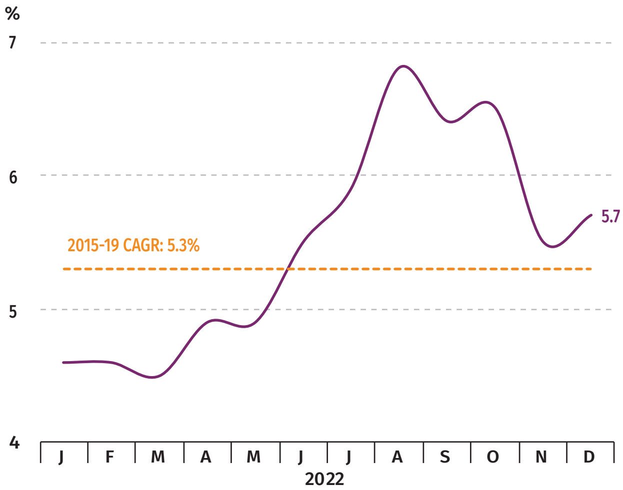
Source: Bank Negara Malaysia

Chart 2.5: Banking System – Average Cost of Deposits, Average Cost of Funds and OPR



Source: Bank Negara Malaysia

Chart 2.6: Banking System – Annual Loan Growth



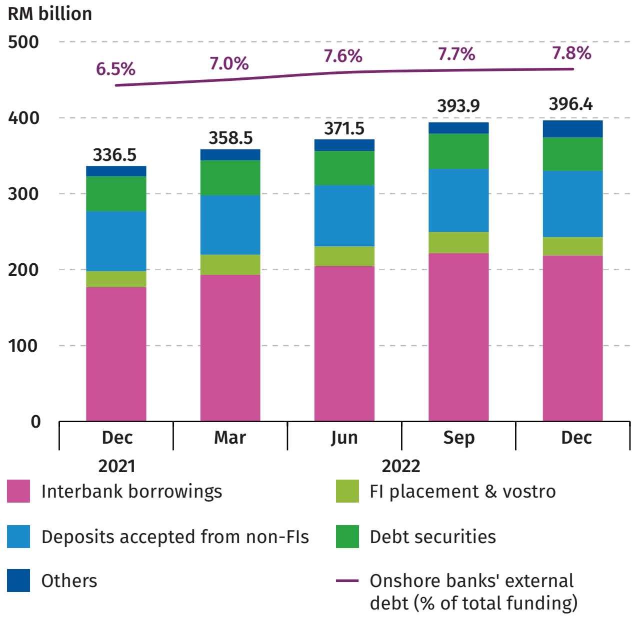
Source: Bank Negara Malaysia

Risks from banks' external debt exposures remained manageable

Banks' external debt increased by RM24.9 billion in the second half of 2022 to RM396.4 billion (Chart 2.7), largely driven by higher interbank borrowings by banks in the Labuan International Business and Financial Centre (LIBFC) from their related offshore counterparts (2H 2022: +RM5.1 billion). The bulk of these borrowings were subsequently channelled into financing and investment activities with non-resident counterparties, thus limiting any domestic spillovers from adverse risk developments. Several domestic banking groups (DBGs) also tapped the international interbank market to bridge temporary foreign currency (FCY) liquidity gaps from maturing deposits.

Overall risks from FCY external debt exposures of banks continued to be well-contained. FCY external debt-at-risk (DAR)[4] remained manageable at RM80.4 billion or 20.3% of total banking system external debt. Banks continued to maintain sizeable FCY liquid assets, sufficient to cover up to 2.6 times of FCY DAR (June 2022: 2.6 times; 2015-2019 average: 2.9 times) (Chart 2.8). The remaining 79.7% of external debt largely comprised interbank exposures with related counterparties or more stable long-term debt, thereby limiting rollover risk faced by banks. Amid elevated levels of market volatility during the period, banks' foreign exchange net open position (FX NOP) from domestic operations declined to a historical low of 3.6% (June 2022: 4.4%) of banks' total capital (Chart 2.9), reflecting the lower risk appetite of banks for uncovered exposures. This conservative FX NOP position limits further FCY liquidity risks from movements in the ringgit.

Chart 2.7: Banks' External Debt – by Instrument

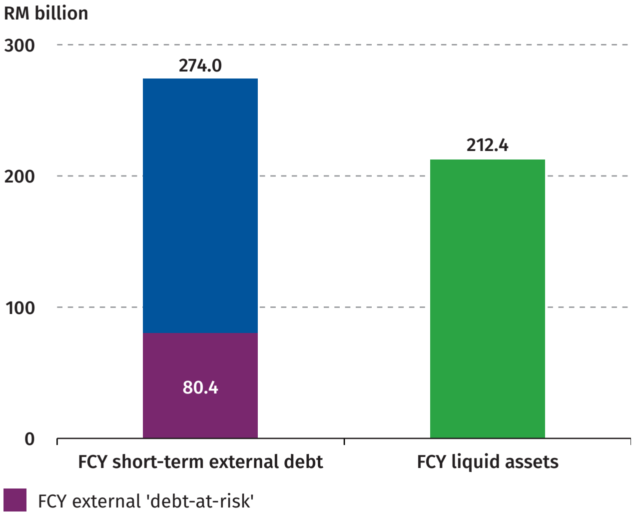


Note: Banks' external debt in this context refers to external debt of DBGs, LIFBs and banks in the Labuan International Business and Financial Centre (LIBFC).

Source: Bank Negara Malaysia

[4] Banks' external debt-at-risk comprises financial institutions' deposits, interbank borrowings, and short-term loans from unrelated non-resident counterparties, which are considered to be more susceptible to sudden withdrawal shocks.

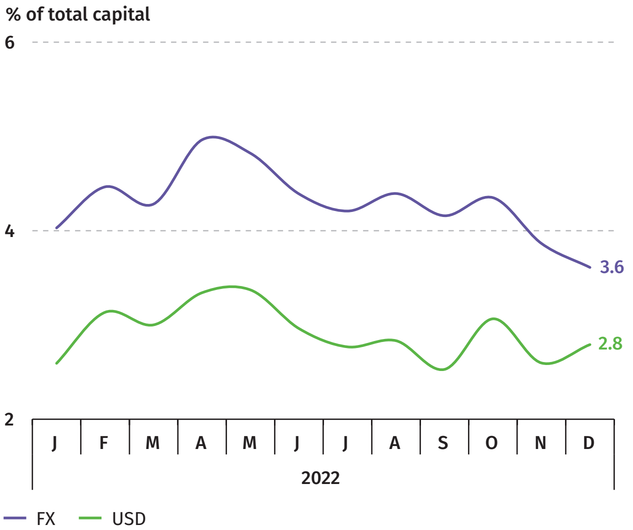
Chart 2.8: Banking System – FCY External 'Debt-at-Risk' and Liquid Assets



Note: Liquid assets comprise cash and cash equivalents, unencumbered debt securities held and interbank placements.

Source: Bank Negara Malaysia

Chart 2.9: Banking System – FX and USD Net Open Positions



Source: Bank Negara Malaysia

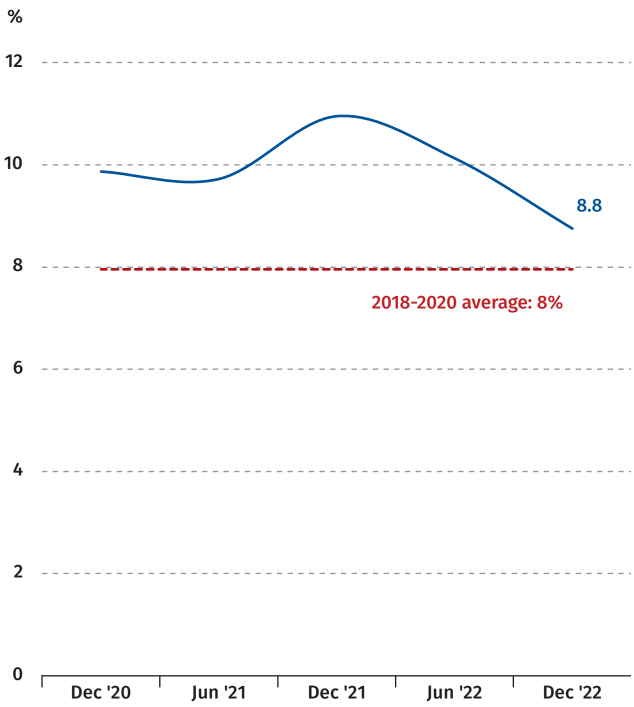
Credit risk outlook improved, but banks remain vigilant

The share of loans under repayment assistance programmes declined further to 4.2% of total banking system loans (June 2022: 5.7%). The resumption of loan servicing by borrowers who exited such programmes has helped improve banks' visibility over repayment behaviour. This in turn contributed to an improved outlook for credit conditions among banks with the share of Stage 2 loans correspondingly declining closer to pre-pandemic levels (Chart 2.10).

The gross impairment ratio stood at 1.7% at the end of 2022 (June 2022: 1.8%) (Chart 2.11). In value terms, impaired loans increased at a slower pace compared to the first half of 2022. A small number of vulnerable household and SME borrowers continued to have difficulties paying their loans after exiting repayment assistance programmes. Most of these loans had previously been identified through banks' proactive engagements with the borrowers, and were therefore already provided for through Stage 2 provisions or management overlays. Meanwhile, non-SME loan impairments declined to 2.8% in December 2022 (June 2022: 3.1%). Moving forward, while credit conditions are expected to broadly improve along with economic growth, elevated levels of input costs for businesses and living expenses for households could pose some downside risks to impairments in 2023.

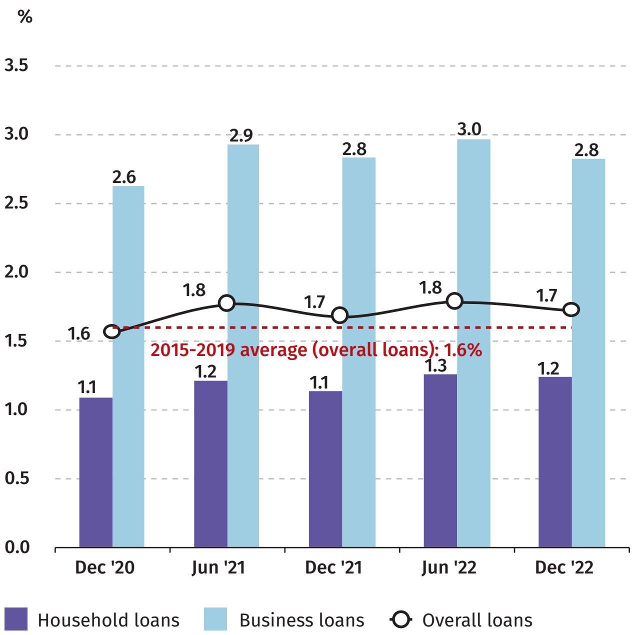
In line with the improvements observed in overall repayment trends, some banks have written back provisions assigned through management overlays during the pandemic for retail borrowers with good repayment behaviour. This, coupled with write-offs of some legacy loans during the period, resulted in provisions recording a decline in the second half of 2022 (Chart 2.12). Loan-loss coverage ratios, including regulatory reserves, nonetheless remained high (December 2022: 118.2%; June 2022: 115.3%; 2015-2019 average: 112.5%) as banks remain vigilant against unfolding credit risks, particularly for loans that are still under, or newly exiting, repayment assistance programmes. Banks' earlier build-up of provisions continues to provide prudent buffers against future expected losses, with the ratio of total provisions to total loans remaining well above pre-pandemic levels despite the modest release in provisions during the year (December 2022: 1.7%; 2018-2019 average: 1.4%). Annualised credit costs have started to normalise towards pre-pandemic levels (December 2022: 20 bps; 2015-2019 average: 14 bps) (Chart 2.13). Moving forward, credit cost is expected to continue to decline as banks write back some of the pandemic-period management overlay provisions in line with refinements to, and revalidation of, provisioning models.

Chart 2.10: Banking System – Stage 2 Loans Ratio



Source: Bank Negara Malaysia

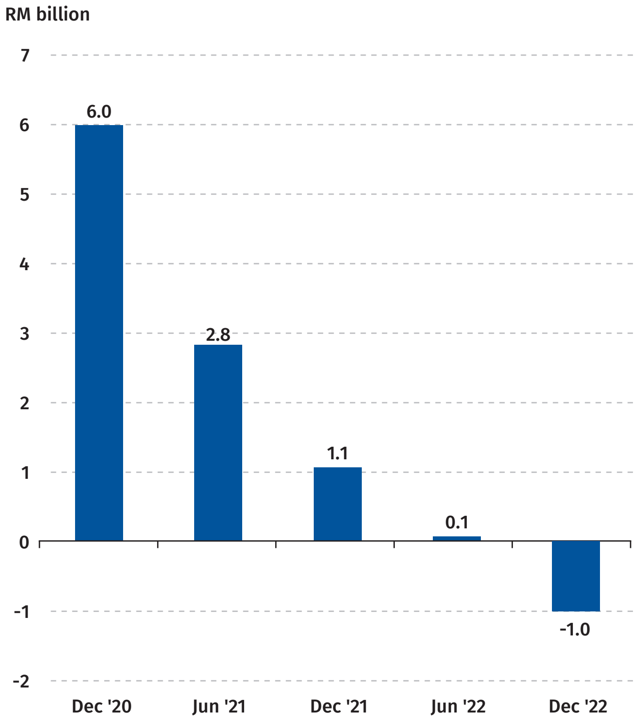
Chart 2.11: Banking System – Gross Impaired Loans Ratio



Note: The loan/financing data from 2021 onwards are based on updated statistical reporting requirements to reflect more accurate data definition and reporting methodology.

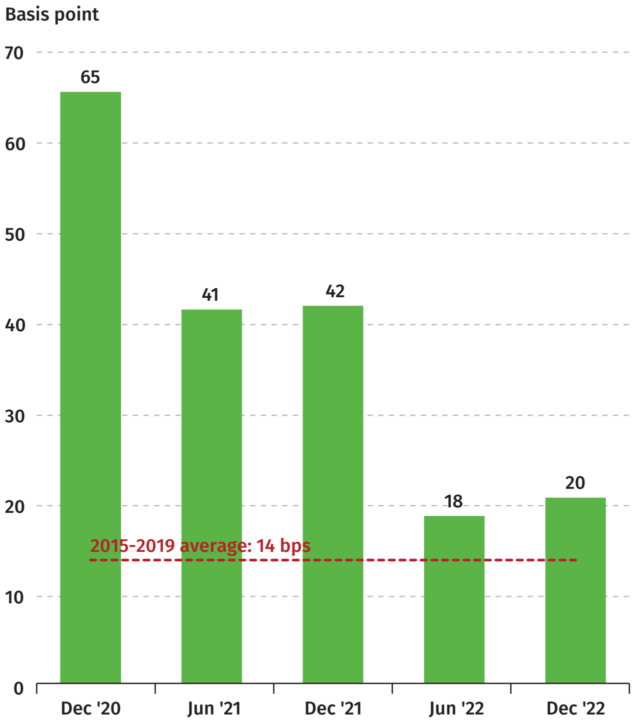
Source: Bank Negara Malaysia

Chart 2.12: Banking System – Half-yearly Change in Provisions



Source: Bank Negara Malaysia

Chart 2.13: Banking System – Annualised Credit Cost Ratio



Source: Bank Negara Malaysia

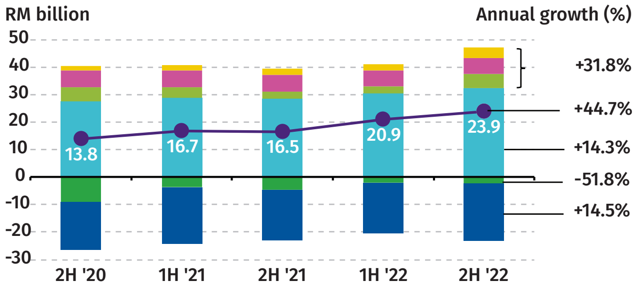
Sustained recovery in banks' earnings but downside risks remain

Bank earnings continued its recovery momentum from the first half of 2022 (Chart 2.14). Net interest margins were sustained by both stronger loan growth and higher lending rates, which outpaced the increase in funding costs. Returns on assets and equity of the banking system correspondingly improved to 1.4% and 12.4% (June 2022: 1.3% and 11.8%), respectively. Similarly, market valuations of listed banks, as measured by the price-to-book (P/B) and price-to-earnings (P/E) ratios also trended higher to 0.9 and 12.2 (June 2022: 0.8 and 11.0), respectively (Chart 2.15). Nevertheless, these valuations have not fully recovered to pre-pandemic levels (2015-2019 average: 1.1 and 11.5), reflecting investor concerns over lingering uncertainties in the operating environment for banks in 2023.

Trading and investment income provided some support to banks' profits in the second half of 2022 despite increased global market volatility during the period (December 2022: 10.2% of banking system's total income; June 2022: 6.9%; 2015-2019 average: 10.4%). Active risk management by banks and market optimism following the slowdown in the pace of tightening by the Fed led to an improvement in banks' trading and investment income (2H 2022: +RM5.1 billion; 1H 2022: +RM2.8 billion). The decline in domestic bond yields in the last two months of 2022, coupled with a stronger ringgit in the last quarter saw banks record gains from their fixed income and FX portfolios.

Banks' holdings of government bonds have increased since the onset of the pandemic (December 2022: 9.9% of banking system total assets; December 2021: 9.4%; 2015-2019 average: 6.8%), exposing banks to higher interest rate risks. Banks continue to monitor these risks carefully to ensure it remains within their internal risk appetite. Of late, a larger share (35.4%; December 2021: 31.8%; 2015-2019 average: 25.2%) of government bonds held by banks is recorded at amortised cost. This has reduced fluctuations in banks' capital positions in an environment of rising interest rates. The high capital buffers of banks also continue to preserve banks' ability to absorb any realised mark-to-market losses from this portfolio. Under a scenario of a 200 bps increase in yield, the mark-to-market losses would reduce the aggregate capital base by 6.2% or total capital ratio by 1.1 percentage points. This remains well within the internal capital targets set by most banks. Among the large DBGs, internal capital targets are set at levels between 4 to 7 percentage points higher than the regulatory minimum to buffer against additional risks including interest rate risk in the banking book.[5] Going forward, financial market volatility is likely to remain elevated and could continue to weigh on banks' trading and investment income although current market risk management strategies by banks point to a modest impact on profitability.

Chart 2.14: Banking System – Income, Cost and Profit before Tax

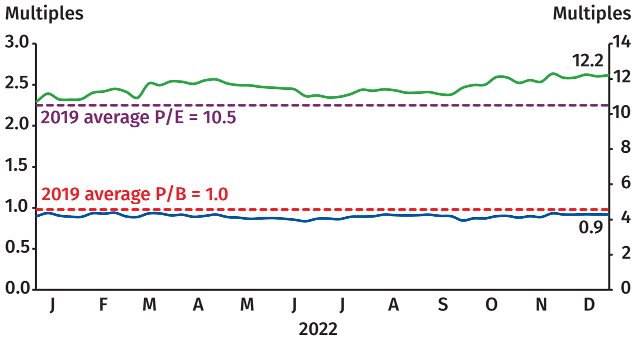


Net interest income
Credit cost
Operating cost
Trading and investment income
Fee income
Other income
Profit before tax

Note: 1. Annual growth computed based on figures for 2H 2021 and 2H 2022.
2. Figures may not add up due to rounding.

Source: Bank Negara Malaysia

Chart 2.15: Banking System – Price-to-Book and Price-to-Earnings Ratios of Publicly Listed Banks in Malaysia



Price-to-book ratio (P/B) Price-to-earnings ratio (P/E) (RHS)

Note: Refers to median ratio of all publicly listed banks in Malaysia.

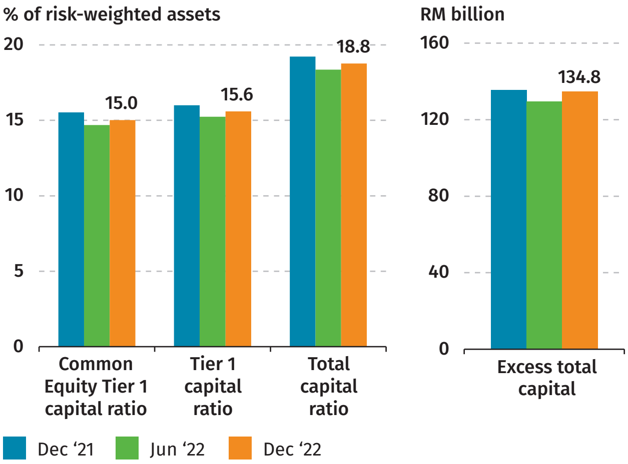
Source: Bloomberg

[5] All banks are required to assess their interest rate risk in the banking book on an ongoing basis as part of their Pillar 2 internal capital adequacy assessment process. This simulates the impact of a sharp increase in yields for assets held in the banking book and assesses the adequacy of capital to withstand these shocks.

The banking system remained well-capitalised, bolstering banks' capacity to support lending activity and absorb unexpected losses

The banking system total capital ratio remained strong (18.8%; June 2022: 18.4%), with capital buffers of RM134.8 billion in excess of the regulatory minimum (Chart 2.16). Improvements in profitability will provide further support for banks' capital buffers, with most banks maintaining capital conservation strategies (including dividend reinvestment programmes) to preserve their buffers. This in turn will continue to support credit to the economy and preserve banks' capacity to absorb unexpected losses. Active risk management and hedging by banks will also help mitigate the impact of volatile market conditions on their capital positions. Work is ongoing by the Bank to progressively adopt key elements of the Basel III reforms package to further improve the risk-sensitivity of the capital framework (Diagram 2.1). This will reinforce the capital strength of the banking system going forward.

Chart 2.16: Banking System – Capitalisation



Note: Excess total capital refers to total capital above the regulatory minimum, which includes the capital conservation buffer requirement of 2.5% and bank-specific higher minimum requirements.

Source: Bank Negara Malaysia

Diagram 2.1: Malaysia's Progress in Adopting Basel III Reform Package

KEY CHANGES

1 Credit Risk (CR) – Standardised Approach

- Emphasised robust due diligence by banks in addition to use of external ratings
- Increase granularity and risk sensitivity to address differences in risk across and within various exposure classes[1]

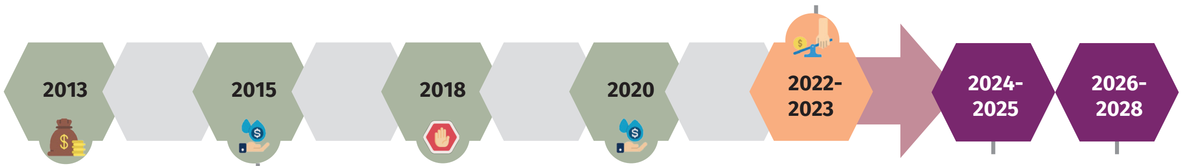
2 Operational Risk (OR)

- Streamlined into a single, formula-based approach to calculate OR capital
- Increase risk sensitivity by combining a refined business volume proxy with option to include bank's historical loss data

3 Exposures to Central Counterparties (CCP)

- Refined capital treatment based on riskiness of exposures to CCP
  - Differentiated risk weights based on status of qualifying CCP
  - Standardised methodology to calculate capital based on type of exposure to CCP

Risk-Weighted Assets (RWA)



2013 – Capital Components
- ✓ CET1[2], Tier 1 Capital, Total Capital
- ✓ Capital Conservation Buffer
- ✓ Countercyclical Capital Buffer

2015 – Liquidity
- ✓ Liquidity Coverage Ratio (LCR)

2018 – Capital Backstop
- ✓ Leverage Ratio

2020 – Liquidity
- ✓ Net Stable Funding Ratio (NSFR)

+

Capital Components
- ✓ D-SIBs[3] Capital Buffer

2024-2025
1. Credit Risk – Internal Ratings Based Approach
2. Securitisation
3. Standardised Approach to Counterparty Credit Risk
4. Large Exposures

2026-2028
1. Market Risk and Credit Valuation Adjustment
2. Interest Rate in the Banking Book via Pillar 2
3. Pillar 3 Disclosure

Implemented | Under consultation | Planned consultation[4]

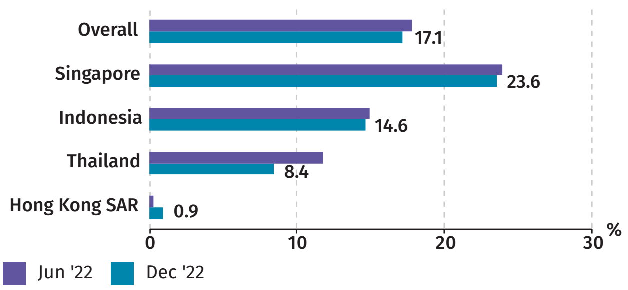
[1] Covered bonds, project finance, object finance, commodities finance, retail and real estate
[2] Common Equity Tier 1 capital
[3] Domestic systemically important banks
[4] Consultation timelines will take into consideration future developments

Source: Bank Negara Malaysia

DBGs' overseas operations remained resilient, with improved repayment trends in most jurisdictions

The profitability of overseas operations[6] of DBGs fell in the second half of 2022 but was stronger compared to the corresponding period in 2021 (Chart 2.17). The slight decline in profitability was observed in operations in Singapore, Indonesia and Thailand, which accounted for more than 80% of total overseas operations in terms of assets (Chart 2.18). The decline was driven by the lower trading income and higher credit costs recorded in some jurisdictions in the last quarter of 2022. Nonetheless, profitability in major operations continued to be supported by net interest income on the back of sustained strong loan growth (December 2022: 9.1%; June 2022: 11.3%; 2021: 7.9%). Similar to Malaysia, improvements in repayment trends were also observed in these economies. The share of loans under pandemic repayment assistance programmes has halved from 4.5% in December 2021 to 2.0% of total overseas operations loans. This has led to better asset quality (Chart 2.19) and lower additional provisions from DBGs' overseas operations, further supporting improvements in profitability compared to 2021. Overseas operations also remained largely funded by local customer deposits (Chart 2.20), thus limiting the risk of liquidity and funding stress and contagion risks to DBGs. Capital levels maintained at DBGs' overseas operations also remain healthy, providing additional buffers against potential credit losses without the need to rely on additional parental support.

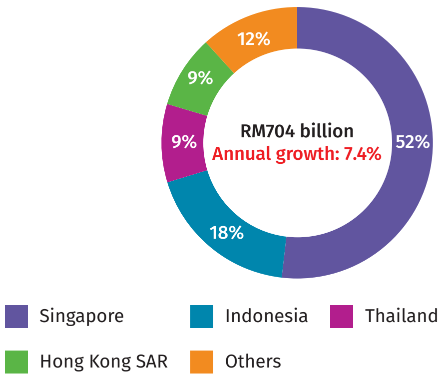
Chart 2.17: Banking System – Return on Equity of Overseas Operations by Jurisdiction



Note: 1. Overall average ROE is weighted by the asset size of selected overseas operations.
2. Average ROE is weighted by the asset size of each domestic banking groups' overseas operations in respective jurisdictions.

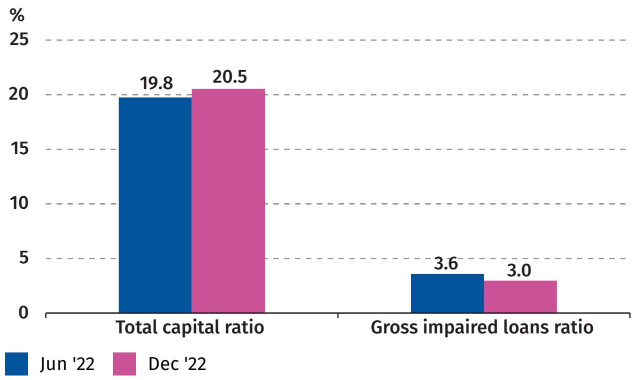
Source: Bank Negara Malaysia

Chart 2.18: Banking System – Asset Profile of Major Overseas Operations



Source: Bank Negara Malaysia

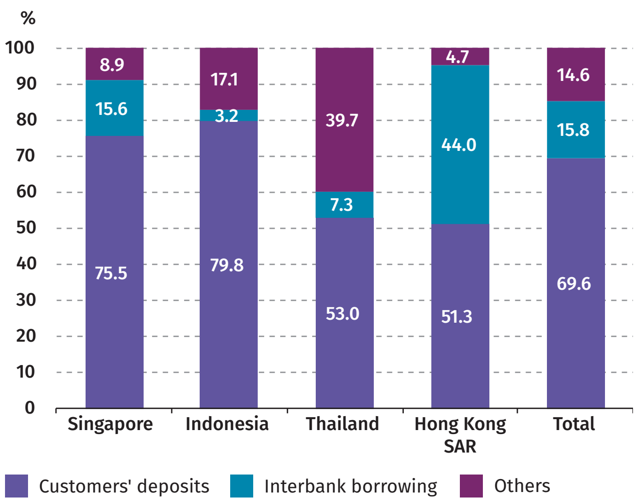
Chart 2.19: Banking System – Key Financial Indicators of Overseas Operations



Note: The average key financial indicators are weighted by the asset size of selected overseas operations.

Source: Bank Negara Malaysia

Chart 2.20: Banking System – Funding Profile of Major Overseas Operations



Note: Figures may not add up due to rounding.

Source: Bank Negara Malaysia

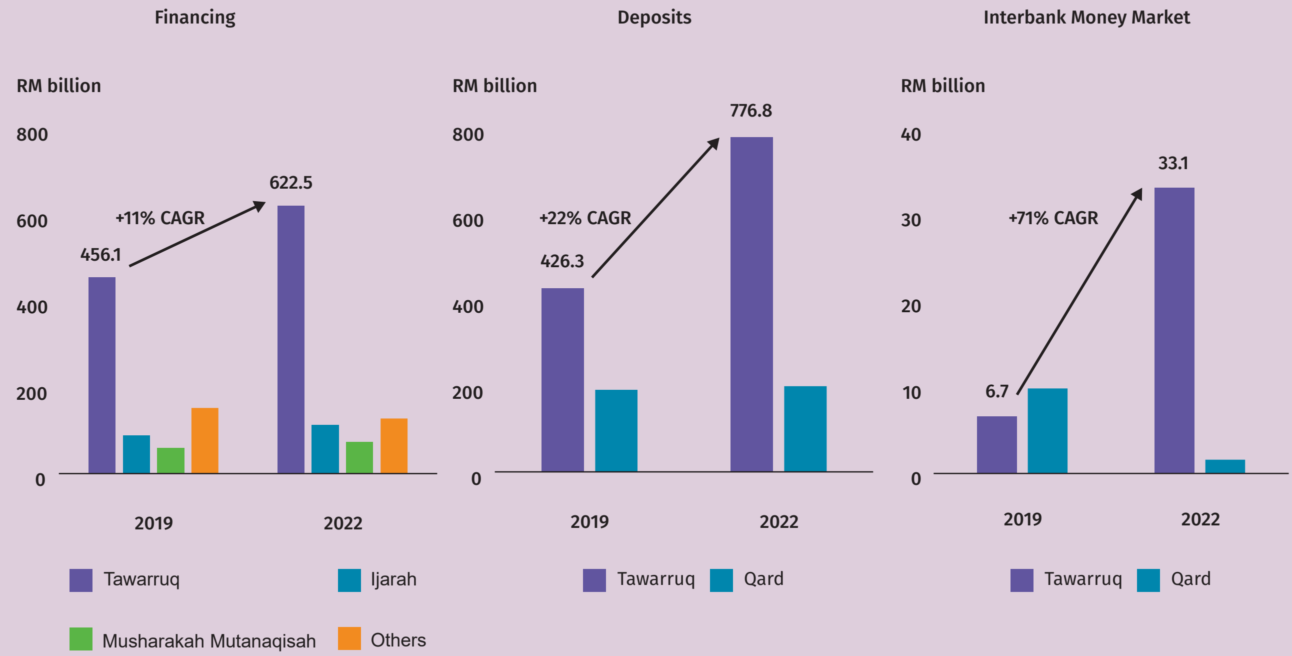
[6] Refers to DBGs' overseas offices, namely branches and subsidiaries operating outside of Malaysia and LIBFC. DBGs are present in 14 economies, with major operations in Singapore, Indonesia, Thailand and Hong Kong SAR.

Managing Transmission of Vulnerabilities in Commodity Markets Associated with the Application of *Tawarruq* in the Islamic Banking System

Application of *Tawarruq* in Islamic Banking

A wide range of Shariah contracts[1] arrangements are currently applied to facilitate Islamic banking transactions. Of these, *tawarruq* is the most widely used contract in key product segments which include financing, deposits and interbank money market (Diagram 1).[2] This is largely due to its ability to facilitate placement of funds[3] and provide cash for different finance purposes such as working capital, trade financing and purchase of properties.

Diagram 1: Trend and Composition of Tawarruq and Other Shariah Contracts by Key Products Segments of Islamic Banks as at 31 December 2022



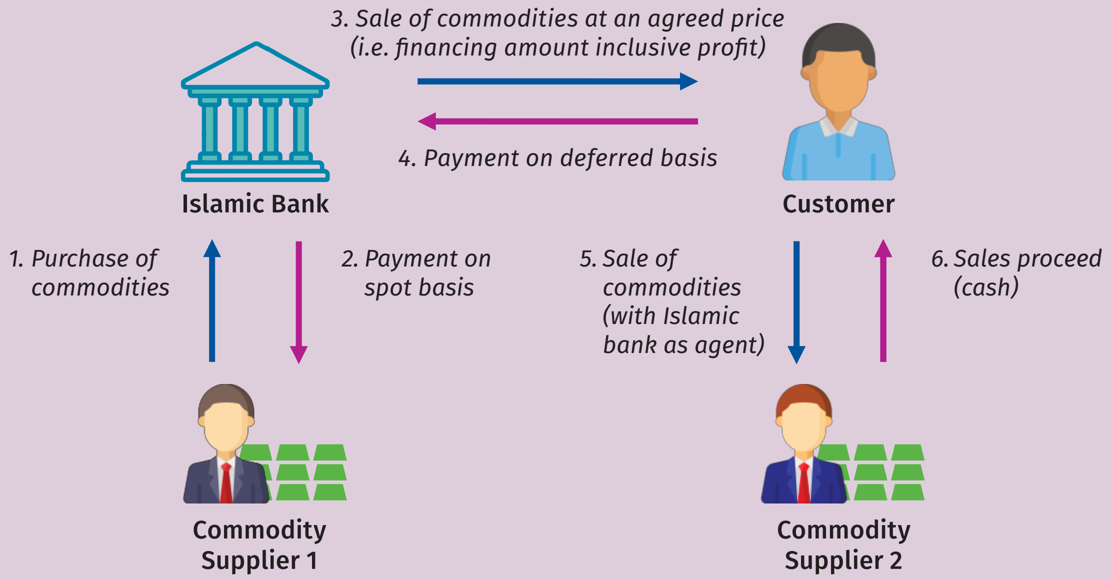
Note: Interbank Money Market data refers to fund placements only, excluding placement with Bank Negara Malaysia

Source: Bank Negara Malaysia, Islamic banks and DFIs

Tawarruq entails two separate sale and purchase transactions of commodities[4] involving four parties – an Islamic bank, its customer and two commodity suppliers. The combination of transactions serves to create a debt obligation on the part of the counterparty that purchases the commodity on a deferred basis at an agreed price (determined in reference to a specified profit rate) (Diagram 2). A wide range of commodities is used in *tawarruq* transactions. These include crude palm oil (CPO), plastic resin, metals, rubber, crude oil and digital commodities which are sourced domestically or globally (Diagram 3). The trading of these commodities is managed by Islamic banks through the use of commodity brokers and exchanges (CBEs).

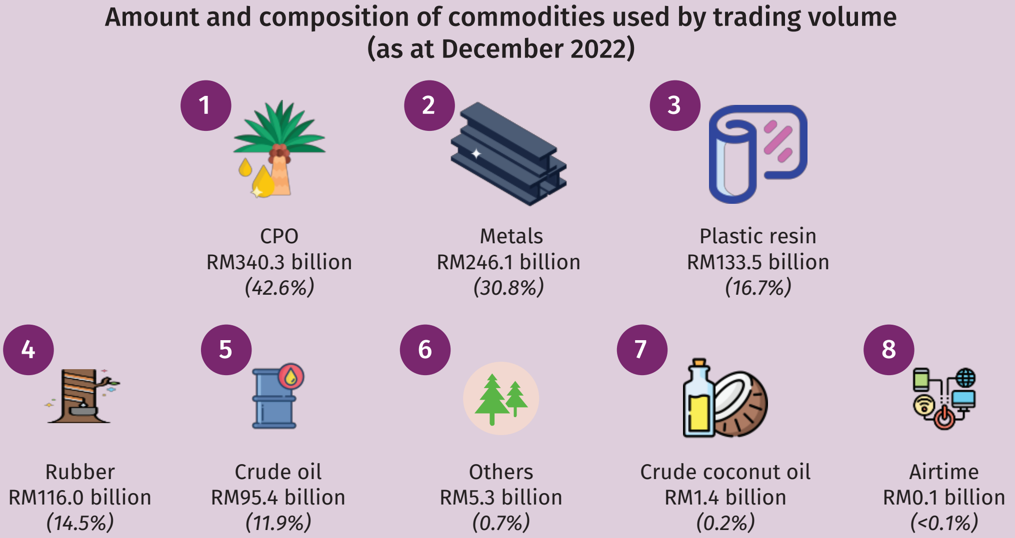
[1] The Shariah contracts consist of *murabahah, musharakah, mudarabah, istisna`, wakalah, wadi`ah, hibah, wa`d, kafalah, qard, bai` al-sarf, ijarah, rahn* and *tawarruq*
[2] Data excludes Islamic window
[3] Interbank money market, deposits, and cash management
[4] Except for gold and currencies

Diagram 2: Illustration on *Tawarruq* Mechanism (Financing)



Source: Bank Negara Malaysia

Diagram 3: Commodities Used for *Tawarruq*



Note: "Others" include palm olein, palm stearin, refined palm oil as well as hardwood and softwood timber

Source: Islamic banks and DFIs

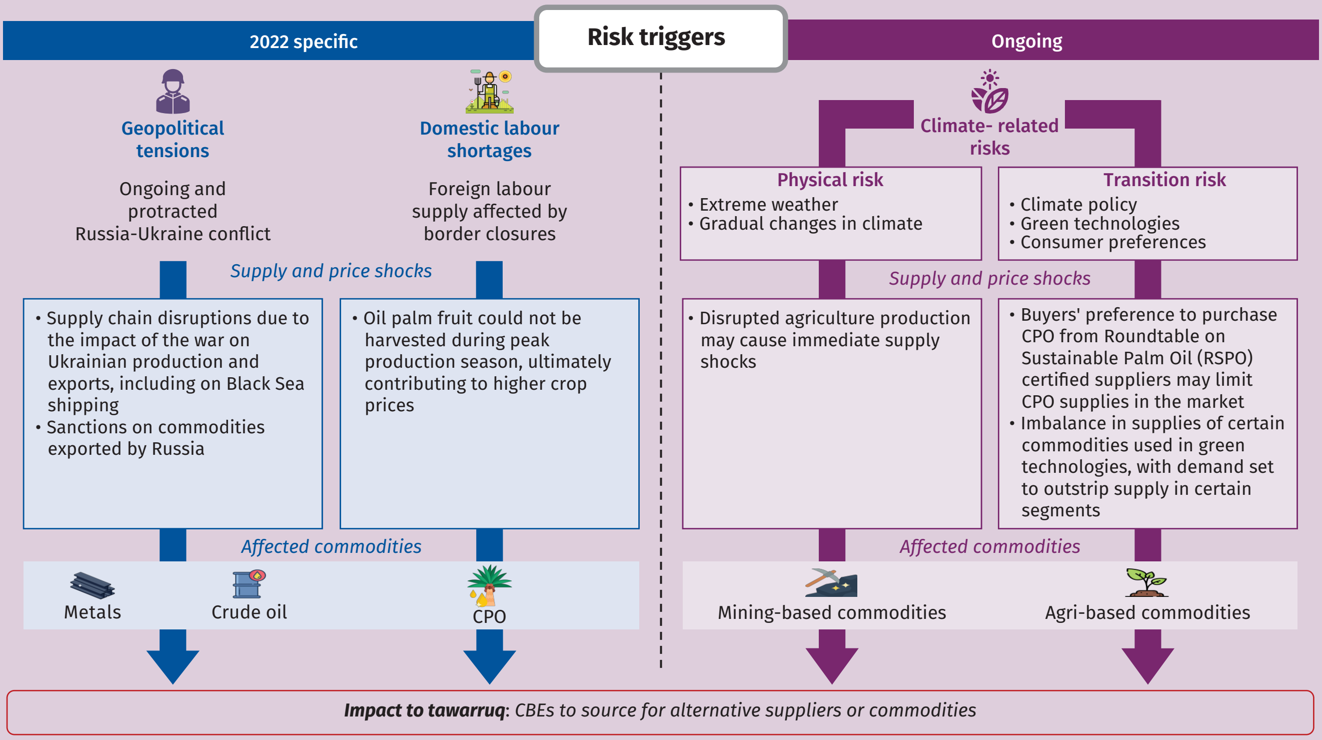
Key Vulnerabilities Observed in Commodity Markets and Their Transmission to *Tawarruq* Transactions

The year 2022 saw increased volatility in commodity markets. Ongoing geopolitical tensions, particularly the military conflict in Ukraine and the subsequent imposition of sanctions on Russia, have affected the supply of metals such as aluminium and nickel. Meanwhile, domestic CPO production was also affected by disruptions in harvesting activity due to prolonged labour shortages during the year.[5] These developments led to significant volatility in the global commodity markets which saw global commodity prices reaching record highs before moderating since the third quarter of 2022.[6]

While the impact of supply disruptions on the commodity markets have been manageable thus far, risks of a further worsening in supply disruptions remain should geopolitical tensions intensify. Over the medium to longer term, physical and transition risks from climate change impacts will also have an important bearing on the outlook for commodity markets.

The volatility in global commodity prices affect *tawarruq* transactions in a number of ways (Diagram 4).

Diagram 4: Key Vulnerabilities in the Global and Domestic Commodity Markets and Impact on *Tawarruq* Transactions



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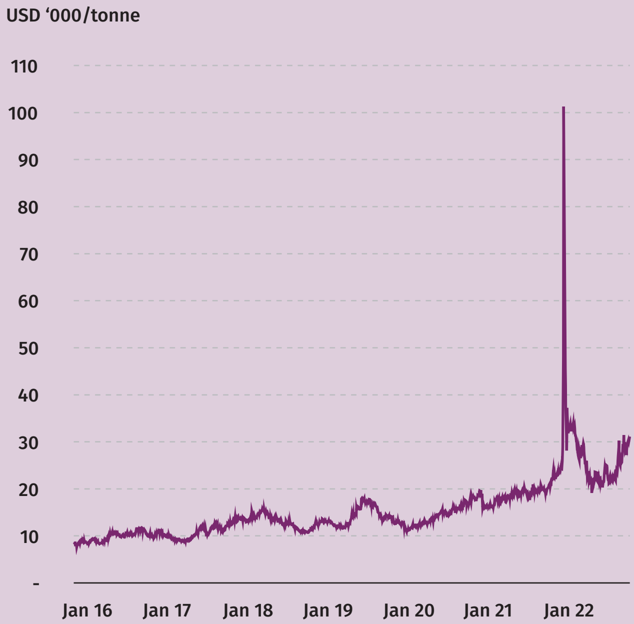
5 Source: BNM Q2 2022 Quarterly Bulletin
6 Source: World Bank

The imposition of sanctions on Russia resulted in extreme volatility in nickel prices in early 2022 as Russia is the producer of 17% of the world's top-grade nickel. On 8 March 2022, nickel futures prices surged by an unprecedented 250% in two days to trade above USD100,000 a tonne (Diagram 5). This caused severe mark-to-market losses for counterparties with short positions in futures contracts on the London Metal Exchange (LME). Consequently, LME had to suspend nickel trading to restore order and enable settlement due on transactions.[7] As the LME sets the global benchmark price for many metals including nickel, the suspension caused a temporary absence of a global benchmark price for nickel. This in turn halted *tawarruq* transactions based on nickel in Malaysia, although its overall impact was limited given the small share of *tawarruq* transactions based on nickel (RM56.0 billion, 6.1% of total commodities used for *tawarruq* transactions).

In such event, Islamic banks will need to find alternative commodities as substitutes. In an extreme scenario where substitution cannot be made, Islamic banks may not be able to enter into new *tawarruq* transactions, disrupting day-to-day *tawarruq* based banking operations.

Diagram 5: Extreme Price Volatility in Nickel in 2022, Particularly in March



Source: Bloomberg

[7] Source: Reuters

Risk Mitigation to Promote Ecosystem Resilience

The Islamic finance industry has implemented several risk management strategies to manage these risks. For example, Islamic banks have, over the years, taken steps to diversify underlying commodities used in trades. Islamic banks are also using multiple CBEs to execute trades. These risk management strategies are further complemented by additional measures taken by CBEs to contain spillover risks. For instance, CBEs typically lock-in prices with commodity suppliers and hedge against intra-day price movements (Diagram 6). These measures have helped Islamic banks navigate the recent shocks in commodity markets, thus preserving orderly intermediation in the domestic Islamic banking system.

Diagram 6: Two Lines of Defence: Risk Management and Controls At Islamic Banks and CBEs

Risk Management and Controls at Islamic Banks	Two Lines of Defence	*Risk Management and Controls at CBEs*
• Diversified commodities are readily available for trading at any point of time. • If one commodity is in short supply, Islamic banks can easily opt for alternative commodities without any delay.	**Supply Risk**	• All CBEs have multiple suppliers of commodities, sourced across a variety of countries. • In the event of any commodity shortage, CBEs can trade on the same underlying commodity more than once, for different transactions as trades are completed almost instantaneously.
• All transactions are conducted on a spot basis, and in entering into *tawarruq* transactions, Islamic banks do not take any market risk positions (e.g. through derivatives). • The commodity price adopted by Islamic banks is fixed at the start/end of the day, and accordingly *tawarruq* transactions are not subject to intra-day price fluctuations seen in the spot market for the underlying commodity.	**Price Risk**	• The commodity price adopted by CBEs is fixed at the start/end of the day, and accordingly *tawarruq* transactions are not subject to intra-day price fluctuations seen in the spot market for the underlying commodity. • This is particularly applicable for commodities with volatile intra-day price movements (e.g. metals), while other commodities with relatively stable prices would not require such an arrangement (e.g. airtime).
• To mitigate single point of failure in the event of any operational/system breakdown and/or shortage of commodities at CBEs, Islamic banks can swiftly switch to alternative CBEs.	**Operational Risk**	• CBEs have in place adequate BCP with regular testing. This is to ensure continuity of services within acceptable time frames during disruptions such as cyber attack, network failure and system downtime.
• Islamic banks are gradually shifting away from commodities with higher carbon footprints. • For example, Islamic banks are also utilising intangible commodities (telecommunication airtime credits which are of zero carbon footprint).	**Climate Transition Risk**	• CBEs require commodity suppliers to have in place appropriate policies and practices on sustainability, including that they be certified by relevant bodies such as RSPO, Malaysian Sustainable Palm Oil (MSPO) etc. • However, offerings of intangible commodities are still limited. In particular, the scale of telecommunication airtime credits in the market remains limited.

Source: Islamic banks, DFIs and CBEs

Measures moving forward

At a system wide level, reducing *tawarruq* concentrations through diversification into non-commodity based Shariah contracts will further enhance the resilience of Islamic banking activities to the risk of extreme supply shocks in global commodity markets. The industry is taking concerted efforts to grow alternative Shariah contracts, as evidenced by an encouraging CAGR of 6.2%[8] in such contracts for the past three years. In addition, various product innovations are taking place, albeit to different degrees across Islamic banks. For example, diminishing partnership (*musharakah mutanaqisah*) has been adopted by a number of Islamic banks as an alternative Shariah contract to facilitate the financing of both completed and under construction properties. Investment account products based on agency contract (*wakalah*) and profit and loss sharing contract (*mudarabah*) are also gaining traction as alternatives to *tawarruq* based deposits. The industry is also advancing initiatives to explore *wakalah* as the Shariah contract for interbank placements between Islamic banks. Moving forward, these innovations are expected to continue to gain traction and further reduce the concentration in *tawarruq*.

[8] Includes only financing activities based on alternative Shariah contracts

Recent Market and Regulatory Developments in the Digital Asset Space

Recent years have seen global interest in digital assets[1] grow significantly. The digital asset market has also been characterised by high risks associated with significant volatility. After sustained increases since June 2020, the market capitalisation of digital assets peaked at USD3.1 trillion in November 2021. This trend has reversed since then amid geopolitical uncertainties, rising interest rates and inflationary pressures. By December 2022, market capitalisation of digital assets stood at USD830 billion, down 73% from its peak.[2] The reversal of crypto's rise – termed as the 'crypto winter' – has been further exacerbated by high profile failures, including that of the TerraUSD stablecoin and the collapse of FTX, one of the largest digital asset exchanges, which led to a broader decline in confidence and reignited concerns over risks associated with digital assets.

Spillovers from crypto's recent reversal have had little impact on Malaysia's financial system. The digital asset market in Malaysia remains small relative to the domestic financial market, with limited linkages between the two. The cumulative net deposit outflow from banks to the four regulated domestic digital asset exchanges represents only 0.6% of the total banking system deposits for individuals as at end-December 2022. Interest by banks to engage in digital asset activities also remains mostly at an exploratory stage. Growing linkages could however increase financial stability risks.

An increasing involvement of banks in digital asset activities would strengthen such linkages. Banks' involvement in the digital asset space can take a variety of forms, including investing in digital assets, offering a range of digital asset-related services such as custody, trading and asset tokenisation, or lending against digital assets as collateral. These activities create channels through which risks can be transmitted from digital asset markets to the broader financial system.

Potential financial stability concerns stem from several sources. Digital assets are considered an emerging asset class, with their performance during stress periods yet to be fully tested. Many digital assets are characterised by a high degree of volatility and are difficult to liquidate, exposing banks to considerable market and liquidity risks. Digital assets also rely heavily on relatively new technology and involve unregulated players in the ecosystem. These may result in heightened and more pronounced operational and legal risks than that typically associated with traditional banking products and business models.

With these considerations in mind, the Basel Committee on Banking Supervision (BCBS) has clarified the prudential treatment of cryptoasset exposures[3] of banks under the Basel standards on capital and liquidity (Diagram 1), aimed at preserving financial stability outcomes from banks' involvement in digital asset activities. The standards apply the 'same risk, same activity, same treatment' principle, where the same capital and liquidity requirements are applied on exposures and activities that serve the same economic functions and carry the same risks, regardless of the underlying technology. In addition, the standards also account for specific risks associated with the unique characteristics of digital assets which are not seen in traditional assets.

The publication of this global standard will inform the Bank's work towards strengthening the regulatory framework to account for emerging risks in this area. Given the cross-border nature and implications of digital asset activities, consistency with global standards will be an important consideration. The Bank will also continue to coordinate closely with the Securities Commission Malaysia in monitoring developments surrounding digital asset-related activities in Malaysia, and balancing the risks and opportunities associated with such activities in progressing a more vibrant digital financial services landscape as envisaged in the Financial Sector Blueprint.

[1] For the purposes of this article, the terms 'digital assets' and 'cryptoassets' are used interchangeably. They refer broadly to digital representations of value that depend primarily on cryptography and distributed ledger or similar technology. Examples include stablecoins and unbacked digital assets.
[2] Source: CoinGecko.
[3] https://www.bis.org/bcbs/publ/d545.pdf

Diagram 1: Summary of BCBS Standard on the Prudential Treatment of Cryptoasset Exposures

Group 1 Cryptoassets

Safer cryptoassets eligible for treatment equivalent to their underlying assets

Tokenised traditional assets or stablecoins that meet classification conditions e.g.:

(i) underlying assets to be traditional assets[1] with effective stabilisation mechanisms (stablecoins)
(ii) robust redemption rights and governance
(iii) safety and soundness of the network on which cryptoassets are based
(iv) operators of cryptoasset exchanges to be regulated and supervised, or subject to appropriate risk management standards, and have in place and disclose a comprehensive governance framework

↓

Capital treatment generally based on existing Basel framework

Add-on infrastructure risk, depending on weaknesses identified in the cryptoasset infrastructure (national discretion)

Group 2 Cryptoassets

Riskier cryptoassets that attract more punitive capital treatment

Cryptoassets that do not meet classification conditions

↓

Meet hedge recognition criteria[2] *(Group 2a)*

↓

Adapted market risk rules with netting and 100% capital charge

Do not meet hedge recognition criteria *(Group 2b)*

↓

1250% risk weight

Group 2 exposure limit of 2% of a bank's Tier 1 capital (with more punitive capital treatment beyond 1% threshold)

Other applicable elements: Operational risk, adapted liquidity requirements, leverage ratio, large exposures, supervisory review and disclosure requirements

Given the rapid pace of market developments, the Basel Committee will also issue additional refinements and clarification over time. This includes addressing issues such as the risk posed by cryptoassets that use permissionless blockchains and the calibration of Group 2 exposure limit.

Qualifying criteria | Prudential treatment

[1] E.g., equities, bonds and commodities.
[2] These include various thresholds relating to the market capitalisation, trading volume and price observations for cryptoassets to meet.

Source: Basel Committee on Banking Supervision (BCBS), summarised by Bank Negara Malaysia