BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

PREFACE

The Financial Stability and Payment Systems Report 2015 outlines Bank Negara Malaysia's assessment of risks and challenges faced by the Malaysian financial system and the capacity of the system to sustain its financial intermediation role in the economy. It also reports the developmental initiatives pursued by the Bank to reinforce the roles of the financial services sector in supporting and contributing to economic growth and the economic transformation process, as well as the regulatory and supervisory measures undertaken by the Bank to ensure continued safety and soundness of financial institutions and promote overall financial and payment systems stability.

This publication is intended to promote greater understanding on issues and developments affecting financial stability, including policy directions of the Bank.

The Financial Stability and Payment Systems Report is available in PDF format at www.bnm.gov.my

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GOVERNOR'S STATEMENT

The Malaysian financial system has remained stable and sound in an environment in which risks have increased at a time when significant global and domestic developments continue to affect our financial system. The year also saw the global economy experiencing slower growth than earlier anticipated, with heightened financial market volatility. It has been the financial sector development and reforms implemented during this recent decade, reinforced by the pre-emptive measures introduced since 2006 to address the risks relating to household leverage and rising property prices, that have contained the repercussions. Greater financial inclusion and financial education have also supported the adjustments needed by the households. While the operating conditions will remain challenging for the financial sector in 2016, the sustained strength and resilience of the Malaysian banking and insurance industries will also continue to be supported by sound risk management, and ample liquidity and capital buffers. These factors will firmly support financial intermediation activities and preserve the ability of the financial system to weather these developments.

A further fundamental development in our financial sector with important implications for financial stability has been the comprehensive legislative reforms over the last 15 years, involving the enactment of 12 pieces of legislation for the financial sector. These laws have served as catalysts for further strengthening of regulation, supervision and the institutional frameworks to deal with the new challenges in the management of financial stability. These challenges also include the larger role of non-bank financial intermediation activities in the mobilisation and allocation of funds as a result of financial deepening. The interactions between the financial system and the real economy have correspondingly taken on new and broader dimensions. The financial system has also become more interconnected across borders with the growing global and regional presence of financial institutions and more internationally integrated financial markets. Additionally, the leverage on technology has increased operational dependencies in ways that may directly affect the stability of critical functions performed by banks in Malaysia. Finally, the orderly alignment of the domestic regulatory framework to the extensive global regulatory reform agenda has been managed so that it achieves greater long-term resilience without unintended dislocations.

In responding to these developments, the Bank has also intensified its surveillance, and reviewed and expanded prudential, conduct and integrity standards that are applied to financial institutions. This has been reinforced with extended co-operative frameworks and arrangements with other authorities. Heightened supervision, including that of financial groups, will continue to be of high priority for the Bank going forward. In the current environment, the Bank also accords close attention to signs of cyclical tendencies in bank behaviour. Given the range of measures that have been implemented to promote sound lending, risk-informed pricing and provisioning practices during the period of strong credit growth, such tendencies have now been substantially mitigated.

A further area of focus for the Bank has been the development of a broad and functional toolkit for managing crises, building on domestic and regional crisis management frameworks that are already in place. Going forward, the focus is on recovery and resolution planning to strengthen market discipline and ensure that critical functions will not be imperilled by risks to the financial system.

In relation to this, the development and greater sophistication of the Malaysian financial system has required a fundamental review of the traditional measures of risks to the system. Prompted in part by the episodes of volatility in the funding markets during the year, the Bank has introduced new liquidity metrics (the liquidity coverage ratio and loans-to-funds ratio) to provide a more comprehensive measure of liquidity risks in the banking system. As banks have now increasingly tapped the now more developed capital markets for their funding requirements and with the wider avenues that have been developed for households and businesses to save and invest, broader liquidity measures are now needed to gauge the soundness of bank funding activities. Improving the quality and relevance of publicly available information is aimed at promoting market actions that contribute to financial stability. Measures have also been taken to implement globally consistent standards for funding and liquidity, including their measurement and disclosure.

As the competent authority under the Anti-Money Laundering, Anti-Terrorism Financing and Proceeds of Unlawful Activities Act 2001, the Bank works with other relevant authorities in Malaysia to ensure that safeguards are in place and operating effectively to prevent money laundering and terrorism financing. In this recent two years, this work has been subjected to close international scrutiny under the mutual evaluation of Malaysia's anti-money laundering and counter-terrorist financing (AML/CFT) framework by the Financial Action Task Force (FATF). In September 2015, the FATF published its report on Malaysia which affirmed the high degree of technical compliance with international standards on combating money laundering and terrorism financing. The Bank, in cooperation with other agencies that form the National Coordination Committee to Counter Money Laundering, is fully committed to undertaking additional measures needed to ensure the effective implementation of these standards across all reporting entities whose activities are exposed to risks of financial abuse. Based on the commitment demonstrated by Malaysia's action plan and the continuing progress in efforts to improve its AML/CFT programme, Malaysia was granted full membership of the FATF in February 2016. Our effectiveness in protecting the integrity of the financial system from abuse for criminal and terrorist activities largely depends on the strength of controls implemented by reporting institutions, in particular financial intermediaries, to identify, analyse and report risks that they encounter. This must therefore continue to be a high priority for all our reporting institutions.

Several milestones were also achieved in the area of Islamic finance in 2015. The issuance of Malaysia's first sustainable and responsible investment sukuk and the pilot issuance by the Bank of a new class of money market instruments will further add to the depth and diversity of the Islamic financial markets in Malaysia. Islamic banks in Malaysia also completed a two-year exercise to fully align all existing customer deposit accounts with their underlying Shariah contracts. This will contribute towards the potential for intermediation in the form of investment accounts that directly promotes risk-sharing. At a global level, there has been greater recognition of the significant potential of Islamic finance in addressing the concerns relating to income inequality and overcoming the inherent problems associated with predominantly debt-based financing systems. The Bank continues to support its development through its active participation in the work of the Islamic Financial Services Board which sets global standards for the effective regulation and supervision of Islamic finance to preserve financial stability in the Islamic financial system.

Five years into the strategic roadmap for e-payments that was outlined in our Financial Sector Blueprint, the Bank has largely completed planned work around regulation and market incentives to encourage the wider use of e-payments. While this has enabled important strides towards achieving the e-payment targets set under the Blueprint, much further progress still remains ahead of us. In the coming years, enhancements to key payments infrastructure and extensive outreach will be accelerated for more businesses and agencies of the Government to migrate to e-payments. There also needs to be more traction in the implementation of innovative initiatives by the financial industry to further enhance e-payment convenience and competitive pricing in this environment.

Promoting an inclusive financial system continues to remain an integral part of the Bank's mandate in advancing our financial stability agenda that is also conducive to sustainable growth. Having made significant progress in increasing financial access, with financial services now within the convenient reach of 99% of Malaysians across the nation, the Bank has intensified efforts to encourage the effective use of financial services. In particular, the Bank encourages further innovation with an inclusive focus across the entire spectrum of financial services – including savings, insurance, credit and payments. Given the rising level of household indebtedness, the Bank has also accorded attention to rein in this trend and to provide effective mechanisms to deal with households in financial distress. This will continue to be supported by education programmes and regulations which balance the objectives of financial stability, inclusion and integrity.

While much ground has been covered in the Bank's efforts to promote financial stability, significant work still lies ahead in a task that has become increasingly more complex in its considerations and dimensions. In turn, the regulation and supervision of the financial system by the Bank, in co-operation with other relevant authorities, will continue to evolve at the national, regional and international levels. Equally important in this endeavour, the Bank has continued to strengthen its organisational capability that is now well supported by our strong institutional framework, a high powered workforce and an important network of domestic, regional and international relationships built over the years that will advance this work forward.

Zeti Akhtar Aziz
Governor
23 March 2016

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EXECUTIVE SUMMARY

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Risk developments and assessment of financial stability in 2015

Financial market volatility remained elevated in 2015. The prospect of the US Federal Reserve's interest rate normalisation, a weaker outlook for global growth including that for PR China and emerging economies, and the unprecedented slide in crude oil prices were major themes driving investor behaviour for most parts of the year. In the case of Malaysia, portfolio flows were largely driven by a broader retreat of global funds from emerging markets and commodity producing economies, and overseas investments by domestic institutional investors as part of portfolio diversification strategies. As in previous episodes of heightened volatility and large capital flows, the deep financial markets and presence of strong domestic institutional investors in Malaysia continued to support orderly market conditions. While funding conditions were occasionally tighter amid the large volume of portfolio outflows, aggregate surplus liquidity in the domestic financial system placed with the Bank remained high at RM205.1 billion as at end-2015. The provision of liquidity through the Bank's reverse repurchase facilities and, more recently, the lowering of the Statutory Reserve Requirement preserved adequate liquidity conditions and helped smooth out adjustments by individual banks to heightened deposit competition and the more uneven distribution of deposits across banks.

Domestic banks, insurers and takaful operators continue to remain profitable and maintain strong capital positions. Banks, in particular, have shown a high degree of earnings resilience in spite of more challenging business conditions, allowing them to maintain strong buffers through prudent earnings retention policies. Banks' capital in excess of the minimum regulatory requirement increased further by 9.5% to RM117.3 billion. The aggregate capitalisation of insurers and takaful operators similarly remained strong with excess capital buffers above the regulatory minimum amounting to RM46 billion. These factors have continued to firmly support domestic intermediation activities and sustained confidence in the Malaysian financial system.

Risks to domestic financial stability arising from household indebtedness and rising property prices continued to moderate. Outstanding household borrowings from banks and non-banks expanded by 7.3%, extending the slower pace of growth observed since the first implementation of macroprudential measures in 2010. This mainly reflected a sustained slower expansion in financing for personal use while financing for house purchases has remained strong. The level of household debt-to-gross domestic product (GDP) ratio continued to be elevated at 89.1% amid the more moderate growth in nominal GDP in 2015. The capacity of households to service debt has however generally remained firm, supported by a broadly stable domestic employment and income outlook. The share of borrowings by highly leveraged lower income households declined further, reflecting improvements in affordability assessments. Aggregate household financial assets have remained above two times household debt. For some, this has supported adjustments to higher living costs. Among lower income households however, leverage levels remained considerably higher. Lowering the debt levels for these households will continue to be important to provide a buffer against unexpected events and rising costs.

Risks to domestic financial stability from household leverage continue to be largely mitigated by sound credit underwriting standards and risk management practices of banks. Enhancements to lending practices of banks to reflect strengthened processes for assessing affordability are now mostly in place. This has been important to maintain the sound asset quality of banks going forward. The overall quality of banks' housing loans improved further with household impaired loans and delinquencies remaining low across all types of financing facilities. Concerns over the mispricing of risks amid strong competition in the retail financing segment were also assessed by the Bank to have abated as banks took steps to either adjust lending rates to reflect more realistic assumptions of credit and liquidity risks, or increased capital buffers. Based on stress tests conducted by the Bank, risks to financial stability from household lending continue to be manageable as potential losses even under assumptions of severe stress conditions remain well within banks' excess capital buffers.

In the property market, growth in aggregate house prices appears to have stabilised as house buyers and developers continued to adjust to macroprudential and fiscal measures aimed at curbing excessive speculation and risk-taking. The Malaysian House Price Index (MHPI) has declined from 9.6% registered for the period 2010-2014 to around 8% registered over five consecutive quarters since 2Q 2014. Slower housing transactions mainly in the higher-priced segments, combined with continued strong demand for affordable home units, have encouraged a rebalancing of housing supply. This in turn reduces the risks associated with an unsustainable supply of housing concentrated in specific segments. Given the prevailing acute demand-supply gap in affordable housing, risks of a more generalised correction in house prices are assessed to remain low. An increase in the supply of affordable housing by the Government and private sector remains key to bringing about a further easing of upward pressures on house prices. In the non-residential property segment, risks have heightened in the office space and shopping complex segments. With more challenging business conditions and incoming supply over the next two years adding further to supply pressures, ensuring the effective management of new supply in these segments will be essential. At present, exposures of banks in these segments are limited, with low and stable delinquencies continuing to be observed.

Growth in non-financial corporate borrowings continues to be driven by domestic investment activities and supported by generally healthy corporate balance sheets. Outstanding Malaysian non-financial corporate sector debt rose to RM1,212.9 billion or 104.8% of GDP as at end-2015. While corporate leverage has increased in the last year, it remains within reasonably prudent levels. The median debt-to-equity ratio of Malaysian non-financial corporations stood at 46.8% as at end-September 2015. Despite lower profitability in some business segments that were more affected by lower commodity prices and softer demand, overall debt servicing capacity of businesses remains sound and continues to be supported by adequate liquidity buffers. At 5.3 times, the median interest coverage ratio of businesses remained comfortably above the prudent standard of two times, while the median ratio of cash-to-short term debt was maintained above one time. This enabled businesses to cope with the more significant movements in exchange rates and commodity prices that were experienced during the year. Furthermore, risks to domestic financial stability from external and foreign currency corporate debt continue to be mitigated by a prudential regulatory approval process that is in place, and financially strong domestic conglomerates (including GLCs) and multinational corporations that account for a significant share of external debt.

The overall quality of business borrowings was thus sustained. While loan performance in some sectors deteriorated in line with economic developments, this had limited impact on overall business loan performance. Bank exposures to the crude palm oil and oil and gas sectors were small at about 4% and 2% of total credit exposures to businesses respectively. Potential cumulative credit losses from simulated severe shocks on large borrower groups also remained manageable, with excess capital buffers of banks sufficient to cover more than two times the estimated losses. Uncertainties in global demand, further exchange rate volatility and movements in commodity prices are expected to continue to weigh on the credit risk outlook for businesses in the coming year. However, the overall debt servicing capacity of Malaysian corporations is expected to remain broadly intact in 2016 given their stronger fundamentals.

Domestic banking groups (DBGs) continued to expand their regional footprint during the year. Total assets of overseas subsidiaries and branches of DBGs grew further to account for a higher share of total assets of DBGs (22.8%; 2014: 20.7%). External exposures of Malaysian banks correspondingly expanded in line with the growth in domestic banks' overseas operations, the continued strong and stable presence of locally incorporated foreign banks (LIFBs) in Malaysia, and the regionalisation of trade and investment activities of Malaysian non-financial corporations. While both external assets and liabilities of Malaysian banks increased during the year, the banking system recorded a slightly higher net external liabilities position of RM138.7 billion (2014: RM131 billion), predominantly attributed to the LIFBs. A significant share of such claims is represented by capital investments in the form of equity and retained earnings of LIFBs with long-established and significant operations in Malaysia, posing limited risks to the Malaysian banking system. The increase in external exposures (both assets and liabilities) of banks has also been the result of centralised liquidity management practices among DBGs that operate across jurisdictions. Such practices must additionally comply with applicable local liquidity regulations in the respective jurisdictions which further mitigate risks associated with claims on Malaysian banks.

The overseas operations of DBGs continued to perform well, contributing between 10% and 21% to overall group profits of individual DBGs. This has been supported by strengthened group-wide risk policies and oversight arrangements of DBGs. Overall loan quality from overseas operations has remained broadly intact, although some DBGs recorded higher impairment ratios which reflected increased credit risks on small and medium enterprise (SME) and business loans to sectors that are more affected by the slower demand from PR China.

The Bank will maintain a heightened degree of vigilance over developments in the household, property and business sectors. This will continue to be underpinned by a strong focus on sound lending standards and risk management practices among banks as well as large non-bank lenders. Domestic and external headwinds will continue to challenge businesses and households in the period ahead, making it more important for financial institutions to intensify their risk management and actively identify and manage borrowers that may be affected in this environment. Importantly, the Malaysian financial system is in a much stronger position to cope with these developments and the effects of continued volatility in the global financial system that can be expected ahead.

Development of the financial sector

The financial sector remained on course towards achieving the outcomes outlined in the Financial Sector Blueprint 2011-2020 to support Malaysia's transition to a high income, high value-added economy. Amid a more challenging economic environment, total outstanding financing to the economy has continued to expand at a healthy pace, with efforts to increase access to financial services for the underserved continuing to pay off. Outstanding financing by the banking system expanded by 7.9% to RM1,445.1 billion, with financing to SMEs increasing by 15% to RM259.7 billion. The expansion of facilities for the financing of new growth areas such as structured trade and commodity finance and green finance also continued to support higher value-added activities. This included broader offerings of structured trade and commodity financing solutions by domestic banks and the adoption of irrevocable Bank Payment Obligations pursuant to uniform rules adopted by the International Chambers of Commerce. An additional funding of RM1 billion was provided by the Government to subsidise the costs of Shariah-compliant financing for SMEs, while the Credit Guarantee Corporation Malaysia Berhad also introduced new schemes catering to specific financing needs of women entrepreneurs and start-ups.

In the Islamic banking sector, the successful migration of customers' deposits into Islamic deposits or investment accounts is expected to enhance the role of Islamic finance in supporting entrepreneurship. As at end June 2015, 8% or RM32 billion of existing deposits in the Islamic banking system were converted into investment accounts. The operationalisation of investment accounts was further complemented by the launch of the Investment Account Platform in February 2016 which is expected to expand the pool of investors, ventures and banks participating in investment account offerings. In the insurance and takaful industry, reforms to the pricing and commission structures that are being progressively advanced will foster greater innovation, promote sustainability and improve choice and value for consumers. This includes the implementation of broader measures of performance to better align the remuneration of insurance intermediaries with the quality of service and advice rendered, and a gradual move towards pricing of motor and fire insurance policies that is more reflective of risks.

Ensuring relevant skills, competencies and a strong ethical foundation for the financial sector workforce remained a key priority of the Bank. This continued to be pursued in close collaboration with key institutions. During the year, several strategic initiatives were progressed to further raise standards of professionalism, ethical conduct and technical competence of the workforce. This included work by the Financial Services Talent Council to formulate strategies to meet the future talent demands of the financial services industry, the publication of a voluntary code of ethics (CoE) by the Financial Services Professional Board which sets a high bar for professionalism and ethics in the financial services industry, and the expansion of high quality programs and qualifications for financial professionals by the key industry professional bodies. The Bank also announced the establishment of the Asia School of Business in collaboration with the Massachusetts Institute of Technology Sloan School of Management to deliver world-class executive education infused with an Asian perspective for business professionals, including those from the financial sector.

Under Malaysia's Chairmanship of ASEAN in 2015, a number of key milestones were achieved in regional financial integration, including the finalisation and launch of the ASEAN Banking Integration Framework to provide greater market access and operational flexibility for Qualified ASEAN Banks. Concurrently, a mutual recognition framework was established to facilitate cross-border offerings of collective investment scheme products within ASEAN, further contributing towards regional capital market development. The Bank also continued to expand central bank arrangements to promote the use of local currencies for trade settlement, the latest being with the Bank of Thailand.

Malaysia's financial markets remained an important avenue for fund-raising and investment activities. Reflecting more bearish conditions during the year, total outstanding debt securities increased at a slower pace of 5.2% to RM1,175.1 billion. Borrowers and investors nevertheless continued to demonstrate confidence in the resilience of the market, with multi-currency issuances further adding to its depth. Notable issuances during the year included an inaugural issuance of Singapore dollar-denominated bonds and sukuk and the largest corporate dollar bond issuance in Asia by Petroliam Nasional Berhad (PETRONAS) which successfully raised USD5 billion. Revisions made by the Bank to the Repurchase Agreement (Repo) Transactions Policy Document which governs repurchase agreements also served to enhance liquidity in the money market. Efforts continued to be pursued to promote utilisation of the renminbi as a currency of settlement. A key development during the year was Malaysia's admission into the Renminbi Qualified Foreign Institutional Investor (RQFII) programme by PR China in November 2015, with an aggregate investment quota of RMB50 billion allocated to Malaysia for investments of renminbi funds in PR China's financial markets. The RQFII programme is expected to encourage the development of renminbi-denominated financial products in response to growing demand for investment opportunities in PR China. Malaysia is the 14th jurisdiction to be included in the programme.

Malaysia's position as an international Islamic finance marketplace and leading issuance destination was further strengthened with several landmark issuances in the sukuk market. The issuance of the USD500 million sukuk by the Government marked the longest tenure sovereign sukuk to date and serves as a long-dated benchmark yield curve for other sovereigns. The sukuk was also the first to adopt a structure that utilises non-physical income generating assets in the form of rights to participate in the provision of services. Malaysia also issued the first ever sustainable and responsible investment sukuk under a RM1 billion programme, the proceeds of which will be channelled towards socially and ethically responsible causes, including the financing of educational projects. In addition, the Bank successfully completed the pilot issuance of three-month Islamic Monetary Notes based on the globally accepted *Mudarabah* concept. This issuance is expected to widen the investor base and increase the depth and vibrancy of Malaysia's Islamic financial markets.

Regulatory and supervisory framework

The Bank continued to strengthen the pillars of a sound prudential framework in 2015. Regulatory and supervisory activities were guided by a domestic focus on ensuring strong governance and appropriate risk-taking by financial institutions in an environment of heightened risks. In addition, the Bank's policy priorities also took into consideration progress made on global regulatory reforms.

The Bank completed a comprehensive review of its corporate governance standards for financial institutions to reflect strengthened practices in the industry as well as evolving global standards and emerging risks, notably from more expansive group activities and interlinkages. The revised standards incorporate strengthened requirements with regard to board composition, compensation structures, corporate culture and group oversight responsibilities. The Bank also completed a review of existing prudential standards on credit risk management to ensure that they continue to remain relevant. A key focus of the review is on improving the sophistication of credit risk measurement methods that are employed across the industry. This includes requiring all banking institutions to develop, test and implement more robust loss estimation models. Both the revised corporate governance and credit risk management standards will be issued for industry feedback in the first half of 2016. In addition, the Bank made further progress on the development of a comprehensive Shariah contract-based regulatory framework that addresses the Shariah parameters and operational requirements. A compendium of Shariah contract-based standards developed and issued by the Bank to date is provided in this Report.

The final Liquidity Coverage Ratio (LCR) standard for banking institutions, one of the key components of the Basel III regulatory reform package, came into effect on 1 June 2015 for banks in Malaysia. The rules require banking institutions to maintain sufficient liquidity buffers to withstand severe short-term liquidity shocks over a 30-day horizon. As expected, banking institutions transitioned smoothly to the new liquidity requirements with the average LCR of the banking sector at 127%, well above the applicable minimum regulatory requirement of 60%, as at end-2015.

In the insurance and takaful sector, the Bank completed revisions to prudential standards that support a strong and independent role for the appointed actuary in promoting the sound management of insurance/takaful and financial risks. To complement the Risk-Based Capital Framework for Takaful Operators (RBCT), the Bank also consulted with the industry on proposals for the implementation of the Internal Capital Adequacy Assessment Process (ICAAP) by takaful operators. The ICAAP aims to promote a more rigorous process for capital management which is aligned with the risk profile of each takaful operator. Similar to the ICAAP for insurers, takaful operators are required to set and observe individual target capital levels which reflect risks beyond those covered in the RBCT. The Bank expects to finalise the requirements in 2016 for implementation in 2017.

An important development during the year was the passage of amendments to the Development Financial Institutions Act 2002 (DFIA) which came into effect on 31 January 2016. The amendments further strengthen the regulatory framework for development financial institutions (DFIs) to ensure that the specific mandates entrusted to DFIs are achieved in a financially sustainable manner.

To this end, existing provisions in the DFIA on corporate governance, business activities and the scope of the Bank's regulatory oversight have been enhanced. In addition, the amended Act incorporates new provisions for the regulation of Shariah governance and consumer protection, with expanded enforcement tools to ensure compliance.

Efforts to strengthen safeguards against threats of money laundering and terrorism financing (ML/TF) continued to be a key priority for the Bank. In September 2015, the Financial Action Task Force (FATF) published a report on the Mutual Evaluation (ME) of Malaysia's anti-money laundering and countering the financing of terrorism (AML/CFT) framework. The report acknowledged Malaysia's well-developed legal and regulatory arrangements, and strong inter-agency coordination for the supervision of ML/TF. Drawing in part on the recommendations of the ME Report, the National Coordination Committee to Counter Money Laundering has formulated a five-year National AML/CFT Strategic Plan to promote and protect the integrity of Malaysia's financial system over the long term and contribute towards mitigating criminal activity in the country. Based on the commitment demonstrated by Malaysia's action plan and the continuing progress in efforts to improve its AML/CFT programme, Malaysia was granted full membership of the FATF in February 2016.

During the year, enforcement actions continued to be pursued by the Bank to safeguard the integrity of the financial system. The Bank successfully prosecuted 182 criminal offences and obtained six court orders requiring entities and/or individuals to cease operating illegal activities. In addition, RM69.5 million in fines were imposed on licensees for regulatory breaches and 26 new investigations were opened by the Bank during the year into suspected illegal activities and regulatory breaches.

Market conduct and consumer empowerment
The Bank continued to focus on promoting fair, responsible and professional business conduct by financial service providers (FSPs) in 2015. Key risks to financial consumers during the year mainly arose from competitive pressures and heightened volatility in investment performance which continued to weigh on profit margins of FSPs and influence the behaviours of FSPs. Regulatory and supervisory measures were therefore focused on ensuring that FSPs were adequately assessing the suitability of financial products for consumers, and improving

the quality and clarity of information provided to consumers. The Bank assesses that risks to consumers remain heightened in the near term as operating conditions continue to be challenging for FSPs. A stronger focus among FSPs on strengthening business practices that promote the interests of consumers will therefore continue to play a key role in mitigating these risks.

A number of market conduct standards were strengthened to incorporate requirements that improve fair outcomes for consumers. This included new standards issued by the Bank on the management of participating life business in July 2015. The standards aim to ensure that profits of the insurance fund are distributed fairly among groups of policy owners, and bonus revisions appropriately reflect the performance of the fund. At the Bank's urging, the banking and insurance industry also continued to promote the use of standardised descriptions of contractual terms and plain language in financial contracts. To date, over two-thirds of the housing loans and home financing contracts issued by banks have adopted standardised descriptions of key contractual terms, and close to one-fifth of personal line insurance policies are in plain language.

The Bank received fewer complaints against FSPs in 2015, mainly owing to the more proactive management of complaints by FSPs and a sustained supervisory focus by the Bank to address practices that were inconsistent with the fair treatment of financial consumers and responsible business conduct. During the year, supervisory and enforcement actions were pursued against 38 FSPs for failures to comply with various business conduct requirements. On 14 September 2015, the Financial Services (Financial Ombudsman Scheme) Regulations 2015 and Islamic Financial Services (Financial Ombudsman Scheme) Regulations 2015 (the Regulations) were brought into force, paving the way for the establishment of a financial ombudsman scheme (FOS) to enhance financial dispute resolution arrangements in Malaysia. Preparations to transform the existing Financial Mediation Bureau (FMB) into an approved FOS are at an advanced stage with the FOS expected to commence its operations in the second quarter of 2016.

The financial education agenda continued to make progress as a key strategy to empower consumers and promote their financial well-being. The Bank's ongoing collaboration with the Ministry of Education to integrate financial education into the school curriculum continued to gain traction with the goal to complete the process for all primary and secondary school levels by 2021. The Bank also continued to leverage on technological advancements in the design and delivery of financial information and advice, with the development of new mobile applications and a financial education portal among some of the initiatives pursued during the year. In addition, the Bank launched a nationwide Financial Capability and Inclusion Demand Side Survey which will allow the Bank to track the financial literacy levels of Malaysian consumers using a Financial Literacy and Capability Index (MYFLIC) that measures the knowledge, behaviour and attitudes of Malaysians in relation to financial matters. Insights from the survey are elaborated in this Report and will be used by the Bank to implement more targeted financial education interventions with the aim of improving the MYFLIC index over time.

Payment and settlement systems

The payment and settlement systems in Malaysia remained resilient and continued to operate smoothly throughout the year, contributing to the stability of the financial system. The systemically important payment systems, namely the Real-time Electronic Transfer of Funds and Securities System (RENTAS) and the National Electronic Cheque Information Clearing System (eSPICK) functioned smoothly without any major disruptions during the year. The Bank's oversight activities over these systems and other major retail payment systems continued to focus on the adequacy of risk management and business continuity arrangements, particularly in view of the increasing transaction volumes supported by the systems.

To further elevate the performance of RENTAS, enhancements have also been made to gradually transform RENTAS into a multi-currency system that adopts the Society for Worldwide Interbank Financial Telecommunication (SWIFT) messaging standard, with multiple access channels and added functionalities that will further enhance operational efficiencies and reduce risks for participants. These improvements are expected to be completed by end-2016 and will also facilitate the integration of RENTAS with other regional large value payment systems for seamless, safe and efficient cross-border financial transactions. Fraud losses related to the use of payment cards and online banking remained negligible due to sustained efforts by the Bank and the industry to continuously strengthen risk management and security measures. Efforts to raise public awareness of preventive measures that can be taken to avoid falling victim to fraud attempts were also intensified.

2015 marked the half-way mark of the Bank's 10-year strategic roadmap to accelerate Malaysia's migration to e-payments as outlined in the Financial Sector Blueprint 2011-2020. In the first five years (2011-2015), emphasis was placed on developing an enabling environment by strengthening regulatory frameworks, addressing market distortions and establishing incentive structures. As a result, cheque usage has fallen from 205 million a year to 148 million in 2015, remaining on track to achieve the target of 100 million by 2020. Over the same period, the number of e-payment transactions per capita has almost doubled from 49 to 82. Efforts to displace cash usage with e-payments will further benefit from the implementation of the Payment Card Reform Framework (PCRF) which took effect on 1 July 2015. The regulatory measures introduced under the PCRF have already resulted in a slight moderation in the cost of accepting cards and a tripling of the growth rate of point-of-sale terminals from 4.9% in 2014 to 18.1% in 2015. The industry has additionally committed to investing approximately RM1.1 billion between 2015 and 2020 for enhancements to payment card infrastructure, including its expansion to provide broader coverage of payment transactions.

2015

RISK DEVELOPMENTS AND ASSESSMENT OF FINANCIAL STABILITY IN 2015

RISK DEVELOPMENTS AND ASSESSMENT OF FINANCIAL STABILITY IN 2015

OVERVIEW

Financial market volatility remained elevated in 2015. The prospect of the US Federal Reserve's interest rate normalisation trajectory, a weaker outlook for global growth including that for PR China and emerging economies, and the unprecedented slide in crude oil prices were major themes driving investor behaviour for most parts of the year. In the case of Malaysia, portfolio flows were largely driven by a broader retreat of global funds from emerging markets and commodity producing economies, and overseas investments by domestic institutional investors as part of portfolio diversification strategies. As in previous episodes of heightened volatility and large capital flows, the deep financial markets and presence of strong domestic institutional investors in Malaysia continued to support orderly market conditions. While funding conditions were occasionally tighter amid the large volume of portfolio outflows, ample liquidity remains in the banking system. The provision of liquidity through the Bank's reverse repurchase facilities and, more recently, the lowering of the Statutory Reserve Requirement preserved adequate liquidity conditions and helped to smooth out adjustments by individual banks to heightened deposit competition. Malaysian banks, insurers and takaful operators continue to remain profitable and maintain strong capital positions. Banks, in particular, have shown a high degree of earnings resilience in spite of more challenging business conditions, allowing them to maintain strong buffers through conservative earnings retention policies. These factors have continued to firmly support domestic intermediation activities and sustained confidence in the Malaysian financial system.

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

Risks to domestic financial stability arising from household indebtedness and rising property prices continued to moderate. Outstanding household borrowings extended the slower pace of growth observed since the first implementation of macroprudential measures in 2010. The share of borrowings by highly leveraged lower income households declined further, reflecting improvements in affordability assessments. Enhancements to lending practices of banks to reflect strengthened processes for assessing affordability are now mostly in place. While the Bank has implemented standards on responsible financing, lending decisions reflect the risk appetite of respective financial institutions and their business models. The standards remain an important measure to maintain the sound asset quality of banks going forward. Concerns over the mispricing of risks amid strong competition in the retail financing segment were also assessed by the Bank to have abated as banks either adjusted lending rates to reflect more realistic assumptions of credit and liquidity risks, or increased capital buffers. Aggregate household financial asset-to-debt ratio has been maintained above two times over the past five years, although leverage levels remain considerably higher among lower income households. Lowering the debt levels for these households will continue to be important to provide a buffer against unexpected events and rising costs. Risks to financial stability continue to be manageable as potential losses from household lending even under assumptions of severe stress conditions remain well within banks' excess capital buffers.

In the property market, growth in aggregate house prices appears to have stabilised as house buyers and developers continued to adjust to macroprudential and fiscal measures aimed at curbing excessive speculation and risk-taking. Slower housing transactions mainly in the higher-priced segments, combined with continued strong demand for affordable home units, have encouraged a rebalancing of housing supply. This in turn is reducing risks associated with an unsustainable supply of housing concentrated in specific segments. Given the prevailing acute demand-supply gap in affordable housing, risks of a more generalised correction in house prices were assessed to remain low. An increase in the supply of affordable housing by the Government and private sector remains key to bring about a further easing of upward pressures on house prices. In the non-residential property segment, risks have increased in the office space and shopping complex segments. With challenging business conditions and more incoming supply over the next two years adding further to supply pressures, ensuring the effective management of new supply in these segments will be essential. At present, exposures of banks to these segments are limited, with continued low and stable delinquencies observed.

Growth in non-financial corporate borrowings continues to be driven by domestic investment activities and supported by generally healthy corporate balance sheets. While corporate leverage has increased in the last year, it remains within reasonably prudent levels. Despite lower profitability in some business segments that were more affected by lower commodity prices and softer demand, overall debt servicing capacity of businesses remains sound and continues to be supported by adequate liquidity buffers. This positioned the businesses to cope with the more significant movements in exchange rates and commodity prices experienced during the year. Additionally, risks to financial stability from external and foreign currency-denominated corporate debt continue to be mitigated by the regulatory approval process that is in place, as well as financially strong domestic conglomerates (including Government-linked corporations) and multinational corporations that account for a significant share of external debt. The overall quality of business borrowings was thus sustained. While loan performance in some sectors deteriorated in line with economic developments, this had limited impact on overall business loan performance.

The Bank will maintain a heightened degree of vigilance over developments in the household, property and business sectors. This will continue to be underpinned by a strong focus on sound lending standards and risk management practices among banks as well as large non-bank lenders. The Bank will also intensify its supervision of life insurers, with a focus on the adequacy of internal oversight arrangements and controls over investment management and strategy in an environment of heightened market volatility. Domestic and external headwinds will continue to challenge businesses and households in the period ahead, making it more important for financial institutions to intensify their risk management and actively identify and manage borrowers that may be affected in this environment. Importantly, the Malaysian financial system is in a much stronger position to cope with these developments and the effects of continued volatility in the global financial system that can be expected ahead.

MANAGING RISKS ARISING FROM HOUSEHOLD INDEBTEDNESS

The growth of aggregate household borrowings moderated further during the year. Household borrowings from banks and non-banks expanded by 7.3% as at end-2015, extending the slower pace of growth since 2010. This was due mainly to a sustained slower expansion in financing for personal use (+4.6%) while financing for house purchases has remained robust (+11%). The expansion in loans for the purchase of securities and non-residential property also moderated. A significant proportion (61.4%) of household debt in Malaysia is secured by property and securities (principal-guaranteed investments), thereby substantially reducing net exposures on household debt (Chart 1.1, Chart 1.2 and Chart 1.3).

Household debt extended the slower pace of growth observed since 2010

The level of household debt-to-gross domestic product (GDP) ratio continued to be elevated at 89.1% amid the more moderate growth in nominal GDP in 2015 (Chart 1.4). The capacity of households to service debt has however generally remained firm. This continues to be supported by a broadly stable domestic employment and income outlook. The share of borrowings by highly leveraged lower income households that earn RM3,000 or less a month declined further to account for 23.6% (2014: 24.3%; 2013: 28.4%) of total household debt or 20.4% (2014: 20.9%; 2013: 25.1%) of total banking system financing to the household sector, reflecting improvements in affordability assessments. The aggregate leverage (measured as a ratio of outstanding debt to annual income) for households in this group has been hovering at about seven times since macroprudential measures were implemented. A moderation in the level of indebtedness for this group is likely to be gradual given the relatively long average remaining maturity of household borrowings (about nine years). However, continued income growth and a deceleration in new financing growth will contribute towards reducing leverage over time. Lower income households also continue to be supported by various financial assistance programmes provided by the Government to ease their financial burden in the face of rising costs. In addition, households that are already highly leveraged have more than half of their borrowings in the form of fixed rate financing which reduces their sensitivities to changes in financing cost. In the higher income groups, aggregate leverage levels have remained stable, averaging at about three times.

The share of borrowings by highly leveraged low-income households declined further

Aggregate household balance sheet remains healthy as households continue to accumulate more financial assets than debt. In 2015, aggregate household financial assets grew by RM97.9 billion, compared with an increase of RM70.4 billion in household debt. Deposits and deposit-like instruments continue to form the major component (43%) of household financial assets (Chart 1.5). This has supported adjustments by households, particularly those living in the urban centres, to higher living costs. Such adjustments partly explained the more moderate pace of growth (+4.8%) in household bank and non-bank deposits for the year and lower household investments in equities and unit trust funds. In addition, households also experienced some erosion in the value of equity and non-principal-guaranteed investments, reflecting movements in the domestic financial markets. A further reason for the moderate increase in household financial assets was the sustained demand for housing, including first-time house buyers, against a backdrop of elevated house prices. Housing wealth is estimated to have risen by a compounded annual growth rate of about 11% over the past five years as more households look to investments in properties to help finance children's education, provide some financial security for the next generation and prepare for retirement including medical costs. Notwithstanding this, aggregate household financial asset-to-debt ratio has remained above two times, indicating continued resilience. Encouragingly, aggregate household liquid financial asset-to-debt ratio has remained in excess of 1.4 times, preserving ready access to funds for households to meet debt obligations.

Aggregate household financial asset-to-debt ratio remained above two times, over the past five years

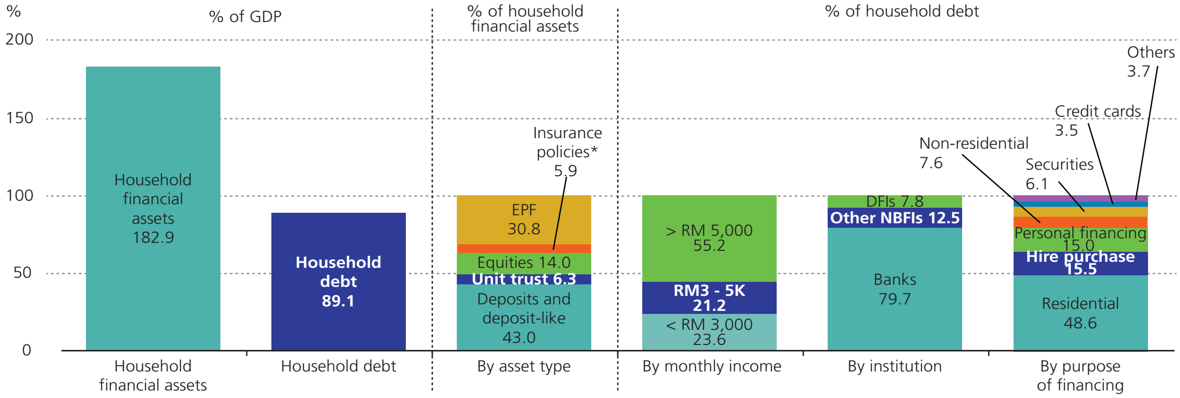
Risks to domestic financial stability from household leverage continue to be largely mitigated by sound credit underwriting standards and risk management practices of banks. Banks remain the largest providers of financing to households, accounting for about 80% of total household debt. Among banks, enhancements to lending practices to reflect strengthened processes for assessing affordability are mostly in place. This has been important to maintain the sound asset quality of banks and resilience of households going forward. Concerns over the mispricing of risks amid strong competition in the retail financing segment were also assessed by the Bank to have abated. Average lending rates on new financing for the purchase of residential properties adjusted upwards during the year by about 15 basis points in response to more realistic estimations by some banks of credit and liquidity risks. Some banks also took measures to boost capital buffers given sustained competition in the vehicle financing segment which continued to bear down on lending rates. For the year as a whole, the overall average lending rate for all new loans to households averaged at 5.1% (2014: 4.9%).

Lending practices among non-banks remained a key focus of the Bank's supervision and engagements with other authorities primarily responsible for such institutions. In 2015, outstanding personal financing granted by non-bank financial institutions (NBFIs), including major credit co-operatives, recorded a lower increase of RM3 billion (2014: RM4.4 billion; 2013: RM10.2 billion). The average financing amount disbursed also declined further to about RM22,000 per facility from levels as high as RM68,000 prior to the implementation of measures that promoted more prudent assessments on the ability of borrowers to take on more debt. The Bank and

Household debt remains supported by asset and wealth accumulation

Chart 1.1

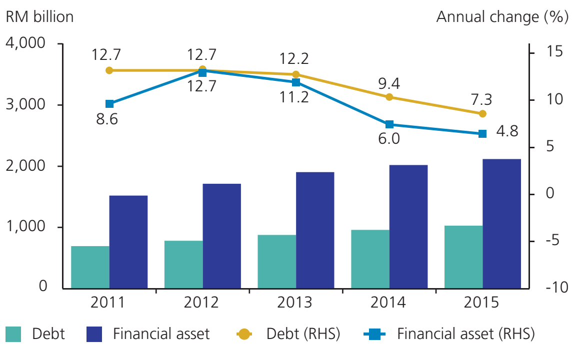
Household Sector: Profile of Borrowings and Financial Assets



Growth in debt moderated further...

Chart 1.2

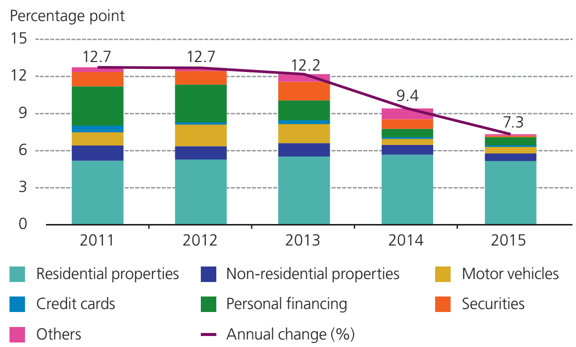
Household Sector: Debts and Financial Assets



...underpinned by slower expansion in unsecured financing

Chart 1.3

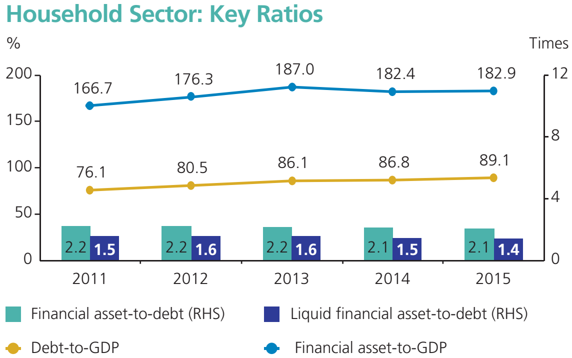
Household Sector: Contribution to Growth in Debt



Household financial assets remained above two times of debt...

Chart 1.4

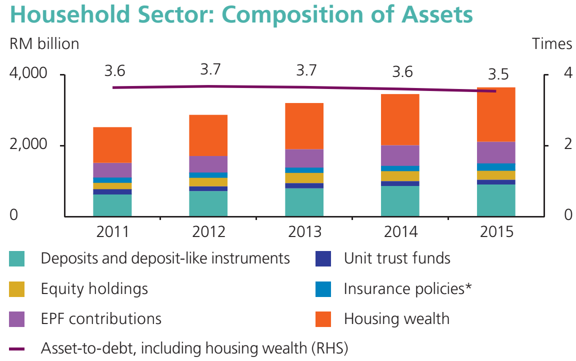
Household Sector: Key Ratios



...including housing wealth, household assets remained above three times of debt in 2015

Chart 1.5

Household Sector: Composition of Assets



Source: Bank Negara Malaysia, Bloomberg, Bursa Malaysia, Department of Statistics, Malaysia, National Property Information Centre, Securities Commission Malaysia and internal computation

*Surrender value

the Malaysia Co-operative Societies Commission (SKM) continue to collaborate closely to promote further improvements in loan affordability assessments, particularly among the medium- and large-sized credit co-operatives that account for the bulk of personal financing to households. An inappropriate easing of lending standards by NBFIs remains a concern that could impose excessive financing burdens on households over the long term and increase arbitrage risks. Financial education of borrowers and close vigilance will thus remain important. Towards this end, the Credit Counselling and Debt Management Agency (AKPK) has continued to expand its outreach, providing financial counselling and advice to over 80,000 individuals in 2015. Of this number, a steady rate of enrolment into AKPK's debt management programme (DMP) was maintained, an indicator that borrowers are getting the help that they need to proactively manage debt.

Household impaired loans and delinquencies remained low across all types of financing facilities, despite higher delinquencies in selected segments

The overall quality of banks' household loans improved further with household impaired loans and delinquencies (loans-in-arrears of between one and three months) remaining low across all types of financing facilities (Table 1.1). Based on the Bank's ongoing engagements with banks and key NBFI lenders, higher delinquencies have been observed in the compact car hire purchase and personal financing segments. This likely reflects financial difficulties facing the more highly leveraged households in the lower income group of borrowers. This is consistent with enrolments in AKPK's DMP where about half are borrowers earning less than RM3,000 per month, and more new cases involving borrowings in these financing segments. For some borrowers, this has also started to increase challenges faced in maintaining regular home financing repayments, resulting in slightly higher house financing delinquencies.

Potential losses to banks from default incidences under stressed scenarios remain limited and well within banks' excess capital buffers

Stress tests conducted by the Bank indicated that the potential losses to banks in the unlikely event of simultaneous default incidences occurring across all types of household borrowings under severe assumptions are estimated to be limited at RM65.4 billion (Table 1.2). Of this amount, estimates of potential losses attributed to households earning a monthly income of RM3,000 and below are only about

Table 1.1

Household Sector, Banking System: Gross Impaired Loans and Gross Delinquent Loans

	Gross Impaired Loans						Gross Delinquent Loans					
	Ratio (%)			Annual Change (%)			Ratio (%)			Annual Change (%)		
	2013	**2014**	**2015**	**2013**	**2014**	**2015**	**2013**	**2014**	**2015**	**2013**	**2014**	**2015**
Overall	**1.3**	**1.2**	**1.1**	**-1.1**	**-1.0**	**-1.6**	**2.1**	**1.8**	**1.5**	**-7.4**	**-5.3**	**-10.5**
Purchase of residential properties	1.5	1.3	1.1	-7.0	-3.9	-1.4	1.6	1.4	1.3	-4.5	-2.6	1.7
Purchase of non-residential properties	0.7	0.6	0.6	-1.4	0.3	-0.1	0.8	0.7	0.7	-3.2	6.9	-1.6
Motor vehicles hire purchase	1.2	1.2	1.0	19.4	1.8	-19.8	4.6	3.9	2.9	-11.8	-11.4	-25.5
Personal financing	1.7	1.7	1.9	-1.6	3.4	16.1	1.2	1.1	1.1	-3.1	-0.3	2.7
Credit cards	1.3	1.2	1.3	4.1	-6.6	10.8	1.5	1.5	1.3	1.8	1.2	-13.3

Source: Bank Negara Malaysia

Table 1.2

Household Sector, Banking System: Potential Losses Based on Severe Assumptions on Probability of Default (PD) and Loss Given Default (LGD)

		Housing loan	Motor vehicle hire purchase	Personal financing	Credit cards	Total[1]
Stressed PD (%) (Baseline PD, %)		12.3 (4.1)	14.4 (4.8)	13.2 (4.4)	18.0 (6.0)	
Stressed LGD (%) (Baseline LGD, %)		40.0 (22.5)	75.0 (55.8)	95.0 (84.7)	95.0 (85.5)	
Potential losses (RM bil)	All borrowers	20.2	15.8	7.9	6.1	65.4
	– Borrowers earning ≤ RM3,000 per month	2.5	5.0	2.6	1.1	15.3
	– Borrowers earning ≤ RM5,000 per month	6.2	9.4	4.3	2.6	28.2

[1] Includes other household loans such as financing for the purchase of non-residential properties and consumer durables
Source: Bank Negara Malaysia

RM15 billion. This is well within the excess capital buffers (above the regulatory minimum) of RM117.3 billion held by banks as at end-2015. These potential losses have not taken into account the available savings and financial buffers of individual households or responses by the banks to manage such scenarios. Over the past two years, banks have also gradually increased the level of provisions and regulatory reserves for collective impairment to 1.5% (2014: 1.4%) of total outstanding loans. This forms part of ongoing measures during periods of healthy profits to strengthen buffers against potential loss events. This level currently stands above the minimum regulatory requirement set by the Bank of 1.2% of total outstanding loans, net of individual impairment provisions.

MANAGING DEVELOPMENTS IN THE DOMESTIC PROPERTY MARKET

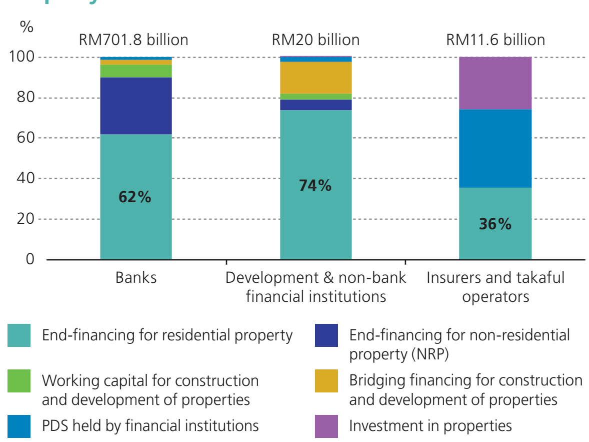
Total exposures of Malaysian financial institutions to the domestic property market stood at RM733.4 billion. This represented 25.7% (2014: 24.1%) of total financial system assets at end-2015. Banks continue to account for the bulk of the exposures, with about 90% of the exposures related to end-financing for the purchase of residential and non-residential properties (Chart 1.6). Growth in bank financing for the purchase of residential properties has remained strong, expanding by 11.7% with some moderation observed in line with the slower growth in the housing market.

Residential property market

Aggregate house price growth continued to moderate since second quarter of 2014, reflecting adjustments in investor demand for housing and the ability to borrow based on affordability assessments. These were intended effects of the pre-emptive macroprudential and fiscal measures implemented since 2010, aimed at mitigating potential risks to financial stability from the strong growth in house prices, hence improving housing affordability, particularly for first-time home buyers. The average growth in house prices, measured by the Malaysian House Price Index (MHPI), has declined from 9.6% registered for the

Chart 1.6

Property Market: Financial Institutions' Exposures to Property Market



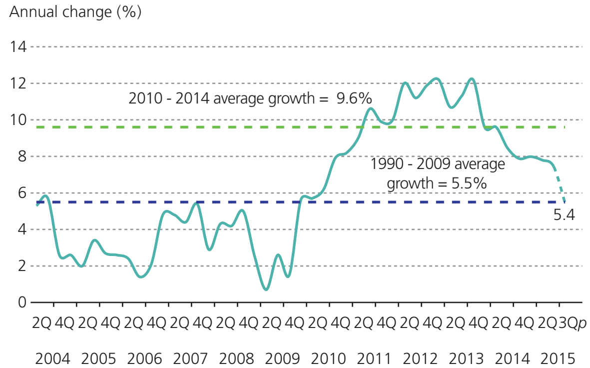
Source: Bank Negara Malaysia and financial statements of non-bank financial institutions period for 2010-2014 to around 8% registered over five consecutive quarters since second quarter of 2014 (Chart 1.7 and Table 1.3). At this level, it remains above the long-term average house price growth of 5.5% for 1990-2009.

Growth in aggregate house prices stabilised at about 8% following measures to curb speculative activities

Elevated house prices continue to reflect imbalances that have been characterised by an acute shortage in the supply of houses within affordable price segments (below RM250,000) and an increasing share of supply of more expensive homes (priced above RM500,000). More recently, slower housing transactions mainly in the higher-priced segments, combined with continued strong demand for affordable home units, have encouraged some rebalancing of housing supply. This in turn reduces the risks associated with an unsustainable supply of houses concentrated in higher-priced segments and a subsequent correction in prices. In the first nine months of 2015, the overall volume and value of housing transactions contracted by 4.9% and 12.7% (2014: +0.4% and +13.9%) respectively. In sharp contrast, the volume and value of transactions for houses priced up to RM250,000 continued to record positive growth of 4.9% and 4.7% respectively. The provision of affordable housing under various federal and state programmes for first-time home buyers, along with a rising share of new launches by private developers in the affordable segment in response to shifting demand drivers should temper future increases in house prices if the additional supply materialises.

Chart 1.7

Property Market, Residential: Growth of Malaysian House Price Index (MHPI) and Long Term Average



p Preliminary

Source: National Property Information Centre

Continued initiatives to increase the supply of affordable housing are key to ease upward pressure on house prices

Table 1.3

Property Market, Residential: Growth of MHPI by Selected State and House Type

	2Q '14	3Q '14	4Q '14	1Q '15	2Q '15	3Q '15*p*
	Annual change (%)					
Kuala Lumpur	8.5	8.0	7.2	9.4	6.9	5.3
Selangor	8.3	7.3	7.2	7.7	8.7	6.2
Johor	10.5	11.1	9.9	6.8	5.3	3.0
Penang	12.1	11.2	8.9	8.6	6.8	3.5
Malaysia	8.4	7.9	8.0	7.8	7.5	5.4
Terraced	9.5	8.6	8.2	7.7	7.4	5.2
Semi-detached	4.8	4.6	8.1	7.7	8.7	6.0
Detached	5.8	7.3	6.9	8.1	5.3	4.1
High-rise	10.6	9.5	7.9	8.2	7.9	6.0

p Preliminary

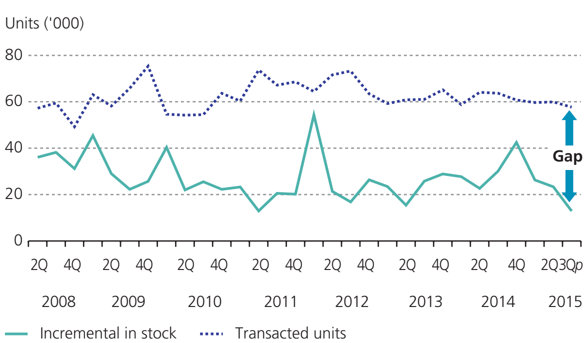
Source: National Property Information Centre

Risks of a more generalised correction in house prices are assessed to remain low given the prevailing acute supply-demand gap (Chart 1.8). Demographic factors such as Malaysia's relatively young labour force and increasing urbanisation continue to be key drivers of demand for affordable housing, while new launches of affordable houses priced below RM250,000 only accounted for less than 30% of total launches in the first nine months of 2015. A significant pick-up in the construction of new housing in this segment will be required before upward pressures on house prices begin to abate on a broader scale. The National Housing Council, established in January 2014, is pursuing strategies for joint initiatives by the Government and private sector to build one million units of affordable housing by 2018. In addition, the Government has announced plans to focus the construction of low-cost and affordable housing units in strategic locations closer to public transit stations. This should increase the take-up rate while reducing the need for households to incur debt to own vehicles. Such initiatives will contribute towards alleviating supply shortages. However, without a sustained and more significant increase in private sector-driven supply of affordable housing, demand will likely continue to outstrip supply in the foreseeable future.

Banks' housing loan portfolio remains in good condition, underpinned by sound lending and valuation practices. Despite heightened competition amid a more moderate loan growth, supervisory reviews by the Bank have not indicated an imprudent easing of lending standards. Banks have demonstrated continued

Chart 1.8

Property Market, Residential: Transaction and Incremental Change in Stock of Houses



p Preliminary

Source: National Property Information Centre

diligence in extending loans where house price growth has been stronger. Valuations supporting credit decisions and impairment assessments are also reasonably conservative. About 70% of outstanding housing loans have a current loan-to-value (LTV) ratio of below 80%, providing banks with a healthy buffer against a risk of falling house prices.

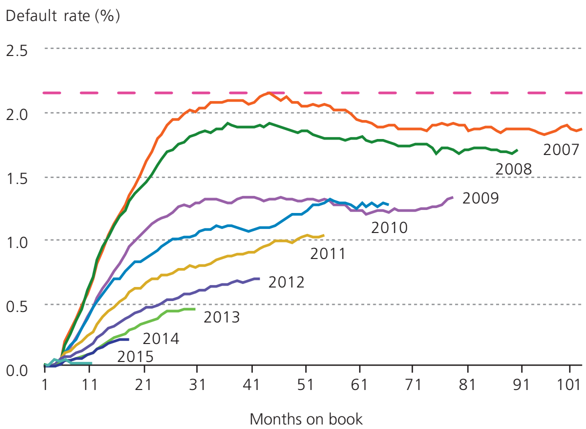
The profile of banks' housing loans has remained fairly stable. Financing extended for the purchase of houses priced below RM500,000, which are at lower risk of significant price corrections due to sustained strong demand, accounted for 85% of outstanding house financing. In terms of borrowers, about 84% of housing loan borrowers have only one outstanding housing loan, of which 88% are first-time home buyers. Such borrowers have strong incentives to maintain loan repayments in an event of financial stress or negative equity on their homes, compared to investment buyers. By contrast, the annual growth in the number of borrowers with at least three outstanding housing loans (a proxy for speculative buyers) was maintained at a low and stable rate of 3.1%, down from the much higher rate of increase last observed in 2010 (+15.8%). Such borrowers continue to account for only 3% of housing loan borrowers. Evidence of `equity withdrawal´ by borrowers who refinance their housing loans at a higher quantum against the current value of their properties has also been limited. For the additional financing, the Bank has required financial service providers to conduct affordability assessments based on parameters that are consistent with those applied to unsecured personal financing.

Banks' excess capital buffers stood at about six times the estimated expected losses from a simulated 40% contraction in house prices and stressed default rates

The vintage default rates for housing loans originated across the years since 2007 continued to show improvement (Chart 1.9). This reflects the stable and improving credit profile of banks' housing loans. Banks have maintained positive cumulative profit to cover up to two times

Chart 1.9

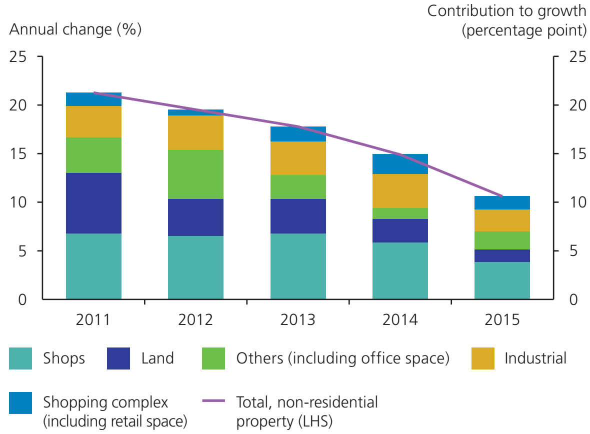
Property Market, Banking System: Vintage Analysis for Housing Loans



Source: Bank Negara Malaysia

Chart 1.10

Property Market, Non-residential: Loan Growth and Contribution to Growth by Segment



Source: Bank Negara Malaysia

of actual historical default, for housing loans originated across the years. The share of impaired and delinquent housing loans also remains low at 2.4% of total housing loans. Based on a single factor sensitivity analysis conducted on the housing loan portfolio of banks, excess capital buffers of the banking system would remain sufficient to cover about six times the estimated expected losses. The sensitivity analysis assumes a stressed probability of default (PD) of more than 12% (three times the current PD of 4.1%) and a severe correction of 40% in house prices.

Non-residential property market

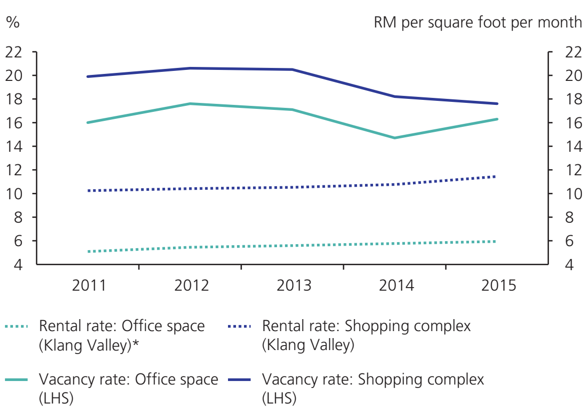
Financial institutions' exposures to the non-residential property market accounted for about 27% of total exposures to the overall property market. Such exposures represent less than 7% of total financial system assets. While this is not particularly large, developments in the non-residential property market have important implications for financial stability. This is due to the possible spillover to the broader economy and strong linkages with residential property developments which underpin a significant share of bank lending to households. In recent years, the construction of mixed property developments has further reinforced these dynamics. The bulk of exposures in the non-residential property market comprises end-financing by banks for the purchase of shops (39%), land (19.7%), industrial buildings (17%), shopping complexes (9.7%) and other non-residential properties including office space and hotels. Growth in bank financing for such purposes moderated to 10.6% (2014: +14.9%) during the year (Chart 1.10), with a fairly mixed picture continuing to emerge across the various sub-segments.

Developments in the shops segment have typically mirrored that of the housing market, given that shops are seen among investors as an alternative investment to residential properties. Despite slower activities in the segment, rental rates remained relatively stable, particularly in the Klang Valley. In the first nine months of the year, both transaction volumes and values for shops decreased by 9.3% and 5.3% (2014: -0.6% and +5.9%) respectively. Correspondingly, average transaction values expanded at a slower pace of 4.5% (2014: +6.5%). This is considerably lower than the much higher rates of increase recorded during 2011 of around 17.7%. The moderating growth reflects more modest investor demand as indicated by the slower increase in the number of borrowers purchasing multiple shop units or combined shop and residential units (+9.4%; 2014: +11.1%). This in turn reduces risks of sharp price adjustments in the future. In contrast, average land prices in major employment centres have maintained a strong upward trend since 2009, recording a compounded annual growth rate of 26.8% for the period up to the third quarter of 2015. The strength in land prices has continued to benefit from the scarcity of land for property development and construction of infrastructure and public transportation, as well as the conversion of agricultural land for commercial use.

Risks have heightened in the office space and shopping complex segments. In the office space segment, the already high vacancy rate rose further to 16.3% (2014: 14.7%) amid the downsizing of companies in the oil and gas (O&G) sector (Chart 1.11). Vacancy rates within the Klang Valley have also risen to 20.4% (2014: 18.6%). While rental rates appear to be holding firm at present, supply pressures are expected to worsen with the large planned incoming supply over the next two years. This could cause vacancy rates to rise further and rental rates to decline. Rental rates for older office buildings are likely to remain somewhat depressed due to tenant preferences for newer or green buildings with better facilities and transport connectivity. Already, some property owners are offering rental holidays and other benefits in order to lock in rental over the medium term. The ongoing process of refurbishing and upgrading many of these buildings should help to support tenancy and rental rates going forward. At the same time ensuring the effective management of new supply will continue to be critical. Conditions in the shopping complex segment present similar challenges ahead. At present, there are more than 50 shopping complexes being built across major employment centres in an environment of more subdued consumer sentiment. An oversupply of commercial properties if left unchecked, may lead to deeper imbalances in the property market with spillovers to the other parts of the economy. A comprehensive and carefully-designed national planning policy, including staggering the supply of large office space and shopping complexes, is therefore needed (refer to box article on `Assessing Demand-Supply Conditions in the Malaysian Property Market´ in Chapter 1 of Bank Negara Malaysia Annual Report 2015). Direct risks to banks from exposures to the office space, shopping complex and hotel segments remain small. The share of bank loans in these segments was broadly unchanged at 3.3% (2014: 3.2%) of total bank loans. More generally, the overall delinquency rate for end-financing provided by banks for the purchase of non-residential properties has also remained low and stable at 0.4%.

Chart 1.11

Property Market, Non-residential, Office Space and Shopping Complex: Vacancy Rate and Rental Rate



* As at third quarter 2015

Source: National Property Information Centre, Knight Frank, Jones Lang Wootton and internal computation

MANAGING CREDIT RISK EXPOSURES TO BUSINESSES

Outstanding Malaysian non-financial corporate sector debt (comprising domestic and external financing, private debt securities (PDS) and sukuk) rose to RM1,212.9 billion or 104.8% of GDP as at end-2015. An analysis of the drivers of corporate leverage has shown that the increase in Malaysian corporate leverage over the last decade is largely explained by firm-related and domestic macroeconomic factors, rather than an increase in risk appetite associated with low global interest rates and ample liquidity conditions (refer to box article on 'Malaysian Corporate Leverage and Its Systemic Implications' published in last year's Report). This is further borne out by the slower accretion of debt by corporations in Malaysia relative to most other emerging market economies (EME) peers. According to the International Monetary Fund, the average corporate debt-to-GDP ratio for EME increased rapidly following the Global Financial Crisis (GFC), rising by 23 percentage points between 2007 and 2014. In comparison, Malaysian corporate debt grew at a compounded annual rate of 8.4% since the GFC, with the corporate debt-to-GDP ratio increasing by 1.9 percentage points over the same period (Chart 1.12).

Growth in non-financial corporate borrowings was driven by domestic investment activities and supported by generally healthy balance sheets

While non-financial corporate leverage has increased, it remains within reasonably prudent levels. The median debt-to-equity ratio of Malaysian corporations (based on 160 firms listed on Bursa Malaysia that account for 80% of market capitalisation (excluding financial institutions)) stood at 46.8% (year-to-date (YTD) 2014: 42.8%) as at end-September 2015. Generally healthy balance sheets enabled most businesses to absorb and adjust to the significant movements in exchange rates and commodity prices experienced during the year (Chart 1.13). Despite lower profitability in some segments that were more affected by lower commodity prices and softer demand, the median interest coverage ratio (ICR) remained high at 5.3 times (YTD 2014: 6.5 times) which is comfortably above the prudent standard of two times (Chart 1.14). Importantly, corporate debt-at-risk, measured as the share of debt borne by firms with an ICR of less than 1.5 times remained low and stable at 8.9% of total corporate debt. The debt servicing capacity of businesses also remain supported by sound liquidity positions, with the median ratio of cash-to-short-term debt (CASTD) at 1.2 times (YTD 2014: 1.3 times) (Chart 1.15). About three quarters of outstanding corporate debt continued to be funded domestically. In 2015, domestic borrowings (excluding loan stock) grew by 9.5% (2014: +8.7%) (Chart 1.16) in line with continued capital expenditures for private sector investments and public infrastructure projects (Chart 1.17). The increase in domestic borrowings remained close to the long-term trend of 8.6% between 2005 and 2015.

Risks to domestic financial stability from external and foreign currency corporate debt continue to be mitigated

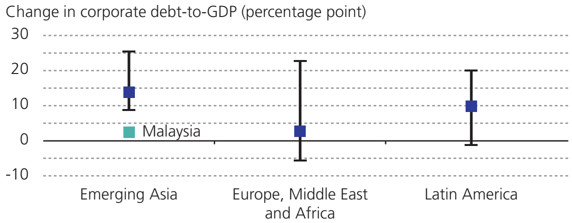
In 2015, the growth of total debt of non-financial corporations almost doubled (+13.2%) compared to the previous year (Chart 1.18), due mainly to the weaker ringgit which increased external debt obligations in ringgit-equivalent terms. Exchange rate valuation effects accounted for about 75% of the increase in corporate external debt recorded for the year. Discounting the effects, new external borrowings (net of debt repayments) was about the equivalent of RM15 billion, driven by a large planned capital raising exercise by an O&G player in the first quarter. Consequently, total corporate external debt as a share of GDP increased to 24.8% (2014: 20.5%) as at end-2015. Foreign currency (FCY)-denominated borrowings from onshore financial institutions accounted for another 4% of GDP. At present, risks to domestic financial stability from the level of external and onshore FCY debt of corporations – mainly arising from currency risk and higher cost of rollover under tighter global financing conditions – continue to be mitigated. Trade credits and non-resident holdings of RM-denominated PDS and sukuk, which pose limited currency risks, accounted for about 22% of total corporate external debt. Also, about 43% of total corporate external debt comprised inter-company obligations which further reduce funding and liquidity risks to the corporations. In addition, close to 73% of external borrowings were of longer maturities exceeding one year, mitigating short-term rollover risks (Chart 1.19). In recent years, Malaysian conglomerates have increased issuances of international debt securities through their overseas subsidiaries which are mainly supported by FCY receipts from the expanding overseas operations and investments of these conglomerates. Including these, the overall corporate external debt level is estimated to be about one-third higher based on data compiled by the Bank for International Settlements.

Pursuant to regulatory requirements, corporations must obtain the Bank's approval for FCY borrowings in aggregate amounts exceeding the equivalent of RM100 million from non-resident financial institutions, special purpose vehicles and other unrelated entities. This serves to contain excessive FCY leverage by requiring corporations to demonstrate adequate debt servicing capacity from FCY revenue streams or through the use of financial derivatives to hedge against currency risks. Borrowings must also be for productive purposes. Financial institutions and corporations must additionally comply with reporting requirements which enable the Bank to monitor significant exposures and obtain early insights into heightened vulnerabilities. Data reported to the Bank indicates that a significant share of outstanding corporate external debt is borne by local outfits of multinational corporations (mainly in the form of inter-company loans) and domestic conglomerates. Such corporations are among the top 5% in terms of total number of borrowers with external borrowings which account for about 70% of total corporate external debt. Most of these borrowings are backed by FCY receipts from overseas operations or hedges with onshore financial institutions. Reflecting more volatile

Non-financial corporate debt in Malaysia grew modestly post-GFC compared to EME peers

Chart 1.12

Business Sector: Cross-Regional Comparison of Change in Corporate Debt

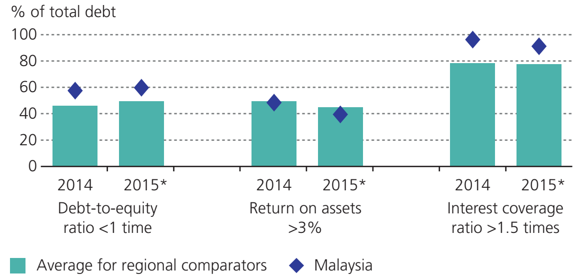


Note: Data for all countries are based on the IMF Global Financial Stability Report October 2015 for the period 2007-2014

Borrowings supported by healthy balance sheets and low debt-at-risk

Chart 1.13

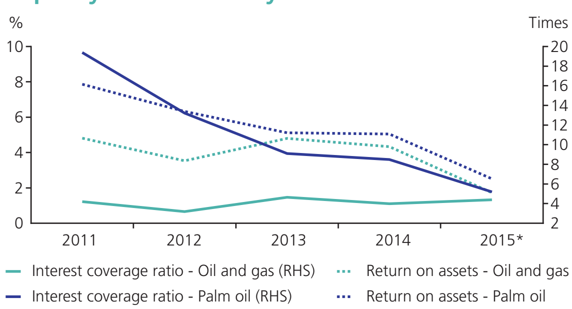
Business Sector: Distribution of Debt by Financial Indicators



Lower profitability in commodity sectors which accounted for 6.2% of bank credit exposures

Chart 1.14

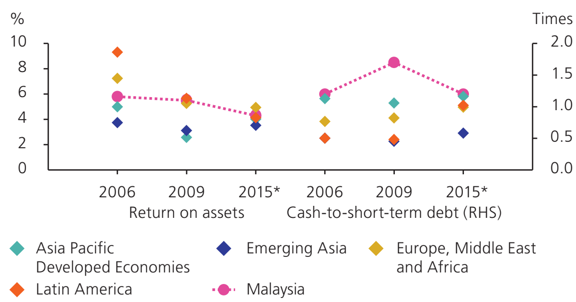
Business Sector: Profitability and Debt Servicing Capacity for Commodity-related Sectors



Overall debt servicing capacity remains supported by sound liquidity

Chart 1.15

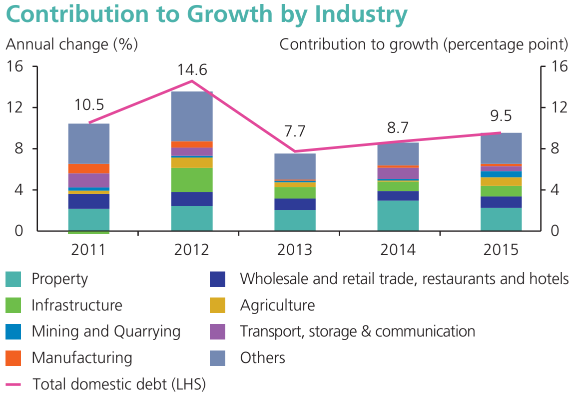
Business Sector: Profitability and Liquidity Indicators



Continued growth in corporate domestic borrowing across diversified sectors...

Chart 1.16

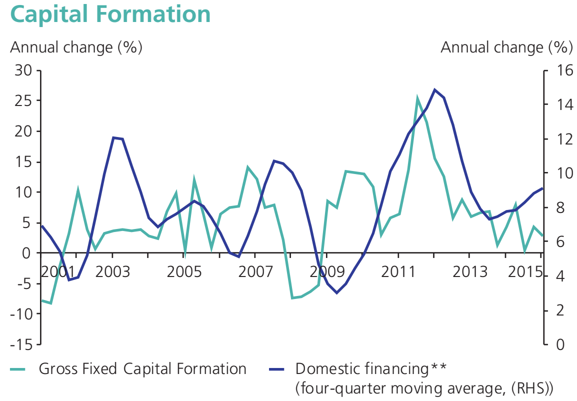
Business Sector: Domestic Debt Growth and Contribution to Growth by Industry



...consistent with domestic economic activities

Chart 1.17

Business Sector: Financing and Gross Fixed Capital Formation



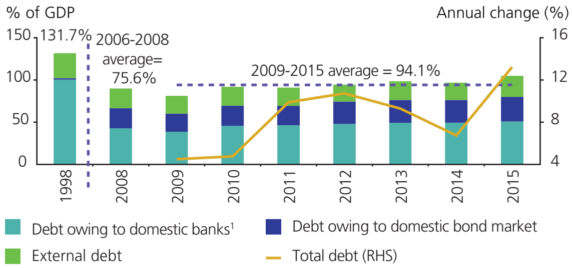
* For Malaysia, data as at first nine months
** Includes outstanding loans from the banking system, outstanding PDS and sukuk

Source: Bank Negara Malaysia, International Monetary Fund, Bloomberg and internal computation

Higher non-financial corporate external debt in 2015 due to exchange rate valuation effects

Chart 1.18

Business Sector: Corporate Debt-to-GDP Ratio

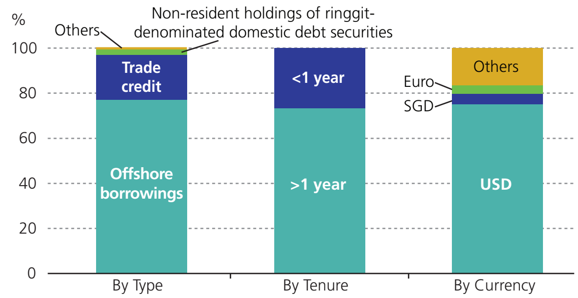


[1] Includes debt owing to locally-incorporated foreign banks

High portion of inter-company loans and longer maturity borrowings reduces liquidity and rollover risks

Chart 1.19

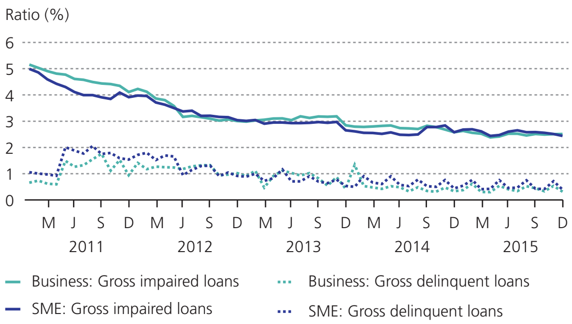
Business Sector: External Debt Profile



Stable overall impairment and delinquency trends amid more challenging business environment

Chart 1.20

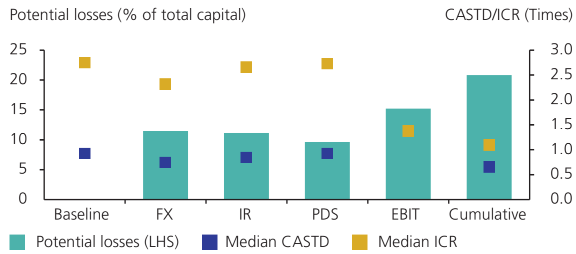
Business Sector: Gross Impaired Loans and Gross Delinquent Loans



Excess capital of banks sufficient to cover more than two times the potential credit losses from large borrowers* under simulated severe shocks

Chart 1.21

Business Sector: Potential Credit Losses for Large Borrowers Under Stress Test

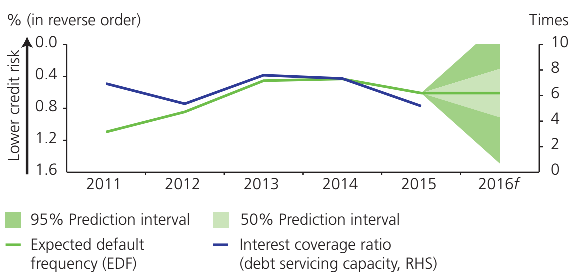


Note: FX: Foreign currency shock
IR: Increase in borrowing costs of RM-denominated loans
PDS: Increase in coupon rate for new corporate bond and sukuk issuances

Overall debt servicing capacity of corporations expected to remain intact despite weaker credit risk outlook in 2016

Chart 1.22

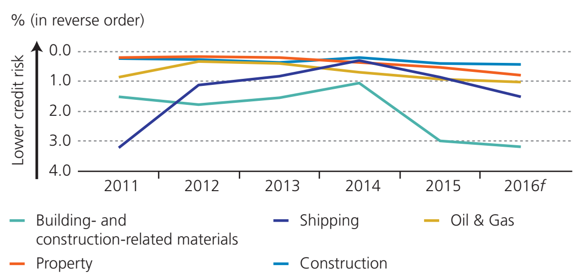
Business Sector: Debt Servicing Capacity and Credit Risk Outlook



Softer outlook for commodity and real estate segments supported by sustained financials (refer to Table 1.5)

Chart 1.23

Business Sector: Credit Risk Outlook for Selected Sectors



f Forecast
* Includes information from latest available financial statements of non-listed large borrowers

Source: Bank Negara Malaysia, Bloomberg, Moody's KMV CreditEdge™ and internal computation currency movements in the more recent period, foreign exchange-related financial derivatives with Malaysian corporations grew significantly by 20.7% to RM74.1 billion in notional terms in 2015.

Sustained overall quality of business borrowings, although some sectors were more affected by domestic and global developments

Against regional comparators, businesses in Malaysia continue to perform reasonably well with a higher share of debt owed by businesses with healthy indicators of leverage and debt servicing capacity. This in turn is reflected in the sound overall quality of business loans in the banking system. The share of aggregate impaired and delinquent business loans, including SME borrowings, remained broadly stable despite more challenging business conditions (Chart 1.20). Businesses that raised debt in the capital markets have also generally maintained their credit standing. The year saw seven downgrades for domestically-rated PDS and sukuk compared to six in the previous year, reflecting company specific weaknesses rather than systemic concerns, and were associated with only 1.8% of total outstanding PDS and sukuk.

Nevertheless, loan performance in some sectors deteriorated in line with economic developments although this had limited impact on overall business loan performance. The share of impaired loans was higher in the real estate, transportation and crude palm oil (CPO) sectors (Table 1.4). Of these, businesses in the real estate sector account for a relatively larger share of banking system exposures and hence have a greater bearing on risks to financial stability. Amid slower sales of new property launches, the debt servicing capacity of larger developers has remained intact, supported by more diverse projects and stronger financial buffers, while some smaller developers and SMEs faced increased challenges in servicing their debt. Despite a moderation in operating margins, the median ICR for corporations in the property segment remained strong at 5.3 times (YTD 2014: 6.6 times). At 1.5%, the ratio of impaired loans in this sector also remained low. In managing the challenges, developers have embarked on

Table 1.4

Business Sector, Banking System: Gross Impaired Loans and Gross Delinquent Loans

	% of Total Domestic Debt[1] Exposure	% of Total Business Loan	Gross Impaired Loans Ratio (%)			Gross Delinquent Loans Ratio (%)		
	2015		2013	2014	2015	2013	2014	2015
Overall			**2.8**	**2.6**	**2.5**	**0.4**	**0.3**	**0.3**
***of which:* SMEs**		**48.7**	**2.7**	**2.6**	**2.4**	**0.5**	**0.4**	**0.4**
Real estate activities	16.8	18.1	0.7	0.7	1.5	0.1	0.1	0.1
Manufacturing	16.5	19.0	6.1	5.0	3.9	0.1	0.1	0.1
Wholesale and retail trade, restaurants and hotels	14.6	19.9	2.0	1.8	1.8	0.4	0.3	0.2
Construction	10.7	11.6	3.1	3.0	2.8	0.3	0.2	0.3
Transport, storage & communication	7.3	6.0	6.2	6.1	6.5	0.9	0.8	0.7
Primary agriculture	6.0	6.8	0.8	0.7	1.0	0.2	0.1	0.03
of which: Palm oil	4.0	4.5	0.8	0.5	1.2	0.1	0.02	0.01
Mining & quarrying	2.5	2.3	2.0	0.4	0.2	0.02	0.03	0.03
of which: Oil & gas[2]	2.2	2.0	2.0	0.3	0.1	0.01	0.01	0.004

[1] Includes business loan/financing, PDS and sukuk
[2] Includes upstream and downstream activities

Source: Bank Negara Malaysia

strategies to focus more on the affordable housing segment, including building smaller units in accessible locations and staggering new launches to improve the take-up rate.

Lower CPO prices contributed to lower share prices of a few palm oil companies and a higher impaired loans ratio of 1.2% (2014: 0.5%). Nonetheless, the profitability and debt servicing capacity of major players in this industry remained sound, with a median ICR of 5.2 times (YTD 2014: 9.5 times). Bank credit exposures to the CPO segment accounted for 4% of total credit exposures of the banking sector. Similarly, the O&G sector, particularly those operating in the upstream engineering, procurement, construction and commissioning (EPCC) segments, faced weaker profitability with little reprieve from declining global oil prices. The impact on the O&G sector was buffered by the reasonably high median ICR which was sustained at about 4.4 times. The exposures of banks to the O&G sector were small at 2.2% of total credit exposures to businesses. Lower freight demand, partly attributed to the O&G sector, affected the land and shipping transportation segments – particularly the latter which was also affected by global overinvestment in shipping capacity in recent years. The transport sector accounted for 3.9% of total bank credit exposures to businesses.

Spillovers from business sectors that are more exposed to demand from PR China – comprising mainly the electrical and electronics, petroleum and chemical products, commodities (CPO, O&G, metals and rubber) and rubber products – are assessed to be manageable. Cumulatively, bank exposures to these affected sectors accounted for about 16% of total credit exposures to businesses, where the median ICR across the sectors were comfortably between 4.4 times and 26.5 times, remaining above prudent thresholds, except for the steel industry which faced legacy structural issues and stiff competition from PR China. Based on stressed PDs and LGDs under the adverse scenario of a simulated economic recession, the potential losses from exposures to these sectors, including the real estate segment which faces a weaker credit outlook due to domestic challenges, were estimated to amount to RM11.7 billion or 4.8% of total bank capital (Table 1.5).

Aggregate debt servicing capacity of large borrower groups continues to be supported by stable and reasonably healthy cash buffers

Within the business sector, the financial condition of large borrowers has a material bearing on the stability of financial institutions given the significance of exposures to such borrowers. In 2015, exposures of Malaysian financial institutions to large borrower groups, defined as corporations with credit exposures (including direct financing and holdings of PDS and sukuk) exceeding RM2 billion with Malaysian financial institutions, were lower at

Table 1.5

Business Sector, Banking System: Potential Losses Based on Severe Assumptions on Probability of Default (PD) and Loss Given Default (LGD) for Selected Sectors

	ICR (Times)	Stressed PD (%)	Stressed LGD (%)	Potential losses (RM billion)	% of banking system capital
Real estate activities	5.3	11.3	55.0	6.5	2.7
Palm oil	5.2	11.6	55.6	1.6	0.7
Metal	1.0	10.9	54.3	1.6	0.6
Rubber products	26.5	8.3	48.7	0.7	0.3
Oil and gas	4.4	8.3	48.7	0.6	0.2
Electrical and electronics	13.3	8.3	48.7	0.4	0.2
Chemical- and petroleum-related products	11.3	8.3	48.7	0.3	0.1
Total				**11.7**	**4.8**

Source: Bank Negara Malaysia, Bloomberg and internal computation

28.3% (2014: 30.1%) of total business exposures of banks and DFIs, and 80.8% (2014: 84.2%) of business exposures of insurers and takaful operators. The aggregate debt servicing capacity of the 43 large borrower groups monitored by the Bank continues to be supported by reasonably healthy cash buffers. As at end-September 2015, the median CASTD ratio for the large borrower groups remained above one time, albeit lower from the previous year at 1.2 times (YTD 2014: 1.6 times), while the median ICR has remained stable at 4.6 times. Credit exposures to large borrower groups with an ICR below the median declined to 12.3% (2014: 12.7%) of total business exposures of banks and DFIs, and 24.3% (2014: 26.1%) of business exposures of insurers and takaful operators. Among these borrowers, credit exposures to groups with relatively weaker ICR and CASTD or with a higher concentration of external debt remain low. Aggregate exposures of Malaysian financial institutions to 16 large borrower groups with a higher concentration (>30%) of FCY borrowings accounted for about 11% of total credit exposures to businesses. Three out of these 16 large borrower groups have relatively weaker ICR and CASTD, with a combined debt owed to Malaysian financial institutions that accounted for less than 3% of total credit exposures to businesses.

These conditions continue to contain risks to financial stability, with the majority of large borrowers expected to be able to support debt repayments in the event of a substantial decline in profitability, further weakening of the ringgit or higher borrowing costs. Based on stress tests conducted by the Bank on the 43 large borrower groups, cumulative potential credit losses from simulated severe shocks (up to 50% depreciation in the ringgit since end-2014, 100 basis point increase in borrowing costs for loans, PDS and sukuk, and a 50% decline in operating profit) would remain manageable, with excess capital buffers of banks sufficient to cover more

Table 1.6

Debt Management and Resolution Mechanisms in Malaysia

A comprehensive and integrated set of institutional arrangements for debt resolution is vital to facilitate early rehabilitation of potentially distressed debt thus avoiding widespread credit defaults. Cognisant of the specific needs and characteristics of the diverse set of borrowers, the Bank has established separate debt management and resolution mechanisms for households, SMEs and large corporations.

Drawing upon experiences from the Asian Financial Crisis (AFC), these voluntary mechanisms provide a platform for borrowers and creditors to work out feasible, market-driven debt restructuring without resorting to lengthy and costly legal proceedings. This three-pronged approach aims to: (i) support balance sheet and cash flow restoration whilst avoiding premature failure of viable borrowers; (ii) improve the speed and value of debt recovery; and (iii) minimise potential losses to financial institutions, which in turn preserves the continuity of the financial intermediation process and economic activity. The flexible nature of each mechanism also allows for the necessary scale-up in terms of scope, size and focus, depending on the extent of the issue or the prevailing operating environment.

	Credit Counselling and Debt Management Agency (AKPK)	Small Debt Resolution Scheme (SDRS)	Corporate Debt Restructuring Committee (CDRC)
Establishment date	2006	2003	1998-2002, re-established in 2009
Objectives	Provide free counselling to individuals on debt and financial management and support debt restructuring	Facilitate debt resolution and restructuring for businesses that have difficulties in meeting their financing obligations from multiple lenders	
Target group	Individuals	SMEs	Viable corporate borrowers with debt of RM30 million or more with multiple lenders
Scope of services provided	• Debt management programme (DMP) • Financial education programmes • Counselling and advice on financial management	• Debt restructuring/ rescheduling • Provide new financing, where appropriate	• Debt restructuring/ rescheduling • Facilitate provision of new financing by lenders, where appropriate

than two times the estimated losses (Chart 1.21). Potential losses are further mitigated by sound underwriting and risk management standards by banks, alongside conservative loan loss provisioning practices, in managing exposures to the business sector. The more comprehensive and granular limits to manage exposures to single counterparties have reduced credit concentrations arising from financial and economic interdependencies, in line with strengthened prudential requirements implemented by the Bank in 2013. Banks also have dedicated remedial and recovery resources to assist viable borrowers that are facing temporary operational challenges (Table 1.6).

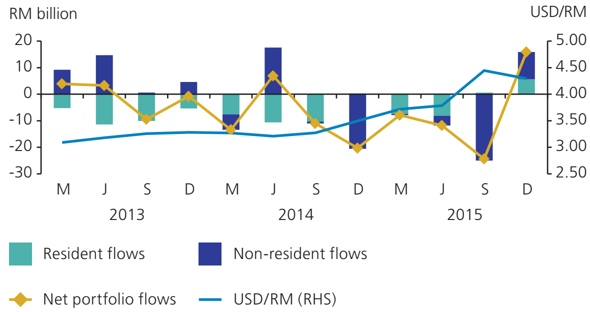
Factors affecting the credit risk outlook for businesses in the coming year will continue to reflect uncertainties in global demand, exchange rate volatility and movements in commodity prices. The overall expected default frequency (EDF) for Malaysian corporations, based on the 9th and latest generation of the Moody's Analytics Public Firm EDF model, increased to 0.61% (2014: 0.43%) at end-2015 indicating a weaker credit risk outlook (Chart 1.22). At this level, the EDF still remains significantly lower than the peak of 3.44% observed during the GFC period, with the debt servicing capacity of Malaysian corporations expected to remain broadly intact in 2016. Industries with the largest credit exposures to the banking system generally recorded low EDF levels, while relatively strong financials continue to support the softer outlook for the O&G, construction and property segments (Chart 1.23). The credit outlook remains challenging for the building and construction materials industry, reflecting continuing competitive and productivity challenges, while overcapacity continues to weigh on the performance of companies in the shipping industry.

MANAGING RISKS FROM FINANCIAL MARKET VOLATILITY

The domestic financial markets experienced several periods of heightened volatility in 2015. Global uncertainties emanating from the prolonged slide in crude oil prices, weak economic data from PR China and the timing of the US Federal Reserve interest rate normalisation heavily influenced investor sentiment and behaviour throughout the year, particularly in the third quarter. Domestic developments dominated by concerns over the impact of lower commodity

Chart 1.24

Financial Market: Net and Gross Portfolio Flows and Ringgit Exchange Rate Movement



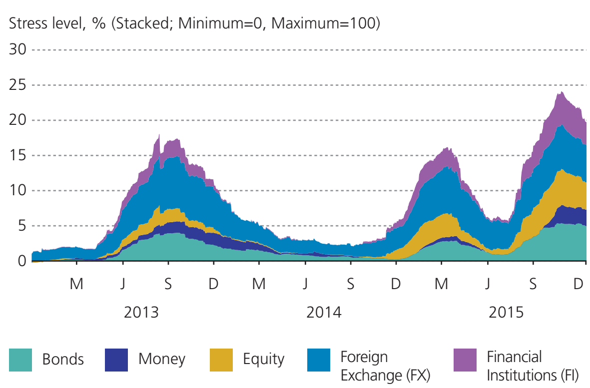
Source: Department of Statistics, Malaysia

prices on Malaysia's fiscal outlook further affected sentiment. Portfolio outflows recorded during the year were largely driven by a broader retreat of global funds from emerging markets and commodity-producing economies, and overseas investments by domestic institutional investors as part of portfolio diversification strategies mainly in the first half of the year. For the year as a whole, net porfolio outflows by non-residents increased to RM19 billion (2014: net outflows of RM10.4 billion). Including resident investors, net portfolio outflows were lower at RM28.2 billion (2014: net outflows of RM38.5 billion) for 2015, mainly due to net inflows in the final quarter (Chart 1.24).

Market volatility remained elevated throughout most of the year (Chart 1.25). As in past periods

Chart 1.25

Financial Market: Financial Market Stress Index (FMSI)

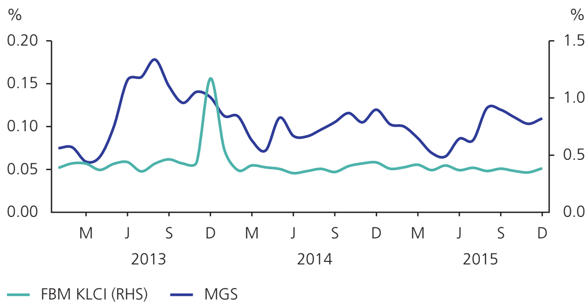


Note: 1. The FMSI is a risk monitoring tool for the financial market that is developed based on the European Central Bank's (ECB's) Composite Indicators of Stress Index (CISS). It is constructed from indicators of volatility in five components of the domestic financial markets - the foreign exchange (FX), equity, bond, money markets and financial institutions (FIs).
2. The stress level at a specific date is expressed as a value between 0 and 100, which signifies the lowest to highest stress level.

Source: Bloomberg and internal computation

Chart 1.26

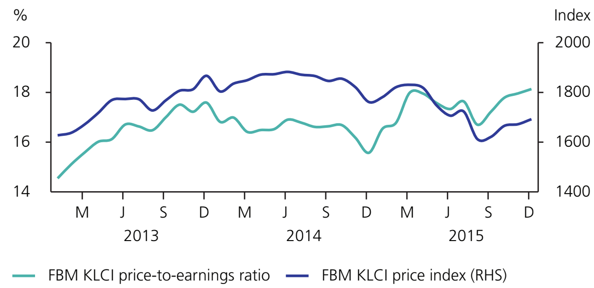
Financial Market: Average Bid-Ask Spreads of FBM KLCI and MGS (% of Mid-price)



Source: Bloomberg, Reuters and internal computation

Chart 1.28

Financial Market: FBM KLCI Price Index and Price-to-earnings Ratio



Source: Bloomberg

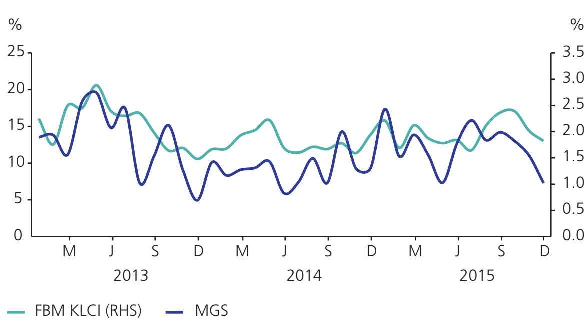
of portfolio outflows, Malaysian financial institutions and large domestic institutional investors provided the necessary support and liquidity to the domestic financial markets, containing volatility levels from overshooting. The domestic financial markets thus remained orderly and facilitative of financial intermediation during the year. Importantly, market liquidity, as measured by the average bid-ask spreads and turnover ratios for Malaysian Government Securities (MGS) and FBM KLCI, was preserved (Chart 1.26 and Chart 1.27). The significant fall in oil prices coupled with weak investor sentiment exerted substantial downward pressure on the ringgit which depreciated 18.6% during the year. This was compounded by the more bearish sentiment in the non-deliverable forward market which added to volatility in the USD/RM exchange rate. The FBM KLCI also ended the year weaker at 1,692.5 points (2014: 1,761.3 points), with the price-to-earnings ratio of the FBM KLCI increasing to 17.8 times (2014: 16.3 times) as corporate earnings moderated (Chart 1.28). At this level, equity valuations were comparable to that of regional peers (Thailand: 17.2 times; Philippines: 20.9 times; Indonesia: 25.7 times), although elevated relative to the long-term historical average (2000-2015) of 16.7 times.

Domestic financial markets remain orderly and facilitative of financial intermediation amid persistent volatility

The share of MGS held by non-residents remained fairly stable at 47.7% (2014: 44.1%) (Chart 1.29), indicating sustained investor interest in Malaysia. This was despite higher market-perceived sovereign risk, as reflected in the credit default swap spread for Malaysia which increased along with that for other regional countries, particularly

Chart 1.27

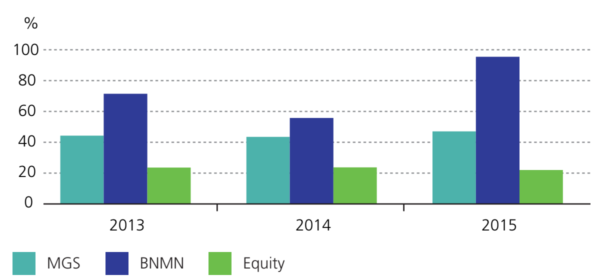
Financial Market: FBM KLCI and MGS Monthly Turnover Ratio



Source: Bloomberg

Chart 1.29

Financial Market: Non-resident Holdings of MGS, BNMN and Equity

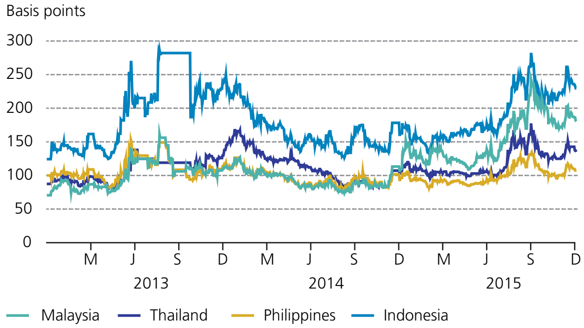


Holdings of MGS and BNMN are quoted as percentage of total outstanding while holdings of equity is quoted as percentage of total market capitalisation

Source: Bursa Malaysia, Bank Negara Malaysia and internal computation

Chart 1.30

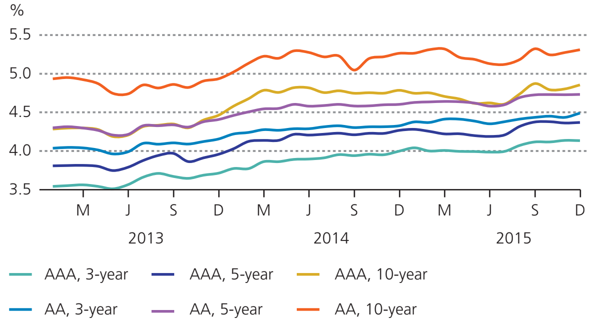
Financial Market: 5-year Credit Default Swap Spread



Source: Bloomberg

Chart 1.32

Financial Market: PDS Yields



Source: Bank Negara Malaysia

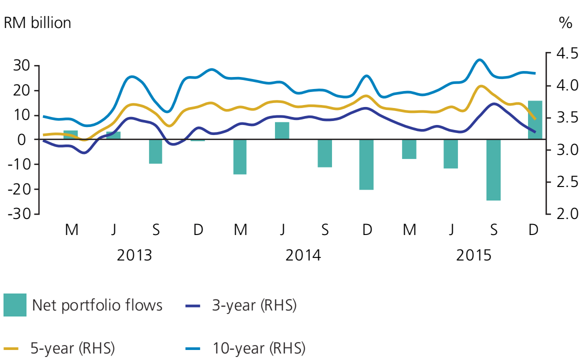
commodity-exporting economies (Chart 1.30). Yields on MGS trended higher during the year but eased towards year-end as demand for securities in the shorter tenures strengthened (Chart 1.31). Correspondingly, credit spreads for similar tenures of PDS widened towards year-end, but remained at levels that continued to be supportive of private sector fund raising activity with total new issuances (including sukuk) of RM128.8 billion in 2015 (all issuers including financial institutions) (Chart 1.32).

In response to the bouts of volatility in the financial markets, banks downsized the treasury portfolios by 9.4% to RM359 billion. This was largely driven by maturing Bank Negara Malaysia notes and lower holdings of MGS which declined by 53.4% to RM43.9 billion, mainly in the shorter tenures as some banks took the opportunity to realise gains amid continued firm demand from non-resident investors. These were replaced by bank holdings of Government Investment Issues which increased by 7.9% to RM88.2 billion to maintain overall holdings in high-quality liquid assets to meet the Basel III Liquidity Coverage Ratio (LCR) requirement which came into effect on 1 June 2015.

Active management of market risk exposures by banks contained the impact of heightened volatility in the financial markets (Chart 1.33). Total capital allocated against interest rate risk in the trading book was stable at 1.2% (2014: 1.4%) of banks' total capital, while exposures to equity risk remained minimal at less than 1% of total capital. The aggregate FCY exposures of banks fluctuated in tandem with more volatile movements in exchange rates and higher volume of hedging transactions with businesses. Overall foreign exchange (FX) risk exposures increased to 6.1% (2014: 4.7%) of total capital, remaining at levels consistent with prudent internal value-at-risk and loss limits set by individual banks for each

Chart 1.31

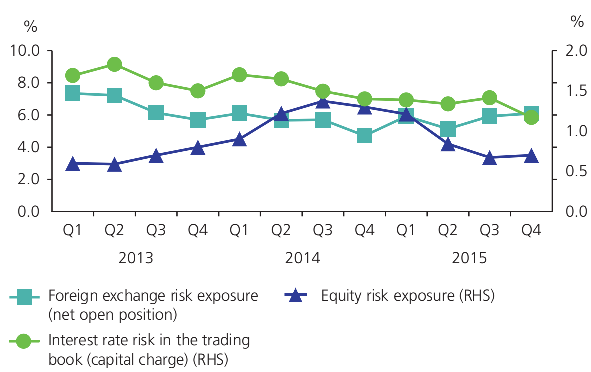
Financial Market: MGS Yields and Quarterly Net Portfolio Flows



Source: Bank Negara Malaysia and Department of Statistics, Malaysia

Chart 1.33

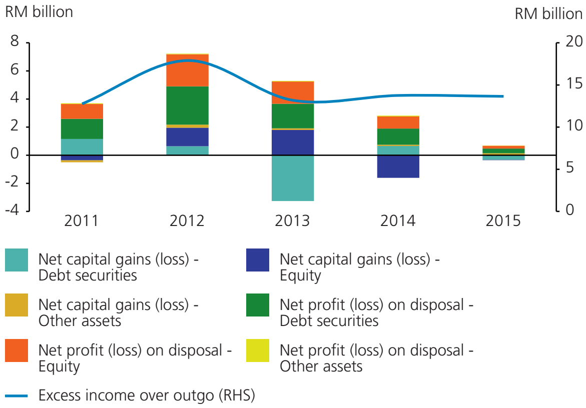
Banking System: Equity, Foreign Exchange and Interest Rate Risks (% of Total Capital)



Source: Bank Negara Malaysia

Chart 1.34

Life Insurance and Family Takaful Sector: Relationship between Profitability and Investment-related Activities



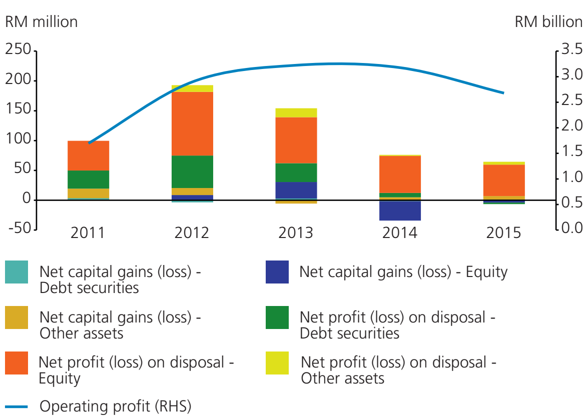
Source: Bank Negara Malaysia

significant currency and all currencies combined. Banks also continue to draw from results of regular internal stress tests which are used to set risk limits and determine portfolio management strategies and capital planning activities. Overall, banks recorded higher net gains totalling RM5.1 billion (2014: RM4 billion) from the trading and investment portfolio, which accounted for 17.6% (2014: 12.6%) of total profit before tax. Net gains from derivatives contributed to 64.6% (2014: 39.3%) of total trading and investment gains.

Insurers (including takaful operators), particularly life insurers, were more affected by movements

Chart 1.35

General Insurance and General Takaful Sector: Relationship between Profitability and Investment-related Activities



Source: Bank Negara Malaysia

Chart 1.36

Insurance Sector: Market Risk Composition

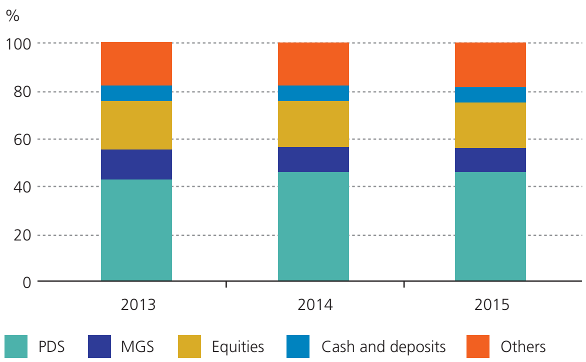
Source: Bank Negara Malaysia

in the domestic equity market (Chart 1.34 and Chart 1.35). Compared to the previous year, the life insurance and family takaful industry recorded a small net profit on disposal and revaluation of investments amounting to RM0.1 billion (2014: net profit of RM0.3 billion). Some life insurers took the opportunity to pick up selected stocks at lower equity prices which resulted in an expansion in aggregate equity holdings by 5.7% (2014: +0.2%). Correspondingly, capital allocated for equity investments increased slightly to account for 7.7% (2014: 7.6%) of total capital available (Chart 1.36). Under conditions of heightened market volatility, the Bank intensified its supervisory focus on the internal oversight arrangements and controls over investment management and strategy that are in place within life insurers. On the whole, insurers have remained fairly cautious. Insurers' equity investments continue to be well-diversified across economic sectors. This mitigated the impact of weaker performance in some sectors, including the O&G sector which represents less than 5% of total exposures of insurers to equities. Consistent with their liability structures, life insurers' investments remained largely in the form of long-term fixed income assets (Chart 1.37 and Chart 1.38). This mainly comprised PDS rated AA and above which accounted for close to 70% of the overall PDS portfolio.

Aggregate surplus liquidity in the domestic financial system placed with the Bank remained high at RM205.1 billion (2014: RM269.9 billion) at end-2015. Notwithstanding the more moderate expansion in deposits, overall financial intermediation activities continued to be firmly supported by the large and stable deposit base of banks which accounted for 70% of banks' total funding base. Growth in household deposits has remained stable, while corporate deposits expanded at a slower pace. This was attributed

Chart 1.37

Life Insurance and Family Takaful Sector: Assets Composition

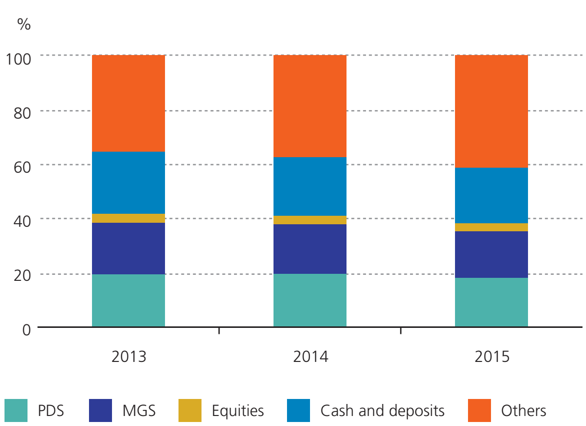


Source: Bank Negara Malaysia

to a combination of factors, including higher investments abroad for regional operations of domestic business conglomerates, higher payments for imports as a result of the weaker ringgit and the reclassification of accounts from deposits to investment accounts in accordance with the Islamic Financial Services Act (IFSA) 2013. The profile of bank deposits remains largely unchanged (Chart 1.39), although recent heightened competition in the deposit markets has led to greater divergence in the distribution of household and corporate deposits across banks. Malaysian banks are not dependent on non-resident deposits which only accounted for 4.1% (2014: 3.8%) of total deposits.

Chart 1.38

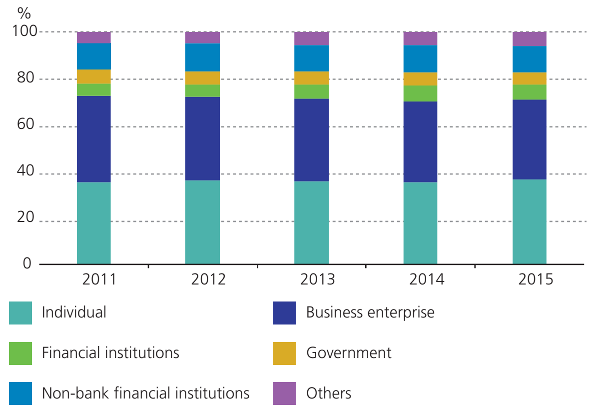
General Insurance and General Takaful Sector: Assets Composition



Source: Bank Negara Malaysia

Chart 1.39

Banking System: Composition of Deposits by Holder



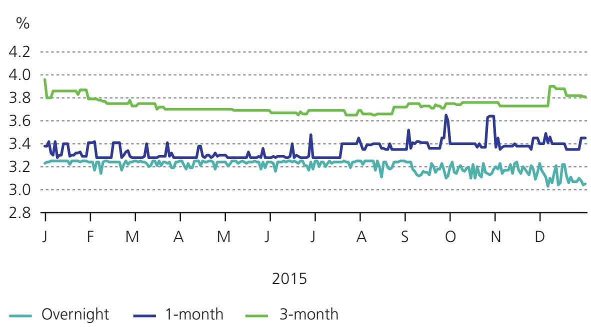
Source: Bank Negara Malaysia

Loan-to-deposit ratio (LDR) has become less relevant over the last few years following the growth of the Malaysian financial market

Over the past few years, the more active management of deposit placements by a number of large corporations has intensified competition for deposits. This in turn drove rates in the interbank market higher, particularly towards the year-end due to pressures faced by banks to boost their loan-to-deposit ratios (LDR) (Chart 1.40). The LDR remains a closely tracked indicator by financial analysts and rating agencies, despite its diminishing relevance over the years with greater depth of Malaysia's financial system, and as banks

Chart 1.40

Financial Market: Ringgit Interbank Rates



Source: Bank Negara Malaysia

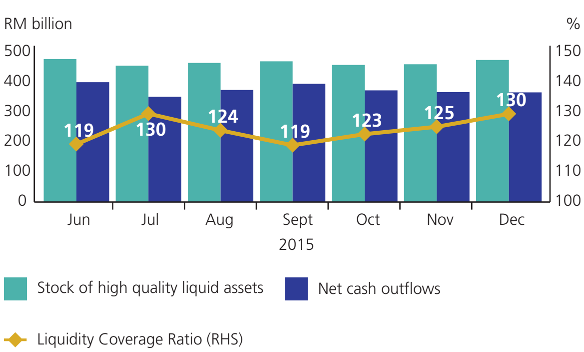
continue to diversify their funding structure. While deposits remain the primary funding source for Malaysian banks, banks have increasingly tapped the capital market to raise medium- and long-term funds. Such funds expanded by 23.2% (2014: +18.2%) to RM107.2 billion to account for a larger share of 4.6% (2014: 3.9%) of total funding. This has contributed to the lengthening of the funding profile of banks, thus narrowing maturity mismatches. Taking the broader funding base of banks into consideration, the loan-to-fund (LTF) ratio (including funding from debt instruments) was relatively stable at 83% (3Q 2015: 82.8%; 2014: 82.1%). The adjusted LDR (which excludes financing funded specifically by Islamic investment accounts, consistent with the exclusion of investment accounts from deposits) was similarly stable at 88.7% (3Q 2015: 88.3%; 2014: 86.7%).

The loan-to-fund (LTF) ratio better captures the more diversified funding structure and broader funding base of banks

The aggregate funding cost for banks rose by 15 basis points during the year, in line with the higher average cost of deposits which increased to 2.53% (2014: 2.38%). The provision of liquidity through the Bank's monetary operations (including the reverse repo facility) which amounted to about RM40 billion during the year, and more recently, the lowering of the Statutory Reserve Requirement from 4.00% to 3.50% effective 1 February 2016, have preserved adequate liquidity in the banking

Chart 1.41

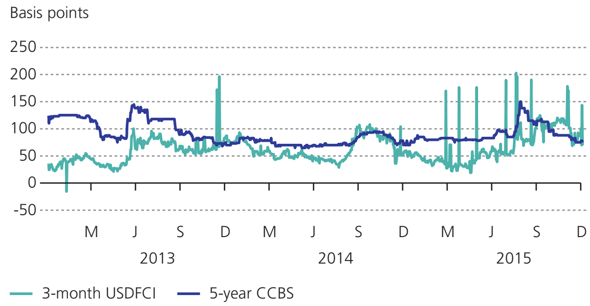
Banking System: Basel III Liquidity Coverage Ratio



Source: Bank Negara Malaysia

Chart 1.42

Financial Market: 3-month USD Funding Cost Indicator (USDFCI) and 5-year USD/RM Cross-currency Basis Swap Spread (CCBS)



Source: Bank Negara Malaysia

system. As at end-2015, the banking system LCR stood at 130% (Chart 1.41), with most banks reporting levels well above both the 60% and 70% minimum requirements that are applicable from 1 June 2015 and 1 January 2016 respectively.

On-shore USD liquidity conditions were tighter during the year, particularly in the third quarter of the year when the largest portfolio outflows were recorded. The Bank's 3-month USD Funding Cost Indicator (3M USDFCI) and 5-year cross currency basis swap spreads (CCBS) increased in August 2015 to levels last observed during the taper tantrum in mid-2013, but have since eased following the resumption of non-resident inflows in the final quarter (Chart 1.42). FCY funding of the banks remained small at 16.3% (2014: 14%) of total liabilities. Of this, FCY-denominated deposits only accounted for 8.4% of total deposits accepted. This remains supported by prudent liquidity management practices by banks, which include the lengthening of the maturity structure of banks' liabilities and diversifying funding sources to include stable medium-term capital market funding.

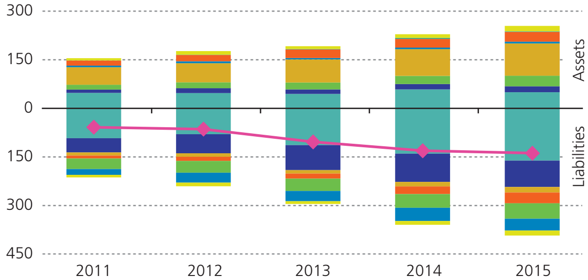
MANAGING CONTAGION RISK FROM EXTERNAL EXPOSURES AND OVERSEAS OPERATIONS

Counterparty risk from financial institutions' external exposures

External exposures of Malaysian banks expanded in line with the growth in domestic banks' overseas operations, the continued strong and stable presence of locally incorporated foreign banks (LIFBs) in Malaysia, and the regionalisation

Chart 1.43

Banking System: External Assets and Liabilities



Note: - Banking system includes entities operating in LIBFC
- External liabilities: External debt (interbank + deposits and nostro + loans + debt securities) + capital funds + securities under custody + others

Source: Bank Negara Malaysia

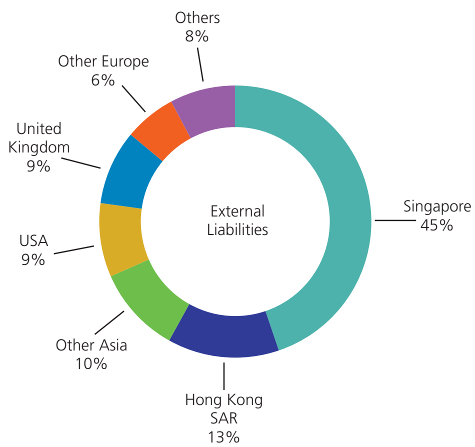
of trade and investment activities of Malaysian non-financial corporations. Both external assets and liabilities of Malaysian banks (including entities in the Labuan International Business and Financial Centre (LIBFC)) increased during the year (Chart 1.43). Claims by Malaysian banks on all external counterparties grew by 11.1% (2014: +19.3%) to RM254.1 billion, outpacing the increase in external claims on Malaysian banks which grew by 9.2% (2014: +21.8%) to RM392.8 billion. The slower growth in external liabilities largely reflected the more moderate expansion of banks' external debt (+11.2%; 2014: +22.2%) which accounts for about three quarters of external liabilities. On a net basis, the banking system recorded a slightly higher net external liabilities position of RM138.7 billion (2014: RM131 billion). The external exposures of the banking system are mainly denominated in the US dollar and with counterparties largely based in Singapore and Hong Kong SAR (Chart 1.44 and Chart 1.45).

External assets and liabilities of banks expanded in line with growing overseas operations, centralised management of liquidity and the continued strong presence of LIFBs in Malaysia

The net external liabilities position of the banking system reflects the net exposures of LIFBs. Risks to the Malaysian banking system from these external claims on LIFBs are limited given that a significant share (28%) of such claims is represented by capital investments in the form of equity and retained earnings of LIFBs operating in Malaysia (Chart 1.46). These LIFBs, mainly based in Singapore and UK, have long-established and significant operations in Malaysia which

Chart 1.44

Banking System: Composition of External Liabilities by Location

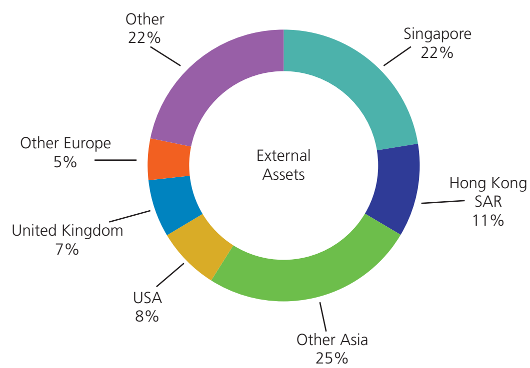


Note: Banking system includes entities operating in LIBFC

Source: Bank Negara Malaysia

Chart 1.45

Banking System: Composition of External Assets by Location

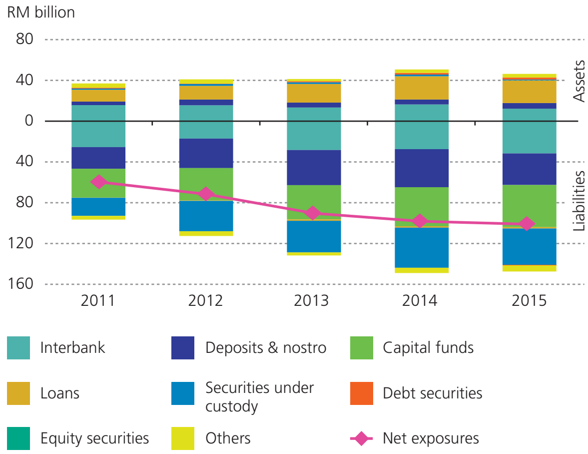


Note: Banking system includes entities operating in LIBFC

Source: Bank Negara Malaysia

Chart 1.46

Banking System: External Assets and Liabilities of LIFBs

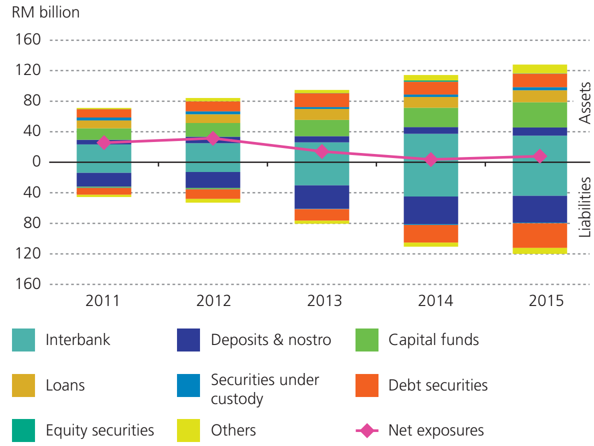


Note: Banking system includes entities operating in LIBFC

Source: Bank Negara Malaysia

Chart 1.47

Banking System: External Assets and Liabilities of DBGs



Note: Banking system includes entities operating in LIBFC

Source: Bank Negara Malaysia

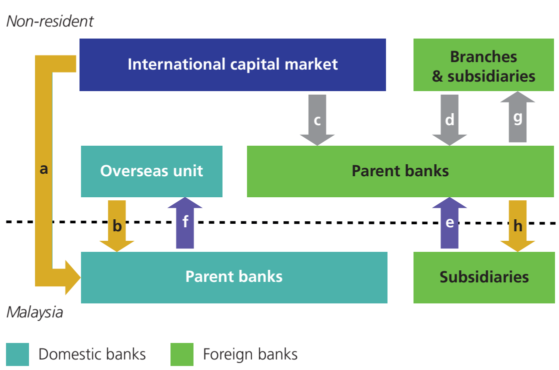
continue to record healthy profits. The other major components of LIFBs' external liabilities consist of securities held under custody (24%) and interbank placements by parent and sister companies (18.6%), which present lower credit and liquidity risks to the domestic operations. Other deposit placements from non-residents remained stable at about 21% of LIFBs' external liabilities.

In contrast, domestic banking groups (DBGs) continued to report a net external assets position which increased further to RM7.9 billion (2014: RM3.5 billion). Part of this reflected higher valuations in ringgit terms from capital investments in overseas subsidiaries of DBGs (Chart 1.47). The bulk of DBGs' external liabilities directly support their overseas operations, including lending and investment activities which are largely funded by local currency deposits. Interbank placements of DBGs have also increased, notably in the last three years, as a result of centralised liquidity operations of DBGs. The higher volume and value of FCY derivatives contracts, mainly to facilitate FX hedging by Malaysian non-financial corporations, further contributed to the position. The impact on FX risk exposures of DBGs, however, remained limited as reflected in their stable FX net open positions of 6.1% of total capital.

A large part of the increase in external exposures (both assets and liabilities) of banks has been attributed to centralised liquidity management practices among DBGs that operate across jurisdictions (Diagram 1.1).

Diagram 1.1

Banking System: Illustration of Centralised Liquidity Management



- Liquidity gapping positions are managed centrally at the headquarters to optimise relative funding advantages across a group's operations.
- This allows for the effective pooling *(a,b,c,d,e)* and redistribution *(f,g,h)* of excess funds across local and overseas entities.
- DBGs have started to raise more longer term FCY funding, via issuances of subordinated debt and structured notes in major currencies, in international capital markets, mainly in Hong Kong and Singapore, to better manage maturity and currency mismatches in their cross-border operations.
- LIFBs have benefitted from cheaper and longer term FCY funding raised through their parent and sister banks in foreign capital markets to mitigate currency and maturity risks in the FCY loan portfolios.

Source: Bank Negara Malaysia

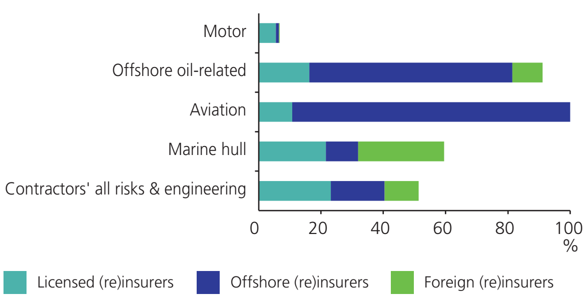
As at end-2015, overall external claims by Malaysian banks accounted for 10.8% (2014: 10.3%) of total banking system assets. Based on the Bank's network contagion analysis of cross-border exposures of Malaysian banks to major banking counterparties overseas, the impact on the domestic banking system from events of distress occurring in the banking systems of these counterparties continues to be limited. The simulated contagion impact arising from a hypothetical banking system distress scenario originating from Singapore, where Malaysian banks have the largest exposures, was only felt in the third contagion round (refer to box article on 'External Connectivity and Risk of Contagion to the Malaysian Banking System' in the 2013 Report).

Increase in short-term external exposures of banks mainly arose from interbank placements by related entities as part of centralised liquidity management operations

External claims by Malaysian insurers (including takaful operators) are predominantly in the form of general reinsurance exposures. Total reinsurance ceded by general insurers amounted to RM4.9 billion at the end of 2015. This represented 30.9% (2014: 29.5%) of the total available capital of all general insurers and mainly related to large and specialised risks in the aviation, offshore oil-related, marine hull and engineering business classes (Chart 1.48). The bulk of overseas reinsurance exposures were to US and European (re)insurers headquartered in Germany and the UK (Chart 1.49). Counterparty risks remained low as the major global (re)insurers continue to maintain strong ratings and sound financial positions despite lower profits due mainly to the more volatile investment performance during the year. With continued excess capacity in the global reinsurance market, overall (re)insurance rates are expected to remain soft in 2016. Insurers have generally remained quite cautious in expanding their investments abroad, controlling such exposures within relatively low internal investment limits and focusing on the more liquid equity markets in Asia (Chart 1.50). While investments abroad have increased at a faster pace in the last two years, these remain a small share of less than 5% of insurance fund assets or 13.3% of the industry's capital base.

Chart 1.48

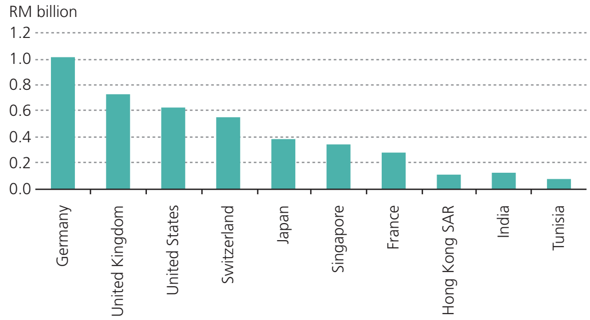
Insurance and Takaful Sector: Reinsurance Ceded Ratio



Source: Bank Negara Malaysia

Chart 1.49

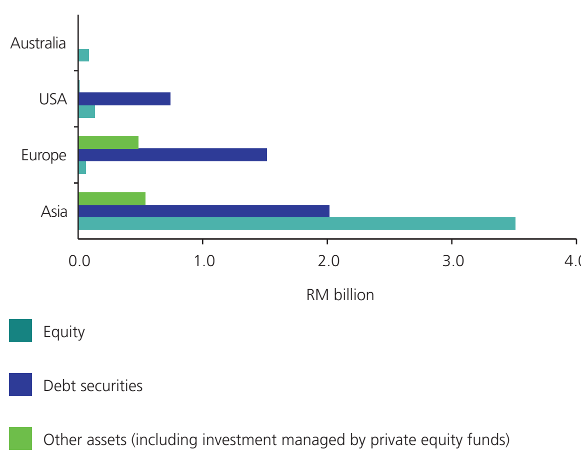
Insurance and Takaful Sector: Foreign-Based Reinsurance Exposure by Major Countries



Source: Bank Negara Malaysia

Chart 1.50

Insurance and Takaful Sector: External Investment Exposures by Region



Source: Bank Negara Malaysia

Overseas operations of domestic banking groups

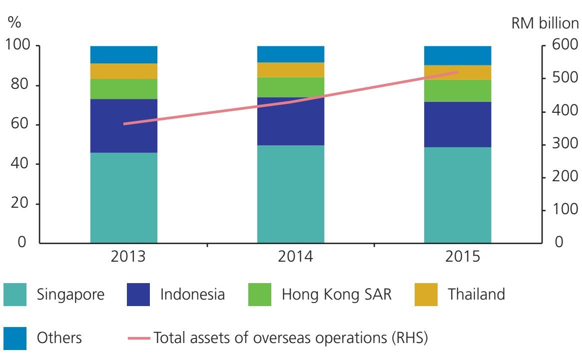
DBGs continued to expand their regional footprint during the year. On an annual basis, total assets of overseas subsidiaries and branches of DBGs (overseas assets) grew further by 32.8% to RM521.6 billion as at end of the third quarter of 2015 to account for a higher share of total assets of DBGs of 22.8% (2014: 20.7%). Discounting FX valuation effects from the weaker ringgit, overseas assets of DBGs expanded annually by 9.5% (2014: +18.8%). Loans, and investments in government securities and investment-grade PDS issuances, continue to represent the bulk of DBGs' overseas assets, accounting for 66.2% and 13.8% of total overseas assets respectively. Across DBGs, overseas assets represent between 0.1% and 35.4% of total assets of individual DBGs, the bulk of which is concentrated in Singapore (48.5%) and Indonesia (23.2%) (Chart 1.51).

Notwithstanding the increasing significance of overseas operations to the performance of DBGs, risks to the Malaysian banking system remain contained. The overseas operations of DBGs are mainly focused on traditional lending activities and largely funded by local currency deposits (Chart 1.52). Based on the Bank's on-site reviews and discussions with host authorities at supervisory colleges organised by the Bank, DBGs have also continued to observe sound risk management and provisioning practices at their overseas branches and subsidiaries. This has been reinforced by strengthened group-wide risk policies and oversight arrangements, including more comprehensive global stress tests, commensurate with the growing size of overseas operations. As a result, the overseas operations of DBGs continued to perform well, contributing between 10% and 21% to overall group profits (2014: between 7.4% and 28.8%) of individual DBGs.

In Singapore and Indonesia where DBGs have the largest operations, retail and SME loans represent more than half of DBGs' credit exposures (Chart 1.53). The retail loans are mainly concentrated in the mortgage, automobile and personal financing segments (Chart 1.54). Overall loan quality

Chart 1.51

Banking System: Asset Composition of Overseas Operations of DBGs

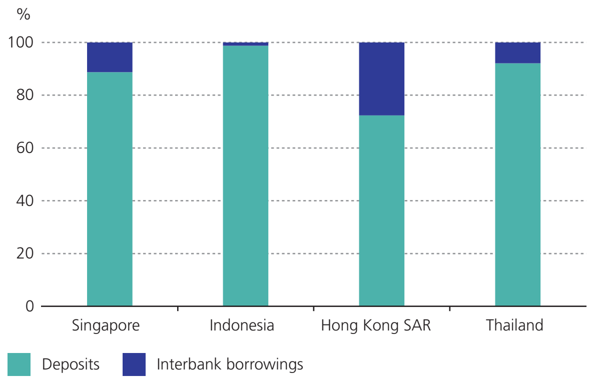


Note: Data as at end 3Q 2015
Banking system includes entities operating in LIBFC

Source: Bank Negara Malaysia

Chart 1.52

Banking System: Funding Structure of Selected Overseas Operations

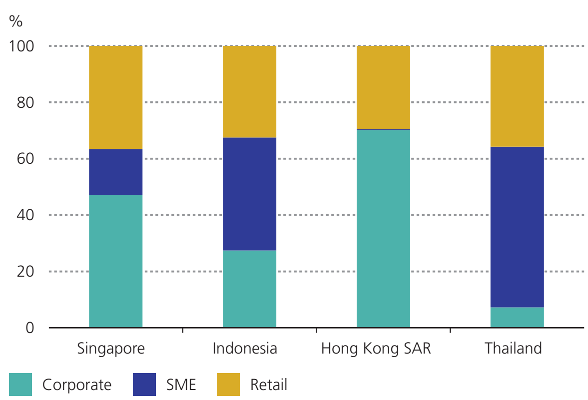


Note: Data as at end 3Q 2015
Banking system includes entities operating in LIBFC

Source: Bank Negara Malaysia

Chart 1.53

Banking System: Loan Composition of Selected Overseas Operations



Note: Data as at end 3Q 2015
Banking system includes entities operating in LIBFC

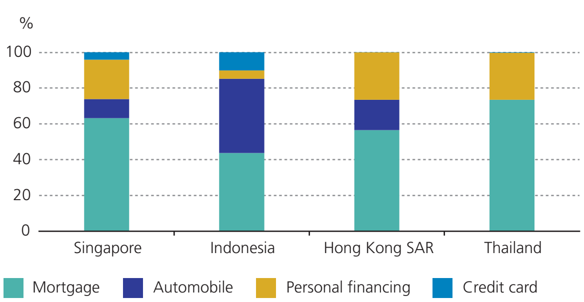
Source: Bank Negara Malaysia

has remained broadly intact. The median gross impaired loans ratio was maintained at below 1% although the distribution across individual DBGs was wider with some DBGs recording higher impairment ratios compared to the previous year (Chart 1.55). This reflected higher credit risks on SME and business loans to sectors that are more affected by the slower demand from PR China. DBGs have already set aside provisions for such potential credit losses. The capital ratios of the large overseas subsidiaries of DBGs remained strong, ranging between 9.2% and 19.8% (2014: between 11% and 17.4%). These ratios already reflect strengthened capital adequacy requirements in some economies which have implemented Basel III standards.

Risks and developments in the overseas operations of DBGs are captured in the Bank's consolidated supervision framework and stress tests. Regular information reported by the DBGs on the performance and risk profile of overseas operations, and the Bank's periodic on-site examinations on these entities, enable the Bank to identify the impact on the financial positions of Malaysian banks arising from any need to provide capital or liquidity support for overseas operations. Overall, healthy level of capital and adequate liquidity buffers were maintained in each jurisdiction, as banks continue to actively manage interdependencies within the group. In 2015, the Bank continued to hold regular engagements with host regulators through established supervisory colleges and bilateral meetings. These platforms facilitated in-depth discussions on supervisory issues specific to the banks in the respective jurisdictions, and the coordination of supervisory

Chart 1.54

Banking System: Retail Loan Composition of Selected Overseas Operations

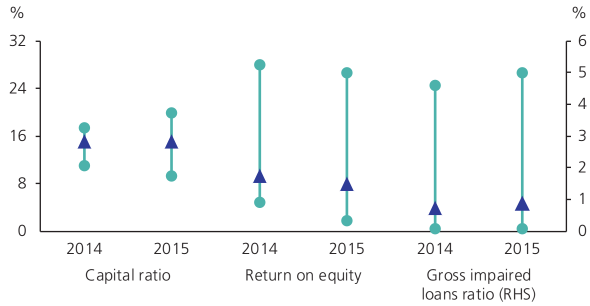


Note: Data as at end 3Q 2015
Banking system includes entities operating in LIBFC

Source: Bank Negara Malaysia

Chart 1.55

Banking System: Range of Key Financial Soundness Indicators of Selected Overseas Operations



Note: 2015 figures refer to 3Q data
Banking system includes entities operating in LIBFC

Source: Bank Negara Malaysia

responses to address these issues. A regional cross-border crisis management and resolution framework has also been put in place by the Executives' Meeting of East Asia-Pacific Central Banks. The framework supports effective co-operation between member central banks and supervisory authorities in the event of a crisis triggered by a distressed financial institution with significant operations in the region.

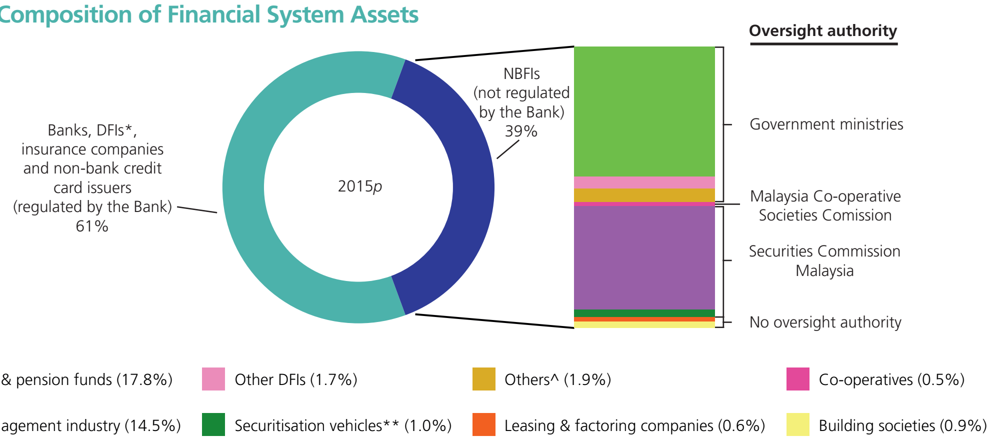
INTERLINKAGES OF NON-BANK FINANCIAL INSTITUTIONS (NBFIs) WITH THE FINANCIAL SYSTEM

The risk profile of NBFIs (financial institutions not regulated by the Bank) (Chart 1.56) and the nature of their interlinkages with the financial system were broadly unchanged. The key channel for the transmission of risks from the larger NBFIs continues to be via holdings of common assets and equity investments in financial institutions. NBFIs also hold a significant amount of household assets in the form of savings with pension and investment funds that are invested in the capital markets (Chart 1.57). These interlinkages and risk transmission channels require the Bank to take a broader view of potential sources of risks to financial stability, and are the focus of the Bank's surveillance of and engagements with the larger NBFIs (refer to the box article on `Financial Deepening and Implications on Financial Stability´).

NBFIs accounted for around 39% (2014: 38.6%; 2013: 38.8%) of total financial system assets, broadly unchanged over the last two years. Provident and pension funds and the

Chart 1.56

Size and Composition of Financial System Assets



p Preliminary
Numbers in brackets refer to percentage of assets to financial system assets

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

* Development Financial Institutions (DFIs) regulated under the Development Financial Institutions Act 2002 – Bank Pembangunan Malaysia Berhad, SME Development Bank Malaysia, Export-Import Bank of Malaysia Berhad (EXIM Bank), Bank Kerjasama Rakyat Malaysia Berhad (a co-operative), Bank Simpanan Nasional and Bank Pertanian Malaysia Berhad (Agrobank)

** 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, published financial statements and internal estimates

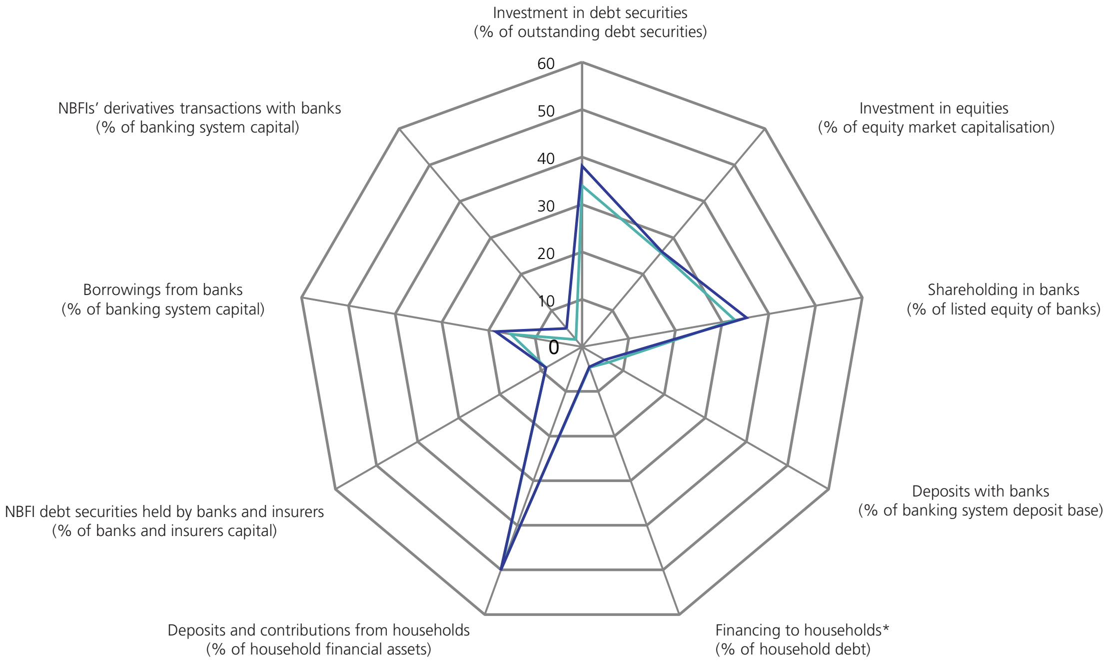
fund management industry make up the majority (83%) of total NBFIs' assets, while the seven largest NBFIs make up 68% of NBFIs' assets. Domestic financial intermediation activities of NBFIs (Chart 1.58) continue to be largely driven by financing and investments in plain vanilla debt securities and equities. In 2015, domestic financial intermediation by NBFIs accounted for a marginally lower share of GDP, reflecting lower financing activities and the weaker performance of the equity market. For the larger NBFIs, equity investments typically account for between 23% and 69% of total assets. A notable development in recent years, particularly among the larger pension funds and fund managers, has been the increasing size and share of investments in non-financial assets (including property holdings and ventures) and in overseas and FCY-denominated assets. The share of overseas assets ranged between 7.4% and 26.2% (2014: between 7.2% and 23.6%) of total assets of individual NBFIs.

Risks to financial stability from the activities of NBFIs can arise if NBFIs experience financial stress which results in large disposals of investments that are also held by other financial institutions, affecting asset prices. NBFIs that are in financial stress can also heighten reputational or financial risks of financial institutions in which NBFIs hold substantial equity interests. One potential source of financial stress lies in the size and extent of maturity transformation undertaken by NBFIs. This risk remains low. NBFIs that are more reliant on market funding have PDS (including sukuk) with an average remaining maturity of 9.8 years while the average tenure of financing granted typically does not exceed 10 years. The reliance of NBFIs on short-term funding remains low, with commercial papers comprising only 4.4% of total domestic PDS issued by NBFIs. Among the NBFIs, the Cagamas group of companies accounts for about half (56%) of domestic PDS issued by NBFIs. As at end-2015, outstanding domestic PDS issued by Cagamas amounted to RM28.7 billion. This represents 2.5% of total outstanding PDS. In addition, the maturity profile of Cagamas is generally well-matched. A few NBFIs are exposed to larger maturity mismatches due to their larger deposit base which is used to fund longer term assets, including loans. Nevertheless, the NBFIs have lately taken prudent measures to improve their maturity profiles and strengthen their liquidity buffers.

The leverage position (defined as assets over capital) of the larger NBFIs also remain low, at about one time. The depreciation of the ringgit during the year did not have a material impact on NBFIs given that the debt exposures were mostly denominated in ringgit. Some of the larger NBFIs posted FX gains from the higher

Chart 1.57

Interlinkages of NBFIs with the Financial System

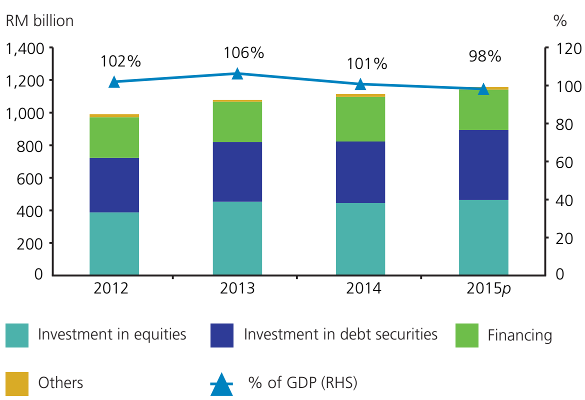


p Preliminary
*Excludes loans granted by NBFIs regulated by Bank Negara Malaysia and Lembaga Pembiayaan Perumahan Sektor Awam

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

Chart 1.58

Domestic Financial Intermediation Undertaken by NBFIs



Note: Financial intermediation comprises (i) investment in equities; (ii) financing; (iii) investment in debt securities; (iv) securitisation; and (v) credit guarantee or enhancement. Credit intermediation comprises (ii) – (v).

p Preliminary

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

valuation of overseas assets. Overall profitability was broadly sustained, albeit at a slightly lower level from previous years. The return on assets, averaged between 3.3% and 6.3% (2014: 4.6% and 7%; 2013: 5.6% and 7.3%) across the larger NBFIs. Moving forward, NBFIs will need to remain vigilant amid more volatile market conditions to sustain profitability levels.

The direct asset-liability interlinkages with the banking system and insurance industry remained low and limited. An exception is the sizable shareholding in DBGs by NBFIs. As valuations of financial stocks became attractive during the year, NBFIs took the opportunity to increase their holdings of financial stocks. Aggregate holdings of shares in DBGs by the larger NBFIs correspondingly rose to 35.2% (2014: 32.7%) of the total market capitalisation of DBGs. Banking system exposures to NBFIs in the form of interest rate and FX swaps are minimal at present, accounting for 5.1% of total bank capital.

FINANCIAL INSTITUTION SOUNDNESS AND RESILIENCE

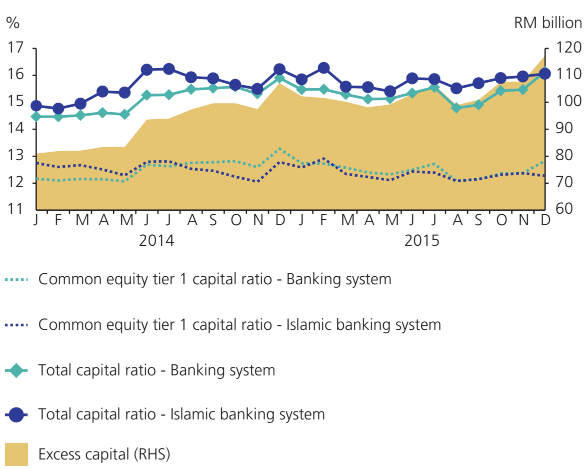
Malaysian financial institutions continued to demonstrate strong financial positions, supported by sound governance and risk management practices. Coupled with high quality capital and liquidity buffers accumulated over the years, financial institutions remained resilient against the heightened volatility and more challenging business conditions during the year. The majority of financial institutions maintained relatively stable risk profiles. This was also reflected in stable composite risk ratings (CRR) for most banks. The CRR captures the Bank's ongoing assessment of the inherent risk and the quality of risk management of a financial institution across significant activities and subsidiaries, taking into account its capital and liquidity management practices and sustainability of earnings.

Capitalisation remained sound and of high quality

The banking, insurance and takaful industries remained well-capitalised throughout the year. As at end-2015, the banking system common equity tier 1 (CET1), tier 1 and total capital (TCR) ratios remained well above the minimum regulatory levels at 12.8%, 13.8% and 16.1% (2014: 13.3%, 14%, 15.9%) respectively. Banks' capital in excess of the minimum regulatory requirement remained strong, growing by 9.5% to RM117.3 billion (Chart 1.59). Even under Basel III minimum capital levels which only apply in full from 2019, banks would still have a buffer of RM79.6 billion above the minimum total capital requirement. These strong buffer levels are supported by high quality capital. More than 90% of banks' total capital consists of high quality, loss absorbing CET1 instruments in the form of equity, retained earnings and reserves. Banks continued to show a high degree of earnings resilience and conservative earnings retention policies, with retained earnings remaining relatively stable at RM68.7 billion (2014: RM70.1 billion) at the system level. Equity and tier 2 subordinated debt issuances were, however, lower at RM22.3 billion (2014: RM26.5 billion), in part due to the effect of Basel II capital instruments that are being gradually phased out under Basel III (2015: RM6.6 billion; 2014: RM8.5 billion). Despite a faster increase of 12.3% in risk weighted assets (RWA) in the third quarter (average 1H 2015: +8.5%) due partly to the higher valuation of FCY assets in ringgit terms, the ratio of total RWA to total assets remained relatively unchanged at 64.4% (2014: 64.3%). The leverage ratio (tier 1 capital as a ratio of total exposures) reported by banks under the current observation period was also unchanged at two times the prescribed minimum level of 3% under Basel III.

Chart 1.59

Banking System: Capital Adequacy Ratios and Excess Capital



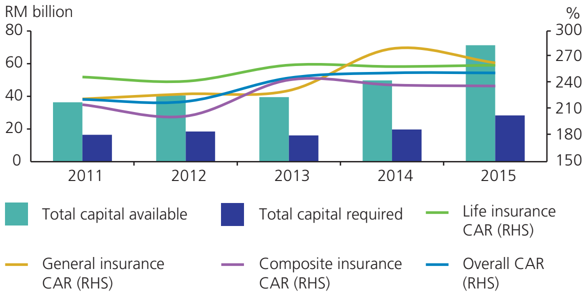
Source: Bank Negara Malaysia

Sustained capitalisation and sound profitability of financial institutions amid sound asset quality, governance and risk management practices

The capitalisation of insurance and takaful industry similarly remained strong with the aggregate capital adequacy ratio (CAR) at 245.4% (2014: 243.5%). Total capital available was partly affected by lower available-for-sale reserves and retained earnings as a result of more volatile investment valuations. This had little impact on aggregate excess capital buffers which remained strong at RM46 billion (Chart 1.60). Overall capital held against insurance and takaful risk (the most significant risk component which represents about 50% of total capital required) remained largely unchanged, reflecting a stable business mix and healthy level of reserves to meet insurance and takaful liabilities. Capital allocated against

Chart 1.60

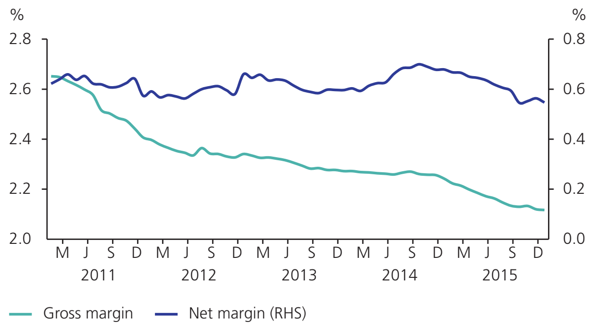
Insurance Sector: Capital Adequacy Ratio



Source: Bank Negara Malaysia

Chart 1.61

Banking System: Gross and Net Interest Margins



Source: Bank Negara Malaysia

market risks increased to 13% (2014: 12.2%) of total capital available. This reflected larger equity exposures from opportunistic equity purchases by insurers during the year. Credit risk exposures also increased slightly to account for 4.1% (2014: 3.9%) of total capital available as insurers held a wider distribution of PDS across investment grades to enhance yields.

Sound profitability amid narrow margins

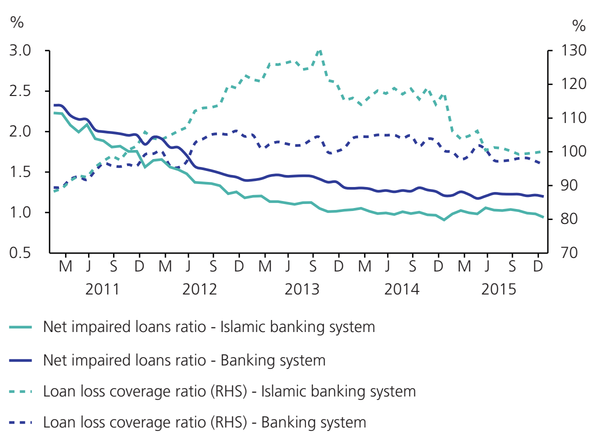
The pre-tax profit of the banking system, including Islamic banks, was slightly lower at RM29 billion (2014: RM31.9 billion) in 2015. Returns on assets and equity correspondingly declined to 1.3% and 12.4% (2014: 1.5% and 15.2%) respectively. As in the previous year, the main driver of earnings performance was net interest/profit from financing and funding activities (+1.5%), although this was partly affected by the higher growth of 14.5% (2014: +8.5%) in interest expense incurred during the year. Higher revenue from fees and commission from financing-related activities also boosted banks' earnings (+5.1%), along with active treasury activities by banks which contributed to higher net trading and investment gains (+27.3%). However, the revenue contribution from brokerage activities was lower as investors were more cautious amid the more volatile performance of the financial markets.

At the system level, the interest/financing margin net of operating costs and loss provisions narrowed to 0.55 percentage points (2014: 0.68 percentage points), mainly reflecting competition in the deposit market which resulted in higher interest expenses on interbank and deposit funding (Chart 1.61). Despite slightly higher impairment levels observed in some sectors that were affected by the prevailing economic conditions, the share of impaired loans was largely unchanged at 1.2% (Chart 1.62). By end-2015, all banks were required to meet a minimum level of collective impairment provisions of at least 1.2% of total outstanding loans (net of specific provisions). This had minimal impact on most banks which already recorded high loan loss coverage ratios of 96.2% (2014: 100.4%).

Bank profitability benefitted from continuing initiatives to improve productivity and operational efficiency, including holistic review of branch operations and a higher penetration of digital consumer banking. Banks have also continued to control overhead costs, although investments are still being made to continuously enhance risk management capabilities and support expanding regional operations. Such improvements have strengthened the identification and measurement of emerging

Chart 1.62

Banking System: Net Impaired Loans Ratio and Loan Loss Coverage Ratio



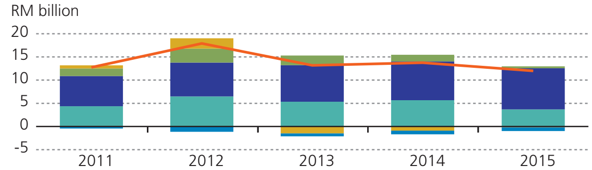
Source: Bank Negara Malaysia

risks, particularly under more uncertain business conditions. The Bank continues to keep a close watch on the impact that cost control measures are having on risk management capabilities and compliance functions to ensure that these are not compromised. Retaining skilled talent, particularly in specialised functions, remains a key challenge for banks in an environment where staff are more mobile and those with sufficient experience are in high demand not only domestically but regionally. Despite a marginally lower headcount (-0.2%), staff cost increased by 11.6% during the year due to higher salaries paid to retain skilled talent. This increased the overall costs per employee slightly by 1.1% during the year. In managing staff costs, banks have been reminded to ensure that incentives are aligned with prudent risk-taking, and key control functions continue to be well-supported by competent staff, including in areas such as compliance.

The insurance and takaful sectors recorded lower profit in 2015 amid heightened financial market volatility (Chart 1.63). Excess income over outgo of life insurers and family takaful operators was lower at RM12 billion (2014: RM13.8 billion) mainly driven by lower profits from the disposal of assets, particularly equities, which amounted to RM0.4 billion (2014: RM1.4 billion) (Chart 1.64). Income continued to be supported by the sustained, albeit more moderate, growth in net premiums of 4.6% (2014: +7.5%) (Chart 1.65). The slower growth was mainly driven by investment-linked insurance premiums which increased at a markedly slower rate of 9.4% (2014: +20.7%), largely reflecting financial market conditions. A growing share of life business tied to investment-linked products (37.4% of net premiums) has contributed to

Chart 1.64

Life Insurance and Family Takaful Sector: Composition of Excess Income over Outgo



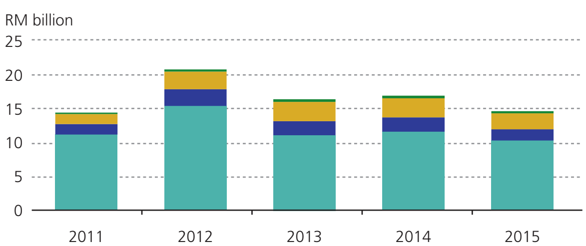
Source: Bank Negara Malaysia

higher volatility in premium income for life insurers in recent years due to more variable demand influenced by financial market conditions and greater flexibility provided for policyholders to vary premium contributions. This in turn has increased the need for insurers to effectively control costs and ensure proper suitability assessments of products sold to policyholders in order to maintain profitability over time. Net policy benefits increased due to higher medical claims and surrenders of investment-linked products, the latter partly reflecting adjustments by households to higher costs of living.

Total net investment income of life insurers and family takaful operators improved to RM8.9 billion (4Q 2014: RM8.4 billion). Despite an increasing share of investments in higher yielding assets, overall investment yields of life insurers and takaful operators have remained within a range of between 5% and 6% per annum. As in the previous year, a number of life insurers reduced

Chart 1.63

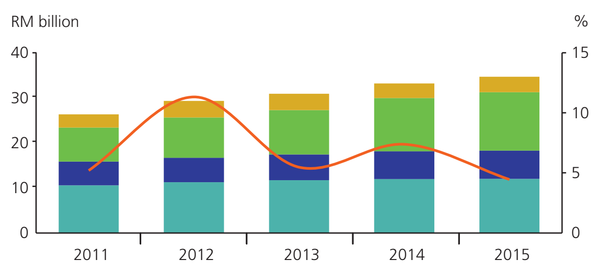
Insurance and Takaful Sector: Profitability



Source: Bank Negara Malaysia

Chart 1.65

Life Insurance and Family Takaful Sector: Net Premium Growth and Product Composition



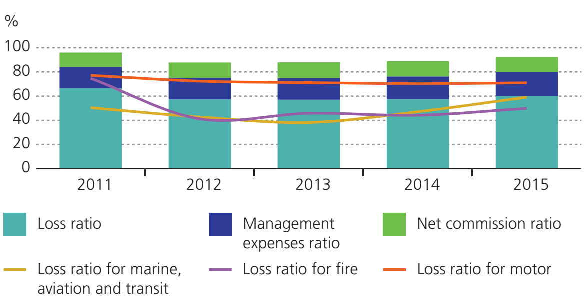
Source: Bank Negara Malaysia

their discretionary bonuses in 2015, reflecting weaker investment performance than had been assumed in the pricing of products sold prior to GFC. Cash bonuses paid out during the year correspondingly grew at a slower rate of 4.9%, compared to the average of 20.8% between 2010 and 2014. Insurers that revise bonuses must comply with requirements under standards issued by the Bank on `Management of Participating Life Business´. This includes requirements to ensure that adjustments to bonus payments are equitable across groups of policyholders and have taken into account the reasonable expectations of policyholders which may be formed from the actions or representations of insurers.

The operating profit of the general insurers and takaful operators declined slightly to RM2.7 billion (2014: RM3.2 billion) on account of higher net claims incurred mainly in the fire and marine, aviation and transit (MAT) sectors. Consequently, the overall loss ratio increased slightly to 60.2% (2014: 57.5%) with losses from the compulsory motor third-party liability insurance (motor 'Act') business continuing to weigh on claims costs. The loss ratios for the fire and MAT sectors increased to 49.8% and 59.1% (2014: 44.2% and 47.1%) respectively (Chart 1.66). Gross direct premiums of general insurance and takaful operators grew at a slower pace, mainly in the MAT and motor businesses (Chart 1.67). Premiums contributed by the O&G industry were not affected by the lower global oil prices as risks insured are mainly concentrated in downstream refining and processing activities. The transition to a more competitive market-based pricing environment is expected to be positive for the industry, through pricing that will be more reflective of risks. This is important to promote the sustainable provision

Chart 1.66

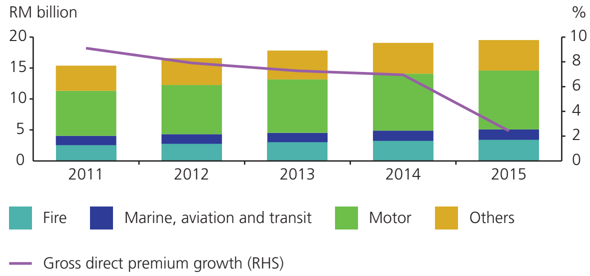
General Insurance and General Takaful Sector: Combined Ratio and Loss Ratio of Selected Business Classes



Source: Bank Negara Malaysia

Chart 1.67

General Insurance and General Takaful Sector: Premium Growth and Business Composition



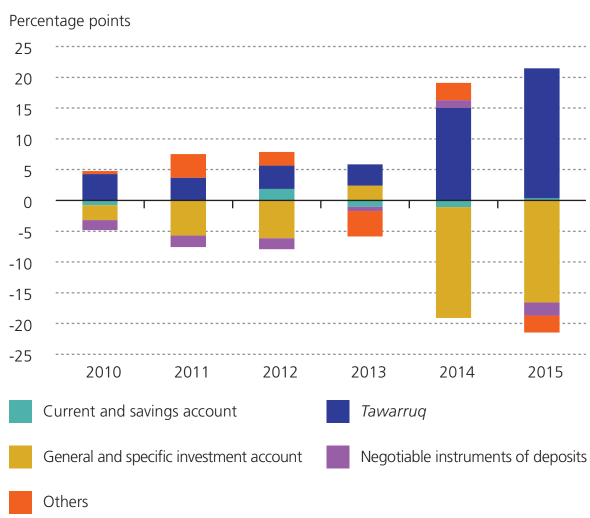
Source: Bank Negara Malaysia

of motor insurance by private enterprises, while allowing policy owners who demonstrate better risk profiles to enjoy lower premiums.

The rate of return risk in the Islamic banking sector continues to be reasonably well-managed, underpinned by active risk reduction strategies pursued by Islamic banks. On the asset side, variable rate assets in the financing book, mainly in the form of *musyarakah* (partnership), *ijarah* (leasing) and variable *murabahah* (mark-up) contracts, expanded further by 24.6% (2014: +28%) to account for 58.4% (2014: 54.4%) of total financing. On the liability side, Islamic banks issued more fixed rate funding instruments such as *tawarruq* (fixed rate deposits) (Chart 1.68) with longer contractual maturities to narrow

Chart 1.68

Islamic Banking: Annual Change in Deposit Composition by Instrument



Source: Bank Negara Malaysia

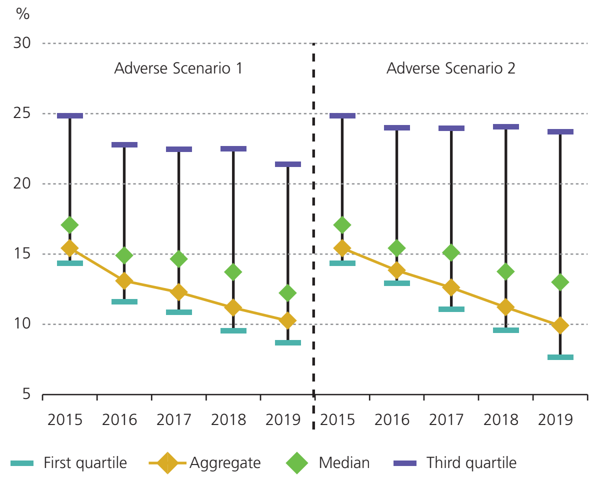
the re-pricing gap against Islamic banks' fixed rate assets. As at end-2015, fixed rate deposits of Islamic banks increased to account for a significantly higher share of 56.8% (2014: 35.7%) of total deposits, or 42.7% (2014: 30%) of the total funding base. The shift towards *tawarruq* was also partly in response to the regulatory requirement to clearly differentiate between deposit and investment account products in accordance with the IFSA 2013. This increased demand for deposit products that are principal-guaranteed. In contrast, *mudarabah*-based general and specific investment deposits declined by 84% to account for 3.1% (2014: 19.7%) of the funding base. Individual Islamic banks have adjusted to these developments quite smoothly, mainly by offering products that customers can switch to.

Multi-year solvency stress test affirmed financial institutions' shock absorbing capacity

Stress tests conducted by the Bank continue to affirm the strong capacity of financial institutions, both at the system and institutional levels, to withstand severe macroeconomic and financial strains (Table 1.7 and Table 1.8). At the end of the four-year stress test horizon, the post-shock aggregate TCR and CET1 capital ratios of the banking system were above 10% and 7% under the first adverse scenario (AS1), and above 9% and 6% under the second adverse scenario (AS2) respectively (Chart 1.69 and Chart 1.70). At the institutional level, the capitalisation of the major banking groups remained above the minimum Basel III TCR, tier 1 and CET1 capital ratio requirements. Net revenue before loan loss provisions contracted by 10.1% and 16% relative to the baseline scenario in AS1 and AS2 respectively. Losses were driven primarily by credit risk shocks, which accounted for more than 96% of overall losses in both scenarios. Of this, the defaults of selected large corporate borrowers comprised 9.5% and 13.5% of total credit losses in AS1 and AS2 respectively. Cumulative net losses across the four-year stress test horizon amounted to RM27 billion and RM51 billion (or 23% and 48% of excess capital buffers) under AS1 and AS2 respectively. Gross impaired loans ratios increased to between 5% and 8% over the stress test horizon in both simulated recession scenarios. These results indicate that even under severe macroeconomic and financial strains, banks remain well-positioned

Chart 1.69

Banking System: Post-shock Total Capital Ratio in Adverse Scenario



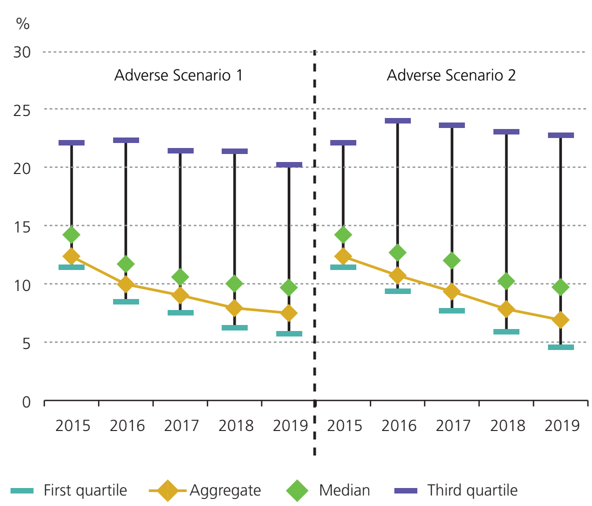
Source: Bank Negara Malaysia

to absorb the impact of losses from available capital buffers, without taking into account any additions to capital throughout the period.

The aggregate CAR of life and general insurers similarly remained above the regulatory minimum across the stress test horizon under both AS1 and AS2. With most assets of life insurers held-for-trading, life insurers were more affected by the assumed market risk shocks in 2016 where simulated sharp declines in asset

Chart 1.70

Banking System: Post-shock Common Equity Tier 1 Capital Ratio in Adverse Scenario



Source: Bank Negara Malaysia

prices were more pronounced, particularly under AS1 where the CAR fell from 252% to 182%. The simulated quick economic recovery in the following years however led to the CAR improving to 270% by end-2019. Market risk shocks account for 60% and 55% of total shocks in 2016 under AS1 and AS2 respectively. The aggregate capitalisation of general insurers remained above 150% under both adverse scenarios, with the main impact arising from shocks related to higher motor claims.

An Overview of the Solvency Stress Test Scenarios for Banks and Insurers

The multi-year solvency-based stress test exercise models a series of tail-risk events based on three hypothetical domestic GDP growth paths (one baseline and two adverse scenarios) and the corresponding macroeconomic and financial conditions over a four-year horizon from 2016 to 2019. The resulting effects incorporating simultaneous shocks on revenue, funding, credit and market risks, were applied to financial institutions' income and operating expenses, balance sheet growth and capitalisation levels, disregarding any loss mitigation responses by financial institutions or policy interventions by the authorities.

Table 1.7

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

Key Assumptions	First adverse scenario (AS1)	Second adverse scenario (AS2)
Balance sheet and income projections		
• Decline in banks' income growth, differentiated across segments (interest income, fee-based and other income)	• up to 43%	• up to 22%
• Moderation in credit growth	• up to 5.5 ppts from baseline	• up to 3.8 ppts from baseline
• Decline in insurers' premium income	• up to 72%	• up to 54%
Credit risk shocks		
• Probability of default (PD) shocks	• Weighted average	• Weighted average
- Business loans	- 8%-9% (up to 12% for certain segments)	- 8%-10% (up to 13% for certain segments)
- Household loans	- 4%-5% (up to 7% for certain segments)	- 4%-6% (up to 8% for certain segments)
• Loss given default (LGD) shocks	• Weighted average	• Weighted average
- Business loans	- 48%-49% (up to 56% for certain segments)	- 47%-53% (up to 60% for certain segments)
- Household loans	- 36%-38% (up to 88% for certain segments)	- 37%-39% (up to 88% for certain segments)
• Default of selected corporations with large exposures to the banking system	• Corporations under watchlist and are more vulnerable to simulated microfinancial shocks, i.e. - Volatile exchange rate movements - Increased costs of borrowings - Decline in operating profits	
Market risk shocks		
• Increase in MGS yields	• up to 130 bps	• up to 100 bps
• Increase in PDS yields	• up to 241 bps	• up to 156 bps
• Basis risk	• 10%	• 10%
• Decline in FBM KLCI	• 51%	• 30%
• Depreciation against major currencies	• 12%-29%	• 11%-15%
External funding risk shocks		
• Reversal of claims by non-residents	• 30% of interbank borrowing and deposits	• 15% of interbank borrowing and deposits
General insurance risk shocks		
• Increase in claims	• up to 28%	• up to 15%
• Increase in premium liabilities (motor classes)	• up to 1.5 times additional provision for adverse deviation	• up to 1 times additional provision for adverse deviation

The first adverse scenario (AS1) is a V-shaped recession in 2016, followed by a rebound in growth before normalising to near potential growth. Recession is equivalent to a deviation from the baseline of 2.5 standard deviations of the long term growth rate, which was deeper than the recession (-1.5%) recorded in 2008. This scenario assumes: (i) a sharp slowdown in the US driven by disorderly monetary policy adjustments; (ii) a significant deterioration in banks' balance sheets in PR China resulting from a sharp equity market correction and deeper slowdown in the property market; (iii) heightened financial market volatility which increases risk aversion and affects investor sentiment, leading to a correction in the financial markets and reduced household wealth; (iv) a significant fall in commodity prices and depreciation of the ringgit; and (v) a global economic rebound from 2017 onwards on the back of monetary and fiscal stimuli by the US and PR China.

The second adverse scenario (AS2) simulates an L-shaped growth path with an initial mild decline, followed by a subsequent prolonged weakness in growth, amounting to a cumulative negative deviation from the baseline of about 6 standard deviations of the long-term growth rate. This scenario assumes: (i) a minor equity correction and unresolved fiscal issues in the US resulting in prolonged uncertainty; (ii) prolonged weakness in PR China, associated with a less severe stock market correction, elevated private sector indebtedness, and a weaker fiscal position; (iii) prolonged volatility in financial markets which increases risk aversion, affects investor sentiment and reduces household wealth; and (iv) a prolonged fall in commodity prices, impacting Malaysia's fiscal revenue. The reduced fiscal space to stimulate the economy leads to rising unemployment and a further deterioration in sentiment.

Table 1.8

Summary of Results of Key Stress Tests Conducted by the Bank

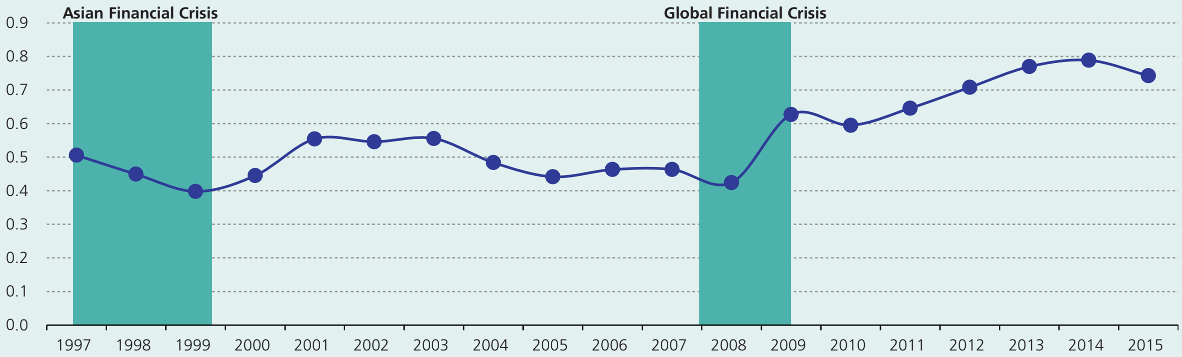
Simulated risk event	Shock assumptions	Broad results
	Broad scenario analysis	
Spillovers from a series of downside risks and tail-risk events over a four-year period	Shocks on revenue, funding, credit, market and insurance risk exposures	• Post-shock aggregate TCR and CET1 capital ratios of the banking system remain above 9% and 6% respectively under the more severe scenario • CAR of general and life insurers remain above 150% under the more severe scenario
	Sensitivity analysis	
Banking system losses arising from simultaneous default incidences in the household sector across all income groups (Table 1.2)	Tripling of baseline PD and stressed LGD	• Estimated potential losses of about RM65.4 billion or 55.8% of excess capital – Potential losses attributed to borrowers earning RM3,000 or less per month are estimated at about RM15 billion or 13% of excess capital
Banking system losses arising from severe correction in house prices (section on 'Managing Developments in the Domestic Property Market')	Tripling of baseline PD for housing loans and 40% contraction in house prices	• Excess capital stood at more than six times the estimated potential losses
Implications from volatile exchange rate movement, higher borrowing costs and lower operating margins on large borrowers (Chart 1.21)	i. Up to 50% depreciation in ringgit since end-2014 ii. Up to 100 bps increase in borrowing costs iii. Up to 50% decline in operating profit	• *Impact from higher FCY-denominated borrowings* – Reduction of up to 0.4 ppts in the median ICR • *Impact from higher floating rate ringgit borrowings* – Reduction of up to 0.1 ppts in the median ICR • *Impact from rollover of maturing PDS/sukuk under higher yields* – Negligible impact on median ICR • *Impact from decline in operating profit* – Reduction of up to 1.4 ppts in the median ICR • Cumulative potential credit losses* remain manageable, with excess capital buffers of banks sufficient to cover more than two times the estimated losses *Potential losses from assumed default of large borrowers with CASTD<1 time and ICR<2 times post-shock

Financial Deepening and Implications on Financial Stability

Malaysia has experienced significant financial deepening, most notably in the recent two decades. This is evident from the breadth and depth of the major components of the financial system, its accessibility and efficiency, and the diversity of players and instruments (Chart 1). The financial system has expanded five times since 1998 to about 400%[1] of GDP as at end-2015, reflecting strategies that were pursued to support the needs of the growing economy while strengthening its resilience to shocks. The more significant role of non-bank financial institutions[2] (NBFIs), in particular, has enhanced access to a wider range of funding and investment options for households, businesses and financial institutions. On one hand, this has contributed to a more efficient allocation of financial resources and dispersion of risks within the economy, but it also requires a broader understanding of the sources of risk to financial stability and the channels through which these risks are transmitted to and within the financial system (Chart 2). This article reviews the evolution of financial intermediation in Malaysia and its implications for the management of financial stability, including concerns that can arise from interlinkages between the banking system and other financial intermediaries, and activities that encourage excessive leverage or which involve maturity and liquidity transformation and imperfect credit risk transfers.

Chart 1

Malaysian Financial Depth Index



Note: The index is constructed from the following indicators as a ratio to GDP: (i) stock market capitalisation; (ii) outstanding domestic public debt securities; (iii) outstanding domestic private debt securities; (iv) banking system assets; (v) fund management industry assets; (vi) provident and pension fund assets; (vii) insurance industry assets; and (viii) other non-bank financial institutions (NBFI) assets

Source: Bank Negara Malaysia and internal computation

Evolution of Financial Intermediation in Malaysia

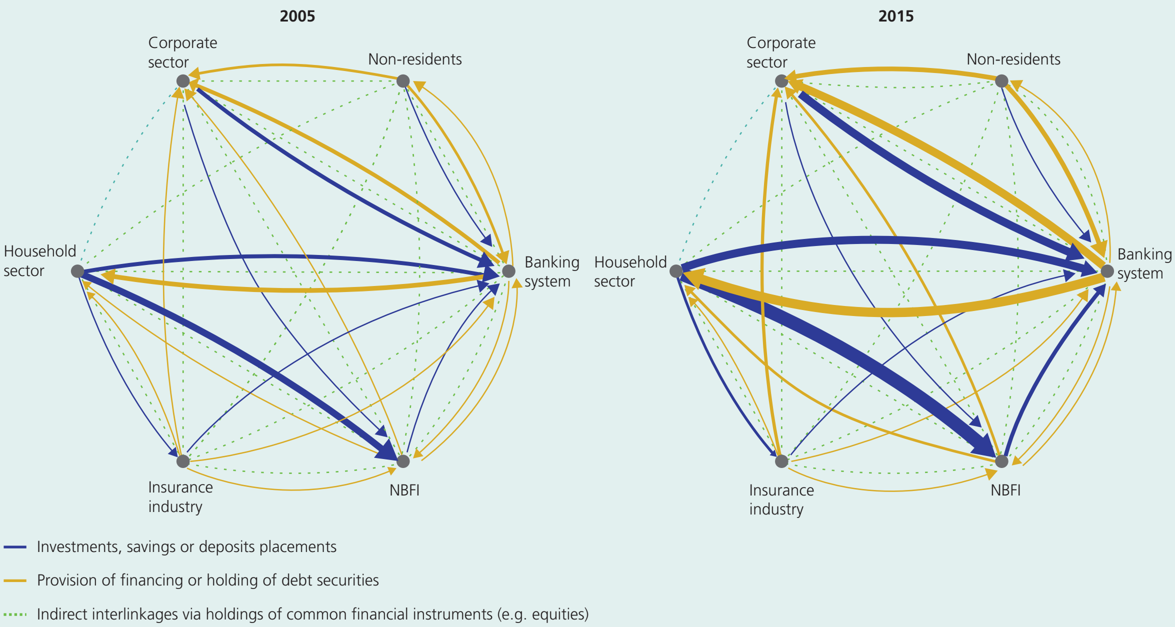
While banks retain a primary role in financial intermediation in Malaysia, a significant feature in the evolution of the financial system over the last decade has been the growing significance of the domestic capital market and NBFIs (Chart 3). Total outstanding debt securities grew at a compounded annual growth rate (CAGR) of 10.4% over the past decade to RM1,127.2 billion or 97.4% of GDP as at end-2015. The average maturity of debt securities has also lengthened, from 3.1 years in 2005 to 6.1 years in 2015, underpinned by issuances of longer-dated securities with maturities as long as 30 years. This has enabled businesses to source funding for projects with long gestation periods or for longer-term expansion plans more efficiently, while reducing refinancing risks. For insurance companies and provident and pension funds, the ability to invest in financial instruments with longer tenures has also reduced asset-liability mismatch risks.

[1] Computed based on outstanding loans granted by financial institutions, market capitalisation of the equity market and outstanding debt securities.

[2] For the purpose of this article, NBFIs comprise insurers and takaful operators, development financial institutions, provident and pension funds, fund management industry, social security organisation, securitisation vehicles and other non-bank lenders such as pawnbrokers, moneylenders, co-operatives, providers of hire purchase financing, leasing and factoring companies, building societies and non-bank provider of education financing.

Chart 2

Interlinkages between Components of the Financial System



Note: Thickness of blue and orange lines represents exposures scaled to size
The above chart captures material interlinkages between components of the financial system

Source: Bank Negara Malaysia and internal computation

The development of the derivatives and securitisation market in Malaysia has been gradual and more measured. While the demand for derivatives for hedging purposes has been on an increasing trend, the market remains relatively small. Securitisation activities, predominantly linked to housing loans granted to civil servants, are mainly structured to reduce maturity mismatches rather than to transfer credit risk. Given their strong capital positions, ample liquidity and manageable credit risk exposures, banks in Malaysia generally do not rely on the asset-backed securitisation market to support their lending activities. As at end-2015, asset-backed securities stood at RM11.4 billion or about 1% (2005: 3.4%) of total outstanding debt securities.

In parallel with the more developed capital market, the role of NBFIs in the mobilisation of savings and investments has also increased in significance. To a large extent, this stemmed from the more vibrant and liquid capital market, but it also reflects a higher level of financial sophistication and awareness among households of the broader range of alternative savings and investment instruments available. Over the past decade, NBFI assets have tripled, and currently account for almost half (49%) (2005: 41%) of total financial institutions' assets as at end-2015. About 70% of NBFI asset growth was driven by the fund management industry and the provident and pension funds. The net asset value of wholesale funds that cater to institutional investors has expanded by more than four times over the past five years to account for about 13% of assets of the fund management industry. Whilst a large share of wholesale funds is invested in money market instruments including deposits, such funds are estimated to represent less than 3% of bank deposits. The demand for private retirement savings to complement mandatory retirement saving schemes and existing welfare safety nets has also increased, with the assets under management of private retirement schemes expanding about four times to RM1.2 billion (2013: RM0.3 billion) since they were launched in 2012. The bulk of the NBFIs (representing more than 95% of total NBFI assets) is subject to the oversight by either the Bank, Securities Commission Malaysia, Malaysia Co-operative Societies Commission and Government ministries.

An expected consequence of the broader range of wealth management instruments and a deeper financial market has been a moderation in deposit growth (CAGR between 2010 to 2015: 7.9%; CAGR between 2005 to 2010: 10.5%). In the more recent period, this has been further compounded by a search for yield amid a prolonged low interest rate environment and the higher volume of capital flows. These developments are reflective of financial deepening and a more mature and open financial system. Banking institutions in Malaysia have, for a few years now, also begun to tap into alternative sources of stable funding through the domestic capital market. This reflects both adjustments made by banks to adapt to slower deposit growth as well as measures taken by banks to diversify and improve the stability of their funding base. As at end-2015, medium-term funding instruments, in ringgit and foreign currency, have increased to represent 5.1% (2010: 2.9%) of banks' total liabilities. This has resulted in the progressive lengthening of the maturity profile of bank funding sources to between three to five years (as opposed to less than one year for deposit-based funding). The maturity mismatch between bank funding and assets (which have an average duration of 11.9 years) has correspondingly improved.

Chart 3

Components of the Financial System

*Refers to development financial institutions (DFIs), co-operatives, building societies, leasing and factoring companies, social security organisation, national mortgage corporation, non-bank provider of education financing, pawnbrokers, moneylenders and outstanding asset-backed securities. Assets for the year 2015 are based on preliminary figures.

Source: Bank Negara Malaysia, Securities Commission Malaysia, Malaysia Co-operative Societies Commissions and internal computation

Implications for the Management of Financial Stability

The combination of a bank-based and market-based financial system has reduced risks associated with a concentration in specific financial markets, institutions or instruments to meet financing needs (Table 1). Notably, in line with the higher share of business financing from the private debt securities market, the concentration of bank exposures to large businesses has been declining (2015: 18.9%; 2005: 22.6%). During the same period, banking sector exposures to households and SMEs have been increasing (2015: 74.8%; 2005: 72.4%) driven by ample liquidity conditions, alongside sustained efforts to promote financial inclusion.

The growing significance of loans to households and SMEs has resulted in greater dispersion of credit risks in the banking system, with attendant changes in credit risk management approaches by banking institutions. This includes the wider use of credit scoring models for risk assessments, supported by credit information from the Central Credit Reference Information System (CCRIS) which continues to serve as a major component of credit scoring models. CCRIS also provides a strong foundation for promoting the development and growth of private credit reporting agencies to further enhance the provision of high quality consumer credit information to help borrowers and lenders make informed financial decisions. Reflecting the increased exposure of financial institutions to households and SMEs, institutional arrangements have also been put in place to pre-emptively respond to potential stress in

Table 1

Financing Profile of Non-financial Corporations

	1998	2015
	RM billion	
Domestic financial institutions*	307.5 (78%)	672.4 (52%)
Debt securities market	5.1 (1%)	337.3 (26%)
External borrowings	83.5 (21%)	287.4 (22%)

*Refers to borrowings from Malaysian banks, DFIs and other NBFIs

Note: Figures in the parentheses are quoted as percentage of total debt of non-financial corporations

Source: Bank Negara Malaysia and internal computation

these segments. This includes the setting up of the Credit Counselling and Debt Management Agency (Agensi Kaunseling dan Pengurusan Kredit, AKPK) and the Small Debt Resolution Scheme by the Bank to facilitate debt resolutions and provide financial management advisory services.

Since 2010, the Bank has also implemented macroprudential measures to manage risks from the higher level of household indebtedness. A key focus of the measures was to ensure that banks comply with responsible financing practices through requirements for banks to carry out proper affordability assessments and observe prudent debt service ratios in their lending processes and decisions. These measures were also extended to NBFIs to reduce opportunities for regulatory arbitrage given the increasing role of such institutions in intermediating household funding needs. With sustained growth in housing loans and rising property prices, measures (including fiscal measures) were also implemented to reduce speculative purchases in the property market. Collectively, these measures have contained the build-up of risks in the household and property sectors.

Another dimension of risks in household lending relates to the changing composition of household assets and the potential effects this may have on household financial buffers (Chart 4). Although a significant share (73.8%) of household financial assets continues to be held in deposits, deposit-like instruments and provident and pension savings, the proportion of assets invested in higher-yielding asset classes such as equities and unit trusts has increased. In the recent periods, the heightened volatility in the equities market resulted in marginal decline in the value of household's equity investments (2015: -0.7%; 2014: -3.6%). The value of investment-linked and other non-guaranteed insurance policies which are largely invested in equities and debt securities was similarly affected. Although this may increase risks of deterioration in household loan performance, such risks are largely mitigated by the sound lending standards that banks have continued to observe.

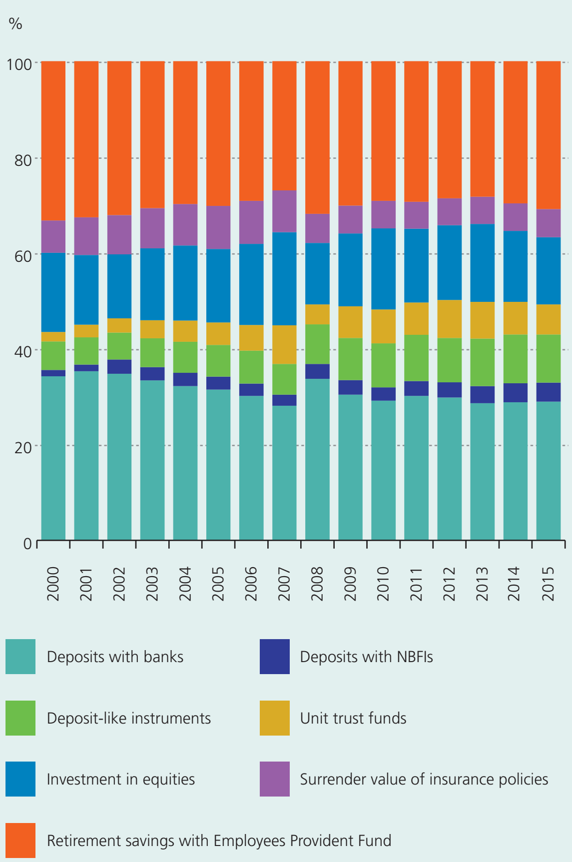
More developed domestic financial markets have also enabled Malaysia to better weather periods of global economic uncertainty and international financial market volatility. Since the 2008 Global Financial Crisis, recurring episodes of market volatility have been tempered by the presence of large and strong institutional investors, including insurance companies, and provident and pension funds. This provided support to asset prices and contributed towards preserving liquidity in the domestic debt securities and equities markets during periods of sustained sell-offs by non-residents. At the height of both the Global Financial Crisis and during the taper tantrum period in 2013, the bid-ask spread and turnover ratio remained relatively stable (Chart 5). Intermediation activities continued undisrupted, reflecting a more resilient financial system as the broad range of domestic funding sources reduced vulnerabilities to external developments.

At present, risks to financial stability from the growing significance of market-based instruments and NBFIs in financial intermediation mainly arise from the resulting increased interlinkages between various components of the financial system. Banking institutions are exposed to risks through holdings of common assets with significant NBFIs, such as provident and pension funds, insurance companies and non-resident investors. Any stress in such NBFIs resulting in the widespread disposal of assets held in common with banks could lead to volatile and significant price movements with direct consequences for bank balance sheets. Currently, this risk is relatively low as bank holdings predominantly consist of higher-rated and more liquid debt securities which are generally more resilient to repricing risks. As at end-2015, holdings of public debt securities and private debt securities rated `AA´ and above account for 58% of the treasury portfolio of banks while equity investments remain small at 1.1% of treasury portfolio (refer to Chapter 1 on `Risk Developments and Assessment of Financial Stability in 2015´).

As the pattern of financial intermediation in Malaysia continues to evolve to keep pace with the growing and changing needs of the economy, policy flexibility to identify and mitigate potential risks and vulnerabilities is paramount. In Malaysia, this has been supported by a strong legal and surveillance framework (Diagram 1) and significantly strengthened inter-agency co-operation arrangements at both domestic and regional levels which facilitate the effective exchange of information and policy coordination, thus promoting the effective management of risks to financial stability.

Chart 4

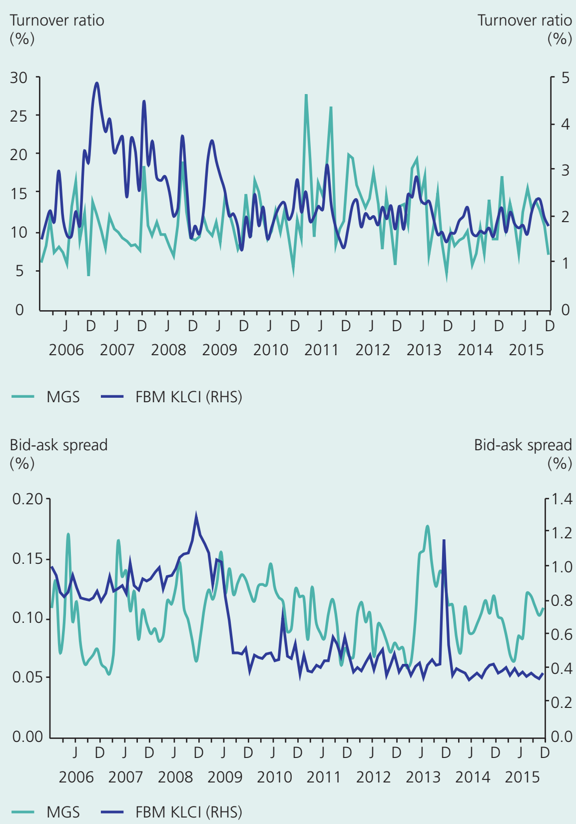
Composition of Household Financial Assets



Source: Bank Negara Malaysia, Securities Commission Malaysia, Bloomberg and internal computation

Chart 5

Monthly Turnover Ratio and Bid-Ask Spreads of MGS and FBM KLCI



Note: Average bid-ask spreads of MGS and FBM KLCI are as % of mid-price

Source: Bank Negara Malaysia and Bloomberg

Diagram 1

Legal Framework and Collaborative Arrangements to Safeguard Financial Stability

Central Bank of Malaysia Act 2009

- Provides clarity in the Bank's financial stability mandate and its statutory responsibilities to regulate and supervise financial institutions, provide oversight over the money and foreign exchange markets, exercise oversight over payment systems, and develop a sound, progressive and inclusive financial system.
- Provides the Bank a broad range of powers and tools to safeguard financial stability.

Ex-ante surveillance powers for timely risk identification

- Access to information for purpose of monitoring risks to financial stability

Pre-emptive powers to avert or mitigate systemic risks

- Issue macroprudential measures
- Order to undertake corrective measures to avert or reduce risks to financial stability
- Provide liquidity assistance and capital support

Power to enter into arrangements, advice and make recommendations to other supervisory authorities

- Collaborate and coordinate financial stability measures
- Promote laws and policies that are consistent with financial stability

Ex-post powers to minimise impact of instability

- Order for compulsory transfers (part or whole of business, shares, assets and liabilities)
- Establish bridge institutions

Reinforced by regulatory laws administered by the Bank

Financial Services Act 2013 & Islamic Financial Services Act 2013

Governs activities of banks, insurers, takaful operators and payment systems operators, and exchange control matters

Development Financial Institutions Act 2002

Governs activities of prescribed development financial institutions (DFIs)

Money Services Business Act 2011

Governs activities of money changing, remittance and wholesale currency business

Anti-Money Laundering, Anti-Terrorism Financing and Proceeds of Unlawful Activities Act 2001

Governs offences, preventive measures and enforcement powers in respect of money laundering, terrorism financing and proceeds of unlawful activities

Focus of legislation:

- Prudential regulation and supervision
- Fair, responsible and professional business conduct
- Deterrence of financial crime
- Financial safety nets
- Orderly financial market and payment systems
- Shariah compliance
- Tools for crisis management and prevention

Enhanced domestic and regional collaborative arrangements

Co-operation with domestic regulators

- Memorandum of Understanding (MoU) with **Securities Commission Malaysia**
- MoU with **Malaysia Co-operative Societies Commission**
- Strategic Alliance Agreement with **Malaysia Deposit Insurance Corporation**
- Other bilateral arrangements and engagements with various Government ministries

Cross - border co-operation

- **Cross-border collateral arrangements between the Bank and other central banks** - to strengthen cross-border liquidity management and reinforce financial and economic ties
- **Chiang Mai Initiative Multilateralisation Agreement** – to provide financial support through currency swap transactions among its participants[1] in times of liquidity need, in order to address balance of payments and short-term liquidity difficulties in the region
- **Home-host supervisory arrangements** – to enable the exchange of information and coordination of supervisory activities involving cross-border financial groups
- **Executives' Meeting of East Asia-Pacific Central Banks** - a co-operative organisation of central banks and monetary authorities. Contribution includes macro-monitoring and crisis management mechanisms

[1] Refers to ten members of the Association of Southeast Asian Nations (ASEAN), PR China (including Hong Kong SAR), Japan and South Korea

Source: Bank Negara Malaysia

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2015

DEVELOPMENT OF THE FINANCIAL SECTOR

The financial sector remained on course towards achieving the outcomes outlined in the Financial Sector Blueprint 2011-2020 to support Malaysia's transition to a high income, high value-added economy. Amid a challenging economic environment, total outstanding financing to the economy has continued to expand at a healthy pace, with efforts to increase access to financial services for the underserved continuing to pay off. Facilities for the financing of new growth areas such as green finance, structured trade and commodity finance, in addition to financing for small and medium enterprises (SMEs), also continued to support higher value-added activities.

In the Islamic banking sector, the successful migration of customers' deposits into Islamic deposits or investment accounts is expected to enhance the role of Islamic finance in supporting entrepreneurship. Market reform measures in pricing and commission structures are being progressively advanced in the insurance and takaful industry to foster greater innovation, promote sustainability and improve choice and value for consumers.

Ensuring relevant skills, competencies and a strong ethical foundation for the financial sector workforce remained a key priority of the Bank. This continued to be pursued in close collaboration with key institutions. During the year, several strategic initiatives were progressed to further raise standards of professionalism, ethical conduct and technical competence of the workforce. The Bank also announced the establishment of the Asia School of Business in collaboration with the Massachusetts Institute of Technology Sloan School of Management to deliver world-class executive education infused with an Asian perspective for business professionals, including those from the financial sector.

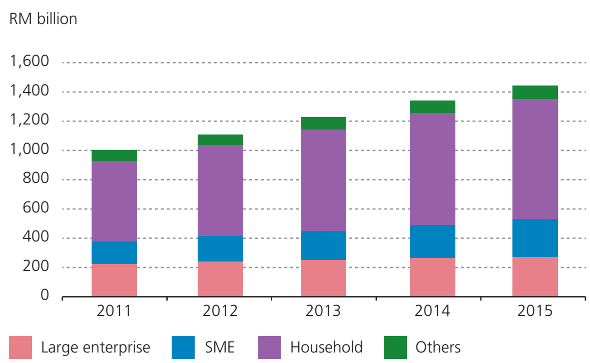
Under Malaysia's Chairmanship of the Association of Southeast Asian Nations (ASEAN) in 2015, a number of key milestones were achieved in regional financial integration, including the finalisation and launch of the ASEAN Banking Integration Framework to provide greater market access and operational flexibility for Qualified ASEAN Banks. Concurrently, a mutual recognition framework was established to facilitate cross-border offerings of collective investment scheme products within ASEAN, contributing towards regional capital market development. The Bank also continued to expand central bank arrangements to promote the use of local currencies for trade settlement, the latest being with the Bank of Thailand.

FOSTERING EFFECTIVE AND EFFICIENT INTERMEDIATION OF FUNDS

Despite the challenging external environment, lending activity remained supportive of the economy. Outstanding financing by the banking system expanded by 7.9% to RM1,445.1 billion (2014: RM1,339.7 billion), with the Islamic banking sector recording a significantly higher growth of 16.4% to account for 27% of total outstanding bank financing to the economy. Outstanding financing to households and businesses grew by 7.7% and 8% respectively, while financing to SMEs increased by 15% to RM259.7 billion (2014: RM225.9 billion).

Chart 2.1

Outstanding Banking System Financing



Source: Bank Negara Malaysia

Efforts to promote financing of new growth areas were further intensified during the year, particularly in trade and green finance, in line with a focus on strengthening capacity within the financial sector to support higher value-added activities. The expanded offering of structured trade and commodity financing (STCF) solutions by domestic banks improved access to finance for commodity producers and trading companies. This resulted in the establishment of dedicated STCF desks in 12 banks to support financing transactions for international trade of high value commodities. Another innovation in trade finance solutions includes the Bank Payment Obligation (BPO), an irrevocable undertaking by a bank to pay another upon successful electronic data matching. Five domestic banks have adopted the BPO since the Uniformed Rules for BPO were introduced by the International Chambers of Commerce in 2013. Taken together, these developments will further enhance Malaysia's competitiveness as a trading hub in the region.

In support of the national green technology agenda, the Government extended the Green Technology Financing Scheme (GTFS) for a period of two years until 2017, with RM1 billion in available funding. Launched in 2010, the GTFS has thus far extended RM2.5 billion in financing to 214 qualified institutions, most of which were to companies that promote clean and efficient energy generation, such as solar energy producers. The implementation by the Sustainable Energy Development Authority Malaysia of the feed-in-tariff system that encourages electricity generation from renewable sources is expected to further increase the take-up rate for financing from the GTFS and contribute towards a sustained increase in investments in the green energy sector.

A multi-bank investment platform launched in February 2016 expanded opportunities for customers to invest in a wide range of Shariah-compliant ventures

During the year, the Islamic banking sector completed an industry-wide exercise to migrate customers' Islamic deposit accounts into Islamic deposits or investment accounts according to the requirements of the Islamic Financial Services Act 2013. Under the exercise that was carried out over two years, customers, depending on their risk appetite, may choose to convert their deposits into investment accounts that offer different rates of return but are not principal-guaranteed. At the expiry of the two-year deadline in June 2015, 8% or RM32 billion of total deposits in the Islamic banking system had been converted into investment accounts. This was followed with the launch of the Investment Account Platform (IAP) by the industry in February 2016 to complement the operationalisation of investment accounts. The IAP is an integrated multi-bank investment platform, allowing retail and corporate customers to view, invest in and efficiently monitor a wide range of Shariah-compliant ventures evaluated by different Islamic banks. It also expands financing opportunities for entrepreneurs with viable projects to reach a wider investor base, while improving cost and operational efficiencies for participating banks by enabling them to leverage on a shared platform and services.

Promoting access to financing for SMEs is one of the key enablers to achieve the goal of increasing the SME sector's contribution to the national gross domestic product to 42% by 2020 (2015: 35.9%). Various programmes have been introduced to increase the supply and the diversity of funding for SMEs. These programmes continued to leverage on the important role and participation of banks in the growth and development of SMEs. Under the 2016 Budget, an additional funding of RM1 billion, valid until 31 December 2017, was provided by the Government for the Shariah-compliant SME Financing Scheme (SSFS) which provides a 2% profit rate subsidy on financing facilities extended by Islamic banks. Over 879 SMEs have already taken advantage of the SSFS since its introduction in 2012.

An additional funding of RM1 billion was allocated by the Government for the Shariah-compliant SME Financing Scheme

The Credit Guarantee Corporation Malaysia Berhad (CGC) continues to support an inclusive ecosystem for SME financing. In a move to address specific financing needs of women entrepreneurs, CGC introduced the BizWanita-I, a RM30 million Shariah-compliant scheme which enables eligible women business owners to borrow up to RM300,000 without collateral over a maximum period of seven years. The BizWanita-I scheme complements the BizMula-I scheme that provides financing to start-ups in operation for less than three years, in supporting the different needs of SME businesses and entrepreneurs.

Provision of Business Remittance Services by Non-banks to SMEs

Under the Bank's current regulatory regime, non-bank remittance service providers (RSPs) are allowed to offer business remittances as part of the provision of complete remittance solutions to the market. SMEs are expected to particularly benefit from such services, in light of the growing share of cross-border trade activities involving SMEs. In 2015, the total value of business remittances increased by 122.1% to RM722.1 million (2014: RM325 million), mainly reflecting demand from SMEs. With better accessibility and longer operating hours, business remittance services offered by the RSPs provide SMEs with a convenient and efficient alternative to banks for cross-border payments not exceeding RM50 million.

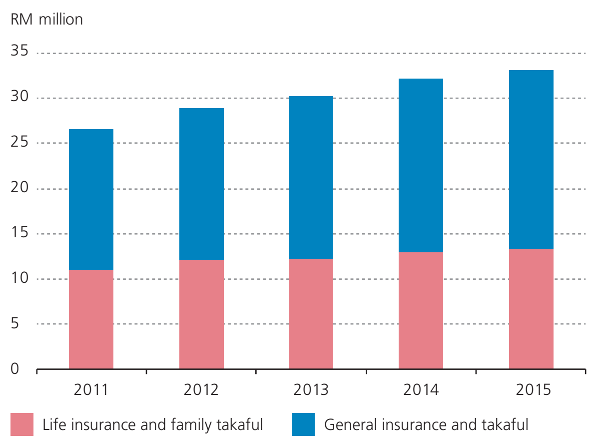
Moving forward, a key driver of future growth in the financial sector will be derived from harnessing the role of financial technology to expand the boundaries of quality, efficiency and value-add in products and services offered to consumers. Advances in financial technology have seen the introduction of new business models and technologies such as crowdfunding platforms, robo-advisors, digital currency and payment innovations that are beginning to replace more traditional forms of financial intermediation. While these developments may challenge existing business models, they can also enhance growth potential. The Bank aims to provide a regulatory environment that is conducive for financial institutions to innovate and to respond to potentially disruptive technological changes in an agile manner, while operating within appropriate risk parameters that safeguard the safety and soundness of the financial system.

PROMOTING COMPETITIVE AND INNOVATIVE INSURANCE AND TAKAFUL SECTORS

During the year, total assets of the insurance and takaful industry expanded by 5.6% to RM264 billion. Within the life insurance and family takaful sector, the growth of takaful contributions has been notable, accounting for almost 18% of new premiums and contributions. Insurance and takaful provide an important avenue for the public to save and invest, in addition to offering a form of risk protection in events such as death, disability and retirement. In this regard, Malaysia remains some way from achieving the target of 75% penetration rate, as measured by the percentage of the population covered by life insurance and family takaful policies. In 2015, the penetration rate decreased slightly to 54.9% (2014: 55.5%). In the general insurance and takaful sector, the combined claims ratio edged higher to 60.2% (2014: 58.4%), reflecting more challenging business conditions, especially in the marine, aviation and transit line of business.

Chart 2.2

Insurance and Takaful: New Premiums and Contributions



Source: Bank Negara Malaysia

After several years of planning and intensive engagements, the various components of broad-based reforms in the insurance and takaful sector have been finalised. The Life Insurance and Family Takaful Framework (the Framework) Notification Paper, issued in November 2015, outlines a three-pronged strategy that will provide greater operational flexibility in the design of incentive structures for the sale of life insurance and family takaful products, promote the development of alternative distribution channels and strengthen arrangements for ensuring high quality service and advice by intermediaries. A phased approach to implementation, extending from 2016 to 2019, will allow the necessary changes to be reflected in the practices of insurers and takaful operators and socialised with consumers, who have an important role in encouraging greater market discipline in the industry going forward.

One of the key initiatives to be implemented in the initial stage is the introduction of the balanced scorecard (BSC) to better align current remuneration structures for intermediaries with quality service and advice. The BSC aims to improve incentives for intermediaries to:
(i) ensure the suitability of advice based on financial needs of a consumer;
(ii) effectively service life policies and family takaful certificates throughout their terms; and
(iii) pursue continuous professional development with a strong focus on ethical and professional conduct in the sales and marketing of life insurance and family takaful products.

This will be achieved through the incorporation of non-sales related key performance indicators (KPIs) for determining the remuneration of intermediaries. Relevant KPIs include indicators linked to the completion of customer fact find forms and the volume of consumer complaints. A pilot run of the BSC will commence in 2016 before its full implementation in 2018. Along with other components of the Framework, it is envisaged that the reforms will have an important impact in increasing the insurance penetration rate in Malaysia.

The Framework outlines a three-pronged strategy that allows greater operational flexibilities, promotes diversified distribution channels and strengthens market conduct of intermediaries

Parallel reforms in the general insurance and takaful sector were also implemented with the issuance of the policy document on the Phased Liberalisation of Motor and Fire Tariffs (the Policy Document) in 2016. This follows earlier revisions to the tariffs that have been made since 1992 and builds on previous measures to prepare the industry and the public for greater price competition in the only segment of the market where prices are still regulated. It also paves the way for the pricing of motor and fire insurance policies that is more reflective of risks. Details on the Policy Document are elaborated in the box article `Liberalisation of the Motor and Fire Tariffs´.

Reforms in the general insurance and takaful sector will result in the pricing of motor and fire insurance policies to be more reflective of risks

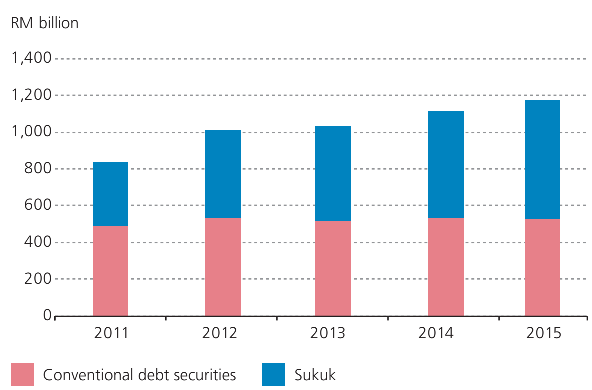
DEVELOPING DEEP AND VIBRANT FINANCIAL MARKETS

Over the past year, the Malaysian financial markets continued to support fund-raising and investment activities for productive uses in the economy. Reflecting more bearish market conditions during the year, total outstanding debt securities in 2015 increased at a slower pace of 5.2% (2014: 8.2%) to RM1,175.1 billion with sukuk accounting for a higher proportion of the total, at 54.8% or RM644.4 billion (2014: 52.2%). New issuances were more modest, with RM276 billion raised in 2015 (2014: RM495 billion). In the foreign exchange market, the average daily turnover was also lower at USD10.2 billion (2014: USD11.8 billion).

Malaysia's debt securities market, at 101.6% of gross domestic product, remains one of the largest in South East Asia. Borrowers and investors

Chart 2.3

Outstanding Debt Securities and Sukuk (Public and Private)



Source: Bank Negara Malaysia

Liberalisation of the Motor and Fire Tariffs

The Bank will be gradually liberalising the Motor and Fire Tariffs with the first phase commencing in 2016. In the new environment, the insurance and takaful industry will have the flexibility to offer motor and fire products with new features or differentiated scope of cover, at market-based prices. This flexibility is expected to spur product innovation, while the application of risk-based pricing will incentivise good risk management behaviour among consumers. The healthy competition generated will also benefit consumers who will gain access to a wider array of motor and fire products, along with higher quality services provided by professional intermediaries. To facilitate an orderly transition both for risk owners and the industry to the new operating environment, a liberalisation roadmap has been developed by the Bank. The roadmap sets out the phases under which existing tariff requirements relating to product features, coverage limits and product pricing will be gradually withdrawn. It also importantly provides for the implementation of strengthened prudential and market conduct requirements necessary to ensure that insurers and takaful operators continue to operate in a safe and sound manner and treat consumers fairly. This article elaborates on the implementation roadmap and the specific objectives behind the phased liberalisation approach.

Phased Liberalisation to Support an Orderly Transition

The liberalisation roadmap provides for the removal of tariff requirements in phases (Diagram 1). This allows gradual adjustments to be made by both the industry and consumers which is important since motor and fire products are widely required by vehicle and property owners, either by law or to protect assets under financing. Motor and fire are also the two largest classes of business for general insurers and takaful operators, accounting for approximately 65% of total industry premiums (including contributions in the context of takaful) on average over the past five years.

During the first year of implementation, the industry will be allowed to offer new products or extensions to the scope of coverage of existing products under the tariffs. The prices of these new products and additional covers will be determined by the market. This will provide an early opportunity for industry players to develop and refine their product and pricing strategies as well as upgrade distribution and operational capabilities. The expected supply of a wider variety of motor and fire products by the industry will also provide additional choice for consumers to purchase insurance or takaful protection that suit their individual needs.

In the second year of implementation, premium rates for Motor Comprehensive and Motor Third Party Fire and Theft (TPFT) products will be determined by the market. Current rates in these product lines are assessed to be reasonably close to their technical levels (based on average loss experience), thus mitigating the risk of sharp adjustments which may cause a disproportionate impact on consumers. Accompanying this change will be enhancements to consumer protection requirements to ensure proper governance over product design and pricing as well as the fair treatment of consumers. Insurers and takaful operators are expected to enhance existing procedures and internal capabilities to enable risks to be properly assessed and prices to be set appropriately and consistently. The standard of disclosure will also be increased, particularly in terms of the pricing components and scope of coverage, to facilitate comparison and enable consumers to make informed purchasing decisions.

Premium rates for Motor Third Party products will continue to be regulated with gradual adjustments to more closely reflect the loss experience of these products. At present, some rates remain substantially below technical levels which are not sustainable over the long term. Based on a recent study, the total premiums collected annually on Motor Third Party products were approximately RM520 million, while incurred claims and expenses have increased to almost RM680 million. This means that for every ringgit of premium received for a Motor Third Party product, insurers and takaful operators paid out an average of RM1.30 in claims and related costs, with some vehicle classes incurring up to RM2.90. Given the sizeable pricing gap relative to risk, an immediate deregulation of rates is likely to result in steep premium increases and thus, affecting large numbers of consumers. In view of this, a more measured approach is necessary to provide time for ongoing initiatives to narrow the pricing gap to take effect, including initiatives aimed at checking the inflation of claims costs and addressing leakages and fraud. These initiatives will be complemented by efforts to inculcate responsible driving habits and adoption of road safety measures. The phased approach will also facilitate the collection of higher quality data at a more granular level by insurers and takaful operators to better inform pricing decisions.

Diagram 1

Phased Liberalisation of Motor and Fire Classes

	Motor Class	Fire Class
Prior to 2016	All available products are defined in the Motor* and Fire Tariffs and are subject to tariff rates Gradual adjustments to tariff rates for identified risk groups	
2016 onwards	New products and new optional add-on covers** can be offered at market rates	
2017 onwards	Disapplication of tariff rates for Motor Comprehensive and Motor Third Party Fire and Theft Gradual adjustments to tariff rates for Motor Third Party for identified vehicle classes	Gradual adjustments to tariff rates for identified risk groups
2019 onwards	Assessment of the state of readiness of the industry and consumers for further liberalisation	

Note:
* More detailed explanation on the types of motor insurance can be found in the Motor Claims Guide on the InsuranceInfo website, http://www.insuranceinfo.com.my/landing_pages/accident_info/download/guide.pdf.
** Refers to a new type of product/cover not defined under the Motor and Fire Tariffs or any variation to or extension of product/cover defined under the Motor and Fire Tariffs.

Source: Bank Negara Malaysia

The liberalisation in motor premium rates will be accompanied by a reduction in fire premium rates for certain risk classes, as part of an overall rebalancing of pricing between these classes of business. Over time, as the pooling of risks becomes more refined, premium rates for the two classes are expected to become more consistent with the underlying risk profiles. The progress of the liberalisation will be reviewed in 2019, with an assessment of the impact of these measures on consumers as well as the industry.

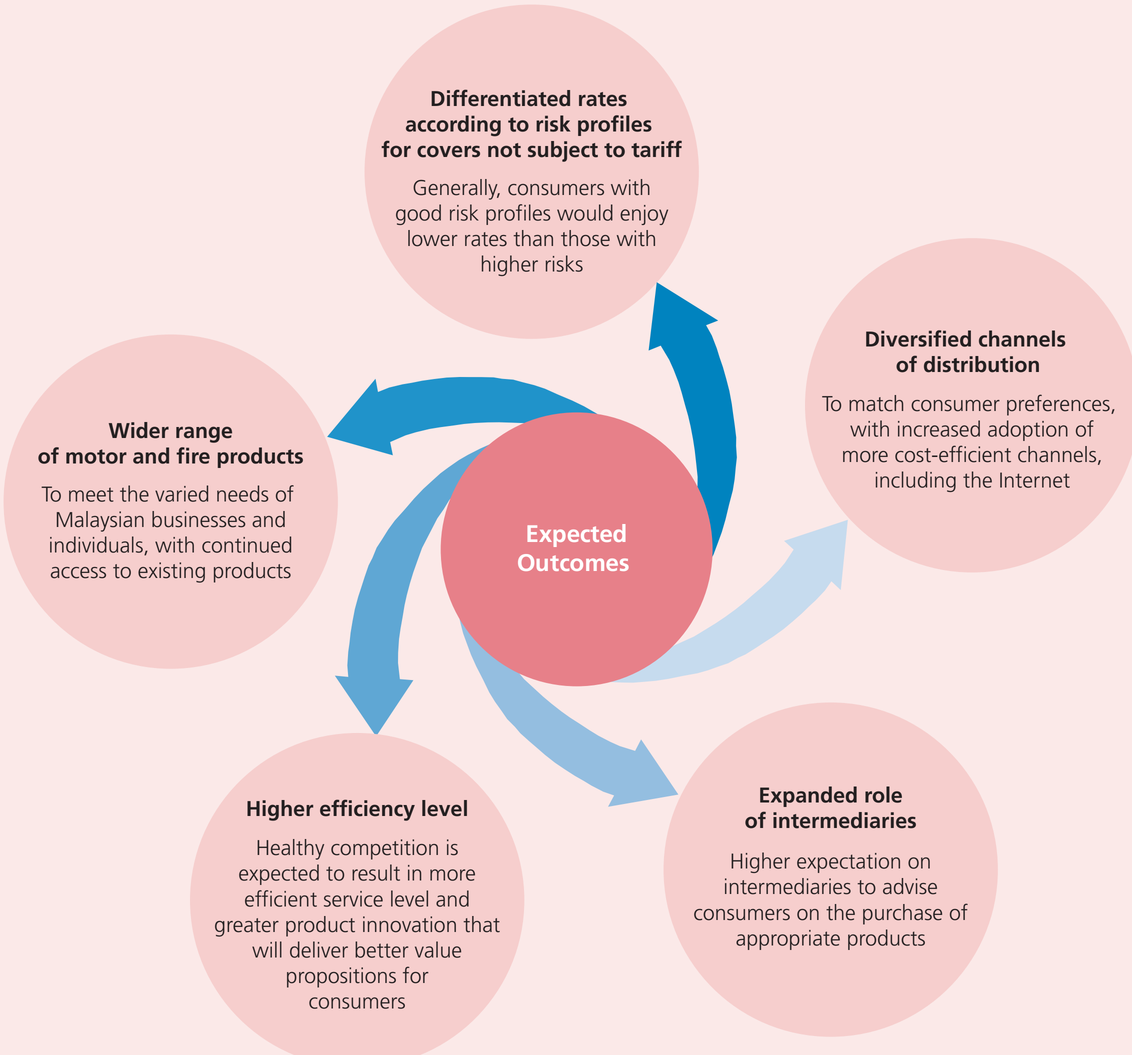
Objectives and Expected Outcomes of Liberalisation

A key objective of the liberalisation initiative is to strengthen incentives for efficiency improvements and sound risk management within the general insurance and takaful sector. Greater flexibility provided for the industry to price motor and fire products will promote competition, in turn driving improvements in underwriting and claims management to deliver the best service and value to consumers. In addition to the need for insurers and takaful operators to upgrade technical capabilities and competencies, it is also expected that broader collaborative efforts, both across the industry and with service providers, will be accelerated to streamline existing practices and minimise leakages and delays in claims settlements. Such efforts include the establishment of the Fraud Intelligence System by the industry to address insurance fraud, upskilling intermediaries to further enhance professionalism and raising the standard of the repair industry to facilitate more efficient claims processing.

Over time, premium rates would be priced fairly and become more aligned to the underlying risks, thus allowing vehicle and property owners with lower risk profiles to be charged lower premium rates. Similarly, those with higher risk profiles will be appropriately incentivised to undertake measures to reduce risk exposure or improve their risk profiles. The resultant changes in risk behaviour may also reduce the overall incidence of accidents and thefts, which can moderate the inflation in claims costs and premium rates as well as ensure the sustainability of the industry over the long term.

Diagram 2

Expected Outcomes under the New Operating Environment



Source: Bank Negara Malaysia

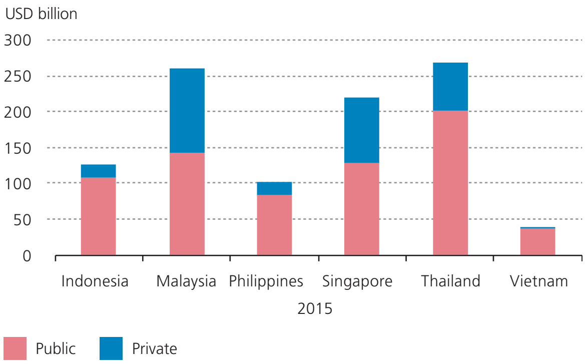
Another important objective of the liberalisation is to encourage greater product innovation that is responsive to the different needs and preferences of vehicle and property owners. This would include the adoption of new technologies in product development that enable insurers and takaful operators to provide incentives for consumers to adopt safer practices, while delivering better value propositions for responsible consumers. Consumers should also be able to access motor and fire products through their preferred distribution channels, including more cost-efficient channels such as the Internet. Aside from having greater product choice, consumers will additionally benefit from the ability to vary coverage limits or purchase optional extensions. This will enable the scope and level of protection as well as the corresponding premium rates to be customised to match individual risk profiles. During the transition however, existing products will continue to be made available to allow time for consumers to review and adjust their purchasing decisions. To facilitate informed decisions by consumers, the disclosure of product features, coverage limits and premium rates will be enhanced. Intermediaries are also expected to take on an expanded role in explaining new product features and options and assisting consumers to optimise their protection purchases.

The industry is well-placed to make a smooth transition towards a more market-based regime. The regulatory and supervisory efforts undertaken by the Bank over the years have substantially strengthened the resilience of the industry and instilled better governance, risk management and market practices. In particular, the prudential requirements relating to risk-based capital and sound risk management are expected to preserve incentives for sustainable pricing practices and ensure that insurers and takaful operators remain financially sound in the more competitive environment.

Greater flexibility in product design and pricing which corresponds to insurers' and takaful operators' respective risk appetites and capital will also promote more equitable pricing of risks. Together with the cost savings derived from other ongoing initiatives to increase operational efficiency, the liberalisation will contribute towards ensuring the sustainability of the industry over the longer term.

Chart 2.4

ASEAN Outstanding Local Currency Debt Securities Market



Source: Asian Bonds Online

continued to demonstrate confidence in the resilience of the market, with multi-currency issuances further adding to its depth. Issuances by Cagamas Berhad in 2015 amounted to over RM7 billion, surpassing its target of RM6 billion. Other notable issuances include an inaugural issuance of the Singapore dollar-denominated bonds and sukuk totalling SGD362.8 million, which follows the landmark RMB1.5 billion `Tiger Emas Bond' issued in the previous year. In addition, Petroliam Nasional Berhad (PETRONAS) completed the largest corporate dollar bond issuance in Asia for 2015, successfully raising USD5 billion in four tranches with a strong bid-to-cover ratio of 2.5 times.

To further promote the development of the money market, the Bank reviewed the Repurchase Agreement (Repo) Transactions Policy Document (Repo Policy Document) to allow financial institutions to utilise eligible foreign currency securities as collateral to obtain foreign currency funding under Repo transactions. This is expected to increase the volume of collateralised transactions which will enhance market liquidity. Measures are also being taken to standardise Repo market practices in line with the Global Master Repurchase Agreement, the internationally accepted legal agreement for Repo transactions. The revisions to the Repo Policy Document, which govern that at least one party to a Repo transaction shall be a licensed bank or licensed investment bank, serve to ensure the necessary risk management safeguards are applicable to all Repo transactions.

Efforts continued to be pursued to promote utilisation of the renminbi as a currency of settlement. A key development during the year was Malaysia's admission into the Renminbi Qualified Foreign Institutional Investor (RQFII) programme by PR China in November 2015, with an aggregate national investment quota of RMB50 billion. The RQFII programme was launched by PR China in December 2011 to provide an alternative channel for foreign investors to reinvest their offshore renminbi funds in the Chinese financial markets. Since the introduction of the programme, the RQFII quota has been granted to 16 countries with a total quota of RMB1.2 trillion. Malaysia is the 14th jurisdiction to be included in the programme.

The RQFII programme is expected to encourage the development of more renminbi-denominated financial products in response to growing demand for investment opportunities in PR China. To facilitate the implementation of RQFII in Malaysia, the Bank is collaborating with the Securities Commission Malaysia and the China Securities Regulatory Commission to formulate the general rules and procedures for the RQFII quota application process by qualified Malaysian institutions.

Malaysia's admission into the Renminbi Qualified Foreign Institutional Investor programme promotes the utilisation of the renminbi as a currency of settlement

ADVANCING MALAYSIA AS AN INTERNATIONAL ISLAMIC FINANCE MARKETPLACE

Malaysia continues to strengthen its reputation as an international Islamic finance marketplace. Total foreign currency assets of Islamic banks grew by 10.1% in 2015 to RM30.5 billion (2014: RM27.7 billion), reflecting increased cross-border transactions in Islamic finance. Following Agrobank's successful transition into a full-fledged Islamic bank, the total number of Islamic banks operating in Malaysia stands at 27, including 11 banks currently operating as Islamic windows.

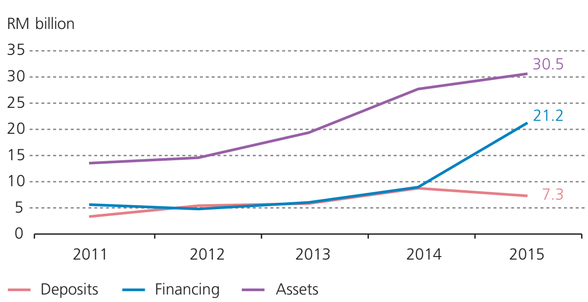
In the sukuk market, Malaysia retained its position as the leading destination for issuances, with a sizeable share of 53% or USD34.8 billion of global new sukuk issuances in 2015. Among the key highlights during the year were two issuances of *`Emas'* sukuk by the Government and PETRONAS, bringing the total number of *`Emas'* sukuk issued since 2009 to 22. Of these, the inaugural 30-year sukuk issuance amounting to USD500 million by the Government in April 2015 was of particular significance, being the longest tenure sukuk issued by a sovereign to date and serving as a long-dated benchmark Islamic yield curve for other sovereigns. The sukuk set a landmark pricing level for Islamic papers with a yield of 4.2% at issuance where it was priced higher than the conventional bonds of better-rated corporates such as PETRONAS. The sukuk was also the first to adopt a structure that utilises non-physical income generating assets in the form of rights to participate in the provision of services.

The issuance of the USD500 million 30-year sukuk in 2015 marks a milestone as it was the longest tenure sovereign sukuk issued to date and serves as a benchmark for other sovereigns

The year also saw the launch of Malaysia's first sustainable and responsible investment sukuk in May 2015 by Khazanah Nasional Berhad.

Chart 2.5

Foreign Currency Assets, Financing and Deposits of Islamic Banks*

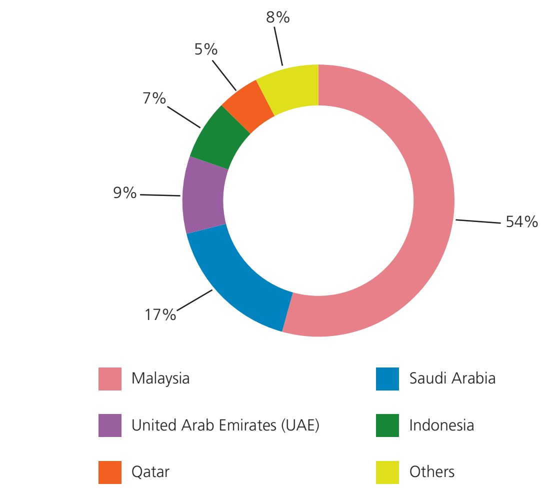


*Including International Islamic Banks and International Currency Business Units

Source: Bank Negara Malaysia

Chart 2.6

Total Outstanding Sukuk Globally in 2015



Source: Zawya

The RM100 million sukuk constitutes the first issuance under a RM1 billion programme which will be channelled towards socially and ethically responsible causes, including the financing of educational projects. In addition, the Bank successfully completed the pilot issuance of RM50 million three-month Islamic Monetary Notes based on the globally accepted profit sharing concept of *Mudarabah*. This issuance is expected to widen the investor base and increase the depth and vibrancy of Malaysia's Islamic financial markets.

The Bank remains active in promoting the sustainable development of Islamic finance at the global level, drawing on its considerable experience. In April 2015, the International Monetary Fund (IMF) and the G-20 economies co-organised an Islamic finance seminar in conjunction with the annual Spring Meetings of the IMF and the World Bank, the first time that Islamic finance has been featured at an event at this level. The Bank supported the event as an expert resource, helping to promote the recognition of Islamic finance as a viable form of financing for infrastructure investment and reinforce its importance in supporting economic growth. Islamic finance has additionally gained further acceptance among ASEAN member states with the adoption of a resolution by the ASEAN Inter-Parliamentary Assembly during the year to promote diverse sources of funding, including Islamic finance, to boost inter- and intra-regional trade.

DEVELOPING TALENT TO DRIVE GROWTH AND DYNAMISM IN THE FINANCIAL SECTOR

Ensuring relevant skills, competencies and a strong ethical foundation for the financial sector workforce remained a key priority of the Bank. This continued to be pursued in close collaboration with key institutions and bodies established and supported by the Bank.

Following its establishment in July 2014, the Financial Services Talent Council (the Council) completed the groundwork to strengthen talent development for the financial industry. The insights and perspectives obtained from extensive engagement and consultation with key stakeholders provided rich input to the Council's formulation of strategies to meet the future talent demands of the industry. The Council is currently in the advanced stages of developing its recommendations and aims to publish the same in 2016. The recommendations are expected to complement the work of existing talent organisations in the industry, with a view towards strengthening the overall talent development ecosystem that produces a sustainable and high quality talent pipeline for the financial sector.

The Financial Services Professional Board (FSPB), an industry-led initiative to drive the development and advocacy of professional and ethical standards, published a voluntary code of ethics (CoE) for the industry in January 2016. Incorporating perspectives from leading practitioners and influential experts, the CoE outlines a set of five fundamental principles, focusing on competence, integrity, fairness, confidentiality and objectivity, the adoption of which will set a high bar for professionalism and ethics in the financial services industry.

The voluntary code of ethics published by the Financial Services Professional Board sets a high bar for professionalism and ethics in the financial services industry

Efforts towards elevating professional standards in the industry were also advanced, as elaborated in Diagram 2.1.

Diagram 2.1

Raising the Professional Standards in the Financial Services Industry through Strategic Transformation of Professional Associations with High Impact Mandate

Formerly known as	Strategic transformation into	Current role and function
Institute of Bankers Malaysia	Asian Institute of Chartered Bankers (AICB) Asian Banking School (ABS)	**AICB, the professional body for the banking industry championing professional development, qualifications and thought leadership in collaboration with ABS, the industry provider specialising in professional banking education** • Introduced the final level of Chartered Banker programme in February 2016, following the successive introduction of the first two levels, the Executive Banker (2013) and Professional Banker (2015) • Offered specialised certification programmes (e.g. regulatory compliance and risk management) to meet the industry's demand
Association of Chartered Islamic Finance Professionals	Chartered Institute of Islamic Finance Professionals (CIIF)	**Promote global standards of professionalism amongst Islamic finance practitioners** • Released inaugural standards on Chartered Professional qualification and authorised training financial institutions, in conjunction with the launch of CIIF in November 2015
Association of Shariah Advisors in Islamic Finance	Association of Certified Shariah Advisors (ACSA)	**A leading professional body committed to enhancing the level of knowledge and standing of Shariah practitioners** • Developing programs to certify Shariah advisors in the financial services industry • Developing continuous professional enhancement programs for its members

The International Centre for Education in Islamic Finance (INCEIF) has continued to play an instrumental role in the education of Islamic finance professionals, supplying core talent to Islamic financial institutions across the globe. The number of enrolled students has increased over threefold since the first intake of 600 students from 21 countries in 2006 to 2,212 students representing 79 nationalities. The number of graduates has correspondingly increased, with 248 students graduating in 2015. With the launch of the INCEIF Endowment Fund in November 2015, the private sector can now contribute towards INCEIF's aspirations, particularly in research and development of programme offerings. INCEIF is concurrently embarking on the development of a ten-year blueprint that will establish its strategic priorities to ensure that it remains responsive to the evolving talent development needs of the Islamic finance industry.

The launch of the INCEIF Endowment Fund in November 2015 allows the private sector to contribute towards INCEIF's aspirations, particularly in research and development of programme offerings

Another key development during the year was the establishment of the Asia School of Business (ASB) in April 2015. The ASB, which will be based in Kuala Lumpur, is the result of a strategic partnership between the Bank and the Massachusetts Institute of Technology Sloan School of Management in support of broader efforts to provide world-class education that will produce transformative and principled leaders who can contribute to the development of the emerging world, particularly in Asia.

DEEPENING OF INTERNATIONAL FINANCIAL AND ECONOMIC LINKAGES

Efforts to foster greater financial and economic integration in the region intensified under Malaysia's Chairmanship of ASEAN. During the year, the ASEAN Community was successfully established, paving the way for the creation of a single market envisioned under the ASEAN Economic Community (AEC). A well-developed and regionally-connected financial system that facilitates economic activity represents a critical prerequisite to achieve the AEC.

The launch of the ASEAN Banking Integration Framework (ABIF) in March 2015 was an important milestone towards achieving greater regional financial integration. Through ABIF, Qualified ASEAN Banks will gain greater market access and operational flexibilities based on mutually agreed commitments between home and host countries in the region. To support the participation of newer ASEAN members in ABIF, the Bank contributed to the development of ABIF's capacity building roadmap, which aims to provide a cohesive and coordinated approach for capacity building initiatives in the region. This was developed in collaboration with the South East Asian Central Banks, the Asian Development Bank and other ASEAN member countries.

The Memorandum of Understanding with the Bank of Thailand serves as a pilot scheme in the use of ASEAN currencies for trade settlement

Looking ahead, the ASEAN Finance Ministers and Central Bank Governors also endorsed a broad framework for further ASEAN financial integration beyond 2015. The framework sets out a ten-year plan based on the three pillars of financial integration, financial stability and financial inclusion. This will guide the priorities of the various ASEAN working committees that have been established to pursue further integration opportunities, including in the areas of financial sector liberalisation, capital market development as well as payment and settlement systems.

Under the mutual recognition framework developed by the ASEAN Capital Market Forum to facilitate cross-border offerings of collective investment scheme (CIS) products within ASEAN, the Bank accorded several foreign exchange administration flexibilities. This will broaden opportunities for authorised fund managers under the ASEAN CIS framework to establish ringgit-denominated unit funds outside Malaysia and to invest ASEAN CIS funds raised in Malaysia abroad without having to seek for prior approval. The ASEAN CIS framework is expected to encourage the development of wider investment product offerings to harness and channel surplus funds within the region in support of regional growth and development.

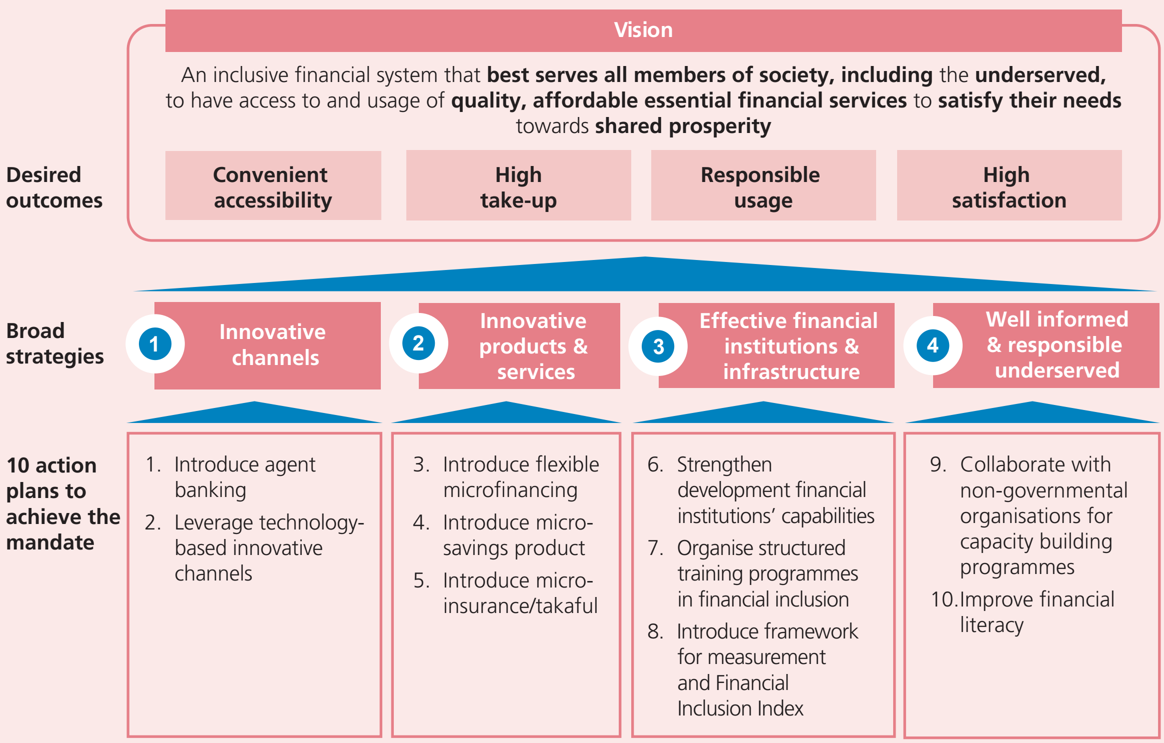
As part of ongoing efforts to promote the use of local currencies in trade and investment, the Bank entered into a Memorandum of Understanding with the Bank of Thailand in August 2015 to promote the use of the ringgit and Thai baht for settlement activities. This collaboration will serve as a pilot scheme in the use of ASEAN currencies for trade settlement, which is expected to lower the cost of doing business and reduce exposure to foreign exchange volatility. The Bank also renewed its bilateral currency swap arrangement with The People's Bank of China for the third time after its initiation in 2009. The three-year term arrangement was maintained at RMB180 billion or RM90 billion and will further strengthen the existing economic and financial linkages between Malaysia and PR China.

Unlocking Shared Benefits for All through Inclusive Finance

Promoting inclusive finance, where all segments of society have access to suitable and affordable formal financial services, is a key focus and specific mandate of the Bank in contributing towards equitable and sustainable growth. Essential financial services provide opportunities for Malaysians, including the lower income segments of society, to safely save and invest, borrow for productive activities and buffer themselves against unforeseen shocks. In advancing the financial inclusion mandate, the Bank in 2011 introduced the Financial Inclusion Framework, a comprehensive plan outlining the strategies for an inclusive financial system over the coming decade. Subsequently, the Financial Inclusion Index was developed to track the progress and impact of the Bank's financial inclusion policies. This article reports on the progress of financial inclusion in Malaysia since 2011 when the first Financial Inclusion Demand-Side Survey was conducted.

Diagram 1

Financial Inclusion Framework



Source: Bank Negara Malaysia

Significant Achievements in Financial Inclusion

The Financial Inclusion Index score for the general population in Malaysia improved significantly to 0.90 in 2015 from 0.77 in 2011 (where 1.00 reflects full inclusion). These improvements were largely driven by increased accessibility to financial access points across the country, more responsible usage of products and higher levels of satisfaction among financial consumers. Meanwhile, gaps continue to be observed in the utilisation of financial products and services, particularly among low-income households.

(i) Convenient Accessibility

Convenient accessibility, which measures the availability of financial access points at the district *(daerah)* and sub-district *(mukim)* levels, recorded a marked improvement. All 144 districts and 97% (2011: 46%) of the 886 sub-districts with a population of at least 2,000 now have access to essential

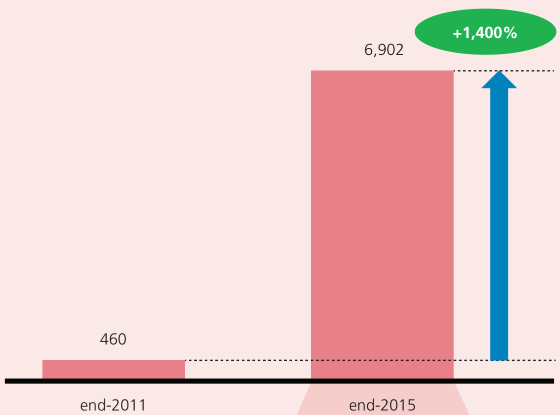
Agent Banking as Catalyst for Financial Inclusion

Agent banking enables consumers to obtain banking services by licensed financial institutions through third-party agents such as retail outlets and post offices. First introduced in 2012, the agent banking regulatory framework was further enhanced in April 2015 to allow agents to facilitate the opening of saving accounts[1] on behalf of financial institutions via online real-time systems and biometric identity verification.

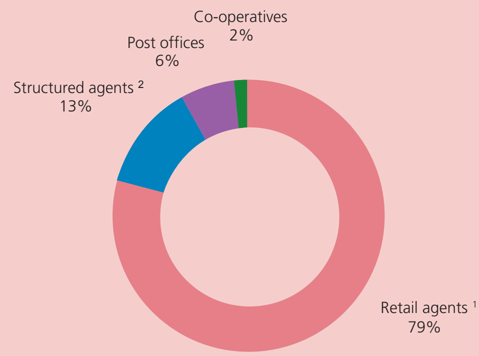
As at end-2015, 6,902 agent banks have been established nationwide, with over 13,600 new accounts opened and 63 million transactions amounting to RM5.7 billion facilitated by agent banks. Most of these transactions involved bill payments (59.2%; RM3.4 billion) and cash deposits (28.1%; RM1.6 billion).

Chart 1

Number of Agent Banks Had Increased



Mainly Supported by Retail Agents



[1] Examples are sundry shops, telecommunication shops
[2] Examples are petrol stations, farmer organisations, mini rural transformation centres

Source: Bank Negara Malaysia

[1] In addition to allowable services under the Guidelines on Agent Banking (2012) namely accepting deposits, facilitating withdrawals, fund transfers, bill payments and financing repayments.

financial services. This expansion in the number of access points nationwide provides 99% (2011: 82%) of Malaysians with convenient access to safe, reliable and affordable financial services.

This achievement was in large part due to the establishment of agent banks, which had an important impact in increasing access to financial services particularly in the rural areas. Following the operation of agent banks, the volume of financial transactions conducted through agent banks has increased from three million transactions as at end-2012 to 63 million as at end-2015 (amounting to RM5.7 billion in value).

Another important development that has intensified since 2011 has been the expansion of Internet banking and mobile banking. As at end-2015, the number of Internet banking subscribers increased to 19.8 million (2011: 11.9 million) representing 63.7% of the total population, while the number of mobile banking subscribers increased to 7.3 million (2011: 1.6 million) representing 23.5% of the total population. These digital channels have had an important impact in increasing access to banking services, with greater convenience and flexibility for consumers to keep track of their personal finances.

Financial Inclusion Index

The Financial Inclusion Index measures the level of financial inclusion in Malaysia and the effectiveness in achieving the four desired outcomes of financial inclusion: (i) convenient accessibility; (ii) high take-up; (iii) responsible usage; and (iv) high satisfaction.

The Financial Inclusion Index is constructed from both supply-side data from financial institutions and demand-side data collected through the Financial Inclusion Demand-Side Survey, conducted periodically by the Bank.

Financial Access Points in Malaysia

Access points per 10,000 adults:
- 4.5 branches and agent banks
- 5.1 Automated Teller Machines (ATMs)
- 2.3 Cash Deposit Machines (CDMs)

Diagram 2

Targeted Microfinancing Solutions

Microfinancing Initiatives	Purpose
Initiatives by the Financial Institutions:	
PEMBIAYAAN MIKRO: ***Pembiayaan Mikro* Scheme**	Increase access to financing for micro enterprises
Flexible Microfinancing Framework	Assist micro enterprises that have irregular or seasonal income streams
Complemented by schemes offered by the Microfinance Institutions:	
Amanah Ikhtiar Malaysia: ***Amanah Ikhtiar Malaysia* (AIM) [1]**	Provide microfinancing primarily to women for income-generating activities
TEKUN Nasional: ***Tabung Ekonomi Kumpulan Usaha Niaga* (TEKUN) [2]**	Provide financing facilities for entrepreneurs to kick-start and further expand their businesses

[1] AIM was established in 1987 with the objective of assisting the hard-core poor to rise out of the poverty trap. This is done through the provision of microfinancing through more than 130 branches nationwide.

[2] TEKUN Nasional was established in 1998 and since then, there was a rebranding exercise in 2008. It has played a role that is beyond just being a financial provider but also provides entrepreneurship development and support services. TEKUN has more than 190 branches to-date.

Source: Bank Negara Malaysia, Amanah Ikhtiar Malaysia & Tabung Ekonomi Kumpulan Usaha Niaga

(ii) *Take-up of Financial Products and Services*

The take-up rate, which represents the population's usage of specific financial products namely deposit accounts, financing accounts and insurance policies, recorded a slight decline. While the percentage of adults with deposit accounts remained high at 91%, the percentage of adults with financing accounts (including credit cards) declined from 36% to 25%. This was due in part to heightened focus on better debt management and affordability of debt servicing following the introduction of measures such as the credit card services tax, the Credit Card Guidelines and the Guidelines on Responsible Financing. The percentage of adults surveyed who indicated that they purchased a life insurance or takaful policy moderated from 18% to 16%. These findings show that while financial inclusion has increased significantly since 2011, certain gaps remain, particularly among the low-income segment, where affordability remains a challenge.

Diagram 3

***Pembiayaan Mikro* Scheme**

PEMBIAYAAN MIKRO

1. Features

- **Easy** – no collateral, minimum documentation, simple procedures
- **Fast** – turnaround time about 10 days
- **Convenient** – accessible via more than 2,000 access points
- **Amount** – up to RM50,000 for business purposes

2. Micro Enterprise Fund (MEF)

- RM200 million revolving fund
- Concessionary funding rate to Participating Financial Institutions for onward lending to viable micro enterprises

3. Participating Financial Institutions

BSN, AGRO BANK, ALLIANCE BANK, BANK RAKYAT, UOB, Maybank, Bank Muamalat, PUBLIC BANK, CIMB ISLAMIC, AmBank

4. Achievements

- Since inception in 2006 until end-2015, RM3.1 billion in financing approved for more than185,000 accounts
- Outstanding financing as at end-2015 stood at RM912.5 million (5.7% year-on-year growth) to more than 66,000 accounts

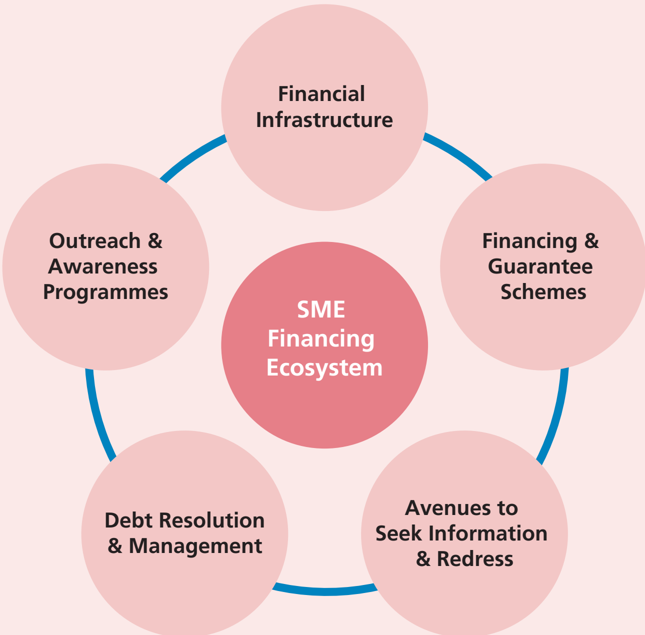
Source: Bank Negara Malaysia

In recognition of these gaps and opportunities, the Bank has undertaken various initiatives to encourage the development of products and services that are targeted towards this segment. This has included encouraging financial institutions to offer microsavings products with low committed periodical savings to encourage and facilitate regular savings among the low-income population; offering affordable microinsurance/microtakaful products by insurance companies and takaful operators to provide financial protection against unexpected adverse events; and supporting the provision of tailored microfinancing solutions for micro, small and medium enterprises (SMEs).

The provision of financial services is also supported by a comprehensive financing ecosystem comprising: (i) an enabling financial infrastructure; (ii) financing and guarantee schemes; (iii) avenues to seek information and redress; (iv) debt resolution and management arrangements; and (v) outreach and awareness programmes. These arrangements have been important to promote confidence and reduce anxiety in using financial services, in addition to supporting individuals and businesses to understand how the financial system can help them manage risks and improve their financial well-being.

Diagram 4

SME Financing Ecosystem



SME Financing in Malaysia

- SME financing approval rate exceeding 80%.
- 96% or RM274.5 billion were from financial institutions.
- Grew by 14% over the last three years.
- Share of financing to small-sized companies (41%), micro enterprises (31%) and medium-sized SMEs (28%).
- 44% of approvals were given to new customers*.

Source: Bank Negara Malaysia and *SME Corporation Malaysia Survey Third Quarter 2015

Development financial institutions (DFIs) also have an important role in contributing to a higher utilisation of financial services given the specific socio-economic objectives that they serve. This includes supporting the development of SMEs, the agricultural sector and co-operatives through the provision of inclusive financial services. The Bank provides oversight over six DFIs that are prescribed under the Development Financial Institutions Act 2002 with the aim of promoting their ability to perform their roles effectively and sustainably.

(iii) Responsible Usage

Responsible usage, which measures whether financial products are utilised appropriately, remained high. The percentage of banking customers with active deposit accounts, an indication that they are saving regularly, has increased to 92% from 87% in 2011 while the percentage of banking customers with performing financing accounts increased to 98% from 97% over the same period.

Financial education initiatives have had a key role in encouraging responsible usage by helping consumers make better financial decisions, thus promoting a positive experience from their participation in the financial system. The Bank continues to collaborate with the public and private sectors to organise and implement these financial capability programmes, while agencies such as the Financial Mediation Bureau, the Credit Counselling and Debt Management Agency and the Small Debt Resolution Scheme serve to ensure that financial consumers are able to get the help that they need to effectively manage their financial affairs.

Diagram 5

Financial Inclusion Initiatives

Dimensions	Initiatives (2011-2015)	Moving Forward
1 Convenient Accessibility 2011 46% 2015 97% sub-districts (*mukim*) with at least 2,000 population with at least one access point 2011 82% 2015 99% population living in sub-districts (*mukim*) with at least one access point	Agent Banking Mobile & Internet Banking Branching policy	• Increase the number of access points in the underserved areas • Promote the opening of accounts via agent banking
2 Take-up Rate % of adult population with financial products deposit accounts: 2011 92%, 2015 91% financing accounts: 2011 36%, 2015 25% life insurance/ takaful policies: 2011 18%, 2015 16%	**Financial Products** Basic savings Microfinancing CGC's direct financing scheme **Enabling Infrastructure** CREDIT BUREAU MALAYSIA CGC CCRIS Proportionate regulation (DFIA)	• Microsavings & microinsurance/ microtakaful for low income households • Savings product for youth • Accelerate migration to e-payment • Financing products for youth, women & persons with disabilities • ASEAN SME & Financial Inclusion Working Groups • Government-to-person payment (G2P) • Financing Guidebook for SMEs • Enhance regulatory framework on microfinance
3 Responsible Usage 2011 87% 2015 92% Customers with active deposit accounts 2011 97% 2015 98% Customers with performing financing accounts	**Regulations** • Responsible Financing Guidelines • Credit Card Guidelines **Financial Advisory, Education and Redress** BANK NEGARA MALAYSIA LINK AKPK POWER! SME Promotion Small Debt Resolution Scheme FMB	• Train-the-Trainers Programme on SME Financing • Financial literacy program for 1AZAM[i] participants and targeted segments (low income households, persons with disabilities, school children) • Enhance restructuring & rescheduling mechanism for SME financing [i] 1AZAM (Akhiri Zaman Miskin) – Government's poverty eradication programme
4 Satisfaction Level 2011 61% 2015 73% Customers who are satisfied with overall financial services	**Consumer and Market Conduct** • Guidelines on Product Transparency and Disclosure • Guidelines on the Imposition of Fees and Charges on Financial Products and Services • ABM-PARTNER on client charter and standard documentations	• Enhance advisory service by the DFIs • Digitalisation of delivery of products and services

Source: Bank Negara Malaysia

(iv) Satisfaction Level

The index revealed a significant improvement in the level of satisfaction with financial services in Malaysia. The percentage of customers of financial institutions who are satisfied with overall financial services increased to 73% (2011: 61%), with higher satisfaction levels observed across all segments of the population, including low-income households who also recorded an increase in satisfaction to 67% (2011: 60%). This in part reflects improvements in the conduct and services of financial institutions arising from various initiatives to promote a positive experience for all financial customers. Of note were substantially strengthened standards issued by the Bank to regulate product transparency and disclosures, and the imposition of fees and charges by banks. Also notable have been key private sector initiatives such as the PARTNER programme by the banking industry which simplifies documentation and improves the turnaround time for processing SME financing and housing loans. A similar initiative to introduce plain language in insurance contracts has also been pursued by the insurance industry.

Elevating the Level of Financial Inclusion

The Bank remains committed to expand the level of financial inclusion. This will be supported by a sustained focus on encouraging the development of innovative delivery systems, products that are responsive to the needs of the underserved, and effective education, support and protection for financial consumers. With this focus, the Bank expects that the remaining 8% that constitutes the unbanked population in Malaysia will be further reduced to 5% by 2020.

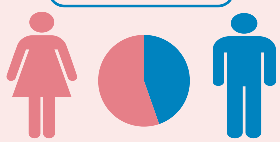
Diagram 6

Who Are the 8% Unbanked Adult Population?

Gaps in financial inclusion across demographics, with women, youth and low income at the greatest disadvantage

Gender

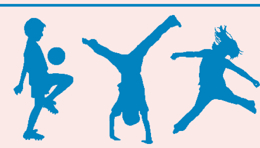
55% women



More than half of the unbanked population are women

Age Group

46% from age of 15-24 years old



Youth are less likely to have a formal account

Income

86% no income & low income

Adults with no income or low income are less likely to be banked

Region

33% in East Malaysia

Adults living in the rural and remote location are less likely to be banked

Source: Bank Negara Malaysia

2015

REGULATORY AND SUPERVISORY FRAMEWORK

The Bank continued to strengthen the pillars of a sound prudential framework in 2015. Regulatory and supervisory activities were guided by a domestic focus on ensuring strong governance and appropriate risk-taking by financial institutions in an environment of heightened risks. These included the intensification of stress tests conducted by both the Bank and financial institutions. In addition, the Bank's policy priorities took into consideration progress made on global regulatory reforms.

On 31 January 2016, amendments to the Development Financial Institutions Act 2002 (DFIA) were brought into force to further strengthen the regulatory framework for development financial institutions (DFIs). The amendments aim to better support the DFIs' specific mandates in a sustainable manner, and reflect the evolving role of DFIs in supporting Malaysia's socio-economic development and inclusive growth.

Efforts to strengthen safeguards against threats of money laundering and terrorism financing (ML/TF) continued to be a key priority for the Bank. In September 2015, the Financial Action Task Force (FATF) published a report on the Mutual Evaluation (ME) of Malaysia's anti-money laundering and countering the financing of terrorism (AML/CFT) framework. The report acknowledged Malaysia's well-developed legal and regulatory arrangements, and strong inter-agency coordination for the supervision of ML/TF. Drawing in part on the recommendations of the ME Report, the National Coordination Committee to Counter Money Laundering (NCC) has formulated a five-year National AML/CFT Strategic Plan (NSP) to promote and protect the integrity of Malaysia's financial system over the long term and contribute towards reducing the level of crime in the country. Based on the commitment demonstrated by Malaysia's action plan and the continuing progress in efforts to improve its AML/CFT programme, Malaysia was granted full membership of the FATF in February 2016.

On the international front, the Bank signed the International Association of Insurance Supervisors (IAIS) Multilateral Memorandum of Understanding (MMoU) in May 2015. The MMoU provides a global framework for supervisory co-operation and information exchange to support the effective supervision of insurers that operate in multiple jurisdictions. As at 31 December 2015, the MMoU has been signed by 54 other supervisory authorities which collectively account for more than 65% of insurance premiums globally.

STRENGTHENING THE PRUDENTIAL FRAMEWORK

Liquidity standards for banking institutions

In March 2015, the Bank issued the final Liquidity Coverage Ratio (LCR) standards for banking institutions as part of the implementation of the Basel III reform package in Malaysia. The rules, which require banking institutions to maintain sufficient liquidity buffers to withstand severe short-term liquidity shocks over a 30-day horizon, came into effect on 1 June 2015. As expected, banking institutions transitioned smoothly to the new liquidity requirements with all banking institutions meeting the 60% minimum requirement. As at 31 December 2015, the average LCR of the banking sector stood at 127% with 39 out of 54 banking institutions already reporting LCR levels above the 100% requirement which only comes into effect in 2019 under the transitioning arrangements. Since August 2015, the Bank has started to publish the aggregate LCR position for the banking system to supplement the loan-to-deposit ratio as a more reflective indicator of liquidity risks.

Banking institutions transitioned smoothly to the new liquidity requirements with all banking institutions meeting the 60% minimum requirement

The Bank continues to monitor banking institutions' positions against the Net Stable Funding Ratio (NSFR) rules set out by the Basel Committee on

Banking Supervision (Basel Committee). The NSFR complements the LCR by reducing a banking institution's funding risk over a longer-term horizon. This is achieved through a requirement for banking institutions to fund their activities with sufficiently stable sources of funding. During the year, the Bank updated the NSFR reporting template to capture the Basel Committee's final NSFR rules which were issued in October 2014. The changes incorporate revised factors for measuring available stable funding and required stable funding as well as more granular reporting of derivatives and short-term exposures. Owing to the more favourable treatment of retail deposits and performing loans, the changes are likely to improve compliance with the NSFR by banking institutions in Malaysia.

Data gathered during the observation period will serve as input to inform the Bank's approach to the implementation of the NSFR in Malaysia. The Bank expects to consult on the proposed rules for banking institutions in the second half of 2016. As with other global standards, the Bank will address issues arising from the application of the rules in the context of the domestic financial system.

Corporate governance

Financial institutions in Malaysia have demonstrated continued improvements in corporate governance over the past few years. In particular, progress was observed among larger financial institutions in strengthening the collective expertise of the board and senior management to navigate a more complex regulatory and operating environment. The Bank has reviewed its corporate governance standards for financial institutions to reflect these developments as well as evolving global standards. The revised corporate governance standards also incorporate changes to existing rules to take into consideration the more diverse range of practices among various financial institutions in the financial system. The revised standards will be issued for industry consultation in the first quarter of 2016.

Among the key changes proposed are: (i) requirements for boards of financial institutions to comprise a majority of independent directors; (ii) heightened expectations on the board and senior management to foster a corporate culture that promotes ethical, prudent and professional behaviour; and (iii) expanded requirements on compensation structures to ensure that employees' incentives are aligned with prudent risk-taking. Financial groups are also required to provide effective group-wide oversight over risks arising from activities within the group and across jurisdictions where the group has operations. The Bank further proposes to reduce interlocking board representations across licensed institutions within a financial group to address potential conflicts that can arise between group and entity-specific interests.

Key changes in the revised corporate governance standards include expanded requirements on compensation structures to align incentives with prudent risk-taking

The Bank is cognisant that sourcing for top quality board members remains a challenge for many financial institutions and is therefore proposing to phase in the strengthened requirements on board composition over three to five years. Concurrently, work to develop a Directors Register is being advanced by the Financial Institutions Directors' Education Programme (FIDE) Forum. FIDE Forum aims to launch the Directors Register in April 2016,

Components of the Net Stable Funding Ratio (NSFR)

The measurement of the NSFR is represented in the formula below:

$$\text{NSFR} = \frac{\text{Available Stable Funding (ASF)}}{\text{Required Stable Funding (RSF)}} \geq 100\%$$

ASF factors are weighted according to the stability of various funding sources while RSF factors reflect the amount of stable funding needed for the banking institution's assets and other exposures.

along with a process to admit qualified individuals to the Register on an ongoing basis to meet the growing demand of financial institutions for new directors.

Credit risk management in banking institutions

Under the more challenging business conditions that prevailed during the year, banking institutions have continued to strengthen their credit risk monitoring and measurement approaches to identify and actively manage potential losses from borrowers that are more exposed to financial stress. With higher exposures of banking institutions to large corporates which are interconnected across economic sectors, and a growing share of foreign currency denominated loans, the Bank has also increased its scrutiny of practices in the industry to account for concentration, country and transfer risks.

In line with these developments, the Bank undertook a comprehensive review of the existing regulatory framework for credit risk management to ensure that the prudential standards continue to remain relevant. A key focus of the review is on improving the sophistication of credit risk measurement methods that are employed across the industry. The Bank proposes to strengthen requirements on credit rating frameworks, including requiring all banking institutions to develop, test and implement loss estimation models that capture internal estimates of the probability of default, loss given default and exposure at default. The proposals will also further clarify the role of the board in credit decisions to reflect the board's primary responsibility for approving the credit risk management strategy (including the risk appetite) and significant credit policies, rather than individual loans. The Bank expects to issue the revised standards for industry consultation in the first half of 2016.

Insurance and takaful

Following the implementation of the revised standards on the role of the appointed actuary which came into effect on 1 January 2015, the Bank completed revisions to four related standards for insurers and takaful operators during the year (Table 3.1). Taken together, these changes support a strong and independent role for the appointed actuary in promoting the sound management of insurance/takaful and financial risks. They also reinforce a more active role of the board in overseeing an insurer/takaful operator's financial affairs.

The independence of an appointed actuary is an important element in promoting sound risk management

Table 3.1

Revised Standards for Insurers and Takaful Operators

Standards	Salient revisions
Introduction of New Products by Insurers and Takaful Operators	• Making the Chief Executive Officer (CEO) clearly responsible to ensure that new products offered are consistent with the risk-bearing capacity of the institution and the interests of the customers
Management of Participating Life Business	• Strengthened responsibility of the appointed actuary to recommend the surplus distribution based on an annual bonus supportability study • Enhanced accountability of the CEO and board in relation to the principles for treating customers fairly
Financial Condition Report (FCR)	• Closer alignment of the FCR prepared by the appointed actuary with an insurer's business planning cycle, including strategy setting, in line with its intended use as a capital and risk management tool by the board and senior management
Stress Testing	• Expanded principles and guidance on the conduct of stress tests for the purpose of informing the appointed actuary's assessments in the FCR. This must include: - forward-looking multi-period stress tests (over a medium- to long-term horizon) - scenarios prescribed by the Bank in addition to internally-developed scenarios

Source: Bank Negara Malaysia

Islamic finance

During the year, the Islamic banks completed the migration of their existing customer accounts to either Islamic deposits or investment accounts, as required under the Islamic Financial Services Act 2013 (IFSA). To comply with the IFSA, Islamic banks can either migrate all existing customer accounts to IFSA-compliant deposit products, or offer customers a choice of placing their monies in IFSA-compliant deposits or investment accounts. As at end of 2015, eight Islamic banks have opted to offer the choice of Islamic deposits or investment accounts to their customers. These Islamic banks have continued to strengthen governance and risk management arrangements in respect of Islamic investment accounts, including arrangements to ensure the proper segregation and management of funds governed under investment account mandates. The remaining Islamic banks, meanwhile, have migrated all their existing customers to IFSA-compliant deposit products which will continue to be principal-guaranteed and insured by Perbadanan Insurans Deposit Malaysia (PIDM).

The Bank also made further progress on the development of a comprehensive Shariah contract-based regulatory framework that addresses Shariah parameters and operational requirements. The Bank's Shariah Advisory Council has approved the Shariah parameters for an additional five contracts, bringing the total number of approved Shariah parameters to date to 13. During the year, operational standards for four other contracts were finalised while standards for five new contracts were issued for consultation. A compendium of Shariah contract-based standards developed and issued to date is provided in Table 3.2.

To complement the Risk-Based Capital Framework for Takaful Operators (RBCT), the Bank outlined proposals for the implementation of the Internal Capital Adequacy Assessment Process (ICAAP) by takaful operators in a concept paper issued for industry feedback in August 2015. The ICAAP aims to promote a more rigorous process for capital management which is aligned with the risk profile of each takaful operator, including under a stressed scenario. Similar to the ICAAP for insurers, takaful operators are required to set and observe individual target capital levels which reflect risks beyond those covered in the RBCT. In addition, takaful operators must specifically assess the need to allocate *qard* for the purpose of addressing a potential deficit in the Participants' Risk Fund. The Bank expects to finalise the requirements in 2016 for implementation in 2017.

Table 3.2

Compendium of Shariah Contract-based Standards

	Shariah parameters	Operational requirements
Murabahah	✓	✓
Musyarakah	✓	✓
Mudarabah	✓	✓
Tawarruq	✓	✓
Istisna`	✓	✓
Qard	✓	✓*
Hibah	✓	✓*
Wakalah	✓	✓*
Wadi`ah	✓	✓*
Kafalah	✓	✓*
Ijarah	✓	✓*
Bai` `inah	✓	–
Wa`d	✓	–
Rahn	✓*	–
Bai` al-sarf	✓*	–

* Issued for consultation

Source: Bank Negara Malaysia

Amendments to the DFIA

Amendments to the DFIA, which came into effect on 31 January 2016, marked another important development in the Bank's continuing efforts to ensure an effective legal framework for financial services in Malaysia. The DFIA supports the effective regulation and supervision of DFIs to ensure that the specific mandates entrusted to DFIs are achieved in a financially sustainable manner. Six DFIs[1] are currently regulated and supervised by the Bank pursuant to the DFIA.

[1] Bank Kerjasama Rakyat Malaysia Berhad (Bank Rakyat), Bank Pembangunan Malaysia Berhad (Bank Pembangunan), Bank Pertanian Malaysia Berhad (Agrobank), Bank Simpanan Nasional (BSN), Export-Import Bank of Malaysia Berhad (EXIM Bank) and Small Medium Enterprise Development Bank Malaysia Berhad (SME Bank).

The amendments aim to ensure sound financial management, and improve the operational efficiency and resilience of DFIs. To this end, existing provisions in the DFIA on corporate governance, business activities and the scope of the Bank's regulatory oversight have been enhanced. In addition, the amended Act incorporates new provisions for the regulation of Shariah governance and consumer protection, with expanded enforcement tools to ensure compliance (Diagram 3.1).

The amendments to the Development Financial Institutions Act 2002 are expected to further strengthen the ability of DFIs to support Malaysia's socio-economic development and promote inclusive growth

As Malaysia progresses towards becoming a high value-added economy, these amendments are expected to further support the important role of DFIs in promoting inclusive growth, building on achievements over the past decade (Diagram 3.2). Importantly, the strengthened legislation will ensure that DFIs are financially sound and sustainable, and well managed in order to effectively contribute to Malaysia's socio-economic development and promote financial stability.

International developments

In the banking sector, the Basel Committee is currently reviewing the overall architecture of the risk-based capital requirements. The review aims to make the requirements simpler, more comparable across jurisdictions and more risk-sensitive. The Basel Committee will be conducting a quantitative impact assessment on the proposed requirements in 2016 with an aim to not significantly increase the overall capital requirements. The expected impact for Malaysian banking institutions will be most significant in the areas of review relating to capital requirements for credit and market risks.

Diagram 3.1

Amendments to the DFIA

Enhanced areas	1 Corporate governance	• Strengthened governance arrangements and 'fit and proper' criteria for appointment of the CEO and directors • Greater clarity on the respective roles and accountability of the Minister and the board in managing DFIs • Enhanced responsibility of the board to ensure alignment of strategies with the mandates, supported by adequate capacity and capability of the DFI
	2 Business activities of DFIs	• Strengthened prudential requirements and more efficient regulatory processes, including those for approving material investments by DFIs and financing to related parties
	3 Regulatory oversight	• Strengthened supervisory intervention mechanisms, including the adoption of pre-emptive triggers • Wider scope for investigation and examination • Enhanced accountability to comply with standards issued by the Bank and to align internal policies and procedures with the standards
New areas	4 Shariah governance	• Comprehensive Shariah governance for Islamic DFI business, consistent with provisions under IFSA
	5 Business conduct and consumer protection	• Comprehensive business conduct and consumer protection which are aligned with the Financial Services Act 2013 (FSA)
	6 Enforcement framework	• Comprehensive enforcement framework to enable proportionate treatment of non-compliance

Source: Bank Negara Malaysia

Diagram 3.2

Accomplishments by DFIs

Higher deposits and greater access to financing	Higher deposits mobilised 2002: RM29.4 billion 2015: RM117.2 billion	Growth in financing 2002: RM25.2 billion 2015: RM135.6 billion
Enhanced institutional structure	A more sustainable business model with expanding branches 2002: 523 2015: 764	Lower dependency on the Government and able to raise funds from the market
Improved corporate governance	Stronger human capital with professionals in management teams	Better mix of expertise at board level
Improved financial performance	Enhanced asset quality with lower impaired loan ratio 2002: 14.9% 2015: 4.7%	Stronger overall capital position 2002: RM4.1 billion 2015: RM30.5 billion

Source: Bank Negara Malaysia

With respect to credit risk, the majority of banking institutions in Malaysia currently adopt the standardised approach which sets out rules for quantifying capital required based on external ratings of credit exposures. The Basel Committee has proposed changes to the standardised approach with the aim of reducing the mechanistic reliance by banking institutions on credit ratings in determining regulatory capital requirements. Changes to the prescribed risk weights for each exposure class are also being proposed to increase their risk-sensitivity and better reflect inherent risks of the exposures.

The market risk framework is also similarly being reassessed. The fundamental review of the trading book addresses the boundaries between the banking and trading books of banking institutions to limit arbitrage opportunities arising from the large differences in capital treatment. The review also introduces changes to the calculation of capital requirements for market risk to better capture tail risk events, with additional constraints proposed for the use of the internal model approach. Based on results of an interim impact analysis published by the Basel Committee in November 2015, substantially higher market risk capital requirements were reported among the sampled banking institutions regardless of whether they adopted the standardised or internal model approach.

In the insurance sector, the introduction of a global capital standard for insurers continued to be a key focus of global regulatory reforms. This is being progressed under two main work streams led by the IAIS. The first is the development of a capital framework for Global Systemically Important Insurers (G-SIIs). The framework will be applied from January 2019 and will comprise basic capital requirements (BCR) as well as higher loss absorbency requirements (HLA). The BCR is the baseline measure and will serve as a comparable foundation for the calculation of HLA, which has been added to appropriately reflect the systemic importance of G-SIIs. In parallel, the IAIS is also developing a risk-based and group-wide insurance capital standard (ICS) that will be applicable to all internationally-active insurance groups (IAIGs). The ICS is aimed at establishing a common methodology for supervisors to assess capital adequacy in IAIGs across different jurisdictions. When implemented at the end of 2019, the ICS is expected to replace the BCR as the baseline capital measure for HLA.

In the area of financial reporting, the development of a single measurement framework for insurance contracts (IFRS 4 Phase II) by the International Accounting Standards Board (IASB) is at an advanced stage and a final standard is expected to be issued in 2016. As the IASB intends to allow a three-year implementation period after the publication of the final insurance contracts standard, the earliest mandatory effective date will be after the implementation date of IFRS 9 Financial Instruments. In response to concerns on the potential increase in profit and loss volatility reported by insurance entities arising from the different implementation dates of IFRS 9 and IFRS 4 Phase II, the IASB is consulting on proposals to allow insurers to either remove from profit and loss any accounting mismatches and temporary volatility arising from the IFRS 9 implementation (overlay approach), or opt for a temporary exemption from applying IFRS 9 (deferral approach). This is a welcome development given Malaysia's convergence with IFRS.

The Bank is monitoring these international developments closely, including through its participation in the global standard setting process. The Bank is also an active member of various regional central banking and supervisory fora which regularly engage with the standard setting bodies to ensure that proposed standards appropriately consider relevant characteristics that may be prevalent in national financial systems. This work is supported by the Bank's specialist units which are tasked to undertake, in coordination with domestic financial institutions, specific reviews and analyses of the impact of global standards on financial intermediation activities in Malaysia.

SAFEGUARDING FINANCIAL SYSTEM INTEGRITY

National level assessment and collaboration
Malaysia continues to make positive strides in detecting and deterring criminal ML/TF activities. In September 2015, the FATF published a report on the ME of Malaysia's AML/CFT framework, an exercise that commenced in 2014. The ME is an independent assessment of a jurisdiction's compliance with the International Standards on Combating Money Laundering and the Financing of Terrorism and Proliferation. To date, 12 countries, including Malaysia, have been assessed against the updated standards that were adopted by the FATF in 2012. The ME Report on Malaysia acknowledged a 'high degree' of technical compliance and a 'substantial to moderate' level of effectiveness in the implementation of the international standards. The ME Report also confirmed that the findings from Malaysia's own National Risk Assessment (NRA), which was conducted by the NCC in 2013, are 'reasonable and sound'.

In addition, the ME Report identified several priority areas for attention to further strengthen Malaysia's defences against threats and vulnerabilities at the national level. Among others, the report highlighted a need to deepen the assessment of money laundering risks from foreign-sourced threats. Malaysia was also encouraged to increase the number of investigations, prosecutions and confiscations in connection with suspected ML/TF offences. Improvement was also recommended in the implementation of risk-based AML/CFT safeguards by designated non-financial businesses and professions (DNFBPs). These include casinos, real estate agents, lawyers and notaries, trust companies, company secretaries, and dealers in precious metals and stones. The full FATF ME Report on Malaysia can be found at the Bank's website (amlcft.bnm.gov.my).

In September 2015, the NCC finalised a comprehensive NSP which draws upon the recommendations of the ME Report and findings from the NCC's own risk assessments. The five-year NSP supersedes the interim plan developed by the NCC in 2014 and sets out to deliver on ten strategic outcomes, including through improvements to legal frameworks, more effective international co-operation and more aggressive training and awareness initiatives. The formulation of the NSP represents a more sustained programme, with a strong emphasis on strengthening inter-agency coordination, to promote and protect the integrity of Malaysia's financial system over the long term. To ensure the effective implementation of the NSP within the agreed timeline, the NCC has established six working groups to monitor the performance of each of the 16 member agencies, with regular reporting to the NCC.

AML/CFT assessments of reporting entities
As the competent authority under the Anti-Money Laundering, Anti-Terrorism Financing and Proceeds of Unlawful Activities Act 2001 (AMLA), the Bank disseminates financial intelligence received from reporting entities to the law enforcement agencies tasked to investigate ML/TF offences. The bulk of such intelligence processed by the Bank during the year related to suspected fraud, corruption and illegal deposit taking activities. The Bank also increased its engagements with relevant law enforcement agencies throughout the year. This included providing to these agencies both proactive and reactive disclosures, particularly

to support investigations on crimes which the NRA identified as posing the highest money laundering threat, namely smuggling, tax evasion, corruption, fraud and drug trafficking.

Observations from the Bank's review of AML/CFT frameworks implemented by reporting entities during the year are provided below.

Banking institutions

The Bank has observed a continued emphasis on strengthening AML/CFT controls and practices among banking institutions. This has been evident in increased resources allocated to, and investments in, screening and transaction monitoring systems. The Bank has also noted improved practices in the conduct of customer due diligence (CDD). Further enhancements in governance and control measures were identified to improve processes for identifying transactions designed to evade tax and for assessing risks associated with politically exposed persons. The Bank will continue to monitor the rectification measures undertaken by banking institutions in these areas.

During the year, the Bank also progressed its internal initiatives to better integrate financial intelligence with its prudential supervision of banking institutions. This involves developing a structured process to incorporate, in a consistent way, results from annual AML/CFT assessments and analyses of trends and patterns in the Bank's risk-based supervisory framework. Such an integrated approach aims to leverage on the Bank's supervisory activities more effectively to support timely interventions by the Bank to pre-emptively address AML/CFT weaknesses identified in banking institutions. As an expected outcome of this work, banking institutions with weak AML/CFT systems will be subjected to closer and more intensive supervision and enforcement action by the Bank.

DNFBPs and other financial institutions

The Bank adopts a risk-based approach in monitoring compliance with AML/CFT requirements by DNFBPs and other financial institutions. Under this approach, supervisory resources are allocated to the sub-sectors and individual entities that have been identified as posing greater risk. Examinations carried out during the year found that most DNFBPs and other financial institutions had in place internal processes for conducting basic CDD assessments. However, the full implementation of beneficial ownership and client risk profiling requirements remains a challenge for these entities. Further efforts will also be required among DNFBPs and other financial institutions to establish appropriate internal controls to ensure a more comprehensive assessment of ML/TF risk. Apart from conducting on-site and off-site examinations and surveillance, the Bank regularly engages with licensing authorities and self-regulatory organisations to assess emerging risks and developments relating to AML/CFT.

While DNFBPs and other financial institutions are currently assessed to pose a medium or low ML/TF risk, the NSP has accorded a specific focus on improving the understanding of AML/CFT issues among such entities. To this end, the NCC elevated the DNFBP Taskforce into a permanent DNFBP Working Group in 2015. The Bank is the Chair and Secretariat to this working group, which is expected to further strengthen inter-agency co-operation in undertaking risk assessments and promoting stronger safeguards against ML/TF risks among DNFBPs. The Bank also plans to increase resources allocated to the assessment of DNFBPs to provide broader coverage of such institutions in its ongoing supervisory activities. This includes carrying out joint assessments with other members of the DNFBP Working Group.

Money services business

Money changing, wholesale currency and remittance services represent an important area of focus for the Bank in reducing vulnerabilities to ML/TF risks. Transactions in these money services business (MSB) sub-sectors continued to expand in 2015 and were supported by improvements observed in operational and compliance standards.

MSBs' compliance with AML/CFT requirements continued to improve during the year. Further progress was made by larger MSBs in implementing a risk-based approach to managing and mitigating ML/TF risk, while the Bank continued to work closely with the industry to support smaller players in incorporating risk-based approaches in their management of ML/TF risks. This included a specific focus on strengthening the competence of compliance officers employed in the industry.

With this in view, the Malaysian Association of Money Services Business has established a Group of Compliance Officers (GOCO) to coordinate and drive capacity building initiatives for compliance officers in the industry. The GOCO also acts as a

Key Developments in the Money Services Business (MSB) Industry

During the year, MSB transactions conducted through formal channels continued to grow.

- Outward remittances expanded strongly by 23.2%, increasing to RM34.8 billion from RM28.2 billion in 2014.
- The retail money changing segment turned around to record a growth of 16.4% from a marginal drop in 2014 to RM60.6 billion. This increase reflects the greater demand for common currencies including the Singapore Dollar, US Dollar and Indonesian Rupiah mainly from inbound and outbound tourists.
- Turnover of the domestic wholesale currency services increased further to RM7.7 billion, representing an increase of 17.2% over the RM6.6 billion registered in 2014.

The industry also continued to consolidate, with the number of licensed entities reducing further from 414 in 2013 to 380 in 2015. Despite the lower number of licensees, public access to money services remained widely distributed given the broader branch and agent networks established by qualified industry players. The number of approved MSB agents rose from 290 in 2014 to 349 in 2015, of which about 273 are agents conducting remittance business.

During the year, rules regulating the conduct of MSB were extended to banking institutions that carry on MSB but which are not subject to the Money Services Business Act 2011 (MSBA). This is particularly relevant in the context of banking institutions that carry on MSB through agents. Such agents and bank outlets providing money services to the public must now comply with relevant operational requirements on a consistent basis with those applied to MSBs. The rules for banking institutions came into effect in July 2015.

In November 2015, efforts to promote the wider use of formal remittance channels were advanced under a collaborative project between the Bank and the World Bank to establish Johor Bahru as Asia's first Greenback champion city. The Greenback 2.0 project will mobilise and channel resources towards targeted educational programmes and initiatives over a two-year period to make formal remittance channels more competitive, convenient and inclusive.

reference point for the industry on compliance matters affecting MSB players. An immediate priority of the GOCO is to develop structured training modules on AML/CFT matters. In addition, the GOCO is working on plans to accredit compliance officers working within the industry to assure a minimum standard of competence. These initiatives will support the industry in meeting the minimum standards for compliance officers which will be issued by the Bank in March 2016.

ENFORCEMENT ACTIVITIES

Enforcement actions by the Bank, including criminal, civil and administrative actions, have an important role in providing a credible deterrence against non-compliance with rules and regulations, which can undermine confidence in and the integrity of the financial system. A summary of enforcement actions taken by the Bank in 2015 is provided in Table 3.3. The Bank successfully prosecuted 182 criminal offences and obtained six court orders requiring entities and/or individuals to cease operating illegal activities. In addition, RM69.5 million in fines were imposed on licensees for regulatory breaches relating to over 240 offences identified under the laws administered by the Bank. The Bank also opened 26 new investigations during the year into suspected illegal activities and regulatory breaches.

Table 3.3

Enforcement Actions Taken in 2015

Illegal deposit taking	• Two individuals convicted for two charges under section 25 of the Banking and Financial Institutions Act 1989
Money laundering	• Two individuals convicted for 28 charges under section 4 of AMLA
Unauthorised provision of money services	• Two charges pursued against one entity and two individuals for unauthorised provision of money changing services under section 4 of MSBA • 179 charges pursued against three entities and eight individuals for unauthorised provision of money remittance services under section 4 of MSBA • Two entities and 12 individuals convicted for 20 charges of unauthorised provision of money changing services under section 4 and section 23 of MSBA, resulting in fines amounting to RM910,000 • One entity and eight individuals convicted for nine charges of unauthorised provision of money remittance services under section 4 of MSBA, resulting in fines amounting to RM650,000 • Six court orders obtained against entities and/or individuals conducting money services business without a licence
Non-compliance with AML/CFT policies	• Compounds amounting to RM1.05 million against two Islamic banks for failure to comply with AMLA Orders under section 48 and section 50 of AMLA • Compound of RM530,000 against one insurance company for failures relating to its reporting obligations and compliance programme under section 14(1)(b) and section 19(1) of AMLA • Compounds amounting to RM82,500 against three MSB operators for failures relating to their compliance programmes under section 19(1) of AMLA • Administrative monetary penalties amounting to RM57.6 million against three banking institutions for failure to comply with standards prescribed by the Bank under section 48(1) of FSA and section 58(1) of IFSA
Non-compliance with prudential requirements	• Compound of RM210,000 against one insurance company for failure to properly maintain a register of policies and claims under section 47(3) of the Insurance Act 1996 • Administrative monetary penalty of RM550,000 against one takaful operator for failure to comply with standards prescribed by the Bank and for submitting misleading or inaccurate information under section 58(1) and section 155(3) of IFSA respectively
Non-compliance with foreign exchange administration rules	• Compounds amounting to RM8.78 million against six banking institutions and RM30,000 against one banking institution for facilitating foreign exchange transactions without the Bank's prior written approval under section 214 of FSA and Exchange Control Act 1953 respectively
Non-compliance with prudential requirements for MSBs	• Compounds amounting to RM305,000 against 13 MSB operators for failure to issue receipts in the manner prescribed by the Bank and three MSB operators for failure to maintain proper records under section 27 and section 28 of MSBA respectively • Compounds amounting to RM205,000 against four MSB operators for failure to obtain the Bank's prior written approval under section 30 or section 32(2) of MSBA • Administrative monetary penalties amounting to RM17,000 against 11 MSB operators for failure to maintain minimum capital funds under section 22 of MSBA • Administrative monetary penalties amounting to RM114,000 against 74 MSB operators for failure to submit their audit reports within the specified period under section 31(9) of MSBA

Source: Bank Negara Malaysia

Enforcement and Penalty Framework

The Bank, under the laws it administers, has the authority to take formal enforcement actions against authorised financial institutions or other persons who fail to comply with regulatory standards and other requirements issued pursuant to these laws. Such actions are important to promote good conduct in the financial industry that is aligned with sound financial and business practices, the legitimate interests of consumers and the prevention of crime. Following wider enforcement powers provided under the laws administered by the Bank, the Bank reviewed and strengthened its internal enforcement procedures. These procedures are set out in the Enforcement and Penalty Framework which governs the Bank's decision-making process and its approach in deciding on enforcement actions.

The framework aligns the Bank's enforcement efforts, activities and resources to achieve the Bank's statutory objectives while ensuring that enforcement actions are commensurate with the severity of the wrongdoing and are applied consistently across entities/persons in similar circumstances.

Enforcement Committee

Enforcement matters are decided by the Enforcement Committee (EC). The EC is chaired by the Governor, and its members consist of two Deputy Governors and five Assistant Governors with responsibilities in the areas of regulation, supervision, legal and enforcement. The EC oversees the implementation of the Bank's enforcement policies and decides on enforcement actions to be pursued in specific cases, which may be administrative, civil and criminal in nature. Under the law, the consent of the Public Prosecutor must be obtained to pursue criminal enforcement actions, that is to prosecute criminals and to compound offences. The EC may delegate its authority to decide on enforcement actions within clearly defined parameters to heads of departments within the Bank that are responsible for administering certain statutory functions of the Bank. In practice, such delegation has been limited to the issuance of warnings and meting out administrative penalties for failures to comply with routine reporting requirements. The vast majority of enforcement decisions were accordingly escalated to the EC for decision.

Laws currently administered by the Bank:

- Financial Services Act 2013 (FSA)
- Islamic Financial Services Act 2013 (IFSA)
- Money Services Business Act 2011
- Central Bank of Malaysia Act 2009
- Development Financial Institutions Act 2002
- Anti-Money Laundering, Anti-Terrorism Financing and Proceeds of Unlawful Activities Act 2001 (AMLA)[1]

An important outcome of enforcement actions is to encourage a strong compliance culture among market participants by providing an effective deterrent against future non-compliance. In taking an enforcement action, the EC will consider the likelihood that an enforcement action will achieve this outcome that may also strengthen market discipline, while ensuring that the action is proportionate to the seriousness of the non-compliance. The severity of an action to be taken will be based on a careful examination by the EC of the facts and circumstances of each case, including the seriousness and impact of the non-compliance, the degree of culpability of the financial service providers (FSPs), past record of non-compliances, the effectiveness of remedial measures taken to rectify the non-compliance and the strength of governance arrangements and risk management control functions within an FSP to prevent a recurrence. The EC, having deliberated each case, may recommend action that is supervisory in nature, instead of pursuing an enforcement action. In some circumstances, both

[1] AMLA is jointly enforced with other law enforcement agencies in Malaysia.

supervisory and enforcement actions are taken. Supervisory actions would form part of the Bank's ongoing prudential and conduct supervision of FSPs and may involve supervisory directions issued to an FSP to take certain actions to improve compliance and oversight functions. Such actions must also be monitored by the FSP's board and management, and reported to the Bank.

Range of supervisory and enforcement actions

Supervisory and enforcement actions are broadly categorised under the Enforcement Framework as actions that are protective or corrective, and actions that are punitive (Table 1).

Table 1

Nature and Type of Actions

Nature of actions	Type of actions
Protective/corrective	• Supervisory letter • Enforceable undertaking • Direction of compliance • Assumption of control • Power to appoint manager • Order to transfer of business, asset and liability • Administrative - order to do or not to do • Administrative - private reprimand • Administrative - order to mitigate • Removal of directors/key responsible persons • Revocation
Punitive	• Administrative - monetary penalty • Administrative - public reprimand • Administrative - remedy/restitution • Civil action • Criminal - prosecution (court) • Criminal - compound

Source: Bank Negara Malaysia

Protective or corrective actions include actions that aim to encourage prompt remedial measures by FSPs and are generally applied where an errant conduct is determined to be isolated in nature and not representative of broader, systemic compliance or governance failures in an FSP. In these circumstances, the Bank may intervene by requiring the FSP to improve its risk management control functions or issuing a private reprimand as a formal record. A more severe or punitive action might be taken should the non-compliance recur. In more serious cases of non-compliance where an FSP's ability to carry on its business in a sustainable manner is affected, the Bank may take more severe corrective actions including the appointment of a manager to manage the FSP's business, removal of directors or key responsible persons, or the assumption of control by the Bank. These actions generally aim to restore the institution to a sound financial position and ensure its proper management, or support its orderly resolution.

The Bank will generally pursue punitive enforcement actions in cases where errant conduct is the result of a deliberate or reckless disregard of regulatory requirements which is compounded by weak controls and governance, or where criminal elements are present. Such actions will also be pursued to provide a credible deterrent where the wrongdoing has wider adverse consequences for public interests. Punitive enforcement actions, which include imposition of monetary penalties, civil or criminal actions, signal the Bank's intolerance of serious non-compliances, particularly those that can undermine the stability of or confidence in the financial system, or the integrity of the financial markets. The law also empowers the Bank to pursue administrative restitution that involves issuing an order to FSPs to compensate depositors and policyholders for their losses.

The Bank takes a strong stance against unlawful conduct or unauthorised or illegal activities. In cases of suspected unauthorised or illegal activity, the Bank will pursue either criminal sanctions or civil actions, or both. Civil proceedings can serve to secure, among other things, compensation for pecuniary gain or loss avoided as a result of the contravention. The Bank may also seek a court order to prevent errant parties from continuing unauthorised activities.

In the enforcement process, FSPs are accorded with an opportunity to provide explanations or highlight mitigating factors which will be considered by the EC in reaching its decision.

Monetary penalties

In imposing monetary penalties for non-compliances with regulatory requirements, the Bank is guided by a structured penalty framework. This framework details out parameters for the computation of initial monetary penalties, and the principles and factors that the EC must have regard to in deciding the final amount of penalty to be imposed for a particular non-compliance.

The amount of initial penalty derived under the penalty framework accounts for aggravating and mitigating factors. This is based on scaling factors applied to a standard starting penalty amount that relates to the maximum fines provided under the laws for a particular non-compliance. Aggravating and mitigating factors include the intent of the offender, history of previous non-compliances, financial gains or losses avoided from the non-compliance and any adverse impact of the non-compliance on the FSP and its customers or on public confidence in the financial system. An FSP's post-conduct behaviour is also factored in the initial determination of the penalty amount. This may include whether an FSP voluntarily reported and provided complete information on the circumstances surrounding the non-compliance to the Bank, and proactively took measures to hold those responsible for the non-compliance to account and prevent similar non-compliances from recurring in future.

The EC may increase or decrease the amount of penalty initially derived from the penalty framework, having regard to additional factors including a consideration of whether the penalty will have a deterrent effect, the extent of its impact on the financial position of the offender and the appropriateness of the penalty in relation to precedents set by the Bank in similar circumstances. Deliberations and decisions of the EC are formally documented and confirmed, and may be reviewed by the Monetary Penalty Review Committee in the event of an appeal against the Bank's decisions in respect of administrative monetary penalties imposed by the Bank. All monetary penalties imposed by the Bank are paid into the Federal Consolidated Fund.

Monetary Penalty Review Committee

As required under the FSA and IFSA, the Bank has established the Monetary Penalty Review Committee (MPRC) whose members are independent of the Bank's executives, to consider appeals relating to the quantum of administrative monetary penalties and pecuniary remedies enforced by the Bank. A person aggrieved by the Bank's decision may file an appeal to the MPRC within 21 days after being notified of the Bank's decision. The MPRC will consider the appeal and it may decide either to confirm the Bank's decision or require the Bank to reconsider the decision in accordance with the findings of the MPRC. More information on MPRC, including its present members, is available on the Bank's website.

Transparency of enforcement actions

The law provides for the Bank, where it thinks necessary, to publish information in relation to any enforcement actions taken. Aggregated information on enforcement actions by the Bank is currently provided in the Bank's annual Financial Stability and Payment Systems Reports. Moving forward, it is recognised that an appropriate degree of transparency around enforcement actions by the Bank beyond what is currently provided, can be helpful to reinforce the deterrent effect of enforcement actions, promote confidence in the financial system and provide information on how the Bank has discharged its responsibilities on a matter of public interest. With these objectives in mind, the Bank will in each case of enforcement actions taken against a firm or individual, specifically consider whether it is also appropriate to publish information on the actions taken in a particular case. Such information will identify the parties against whom actions have been taken, provide a brief description of the circumstances of the non-compliance and outline the specific actions taken, including any material considerations of the EC in reaching its decision. The Bank generally expects to publish information on enforcement actions taken except where the Bank has reason to believe that the publication would be prejudicial to financial stability, the soundness of an FSP or the interests of depositors and policyholders. This in turn is expected to enhance the efficacy of enforcement actions as a tool to promote financial stability.

2015

MARKET CONDUCT AND CONSUMER EMPOWERMENT

The Bank continued to focus on promoting fair, responsible and professional business conduct by financial service providers (FSPs) in 2015. Against a backdrop of more moderate growth, continued volatility in the financial markets and elevated household borrowings, the Bank intensified efforts aimed at helping consumers make informed financial decisions. Regulatory and supervisory measures were introduced to ensure FSPs adequately assess the suitability of financial products for consumers, and improve the quality and clarity of information provided to consumers. In addition to pursuing enforcement actions against FSPs where warranted, a number of market conduct standards were strengthened to incorporate requirements that will improve fair outcomes for consumers. Regulations were also introduced to pave the way for a financial ombudsman scheme (FOS) to be established and fully operational by the second quarter of 2016. The financial education agenda continued to make progress as a key strategy to empower consumers and promote their financial well-being. This included the progressive rollout of financial education as part of the formal curriculum in schools, and the development of new targeted financial capability programmes and financial management tools.

MANAGING RISKS TO FINANCIAL CONSUMERS

Key risks to financial consumers in 2015 mainly arose from competitive pressures and heightened volatility in investment performance which continued to weigh on profit margins of FSPs and influence the behaviours of FSPs. Accordingly, the Bank focused on aggressive sales practices, the promotion of more complex financial products to consumers for whom such products may be unsuitable, and consumers' understanding of financial products. The Bank assesses that risks to consumers remain heightened in the near term as operating conditions continue to be challenging for FSPs. A stronger focus among FSPs on strengthening business practices that promote the interests of consumers will therefore continue to play a key role in mitigating these risks.

Investment accounts

The exercise to migrate customers' Islamic deposit accounts held with Islamic banks into Islamic deposits or investment accounts as required under the Islamic Financial Services Act 2013 (IFSA) was completed in June 2015. Existing customers of Islamic banks were given the option to either maintain their funds in IFSA-compliant deposit accounts, or to participate in new investment accounts with the potential for generating higher returns but which are not principal-guaranteed. These banks were required to clearly explain to customers the different risk and return characteristics of Islamic deposits and investment accounts, and obtain the express consent of account holders to migrate funds from deposit accounts into investment accounts. Islamic banks that offer investment accounts must additionally comply with requirements on disclosures and suitability assessments.

In preparation for the launch of the Investment Account Platform (the platform) in February 2016, the Bank worked closely with the industry to develop practical solutions for conducting non face-to-face suitability assessments in respect of investment ventures offered via the platform

Investment accounts may be in the form of either a restricted investment account or an unrestricted investment account. A restricted investment account provides for the account holder to specify investment mandates that must be complied with by the Islamic banks, such as the purpose of the investment, the underlying assets that the funds can invest in and the period of investment. An unrestricted investment account, on the other hand, provides the Islamic banks the flexibility to make investment decisions on behalf of the account holder without restrictions or conditions. The inherent complexities and risks associated with investment accounts vary according to the underlying investment assets.

(further details on the platform are provided in the chapter 'Development of the Financial Sector'). Islamic banks were also required to ensure that pertinent information on the investment accounts including related risk disclosures are carried prominently on the platform to facilitate informed decisions by prospective investors.

Bonus revisions for participating policy owners
Participating life insurance policies provide policy owners with the opportunity to participate in the profits of the insurance fund by way of bonus distributions determined by the insurer. Such policies account for 40% of all life insurance premiums currently in force. During the year, the Bank reviewed insurers' practices in the determination of discretionary bonus distributions. This has been an area of focus as weaker investment performance of certain participating funds might give rise to bonus adjustments. The Bank found considerable scope for improving the consistency of practices that would promote more objective and equitable benefit payouts across groups of policy owners. To this end, the Bank issued new standards on the management of participating life business in July 2015. The standards set out requirements on fair treatment of policy owners that must be observed by insurers to ensure that profits of the insurance fund are distributed fairly among groups of policy owners.

The new standards on the management of participating life business will promote more objective and equitable benefit payouts across groups of policy owners for participating life business

The Bank expects that any bonus revision must appropriately reflect the performance of the fund, communication to policy owners regarding bonuses when the policies were sold and equitable treatment of policy owners. The standards also seek to gradually unwind legacy practices, mainly affecting policies issued before 2005, to limit the future scope of cross-subsidisation between groups of policies. Cross-subsidisation is unfair to different groups of policy owners who are deprived of a fair share of the current profits. The Bank will continue to scrutinise the practices of insurers in determining bonus revisions, particularly in the current volatile financial market environment, to ensure compliance with the standards issued by the Bank.

Standardised contract terms and conditions, and use of plain language
The banking and insurance industry continued to promote the use of standardised descriptions of contractual terms and plain language in financial contracts. Since 2013, banks have adopted standardised descriptions of key terms and conditions developed by the Association of Banks in Malaysia (ABM) for housing loans and home financing agreements involving a principal sum of RM500,000 and below. In 2015, over two-thirds of the housing loans and home financing contracts issued by banks adopted the standardised descriptions. The Association of Islamic Banking Institutions Malaysia (AIBIM) has embarked on a similar initiative for Islamic home financing agreements, which is expected to be implemented in 2016.

In the insurance and takaful industry, plain language insurance and takaful contracts have been implemented for houseowner and householder insurance policies and personal accident policies offered by general insurers and takaful operators, covering close to one-fifth of the personal line insurance policies issued to individuals in 2015. The descriptions for the 40 critical illnesses (CI) under CI policies have also been further simplified by the insurance and takaful industry associations and will be adopted for all new and existing CI products beginning 1 April 2016. This will be followed by private car, motorcycle, and hospital and surgical insurance, which account for two-thirds of the personal line insurance policies, by the end of 2016.

Combating financial fraud
Measures taken by FSPs to enhance their operational risk management, information technology (IT) systems and monitoring capabilities have strengthened the management of fraud risks, particularly those involving electronic channels and digital platforms. The measures

are complemented with collaboration and coordinated enforcement actions between the Bank and relevant law enforcement agencies. This includes the dissemination of information on mule account holders to facilitate FSPs' customer due diligence process. In addition, the Bank has also given greater emphasis on joint enforcement initiatives with relevant enforcement agencies, aimed at conducting more impactful financial investigations. In 2015, the proportion of transactions with financial losses from online banking fraud reported by FSPs remained low, below 0.001% of the total online banking transactions despite higher reported fraud attempts. Continued vigilance by FSPs in implementing precautionary measures remains important in maintaining public confidence in the security of online financial transactions. FSPs have also intensified communications on safety tips and transaction notifications to customers to validate the authenticity of online transactions. As a result of these developments, total losses sustained by financial consumers during the year declined slightly from RM7.9 million in 2014 to RM7.5 million.

The Bank continued to leverage on social media and its outreach activities to increase public awareness of financial scams and how they operate. This included warning consumers on the risks of dealing with unauthorised entities. The Bank maintains and regularly updates a Financial Consumer Alert List (available on the Bank's website) which the public can refer to in order to identify entities that are not authorised to conduct any financial activities regulated by the Bank. 246 entities are currently listed on the Financial Consumer Alert List which attracted more than 44,000 views in 2015 and has become a useful source of reference for consumers to avoid becoming victims of fraudulent activities.

Supervisory and enforcement actions

The focus of the Bank's market conduct supervisory activities is driven by an assessment of developments and conditions that increase risks to financial consumers. During the year, the Bank conducted thematic reviews on: (i) the implementation of responsible lending practices by FSPs with a focus on lending to middle income

Table 4.1

Supervisory and Enforcement Actions Taken in 2015

Areas of Concern	Supervisory and Enforcement Actions
Lapses in safeguarding confidentiality of customer information	• Two FSPs were issued a warning letter and a private reprimand respectively for lapses in their internal controls, and poor handling of customer documents and information leading to breach of customer confidentiality.
Mis-selling of life insurance and family takaful products	• One FSP was required to provide compensation to 6,792 policy owners for mis-selling an insurance product as a savings product and promising high returns with a limited payment period. The affected policy owners were given the option to cancel the policies and obtain a full refund of premiums with interest or to convert the existing policies to fully paid-up protection plans. The costs of compensation to the affected policy owners were borne by the FSP's shareholders' fund. • One FSP was required to fully refund contributions amounting to RM742,450 to 131 affected takaful participants for the mis-selling of takaful products.
Imposition of excessive fees on customers	• Six FSPs were required to withdraw fees that were deemed to be excessive. • 162 applications received from FSPs to impose or increase fees were rejected. 27 applications to increase fees were subsequently approved after FSPs revised the fees downwards.
Unfair terms and conditions, and misleading or non-disclosure of key information in advertisements and marketing materials	• 14 FSPs were required to modify and improve the level of disclosures in related marketing materials to clearly disclose the respective product's risks and pertinent information. • Four FSPs were required to improve the level of disclosures in communications to consumers for re-pricing of medical and health insurance products. • Two FSPs were required to revise terms in contracts that were deemed to be unfair or were detrimental to customers' interests.
Failure to offer basic banking services options to customers	• 20 FSPs were reprimanded for failing to ensure that basic banking services are offered as an option to customers who would be better served by basic deposit accounts.

Source: Bank Negara Malaysia

earners; (ii) the effectiveness of FSPs' controls in safeguarding customer information; and (iii) motor insurance claims settlement practices. As a result of the reviews, supervisory and enforcement actions were pursued against 38 FSPs for failures to comply with business conduct requirements prescribed by the Bank. A summary of the key supervisory and enforcement actions taken by the Bank in 2015 is provided in Table 4.1.

Supervisory and enforcement actions were pursued against 38 FSPs for failures to comply with business conduct requirements

The thematic review of the motor claims management practices of FSPs was an important exercise to identify key areas for action to improve the timeliness of claims settlements and reduce the incidence of disputes over settlement amounts. Common weaknesses that were identified by the Bank related to the design of performance measurements for claims staff which did not incentivise a high standard of professional conduct, and the quality of information supporting claims decisions which allowed claims to be artificially inflated. FSPs were required to rectify these issues. In parallel, solutions at the industry level are also being pursued to streamline the claims process, and raise professional and service standards more broadly across key actors in the claims process, including loss adjusters, tow truck operators and repair workshops.

STRENGTHENING REDRESS MECHANISMS FOR CONSUMERS

The Financial Services (Financial Ombudsman Scheme) Regulations 2015 and Islamic Financial Services (Financial Ombudsman Scheme) Regulations 2015 (the Regulations) were brought into force on 14 September 2015. This paves the way for the establishment of an FOS as envisaged under the Financial Sector Blueprint to enhance financial dispute resolution arrangements in Malaysia.

The proposed FOS framework, covering its scope, membership, funding, governance and resolution processes, was first published for public consultation on 29 August 2014 and provided the key elements of the Regulations. The Bank received 55 responses that affirmed broad support for the proposed framework. Acting on specific comments and suggestions received, the Bank made several improvements to the framework prior to its finalisation. These included providing for the periodic review of the monetary award limit, imposing a clear duty on the directors of the FOS to act in the best interest of the FOS, affirming a two-stage dispute resolution process comprising mediation and adjudication to provide ample opportunity for disputing parties to reach an amicable agreement, and adopting a fee structure that incentivises FSPs to improve their handling of complaints.

Preparations to transform the existing Financial Mediation Bureau (FMB), which will be approved as the FOS, are well into the advanced stages. The FOS is expected to commence its operations in the second quarter of 2016.

The establishment of the FOS will further strengthen redress mechanisms for consumers

Apart from the FMB and dedicated complaints units within FSPs, BNMLINK and BNMTELELINK continued to provide an alternative avenue for consumers to seek redress or resolve their disputes with FSPs. Over the 10 years of operations, BNMLINK and BNMTELELINK have handled an increasing number of queries and complaints, reaching 480,000 in 2015. The Bank received fewer complaints against FSPs in 2015, mainly owing to the more proactive management of complaints by FSPs and a sustained focus by the Bank on promoting fair treatment of financial consumers and responsible business conduct among FSPs.

WELL-INFORMED AND RESPONSIBLE FINANCIAL CONSUMERS

The Bank's ongoing collaboration with the Ministry of Education (MOE) to promote financial capability as an essential life skill from an early age has made encouraging progress. Work to integrate financial

- My Ringgit - A tool to learn about the Malaysian banknotes, including security features and quality standards.
- My Tabung - A tool for consumers to better monitor and manage their income and expenses.
- My BNM - A tool for consumers to read the latest financial news and announcements, including fraud alerts issued by the Bank.
- BNM MyLINK - A tool for consumers to make enquiries, obtain advice and lodge their complaints against FSPs.

Further information on these applications can be found on the Bank's website, www.bnm.gov.my.

education into the school curriculum continued to gain traction with the goal to complete the process for all primary and secondary school levels by 2021. During the year, the Bank supported the MOE in developing education materials, including financial education modules and guides for teachers to be able to deliver financial education effectively. An assessment on the effectiveness of the curricula implemented for the first batch of Primary Four and Primary Five students is also being conducted in collaboration with the MOE. Insights will be used to further improve and refine future implementation efforts.

An overview of key financial education initiatives in 2015, including those undertaken by the Credit Counselling and Debt Management Agency (Agensi Kaunseling Dan Pengurusan Kredit, AKPK), is provided in Table 4.2. The Bank also continued to leverage on technological advancements in the design and delivery of financial information and advice. Four consumer-centric mobile applications, namely, My Ringgit, My Tabung, My BNM and BNM MyLINK, were introduced to elevate consumer awareness and skills in money management matters. An initiative to develop a financial education portal (the portal) also commenced during the year. The first phase of the portal which will provide consumers access to information on personal financial management based on life stages, is expected to be completed by end-2016. To support the needs of persons with disabilities, the Bank collaborated with Kementerian Pembangunan Wanita, Keluarga dan Masyarakat to introduce a device known as Ringgit Cash Test Card, a credit card-sized plastic card with gauges designed to assist the visually impaired in identifying banknotes and coins.

To guide the Bank's priorities and ensure that financial education initiatives are delivering the intended outcomes, the Bank launched a

Table 4.2

Key Financial Education Initiatives in 2015

Strategy	Initiatives
Financial education in schools	• Incorporated financial education elements in Primary Six Mathematics, Bahasa Melayu, English and Moral Education curricula and textbooks. • Equipped 5,000 trainee teachers with the knowledge and skills to deliver financial education.
Adult financial education	• Reached over 373,000 adults through AKPK's financial education programmes targeted at various consumer segments, including: – personal financial management programmes for college students, retirees and the public at large; – financial guidance provided to Amanah Ikhtiar Malaysia (AIM) borrowers; – "Jelajah Bijak Wang" road shows in six major locations organised in collaboration with the Ministry of Finance on good money management; and – an online financial literacy game, 'Cent-sible Choice', launched in collaboration with Visa, to educate young Malaysians on financial management responsibilities. • Continuously promoted the POWER! (Pengurusan Wang Ringgit Anda) Online Learning Programme, which saw 1,359 individuals completing the programme. • Trained 48 Royal Malaysian Police's counsellors and trainers who will then deliver financial education modules to the members of the police force and their family members.

Source: Bank Negara Malaysia and Agensi Kaunseling Dan Pengurusan Kredit nationwide Financial Capability and Inclusion Demand Side (FCI) Survey in January 2015 to measure and track the financial literacy and capability levels of Malaysian consumers. A Financial Literacy and Capability Index for Malaysia (MYFLIC) was constructed based on data obtained and analysed through the survey (Diagram 4.1).

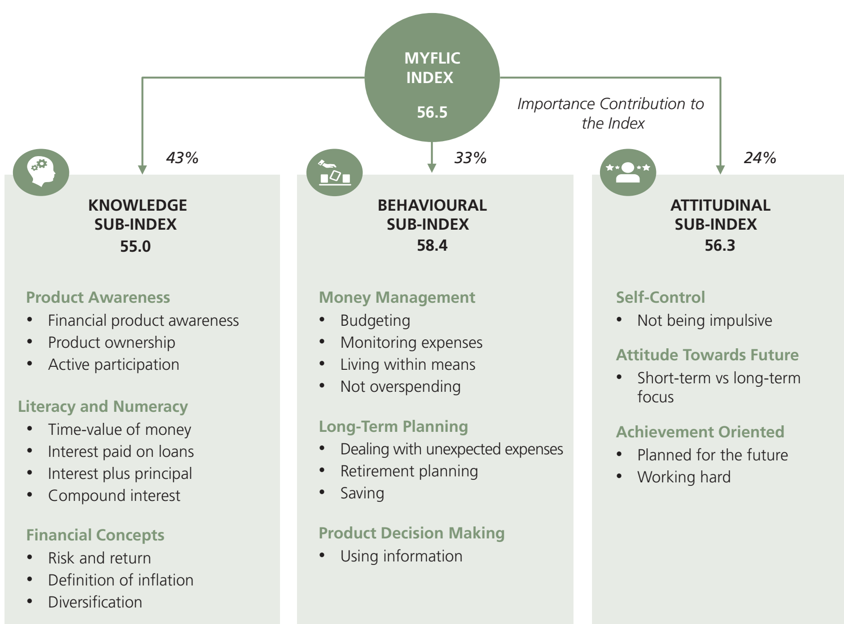
The Bank continued to leverage on technological advancements in the design and delivery of financial information and advice

Key observations from the FCI Survey 2015 are summarised in Table 4.3. The study revealed that while the financial infrastructure to promote access to financial products and services is well developed in Malaysia, consumers still lack the ability to make good financial decisions. Respondents in the lower income groups do not have sufficient means to effectively participate in the financial system, with their financial resources mainly being utilised for essential needs. Financial education strategies therefore, also need to address ways in which individuals can responsibly enhance their income, including through agencies such as Amanah Ikhtiar Malaysia, which provide support for vulnerable segments of the population. Groups that are more likely to be financially excluded such as the younger population, the urban poor, low income groups and retirees also exhibit lower levels of financial literacy and would particularly benefit from targeted interventions in financial education. These observations will be used by the Bank to develop and implement more effective financial education interventions with the aim of improving the MYFLIC index over time.

The financial capability level of Malaysian consumers was measured through a nationwide Financial Capability and Inclusion Demand Side Survey to implement more effective financial education interventions

Diagram 4.1

Malaysia Financial Literacy and Capability (MYFLIC) Index 2015



- Main sample
  - 3,000 Malaysians
  - Aged between 15 to 74 years
- Booster samples
  - Clients of AKPK
  - Low-income households
  - Micro enterprises
- Face-to-face computer assisted personal interviewing

Source: Bank Negara Malaysia

The Bank continued to contribute to and learn from the international exchange of experiences in the area of financial education. Over the years, the Bank's participation in relevant forums has helped to sharpen domestic priorities, strengthen partnerships and broaden perspectives in the implementation of financial education initiatives. As part of this continuing engagement, the Bank co-hosted the Organisation for Economic Co-operation and Development/International Network on Financial Education (OECD/INFE) global symposium in September 2015. The symposium, which drew more than 230 policymakers and financial educators to Malaysia, provided rich ground to discuss developments in financial education and consumer protection strategies and policies to advance financial literacy initiatives for different target consumer groups. As a member of the INFE in the OECD, the Bank also actively participates in research and data collection efforts, which have enabled the Bank to develop more evidence-based financial education policies and interventions.

Table 4.3

FCI Survey 2015: Key Observations on the Levels of Financial Literacy and Capability in Malaysia

Knowledge (55.0)
• There is a general awareness of financial products and services, and understanding of basic financial concepts such as risk and return as well as inflation. • Most consumers lack understanding of the concept and importance of diversification. Consumers also struggle with numeracy, computation of time value of money, interest plus principal and compound interest. • AKPK's clients and micro entrepreneurs show greater understanding of common financial products, numeracy and financial concepts.
Behavioural (58.4)
• Consumers generally claim to be cautious in spending and able to repay debts. Only 19% of respondents find their debts to be burdensome. • A significant majority of consumers are ill-prepared to meet unexpected expenses, with 76% of respondents admitting that they would have difficulty raising RM1,000 to meet emergency needs. • Most consumers indicated that they will face financial pressure in the event of a loss of income, with only 6% of respondents expressing confidence that they will be able to meet financial obligations for at least six months after income loss. • Only 40% of respondents are financially ready for retirement, while 92% have concerns about their financial health at an advanced age.
Attitudinal (56.3)
• Consumers display short-sighted tendencies and are inclined to focus on instant gratification at the expense of their future. • AKPK's clients exhibit lower self-control over managing their own finances and generally take a short-term view when making financial choices.

Source: Bank Negara Malaysia

2015

PAYMENT AND SETTLEMENT SYSTEMS

In 2015, the Bank continued to promote the safety, reliability and efficiency of the payment systems and instruments as part of its wider responsibilities of maintaining monetary and financial stability. The Bank's oversight activities continued to focus on the adequacy of risk management and business continuity arrangements in ensuring the resilience of the systemically important and system-wide important payment systems. These systems, namely the Real-time Electronic Transfer of Funds and Securities System (RENTAS) and the National Electronic Cheque Information Clearing System (eSPICK) operated smoothly without any major disruption throughout the year, clearing and settling payment transactions valued at 46.3 and 1.6 times of gross domestic product (GDP), respectively. Measures were also undertaken to strengthen the risk management and system capabilities of other retail payment systems particularly for credit transfers, to cater for the increasing transaction volume of these payment systems.

Accelerating the migration to electronic payments (e-payments) also remains an important priority for the Bank to enhance national productivity and competitiveness. Under the 10-year strategic roadmap to accelerate Malaysia's migration to e-payments as outlined in the Financial Sector Blueprint 2011-2020, the Bank continues to foster an enabling environment for greater adoption of e-payments. A key thrust of the strategy adopted by the Bank is to promote efficiency and competition in the retail payment market to provide more choices and spur the provision of better quality payment services to individuals and businesses. In the first five years (2011-2015), significant efforts were directed at strengthening regulatory frameworks, addressing market distortions and establishing incentive structures. Efforts were also made to enhance market infrastructure and promote greater awareness and confidence in the use of e-payments. In the second half of the roadmap (2016-2020), the Bank aims to strengthen coordination among stakeholders in the implementation of industry-wide initiatives to drive the achievement of the e-payments targets set out in the Financial Sector Blueprint 2011-2020. In addition, further enhancements to the key payments infrastructure will remain important to keep pace with innovation and to meet anticipated future needs (Diagram 5.1).

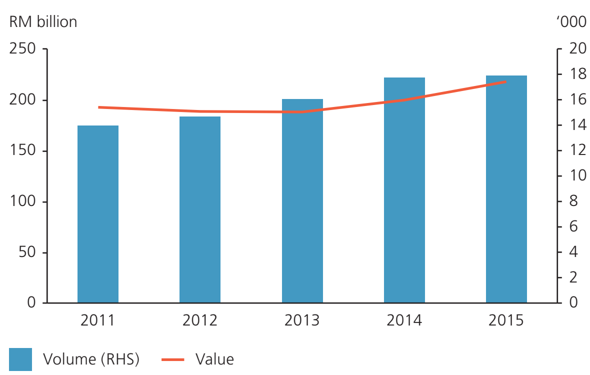
PROMOTING THE STABILITY OF PAYMENT AND SETTLEMENT SYSTEMS

Oversight of RENTAS

RENTAS facilitates the transfer and settlement of high-value interbank payments and securities transactions. The availability of the system remained high, achieving 100% uptime throughout the year and clearing transactions amounting to RM53.6 trillion. A daily average of 17,897 transactions valued at RM217.8 billion were settled via RENTAS, representing a growth of 0.8% and 9% by volume and value, respectively (Chart 5.1). Similar to previous years, money market and third-party funds transfers accounted for the bulk of RENTAS activity, amounting to 68% of the total value of RENTAS transactions in 2015. However, the growth in volume has slowed, owing primarily to a decline in third-party funds transfers which decreased by 2% compared to an average growth rate of 11.4% for the past three years. This decline, which comprised mainly RENTAS transactions below RM1 million, partly reflected the migration of lower value RENTAS transactions to other modes of credit transfer services such as the Interbank GIRO (IBG) that offers enhanced services including extended cut-off time for same day crediting of customers´ accounts and lower fees.

Chart 5.1

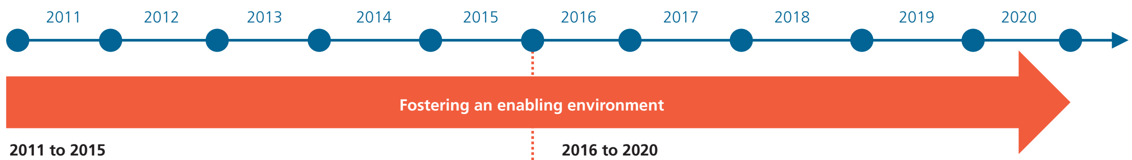
RENTAS: Daily Average by Volume and Value



Source: Bank Negara Malaysia

Diagram 5.1

Stages of Migration to E-payments (2011-2020)



2011 to 2015

- Strengthening regulatory frameworks, addressing distortions and establishing incentive structures
- Expanding and enhancing the market infrastructure
- Promoting awareness and instilling confidence

2016 to 2020

- Strengthening coordination and alignment to drive achievement of e-payment targets
- Continuous infrastructure enhancement to keep pace with innovation and meet user needs

Focus areas	Credit transfer to displace cheques	Debit card to displace cash
1. Price signal	• IBG (Maximum of 10 sen) • IBFT (Maximum of 50 sen)	• Ceilings for interchange fee • Unbundling of MDR
2. Quality & value proposition	• Faster crediting time for IBG • Payment details in bank statement • Future-dated IBG	• Contactless feature
3. Access points	• Credit transfer accessible via online banking and ATM	• 800,000 terminals by 2020
4. Market incentive structure	• E-payment Incentive Fund	• Market Development Fund
5. Awareness & confidence	• E-payment roadshows • Media engagements • Workshops • Strengthening security requirements	• E-payment roadshows • Media engagements • Township campaigns • Strengthening security requirements

Source: Bank Negara Malaysia

The migration of lower value payments to retail payment systems also reduces the concentration risk in RENTAS, which continues to be utilised mainly for higher value interbank payment transactions.

The operator of RENTAS, Malaysian Electronic Clearing Corporation Sdn. Bhd. (MyClear), conducted 11 disaster recovery live runs throughout the year, including one that was carried out without prior notification, to test the effectiveness of business continuity arrangements under simulated disruption events. Such scenarios included disruption of servers, failure of the authentication component and network connection outage at the primary data centre. The live runs affirmed the continued vigilance of MyClear and RENTAS participants and their preparedness for disruptions, with the system resuming service within the recovery time objective of one hour in every test. The Bank also undertook a review of selected major participants in 2015 and found that appropriate business continuity arrangements are in place.

Developments in RENTAS

With the implementation of the Automated Collateralised Overnight Funding Facility (ACOFF) in December 2014, RENTAS participants are now able to utilise collateral to obtain liquidity after the close of business hours up till 9.00 p.m. for their obligations during the IBG evening settlement windows. This provides an avenue for other retail payment systems to leverage on the evening settlement windows in RENTAS to manage interbank liquidity and reduce credit risks. In 2015, approximately 7.7% of the daily IBG evening settlements were settled using ACOFF.

While Malaysia was assessed under the Financial Sector Assessment Program to have fully observed the Principles for Financial Market Infrastructures developed by the Bank for International Settlements and International Organisation of Securities Commissions, efforts to elevate the performance of RENTAS continue to be a key priority for the Bank. In this regard, enhancements have also been made to gradually transform RENTAS into a multi-currency system that adopts the Society for

Worldwide Interbank Financial Telecommunication (SWIFT) messaging standard, with multiple access channels and added functionalities for participants to further enhance their operational efficiency and reduce risks. These improvements are expected to be completed by end-2016 and will include a gridlock resolution mechanism and the automation of cross-currency intraday credit facilities. This will augment existing risk mitigation mechanisms such as the Payment versus Payment (PvP) functionalities for the renminbi, US dollar and ringgit. The adoption of the SWIFT standard, a multi-currency platform and enhanced risk mitigation measures will also facilitate efficiency and the integration of RENTAS with other regional financial market infrastructures for seamless, safe and efficient cross-border financial transactions.

The adoption of the SWIFT standard and enhanced risk mitigation measures will facilitate efficiency and the integration of RENTAS with other regional financial market infrastructures for seamless, safe and efficient cross-border financial transactions

Oversight of retail payments

eSPICK and major retail payment systems

Throughout the year, eSPICK functioned smoothly and achieved 99.9% system availability. Three minor incidents temporarily affected the connectivity of participants to the eSPICK host system, but these were swiftly resolved. In all three incidents, the timeliness of interbank cheque clearing and settlement was not severely impacted and banks were able to credit the beneficiaries' accounts within the maximum period of two business days (T+1). In November 2015, MyClear undertook a scheduled technology refresh exercise for eSPICK, which included upgrades to system software and hardware components to maintain optimal system performance for the next five years.

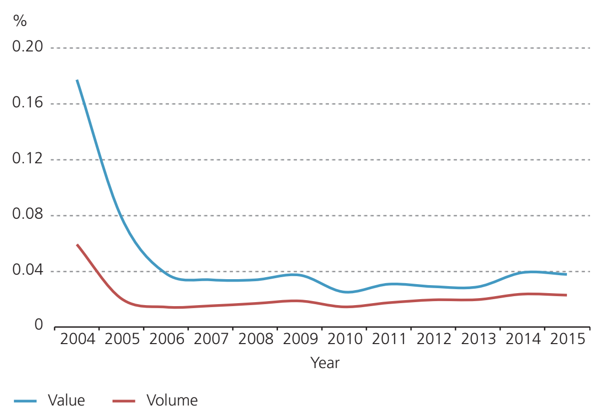
With the exception of eSPICK transactions which continued on a declining trend, total transaction volume processed through the various retail payment systems continued to grow. The use of credit transfer services, comprising IBG and Interbank Fund Transfer (IBFT), continued to sustain double digit growth, reflecting the accelerated migration of cheque users to more efficient funds transfer services. MyClear and the Malaysian Electronic Payment System Sdn. Bhd. (MEPS) which operate the IBG and IBFT services respectively, have also initiated upgrades to the network infrastructure to ensure the reliability and resiliency of these systems in the face of anticipated growth in transaction volumes over the medium term. In 2015, the availability of these retail payment systems remained high at 99.8% uptime.

Payments fraud

With the migration to chip-based payment cards in 2005, fraud losses related to payment cards remained low at less than 0.04% of total transaction value over the period from 2006 to 2015 (Chart 5.2). Unauthorised online transactions remained the most common type of fraud, accounting for 60% of total reported payment card fraud in 2015. However, 97% of the losses were borne by financial institutions located abroad, which have yet to implement a strong authentication method. This is pursuant to the rules set by the international payment card schemes, which require fraud losses to be borne by the party with the weaker security measures. In this regard, Malaysia has implemented a strong authentication method for online transactions since 2012 which requires cardholders to enter a one-time password to authorise online transactions.

Chart 5.2

Payment Card[1] Fraud Value and Volume, % of Total Transaction Value and Volume



[1]Payment card consists of credit card, debit card and charge card

Source: Bank Negara Malaysia

To further enhance protection against unauthorised transactions, the use of debit and prepaid cards for overseas transactions and card-not-present transactions (mail order, telephone order or online transactions which are not authenticated using a strong authentication method) will only be enabled upon the cardholder's request. At the same time, the banking industry is undertaking a migration exercise from signature to Personal Identification Number (PIN) verification for payment card transactions conducted at point-of-sale (POS) terminals, which is expected to be completed by 1 January 2017.

Since the introduction of stronger risk management measures in 2012, online banking fraud losses have remained negligible at less than 0.0002% of the total transaction value over the period from 2012 to 2015 (Chart 5.3). However, phishing, which includes the use of e-mails, short message services (SMS) or telephone calls purportedly from financial institutions to lure victims into disclosing their login credentials and passcodes, continued to be prevalent and accounted for 95.2% of total online banking fraud reported in 2015.

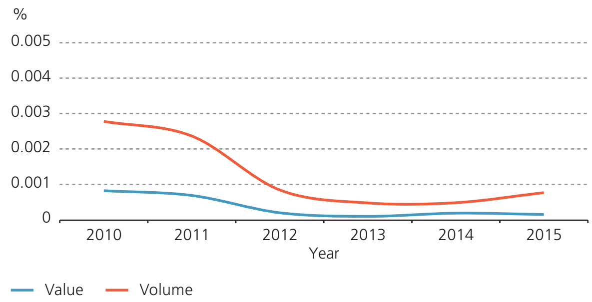
Fraud related to the use of payment cards and online banking remained low in 2015, at 0.04% of total payment card transaction value and 0.0002% of total online banking transaction value

During the year, financial institutions continued to strengthen risk management practices to address the evolving threat of online banking fraud. This included enhancements to fraud deterrent measures. In addition, financial institutions also continued to promote consumer awareness by publishing fraud alerts on online banking websites. These initiatives were in line with the requirements issued by the Bank in December 2014 which reinforced the obligations of financial institutions to ensure risk management and security measures remain robust, and undertake effective measures to educate customers on safe online banking practices.

As most of the fraud cases entail phishing, the Bank will intensify efforts to promote public awareness of this type of fraud and the preventive measures that can be undertaken by customers

Chart 5.3

Online Banking Fraud Value and Volume, % of Total Transaction Value and Volume



Source: Bank Negara Malaysia

when conducting online banking transactions. This will be complemented by heightened supervisory expectations on financial institutions to improve the effectiveness of their consumer education initiatives to mitigate fraud attempts that employ fraudulent means to manipulate victims into divulging sensitive or confidential information. In addition, the Bank will seek to elevate risk management practices of individual financial institutions where gaps remain. This includes requiring affected financial institutions to enhance their risk management such as to deploy automated fraud detection systems with behavioural analytics to identify suspicious activities, implement image or word verification to enable customers to ascertain the authenticity of a financial institution's Internet banking website and implement stronger two-factor authentication measures for high risk transactions.

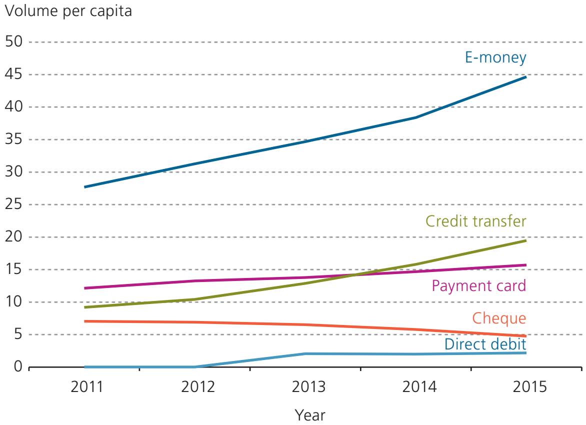
KEY TRENDS AND DEVELOPMENT IN RETAIL PAYMENT SYSTEMS

Non-cash retail payments

The use of non-cash retail payments continued to grow (Chart 5.4), with the average number of non-cash transactions per capita increasing to 87 in 2015, compared to 56 transactions in 2011. The most common non-cash payments were electronic money (e-money) transactions, mainly transit payments using prepaid cards. This was followed by credit transfers between bank accounts and payment card transactions at merchant outlets. In contrast, the use of cheques by consumers and businesses continued to decline, with the number of cheques issued per capita falling further from seven cheques in 2011 to five cheques in 2015, while direct debit transactions remained negligible.

Chart 5.4

Non-cash Transaction Volume per Capita



Source: Bank Negara Malaysia and Department of Statistics Malaysia

Strategy to accelerate migration to e-payments

Over the past five years, the decline in the use of cheques and adoption of e-payment services has been encouraging (Diagram 5.2). The total number of cheques issued per year has declined by 27.8% from 205 million in 2011 to 148 million in 2015, while e-payments per capita increased by 67.2% from 49 to 82 over the same period. The number of POS terminals and debit card transactions per capita are also expected to increase more rapidly with the implementation of the Payment Card Reform Framework (PCRF) in 2015, which is likely to reduce the cost of accepting debit cards and promote payment card acceptance at lower tier merchants. In parallel with the lowering of the cost of accepting payment cards, industry initiatives are being undertaken to expand the network of POS terminals, introduce new card features that enhance both convenience and security, and promote the usage of debit cards.

The use of credit transfer services, debit cards and mobile payments will be accelerated to reduce the usage of cheques and cash

A key strategy to achieve the e-payment targets set out in the Financial Sector Blueprint 2011-2020 is to accelerate the use of credit transfer services (to displace cheques) and the use of debit cards and mobile payments (to displace cash), given their wide availability and potential as cost-effective alternatives. This will leverage on existing payment infrastructure to avoid duplicative resources and investments by the industry. In this regard, the Bank has worked with the industry to strengthen five key areas to make e-payments more affordable, accessible and convenient (Diagram 5.3). Central to such strategy are efforts to promote efficiency and competition in the payment landscape to spur the provision of better product offerings and greater choices to consumers and businesses. Given the high mobile penetration rate in Malaysia, efforts are also being made to foster innovation and confidence in the mobile channel as a convenient means to conduct banking and payment transactions.

Diagram 5.2

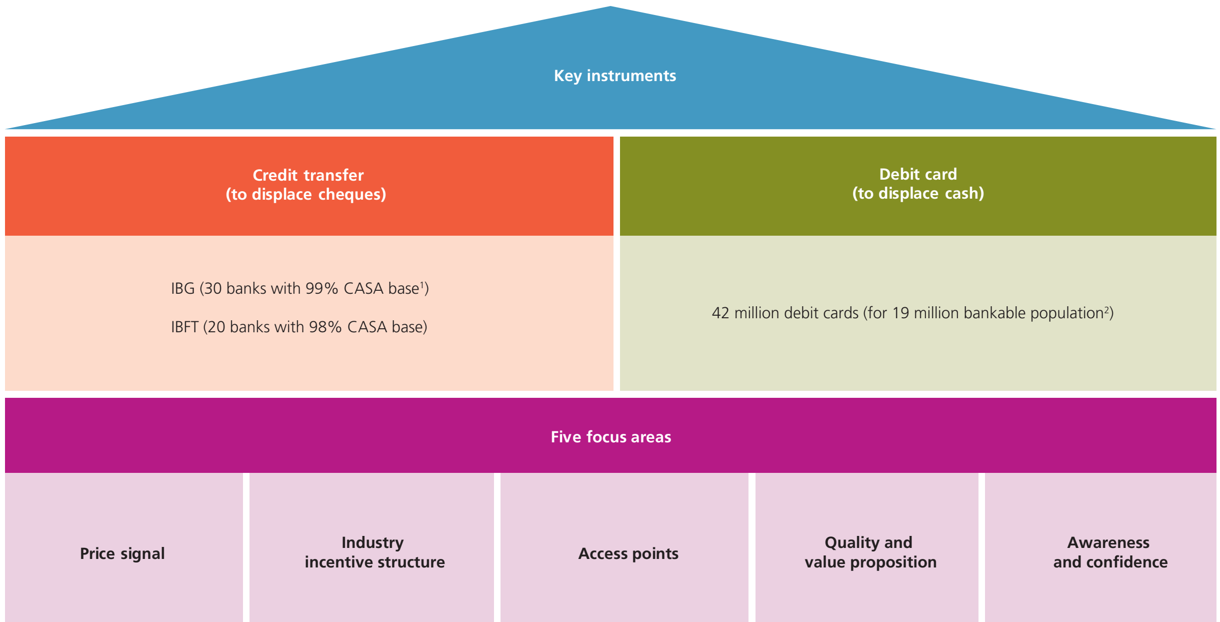
Progress Made in Achieving the Financial Sector Blueprint 2011-2020 Targets

Payment indicators	2011	2015	2020 target
E-payments per capita	49	82	200
Cheques cleared (million)	205	148	100
Payment card terminals (per 1,000 inhabitants)	7	9	25
Debit card transactions per capita	1	3	30

Source: Bank Negara Malaysia

Diagram 5.3

Key Instruments and Focus Areas to Accelerate Migration to E-payments



[1] *Total number of current and savings accounts*
[2] *Estimated based on the findings of the Financial Inclusion Demand-Side Survey which show that 92% of individuals aged 15 and above have a deposit account*

Source: Bank Negara Malaysia

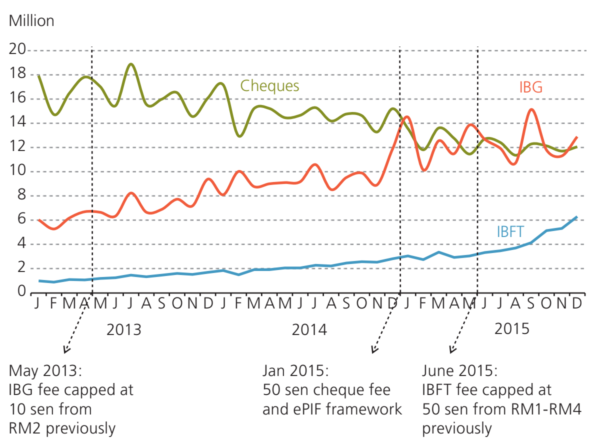
Adoption of retail credit transfers is gaining momentum

In 2015, the number of cheques issued declined at a faster pace of 16.5% compared to the previous years (2014: -10.1%; 2013: -3.3%). Transaction volume for retail credit transfer services comprising the IBG and IBFT on the other hand, continued to record double-digit growth rates of 31.2% (2014: 36.2%) and 76.7% (2014: 67.8%), respectively (Chart 5.5), driven among others by lower transaction fees, incentives offered by banks, wider availability, enhanced features as well as increased awareness and confidence in the use of these services.

IBFT transactions conducted via online banking grew at a faster average rate of 170.8% compared to 30.4% for IBFT transactions conducted via automated teller machines (ATMs) over the past two years. In 2015, IBFT transactions conducted online rose to 26.1 million, surpassing the number of IBFT transactions conducted via ATMs for the first time (Chart 5.6). This can be attributed to the increase in the number of banks offering the IBFT service via online banking, the reduction in online IBFT

Chart 5.5

Transaction Volume for Cheques, IBG and IBFT



Source: Bank Negara Malaysia

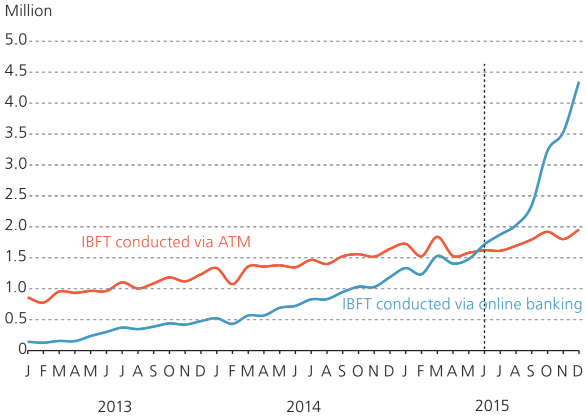
fees and the growing familiarity among users with the online IBFT service.

Cost-effective retail credit transfer services

The implementation of reforms to the payments pricing structure since 2013 (Table 5.1) has led to a gradual shift of customers' preferences

Chart 5.6

IBFT Transaction Volume via ATM and Online Banking



Source: Bank Negara Malaysia

from cheques to the more cost-effective credit transfer services. The pricing reform entailed, among others, a cap on the IBG fee at 10 sen per transaction and the imposition of a 50 sen cheque processing fee. This was complemented by the introduction of the e-Payment Incentive Fund (ePIF) framework in January 2015, which required financial institutions to channel cheque processing fees into providing incentives for customers to migrate to e-payments.

Measures were also taken by MEPS to promote e-payments in 2015. Effective from 1 June 2015, MEPS set a ceiling of 50 sen for IBFT services which used to cost users between RM1 and RM4 per transaction. In collaboration with financial institutions, a nationwide campaign was also launched by MEPS to waive the transaction fee for a period of three months from October 2015.

Multiple access points to retail credit transfer services

For the past three years, the number of active online banking subscribers who conduct online transactions at least once a quarter has been increasing at an average growth rate of 19%. In 2015, there was an average of 7.8 million active subscribers per month. However, this represented only 14.1% of the total current and savings accounts (CASA) in Malaysia. A key initiative to extend the availability of e-payment services to segments of the economy which have yet to adopt online banking is the provision of credit transfer services via ATMs. This would provide the public with an alternative channel to access credit transfer services. To date, 15 and 20 banks offer IBG and IBFT services respectively via their ATMs, giving access to such services for about 96.3% and 99.9% of total CASA (Table 5.2). During the year, the volume of IBG transactions initiated via ATMs more than doubled from 255,310 transactions in 2014 to 658,832 in 2015.

IBG and IBFT services are made more accessible via online banking and ATMs. The volume of IBG transactions initiated via ATMs more than doubled from 255,310 transactions in 2014 to 658,832 in 2015

High-quality and value-added retail credit transfer features

Another key driver of e-payment adoption is the speed of interbank funds transfer. The IBG service was enhanced in December 2014 to facilitate same-day crediting of funds for payment

Table 5.1

Fee Structure for Cheques, IBG and IBFT

	Previous Fee	Current Fee (Ceiling*)	
		Fee	**Effective Date**
IBG:			
Conducted via:			
- Online banking	RM2	10 sen*	2 May 2013
- ATM	RM2	30 sen*	1 October 2014
Cheques	NIL	50 sen	2 January 2015
IBFT	RM1 - RM4	50 sen*	1 June 2015

Table 5.2

Access to IBG and IBFT Services via ATM and Online Banking

	IBG	IBFT
Number of banks offering via online banking	30	17
Number of banks offering via ATM	15	20
- Number of ATMs	11,356	12,287

instructions made before 5.00 p.m., compared to the previous cut-off time of 12.30 p.m. The IBFT service on the other hand provides for crediting of customer accounts on a near real-time basis. The crediting time for the IBG and the IBFT services is significantly faster than for cheques, where customer accounts are only credited by the end of the next business day for cheques banked in before 4.00 p.m. (Table 5.3). To further enhance the value proposition of the IBG and the IBFT services, payment reference details, including the beneficiary's name and payer's name, are now recorded in the bank statements, thus facilitating reconciliation for both payers and beneficiaries, respectively.

The establishment of JomPAY, a national electronic bill payment platform, on 9 April 2015 is another initiative designed to enhance the efficiency and convenience of bill payments. JomPAY enables customers of a participating bank to make payments to the registered billers of all JomPAY participating banks. This open platform eliminates the need for a biller to maintain banking relationships with multiple banks in order to accept payments from its customers. As at end-2015, JomPAY is offered by 29 banks via online banking and four banks via ATMs, with 472 registered billers accepting payments through the platform. In 2015, 302,595 transactions were made using JomPAY amounting to RM99 million. Plans are underway to expand the electronic bill payment market to include new merchant sectors, particularly small and medium enterprises (SMEs) and micro enterprises, with a target of 5,000 registered billers by the year 2020.

Promoting transparency and competition

To promote transparency and competition among banks in their product offerings, details of the e-payment services offered by banks are made available at all bank branches and on the websites of banking institutions, the Bank, The Association of Banks in Malaysia (ABM) and The Association of Islamic Banking Institutions Malaysia (AIBIM). The public would be able to select the services offered by banks that best serve their needs by comparing details such as the transaction fee, access channels, crediting time and transaction limit.

Facilitating greater payment card usage

Transaction and market share trends for payment cards

Payment card usage continued to increase, recording a growth of 8.4% and 9.9% in terms of transaction volume and value respectively, reaching 453.9 million transactions valued at RM141.5 billion in 2015 (2014: 418.8 million; RM128.8 billion) (Chart 5.7). Credit card remained the most widely

Table 5.3

Value-added Features for IBG and IBFT Services

	IBG	IBFT	Cheques
Crediting time	Same business day if payment is initiated before 5.00 p.m.	Almost instantly	Next business day if cheques are banked in before 4.00 p.m.
Number of banks providing payment reference for transactions made via online banking as at end-2015			
– Payer's details in beneficiary's statement	All 30 offering banks	16 out of 17 offering banks	Payment reference is not available
– Beneficiary's details in payer's statement	29 out of 30 offering banks	14 out of 17 offering banks	

used payment card but its proportion of the total payment cards transaction volume decreased to 79.2% in 2015 (2014: 82.5%). Debit card increased its share of the total payment card transactions to 19.8% (2014: 16.4%), representing a year-on-year growth rate of 31% with a total transaction volume of 90.1 million valued at RM20 billion (2014: 68.7 million; RM14.8 billion). The share of charge card transactions remained relatively low at 0.9% (2014: 1%).

Lower cost of accepting payment cards

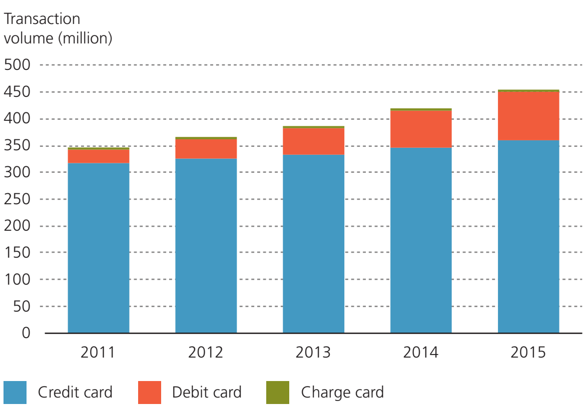
Significant progress has been made towards reducing the cost of accepting payment cards with the implementation of the PCRF, which came into effect on 1 July 2015. The PCRF addresses indiscriminate increases in interchange fees and other distortions in the payment card market which had previously led to unnecessarily higher costs in accepting payment cards. This was achieved through the imposition of interchange fee ceilings, supported by a series of measures to promote efficiency and competition in the payment card market to lower cost whilst providing merchants with greater choice and control over the cost of payment card acceptance (Table 5.4). These measures have already resulted in a slight moderation in the average merchant discount rate (MDR) charged by the acquirers, which will further encourage the wider acceptance of payment cards (Chart 5.8).

Greater accessibility through deployment of POS terminals

In 2015, the total number of POS terminals in the market increased by 18.1% to 280,704 (2014: 4.9%; 237,657). To encourage further expansion of the POS terminal network, the PCRF provides payment card schemes with the option of establishing a Market Development Fund (MDF) to support the deployment of new POS terminals (Diagram 5.4). The MDF is to be funded by a portion of the interchange fee amounting to 0.1% of the value of any credit card transaction. Card issuers that receive MDF funds will be assigned individual targets for POS terminal deployment, and issuers that fail to achieve the targets would

Chart 5.7

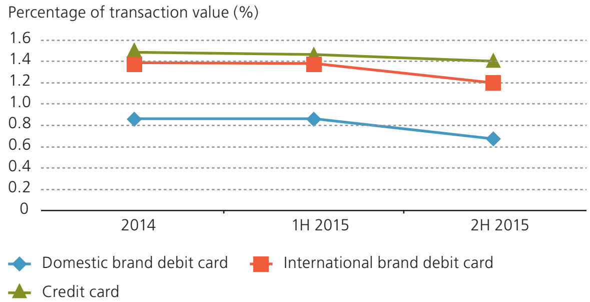
Payment Card Transaction Volume by Type of Cards



Source: Bank Negara Malaysia

Chart 5.8

Average MDR by Type of Payment Card Transactions*



*Based on the data submitted by 10 acquirers with 61% market share in the total number of POS terminals as at end-2015.

Source: Bank Negara Malaysia

Table 5.4

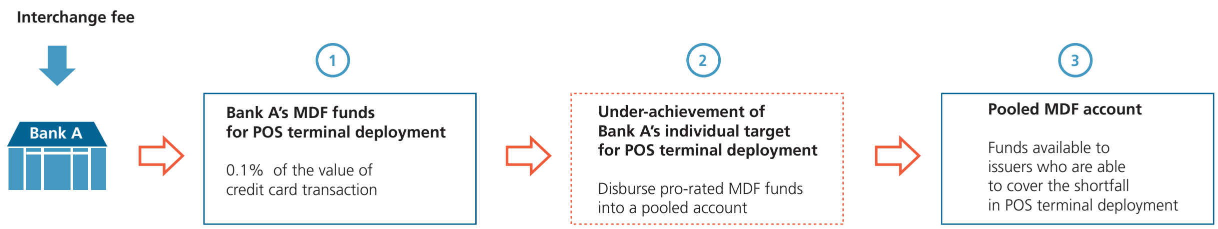
Measures to Provide Merchants with Better Control of the Cost of Payment Card Acceptance

Measures	Rationale
1. Unbundling of MDR for payment cards	To ensure MDR reflects the cost structure of different payment cards
2. Disclosure of MDR and interchange fee rates in the merchant statements	To provide greater transparency to merchants on the cost of accepting different payment cards
3. Empowering merchants to steer their customers to use cost-effective payment cards	To facilitate merchants to minimise their cost of accepting payment cards by encouraging their customers to use the cost-effective payment cards
4. Empowering merchants to set priority network routing for co-badged debit cards[1]	To enable merchants to prioritise the acceptance of the lowest-cost debit card network in order to minimise the cost of accepting payment cards

[1] Co-badged debit cards have both the domestic brand debit application (i.e. MyDebit) and an international brand debit application (e.g. Visa or MasterCard) on the same card.

Diagram 5.4

Mechanism of the MDF



Source: Bank Negara Malaysia

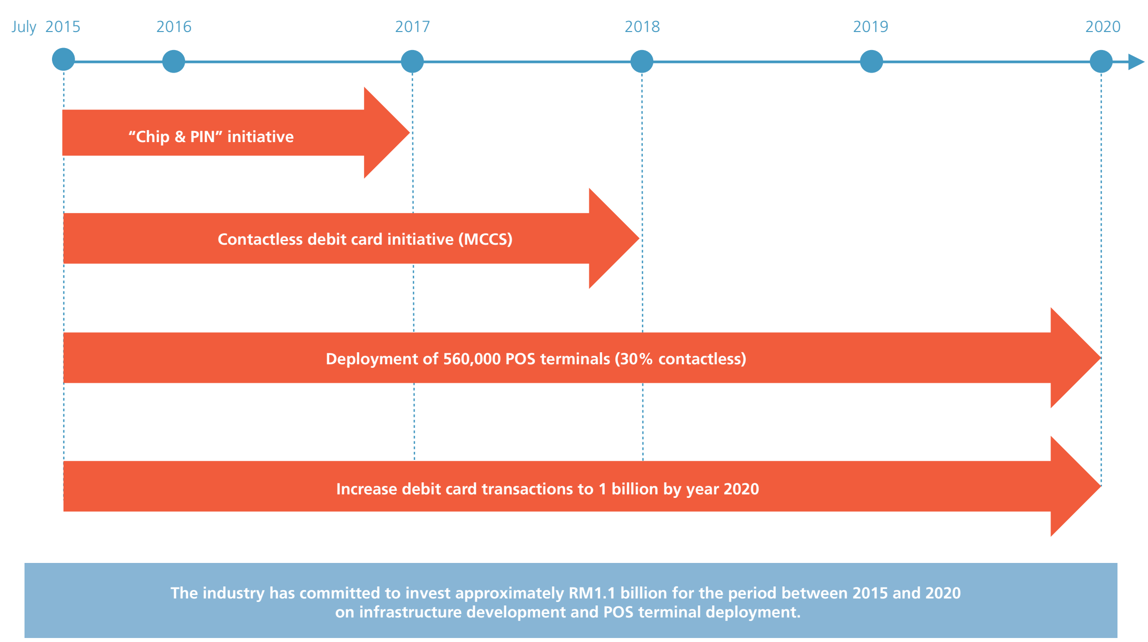
be required to return the MDF funds to a pooled account on a pro-rated basis, which will be made available to other issuers that are able to cover the shortfall in POS terminal deployment. Two major payment card schemes have since established an MDF for the benefit of their participants, which is expected to channel approximately RM455 million towards expanding the POS terminal network for the period between July 2015 and 2020.

``Chip and PIN´´ and Malaysian Chip Card Specification initiatives

The enhancement of the payment card infrastructure is currently underway, with the expected migration from signature to PIN verification for payment card transactions at POS terminals (``Chip and PIN´´) and the roll out of Malaysian Chip Card Specification (MCCS)-compliant payment cards and terminals by 1 January 2017 and 1 January 2018, respectively (Diagram 5.5). To support such infrastructure enhancements and the expansion of the POS terminals, the industry has committed to invest approximately RM1.1 billion for the period between 2015 and 2020. The adoption of ``Chip and PIN´´ verification will further improve the security of payment card transactions at POS terminals, while the adoption of the international Europay-MasterCard-Visa (EMV) standard and contactless functionality under the MCCS initiative will enhance the interoperability and efficiency of

Diagram 5.5

Industry-wide Initiatives to Enhance the Payment Card Landscape



Source: Bank Negara Malaysia

domestic debit cards. These enhanced card features will provide greater convenience and further improve consumer confidence in the use of payment cards.

Promoting adoption of mobile banking and payments

The Bank is also closely monitoring developments in mobile banking and payments. With a mobile penetration rate of about 1.5 mobile phones per capita, mobile phones have the potential to serve as a convenient channel for banking and payment transactions. Currently, mobile banking services are offered by 13 banks, which collectively cover 86.1% of total CASA. Subscription to mobile banking services has also been significant, with the number of mobile banking subscribers increasing by 29.1% to 7.3 million subscribers in 2015, of which about 1.6 million are active subscribers. This is also reflected by the growth of mobile banking financial transaction volume, which grew by 35.6% to 31.6 million transactions. Growth was also observed in mobile payment services offered by mobile network operators where mobile payment transactions increased by 15.9% to 0.3 million transactions in 2015. These trends are expected to continue amid further advancements in mobile technology, and greater consumer awareness and confidence. A key area of focus for the Bank is to foster innovation and confidence in mobile banking and payment services. While some security measures are already embedded as part of online banking security features such as Transaction Authorisation Code (TAC), efforts to further elevate security standards have nonetheless been observed, most notably with the introduction of biometric authentication by some banks.

Fostering awareness to boost e-payment adoption

In the past three years, the Bank has worked closely with the banking industry to initiate a series of outreach programmes aimed at fostering greater awareness and promoting the use of cost-effective payment instruments and services among consumers and businesses. This included the `Experience IBG´ roadshow, `Open Day´ event at bank branches and the annual Payment Systems Forum and Exhibition. This collaborative approach continued in 2015 with the National e-Payment Roadshow (Roadshow) which was held at six major towns in Pulau Pinang, Johor, Kelantan, Sabah, Sarawak and Kuala Lumpur. The Roadshow focused on promoting the acceptance of payment cards, funds transfers via ATM, online banking services and safe practices in conducting online banking transactions. The Roadshow was attended mainly by SMEs and micro enterprises. In conjunction with the Roadshow, banks also launched campaigns in more than 40 selected towns to encourage businesses to accept payment cards, during which attractive incentives and promotional packages were offered. These included lower MDR fees and free rental for payment card terminals to businesses that signed up for card acceptance services.

REGIONAL CO-OPERATION IN PAYMENT SYSTEMS

The Bank continued during the year to advance regional financial co-operation through its participation in various regional groupings such as the Working Group on Payment Systems under the Executives' Meeting on East Asia-Pacific Central Banks (EMEAP), ASEAN+3 Cross-border Settlement Infrastructure Forum and ASEAN Working Committee on Payment and Settlement Systems (WCPSS). The Bank currently co-chairs the ASEAN WCPSS which seeks to facilitate greater interconnectedness within the ASEAN payment infrastructures. The initiatives being pursued include improving cross-border payment services and promoting greater convergence between domestic regulatory frameworks in areas such as consumer protection and risk management. These measures are envisaged to create an integrated ASEAN payment system that is safe, innovative, competitive, efficient and cost-effective. This, in turn, is expected to lead to wider consumer choice and greater access to e-payment channels, lower transaction costs and risk as well as faster settlements. In order to achieve the goal of payment integration within ASEAN, further efforts will be directed towards harmonising technical and operational standards in areas such as messaging format, settlement cycle, service availability, dispute resolution and liability management. These efforts must nonetheless be supported by cross-border collaboration and coordinated arrangements, including through capacity building and technical assistance, having regard for the diverse stages of economic development, institutional frameworks and domestic priorities across the ASEAN jurisdictions.

2015

ANNEX

CONTENTS

Key Financial and Payment Systems Statistics

Payment and Settlement Systems

Table A.1

Key Financial Soundness Indicators

	As at end				
	2011	2012	2013	2014	2015*p*
	% (or otherwise stated)				
Banking System					
Risk-Weighted Capital Ratio	15.7	15.7	-	-	-
Core Capital Ratio	13.7	13.9	-	-	-
Total Capital Ratio[1]	-	-	14.9	15.9	16.1
Tier 1 Capital Ratio[1]	-	-	13.5	14.0	13.8
Common Equity Tier 1 Capital Ratio[1]	-	-	12.6	13.3	12.8
Return on Assets	1.6	1.6	1.5	1.5	1.3
Return on Equity	17.4	17.4	15.9	15.2	12.4
Liquid Assets to Total Assets[2]	16.0	13.8	11.6	13.3	-
Liquid Assets to Short-term Liabilities[2]	45.4	42.5	36.5	42.6	-
Liquidity Coverage Ratio[3]	-	-	-	-	129.5
Net Impaired Loans Ratio	1.8	1.4	1.3	1.2	1.2
Capital Charge on Interest Rate Risk in the Trading Book to Capital Base[1]	1.7	1.7	1.5	1.4	1.2
Net Open Position in FCY to Capital Base[1]	6.7	6.1	5.7	4.7	6.1
Equity Holdings to Capital Base[1]	0.9	0.6	0.8	1.3	0.7
Insurance and Takaful Sector					
Capital Adequacy Ratio (conventional only)	222.5	219.1	246.1	251.9	251.9
Life Insurance and Family Takaful					
Excess Income over Outgo (RM billion)	12.7	17.9	13.2	13.8	12.0
New Business Premiums / Contributions (RM billion)	10.9	12.0	12.1	12.9	13.3
Capital Adequacy Ratio (conventional only)	248.5	242.3	260.9	259.2	260.8
General Insurance and General Takaful					
Underwriting Profit (RM billion)	0.5	1.7	1.8	1.8	1.3
Operating Profit (RM billion)	1.7	2.9	3.2	3.2	2.7
Gross Direct Premiums / Contributions (RM billion)	15.4	16.6	17.8	19.1	19.5
Claims Ratio	66.7	57.3	57.1	57.5	60.2
Capital Adequacy Ratio (conventional only)	222.9	227.7	231.7	279.7	263.4
Household (HH) Sector					
HH Debt (RM billion)	694.2	782.3	877.6	960.2	1,030.6
HH Financial Asset (RM billion)	1,519.6	1,712.3	1,904.9	2,018.2	2,116.1
HH Debt-to-GDP Ratio	76.1	80.5	86.1	86.8	89.1
HH Financial Asset to Total HH Debt Ratio	218.9	218.9	217.1	210.2	205.3
HH Liquid Financial Asset to Total HH Debt Ratio	154.7	156.3	155.7	147.9	142.0
Impaired Loans Ratio of HH Sector	1.8	1.5	1.3	1.2	1.1
Business Sector					
Return on Assets	5.5	5.1	4.9	4.7	3.9*
Return on Equity	10.2	9.0	9.3	8.1	6.8*
Debt-to-Equity Ratio	45.5	42.5	40.0	41.5	46.8*
Interest Coverage Ratio (times)	6.9	5.4	7.6	7.3	5.3*
Operating Margin	13.2	12.2	12.9	11.8	13.4*
Impaired Loans Ratio of Business Sector	4.1	3.0	2.8	2.6	2.5
Development Financial Institutions[4]					
Lending to Targeted Sectors (% change)	7.1	10.1	8.1	7.0	5.5
Deposits Mobilised (% change)	16.1	7.1	7.2	5.3	1.9
Impaired Loans Ratio	7.3	6.3	5.6	4.7	4.7
Return on Assets	2.7	2.5	2.2	1.6	1.5

[1] Beginning January 2013, capital components are reported based on Basel III Capital Adequacy Framework
[2] Beginning January 2012, the computation of liquid assets excludes interbank deposits
[3] The Basel III Liquidity Coverage Ratio (LCR) Framework takes effect on 1 June 2015 and supersedes the guidelines on Liquidity Framework and Liquidity Framework-i issued on 1 July 1998
[4] Refers to development financial institutions under the Development Financial Institutions Act 2002
p Preliminary
*Based on data from January to September 2015
Note: Figures may not necessarily add up due to rounding

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

Table A.2

Key Financial Indicators - Islamic Banking and Takaful Sectors

	As at end				
	2011	2012	2013	2014	2015*p*
Islamic Banking System	RM million (or otherwise stated)				
Total assets[1,2]	434,665.5	494,705.2	558,295.0	615,190.0	685,391.9
% of total assets of entire banking system[1,2]	22.4	23.8	25.0	25.5	26.8
Total financing[1,2]	268,251.5	314,973.3	370,673.8	427,887.8	495,004.6
% of total loans / financing of entire banking system[1,2]	24.3	25.8	27.5	29.2	31.3
Total deposits and investment accounts[1,3]	-	-	-	-	550,139.7
Total deposits	340,695.8	386,196.8	436,327.6	494,738.3	502,992.4
Total investment accounts	-	-	-	-	47,147.3
% of total deposits and investment accounts of entire banking system[1,3]	24.4	25.6	26.7	28.2	30.0
	%				
Risk-Weighted Capital Ratio	15.0	14.5	-	-	-
Core Capital Ratio	12.1	12.0	-	-	-
Total Capital Ratio[4]	-	-	15.1	16.2	16.1
Tier 1 Capital Ratio[4]	-	-	12.8	12.9	12.3
Common Equity Tier 1 Capital Ratio[4]	-	-	12.8	12.8	12.3
Return on Assets	1.0	1.3	1.2	1.1	1.0
Net Impaired Financing Ratio	1.6	1.2	1.0	0.9	0.9
Takaful Sector	RM million (or otherwise stated)				
Takaful Fund Assets	16,948.2	19,045.6	20,934.2	22,746.3	24,753.2
Family	14,377.2	16,289.8	17,952.2	19,619.3	21,434.8
General	2,570.9	2,755.9	2,982.0	3,127.0	3,318.4
% of insurance and takaful industry	8.8	9.0	9.0	9.1	9.4
Net Contributions Income	4,863.0	5,887.8	6,204.4	6,330.6	6,809.7
Family	3,703.6	4,574.8	4,803.9	4,787.2	5,098.4
General	1,159.4	1,313.0	1,400.5	1,543.4	1,711.3
% of insurance and takaful industry	13.0	14.3	14.1	12.5	12.9
Family Takaful					
New Business Contributions	2,695.1	3,474.5	3,563.5	3,500.3	3,638.4
General Takaful					
Gross Direct Contributions	1,599.1	1,737.6	1,908.8	2,163.7	2,295.9
Claims Ratio (%)	67.8	56.9	53.6	47.8	51.9

[1] Including development financial institutions under the Development Financial Institutions Act 2002
[2] Beginning 1 July 2015, includes assets / financing funded by investment accounts which are recognised on and off-balance sheet
[3] Beginning 1 July 2015, Islamic deposits and investment accounts are required to be designated separately. Investment account figures include those which are recognised on and off-balance sheet
[4] Beginning January 2013, capital components are reported based on Basel III Capital Adequacy Framework
p Preliminary
Note: Figures may not necessarily add up due to rounding

Source: Bank Negara Malaysia

Table A.3

Banking System[1]: Income and Expenditure

	For the calendar year				
	2011	2012	2013	2014	2015*p*
	RM million (or otherwise stated)				
Interest income	73,681.0	83,760.1	83,079.3	89,416.7	96,797.4
Less: Interest expense	38,918.2	46,292.9	43,621.4	47,911.5	54,625.6
Net interest income	34,762.8	37,467.3	39,457.8	41,505.1	42,171.8
Add: Fee-based income	8,951.8	9,125.5	9,617.6	10,103.0	9,667.3
Less: Staff cost	12,841.9	13,810.3	13,561.5	13,628.7	15,206.3
Overheads	11,751.1	12,666.5	13,383.7	14,171.8	15,216.3
Gross operating profit	19,121.6	20,116.0	22,130.2	23,807.6	21,416.5
Less: Impairment[2] and other provisions	2,835.6	1,501.9	2,427.1	1,472.0	2,851.4
Gross operating profit after provision	16,286.0	18,614.1	19,703.1	22,335.6	18,565.1
Add: Other income	9,909.6	10,604.9	10,054.5	9,593.3	10,454.9
Pre-tax profit	**26,195.6**	**29,219.0**	**29,757.6**	**31,928.9**	**29,020.0**
Pre-tax profit / Average assets (%)	1.6	1.6	1.5	1.5	1.3
Pre-tax profit / Average shareholders' funds (%)	17.4	17.4	15.9	15.2	12.4
Pre-tax profit / Average employee (RM'000)	213.3	231.9	236.2	255.0	237.4
Cost incurred per ringgit of revenue earned (sen)	45.9	46.3	45.6	45.4	48.8
Cost incurred per ringgit of net interest income (sen)	70.7	70.7	68.3	67.0	72.1
Overheads to staff cost (%)	91.5	91.7	98.7	104.0	100.1
Staff cost per employee (RM'000)	102.7	108.8	108.4	108.8	127.6

[1] Includes Islamic banks
[2] Refers to individual and collective impairment provisions in accordance with the Guidelines on Classification and Impairment Provisions for Loans / Financing
p Preliminary
Note: Figures may not necessarily add up due to rounding

Source: Bank Negara Malaysia

Table A.4

Commercial Banks[1]: Income and Expenditure

	For the calendar year				
	2011	2012	2013	2014	2015*p*
	RM million (or otherwise stated)				
Interest income	71,668.9	81,931.8	81,085.9	87,707.9	95,041.0
Less: Interest expense	37,417.0	44,943.9	42,165.1	46,598.7	53,361.0
Net interest income	34,251.8	36,988.0	38,920.9	41,109.2	41,680.0
Add: Fee-based income	6,904.9	7,620.1	7,874.4	8,179.1	8,061.2
Less: Staff cost	11,736.6	12,789.4	12,399.9	12,488.5	14,071.0
Overheads	10,747.1	12,031.4	12,571.6	13,232.2	14,381.8
Gross operating profit	18,673.1	19,787.3	21,823.8	23,567.5	21,288.4
Less: Impairment[2] and other provisions	2,938.6	1,509.0	2,467.4	1,487.0	2,893.5
Gross operating profit after provision	15,734.5	18,278.3	19,356.4	22,080.5	18,395.0
Add: Other income	9,360.4	9,920.3	9,409.3	8,675.3	9,892.4
Pre-tax profit	**25,094.9**	**28,198.5**	**28,765.7**	**30,755.8**	**28,287.4**
Pre-tax profit / Average assets (%)	1.6	1.6	1.5	1.5	1.3
Pre-tax profit / Average shareholders' funds (%)	17.7	17.4	16.0	15.4	12.6
Pre-tax profit / Average employee (RM'000)	219.9	242.3	246.3	264.6	249.2
Cost incurred per ringgit of revenue earned (sen)	44.5	45.5	44.4	44.4	47.7
Cost incurred per ringgit of net interest income (sen)	65.6	67.1	64.2	62.6	68.3
Overheads to staff cost (%)	91.6	94.1	101.4	106.0	102.2
Staff cost per employee (RM'000)	102.8	109.0	106.7	107.5	127.0

[1] Includes Islamic banks
[2] Refers to individual and collective impairment provisions in accordance with the Guidelines on Classification and Impairment Provisions for Loans / Financing
p Preliminary
Note: Figures may not necessarily add up due to rounding

Source: Bank Negara Malaysia

Table A.5

Investment Banks: Income and Expenditure

	For the calendar year				
	2011	2012	2013	2014	2015*p*
	RM million (or otherwise stated)				
Interest income	2,012.1	1,828.3	1,993.3	1,708.8	1,756.4
Less: Interest expense	1,501.1	1,349.0	1,456.4	1,312.8	1,264.6
Net interest income	511.0	479.3	536.9	396.0	491.8
Add: Fee-based income	2,046.9	1,505.4	1,743.2	1,923.9	1,606.1
Less: Staff cost	1,105.3	1,020.9	1,161.5	1,140.1	1,135.3
Overheads	1,004.0	635.1	812.2	939.6	834.5
Gross operating profit	448.5	328.7	306.4	240.1	128.1
Less: Impairment[1] and other provisions	-103.1	-7.1	-40.4	-15.0	-42.0
Gross operating profit after provision	551.6	335.8	346.8	255.1	170.1
Add: Other income	549.2	684.6	645.2	918.0	562.5
Pre-tax profit	**1,100.8**	**1,020.4**	**991.9**	**1,173.1**	**732.6**
Pre-tax profit / Average assets (%)	1.7	1.6	1.7	2.1	1.4
Pre-tax profit / Average shareholders' funds (%)	12.3	11.5	10.6	11.4	6.9
Pre-tax profit / Average employee (RM'000)	117.4	108.4	107.7	130.8	83.8
Cost incurred per ringgit of revenue earned (sen)	67.9	62.0	67.5	64.2	74.0
Cost incurred per ringgit of net interest income (sen)	412.8	345.5	367.6	525.2	400.6
Overheads to staff cost (%)	90.8	62.2	69.9	82.4	73.5
Staff cost per employee (RM'000)	117.9	106.2	131.8	125.0	135.8

[1] Refers to individual and collective impairment provisions in accordance with the Guidelines on Classification and Impairment Provisions for Loans/Financing

p Preliminary

Note: Figures may not necessarily add up due to rounding

Source: Bank Negara Malaysia

Table A.6

Islamic Banking System: Income and Expenditure

	For the calendar year				
	2011	2012	2013	2014	2015*p*
	RM million (or otherwise stated)				
Income[1]	13,643.1	16,415.7	18,106.3	20,416.1	23,519.6
of which: derived from assets funded by investment accounts	-	-	-	-	1,148.5
Less: Expense[1]	6,535.8	7,965.1	9,422.9	10,888.9	13,738.6
of which: profit distributed to investment account holders	-	-	-	-	564.6
Net income	7,107.4	8,450.6	8,683.3	9,527.2	9,781.0
Add: Fee-based income[2]	835.7	1,055.2	1,048.4	1,056.9	1,105.9
Less: Staff cost	1,377.6	1,636.7	1,740.0	1,741.9	1,754.7
Overheads	2,388.1	3,016.8	3,079.2	3,225.5	3,495.6
Gross operating profit	4,177.3	4,852.3	4,912.5	5,616.8	5,636.7
Less: Impairment[3] and other provisions	1,692.1	609.0	443.8	758.2	1,047.1
Gross operating profit after provision	2,485.2	4,243.2	4,468.7	4,858.6	4,589.6
Add: Other income	541.7	608.9	444.0	253.1	450.0
Pre-tax profit	**3,026.9**	**4,852.1**	**4,912.7**	**5,111.7**	**5,039.6**
Pre-tax profit / Average assets (%)	1.0	1.3	1.2	1.1	1.0
Pre-tax profit / Average shareholders' funds (%)	13.5	18.2	17.0	15.7	14.0
Pre-tax profit / Average employee (RM'000)[4]	119.0	173.8	167.0	173.1	168.9
Cost incurred per ringgit of revenue earned (sen)	25.1	25.7	24.6	22.9	20.9
Cost incurred per ringgit of net income (sen)	53.0	55.1	55.5	52.1	53.7
Overheads to staff cost (%)	173.4	184.3	177.0	185.2	199.2
Staff cost per employee (RM'000)[4]	54.1	58.6	59.1	59.0	58.8

[1] Beginning 1 July 2015, income and expenses include those arising from assets funded by investment accounts and profit distributed to investment account holders
[2] Including income derived from assets funded by investment accounts which are recognised off-balance sheet
[3] Refers to individual and collective impairment provisions in accordance with the Guidelines on the Classification and Impairment Provisions for Loans / Financing
[4] Number of employees is estimated based on the percentage of the institutions' Islamic assets
p Preliminary
Note: Figures may not necessarily add up due to rounding

Source: Bank Negara Malaysia

Table A.7

Banking System: Network and Workforce

	As at end				
	2011	2012	2013	2014	2015*p*
Number of institutions	56	56	55	54	54
Commercial banks	*25*	*27*	*27*	*27*	*27*
Investment banks	*15*	*13*	*12*	*11*	*11*
Islamic banks	*16*	*16*	*16*	*16*	*16*
Office network	2,435	2,481	2,479	2,494	2,500
Commercial banks	*2,050*	*2,056*	*2,029*	*2,045*	*2,048*
Investment banks	*133*	*148*	*135*	*135*	*119*
Islamic banks[1]	*2,147*	*2,171*	*2,177*	*2,192*	*2,206*
Number of banks with internet services	27	28	31	31	31
Number of employees	125,065	126,902	125,071	125,307	119,162
Commercial banks	*106,274*	*107,541*	*106,006*	*106,783*	*101,823*
Investment banks	*9,577*	*9,610*	*8,814*	*9,122*	*8,361*
Islamic banks	*9,214*	*9,751*	*10,251*	*9,402*	*8,978*

[1] Includes Islamic bank branches that are shared with conventional bank branches
p Preliminary

Source: Bank Negara Malaysia

Table A.8

Commercial Banks[1]: Commitments and Contingencies

	As at end				
	2011	2012	2013	2014	2015*p*
	RM million				
Assets sold with recourse and commitments with drawdown	6,509.9	6,053.5	5,284.8	6,762.4	8,852.4
Credit extension commitments	409,756.4	444,293.6	470,299.8	472,472.5	490,961.9
Direct credit substitutes	21,302.3	24,960.5	33,087.9	29,897.3	32,830.2
Foreign exchange-related contracts	476,725.8	518,150.2	577,388.4	760,062.7	891,122.5
Interest rate-related contracts	695,982.4	716,494.7	772,958.0	791,736.1	858,058.7
Trade-related contingencies	11,721.1	10,644.2	10,677.4	13,724.3	13,505.9
Transaction-related contingencies	41,059.9	45,928.8	50,561.5	57,964.8	60,492.9
Underwriting obligations	789.5	445.0	522.0	466.0	76.0
Others	65,938.4	72,179.0	55,541.2	63,046.9	58,523.2
Total	**1,729,785.7**	**1,839,149.5**	**1,976,320.9**	**2,196,133.0**	**2,414,423.9**

[1] Includes Islamic banks
p Preliminary
Note: Figures may not necessarily add up due to rounding

Source: Bank Negara Malaysia

Table A.9

Investment Banks: Commitments and Contingencies

	As at end				
	2011	2012	2013	2014	2015*p*
	RM million				
Assets sold with recourse and commitments with drawdown	20.4	19.2	12.4	77.0	4.5
Credit extension commitments	3,353.6	3,666.1	5,454.8	5,609.1	5,802.7
Direct credit substitutes	322.6	201.5	316.6	418.0	543.0
Foreign exchange-related contracts	3,958.7	5,536.6	7,548.1	7,941.7	8,736.5
Interest rate-related contracts	10,573.4	9,161.6	9,779.4	8,957.2	7,370.6
Trade-related contingencies	1.1	1.1	0.0	0.0	0.0
Transaction-related contingencies	10.5	10.5	10.5	10.5	10.5
Underwriting obligations	717.5	190.3	680.8	90.2	218.4
Others	1,523.1	2,205.8	3,402.7	3,296.3	2,944.5
Total	**20,480.9**	**20,992.6**	**27,205.4**	**26,399.9**	**25,630.7**

p Preliminary
Note: Figures may not necessarily add up due to rounding

Source: Bank Negara Malaysia

Table A.10

Life Insurance[1]: Income and Outgo

	For the calendar year				
	2011	2012	2013	2014	2015*p*
	RM million				
Net premiums	22,877.7	25,005.7	26,458.1	28,824.8	30,043.6
Less: Net policy benefits	14,015.5	14,342.4	16,357.7	17,997.2	20,541.1
Agency remuneration	3,384.1	3,551.9	3,667.9	3,837.0	3,901.4
Total management expenses	2,092.9	2,287.6	2,481.8	2,626.5	2,997.6
Balance of transaction	3,385.2	4,823.8	3,950.7	4,364.1	2,603.5
Add: Net investment income	6,039.5	6,706.8	7,208.4	7,623.2	8,056.9
Net capital gain (loss)	659.0	2,181.6	-1,344.2	-856.2	-214.7
Net other income (outgo)	1,112.7	1,735.7	1,272.8	512.9	-112.6
Excess income over outgo	**11,196.4**	**15,447.8**	**11,087.7**	**11,643.9**	**10,333.1**

[1] Figures are based on global business of life insurance
p Preliminary
Note: Figures may not necessarily add up due to rounding

Source: Bank Negara Malaysia

Table A.11

General Insurance[1]: Underwriting and Operating Results

	For the calendar year				
	2011	2012	2013	2014	2015*p*
	RM million				
Earned premium income	11,236.9	12,418.7	13,821.3	14,885.6	15,631.8
Less: Net claims incurred	7,483.7	7,126.7	7,934.2	8,699.6	9,554.6
Net commission	1,374.3	1,587.4	1,789.8	1,963.4	2,016.7
Total management expenses	1,990.2	2,220.2	2,477.1	2,656.4	2,932.7
Underwriting profit	388.7	1,484.3	1,620.1	1,566.2	1,127.8
Add: Net investment income	924.6	970.1	1,015.7	1,063.9	1,151.1
Net capital gains (loss)	18.9	19.6	24.8	-29.2	3.1
Net other income	127.2	114.9	180.5	197.3	75.9
Operating profit	**1,459.5**	**2,588.9**	**2,841.1**	**2,798.2**	**2,357.9**

[1] Figures are based on global business of general insurance
p Preliminary
Note: Figures may not necessarily add up due to rounding
Source: Bank Negara Malaysia

Table A.12

Family Takaful[1]: Income and Outgo

	For the calendar year				
	2011	2012	2013	2014	2015*p*
	RM million				
Net contributions	3,703.6	4,574.8	4,803.9	4,787.2	5,098.4
Less: Net certificate benefits	1,660.9	1,635.9	1,999.2	2,027.6	2,437.2
Net commissions	599.2	711.2	761.2	731.5	846.6
Total management expenses	476.5	574.6	642.5	731.4	741.4
Balance of transaction	967.0	1,653.2	1,401.0	1,296.7	1,073.2
Add: Net investment income	494.2	590.1	659.1	736.9	830.9
Net capital gain (loss)	27.8	54.6	-164.4	-56.1	16.4
Net other income (outgo)	78.1	155.8	204.4	138.5	-260.3
Excess income over outgo	**1,567.1**	**2,453.7**	**2,100.1**	**2,116.0**	**1,660.2**

[1] Figures are based on global business and actual expenses borne by family takaful funds
p Preliminary
Note: Figures may not necessarily add up due to rounding
Source: Bank Negara Malaysia

Table A.13

General Takaful[1]: Underwriting and Operating Results

	For the calendar year				
	2011	2012	2013	2014	2015*p*
	RM million				
Earned contributions income	1,090.3	1,282.1	1,390.0	1,466.8	1,671.4
Less: Net claims incurred	738.9	730.0	743.2	700.6	867.7
Net commission	96.7	156.7	192.4	91.9	105.0
Total management expenses	155.9	206.0	247.4	416.7	502.9
Underwriting profit	98.7	189.5	207.0	257.6	195.8
Add: Net investment income	84.5	96.3	102.8	110.6	119.1
Net capital gains (loss)	35.8	41.6	80.4	11.8	6.9
Net other income (outgo)	17.5	-18.3	-7.7	-2.2	-1.3
Operating profit	**236.5**	**309.1**	**382.5**	**377.8**	**320.5**

[1] Figures are based on global business and actual expenses borne by general takaful funds
p Preliminary
Note: Figures may not necessarily add up due to rounding

Source: Bank Negara Malaysia

Table A.14

Development Financial Institutions: Sources and Uses of Funds

	DFIs[1] under DFIA[2]		Non-DFIA[2] DFIs[3]		Total DFIs	
	As at end					
	2014	2015	2014	2015	2014	2015
	RM million					
Sources:						
Shareholders' equity	28,646.3	30,466.4	5,112.4	5,751.2	33,758.7	36,217.6
of which:						
Paid-up capital	*11,111.1*	*11,121.3*	*2,844.5*	*2,859.5*	*13,955.6*	*13,980.8*
Reserves	*7,854.6*	*7,844.8*	*752.0*	*-2,207.8*	*8,606.6*	*5,637.0*
Retained earnings/losses	*7,436.5*	*9,023.1*	*1,621.7*	*1,404.5*	*9,058.2*	*10,427.6*
Liabilities	163,710.0	167,696.5	65,275.2	70,894.5	228,985.2	238,591.0
of which:						
Deposits accepted	113,511.7	117,248.4	55,457.6	60,243.6	168,969.3	177,492.0
Borrowings	17,691.1	15,085.0	7,034.7	7,950.3	24,725.8	23,035.3
Government	*13,391.3*	*9,227.9*	*1,975.0*	*2,163.7*	*15,366.3*	*11,391.6*
Multilateral/International agencies	*2,499.8*	*3,917.1*	*18.2*	*13.2*	*2,518.0*	*3,930.3*
Others	*1,800.0*	*1,940.0*	*5,041.5*	*5,773.4*	*6,841.5*	*7,713.4*
Debt securities issued	15,546.7	17,692.3	-	-	15,546.7	17,692.3
Total	**192,356.3**	**198,162.9**	**70,387.6**	**76,645.7**	**262,743.9**	**274,808.6**
Uses:						
Assets	192,356.3	198,162.9	70,387.6	76,645.7	262,743.9	274,808.6
of which:						
Deposits placed	10,419.3	7,157.9	8,066.9	12,330.5	18,486.2	19,488.4
Investments	42,086.0	42,198.0	41,792.9	45,116.8	83,878.9	87,314.8
of which:						
Government securities	*9,645.9*	*25,683.6*	-	-	*9,645.9*	*25,683.6*
Shares	*861.7*	*632.7*	*14,190.0*	*16,312.3*	*15,051.7*	*16,945.0*
Quoted	*812.3*	*583.7*	*14,053.6*	*16,175.6*	*14,865.9*	*16,759.3*
Unquoted	*49.4*	*49.0*	*136.4*	*136.7*	*185.8*	*185.7*
Corporate debt securities	*5,160.6*	*9,184.5*	*12,880.0*	*13,577.8*	*18,040.6*	*22,762.3*
Loans and advances	128,463.2	135,584.0	8,587.4	9,283.5	137,050.6	144,867.5
Fixed assets	3,770.1	4,001.6	5,661.7	6,208.8	9,431.8	10,210.4
Total	**192,356.3**	**198,162.9**	**70,387.6**	**76,645.7**	**262,743.9**	**274,808.6**
Contingencies:						
Guarantee	594.9	625.9	6,668.9	6,877.5	7,263.8	7,503.4
Export credit insurance	1,072.9	1,366.8	-	-	1,072.9	1,366.8
Total	**1,667.8**	**1,992.7**	**6,668.9**	**6,877.5**	**8,336.7**	**8,870.2**

[1] Refers to Bank Kerjasama Rakyat Malaysia Berhad (Bank Rakyat), Bank Simpanan Nasional (BSN), Bank Pembangunan Malaysia Berhad (Bank Pembangunan), Bank Pertanian Malaysia Berhad (Agrobank), Export-Import Bank of Malaysia Berhad (EXIM Bank) and Small Medium Enterprise Development Bank Malaysia Berhad (SME Bank)

[2] Development Financial Institutions Act 2002

[3] Refers to Lembaga Tabung Haji (LTH), Credit Guarantee Corporation Malaysia Berhad (CGC), Sabah Development Bank Berhad (SDB), Malaysian Industrial Development Finance Berhad (MIDF), Sabah Credit Corporation (SCC), Borneo Development Corporation (Sarawak) Sendirian Berhad (BDC Sarawak) and Borneo Development Corporation (Sabah) Sendirian Berhad (BDC Sabah)

Table A.15

Development Financial Institutions[1] under DFIA[2]: Sources and Uses of Funds

	As at end-2015						
	Bank Rakyat	BSN	Bank Pembangunan	Agrobank	EXIM Bank	SME Bank	Total
	RM million						
Sources:							
Shareholders' equity	13,812.6	2,310.2	7,511.5	2,520.2	3,039.3	1,272.6	30,466.4
of which:							
Paid-up capital	*2,983.9*	*-*	*3,078.7*	*1,000.0*	*2,708.7*	*1,350.0*	*11,121.3*
Reserves	*4,552.7*	*1,058.6*	*1,851.5*	*423.7*	*0.2*	*-41.9*	*7,844.8*
Retained earnings/losses	*4,448.6*	*1,138.0*	*2,333.3*	*940.9*	*258.4*	*-96.1*	*9,023.1*
Liabilities	80,475.2	31,920.7	22,138.7	10,632.7	12,989.1	9,540.1	167,696.5
of which:							
Deposits accepted	71,234.1	27,588.6	8,127.7	6,902.7	-	3,395.3	117,248.4
Borrowings	2,138.1	31.2	4,404.2	2,191.0	3,611.1	2,709.4	15,085.0
Government	*198.1*	*31.2*	*3,954.1*	*2,191.0*	*170.1*	*2,683.4*	*9,227.9*
Multilateral/ International agencies	*-*	*-*	*450.1*	*-*	*3,441.0*	*26.0*	*3,917.1*
Others	*1,940.0*	*-*	*-*	*-*	*-*	*-*	*1,940.0*
Debt securities issued	2,718.9	-	6,059.0	-	7,394.6	1,519.8	17,692.3
Total	**94,287.8**	**34,230.9**	**29,650.2**	**13,152.9**	**16,028.4**	**10,812.7**	**198,162.9**
Uses:							
Assets	94,287.8	34,230.9	29,650.2	13,152.9	16,028.4	10,812.7	198,162.9
of which:							
Deposits placed	1,725.5	213.9	1,123.0	557.6	2,155.2	1,382.7	7,157.9
Investments	24,115.6	9,148.5	2,098.8	4,105.0	200.2	2,529.9	42,198.0
of which:							
Government securities	*16,648.3*	*5,815.3*	*865.6*	*1,204.4*	*-*	*1,150.0*	*25,683.6*
Shares	*294.0*	*141.9*	*186.8*	*0.8*	*-*	*9.2*	*632.7*
Quoted	*282.3*	*141.9*	*158.7*	*0.8*	*-*	*-*	*583.7*
Unquoted	*11.7*	*-*	*28.1*	*-*	*-*	*9.2*	*49.0*
Corporate debt securities	*3,211.8*	*480.6*	*1,041.5*	*2,899.7*	*200.2*	*1,350.7*	*9,184.5*
Loans and advances	64,463.7	20,674.1	24,850.9	7,482.5	12,723.6	5,389.2	135,584.0
Fixed assets	1,317.4	1,364.4	200.6	521.8	134.5	462.9	4,001.6
Total	**94,287.8**	**34,230.9**	**29,650.2**	**13,152.9**	**16,028.4**	**10,812.7**	**198,162.9**

[1] Refers to Bank Kerjasama Rakyat Malaysia Berhad (Bank Rakyat), Bank Simpanan Nasional (BSN), Bank Pembangunan Malaysia Berhad (Bank Pembangunan), Bank Pertanian Malaysia Berhad (Agrobank), Export-Import Bank of Malaysia Berhad (EXIM Bank) and Small Medium Enterprise Development Bank Malaysia Berhad (SME Bank)
[2] Development Financial Institutions Act 2002

Table A.16

Development Financial Institutions: Financing by Economic Sector

	DFIs[1] under DFIA[2]		Non-DFIA[2] DFIs[3]		Total DFIs	
	As at end					
	2014	2015	2014	2015	2014	2015
	RM million					
Agriculture, forestry and fishery	7,714.2	8,031.7	271.2	689.0	7,985.4	8,720.7
Mining and quarrying	166.8	657.1	37.8	25.6	204.6	682.7
Manufacturing	5,461.6	4,992.0	498.8	515.6	5,960.4	5,507.6
Electricity, gas and water supply	3,554.3	4,792.9	468.1	467.5	4,022.4	5,260.4
Import and export, wholesale and retail trade, restaurants and hotels	3,414.0	4,398.6	150.6	144.1	3,564.6	4,542.7
Broad property sector	22,028.5	22,168.3	3,388.1	3,269.1	25,416.6	25,437.4
Construction	*12,635.8*	*11,818.2*	*1,965.5*	*1,990.4*	*14,601.3*	*13,808.6*
Purchase of residential property	*8,588.9*	*9,510.3*	*90.0*	*74.2*	*8,678.9*	*9,584.5*
Purchase of non-residential property	*211.5*	*214.4*	*28.5*	*27.5*	*240.0*	*241.9*
Real estate	*592.3*	*625.4*	*1,304.1*	*1,177.0*	*1,896.4*	*1,802.4*
Maritime	2,401.2	1,931.4	-	-	2,401.2	1,931.4
Transport, storage and communication	10,234.5	10,000.4	37.1	37.9	10,271.6	10,038.3
Finance, insurance and business services	4,109.6	4,572.0	523.6	616.8	4,633.2	5,188.8
Consumption credit	66,014.4	70,072.2	2,159.7	2,325.9	68,174.1	72,398.1
of which:						
Purchase of motor vehicles	*1,456.5*	*1,714.2*	*1.9*	*1.2*	*1,458.4*	*1,715.4*
Credit card	*804.3*	*866.8*	*2,157.7*	*2,324.6*	*2,962.0*	*3,191.4*
Community, social and other service activities	2,825.0	3,351.0	3.2	5.9	2,828.2	3,356.9
Purchase of securities	150.5	259.2	-	-	150.5	259.2
Other sectors	388.6	357.2	1,049.2	1,186.1	1,437.8	1,543.3
Total	**128,463.2**	**135,584.0**	**8,587.4**	**9,283.5**	**137,050.6**	**144,867.5**

[1] Refers to Bank Kerjasama Rakyat Malaysia Berhad (Bank Rakyat), Bank Simpanan Nasional (BSN), Bank Pembangunan Malaysia Berhad (Bank Pembangunan), Bank Pertanian Malaysia Berhad (Agrobank), Export-Import Bank of Malaysia Berhad (EXIM Bank) and Small Medium Enterprise Development Bank Malaysia Berhad (SME Bank)
[2] Development Financial Institutions Act 2002
[3] Refers to Lembaga Tabung Haji (LTH), Credit Guarantee Corporation Malaysia Berhad (CGC), Sabah Development Bank Berhad (SDB), Malaysian Industrial Development Finance Berhad (MIDF), Sabah Credit Corporation (SCC), Borneo Development Corporation (Sarawak) Sendirian Berhad (BDC Sarawak) and Borneo Development Corporation (Sabah) Sendirian Berhad (BDC Sabah)

Table A.17

Development Financial Institutions[1] under DFIA[2]: Financing by Economic Sector

	Bank Rakyat	BSN	Bank Pembangunan	Agrobank	EXIM Bank	SME Bank	Total
	As at end-2015						
	RM million						
Agriculture, forestry and fishery	366.0	-	-	7,482.5	174.6	8.6	8,031.7
Mining and quarrying	-	-	-	-	613.7	43.4	657.1
Manufacturing	189.3	178.6	1,460.1	-	2,232.7	931.3	4,992.0
Electricity, gas and water supply	100.4	-	2,047.8	-	2,612.5	32.2	4,792.9
Import and export, wholesale and retail trade, restaurants and hotels	117.9	349.4	1,381.7	-	1,168.7	1,380.9	4,398.6
Broad property sector	3,431.4	7,794.0	8,081.5	-	2,046.0	815.4	22,168.3
Construction	*1,139.6*	-	*8,081.5*	-	*1,908.0*	*689.0*	*11,818.1*
Purchase of residential property	*1,767.0*	*7,743.3*	-	-	-	-	*9,510.3*
Purchase of non-residential property	*163.7*	*50.7*	-	-	-	-	*214.4*
Real estate	*361.1*	-	-	-	*138.0*	*126.4*	*625.5*
Maritime	-	-	1,931.4	-	-	-	1,931.4
Transport, storage and communication	155.6	4.2	7,424.5	-	1,619.2	796.9	10,000.4
Finance, insurance and business services	1,981.0	108.0	-	-	1,935.1	547.9	4,572.0
Consumption credit	58,020.7	12,051.5	-	-	-	-	70,072.2
of which:							
Purchase of motor vehicles	*1,240.0*	*474.2*	-	-	-	-	*1,714.2*
Credit card	*476.8*	*390.0*	-	-	-	-	*866.8*
Community, social and other service activities	29.4	…	2,513.6	-	-	808.0	3,351.0
Purchase of securities	72.0	187.2	-	-	-	-	259.2
Other sectors	-	1.2	10.3	-	321.1	24.6	357.2
Total	**64,463.7**	**20,674.1**	**24,850.9**	**7,482.5**	**12,723.6**	**5,389.2**	**135,584.0**

[1] Refers to Bank Kerjasama Rakyat Malaysia Berhad (Bank Rakyat), Bank Simpanan Nasional (BSN), Bank Pembangunan Malaysia Berhad (Bank Pembangunan), Bank Pertanian Malaysia Berhad (Agrobank), Export-Import Bank of Malaysia Berhad (EXIM Bank) and Small Medium Enterprise Development Bank Malaysia Berhad (SME Bank)
[2] Development Financial Institutions Act 2002

... Negligible

Table A.18

Development Financial Institutions: Selected Data

	As at end					
	2014			2015		
DFIs under DFIA[1]:	Branch	ATM	Staff	Branch	ATM	Staff
Bank Kerjasama Rakyat Malaysia Berhad	174	650	4,642	148	699	5,153
Bank Simpanan Nasional	403	885	6,961	400	862	7,084
Bank Pembangunan Malaysia Berhad	-	-	331	-	-	342
Bank Pertanian Malaysia Berhad	190	258	3,347	187	255	3,102
Export-Import Bank of Malaysia Berhad	-	-	298	-	-	312
Small Medium Enterprise Development Bank Malaysia Berhad	29	-	1,028	29	-	1,029
Sub-total	796	1,793	16,607	764	1,816	17,022
Non-DFIA[1] DFIs:						
Lembaga Tabung Haji	121	-	2,090	122	-	2,118
Credit Guarantee Corporation Malaysia Berhad	16	-	500	16	-	541
Sabah Development Bank Berhad	-	-	88	-	-	83
Malaysian Industrial Development Finance Berhad	5	-	293	5	-	284
Sabah Credit Corporation	12	-	184	13	-	185
Borneo Development Corporation (Sarawak) Sendirian Berhad	-	-	36	-	-	35
Borneo Development Corporation (Sabah) Sendirian Berhad	-	-	20	-	-	21
Sub-total	154	-	3,211	156	-	3,267
Total	**950**	**1,793**	**19,818**	**920**	**1,816**	**20,289**

[1] Development Financial Institutions Act 2002

Table A.19

Total Outward and Inward Remittances

	2011	2012	2013	2014	2015
	RM million				
Total outward[1]	**15,703.8**	**18,357.5**	**22,717.1**	**28,207.9**	**34,753.1**
Remitted via:					
Banks[2]	7,812.8	7,543.3	8,577.2	10,739.9	14,084.8
Money services business licensees[3]	7,891.0	10,814.2	14,139.9	17,468.0	20,668.3
Total inward[4]	**5,215.8**	**4,966.6**	**5,764.8**	**6,866.0**	**8,433.3**
Remitted via:					
Banks	4,654.7	4,362.9	4,984.6	5,885.3	7,111.9
Money services business licensees	561.1	603.7	780.2	980.7	1,321.4
As at end of period					
No. of remittance service providers	**80**	**79**	**77**	**77**	**76**
Commercial banks	41	43	43	43	43
Development financial institutions	2	2	2	3	3
Licensed non-bank remittance service providers	37	34	32	31	30

1 Refers to total funds remitted from Malaysia to other countries for workers' remittances and remuneration for employees
2 Remittance transactions adjusted for funds channelled through Malaysia from a country of origin to another destination country. These funds comprise primarily the international worker remittances conducted via the MSB licensees approved under the Money Services Business Act (MSBA) 2011
3 Refers to non-bank remittance service providers and development financial institutions licensed under the MSBA 2011
4 Refers to total funds remitted from other countries to Malaysia for workers' remittances and remuneration for employees

Source: International Transactions Information System (ITIS), e-SURVEY on bank remittance transactions and Money Services Business Statistical Report on Remittance Business

Table A.20

Basic Payments Indicator

	2011	2012	2013	2014	2015
Population (million)	29.1	29.5	30.2	30.6	31.0
GDP (RM million)	911,733	971,252	1,018,821	1,106,580	1,156,881
Cash in circulation (CIC) (RM million)	53,488.5	57,395.6	62,710.2	68,029.4	76,642.9
Transaction Volume Per Capita (unit):					
Cheque[1]	7.1	6.9	6.5	5.8	4.8
E-payments:	49.1	55.0	63.4	70.9	82.0
Credit card	10.9	11.0	11.0	11.3	11.6
Charge card	0.1	0.1	0.1	0.1	0.1
Debit card	0.9	1.2	1.6	2.2	2.9
E-money	27.7	31.3	34.7	38.4	44.7
Other cashless instruments[2]	0.2	0.9	1.0	1.0	1.1
Interbank GIRO	2.1	2.4	2.8	3.7	4.8
Direct Debit[3]	…	…	…	…	0.1
ATM[4]	1.3	1.5	1.4	1.7	2.1
Internet banking[5]	5.6	6.3	7.2	8.7	10.5
Mobile banking[5]	0.1	0.2	0.5	0.7	0.9
RENTAS - Third party transactions[6]	0.1	0.1	0.1	0.1	0.1
Intrabank direct debit and standing instructions[7]	-	-	3.0	2.9	3.1
Transaction Value Per Capita (RM):					
CIC	1,840.5	1,945.0	2,075.5	2,223.3	2,472.7
Cheque[1]	68,125.3	68,899.4	68,163.9	63,344.6	57,908.7
E-payments:	446,802.4	512,226.1	535,343.6	565,573.9	538,474.7
Credit card	3,055.4	3,188.2	3,300.9	3,447.9	3,635.1
Charge card	185.4	218.9	239.1	279.8	287.3
Debit card	215.3	292.1	379.1	483.3	643.9
E-money	119.7	143.8	162.8	172.7	193.4
Other cashless instruments[2]	1.0	2.6	4.3	3.2	3.3
Interbank GIRO	5,716.8	7,172.5	9,441.6	14,136.1	20,537.0
Direct Debit[3]	166.3	279.5	372.4	483.6	623.0
ATM[4]	1,163.7	1,255.6	1,356.6	1,701.0	1,815.3
Internet banking[5]	64,264.0	62,650.4	74,809.0	87,504.4	90,174.9
Mobile banking[5]	24.4	124.2	257.8	396.4	500.3
RENTAS - Third party transactions[6]	371,890.5	436,898.4	424,296.4	444,783.3	409,979.6
Intrabank direct debit and standing instructions[7]	-	-	20,723.7	12,182.2	10,081.6
Turnover to GDP:					
CIC (%)	5.9	5.9	6.2	6.1	6.6
Cheque[1] (times)	2.2	2.1	2.0	1.8	1.6
E-payments (times):	14.2	15.6	15.9	15.6	14.4
% of GDP:					
Credit card	9.7	9.7	9.8	9.5	9.7
Charge card	0.6	0.7	0.7	0.8	0.8
Debit card	0.7	0.9	1.1	1.3	1.7
E-money	0.4	0.4	0.5	0.5	0.5
Other cashless instruments[2]	…	…	…	…	…
Interbank GIRO	18.2	21.8	28.0	39.1	55.0
Direct Debit[3]	0.5	0.8	1.1	1.3	1.7
ATM[4]	3.7	3.8	4.0	4.7	4.9
Internet banking[5]	204.8	190.4	221.9	242.0	241.6
Mobile banking[5]	0.1	0.4	0.8	1.1	1.3
RENTAS - Third party transactions[6] (times)	11.9	13.3	12.6	12.3	11.0
Intrabank direct debit and standing instructions[7]	-	-	61.5	33.7	27.0

1 Cheques cleared via eSPICK
2 Refer to single purpose payment cards
3 Refer to interbank direct debit transactions
4 Refer to payment transactions via ATM, including own and third party funds transfer. Exclude cash withdrawals
5 Exclude non-financial transactions, credit card, IBG and RENTAS third party transactions performed online
6 Refer to Government, custom duty and third party payments via Interbank Funds Transfer System. Third party payment refers to transaction with a minimum amount of RM10,000, where the beneficiary or ordering party is a non-RENTAS member
7 Refer to payments that are directly debited by the banks from the current and savings account. Data available from 2013
… Negligible
Note: Figures may not necessarily add up due to rounding

Source: Bank Negara Malaysia and Department of Statistics, Malaysia

Table A.21

Cashless Payment Instruments: Transaction Volume

	2011	2012	2013	2014	2015	2014	2015
	Million					% Annual change	
Cheque[1]	**204.9**	**203.8**	**197.1**	**177.1**	**148.0**	**-10.1**	**-16.5**
Credit card	**316.9**	**325.3**	**332.4**	**345.7**	**359.6**	**4.0**	**4.0**
Charge card	**3.9**	**4.1**	**4.1**	**4.4**	**4.2**	**7.5**	**-4.1**
Debit card	**25.1**	**36.0**	**49.4**	**68.7**	**90.1**	**39.3**	**31.0**
International debit	*19.8*	*29.7*	*41.9*	*60.4*	*79.7*	*44.0*	*31.9*
Domestic debit[2]	*5.4*	*6.3*	*7.4*	*8.4*	*10.4*	*12.7*	*24.8*
E-money	**804.8**	**923.0**	**1,048.0**	**1,175.0**	**1,384.7**	**12.1**	**17.8**
Card-based	*797.4*	*914.6*	*1,028.0*	*1,153.0*	*1,360.9*	*12.2*	*18.0*
Network-based	*7.4*	*8.5*	*20.1*	*22.0*	*23.7*	*9.4*	*8.1*

[1] Cheques cleared via eSPICK
[2] Domestic PIN-based ATM card
Note: Figures may not necessarily add up due to rounding

Source: Bank Negara Malaysia

Table A.22

Cashless Payment Instruments: Transaction Value

	2011	2012	2013	2014	2015	2014	2015
	RM million					% Annual change	
Cheque[1]	**1,979,858**	**2,033,221**	**2,059,504**	**1,938,218**	**1,794,937**	**-5.9**	**-7.4**
Credit card	**88,797**	**94,085**	**99,733**	**105,498**	**112,675**	**5.8**	**6.8**
Purchases	*85,364*	*91,270*	*97,291*	*103,112*	*110,346*	*6.0*	*7.0*
Cash advances	*3,432*	*2,815*	*2,442*	*2,386*	*2,328*	*-2.3*	*-2.4*
Charge card	**5,388**	**6,459**	**7,223**	**8,560**	**8,906**	**18.5**	**4.0**
Purchases	*5,359*	*6,435*	*7,202*	*8,542*	*8,892*	*18.6*	*4.1*
Cash advances	*28*	*24*	*21*	*18*	*14*	*-13.5*	*-21.9*
Debit card	**6,256**	**8,619**	**11,454**	**14,785**	**19,957**	**29.1**	**35.0**
International debit	*3,239*	*4,954*	*7,092*	*10,042*	*14,219*	*41.6*	*41.6*
Domestic debit[2]	*3,016*	*3,665*	*4,362*	*4,743*	*5,738*	*8.8*	*21.0*
E-money	**3,477**	**4,244**	**4,919**	**5,284**	**5,995**	**7.4**	**13.5**
Card-based	*2,424*	*2,983*	*3,361*	*3,837*	*4,537*	*14.1*	*18.3*
Network-based	*1,054*	*1,261*	*1,557*	*1,447*	*1,458*	*-7.1*	*0.7*

[1] Cheques cleared via eSPICK
[2] Domestic PIN-based ATM card
Note: Figures may not necessarily add up due to rounding

Source: Bank Negara Malaysia

Table A.23

Payment Systems: Transaction Volume and Value

	2011	2012	2013	2014	2015	2014	2015
	Million/RM billion					% Annual change	
RENTAS[1]							
Transaction volume	3.4	3.6	4.0	4.4	4.4	10.1	0.8
Transaction value	47,175.6	46,169.4	46,437.7	49,127.4	53,570.5	5.8	9.0
Interbank GIRO							
Transaction volume	60.4	70.1	83.4	113.6	149.1	36.2	31.2
Transaction value	166.1	211.7	285.3	432.5	636.6	51.6	47.2
	'000/RM million						
FPX[2]							
Transaction volume	878.4	1,440.9	2,211.7	3,099.7	4,648.8	40.2	50.0
Transaction value	618.9	821.6	1,372.2	4,191.4	8,602.5	205.4	105.2
Direct Debit							
Transaction volume	575.7	708.8	924.2	1,278.4	1,678.7	38.3	31.3
Transaction value	4,832.0	8,248.2	11,251.9	14,796.2	19,310.7	31.5	30.5

[1] Malaysia's large-value payment system, Real-time Electronic Transfer of Funds and Securities System
[2] Financial Process Exchange

Source: Bank Negara Malaysia

Table A.24

Payment and Securities Transactions Handled by RENTAS

Transaction Volume	2011	2012	2013	2014	2015	2014	2015
	'000					% Annual change	
Total	**3,425.0**	**3,588.7**	**3,967.1**	**4,367.2**	**4,402.7**	**10.1**	**0.8**
IFTS[1]	**3,310.3**	**3,467.5**	**3,847.7**	**4,257.3**	**4,283.4**	**10.6**	**0.6**
Money market operations	95.9	90.8	87.3	88.1	86.8	0.9	-1.5
Foreign exchange settlement	85.9	91.8	100.0	107.6	126.8	7.6	17.8
of which: USD CHATS[2]	*44.4*	*41.2*	*47.8*	*53.7*	*63.0*	*12.3*	*17.3*
Third party transactions	2,449.4	2,701.5	3,020.2	3,383.8	3,317.5	12.0	-2.0
Others	679.0	583.4	640.2	677.8	752.3	5.9	11.0
SSDS[3]	**114.7**	**121.2**	**119.4**	**110.0**	**119.3**	**-7.9**	**8.5**
Transaction Value	RM billion						
Total	**47,175.6**	**46,169.4**	**46,437.7**	**49,127.4**	**53,570.5**	**5.8**	**9.0**
IFTS[1]	**44,227.9**	**43,153.2**	**43,903.3**	**46,743.1**	**51,330.8**	**6.5**	**9.8**
Money market operations	21,473.2	17,520.1	18,656.7	18,935.5	23,741.9	1.5	25.4
Foreign exchange settlement	3,831.6	3,955.7	3,839.6	4,966.6	5,190.4	29.4	4.5
of which: USD CHATS[2]	*2,414.3*	*2,401.6*	*2,594.8*	*3,595.2*	*3,700.9*	*38.6*	*2.9*
Third party transactions	10,807.9	12,892.9	12,819.7	13,609.5	12,707.7	6.2	-6.6
Others	8,115.2	8,784.4	8,587.2	9,231.5	9,690.8	7.5	5.0
SSDS[3]	**2,947.7**	**3,016.3**	**2,534.5**	**2,384.3**	**2,239.7**	**-5.9**	**-6.1**
Turnover to GDP (times)	**51.7**	**47.5**	**45.6**	**44.4**	**46.3**		
Daily Average:							
Transaction volume ('000)	14.0	14.6	16.1	17.8	17.9	10.5	0.8
Transaction value (RM billion)	192.6	188.4	188.0	199.7	217.8	6.2	9.0

[1] Interbank Funds Transfer System
[2] Payment versus Payment (PvP) link established in 2006, for interbank settlement of ringgit-US dollar trades through RENTAS USD CHATS
[3] Scripless Securities Depository System for Malaysian Government Securities, Treasury bills, and scripless public debt securities
Note: Figures may not necessarily add up due to rounding

Source: Bank Negara Malaysia and Department of Statistics, Malaysia

Table A.25

Payment Channels: Transaction Volume and Value

Transaction Volume	2011	2012	2013	2014	2015	2014	2015
	Million					% Annual change	
Internet banking[1]	198.4	227.3	269.8	350.7	452.0	30.0	28.9
Individual	*141.3*	*161.7*	*194.8*	*252.2*	*321.3*	*29.5*	*27.4*
Corporate	*57.1*	*65.6*	*75.0*	*98.5*	*130.6*	*31.3*	*32.7*
Mobile banking[1]	2.2	7.1	16.1	23.3	31.6	45.1	35.6
ATM[2]	38.5	43.0	42.4	51.3	66.5	21.0	29.7
Transaction Value	RM million						
Internet banking[1]	1,934,208	2,978,435	3,457,627	4,108,271	4,773,641	18.8	16.2
Individual	*153,648*	*171,825*	*224,852*	*304,177*	*407,784*	*35.3*	*34.1*
Corporate	*1,780,560*	*2,806,610*	*3,232,775*	*3,804,094*	*4,365,857*	*17.7*	*14.8*
Mobile banking[1]	852	4,237	9,243	14,677	20,565	58.8	40.1
ATM[2]	33,818	37,052	40,987	52,047	56,269	27.0	8.1

[1] Exclude non-financial transactions
[2] Refer to payment transactions via ATM, including own and third party funds transfer. Exclude cash withdrawals
Note: Figures may not necessarily add up due to rounding

Source: Bank Negara Malaysia

Table A.26

Payment Transactions by Channels

Transaction Volume	2014			2015		
	Internet banking	Mobile banking	ATM	Internet banking	Mobile banking	ATM
	Million					
Funds transfer	162.2	11.5	38.7	237.7	17.1	53.1
Bill payment[1]	62.7	4.1	1.6	74.0	5.1	1.9
Investment in share and unit trust	6.3	…	0.1	6.6	-	0.1
Re-load	23.1	5.9	2.8	24.9	6.9	3.0
Card and loan repayment	22.2	1.6	8.1	26.0	2.2	8.4
Transaction Value	RM million					
Funds transfer	2,669,945	11,965	43,042	3,037,540	16,770	46,478
Bill payment[1]	16,588	536	389	26,297	684	520
Investment in share and unit trust	66,165	…	1,475	59,752	-	1,174
Re-load	433	92	128	501	123	148
Card and loan repayment	29,382	1,947	6,913	48,948	2,703	7,848

[1] Include insurance payments
… Negligible

Source: Bank Negara Malaysia

Table A.27

ATM Cash Withdrawals in Malaysia

	2011	2012	2013	2014	2015	2014	2015
Volume of cash withdrawals	Million					% Annual change	
	556.8	565.7	526.5	579.2	704.8	10.0	21.7
Value of cash withdrawals	RM million						
	279,484.7	294,149.1	286,491.2	315,144.5	356,630.4	10.0	13.2
Average value per transaction (RM)	501.9	520.0	544.1	544.1	506.0	…	-7.0

… Negligible
Source: Bank Negara Malaysia

Table A.28

Number of Electronic Funds Transfer at Point-of-Sale (EFTPOS) Terminals

As at end of period	2011	2012	2013	2014	2015
	Unit				
Total terminals[1]	206,984	219,758	226,599	237,657	280,704
of which:					
International brand payment cards	204,443	217,236	223,957	229,433	268,546
Domestic debit[2]	129,478	140,127	159,357	190,444	218,451
Terminals per 1,000 inhabitants	7	7	7	8	9

[1] Terminals that accept international brand payment card and/or domestic debit. Include terminals acquired by non-bank acquirers
[2] Domestic PIN-based ATM card

Source: Bank Negara Malaysia and Department of Statistics, Malaysia

Table A.29

Number of Cards and Users of Payment Instruments and Channels

As at end of period	2011	2012	2013	2014	2015	2014	2015
	'000					% Annual change	
Number of cards/accounts:							
Credit card	8,281	8,150	8,128	8,048	8,741	-1.0	8.6
Charge card	154	138	155	142	143	-8.9	0.8
Debit card	29,869	34,630	38,226	41,439	42,962	8.4	3.7
of which: Domestic debit[1]	*17,301*	*17,237*	*17,363*	*16,785*	*15,315*	*-3.3*	*-8.8*
E-money	84,178	91,008	97,735	45,557	55,825	-53.4	22.5
Number of subscribers:							
Internet banking	11,873	13,678	15,524	17,600	19,751	13.4	12.2
Individual	*11,637*	*13,430*	*15,225*	*17,254*	*19,176*	*13.3*	*11.1*
Corporate	*236*	*248*	*299*	*346*	*575*	*15.6*	*66.2*
Penetration rate to population (%)	*40.9*	*46.4*	*51.4*	*57.5*	*63.7*		
Mobile banking	1,560	2,446	4,379	5,639	7,279	28.8	29.1
Penetration rate to population (%)	*5.4*	*8.3*	*14.5*	*18.4*	*23.5*		

[1] Domestic PIN-based ATM card

Source: Bank Negara Malaysia

Table A.30

Number of Participants and Instrument Issuers

As at end of period	2011	2012	2013	2014	2015
	Unit				
RENTAS	**68**	**68**	**68**	**68**	**68**
Bank Negara Malaysia	*1*	*1*	*1*	*1*	*1*
Banks	*56*	*56*	*55*	*55*	*55*
DFIs	*6*	*6*	*6*	*6*	*6*
Non-banks	*5*	*5*	*6*	*6*	*6*
eSPICK	**46**	**48**	**47**	**46**	**46**
Credit card	**25**	**26**	**25**	**26**	**27**
Banks	*21*	*22*	*22*	*23*	*24*
Non-banks	*4*	*4*	*3*	*3*	*3*
Debit card[1]	**22**	**22**	**25**	**25**	**26**
International debit	*9*	*10*	*12*	*13*	*14*
Domestic debit[2]	*13*	*13*	*13*	*13*	*13*
Others[3]	*11*	*10*	*11*	*11*	*11*
Charge card	**6**	**6**	**7**	**6**	**6**
Banks	*4*	*4*	*6*	*5*	*5*
Non-banks	*2*	*2*	*1*	*1*	*1*
E-money[4]	**21**	**25**	**25**	**24**	**23**
Banks	*6*	*7*	*6*	*7*	*5*
Non-banks	*15*	*18*	*19*	*17*	*18*
Internet banking	**26**	**29**	**29**	**30**	**30**
Mobile banking	**13**	**13**	**13**	**13**	**13**
FPX[5]	**7**	**10**	**12**	**13**	**16**
Banks	*7*	*7*	*9*	*10*	*13*
Non-banks	-	*3*	*3*	*3*	*3*
Direct Debit	**13**	**16**	**17**	**17**	**14**
Banks	*13*	*13*	*14*	*14*	*14*
Non-banks	-	*3*	*3*	*3*	-
Interbank GIRO	**26**	**28**	**29**	**30**	**30**

[1] There are banks issuing more than one type of debit card
[2] Domestic PIN-based ATM card
[3] Cards with both international debit and domestic PIN-based debit card functions
[4] Include international brand prepaid card
[5] Financial Process Exchange

Source: Bank Negara Malaysia