



Suruhanjaya Sekuriti
Securities Commission
Malaysia

CAPITAL MARKET STABILITY REVIEW 2022

**CAPITAL
MARKET
STABILITY
REVIEW
2022**

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PREAMBLE

The Securities Commission Malaysia (SC) is mandated to take all reasonable measures to monitor, mitigate and manage systemic risks arising from the capital market.

This inaugural *Capital Market Stability Review 2022* outlines overall risk assessments on various components of the Malaysian capital market from 1 January to 31 December 2022, unless otherwise stated, and discusses the relevant systemic risk drivers. The report also covers two thematic risk analyses on specific components of the capital market: macro stress tests to assess investment funds' liquidity under adverse market conditions; and analysis of the various investor groups to facilitate the monitoring and management of systemic stability.

KEY HIGHLIGHTS

Malaysia's transition to the endemic phase signalled the beginning of the country's recovery. The reopening of economic activities and an improved job market have lifted market and corporate sentiment.

During the review period, the domestic capital market remained resilient and orderly without any observed systemic stability concerns. Given the challenging market conditions, the SC will continue to remain vigilant in handling and mitigating any potential risk that may arise.

EQUITY MARKET AND INFRASTRUCTURE



DOMESTIC MARKETS were impacted by global volatility, with FBMKLCI recording a yearly decline of -4.60% led mainly by healthcare counters.



MARKET RISK management mechanisms were in place and there was no circuit breaker triggered in 2022.

DIGITAL ASSETS



TRADING ACTIVITY in local digital asset exchanges (DAXs) declined towards the end of 2022.



DIGITAL ASSETS VALUE TRADED remained small at 0.35% compared to the domestic equity market.

BOND MARKET



MGS YIELD CURVE trended upwards in tandem with global bond market.



DEFAULT RATE of corporate bonds and sukuk was low at 0.18%.

INVESTMENT FLOWS



FOREIGN HOLDINGS in equities were stable. However, foreign holdings in bonds experienced decline in 2022.



FOREIGN SOURCE OF FUNDS remained relatively small in the fund management segment.



ANALYSIS ON INVESTOR PARTICIPATION showed that as at 30 September 2022, 68.68% of the total foreign holdings across various markets and sectors on Bursa Malaysia were held by foreign strategic investors.

INVESTMENT MANAGEMENT



ASSETS UNDER MANAGEMENT (AUM) OF FUND MANAGEMENT AND NET ASSET VALUE (NAV) OF UNIT TRUST FUNDS (UTF) recorded a decrease from 2021, largely due to a drop in the market value of assets in line with unfavourable equity markets.



FUND MANAGERS have in place adequate liquidity risk management processes to ensure sufficient liquidity to manage potential increase in redemptions.



STRESS TEST RESULTS showed sufficient liquidity buffers across all investment funds in the form of cash and cash equivalents to withstand considerable redemption pressures.

STOCKBROKING INTERMEDIARIES



STOCKBROKERS AND INVESTMENT BANKS remained resilient and have sufficient capital buffers to manage their respective liquidity positions prudently.

PUBLIC-LISTED COMPANIES*



MOST SECTORS recorded higher earnings in 2022, with financial services, consumer services and retail, and manufacturing being the top three sectors with significantly better earnings.



HEALTHCARE MANUFACTURING AND ENERGY SECTORS continued to face post COVID-19 changes and challenges.

* Based on the latest available financials up to Q3 2022.

RISK OUTLOOK

The global financial market, particularly the capital market, is expected to weather various risks and vulnerabilities stemming from geopolitical conditions and the monetary policy stance of major central banks amid the persistently increasing inflationary and growth concerns. Similarly, the Malaysian capital market would be exposed to the following risk drivers:

TIGHTENING MONETARY POLICY



The global market shifted from abundant liquidity to tighter monetary and financial conditions which is expected to create heightened volatility.



Any deterioration in market liquidity conditions would impact overall equity market performance, particularly in emerging markets, as foreign fund inflows dissipate.



On the flip side, valuations are driven lower as global investors pare down their positions in the emerging markets, which could be a consequential opportunity for Malaysia given the strong fundamentals of Malaysian PLCs.

CAPITAL MARKET ATTRACTIVENESS



The domestic capital market is expected to remain resilient. Nonetheless, keeping pace with regional peers is key to maintain market attractiveness. Greater fundraising access and diversity of investment products and services will be a distinguishing advantage for Malaysia's capital market.



Passive funds constantly track benchmark indices such as the MSCI Emerging Markets Index. Therefore, Malaysia's weightage in those indices may influence fund flow from passive investors.



Finding unique propositions and driving value creation in Malaysian PLCs would be essential to attract investors.

ECONOMIC CONDITIONS



The International Monetary Fund (IMF) has forecasted global growth to slow down from 3.2% in 2022 to 2.7% in 2023, the weakest growth profile since 2001 apart from the global financial crisis in 2008 and the COVID-19 in 2020.



Downside risks to economic growth would add further constraints on the corporates' bottom-lines, amid volatile commodity prices, further disruptions to global supply chains and US dollar strength.



Rising interest rates would also increase the funding costs while overly leveraged firms could face increased pressure in servicing their debts.

SUSTAINABILITY



Sustainability has garnered much attention globally especially with the adoption of the 2030 Agenda for Sustainable Development by all United Nations Member States.



Capital market investors have also increasingly emphasised the importance of environmental, social and governance in making their investment considerations.



Given countries' varying stages of implementation, disclosures and transition risk remain key challenges for capital market participants.



**RISK ASSESSMENTS
ON COMPONENTS OF
THE CAPITAL MARKET**

EQUITY MARKET AND INFRASTRUCTURE

In 2022, global volatility was largely influenced by rising recessionary risk, higher global interest rates, strict COVID-19 lockdowns in China and Russia’s invasion of Ukraine. In line with the global market, the domestic market was impacted as the FBMKLCI recorded a yearly decline of -4.60% (Chart 1), ending the year 2022 at 1,495.49 points.

The average daily trading volume and value for 2022 trended downwards to 3.00 billion units and RM2.18 billion, respectively in 2022 (Chart 2) (2021: trading volume and value of 5.85 billion units and RM3.66 billion, respectively), despite the country entering the endemic phase and reopening of economic activities.

Higher global inflationary pressure, poor global equity market outlook and the tightening of monetary policy affected market sentiment amid healthy local retail and foreign investor participation in 2022.

FBMKLCI valuation improved slightly compared to most regional emerging markets (Chart 3) amid an anticipated stronger economic recovery momentum.

Market-wide circuit breaker and dynamic and static price limits for equities were in place as part of the risk management mechanism to address excessive market volatility. In 2022, no circuit breakers were triggered.

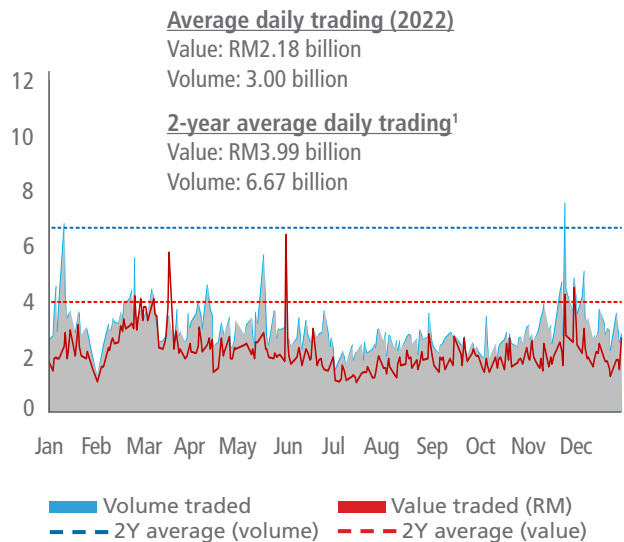
Securities and Derivatives Clearing Guarantee Funds have been in place to manage the settlement of trades when there is a payment or delivery default. There has been no utilisation of the clearing guarantee funds since inception.

CHART 1
Equity market performance



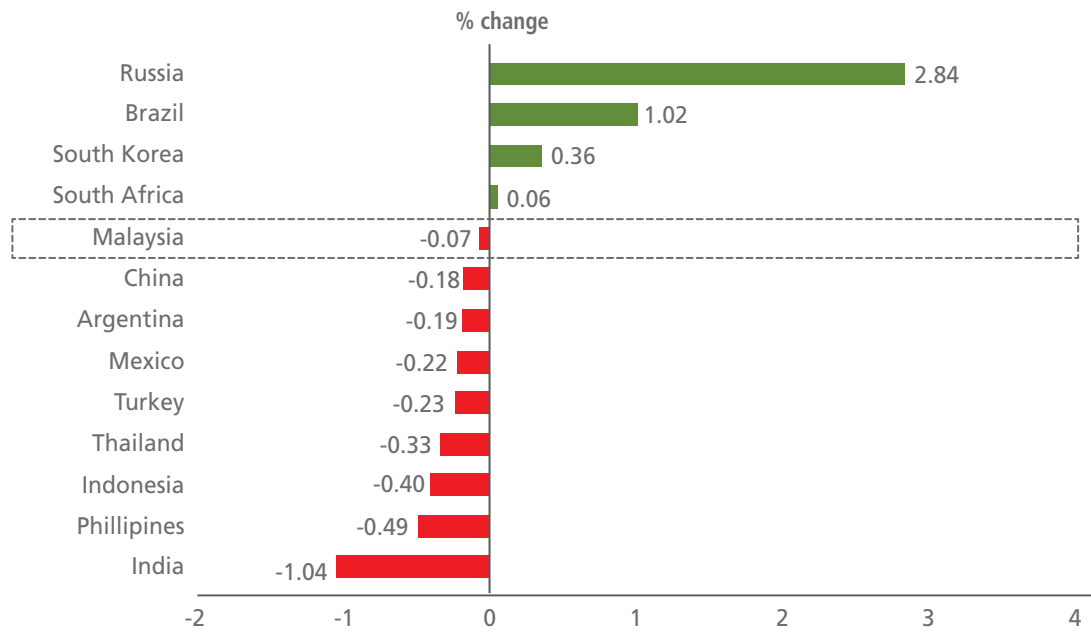
Source: Bloomberg.

CHART 2
Average daily trading



Source: The SC.

¹ A two-year average covering average daily trading between 2020 and 2021.

CHART 3Emerging Markets – Composite Valuation Score²

Source: Bloomberg.

² Composite valuation score comprises equally weighted price-to-book ratio, price-to-earnings ratio and dividend yield.

BOND MARKET

Global bond market volatility remained elevated since the beginning of 2022 due to aggressive monetary policy tightening by major central banks to fight inflationary pressures, sparking recession fears. In 2022, the Federal Reserve (Fed) has raised its Federal Funds Rate seven times (4.25% - 4.50% as at end December) and the Fed is expected to continue raising the rate until the inflation condition has stabilised.

Domestically, Bank Negara Malaysia (BNM) at its Monetary Policy Committee meeting on 3 November 2022 reiterated that despite the current rising interest rate trend, the stance of monetary policy will be adjusted in a measured and gradual manner to ensure an accommodative monetary policy to support sustainable

economic growth. The Overnight Policy Rate (OPR) as at end 2022 was 2.75% and BNM has raised the OPR four times in 2022 (May: 1.75% to 2.00%, July: 2.00% to 2.25%, September: 2.25% to 2.50%, November: 2.50% to 2.75%).

Malaysian Government Securities (MGS) yields trended upwards in tandem with global interest rates increases led by the Fed and subsequent OPR rate hikes by BNM in 2022 (Chart 1). Amid the aggressive rate hikes, the J.P. Morgan Global Aggregate Bond Index also recorded a yearly decline of -15.81% as at December 2022 (Chart 2).

Corporate bonds and sukuk continued to be resilient. The default rate was low at 0.18% (2021: 0.17%).

CHART 1
MGS yields



Source: Bond Pricing Agency Malaysia.

CHART 2
Global and emerging markets bond indices



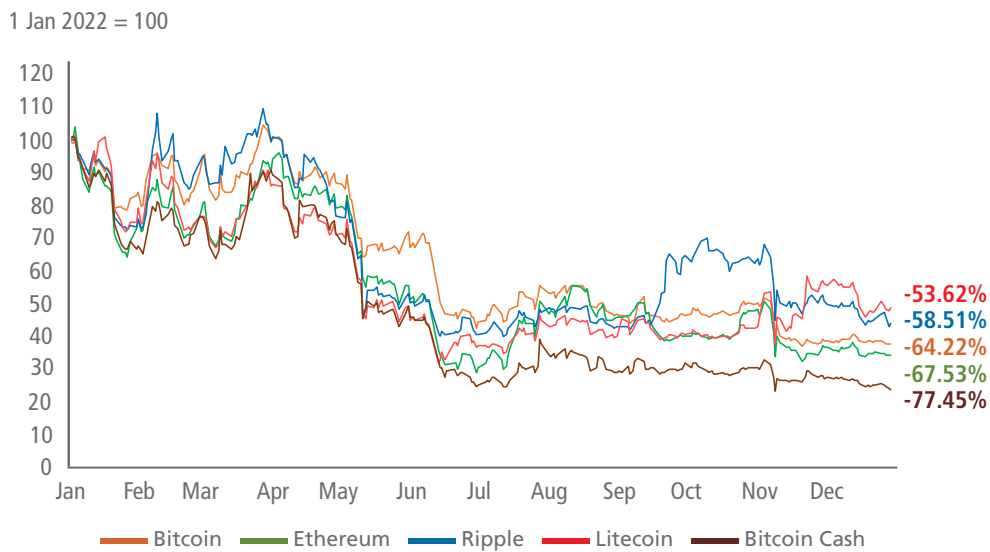
Source: Bloomberg.

DIGITAL ASSETS

In 2022, the cryptocurrency market was hit by a crypto winter which saw a significant decline in major cryptocurrency prices. Consequently, most tracked digital assets traded on local DAXs recorded negative performances (Chart 1) as recessionary fears and geopolitical tensions sapped demand for high-risk cryptocurrency assets.

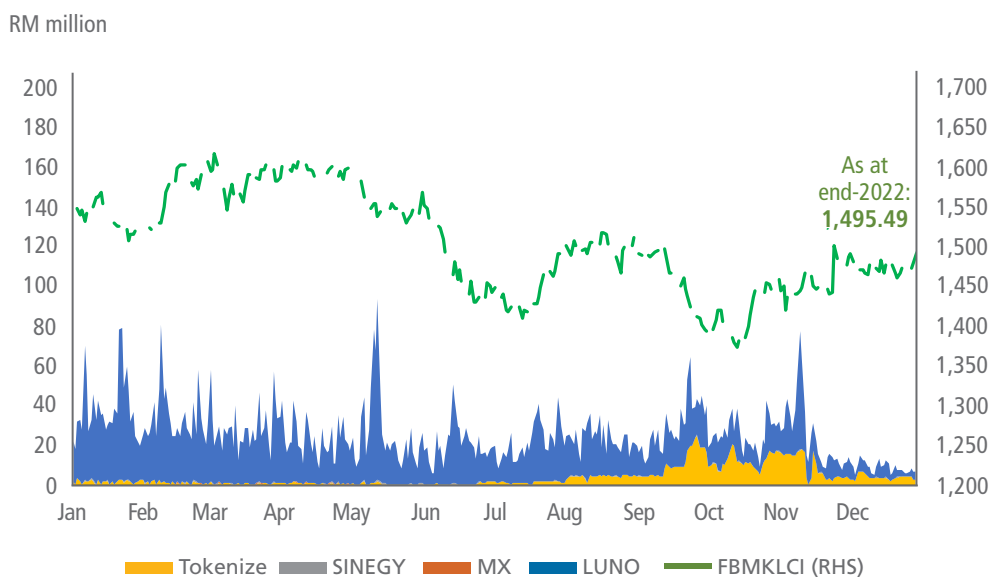
Trading activity in the local DAXs declined towards the end of the period, with Tokenize gaining more traction compared to its peers (Chart 2). Overall, digital assets value traded remained small at 0.35% compared to the domestic equity market as at December 2022.

CHART 1
Digital assets performance



Source: Bloomberg.

CHART 2
DAX Daily Trading Value

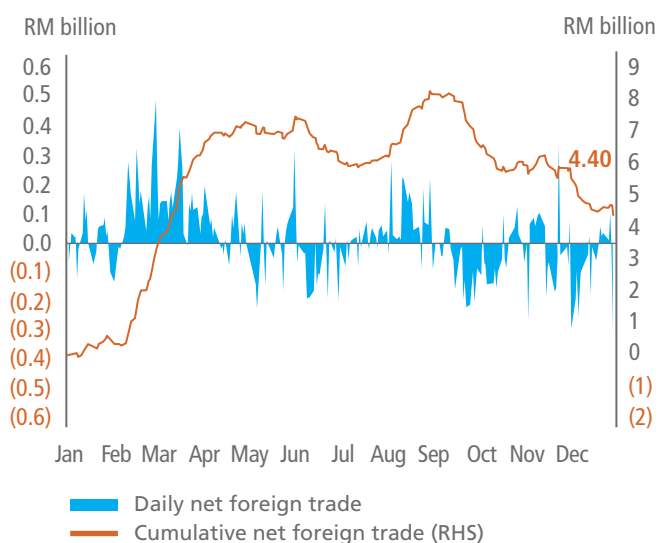


Source: The SC.

INVESTMENT FLOWS

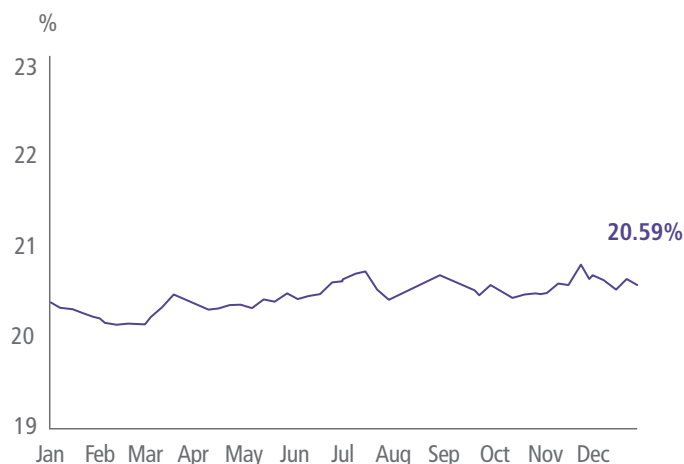
For equities, local institutional investors were net sellers with an outflow of -RM6.53 billion in 2022 (2021: net sell -RM9.06 billion), while buying support came from both foreign investors and local retail investors. Local retail investors' net purchases were relatively muted with inflows of RM2.13 billion (2021: net buy RM12.21 billion) while foreign investors turned net buyers with inflows of RM4.40 billion in 2022 (Chart 1) (net sellers in 2021: -RM3.15 billion). As such, foreign equity holdings increased to 20.59% as at December 2022 (Chart 2) compared to 20.41% in 2021.

CHART 1
Equity foreign trading



Source: Bursa Malaysia.

CHART 2
Foreign holdings in Malaysian equities

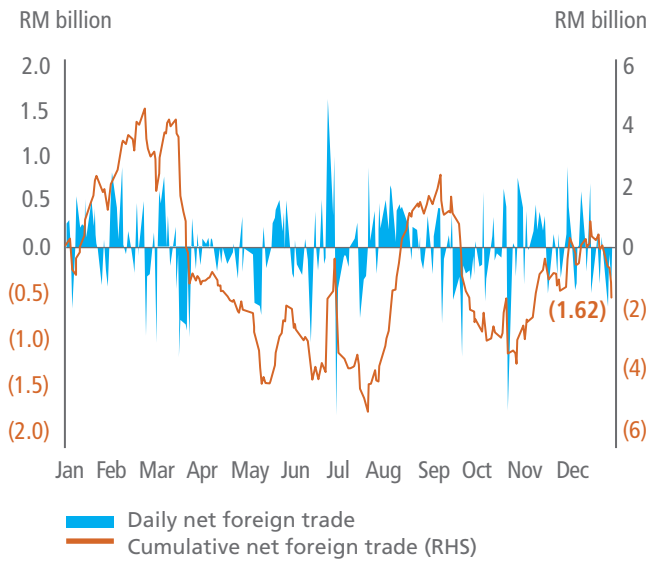


Source: Bursa Malaysia.

Foreign investors' bond trading activity recorded a net outflow of -RM1.62 billion in 2022 (Chart 3) (net inflow in 2021: RM32.00 billion) led by MGS (-RM6.83 billion). Foreign demand for MGS and Government Investment Issue (GII) reduced in 2022 amid the continued hawkish stance of the Fed, with the narrower differential between MGS and US Treasury yields reducing the appeal of ringgit bonds for foreign buyers.

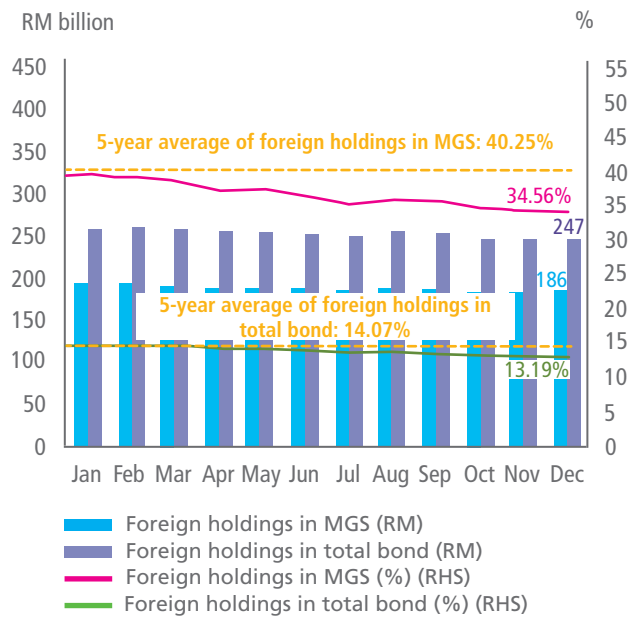
Foreign holdings in the Malaysian bond market stood at 13.19% (2021: 14.74%) as at December 2022, dropping below its 5-year average of 14.07% (Chart 4). The foreign investors held mostly MGS (75.36%, 2021: 73.85%), followed by GII (16.29%, 2021: 17.34%), Malaysian Treasury Bills and Malaysian Islamic Treasury Bills (2.85%, 2021: 3.07%) and corporate bonds and sukuk (5.50%, 2021: 5.73%).

CHART 3
Bond foreign trading



Source: Bursa Malaysia.

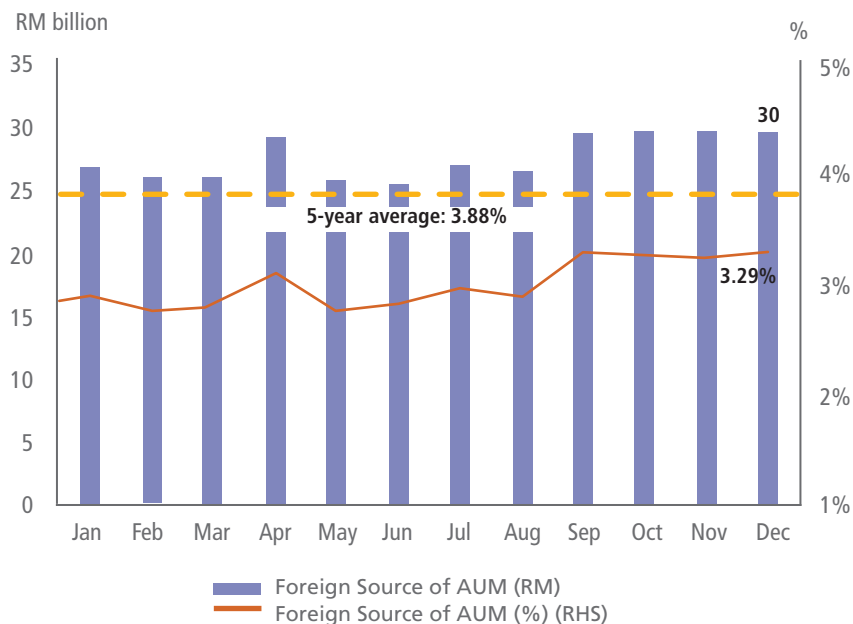
CHART 4
Foreign holdings in ringgit bonds



Source: BNM.

In the fund management segment, foreign investors made up 3.29% of total AUM as at end December 2022 (Chart 5) (2021: 2.81%). Foreign source of funds remained relatively small in this sector.

CHART 5
Foreign source of AUM



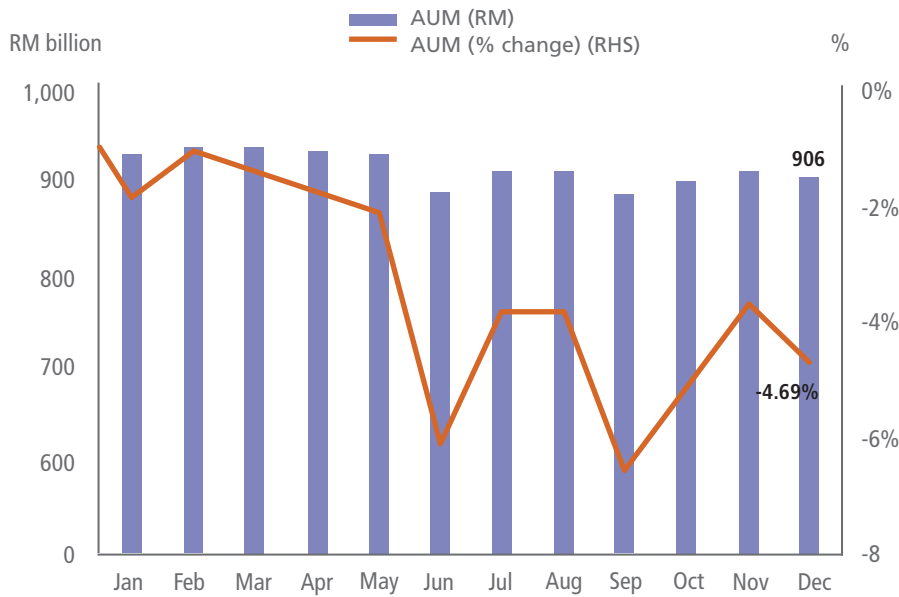
Source: The SC.

INVESTMENT MANAGEMENT

AUM for the fund management industry stood at RM906.46 billion as at end of December 2022 (Chart 1), recording a decrease of -RM44.59 billion, or -4.69% from 2021's AUM of RM951.05 billion. This was largely due to a reduction in the market value of assets in line with sluggish global markets as assets were mainly allocated in equities (47.59%, 2021: 49.20%), followed by fixed income securities (23.25%, 2021: 22.05%) and money market (14.81%, 2021: 15.40%).

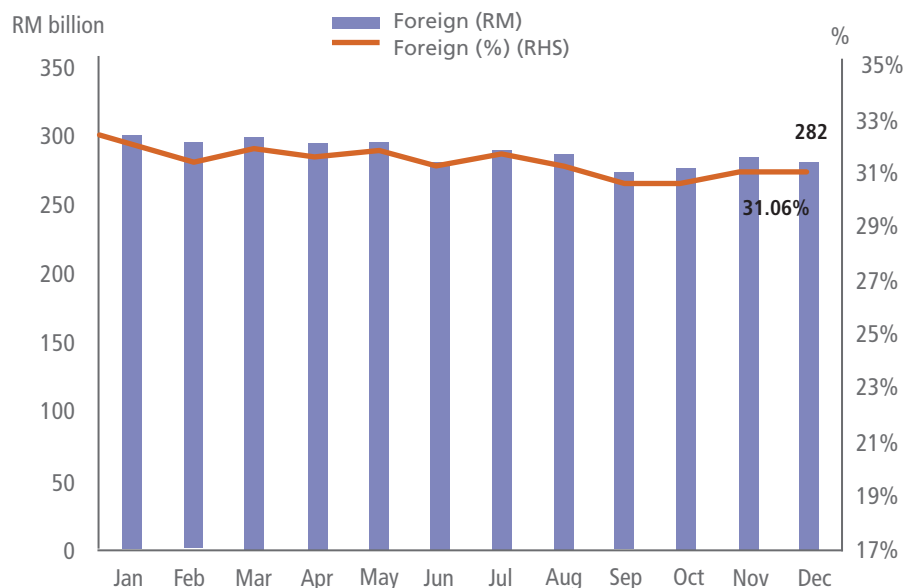
Allocation in foreign assets decreased by -RM30.05 billion to RM281.59 billion (Chart 2), while the allocation in local assets dropped by -RM14.54 billion to RM624.87 billion (Chart 3) mainly due to net redemptions in money market funds and weaker market valuations.

CHART 1
AUM



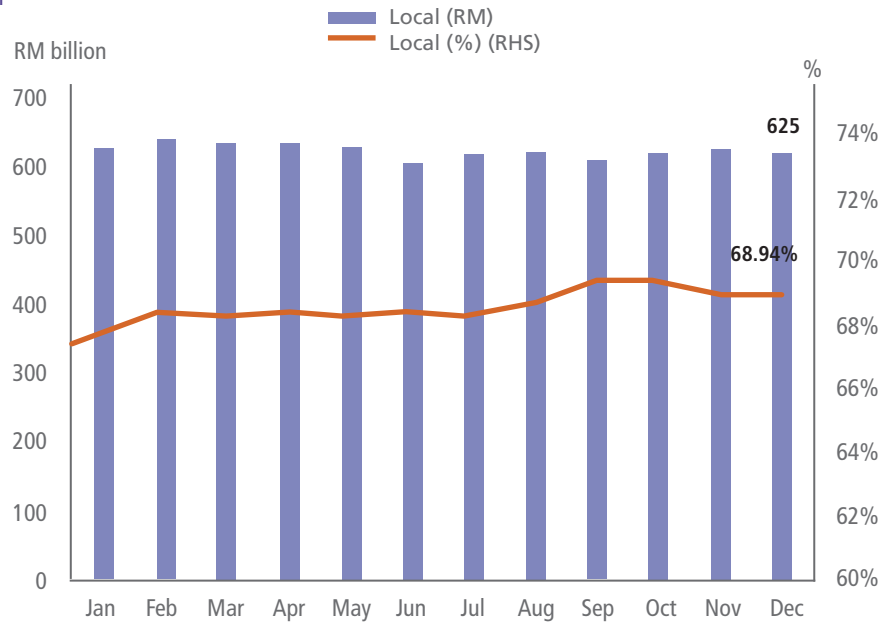
Source: The SC.

CHART 2
Foreign AUM allocation



Source: The SC.

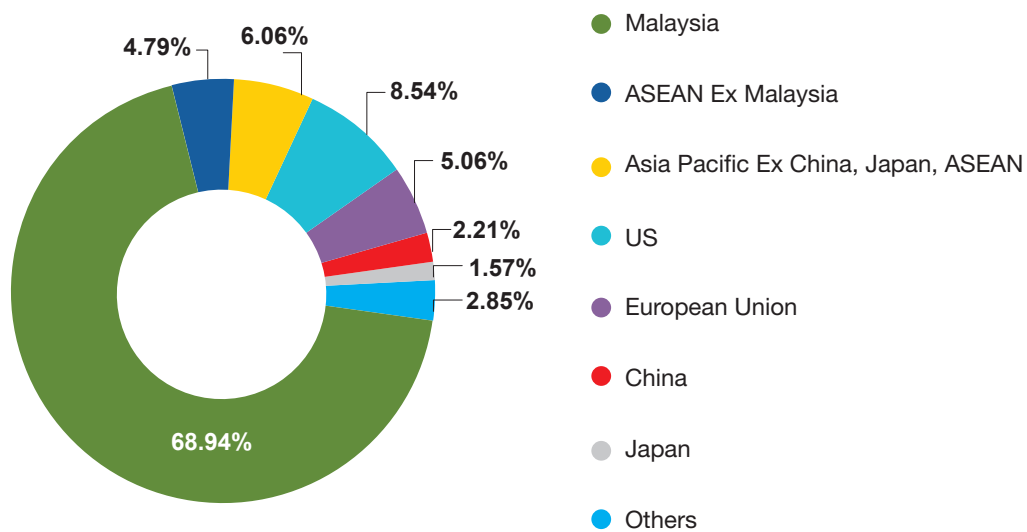
CHART 3
Local AUM allocation



Source: The SC.

Foreign AUM allocation was primarily concentrated in the US, Asia Pacific Ex China, Japan and ASEAN and European Union (Chart 4).

CHART 4
AUM allocation by region

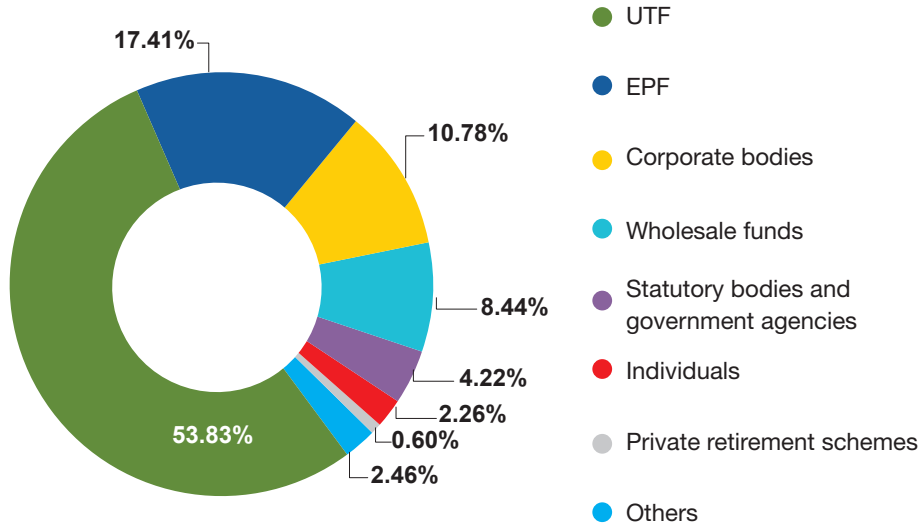


Source: The SC.

Note:
* The numbers may not add up due to rounding.

UTF remained the largest source of AUM at 53.83% (2021: 55.40%), followed by the Employees Provident Fund (EPF) at 17.41% (2021: 17.34%) and corporate bodies at 10.78% (2021: 9.97%) (Chart 5).

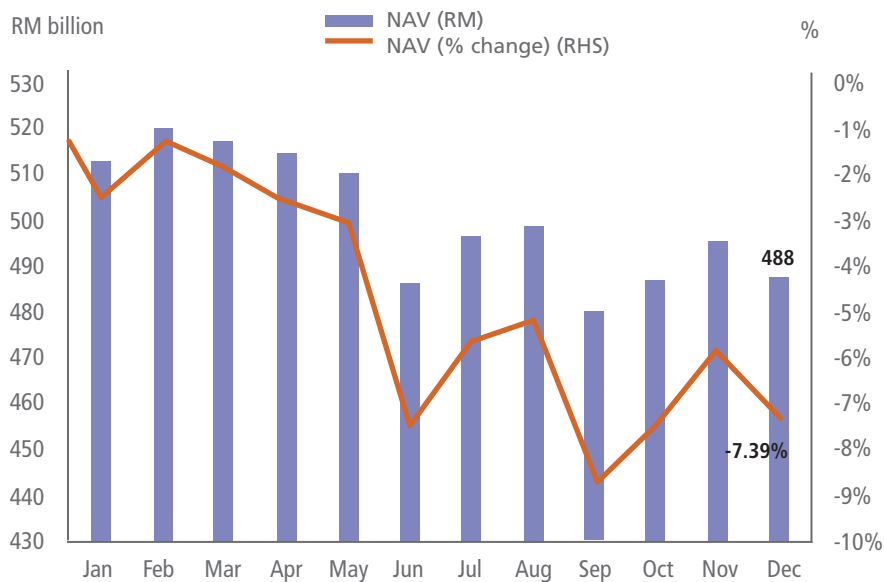
CHART 5
Sources of AUM



Source: The SC.

UTF's NAV stood at RM487.94 billion as at December 2022 (Chart 6), a decrease from RM526.90 billion in December 2021. This was driven by drop in asset values, consistent with equity market weakness and the overall movement of AUM.

CHART 6
UTF NAV



Source: The SC.

Fund managers have in place adequate liquidity risk management processes to ensure sufficient liquidity in the funds to manage redemptions in an orderly manner. UTFs recorded a net redemption of -RM9.60 billion³ as at December 2022, comprising gross sales of RM239.56 billion³ and gross redemptions of -RM249.16 billion (2021: net sales of RM15.92 billion)³, mainly driven by net redemptions in money market funds.

³ Include reinvestment of distribution.

STOCKBROKING INTERMEDIARIES

Stockbrokers and investment banks (IBs) continued to meet their respective minimum capital adequacy requirements (capital adequacy ratio (CAR) of 1.20 times; risk weighted capital ratio (RWCR) of 8.00%). As at December 2022, stockbrokers' average CAR was at 13.47 times, increasing from 12.82 times in 2021 while the IBs' average RWCR increased to 38.76% (as at December 2022) from 37.35% in 2021.

Stockbroking intermediaries' risk management controls were sufficiently robust to manage credit risk exposures arising from margin financing. The collateral coverage ratio as at December 2022 stood at 3.28 times (2021: 3.53 times), relative to the minimum required level of 1.30 times.

Overall, stockbroking intermediaries managed their respective liquidity positions prudently and adequately.

PLCs⁴

Generally, Malaysian PLCs showed signs of continued recovery as at Q3 2022, with most sectors recording higher earnings as compared to the corresponding period in 2021. The top sectors with significantly better earnings were transport (+RM63.27 billion, 205.15%), financial services (+RM7.00 billion, 36.53%), consumer services and retail (+RM3.67 billion, 152.74%), manufacturing (+RM2.82 billion, 15.62%) and utilities (+RM2.26 billion, 50.51%). Apart from the transport sector which has better-reported earnings mainly due to an exceptional item on a writeback of provision upon completion of the debt restructuring by an airline PLC, other sectors' improved performance was reflective of the normalisation of economic activities as the country moved towards endemicity and reopening of international borders. It is also observed that 60% of the PLCs have exhibited earnings improvement as at Q3 2022 compared to the corresponding period in 2021.

Apart from the healthcare (glove) manufacturing sector which recorded significantly lower cumulative earnings as at Q3 2022 compared to Q3 2021, the energy sector also reported weaker earnings. The energy sector was impacted mainly due to significant impairments recorded by an upstream oil and gas PLC as well as two petroleum refinery PLCs which were affected by lower sales margins from the pricing difference of crude oil and refined petroleum products. In addition, the reported earnings of the property and construction sectors remain weak and have yet to recover to pre-pandemic levels. These sectors' slow recovery is caused

by the spill-over effects of the COVID-19, higher cost of materials and cautious property market sentiment.

The escalating external challenges may also continue to exacerbate PLCs' liquidity risk, potentially impacting the capital market moving forward. Notwithstanding this, based on the SC's assessment of PLCs' financials, including sectors with the largest debt size, i.e. utilities sector with a debt size totalling RM185.67 billion and consumer services and retail sector with a debt size totalling RM135.08 billion, there are no alarming signs of deteriorating credit health which may pose a significant risk to the capital market.

Another challenge faced by the PLCs in 2022 was the strengthening of the US dollar against ringgit, which impacted PLCs with US dollar denominated borrowings. Based on the assessment, the exposure to volatility in the US dollar was moderated by PLCs' hedging policies in managing their US dollar exposures or naturally hedged for PLCs with revenue denominated in US dollars.

Overall, notwithstanding the improved performance of the PLCs as at Q3 2022, Malaysia's growth trajectory continues to face challenges on continued interest rate hikes and the risk of prolonged geopolitical tensions disrupting the global supply chains leading to higher inflation. Furthermore, persisting inflationary pressures could dampen household spending and investment activities.

⁴ The write-up on the assessment of PLCs' earnings was based on the latest available financials up to Q3 2022.

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**THEMATIC REVIEW
OF CAPITAL MARKET
SEGMENTS – STRESS
TEST ON FUNDS**

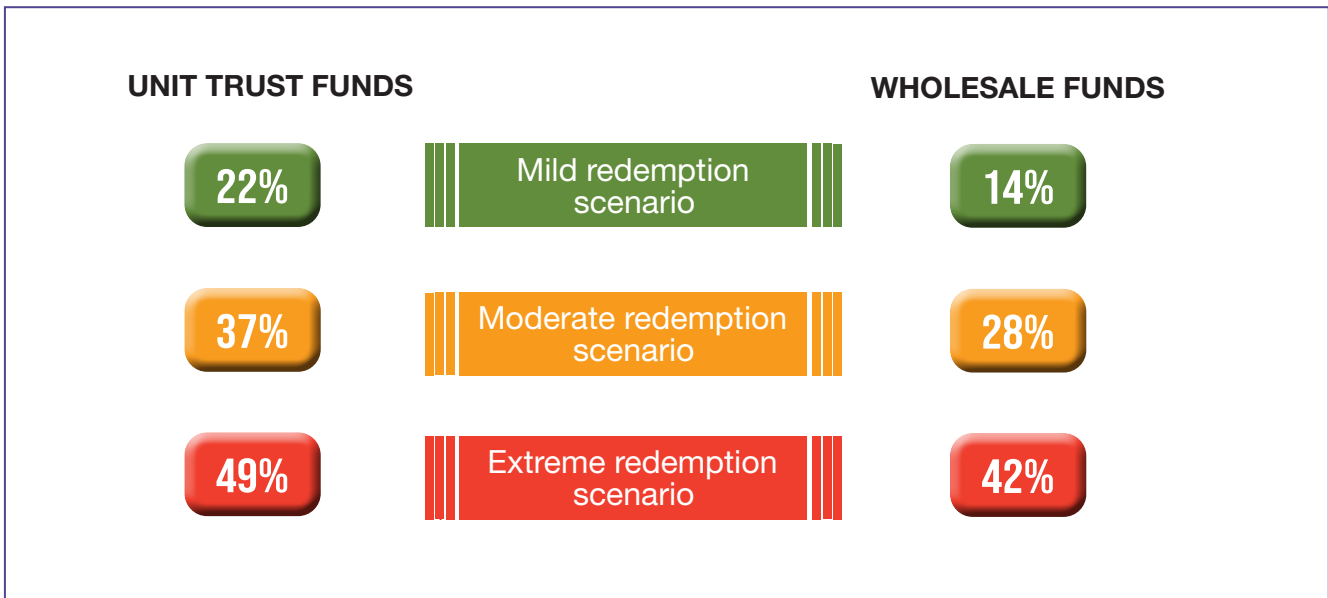
ASSESSING LIQUIDITY RISK IN INVESTMENT FUNDS

Asset liquidity remains critical in mitigating adverse impacts from potentially large redemption pressures, which are common during periods of unfavourable market conditions. Recognising the need for an industry-wide assessment, the SC developed and conducted a series of macro stress tests on unit trust and wholesale funds (collectively referred to as investment funds). This aligns with the International Organization of Securities Commissions¹ (IOSCO) focus on assessing the liquidity characteristics of assets in relation to their anticipated redemption flows in stressed market conditions.

STRESS TEST SCENARIOS AND METHODOLOGY

The macro stress test was conducted based on plausible tail scenarios, which were derived from historical redemption data to simulate mild, moderate, and extreme redemption pressures (Figure 1). Several assumptions were applied in developing the scenarios, including the expectation that the initial redemption shock would prompt further redemptions by other unitholders. Additionally, individual investment funds were required to maintain liquidity buffers of at least 10% in all asset classes in anticipation of future redemptions by unitholders. Effectively, funds incapable of reserving sufficient buffers for redemption are considered illiquid. The stress test exercise also assumed that neither the regulator nor the trustee would intervene in terms of liquidity management practices.

FIGURE 1
Stress test scenarios based on redemption of NAV



Source: The SC.

¹ Final Report: Recommendations for Liquidity Risk Management for Collective Investment Schemes. The Board of the IOSCO, IOSCO, 2018.

The macro stress test model involved a bottom-up approach where risks across the financial markets and assets were considered. The model utilised sensitivity analysis where a factor of large rolling redemption pressures was applied to the individual investment funds liability in three broad scenarios of redemption pressures based on historical redemption patterns. On the funds' asset side, liquidation of certain asset classes was moderated by downward pressure on asset prices.

In terms of liquidation, a macro stress test can be conducted based on either one of two slicing approaches. In a horizontal slicing² (waterfall liquidation³) approach, liquidation takes place from cash and cash equivalents (most liquid) to corporate bonds/sukuk (least liquid). Under the vertical slicing (*pro rata* liquidation) approach, the structure of the portfolio takes precedence;

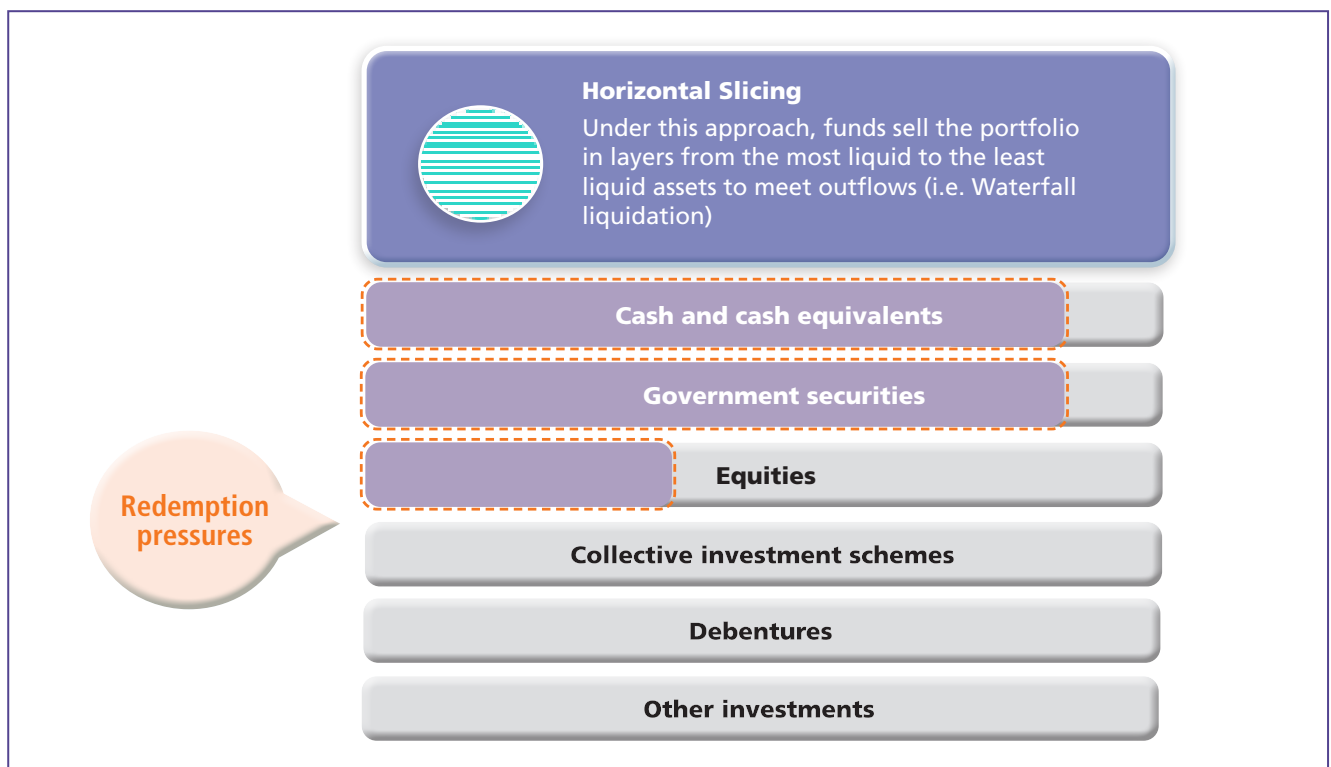
all securities are liquidated in the same proportion. Such strategies would enable fund managers to maintain their respective asset allocations.

Under the SC's macro stress test, the horizontal slicing approach was chosen given its capacity to render a more pronounced observation into potential risk transmission effects across major asset classes. In this slicing approach (as illustrated in Figure 2), liquidation would first occur in withdrawals of highly liquid assets, including cash, deposits, money market placements, and government securities.

To simulate the impact of a market risk shock at the point of liquidation, the stress test model assumes a decline in fair value for the equities, government securities, and corporate bonds/sukuk asset classes.

FIGURE 2

Asset liquidations based on horizontal slicing approach



* The fund will maintain a 10% balance of each asset class as liquidity buffer for potential future redemptions.

** Other investments exclude derivatives as the instrument may be unsuitable for liquidation, e.g. foreign currency forward contracts. Instead, other asset classes will be equally adjusted to assume liquidation of such exposure.

Source: The SC.

² *Bond Funds and Fixed-Income Market Liquidity: A Stress Testing Approach*, Technical Reports No. 115, Arora, Rohan, et al., Bank of Canada, August 2019.

³ *Liquidity Stress Tests for Investment Funds: A Practical Guide*, IMF Working Paper, IMF, October 2017.

INVESTMENT FUNDS SUBJECT TO THE STRESS TEST

The macro stress test exercise was conducted based on 30 September 2022 data where 1,105 investment funds with an aggregated NAV of RM553.80 billion were tested.⁴ These were largely made up of mixed-assets funds followed by equity and bond/sukuk funds. With regard to asset allocation, equities (47.64%) comprised the majority of holdings, followed by cash and cash equivalents (25.82%) and corporate bonds/sukuk (14.08%). Meanwhile, collective investment schemes (CIS), government securities, and other investments made up the remaining 12.46% of the allocation. A further breakdown of the key components of domestic asset classes is shown below (Chart 1).

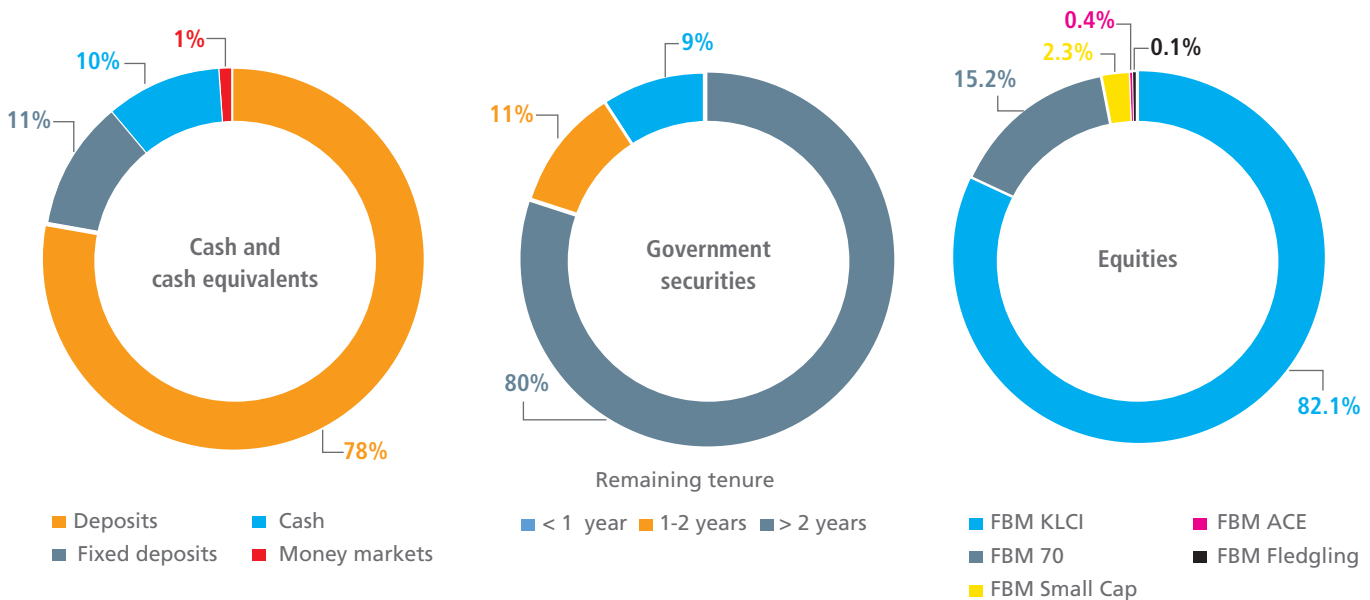
The majority of holdings of cash and cash equivalents consisted of deposits and money market placements, with three major domestic banking groups accounting for more than half of the total holdings. Based on a

measure of market competitiveness, the Herfindahl-Hirschman Index (HHI) indicated that there was a low degree of concentration in holdings of deposits and placements (Chart 2).⁵

Subsequently in the equities asset class, holdings in domestic equities were mainly in the financials sector,⁶ followed by consumer staples, and industrials sector. It was observed that the degree of concentration in this asset class was moderate (Chart 3).

In terms of the maturity profile of government securities, 80.18% of the government securities held had remaining tenures of more than two years, followed by those with remaining tenures of between one to two years at 11.00%, and those with remaining tenures of less than one year at 8.82% (Chart 4).

CHART 1
Key components of domestic asset classes (by liquidation order)



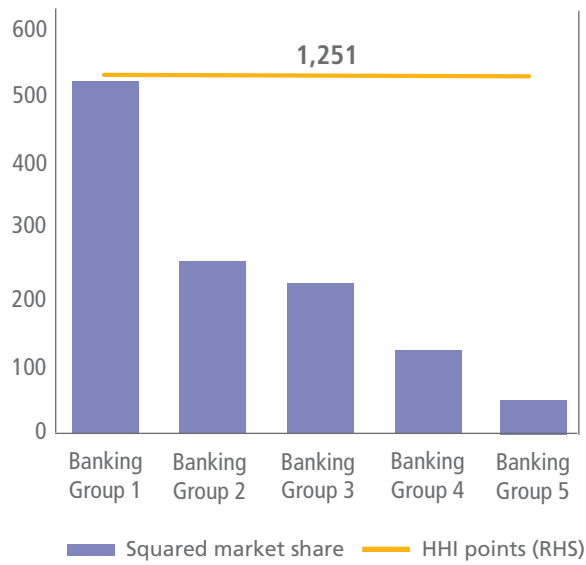
Source: The SC.

Note:
* The numbers may not add up due to rounding.

⁴ Excluding those funds with zero NAV, funds with no investment asset in its portfolio and funds which invest primarily in property assets.
⁵ According to the Malaysia Competition Commission, a HHI of less than 1,500 denotes an unconcentrated (competitive) market; between 1,500 and 2,500 denotes a moderate level of concentration; and over 2,500 denotes a highly concentrated market.
⁶ As of 30 September 2022, financials counters made up 19.55% of Bursa Malaysia's market capitalisation.

CHART 2

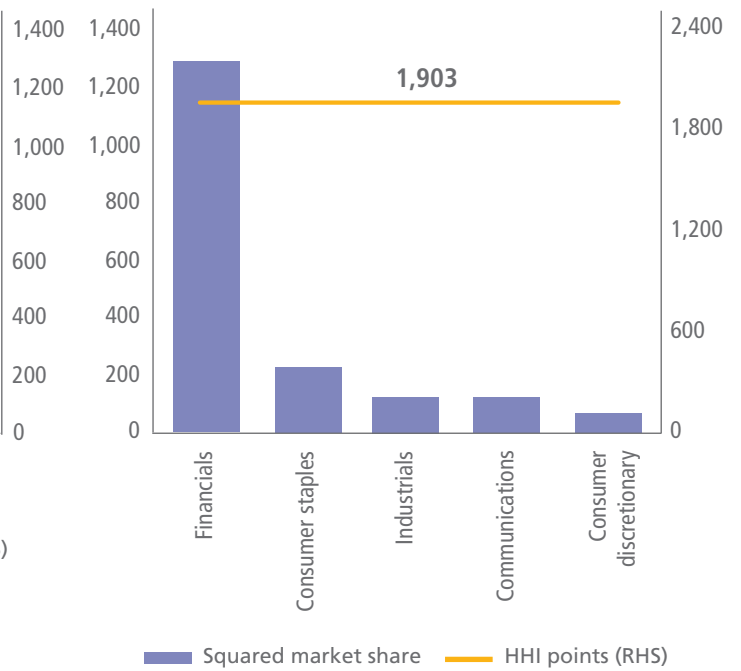
Holdings in cash and cash equivalents by banking group



Source: The SC.

CHART 3

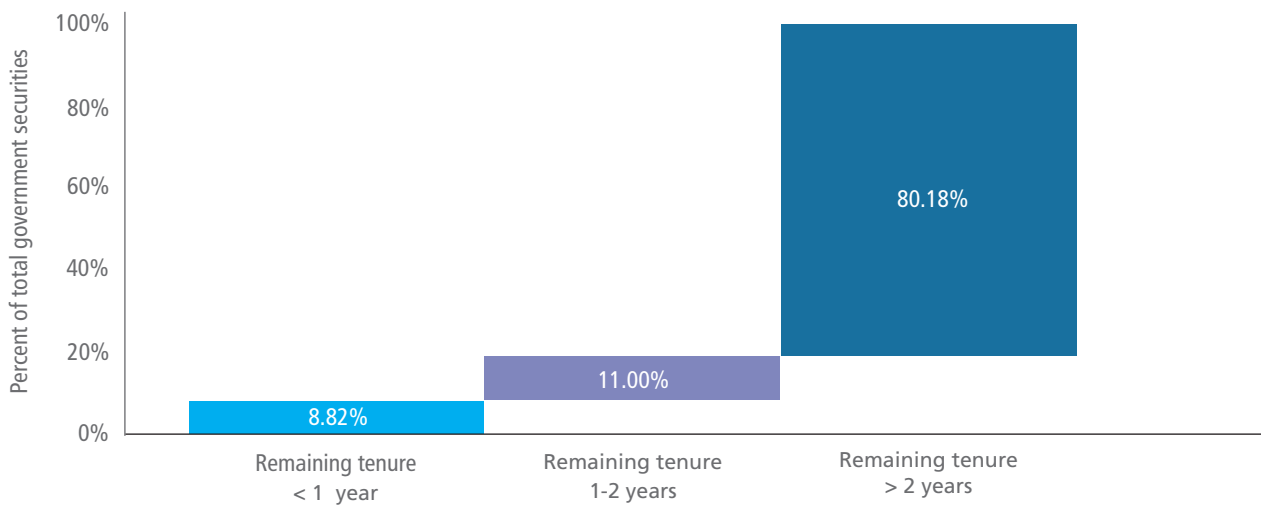
Holdings in domestic equities by sector



Source: The SC.

CHART 4

Maturity profile of government securities



Source: The SC.

STRESS TEST RESULTS

Based on the stress test results, it was found that investment funds would have to liquidate in aggregate 56.13% of their assets to satisfy redemption pressures based on the extreme scenario (Figure 3). Each of the top three asset classes (cash and cash equivalents, government securities and equities, in terms of liquidity order) experienced liquidations in excess of 60%. CIS saw 32.64% liquidation, followed by corporate bonds/sukuk at 26.54%, primarily due to the extreme redemption scenario imposed.

FIGURE 3
Utilisation under the extreme scenario



Source: The SC.

Utilisation of liquidity buffers remained unlikely across all scenarios. Under the extreme scenario, the macro stress test showed adequate holdings of cash and cash equivalents and equities asset classes prior to any potential use of buffers, indicating ample liquidity in the portfolio structure.

Collectively, investment funds held approximately 10.17% of Bursa Malaysia’s total market capitalisation. In the extreme scenario, the SC estimated that severe disruption of the equities market is unlikely, given that redemption pressures were not expected to occur simultaneously.

In the fixed income asset class, investment funds held approximately 5.00% of the total outstanding domestic corporate and government bonds/sukuk. Nonetheless, the utilisation of this asset class to meet redemption was noted to be minimal particularly for corporate bonds/sukuk, which remained lower in the liquidity order. Therefore, it is less likely to pose a severe risk transmission.

The most vulnerable funds have been identified as equity and mixed assets funds due to their high exposure in equities (around 90%) and lower level of liquid assets (below 3%). This high exposure in equities coupled with the low levels of liquid assets in these funds could exacerbate the risk of fire sales in the extreme liquidation scenario. Nevertheless, if liquidity risk management tools are implemented adequately and in a timely manner, this risk would be mitigated.



**THEMATIC REVIEW
OF CAPITAL MARKET
SEGMENTS –
DEVELOPING A BETTER
UNDERSTANDING
OF INVESTOR
PARTICIPATION**

INVESTORS' PARTICIPATION

Investors' demographics, and its associated behaviours and participation, influences the overall stability and liquidity of the Malaysian capital market. Market liquidity is an essential condition for the market to function effectively. This facilitates price formation and discovery, and more importantly for systemic stability via the absorption of systemic shocks.¹

Diversity in the type of investors also plays an important role in promoting the health and depth of the market. Therefore, a deeper analysis on the participation of these various groups of investors would facilitate a better understanding of market structure for the monitoring and management of systemic stability.²

FIGURE 1a
Holdings in the equity market (RM billion)

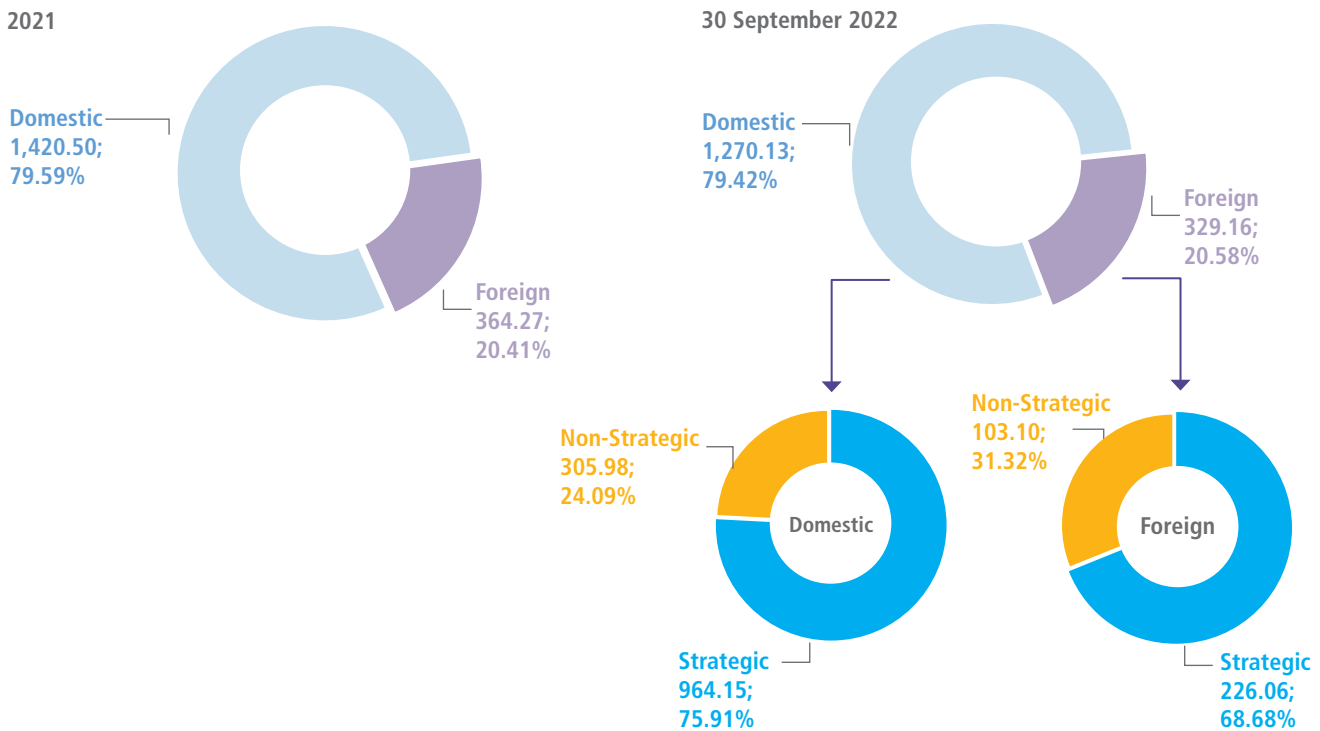


FIGURE 1b
Net value traded in the equity market as of 30 September 2022 (RM billion)



Source: Bursa Malaysia, Thomson Reuters Eikon and the SC.

¹ Final Report: Development of Emerging Capital Markets: Opportunities, Challenges and Solutions. The Growth and Emerging Markets Committee of IOSCO. IOSCO. 2020.

² Internal assessment sources: Bursa Malaysia, Thomson Reuters Eikon and the SC.

The decrease in domestic holdings from 79.59% as of end December 2021 to 79.42% as of 30 September 2022 (Figure 1a) was driven by domestic institutional investors who were net sellers for seven out of the first nine months in 2022 (total net sell of -RM9.03 billion) (Figure 1b). Meanwhile, for the same period, domestic retail investors traded at a net buy of RM2.30 billion, while foreign institutional and retail investors also traded at a net buy of RM6.58 billion and RM0.06 billion respectively.

Based on the SC's assessments, domestic holdings as of 30 September 2022 were largely held by strategic investors (75.91%) with non-strategic investors holding the remainder. Strategic investors consisted of promoters, parent, or holding companies of a PLC that had a longer-term investment strategy in mind whereas non-strategic investors were investment managers with shorter investment horizons.

TYPES OF FOREIGN INVESTORS

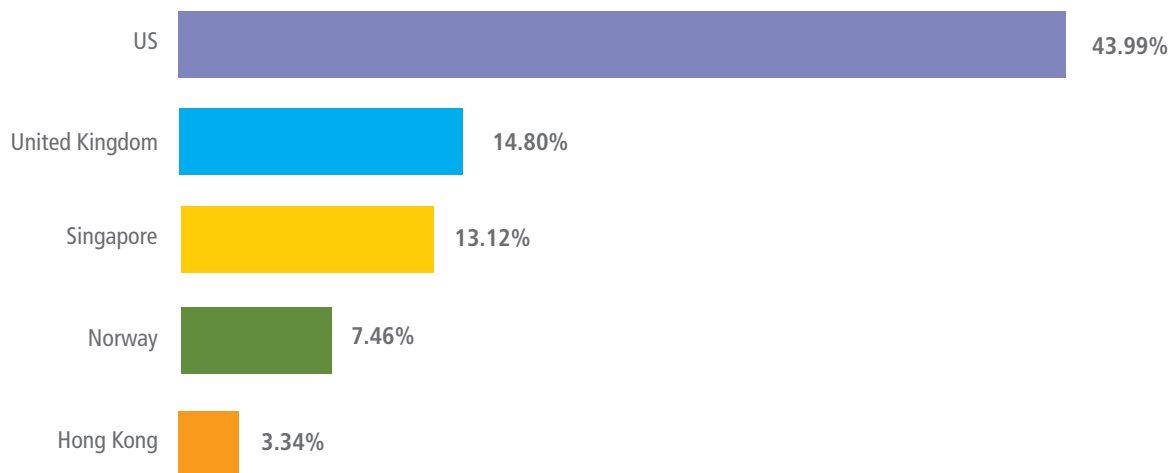
Further analysis into the type of foreign holdings indicated that out of the 20.58% of foreign holdings as of 30 September 2022, a total of 68.68% across various markets and sectors on Bursa Malaysia were held by foreign strategic investors (Figure 1a). By type, 96.34% of foreign strategic investors were corporations whereas

the rest consisted of individual investors, government agencies, holding companies, and others.

Nearly half of the foreign non-strategic investors were from the US and their top three holdings were in the banking counters (Chart 1).

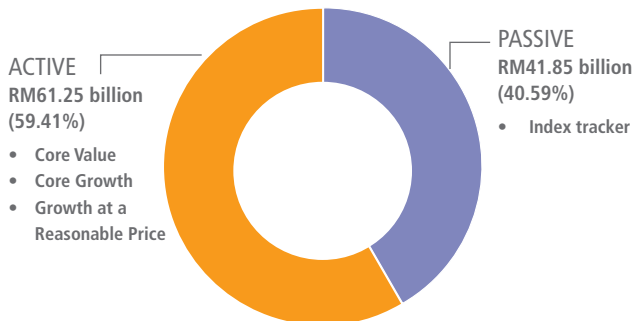
CHART 1

Top 5 countries of foreign non-strategic investors as of 30 September 2022



Source: The SC; Thomson Reuters Eikon.

CHART 2
Investment style by foreign non-strategic investors as of 30 September 2022



Source: The SC; Thomson Reuters Eikon.

Meanwhile, 31.32% of foreign holdings were held by non-strategic investors, who mainly comprised fund managers, hedge funds, and sovereign wealth funds with the remaining being pension funds, insurance companies, and others (Figure 1a). This can be further categorised as active or passive investors (Chart 2). Passive investors track the returns of an index such as an established market benchmark and tend to buy and hold unless there are changes to the index constituents. Active investors, meanwhile, seek to invest through discretionary stock selection or trade in anticipation of market turning points.³

Pension funds typically have a ‘buy and hold’ strategy as their focus is on long-term income rather than capital accumulation.⁴ Thus, investors that most frequently enter or exit a market would be the active non-strategic investors, followed by central banks, governments, pension funds, and subsequently the passive non-strategic investors.

³ *BIS Quarterly Review: The implications of passive investing for securities markets.* Sushko, V. & Turner, G., Bank of International Settlements, 2018.

⁴ *Policy Actions: Pension Funds Investment in Infrastructure.* Della Croce, R., *OECD Working Papers on Finance, Insurance and Private Pensions No. 13.* OECD. 2011.

POSSIBLE RISK TRANSMISSION

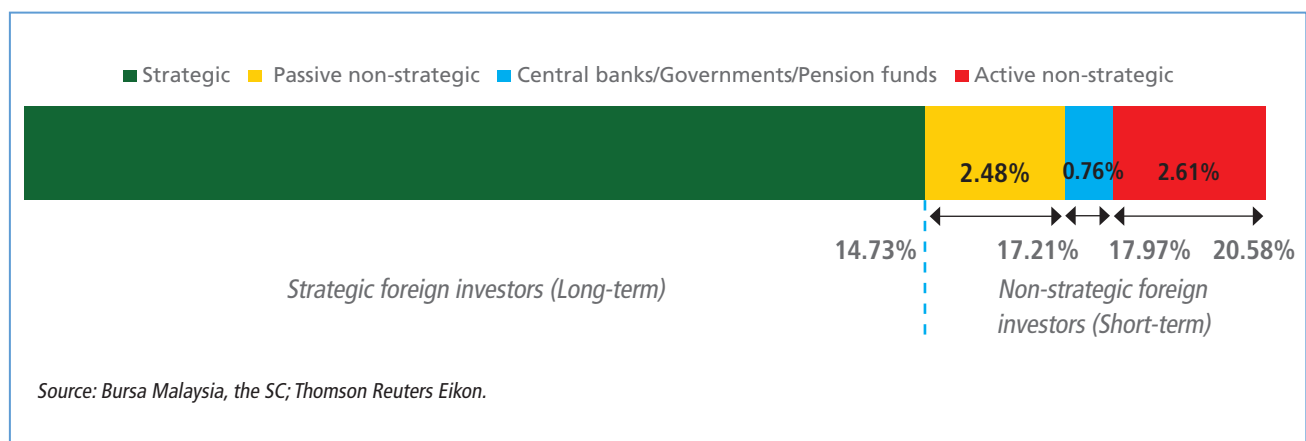
There were three hypothetical scenarios to simulate the possible foreign shareholding if non-strategic investors were to exit the domestic equity market. Figure 2 shows foreign investors arranged according to their likelihood of exiting the market in the event of a shock, with the least likely on the furthest left and most likely on the furthest right. Should active non-strategic investors excluding central banks, governments, and pension funds exit, the foreign holdings remaining were estimated to be around 17.97% (-RM50.95 billion outflow), down from 20.58%. Following that, if all active non-strategic investors exit the market, the foreign holdings would decline to an estimated 17.21% (-RM65.19 billion outflow). Subsequently, if all

non-strategic investors, passive and active, were to exit the market, the foreign holdings after outflow would decrease to an estimated 14.73% (-RM109.74 billion outflow).

However, the likelihood of the three extreme simulations occurring is low. COVID-19, as measured by the heightened volatility of equity trading from February 2020 to May 2020, only led to a total equity outflow of -RM13.2 billion. In addition, there was sufficient liquidity in the market to facilitate trading activities in the event of any major selling.

FIGURE 2

Foreign Holdings: Scenarios if non-strategic foreign investors exit the market



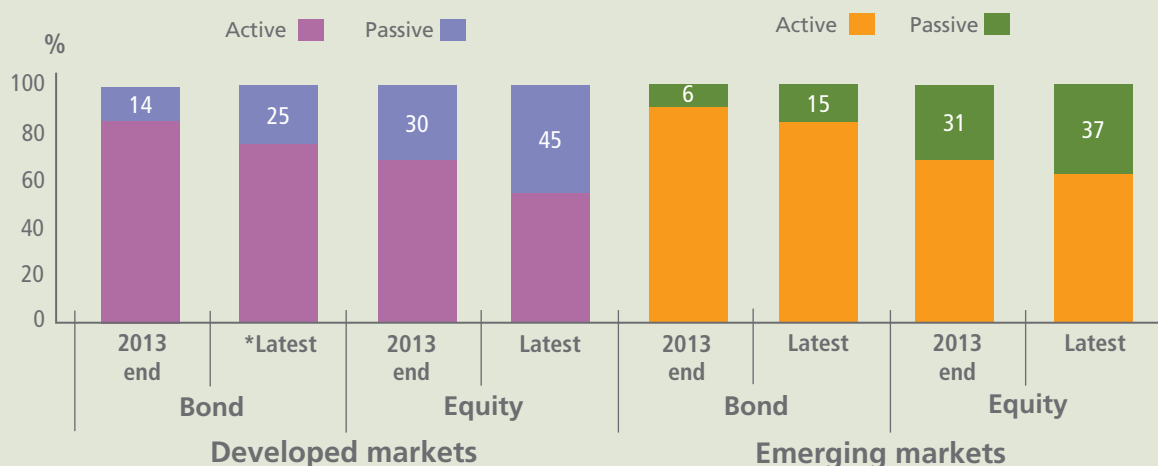
SPECIAL FEATURE

GROWTH OF PASSIVE FUNDS

Passive funds such as index funds and exchange-traded funds (ETFs) are benchmark-driven and track components of market indices. Such passive funds maximise returns by replicating a representative benchmark. The appeal of passively managed funds lies in their diversified and low-fee portfolios, which in some cases outperform their actively managed counterparts.

Passive investing, together with technological changes and the use of data, have the potential to change the way that securities markets function and market participants interact. Given their tracking of benchmark indices, passive fund weightages could influence the presence of foreign investors in a country. The addition of a PLC to an index would result in an inflow of investment from funds tracking the index, benefiting the domestic capital market.

CHART 1
Proportion of fund AUM benchmarked to active vs passive funds



* Latest as of publication date.

Source: Policy Considerations: Investment Funds and Financial Stability. Garcia Pascual, A., Singh, R. & Surti, J. IMF. 2021.

Globally recognised indices that track Malaysia include the MSCI Emerging Markets Index, FTSE Emerging Index, and the Nasdaq Emerging Markets Index. The MSCI Emerging Markets Index comprises large and mid-cap representation across 24 emerging market countries, covering almost 12% of the world market capitalisation. Malaysia’s securities weightage in the MSCI Emerging Markets Index was 1.52% as of 30 September 2022.

In the US, Bloomberg Intelligence reported that it is only a matter of time before passive assets overtake active assets in mutual funds and ETFs. As of December 2020, approximately 42.9% (US\$10 trillion) of US-based mutual funds and ETFs were passively managed which were up from 31.6% (US\$4.1 trillion) at the end of 2015, demonstrating the rapid growth of passive funds. For emerging markets, there was a 5% increase in AUM benchmarked to the MSCI Emerging Markets Index from December 2016 to December 2021. In Malaysia, it was estimated that RM41.85 billion or 40.59% of foreign non-strategic investors were passive investors who tracked index funds in general. In this regard, Malaysian PLCs included in an index would be appealing to passive funds. Thus, the shifting trend from active to passive investing intensifies the need for PLCs to be competitive in terms of size and liquidity.

The IMF in its *Global Financial Stability Report* issued in April 2019 highlighted that while inclusion in an index provides emerging market countries with access to a larger and more diverse pool of financing, inflows are highly sensitive to global or regional factors common to emerging markets included in the index. Investors are inclined to treat emerging markets as an asset class rather than focus on country specific developments. Consequently, any adverse news to emerging markets as a group may cause destabilising effects to a country with a larger share of benchmark-driven investments.

There could also be systemic stability concerns when rebalancing is being carried out by leveraged or inverse ETFs as it could potentially cause adverse price movements. The increasing use of passive-index and benchmark-hugging-active investment strategies to invest in high-risk, low-liquidity assets might exacerbate first-exit incentives by increasing the likelihood of fire-sales under stress.¹ Given the concerns, the increase in passive funds has prompted comprehensive discussions between index providers, regulators, and investors. In addition, enhanced transparency by index providers in terms of eligibility criteria would also improve flow volatility management.

¹ *Policy Considerations: Investment Funds and Financial Stability*. Garcia Pascual, A., Singh, R. & Surti, J. IMF. 2021.

ACRONYMS AND ABBREVIATIONS

AUM	assets under management
BNM	Bank Negara Malaysia
CAR	capital adequacy ratio
CIS	collective investment schemes
DAX	digital asset exchange
EPF	Employees Provident Fund
ETF	exchange-traded fund
FED	Federal Reserve System
GII	Government Investment Issue
HHI	Herfindahl-Hirschman Index
IB	investment bank
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
MGS	Malaysian Government Securities
NAV	net asset value
PLC	public-listed company
RWCR	risk weighted capital ratio
SC	Securities Commission Malaysia
US	United States
UTF	unit trust fund

