



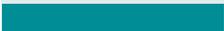
BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

STATUTORY REQUIREMENTS

For the period January 2013 to June 2013, for purposes of section 192 of the Insurance Act 1996 and section 56 of the Takaful Act 1984 (respectively repealed by the Financial Services Act 2013 and the Islamic Financial Services Act 2013 with effect from 30 June 2013), Bank Negara Malaysia has submitted to the Minister of Finance a copy of this Financial Stability and Payment Systems Report 2013 for presentation to Parliament.

A handwritten signature in black ink, appearing to read 'Zeti Akhtar Aziz'.

Zeti Akhtar Aziz
Governor
19 March 2014



PREFACE

The Financial Stability and Payment Systems Report 2013 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 domestic financial system remained resilient in 2013 with significant progress achieved on a number of important fronts to strengthen the conditions for financial stability. As an open economy, Malaysia experienced significant two-way capital flows following the continued volatility in the international financial markets. The effects have however been relatively modest reflecting a far more resilient domestic financial system. The orderly conditions in the domestic financial markets was supported by the deeper and more developed domestic financial markets which was further reinforced by the presence of a large number of strong domestic institutional investors. Financial institutions in Malaysia also continue to demonstrate a high degree of resilience during the year.

Among the significant developments during the year were several legislative, structural and institutional enhancements in the financial sector. This included the coming into force of the Financial Services Act 2013 and Islamic Financial Services Act 2013 in June which, together with the Central Bank of Malaysia Act 2009, takes the legislative framework for financial stability in Malaysia to a new frontier. This reflects and anticipates a financial system that is more dynamic, more interconnected and inclusive but also more complex. The legislation significantly strengthens the Bank's capacity to maintain financial stability in this changing environment and in many ways, places Malaysia at the forefront of financial stability frameworks.

This strengthened capacity has enabled the Bank to respond to the potential build up of financial imbalances in an environment in which credit has continued to expand at a relatively strong pace in particular to the household sector, while asset prices experienced upward pressures. The Bank expanded the use of macroprudential instruments including to the non-bank sector to secure stable conditions in the credit and asset markets, in addition to maintaining a strong supervisory focus on the lending and provisioning practices of the banking institutions. Maintaining confidence in the financial system has also involved protecting the system from abuse. Actions against financial crime – both preventive and enforcement actions – continued to be pursued to safeguard the integrity of the financial system. This included the steps taken to review and strengthen the Anti-Money Laundering and Anti-Terrorism Financing Act 2001 (AMLATFA), while the enforcement actions have also been more effective including with stronger domestic and international cooperation.

Prudential standards have also continued to be raised, most notably with the implementation of the Basel III reform package beginning from January 2013. At the same time, the greater maturity of the financial sector has allowed the Bank to pursue important reforms to further reduce pricing distortions, including in the motor and life insurance industries, and in respect of payment instruments. Progress has also been made in the plans to replace the base lending rate framework with a new reference rate framework that is more relevant and reflective of conditions in the funding markets. These developments reinforce the progress in evolving a greater degree of market orientation in financial services that would in turn, contribute to the efficient and effective overall functioning of the financial sector. Finally investment in talent development for the industry has remained a key priority. The efforts have culminated in three further strategic initiatives - the establishment of the National Talent Council, the Finance Accreditation Agency and the Financial Services Professional Board, which is being led by the industry, to raise the bar in the financial services industry.

On the regional front, Asia as a whole has continued to become more cohesive. Regional financial integration has gained further traction during the year with the ASEAN Banking Integration Framework now in its final stages. Regional surveillance and research activities have also continued to support assessments on the risks and vulnerabilities in the region. The adoption during the year of a regional crisis management and resolution framework that establishes agreed protocols and commitments to enhance cooperation between central banks during crises, further consolidates the region's progress in building strong foundations for regional stability and growth.

An area of focus during the year has been the management of risks to domestic financial stability that have revolved around the accumulation of household debt and the developments in the property market. Following the series of macro and micro-prudential measures that were implemented during the year, the pace of growth of household debt has been slower. The more modest growth trend is expected to continue although debt levels to GDP are likely remain elevated in the near term. The broader structural measures currently being pursued by the Government to increase the supply of affordable homes and the development of the public transportation system will contribute towards reducing the amount of debt by households as homes become more affordable and as the reliance on public transportation increases. While the risk profile of new household lending remains sound, reinforced by further improvements in lending standards and an intensification of financial education programs, the Bank will continue to monitor closely the potential risks associated with the high household indebtedness.

Developments in the property sector has also warranted close attention during the year. Speculative activity in the property market, while not widespread, has occurred with the progressive lowering of entry costs for prospective investors through attractive home packages offered by property developers and the low borrowing costs. The Bank has therefore increased its scrutiny of the valuation and provisioning practices of financial institutions to ensure that lending decisions based on inflated valuations are not fuelling price increases and that loan loss buffers are adequate over the life cycle of the loan. This has been reinforced by measures by the Government to curb speculative activity, including improving the transparency in property prices in addition to the coordination of the supply measures. The National Housing Council represents an

important development to monitor and manage these measures in a coordinated manner. Also important will be the careful management and sequencing of the incoming supply of commercial office and retail space in the period ahead.

As the financial sector has an important role in supporting the financial management of businesses and households, efforts in coming year will be intensified to further widen access to financial services, increase the efficiency of financial intermediation and further develop the financing ecosystem. These include enhancements to the Development Financial Institutions Act 2002 to strengthen the performance of development financial institutions (DFIs) to better achieve their development mandates and to the agent banking framework to ensure broad-based and safe access to formal financial services. As financial inclusion is not just about access, but about equipping consumers to effectively use financial services, efforts will continue to further improve the financial literacy of Malaysian households and businesses, in particular, the small and medium size enterprises. A national financial education network will be established to drive and coordinate the financial education priorities.

In the payments area, the implementation of pricing reforms is expected to accelerate the migration by households and businesses to electronic means of payments. This will be reinforced by initiatives to further diversify and increase the efficiency of e-payment channels, making it more accessible and affordable, and providing opportunities for small businesses in particular to improve their business processes and reduce the costs of business.

For Malaysia to develop as a world's Islamic finance marketplace, more will be done to further deepen the Islamic financial markets in particular for extended maturity structures and for multicurrency sukuk issuance. The year also witnessed the inaugural issuance of the short-term sukuk by the International Islamic Liquidity Management Corporation (IILM) which represents an important and significant global breakthrough. This provides Islamic financial institutions including those in Malaysia, with a unique and dedicated instrument to manage their liquidity requirements for preserving financial stability. Islamic finance also continues to have a key role in microfinancing and microtakaful solutions, and in creating new opportunities for micro enterprises in Malaysia. Finally, through the work on the development of Shariah contract standards and a strengthened regulatory framework for the management of Islamic investment accounts, it will contribute providing an enabling environment responsible innovations and hence safeguarding financial stability.

Among the key regulatory and supervisory priorities for the Bank in the year ahead is the implementation of new arrangements for the prudential oversight of financial groups, and continuing to raise the bar on corporate governance and risk management practices in the financial services industry. As part of efforts to strengthen the resilience of the domestic financial system to systemic shocks, the Bank will also commence work on the development of a framework for identifying and strengthening the regulatory and supervisory regime for financial institutions that are systemically significant to the domestic financial system. This will include requirements for such institutions to maintain strong financial buffers, develop credible

recovery plans to restore financial viability in the event of severe stress, and including the support strategies by the relevant authorities to achieve an orderly resolution where necessary.

In pursuing these priorities, the Bank will continue to build on successful collaborative arrangements with other domestic and international authorities. During the year the Bank entered into formal arrangements with the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP) specifically to strengthen regional crisis management and resolution. Additionally, given the changing nature and growing interdependencies within the financial services sector, evolving effective inter-agency coordination has been strengthened further as an important part of the agenda for preserving financial stability and promoting the development of a financial system that contributes towards economic sustainability.

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Zeti Akhtar Aziz
Governor
19 March 2014

2013

EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

Risk developments and assessment of financial stability in 2013

Domestic financial stability was well-preserved during the year, providing a conducive environment for the growth of the Malaysian economy. The financial system continued to demonstrate a high degree of resilience amid heightened volatility in the global financial markets and against domestic sources of potential risks. During several episodes of sharp capital flow reversals triggered by shifting global investor sentiment, orderly conditions were preserved, supported by deep domestic financial markets and the presence of a pool of strong domestic institutional investors. Financial institutions remained strong and continued to lend support to the financing and risk management needs of businesses and households throughout these episodes. Institutional resilience was further reinforced by sustained improvements in governance and risk management practices, and restraint in risk-taking in an environment of persistent and ample domestic liquidity. Overall confidence in the Malaysian financial system has also remained firmly intact.

Credit growth to both households and businesses expanded at a slower pace in 2013, reflecting economic factors and various precautionary measures taken to strengthen the resilience of households. The quality of domestic financial institutions' credit exposures remained sound. Aggregate business leverage improved further. Along with stable liquidity positions, this supported the overall debt servicing capacity of businesses despite a higher level of external borrowings. The share of delinquent business loans was correspondingly lower. Businesses with a higher share of external debt have generally maintained strong balance sheets and cash flow positions. This remains crucial for preserving buffers against foreign currency movements and elevated input costs.

Aggregate household borrowings grew at the slowest pace since 2010, mainly driven by the significantly slower growth in personal financing by non-bank financial institutions in response to macroprudential measures implemented in July 2013.

The aggregate balance sheet and debt servicing capacity of households remained intact. This was supported by favourable employment and income conditions, which also saw households accumulating more financial assets. The combined effects of the incremental measures introduced by the Bank since 2010 to curb excessive household indebtedness continued to be observed, particularly in reducing the vulnerability of lower income households. Although the leverage position of these households has stabilised, the current leverage levels remain high. In general, households appear to be paying more attention to managing their leverage positions, which is important to preserve household resilience.

Risks to financial stability from household lending are assessed to remain well-contained. Household loans from the banking system continued to improve in quality across all loan segments, with delinquencies remaining low and continuing to trend downwards. Housing loans that originated over this decade (since 2004) have continued to perform better in terms of the default experience compared with earlier loans of similar vintage, reflecting the sustained improvements in the lending and risk management practices of banks. Simulations of household stress, including under extreme assumptions, also continued to affirm the strength of the banking system's buffers against potential losses from this sector. These buffers were further strengthened during the year with the requirement for banks to raise the level of provisions and reserves held for collective impairments where they were below a minimum level.

The level of household indebtedness is expected to remain elevated over the next few years as demand for credit is likely to remain strong, particularly from the relatively young, more affluent population settling in urban centres and expanded access to credits. As measures by the Government to increase the supply of affordable housing and improve public transportation, along with the current measures on lending practices take firm hold, the level of household indebtedness is expected to moderate. During this current period, it is particularly important that financial institutions continue to maintain sound

lending discipline and adopt robust affordability assessments in their credit lending practices.

In the domestic property market, house prices remained elevated during the year and an area that warrants continuous close monitoring in view of the effect of higher house prices on overall household debt and the significant exposures of banking institutions to the property market. The upward pressure on house prices continues to be largely explained by structural supply and demand factors, with demand particularly for low- to mid-priced homes likely to continue to outstrip supply in the near to medium term. Speculative purchases in the property market which are financed from bank borrowings have continued to remain subdued, particularly following further measures by the Government to raise the entry costs for short-term speculative purchases, and improve transparency in property prices. The effect of these measures should contribute towards encouraging more realistic valuations. While prices of residential properties continued to increase at a strong pace, risks to household finances and financial stability from any market correction are mitigated by the limited borrowings to finance speculative purchases and the strengthened lending practices of banks. The proportion of loans with lower loan-to-value ratios has also improved and now form bulk of the property loan portfolio, providing larger buffers against potential losses. Risks to financial institutions from the non-residential property segment are at present assessed to be low given the small credit exposures of financial institutions. Nevertheless, there is a need to effectively manage the incoming supply of new commercial properties to allow demand to keep pace with supply.

Domestic financial markets and financial institutions have held up well against the more volatile market conditions during the year. Active risk management by financial institutions have contained market risk exposures despite greater volatility in trading and investment income. The funding and liquidity positions of banks remained sound throughout the year supported by stable domestic savings, healthy liquidity buffers and a continued low reliance on offshore wholesale funding markets. Counterparty risk arising from claims by Malaysian financial institutions on external parties remained manageable, mostly comprising external claims on Asian economies. The share of exposures to counterparties in the United States and Europe remained stable.

Consistent with assessments in previous years, the risks from any potential deleveraging activities by foreign financial institutions remain low and have subsided further since the Global Financial Crisis. Global reinsurance conditions have also improved considerably, reducing the counterparty risks associated with foreign reinsurance placements.

Malaysian financial institutions continued to record strong capitalisation and financial performance. Banking institutions achieved a smooth transition into the first phase of strengthened capital requirements under Basel III which began from January 2013. Overall profitability has been sustained despite the more volatile market conditions. The overseas operations of domestic banking groups also continued to perform reasonably well despite tightening measures in some markets and differences in the intensity of the impact of capital flows across economies in the region. For the Islamic banks, the broadly stable ringgit funding conditions has further eased the pressures in managing displaced commercial risks. While the impact of market developments on the profitability of life insurers and family takaful operators was more pronounced, the insurance industry as a whole remained profitable and continued to maintain capital buffers well above the minimum regulatory requirement. In the general insurance sector, losses from the compulsory motor insurance segment continued to pose a significant drag on overall claims and underwriting performance. The implementation of the New Motor Cover Framework will be critical to restore some equilibrium in this segment of the general insurance sector. Results of updated and multi-year stress tests by the Bank continue to indicate sufficient earnings and capital buffers of banks and insurers to withstand severe scenarios of adverse portfolio flows and contraction in the domestic economy.

Looking ahead, Malaysian financial institutions continue to be well-positioned to manage external risks arising from the unwinding of the unconventional monetary policies in the major advanced economies as prospects for stronger economic recovery improve. Continued volatility is likely to persist in the domestic financial markets as investors adjust to changing expectations for the US monetary policy as well as developments in the euro area and The People's Republic of China. Over the recent period, Malaysian financial institutions have demonstrated resilience during such episodes of heightened volatility and have

continued to strengthen its resilience – notably by preserving strong financial buffers, ensuring that foreign currency funding mismatches remain low and continued prudence in risk-taking. The deep and more efficient domestic financial markets will also continue to provide support for orderly market conditions.

Development of the financial sector

Development initiatives in 2013 continued to focus on enhancing the role of the financial sector to better serve the needs of the economy, guided by the progressive implementation of the strategies and initiatives outlined in the Financial Sector Blueprint 2011-2020 (the Blueprint). The efficient mobilisation and intermediation of funds towards productive investments was further enhanced, in particular, for small and medium enterprises (SMEs) which saw the share of financing from the banking system increased further to 42.1% of total business financing, from 40.5% in 2012. Financing for SMEs continued to be supported by a wider range of products and schemes introduced during the year and further improvements to financing processes. In new growth areas, platforms created for greater engagement between businesses and financial institutions to bridge information gaps had an important role in expanding avenues for innovative businesses to obtain financing.

During the year, the Bank advanced proposed reforms under the Life Insurance and Family Takaful Framework to encourage greater operational efficiency, innovation and a higher level of insurance penetration in Malaysia. The framework outlines wide ranging proposals to increase the flexibility given for life insurers and family takaful operators to manage their operating costs with safeguards to protect the interests of policyholders, further diversify delivery channels, improve disclosures to consumers and drive higher professional standards among intermediaries. In the general insurance sector, the implementation of key initiatives under the New Motor Cover Framework (the Framework) progressed further with the second round of motor insurance premium adjustments taking effect to bring the industry closer to sustainable pricing levels. The Accident Assist Call Centre was also introduced to provide immediate assistance to consumers involved in road accidents and along with the Motor Claims Guide, are expected to contribute to a more efficient claims process and greater control over claims costs. These, together with earlier measures implemented under the

Framework, have contributed to the reduction in the average time taken to settle third party bodily injury claims.

Indicators of financial inclusion continued to improve, with the number of deposit and financing accounts increasing further. The implementation of the Agent Banking Framework was instrumental in achieving nationwide access to basic banking services, with banking institutions and agent banks now present in all districts and Parliamentary constituencies. In addition, the MyMobile platform has also significantly widened access to financial services through mobile networks. At the international level, the Bank co-hosted the 5th Global Policy Forum (GPF) with the Alliance for Financial Inclusion (AFI) which explored policy strategies that optimally balance financial inclusion, financial stability and consumer protection objectives. The GPF concluded with the launch of the Sasana Accord which reinforced commitments made by AFI members, including Malaysia, towards advancing the financial inclusion agenda.

Malaysia's debt securities market remained the largest in Southeast Asia, despite slower corporate fund raising activities during the year as global economic conditions remained challenging. A significant development during the year was the inaugural issuance of RM2.5 billion of 30-year Malaysian Government Securities, further extending the maturity profile of the domestic debt securities market. Enhancements made to the payment and settlements infrastructure in line with international standards have also supported a wider institutional investor base for the Malaysian debt securities market. In facilitating the use of renminbi as an additional currency of settlements, the Bank introduced the Renminbi Liquidity Facility to provide an additional avenue for financial institutions to manage renminbi liquidity. At the same time, the foreign exchange administration rules continued to be liberalised to allow businesses to manage foreign exchange risks more efficiently and to support wider range of financial product offerings that facilitate trade and investments. Work currently in progress to secure the enforceability of netting arrangements, including the development of a netting legislation, will further contribute to the deepening of Malaysia's financial markets.

Efforts to promote deeper financial integration within the Association of Southeast Asian Nations (ASEAN) region made important progress during the year, with the the high-level principles of the ASEAN Banking Integration Framework now being at an advance stage of being finalised. This work has proceeded in parallel with initiatives to further strengthen collaboration and coordination between authorities in the region in maintaining financial system stability. Of significance was the endorsement of a regional crisis management and resolution framework by the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP) which would support timely information flows and effective coordination in managing developments affecting regional monetary and financial stability. The Bank also extended its cooperation arrangements with foreign central banks and supervisory authorities in the areas of supervision, the development of financial markets, capacity building, Islamic finance and the promotion of local currency trade settlements.

The Islamic finance industry continued its growth trajectory during the year supported by several key initiatives that has further advanced the internationalisation of Islamic finance. The sustained momentum of sukuk issuances in Malaysia has continued which includes issuances made by foreign corporations. The year saw several firsts achieved in Islamic financial innovations. The Government issued the first Government Investment Issue based on the *murabahah* concept, appealing to a wider domestic and international investor base for sovereign sukuk. The Bank also participated in the inaugural issue of the short-term sukuk by the International Islamic Liquidity Management Corporation (IILM) which represents an important breakthrough on a global level in promoting the efficient management of cross-border liquidity to support financial stability in the international Islamic finance system. Continuing its work to promote transparency and consistency of Shariah contract application as well as to catalyse greater mutual respect of Shariah opinions across jurisdictions, the Bank has issued Shariah and operational standards for one Shariah contract while concept papers on eleven other Shariah standards and two operational standards have been published for industry feedback. During the year, the Law Harmonisation Committee, which led a comprehensive review of Malaysian legislation to support Islamic financial transactions, released its report which provides a basis for

relevant government agencies to pursue specific legislative amendments that will improve the certainty and enforceability of Islamic financial contracts in Malaysia. Reflecting the increasing connectivity between Islamic financial institutions in Malaysia with the global financial community, a new global brand identity - "Malaysia: World's Islamic Finance Marketplace" - was also introduced by the Malaysia International Islamic Financial Centre (MIFC), marking yet another phase in the development of Islamic finance in Malaysia.

Talent development continued to be a key priority, with a particular focus on further raising the bar on standards of quality, professionalism and ethics. During the year, the Institute of Bankers Malaysia (Institut Bank-Bank Malaysia, IBBM) commenced a process of transformation to separate and strengthen its roles as a professional body (repositioned as the Asian Institute of Chartered Bankers), and as a premier provider of banking education and training through the Asian Banking School. This will complement the establishment of an industry-led Financial Services Professional Board (FSPB) to promote, advocate and facilitate the development and adoption of professional standards across the different sectors of the financial industry. The Finance Accreditation Agency (FAA) was also officially launched during the year as an independent quality assurance and accreditation body of training programmes. Together with the Iclif Leadership and Governance Centre, the International Centre for Education in Islamic Finance (INCEIF) and the industry training and research bodies in the financial sector, these institutions complete the core components of an institutional framework that has been put in place for the development and enrichment of the financial sector workforce at all levels including leadership. Going forward, key challenges remain in developing a strong talent pipeline and the agility to respond to changes in talent demand and supply. To manage these challenges, a Financial Services Talent Council is in the process of being established with a key role in shaping the direction of talent strategies that will enable the financial industry to respond effectively to the challenges faced.

Regulatory and supervisory framework

The regulatory and supervisory framework continue to have a critical role in safeguarding the stability of the financial system and promoting the orderly development of the financial sector. A large part of the Bank's regulatory priorities during the year were directed at giving full effect

to the Financial Services Act 2013 (FSA) and the Islamic Financial Services Act 2013 (IFSA), which came into force on 30 June 2013. This included strengthening the focus of financial supervision beyond individual financial institutions to take into account group-wide and system-wide risks. Following an extensive review of group structures and the nature and scope of group activities observed in Malaysia, the Bank outlined its intended approach to overseeing financial groups which clarified how the boundaries of a financial group will be drawn for the purpose of prudential regulation and supervision and correspondingly, the scope of regulation and supervision that will apply. This will be followed by the progressive issuance, from 2014, of group-level prudential standards for financial groups on capital adequacy, corporate governance, risk management and liquidity management. To give effect to the clear distinction under the IFSA between 'Islamic deposits' and 'investment accounts', the Bank also published proposals on strengthened oversight and risk management arrangements for the management of investment accounts to uphold compliance with Shariah and provide adequate protection for investors commensurate with the investment risks borne by them. These standards will be finalised in 2014 for effective implementation from June 2015 when the separation between Islamic deposits and investment accounts takes full effect under the law after a two-year transition period.

The domestic implementation of the capital and liquidity components of the Basel III regulatory reform package progressed in line with globally agreed implementation timelines. Accordingly, higher regulatory capital standards came into effect from January 2013. The level and quality of banking institutions' capital positions continued to remain strong under the new rules. Work to calibrate the Liquidity Coverage Ratio for domestic implementation is also well advanced and remains on track for effective implementation in 2015. Data from the observation period suggests that banks will be able to meet strengthened liquidity standards without significant difficulty. In the takaful sector, the industry similarly transitioned smoothly towards the adoption of the Risk-Based Capital Framework for Takaful Operators in January 2014, following a one-year parallel run. This will better support a well-capitalised takaful industry and significantly strengthen incentives for sound risk management by takaful operators. The Bank continued to increase its supervisory

emphasis on the effective implementation of Internal Capital Adequacy Assessment Process (ICAAP) by banks and insurers. There has been clear progress observed in some areas, including in how institutions are more formally integrating risk and capital management strategies. The Bank expects this process to continue to evolve as institutions further refine their approaches to setting internal capital targets and enhance internal arrangements to monitor and credibly maintain internal capital target levels.

The Bank continued to strengthen standards of governance and risk management across the financial sector. Measures were proposed and are being finalised to enhance the stature of appointed actuaries in insurers and takaful operators and strengthen the effectiveness of the control function performed by the actuary, including through a clear separation of the appointed actuary from pricing responsibilities. During the year, the Bank also finalised standards to promote the sound pricing of retail loans and other financing products.

Focus continued to be given to strengthening safeguards against money laundering and terrorism financing (ML/TF) threats. The Bank, together with other agencies under the ambit of the National Coordination Committee to Counter Money Laundering (NCC) proposed several amendments to the Anti-Money Laundering and Anti-Terrorism Financing Act 2001 (AMLATFA). The existing regulatory requirements were also revised to be in line with global standards and to ensure that the anti-money laundering and combating the financing of terrorism (AML/CFT) framework remains relevant and effective in combating ML/TF threats. Further progress has been made in raising the standards of compliance with measures to combat ML/TF in the money services business industry. The Bank also intensified its review of the effectiveness of AML/CFT controls within financial institutions. Practices within financial institutions to address threats of ML/TF are generally well established. However, systems in some institutions can be further enhanced to support the effective ongoing monitoring of customer accounts and transaction patterns, in addition to continued investments in training for frontline employees to perform effective assessments of customer risk profiles. Enforcement and supervisory actions were taken against financial institutions that failed to effectively control ML/TF risks in their operations,

serving to ensure that financial institutions remain alert to ML/TF threats and are taking appropriate measures to protect the integrity of the financial system. The Bank, in some cases acting jointly with other authorities, also brought 1,823 charges against companies and individuals investigated for money laundering and operating illegal schemes and activities.

Market conduct and consumer empowerment

The Bank's market conduct oversight activities in 2013 continued to be directed at monitoring and managing risks to consumers arising from increased competitive pressures in the retail market, a sustained low interest rate environment and corresponding search for higher yields, and the wider use of new delivery channels for financial products and services. In managing these risks, the Bank further strengthened standards on business conduct, increased its supervisory intensity in areas which pose heightened risks to consumers, and worked in close collaboration with relevant stakeholders to address conduct issues.

A review by the Bank of financial institutions' compliance with responsible financing requirements which were introduced in 2012 showed that lending practices of financial service providers (FSPs) have improved. More information is being provided to borrowers on the process for demonstrating affordability and the implications of a potential rise in borrowing costs. Financial institutions are also adopting more realistic assumptions in conducting affordability assessments and have demonstrated greater restraint in marketing financing products to more vulnerable borrowers. The fair treatment of customers remained at the centre of the Bank's market conduct focus. In this respect, the level of compliance with transparency and disclosure requirements in the marketing and advertising materials produced by financial institutions continued to improve during the year, although the provision of quality advice on financial products to customers needs to be further improved. The Bank continued to take firm actions on financial institutions that failed to observe the Bank's guiding principles on fees and charges, resulting in refunds of more than RM13 million to affected customers. Similar actions were taken on unfair tied-selling practices especially where general insurers were

requiring policyholders to purchase personal accident insurance as a condition for, or together with, motor insurance.

The Bank remained vigilant in combating banking fraud and financial scams. Cases of Internet fraud have continued to reduce as a result of banking institutions' ongoing efforts to ensure a secure electronic banking environment. Criminal actions taken against illegal investment schemes, stronger inter-agency collaboration and greater consumer awareness on financial scams and frauds have also contributed to the reduced incidence of frauds and scams during the year.

The Bank continued to devote significant resources to enhancing financial capability through education initiatives. The Bank's ongoing collaboration with the Ministry of Education to integrate financial education into the primary school curriculum made encouraging progress with the progressive incorporation of financial education themes into the school curriculum, beginning from 2014. Building on the successful implementation of the POWER! Programme, the Bank worked with the Credit Counselling and Debt Management Agency (Agensi Kaunseling dan Pengurusan Kredit, AKPK) to further tailor financial education programmes to the specific needs and priorities of consumers at different life stages, focusing initially on targeted programmes for working adults that were delivered at the workplace through public-private sector partnerships. A Financial Education Assessment Framework developed during the year enables the Bank to evaluate the effectiveness of these programmes.

Avenues for consumer redress were further enhanced. To give effect to provisions under the FSA and IFSA for the establishment of a financial ombudsman scheme, work to review the current functions (including the scope of disputes handled), operations and funding arrangements of the Financial Mediation Bureau, and facilitate its transformation into a financial ombudsman scheme, is largely complete. The Bank expects to publish the outcome of this review for public feedback in April 2014. The scope of AKPK's debt management services was further expanded during the year to cover borrowers of credit co-operatives and the Malaysia Building Society

Berhad, in addition to borrowers from financial institutions regulated by the Bank.

Payment and settlement systems

The payment and settlement systems in Malaysia remained resilient and continued to operate reliably to support the financial system and economy. Supervisory activities during the year remained focused on ensuring the efficiency and reliability of the major payment systems. Apart from the Real-time Electronic Transfer of Funds and Securities System (RENTAS) which continued to maintain 100% system availability throughout 2013, this included the major retail payment systems such as the Interbank GIRO, Financial Process Exchange, domestic debit card and the Shared ATM Network systems. As the migration to electronic payment (e-payment) gains further traction, the stability of these systems is critical to support the increasing number and volume of e-payment transactions. In addition, previous measures to strengthen security standards for payment instruments and channels have continued to keep fraud losses at negligible levels.

Further progress was made during the year towards achieving the bold targets set under the Blueprint for the widespread adoption of e-payments in Malaysia. E-payment transactions increased in volume by 18.8% for the year. On a per capita basis, the number of e-payment

transactions was also higher at 65 transactions in 2013, with ongoing initiatives expected to further advance e-payment adoption towards the target of 200 transactions per capita in 2020. While the number of cheque transactions decreased at a faster pace in 2013, the total number of cheques issued remains high and would need to decline at a much faster pace to achieve the targets set under the Blueprint. In a major development to encourage greater adoption of e-payments, the first phase of pricing reforms was implemented during the year to incentivise the use of more cost-effective payment instruments, along with continued measures to further improve the accessibility and convenience of payment services. The Bank continues to work closely with key sectors of the economy, including the public sector, the financial sector and the transportation sector, to encourage the use of e-payments and enhance awareness among businesses and the public on the benefits of e-payments as well as the range of e-payment solutions available. The Bank is also closely monitoring developments which are pointing to a rising trend in interchange fees that could increase costs for businesses and consumers that use payment cards, and will consider an appropriate framework for regulating the process of setting domestic interchange fees that balances the interests of the relevant parties.

2013

RISK DEVELOPMENTS AND ASSESSMENT OF FINANCIAL STABILITY IN 2013

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RISK DEVELOPMENTS AND ASSESSMENT OF FINANCIAL STABILITY IN 2013

OVERVIEW

Domestic financial stability was well-preserved throughout the year, providing an environment that continued to be conducive for the growth of the Malaysian economy. The domestic financial system exhibited a high degree of resilience amid heightened volatility in the global financial markets. While economic conditions generally improved in the major advanced economies, financial market developments largely driven by sentiment triggered several episodes of capital flow reversals in some emerging economies during the year. The deep financial markets and presence of a pool of strong institutional investors in Malaysia supported orderly conditions in the domestic financial markets during these episodes. Financial institutions in the banking, insurance and takaful sectors continued to maintain strong financials, supported by sustained improvements in governance and risk management practices, and appropriate restraint in risk-taking in an environment of persistent ample domestic liquidity. This ensured continued access to financial solutions to meet the needs of businesses and households, underpinned by lending practices that have been further strengthened. Confidence in the Malaysian financial system has also remained firmly intact.

Domestic financial stability continued to be preserved in 2013, supported by orderly financial market conditions and strong financial institutions

Consistent with the outlook provided by the Bank in the previous Financial Stability and Payment Systems Report, the key risks to domestic financial stability in 2013 were associated with the more volatile financial markets, continued growth in household borrowings and rising property prices. These issues were the focus of deliberations by the Bank's Financial Stability Committee, Joint

Policy Committee and the Financial Stability Executive Committee during the year. While the risks remain well-contained at present, additional macroprudential and fiscal measures were introduced to promote macro- and socio-economic stability and avert the potential for future risks to domestic financial stability. The macroprudential measures were extended for the first time to non-bank financial institutions (NBFIs) in order to provide a more complete response to the rising household debt level, particularly among lower income households. Further measures, both supply and financing measures, intended to curb speculative activity and moderate the increase in house prices are also expected to contribute towards reducing the overall household debt load. The implementation of these measures involved the close coordination with relevant authorities, notably the Malaysia Co-operative Societies Commission (Suruhanjaya Koperasi Malaysia, SKM) and the Ministry of Urban Wellbeing, Housing and Local Government (Kementerian Kesejahteraan Bandar, Perumahan dan Kerajaan Tempatan, KPKT).

The balance sheet and debt servicing capacity of the household sector remained intact despite further increase in the level of indebtedness. This has been supported by the favourable conditions for employment and higher income levels, which also saw households accumulating more financial assets. Financial institutions have also maintained sound underwriting and risk management standards. The leverage position has been stable for borrowers who have high leverage or are more exposed to financial challenges in an environment of rising cost of living. These factors collectively ensured that any potential risk to financial stability remains well-contained, which is reinforced by the strong capacity of financial institutions to withstand potential shocks affecting the household sector.

While house prices have continued to increase at a strong pace, measures introduced by the Government and continued vigilance over bank lending and valuation practices should serve to curb excessive speculation and risk-taking. Risks to household finances and financial stability from a potential correction in house prices are largely

mitigated by limited borrowings by households to finance speculative investment purchases and the substantially strengthened lending practices of banks.

Despite the slower growth in household debt, particularly personal financing, the level of indebtedness is expected to remain elevated over the next few years as the demographic profile of households, broader access to financing and increasing urbanisation will continue to generate strong demand for asset and wealth accumulation. Household indebtedness is only expected to begin moderating as the effects of structural measures to increase the supply of affordable housing and to improve the public transportation system become more entrenched. The series of measures introduced thus far aims to ensure that the risks to domestic financial, macro- and socio-economic stability remain contained while these adjustments are taking shape.

Credit risk to financial institutions arising from exposures to businesses remained largely unchanged. The financial and balance sheet strength of businesses, including large and systemic borrowers, was generally intact with stable liquidity positions observed. The overall leverage position was lower despite higher borrowings. Although some business sectors were more affected by the elevated input costs and exchange rate volatility, particularly those businesses with high import content and large external borrowings, overall debt servicing capacity of businesses remained strong amid further improvement in the interest coverage ratio.

Malaysian financial institutions remained well-capitalised and profitable. As expected, banks managed a smooth transition to strengthened capital requirements, consistent with Basel III, which were phased in from 2013. A number of banks successfully raised new capital with Basel III compliant features, which was well received in the market. Overall profitability of the banking, insurance and takaful sectors was sustained, although contributions from trading and investment activities were more volatile, reflecting market conditions. Financial institutions also remained prudent in taking market risk positions, and continued to actively manage foreign currency funding positions and exposures to exchange rate movements. Strategies by life insurers to better manage

insurance risk in the prevailing low interest rate environment continued to lend support to the financial resilience of these institutions. Stress tests conducted by the Bank affirmed that even under the assumptions of extreme portfolio outflows and adverse economic conditions, banks and insurers are expected to remain adequately capitalised.

During the annual International Monetary Fund (IMF) Article IV consultation in December 2013, the assessors noted significant progress in the implementation of the recommendations highlighted in the Financial Sector Assessment Program (FSAP) for Malaysia in the previous year. In particular, the new financial services legislation significantly strengthens the regulatory and supervisory framework in Malaysia, and arrangements that support effective inter-agency coordination in the management of crises have been enhanced. The Bank has also further strengthened the framework for stress testing of financial institutions and has advanced efforts to improve the granularity of household data for purposes of risk analyses. The IMF Article IV consultation assessment also independently affirmed the resilience of the banks, consistent with earlier results of the stress tests undertaken during the FSAP exercise.

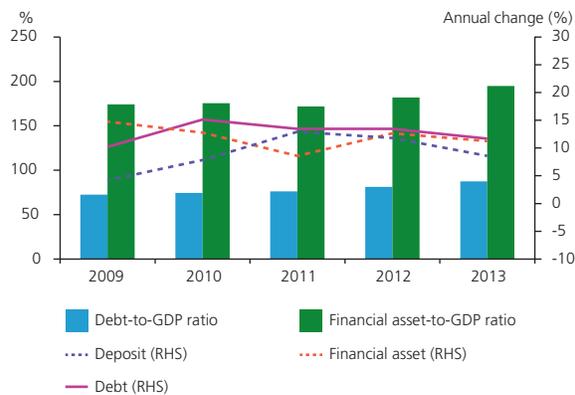
While the external environment will remain challenging in 2014, the Bank expects that domestic financial stability will continue to be preserved. The Malaysian financial sector is well-placed to manage the attendant risks due to the presence of strong financial institutions, deep financial markets, and continued close supervision by the Bank on risk-taking activities by financial institutions and the management of contagion risks. The comprehensive institutional arrangements that are in place for dealing with financial distress will further add to the enhanced capacity to manage shocks. Domestic risks, including those emanating from NBFIs and developments in the property sector, are also expected to be contained by the broad measures that have been implemented. While the risks are assessed to be contained, the Bank's surveillance and supervisory activities will be maintained at a heightened level of vigilance in the foreseeable future. The Bank continues to stand ready to act pre-emptively to address any build-up of emerging risks and threats to domestic financial stability.

MANAGING RISKS ARISING FROM HOUSEHOLD INDEBTEDNESS

Aggregate household borrowings grew at the slowest pace of 11.7% (2012: +13.5%; 2011: +13.5%; 2010: +15.1%) to RM854.3 billion since the introduction of the series of measures in 2010 to rein in the excessive accumulation of debts by households. This was driven primarily by the substantially slower pace of expansion in lending by NBFIs, particularly in the second half

Chart 1.1

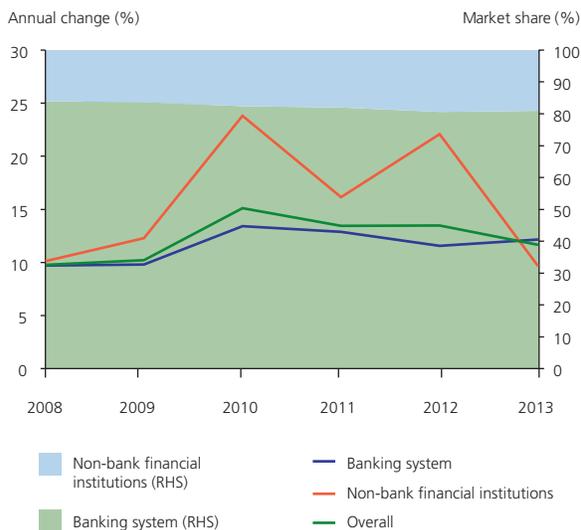
Household Sector: Debts and Financial Assets



Source: Bank Negara Malaysia

Chart 1.2

Household Sector: Annual Change and Market Share of Lending by Banks and Non-bank Financial Institutions



Source: Bank Negara Malaysia

of 2013 (Chart 1.1 and Chart 1.2). The aggregate balance sheet of households remained healthy, with stable employment and income conditions throughout the year, lending continued support to the financial strength and debt servicing capacity of households at large. Household financial assets expanded at a closer rate to the pace of growth in household debts, compared to previous years. In 2013, household financial assets grew by 11.2% (2012: +12.7%) to RM1.9 trillion or 193.5% of gross domestic product (GDP). Similar to previous years, the composition of household financial assets was broadly unchanged with 42% of financial assets held in the form of deposits and deposit-like instruments. Investments in shares and unit trusts expanded slightly to account for about 25% (2012: 24%) of financial assets. At the aggregate level, the ratio of household financial assets to debt remained stable at 2.2 times.

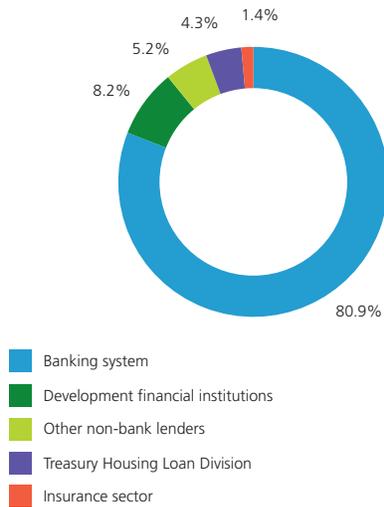
Household debt grew at the slowest pace since 2010, matched by the expansion in financial assets. Aggregate leverage of lower income borrowers remained stable

Notwithstanding the slower growth in household borrowings, the level of household indebtedness increased to 86.8% of GDP at the end of the year on account of the slower growth in nominal GDP of 4.5% (2012: +6.4%). Risks to domestic financial stability, however, remained well-contained given the strong fundamentals in the household and financial sectors, and pre-emptive measures in place to restrain excessive behaviours. The steady economic growth and favourable employment conditions further reinforce these fundamentals.

Banks remained the main credit provider to households, accounting for 80.9% (2012: 80.6%) of household debts (Chart 1.3). Close to 60% of lending to households were for the purchase of properties and investment in equities and unit trust funds which add to household wealth (Chart 1.4). The combined effects of incremental measures introduced since 2010 to curb excessive indebtedness continued to be observed, particularly in reducing the vulnerability of lower income households and preventing households in general from becoming over-leveraged.

Chart 1.3

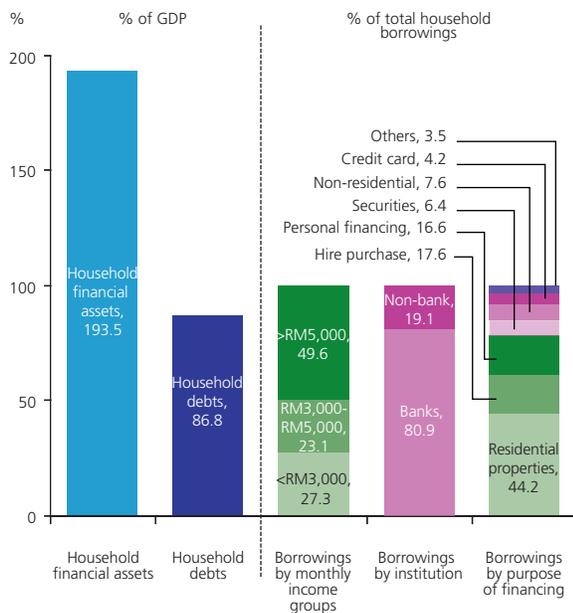
Household Sector: Composition of Credit Providers



Source: Bank Negara Malaysia and Treasury Housing Loan Division

Chart 1.4

Household Sector: Profile of Borrowings and Financial Assets



Source: Bank Negara Malaysia

Consequently, the proportion of households with monthly earnings of up to RM3,000 accounted for a significantly lower share of total household borrowings at 27% (2012: 33%) or RM230.7 billion (2012: RM252.5 billion). Although aggregate leverage for households earning up

to RM3,000 a month was stable at about seven times (measured as the ratio of outstanding borrowings to annual income), the level remains high. It would be prudent to reduce the level of leverage for this group of borrowers to increase their buffers against income or expense shocks. In other income categories, while the leverage is considerably lower, it is equally important for these households to manage their leverage position. Households appear to be paying greater attention to managing their overall leverage, as indicated by the Bank's survey on consumer sentiment. This will provide support towards preserving the resilience of the household sector.

The latest package of measures introduced by the Bank in July and November 2013 responded to lending practices which were found to be incompatible with prudent affordability assessments and responsible lending behaviour. Practices that were of concern include (i) the lengthening of repayment tenures of up to 45 years for new housing loans; (ii) long repayment tenure of up to 25 years for personal financing offered by NBFIs; and (iii) increased lending for the development and purchase of residential properties under housing projects that offer interest capitalisation schemes (ICS) (including developer interest bearing schemes (DIBS)). Such schemes were found to inflate property prices by as high as 30%, while encouraging speculative activity in the property market by lowering the entry cost for buyers. Given the significant share of household borrowings for the purchase of properties, lending directed towards these schemes, if left unchecked, could also contribute to a higher level of household debt.

The new measures limit the repayment period for the purchase of properties to 35 years and personal financing to 10 years. The offering of pre-approved personal financing facilities without an application from the borrower was also prohibited. Apart from financial institutions regulated by the Bank, these measures were extended to all credit co-operatives regulated by SKM and two large retail credit providers, namely Malaysia Building Society Berhad (MBSB) and AEON Credit Service (M) Berhad. Practices of lending institutions in observing a prudent debt service ratio (DSR) for household lending were also streamlined to ensure that the total debt obligations of a borrower (including loans taken from both banks and NBFIs) are properly and adequately captured in the DSR computation. In extending the measures to credit co-operatives,

the Bank coordinated closely with SKM, which participated in the decision by the Financial Stability Executive Committee. The coordination included specifying the detailed requirements to give effect to the measures, joint briefings, monitoring and examinations on co-operatives to ensure the effective implementation of the measures. In response to concerns around property-related lending practices which were fuelling higher property prices, financial institutions were prohibited from financing the development and purchase of properties with elements of ICS, including DIBS. This followed a ban by the Government on the offering of properties for sale by developers under such terms.

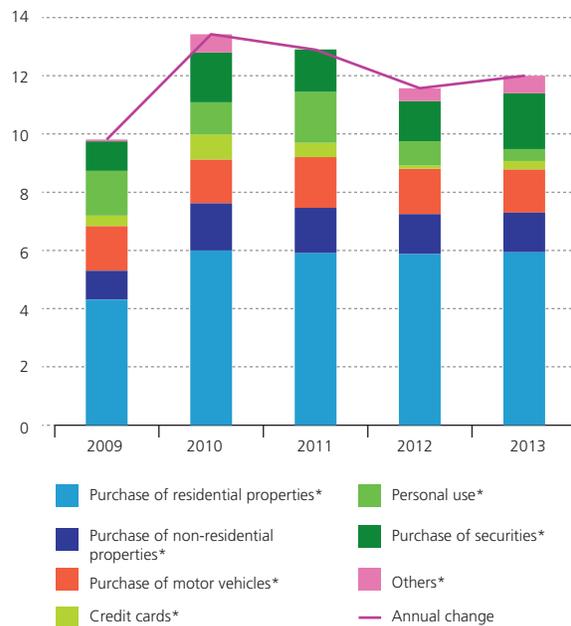
Bank lending to households

Outstanding bank lending to the household sector grew by 12% to RM690.6 billion or 70.2% of GDP as at end-2013. The growth continued to be largely driven by lending for the purchase of residential and non-residential properties (mainly shops) (Chart 1.5). Lending growth in these segments has declined from the peak growth rates recorded in 2010. Residential property financing remained relatively stable over the last four years,

Chart 1.5

Household Sector, Banking System: Contribution to Loan Growth

Annual change (%), contribution to growth (percentage point)

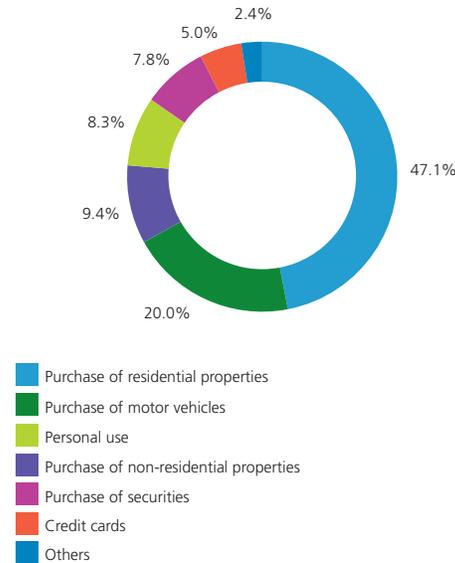


* In percentage point

Source: Bank Negara Malaysia

Chart 1.6

Household Sector, Banking System: Exposure by Purpose of Financing



Source: Bank Negara Malaysia

while non-residential property financing showed a declining trend. The composition of bank lending to households remained broadly unchanged, with lending for the purchase of properties continuing to account for the bulk (56.5%) of total household loans from the banking system (Chart 1.6). The continued strong growth in lending for housing and motor vehicles reflects the demographic profile of a relatively young and growing working population with increasing affluence. In 2013, the labour force grew by 4.3% (2012: +3.5%), with more than half of the labour force aged below 35 years old. Many Malaysians also view owning or investing in properties as an important financial goal in preparation for marriage and retirement, to finance education of children, or to provide a form of financial security for the next generation.

The share of unsecured financing has been stable at below 15% of banking system loans to households. Notably, financing for personal use grew annually at a much slower pace of 4.6% in the second half of the year, compared to 7.5% in the first half (2012: +9.1%), following the measures implemented by the Bank in July. Outstanding credit card balances increased slightly by 4.3% in 2013, of which about 93% of the outstanding balances were current (yet to pass payment due date) and another 6% were less than three months overdue. Although revolving

card balances (credit card balances that are rolled over) were slightly higher (+2.3%) than in the previous year, the number of card holders with revolving balances declined further by 4% to account for 48% of total cards in circulation as borrowers continued to consolidate credit card debts. In addition, the proportion of card holders who paid their credit card balances in full each month (about one third) continued to do so as in the previous year. Credit risk from exposures to the credit card segment remained limited as reflected by stable and low delinquencies. The Bank has, since 2011, emphasised the requirement for card issuers to provide clear disclosures on the implications of making partial settlements on overall outstanding card balances due to the higher amount of interest incurred. Banks have also been actively promoting debit cards as an alternative for purposes of making payments.

Sound lending standards preserved, with further improvements in conduct of affordability assessments

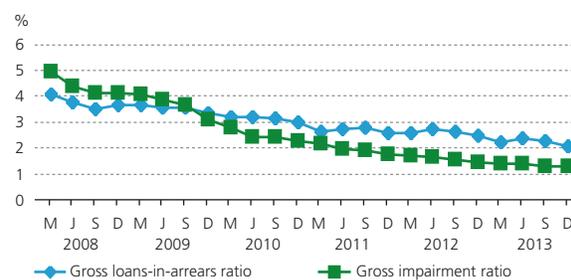
Banks generally continued to maintain sound lending standards notwithstanding credit conditions that remained highly competitive and the ample liquidity situation. Since the implementation of the Guidelines on Responsible Financing two years ago, further improvements were observed in banks' conduct of affordability assessments. This was particularly evident in the strengthened documentation requirements observed by banks for the purpose of verifying income, and more conservative assumptions used to estimate variable income in assessing a borrower's debt repayment capacity. A number of banks also reviewed existing retail credit scorecards to capture behavioural information, as well as additional and more granular information to improve the risk profiling and monitoring of borrower segments. This was supported by the continued access to real time credit information on borrowers via the Central Credit Reference Information System (CCRIS). Data collected from and engagements with banks since July showed that the average DSR on new financing facilities approved remained prudent at less than 40% and is underpinned by more robust assessments of income and debt.

In respect of property loans, the Bank increased scrutiny over valuation practices on concerns of a possible easing in valuation practices due to the rising trend in property prices. The review across major bank lenders in the housing loan market revealed that valuation standards remained generally sound. While most banks, in competing for loans, were initiating the processing of loan applications based on indicative property valuations, formal valuations continued to be required and used to determine the final approved loan amount in accordance with internal loan-to-value (LTV) ratio policies. Approved LTVs are more differentiated across risk segments, with lower levels applied to properties in locations where price increases have been stronger or for borrowers who have a higher credit risk profile based on the bank's credit scorecard and affordability assessments. Banks also use property valuations from multiple sources to support annual revaluation of collateral as part of the portfolio management and credit review process. For a number of banks, internal information systems have been enhanced to better support these processes through the capture of more detailed information on transacted values of properties financed, independent valuations and other comparative information from credible secondary sources.

Household loans from the banking system continued to improve in quality across all segments with low incidence of delinquencies (Chart 1.7 and Table 1.1). The vintage analysis for housing loans, the largest component of bank exposures to the household sector, has been exhibiting lower default rates for new loans originated in the later periods since 2004 (Chart 1.8). The default experience has continued to improve steadily over the years, reflecting the strengthening of banks' underwriting standards and practices. Consistent with this trend,

Chart 1.7

Household Sector, Banking System: Delinquencies

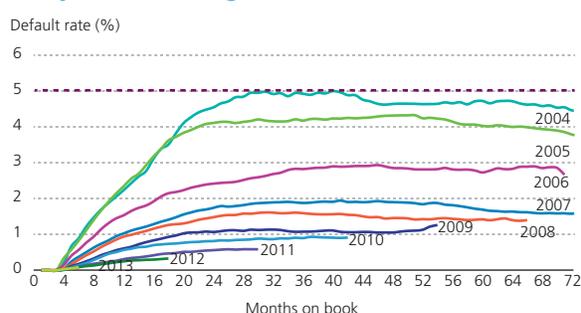


Source: Bank Negara Malaysia

Table 1.1**Household Sector, Banking System: Gross Loans-in-arrears Ratio**

	2011	2012	2013
	%		
Overall	2.6	2.5	2.1
Purchase of residential properties	2.0	1.9	1.6
Purchase of motor vehicles	5.5	5.6	4.7
Personal financing	1.7	1.3	1.2

Source: Bank Negara Malaysia

Chart 1.8**Household Sector, Banking System: Vintage Analysis for Housing Loans**

Source: Bank Negara Malaysia

housing loans-in-arrears of between one and three months declined further in 2013, accounting for only 1.6% (2012: 1.9%) of total housing loans.

While there were sustained improvements in the lending practices and quality of the household loan portfolio, the Bank has observed a gradual reduction in collective impairment provisions made by banks since the adoption of the new financial reporting standards on provisioning in 2012. Across individual banks, the Bank also observed a degree of divergence in the determination of loss rates and time frame for evaluation of loss experience. In an environment of continued strong credit growth, it is prudent to strengthen buffers against potential future loss events. With this in view, banks are required to maintain, on aggregate, collective impairment provisions and regulatory reserves of not less than 1.2% of total outstanding loans (net of individual impairment provisions). Banks are expected to progressively build the required buffers in order to achieve full compliance by end-2015. Prudent pricing practices by banks in line with requirements under the

Risk-informed Pricing Standards issued by the Bank in 2013 will further reinforce banks' buffers against potential losses (refer to Chapter 3 on 'Regulatory and Supervisory Framework').

Measures introduced to enhance provisioning and risk pricing practices of banks will further strengthen buffers against potential future loss events

The estimated average loss given default (LGD) and probability of default (PD) experiences have remained stable (Table 1.2, Table 1.3 and Table 1.4). Under normal operating conditions, assuming a simultaneous materialisation of default incidences across the different types of borrowings by households with monthly earnings of RM3,000 and below (which accounted for 24% (2012: 29%) of total bank lending to households), the expected losses to the banking system is estimated at RM1.9 billion or 2.4% of the capital buffer of banks (2013: RM79.3 billion) that is in excess of the minimum Basel III regulatory requirement.

Table 1.2**Household Sector, Banking System: Average Probability of Default (PD)**

	2011	2012	2013
	%		
Purchase of residential properties	3.1	2.5	2.4
Purchase of motor vehicles	3.2	2.8	2.4
Unsecured financing	3.5	3.5	3.5

Source: Bank Negara Malaysia

Table 1.3**Household Sector, Banking System: Average Loss Given Default (LGD)**

	2011	2012	2013
	%		
Purchase of residential properties	19	18	18
Purchase of motor vehicles	48	49	49
Unsecured financing	77	76	78

Source: Bank Negara Malaysia

Table 1.4**Household Sector, Banking System: Expected Loss**

	2011	2012	2013
	RM billion		
Purchase of residential properties	1.5	1.3	1.4
Purchase of motor vehicles	1.9	1.8	1.6
Unsecured financing	2.2	2.4	2.5

Source: Bank Negara Malaysia

In the unlikely event of similar default incidences materialising across all income groups, the estimated expected losses would still be manageable at RM6.4 billion or 8.1% of excess capital of the banking system. Even under severe assumptions of an approximate tripling of the PD and significantly

higher LGD, the estimated expected losses of about RM30.5 billion remained well within the absorption capacity of the banking system (Table 1.5).

NBFI lending to households

Following the measures implemented by the Bank in July, the annual growth in outstanding NBFI lending to the household sector (including lending by development financial institutions (DFIs)) more than halved for the year (2013: +9.6%; 2012: +22.1%), corresponding with a marked slowdown in the annual growth of personal financing to 13.9% (1H 2013: +25%) (Chart 1.9). Compared to the first half of 2013, the number and value of new personal financing facilities approved by NBFIs in the second half of the year declined by 25.5% and 68.1% respectively (Table 1.7). Despite the slower expansion in personal financing, NBFIs remained the largest provider of personal financing with a share

Table 1.5**Household Sector, Banking System: Potential Losses Based on Severe Assumptions on Household Default Incidences and Loss Given Default**

	Housing loan	Vehicle hire purchase	Personal financing	Credit cards	Total ¹
Probability of default (%)	7.2	7.2	10.5	10.5	
Loss given default (%)	40	75	95	95	
Potential losses (RM bil)					
- Borrowers earning RM3,000 or less per month	1.5	2.8	2.2	0.8	8.4
- Borrowers earning RM5,000 or less per month	3.4	4.6	3.6	1.7	15.3
- All borrowers	9.4	7.5	5.7	3.5	30.5

¹ Includes other household loans such as financing for the purchase of non-residential properties and consumer durables

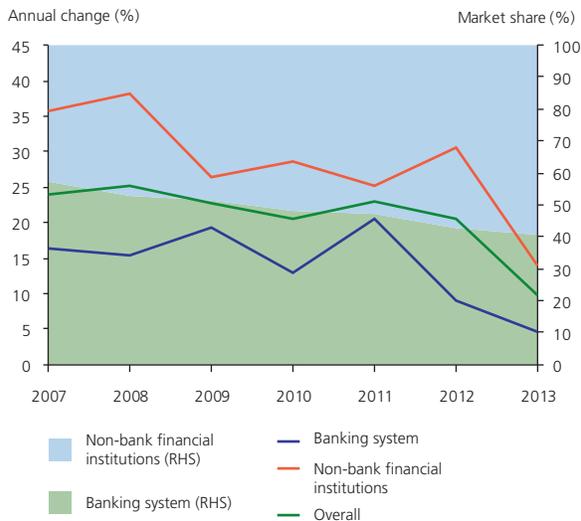
Source: Bank Negara Malaysia

Table 1.6**Household Sector: Factors Supporting the Assessment on Risks to Domestic Financial Stability Arising from Household Indebtedness**

Financial institutions	<ul style="list-style-type: none"> • Strong capital buffers to absorb potential losses from adverse conditions affecting debt servicing capacity of households • Sound lending standards preserved with continued improvements in affordability assessments (including NBFIs), improving pricing discipline and enhanced valuation practices • Robust and comprehensive risk management infrastructure in place, reinforced by adequate loan loss provisions
Households	<ul style="list-style-type: none"> • Strong financial buffers, with continued growth in household financial assets in tandem with household debt • Sustained aggregate debt servicing capacity of households and healthy repayment trends • Stable leverage of vulnerable borrowers
Authorities	<ul style="list-style-type: none"> • Macroprudential measures in place, reinforced by fiscal measures and other initiatives by the Government • Clear arrangements and powers to implement and adjust measures as needed if risks increase • Continued strong supervisory vigilance • Intensified financial education and literacy efforts • Greater national level and inter-agency coordination

Chart 1.9

Household Sector: Annual Change and Market Share of Personal Financing by Banks and Non-bank Financial Institutions



Source: Bank Negara Malaysia

Table 1.7

Household Sector: New Approvals of Personal Financing

Credit providers	Number of borrowers		Amount (RM mil)	
	1H 2013	2H 2013	1H 2013	2H 2013
Banks	304,967	270,024	9,303	7,652
NBFIs	286,215	213,318	20,422	6,508

Source: Bank Negara Malaysia

of 60% (2012: 57%) of total personal financing to households. Similar to banks, improvements were also observed in the DSR of borrowers who obtained new financing from NBFIs in the second half of the year, where about 70% of the new loans granted were to borrowers with a DSR of below 40%. The average personal financing amount disbursed by NBFIs was also more than 50% lower at around RM30,000 per facility.

Despite the adjustments resulting from the measures implemented in July, the profitability of the three NBFIs with the largest market share in personal financing (namely Bank Kerjasama Rakyat Malaysia Berhad, MBSB and AEON Credit Service (M) Berhad) remained strong, with the annual growth in profit before tax ranging between 24% and 42%. More than 80% of the respective

lending portfolios of these entities comprised personal financing. Of this, about 80% of the lending portfolio continued to be extended to civil servants based on the automatic salary deduction scheme administered by the Angkasa Service Bureau (Biro Perkhidmatan Angkasa, BPA). As a safeguard, the scheme prescribes a maximum deduction threshold of 60% of a borrower's total income, including deductions for loan repayments (now strengthened to also include loans other than those administered under BPA), statutory and other obligations. This feature serves to significantly reduce the credit risk borne by the NBFIs, which is evident in the low impairment ratio of 1.7% recorded for the personal financing portfolio of NBFIs, similar to that for banks. This also enabled NBFIs to maintain financing rates at low levels (as low as 3.25% per annum on a flat rate basis).

The high level of indebtedness of households is expected to persist over the next few years with the continued strong demand for dwelling and transportation, and increasing urbanisation combined with the relatively young and more affluent population. As the effects of earlier macroprudential measures taken by the Bank together with broader structural measures by the Government, in particular to increase the supply of affordable housing and to improve the public transportation system, become more entrenched in the years to come, the level and growth of household indebtedness should begin to moderate. Under conditions where growth in household debt will likely remain relatively strong in the foreseeable future, it is therefore particularly important that continued emphasis on sound lending discipline and affordability assessments by financial institutions be maintained. This will be complemented with further intensification of education initiatives that serve to reinforce responsible borrowing behaviours (refer to Chapter 4 on 'Market Conduct and Consumer Empowerment').

MANAGING DEVELOPMENTS IN THE DOMESTIC PROPERTY MARKET

House prices remained elevated during the year and continue to be an area that warrants close monitoring in view of the effect of higher house prices on overall household debt and the exposure of financial institutions to the property market. Any substantial correction in property prices can add pressures on the balance sheets of financial institutions.

Credit Expansion and Implications on Financial Stability

A well-functioning financial system, through its role in maturity and liquidity transformation, risk diversification and the payment systems, enables the efficient intermediation of funds which supports economic activity. The expansion of credit to businesses and households contributes to financial deepening and facilitates growth-enhancing investment and consumption activities. However, excessive credit expansion that outstrips economic fundamentals and output potential can pose destabilising risks to the economy and financial system. Prolonged periods of such rapid credit growth have generally been seen to precede banking crises and tend to be associated with increased macroeconomic and financial fragility. While excessive credit growth is widely seen as a useful indicator of potential systemic vulnerability, studies have also shown that a sustained period of high credit growth is more likely to amplify the likelihood or severity of systemic distress if the financial system is characterised by other structural fragilities or financial imbalances.

Credit conditions in Malaysia have been conducive to the financing needs of the economy and reflect greater financial deepening in Malaysia. In the more recent period, credit growth has also been driven by ample liquidity conditions in the domestic financial system. Since 2001, credit expansion has averaged around 9.2%. This period of strong credit expansion coincides with a period of wide ranging reforms undertaken to strengthen the banking sector following the Asian Financial Crisis (AFC). Against this backdrop, this article identifies the determinants of credit expansion in Malaysia and examines whether there are signs of excessive credit growth based on an analysis of common metrics of credit growth against long-term trends. The article also discusses the limitations associated with the use of common methodologies to determine excessive credit growth. These limitations imply that it is relevant to also pay attention to characteristics of the domestic financial system which can either amplify or reduce risks to financial stability in an environment of sustained high credit growth.

Determinants of Credit Expansion

In ascertaining the key drivers of credit growth, total private sector credit (both loans and private sector debt securities) was regressed against a set of independent variables¹ influencing the demand and supply of credit using an Error Correction Model (ECM)². Three statistically significant variables were found to influence credit expansion over the long-term, namely total deposits, GDP and the Malaysian House Price Index (MHPI). Customer deposits have consistently been the dominant funding source for major credit providers in Malaysia. The continued expansion of the deposit base of banks (CAGR of 9.4% from 2001 to 2013) is therefore a key driver of financing activities by banks (CAGR of 9.1% for the same period), effectively enlarging the supply of loanable funds. The demand for credit by households and businesses also typically rises in tandem with higher consumption and investment activities on the back of an expanding economy. Combined with the ongoing process of financial deepening in Malaysia, this increases both the demand for and supply of credit which in turn supports economic activity and growth. Finally, property prices are an important determinant of the private sector's borrowing capacity, reflecting its common use as collateral for financing. Property prices also influence credit providers' willingness to lend as changes in prices can have a material impact on banks' balance sheets through holdings of property-related assets or higher potential losses on loans secured by property. In Malaysia, 28.1% of total banking system loans were extended to finance the purchase of residential properties and another 12.6% for the purchase of non-residential properties. Including loans extended for other purposes, approximately RM587.1 billion (or 47.9%) of outstanding loans are secured by properties. It is therefore not surprising that the MHPI which grew by a CAGR of 5.5% since 2001 emerged as a significant factor influencing both credit supply and demand.

¹ Factors influencing credit demand and supply that were considered include the nominal and real GDP, average lending rate, average 10-year yields for AAA-rated private debt securities (PDS), Consumer Price Index (CPI), MHPI, average house transaction value, FBM Kuala Lumpur Composite Index (FBM KLCI), working population, total domestic deposits, portfolio capital flows, stock market capitalisation, savings rate, money supply, US policy rate, and return on assets and equity of banks.

² The ECM enables estimations of both the long-run relationship between cointegrated variables and the potential short-run deviations from the long-run relationship.

Trend Estimations of Credit Growth and Related Limitations

A major challenge in constructing a reliable indicator for excessive credit³ growth is determining the threshold level that may pose significant risks to the stability of the financial system. For the purpose of this study, a routinely used method in literature that applies the statistical Hodrick-Prescott (HP) filter was employed to derive a trend from a time series of credit-to-GDP (CTG) ratios. This method is also proposed by the Basel Committee on Banking Supervision (BCBS) for the purpose of setting the 'countercyclical capital buffer', a macroprudential tool aimed at protecting the banking sector from periods of excessive credit growth⁴. Deviations between the actual values and the underlying long-term trend (CTG gaps) were compared with commonly used thresholds in literature to ascertain periods of credit growth excessiveness (Table 1).

Table 1
Common Thresholds Used in Literature

Threshold ⁵	Definition
A	CTG gap >1.5 times its standard deviation
B	Annual growth rate of CTG ratio >10%

The study suggested that there were no strong indicative signs of credit excessiveness based on the abovementioned thresholds. The CTG ratios in the past 7 quarters moved above the long-term trend but remained within threshold A (Chart 1). Compared to the 1994-1998 period where the above-trend credit growth was observed for a period of 13 consecutive quarters prior to the AFC, the CTG ratio in the recent three years has increased at a much slower and more gradual pace. The level also remains well below the peak recorded in 1997. Turning to threshold B (Chart 2), the annual growth of the CTG ratio and credit has remained below the levels seen prior to the AFC over the past 14 years. The threshold was exceeded temporarily during the 2008-09 Global Financial Crisis, but this was driven largely by changes in the denominator (GDP) resulting from external shocks to the economy, while domestic conditions continued to support the demand for and supply of credit. The annual growth of the CTG ratio fell quickly below the threshold as the economy recovered. This contrasts with the period prior to the AFC which saw a prolonged and rapid acceleration of credit expansion (where credit growth grew by more than 20% and threshold B was exceeded for more than 3 years consecutively), combined with weaker underwriting standards.

While the HP filter is often used to determine trends in macroeconomic variables and provides effective means to capture structural breaks, the methodology has several limitations. The trend estimation of a time series to a large extent is highly dependent on the length of series used, and therefore produces varying estimations of CTG gaps and thresholds as illustrated using two sets of time series (Chart 3). This study used a 20-year horizon⁶ given that a longer time series

³ Data on credit includes (i) those provided by Malaysian banks and other sectors of the economy; (ii) credit to non-financial corporations, households and non-profit institutions serving households; and (iii) loans and debt securities.

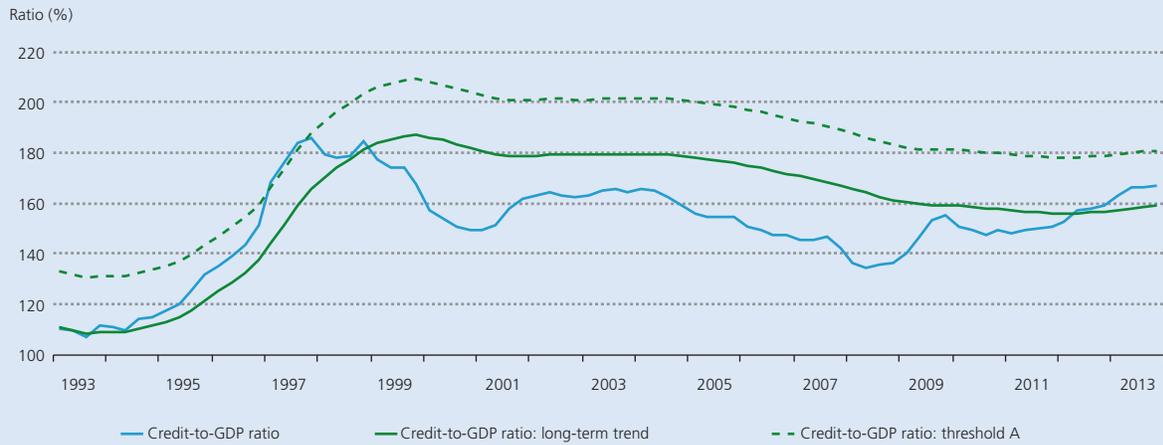
⁴ BCBS (2010a) proposed that the primary aim is to use a buffer of capital to achieve the macroprudential goal of protecting the banking sector from periods of excess credit growth by ensuring adequate capital to help maintain the flow of credit in the economy, when the broader financial system experiences stress after a period of excess credit growth. In addressing the aim of protecting the banking sector, the capital buffer may also help to lean against the build-up of financial imbalances by raising the cost of credit and dampening its demand.

⁵ Dell' Ariccia et al (IMF, 2012) classified an episode of credit boom if either of the following two conditions is satisfied: (i) the deviation from trend is greater than 1.5 times its standard deviation and the annual growth rate of the credit-to-GDP ratio >10%; or (ii) the annual growth rate of the credit-to-GDP ratio exceeds 20%. The second condition is introduced to capture episodes in which aggregate credit accelerates very gradually but credit growth reaches levels that are well above those previously observed in the country.

⁶ BCBS recommended a minimum of 20-year period in the context of countercyclical capital buffer.

Chart 1

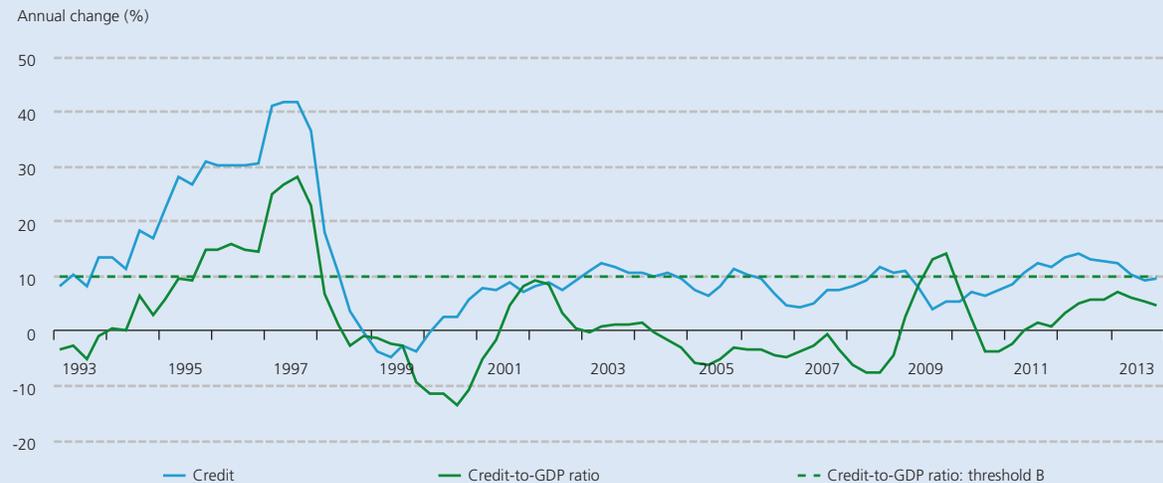
Credit-to-GDP Ratio



Source: Bank Negara Malaysia, Department of Statistics, Malaysia, Bank for International Settlements and internal computation

Chart 2

Credit and Credit-to-GDP Ratio: Annual Growth



Source: Bank Negara Malaysia, Department of Statistics, Malaysia, Bank for International Settlements and internal computation

provides a more reflective estimation of a country's position in a credit cycle⁷. Another drawback relates to the sensitivity of trend estimations to the smoothing parameter (λ)⁸ (Chart 4). Further, differing signals to policymakers may arise by applying the HP filter recursively to determine the trend based on current available data at each quarter (a one-sided filter, as recommended by BCBS and used in this study), instead of the entire time series (two-sided filter) (Chart 5). This can pose

⁷ Drehman et al (2012) study on financial cycle observed that assessment using longer time series will better capture medium-term component of fluctuations in credit cycle.

⁸ Empirical analysis by Drehman et al (2010) revealed that the trend component calculated using a λ of 400,000 (as adopted in this study) performs well in picking up the long-term trend in private sector indebtedness. Similarly, Ravn et al (2002) suggested a λ of 1600 for the business cycle and quarterly observations. For cycles with longer duration such as the credit cycle, a higher value is considered appropriate.

some challenges for determining if policy responses are required to control excessive credit growth and if so, the intensity of those responses. Another relevant consideration relates to the use of other denominators besides GDP such as financial and non-financial assets of the private sector which are relevant to the evaluation of debt servicing capacity and credit excessiveness (Chart 6).

Chart 3

Credit-to-GDP Ratio Gap: Comparison between Lengths of Time Series



Source: Bank Negara Malaysia, Department of Statistics, Malaysia, Bank for International Settlements and internal computation

Chart 4

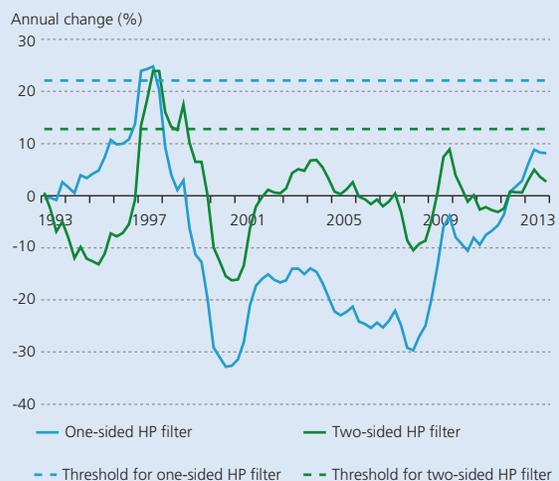
Credit-to-GDP Ratio Gap: Comparison between Smoothing Parameters



Source: Bank Negara Malaysia, Department of Statistics, Malaysia, Bank for International Settlements and internal computation

Chart 5

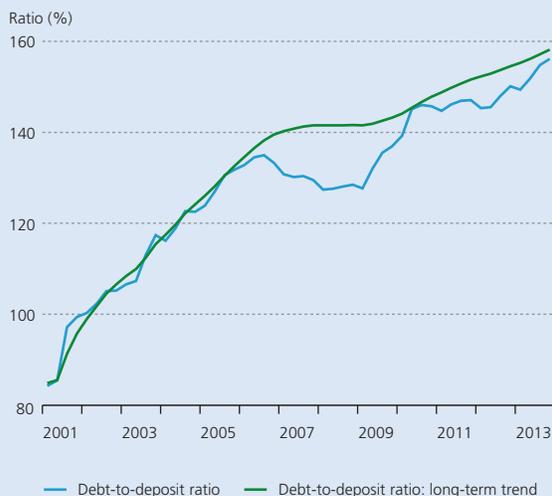
Credit-to-GDP Ratio Gap: Comparison between One-Sided and Two-Sided HP Filters



Source: Bank Negara Malaysia, Department of Statistics, Malaysia, Bank for International Settlements and internal computation

Chart 6

Household Sector: Debt-to-deposit Ratio



Source: Bank Negara Malaysia and Treasury Housing Loan Division

Assessing Factors Influencing Vulnerabilities in an Environment of Higher Credit Growth

The limitations of current methodologies used to assess if credit growth is excessive imply that any conclusions drawn must also take into account other relevant and important factors. As noted earlier, these factors should include inherent strengths or fragilities in the financial system that can amplify or reduce risks to financial and macroeconomic stability. For emerging market or transition economies, studies have suggested that rapid credit growth may also signify a convergence towards the average credit level in advanced economies⁹, and not necessarily excessive borrowing.

There are a number of factors that can indicate fragility within the financial system, which combined with a protracted, brisk pace of credit expansion, could lead to destabilising threats to financial stability if left unattended. These include (i) imprudent underwriting practices and mispricing of risk; (ii) inadequate financial buffers to absorb temporary shocks; (iii) weak supervision of major credit providers that may include non-bank financial intermediaries; (iv) high proportion of externally sourced foreign currency loans that are vulnerable to foreign exchange and roll-over risks; (v) credit-fuelled asset price distortions; and (vi) high and increasing leverage positions of households and businesses.

The Bank has been closely monitoring developments in domestic credit growth, particularly in light of ample liquidity conditions, low borrowing costs and rising property prices. The Bank assesses that at present, risks to financial stability are well-contained. Notwithstanding this, the Bank has taken a series of measures since 2010 to pre-emptively address potential weaknesses that could increase risks to financial stability in the longer term. These measures reflect a targeted and incremental approach which aims to avoid unintended consequences that could result in an over-adjustment in the economy, while allowing market participants, including households and businesses, to gradually adjust their expectations, behaviour and risk appetite, and thus ensure that these risks continue to be well-managed.

References

Basel Committee on Banking Supervision (2010), 'Guidance for National Authorities Operating the Countercyclical Capital Buffer'.

Borio, C. (2012), 'The Financial Cycle and Macroeconomics: What Have We Learnt?', BIS Working Paper No. 395.

Dell'Ariccia, G., D. Igan, L. Laevan and H. Tong (2012), 'Policies for Macrofinancial Stability: How to Deal with Credit Booms', IMF Staff Discussion Note SDN/12/06.

International Monetary Fund (2004), 'Are Credit Booms in Emerging Markets a Concern?', World Economic Outlook, April.

Drehmann, M., C. Borio and K. Tsatsaronis (2012), 'Characterising the Financial Cycle: Don't Lose Sight of the Medium Term!', BIS Working Paper No. 380.

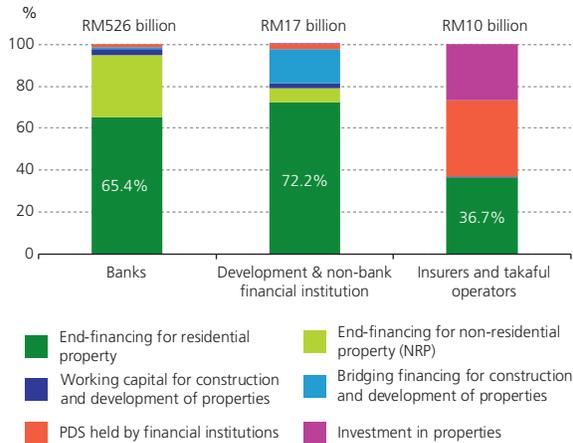
Drehmann, M., C. Borio, L. Gambacorta, G. Jiménez and C. Trucharte (2010), 'Countercyclical Capital Buffers: Exploring Options', BIS Working Paper No. 317.

Ravn, M. O. and H. Ulig (2002), 'On Adjusting the Hodrick-Prescott Filter for the Frequency of Observations', Review of Economics and Statistics Vol. 84.

⁹ For this reason, the existing literature suggests using the out-of-sample panel estimation to better estimate the correct equilibrium relationships between economic fundamentals and private credit using a suitable set of countries.

Chart 1.10

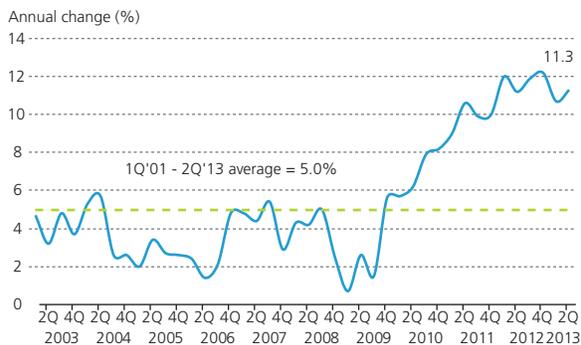
Property Market: Financial Institutions' Exposures to the Property Market



Source: Bank Negara Malaysia and financial statement of non-bank financial institution

Chart 1.11

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



Source: National Property Information Centre

Total exposures of financial institutions to the property sector (mainly in the form of direct lending to property developers and purchasers, and to a lesser extent, holdings of debt securities issued by property-related companies and investments in properties) expanded by 14.3% (2012: +15.1%) during the year to RM53.5 billion, or 21.9% of total financial system assets (Chart 1.10). Of this amount, aggregate exposures of the banking system to the property market increased by 14.7% to RM526.2 billion, or 25.4% of total assets. About 65% of such exposures comprised end-financing extended for the purchase of residential properties, while about 29% was for the acquisition of non-residential properties. Credit facilities for working capital and bridging financing for the construction and development of properties made up another 4% of bank exposures to the property market. Exposures of insurers and takaful operators to the property market, mainly through holdings of debt securities and investments in properties, amounted to RM10 billion or only 4.3% of total assets. Some large life insurers also extended loans for the purchase of residential properties in order to match the maturity profile of life insurance liabilities, but these only accounted for 1.6% of total assets of the industry, or 1% of total end-financing for the purchase of residential properties.

The lower volume of residential property transactions in the first half of the year had little effect on house prices. The Malaysian House Price Index (MHPI) edged higher while house prices in major urban centres remained elevated (Chart 1.11 and Table 1.8). Despite a marked decline in the volume of residential

Table 1.8

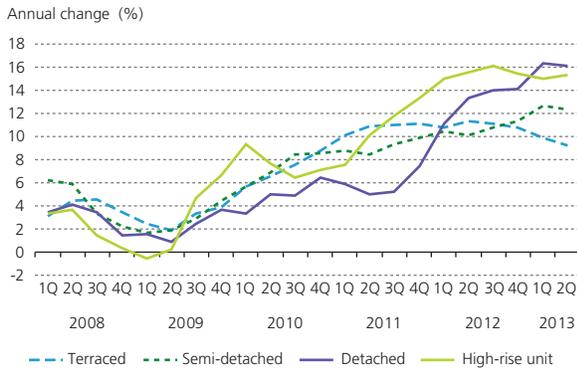
Property Market, Residential: Growth of House Prices by State

Annual change (%)	'01-'10 Average	4Q'11	4Q'12	2Q'12	1Q'13	2Q'13
Malaysia	3.6	10.0	12.2	11.2	10.7	11.3
Kuala Lumpur	4.7	13.9	17.4	9.1	13.6	25.3
Selangor	3.1	11.9	10.4	16.5	7.5	8.1
Johor	0.2	9.1	15.8	8.1	20.0	24.1
Penang	4.3	11.4	12.5	11.9	12.6	15.6

Source: National Property Information Centre

Chart 1.12

Property Market, Residential: Growth of House Prices by Segment



Note: Data based on a 3-quarter moving average
Source: National Property Information Centre

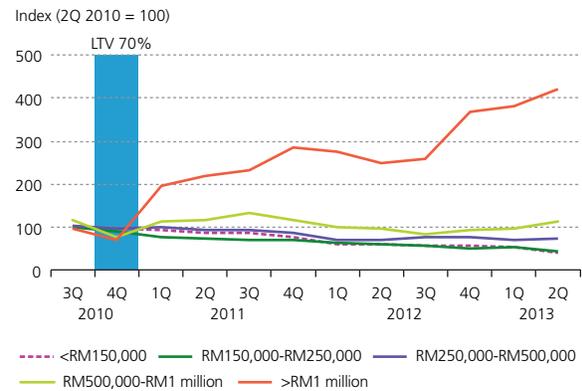
property transactions by 12.6% in the first half of 2013 as house buyers and investors stayed on the sidelines prior to the general election, the aggregate value of transactions was marginally higher by 1.1%. House prices rose across the board for all property categories, with stronger growth observed for detached and high-rise properties (Chart 1.12). The concentration in new property launches on high-end properties (Chart 1.13) continued to exert upward pressure on prices of other properties. Housing affordability will remain challenging for households in major city centres in the near term as the incoming supply of housing units under initiatives by the Government will take time to materialise.

House prices remained elevated and continued to be driven by the structural mismatch between supply and demand. Credit-induced speculative purchases of residential properties have remained subdued

The upward pressure on house prices continued to be largely explained by structural factors. Demand (using average transacted units as a proxy) continued to outpace the new supply of houses (as measured by the incremental stock of houses) by a large margin (Chart 1.14), particularly

Chart 1.13

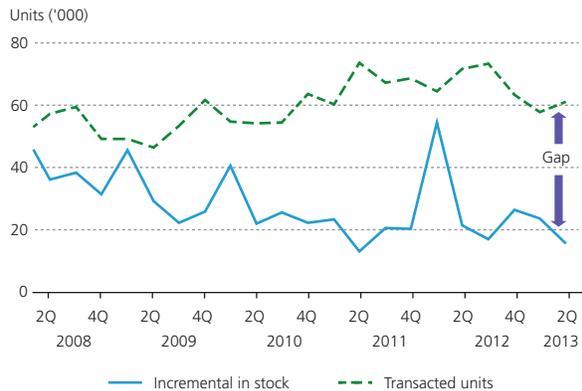
Property Market, Residential: Index of Units Launched by Price



Source: National Property Information Centre

Chart 1.14

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

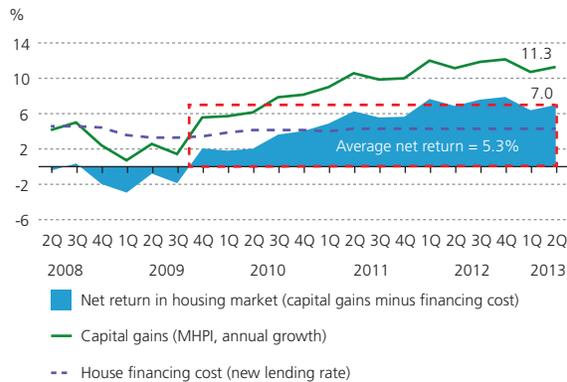


Source: National Property Information Centre

in the low- to medium-priced segments and in major employment centres. Demographic factors given Malaysia's relatively young population and labour force (Table 1.9), increasing urbanisation and general inclination to own a house, are expected to sustain strong demand for affordable residential properties in major urban centres, likely outstripping supply over the near- and medium-term. Part of the mismatch is due to rising land prices and construction costs which increased the incentive for developers to build high-end properties where the margins are higher. This has reinforced a trend in which the bulk of demand for more affordable homes is being met in the secondary market by home owners who sell their existing properties at higher prices. Secondary

Chart 1.15

Property Market, Residential: Capital Gains from Investments in Housing Market



Source: National Property Information Centre and internal computation

market transactions accounted for about 80% of residential property transactions in 2013.

Purchases of residential properties for investment purposes have also been encouraged by the attractive and relatively stable net return on investment in an environment of persistent low interest rates (Chart 1.15). Although investment demand remained strong, the bulk of house purchases continued to be for own occupation or medium- to long-term investment. This was corroborated by data showing that 84% of housing loan borrowers only have one outstanding housing loan account. Credit-induced speculative purchases of residential properties remained subdued following the implementation of the LTV limit on borrowers with three or more outstanding housing loans since November 2010. The annual growth in the

number of borrowers with multiple housing loans has declined substantially from the peak of 15.8% just prior to the implementation of the measures to account for only 3% of individuals with outstanding housing loan accounts with banks, a level that has been preserved since the introduction of the LTV limit. Investment purchases by foreigners (usually with cash and at the high end of the property market) also contributed to strong demand for houses in specific locations, but these transactions remained minimal, accounting for less than 2% of the total number of property market transactions.

The risks to household finances arising from a potential correction in house prices are mitigated by several factors including that speculative purchases that are financed by borrowings have not been significant. Based on the Bank's supervisory monitoring, there is also no strong evidence to suggest a widespread trend of home owners increasing their leverage by taking on more borrowing (through refinancing) against the rising value of their properties for consumption purposes. This is supported by the sustained growth of 6.7% (2012: +6.5%) in housing loan repayments during the year. Measures taken by the Bank to strengthen affordability assessments by banks further ensure that new borrowings are supported by household income rather than rising property valuations.

Banks have exhibited greater vigilance in observing prudent underwriting standards. The proportion of outstanding housing loans with LTV above 70% tapered to 46.6% (2012: 50.1%). This provides a comfortable buffer for banks against a decline in the value of the underlying collateral

Table 1.9

Property Market, Residential: Demographic Breakdown by Age in Major Employment Centres

Age Group	Klang Valley		Johor		Penang		Malaysia	
	Person	(%)	Person	(%)	Person	(%)	Person	(%)
0 - 14 years	1,742,216	24.4	910,413	27.2	361,081	23.1	7,827,907	27.6
15 - 24 years	1,421,967	19.9	631,233	18.9	279,771	17.9	5,689,674	20.1
25 - 44 years	2,536,659	35.5	1,038,112	31.0	506,742	32.5	8,525,994	30.1
45 - 64 years	1,160,073	16.3	590,520	17.6	313,128	20.1	4,863,220	17.1
+65 years	275,847	3.9	178,005	5.3	100,661	6.4	1,427,340	5.1
Total	7,136,762	100	3,348,283	100	1,561,383	100	28,334,135	100

Source: 2010 Census, Department of Statistics Malaysia and internal computation

relative to the outstanding amount of a housing loan in the event of defaults. Banks have also demonstrated an increased rigour in the assessment of factors which support property valuations, such as the level of development in a specific location, population density, status of overhang, existing and potential demand, and number and value of turnover of properties within the surrounding areas. These factors were observed to be more regularly updated to take account of new developments and trends. It was also observed that the lower margin of financing was applied by banks on new housing loans for properties in locations where price increases have been stronger. In the more recent period, valuations used for this purpose have excluded values inflated by incentives offered by developers to house purchasers which can increase house prices by between 10% and 30% above the intrinsic values.

Borrowers with one housing loan account are typically owner-occupants or strategic investors with a medium- to long-term investment horizon. For such borrowers, the propensity to continue to service housing debt is typically high and in cases where a temporary income shock occurs, there is a high willingness to seek debt management assistance at an early stage. Such borrowers are less inclined to dispose of the property in response to a downward movement in property prices as the loan repayment capacity is not dependent on the home equity value or expected capital gains, given the medium- to long-term nature of ownership and investment horizon. This could thus limit the potential for a sharp increase in default incidences and hence credit losses to banks in the event of a price correction in the property market. Based on a single factor sensitivity analysis on the housing loan portfolio of banks with a stressed PD of up to 10% (about four times the current PD) and an adverse correction in house prices of 40%, banks' excess capital buffers stood at more than five times the estimated expected losses.

The macro top-down stress test over a three-year horizon conducted on the banking system exposures to the residential property, non-residential property and construction sectors revealed potential losses of RM11.3 billion per year. This was premised upon assumptions of stressed PD which ranged between 6% and 10%, and a severe correction in house prices of up to 40%. Of this, about RM9.2 billion are potential losses attributed to conventional banks

and RM2.1 billion to Islamic banks. Data at the end of 2013 showed strong capacity to absorb the assumed shocks as the excess capital buffers of conventional and Islamic banks covered 7.3 times and 5.9 times the estimated annual potential losses respectively.

Banks' capital buffers stood at more than five times the estimated losses from a 40% contraction in house prices and stressed probability of default

Since 2010, a range of macroprudential and fiscal measures have been put in place to curb speculative activities and promote a sound and sustainable property market. In July 2013, the Bank acted to limit the maximum tenure for financing granted for the purchase of properties to 35 years to ensure that assessments of households' debt repayment capacity were not being undermined by extended financing tenures. This measure also serves to discourage speculative borrowers. Subsequently, in November 2013, the Bank prohibited financial institutions from financing new development projects and end-purchases of properties with elements of ICS, including DIBS or any permutations thereof, which have contributed to property prices that exceed the true valuations and lower entry costs for property speculators. The Government also banned new property developments that offer these interest capitalisation schemes. Further measures have also been introduced by the Government to curb speculative activities, including a further increase in the real property gains tax, higher thresholds for property purchases by foreigners, and improved transparency in property prices.

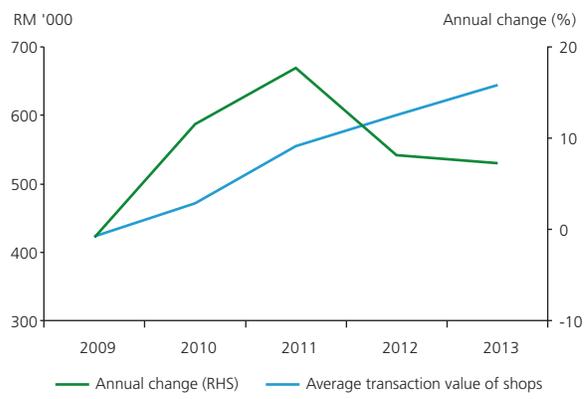
In the 2014 Budget, the Government has pledged to increase access to home ownership at affordable prices, with the construction of about 223,000 additional affordable housing units in various strategic locations nationwide. Based on recent trends, prices of housing units under the 1Malaysia People's Housing (Perumahan Rakyat 1Malaysia, PR1MA) Programme are expected to be approximately 20% below prevailing market prices. The establishment of the National Housing Council by the Government

in 2014, comprising federal agencies, state governments, the National Housing Department, PR1MA Corporation Malaysia, Syarikat Perumahan Negara Berhad and the private sector, is an important development to ensure the effective coordination and timely implementation of housing supply measures. An important part of its mandate will include improving the coverage and timeliness of data to facilitate analysis of developments in the property market and the impact of measures taken.

Financial institutions' exposures to the non-residential segment of the property market comprised mainly end-financing by banks for the purchase of shops and land. Overall financing by banks for the purchase of non-residential properties (including land) grew slower by 17.7% (2012: +19.4%) during the year. Financing for the purchase of shops grew higher by 17.3% (2012: +16.1%) to account for 5% of total bank loans, while financing for the purchase of land and office space recorded slower growth of 15.7% and 15.2% respectively (2012: +17.7% and +37.6% respectively) to account for 2.7% and 1.9% of total bank loans respectively (Chart 1.16). About 42% of bank lending for non-residential property purchases is estimated to be associated with purchases by households and retail investors, with shops being the most common alternative investment option to residential properties. Consequently, individuals with outstanding borrowings for the purchase of both residential and non-residential properties grew by 12.4% (2012: +13.1%). This also partly explains the strong positive correlation of 0.96 between the

Chart 1.17

Property Market, Non-residential, Shops: Average Transaction Value



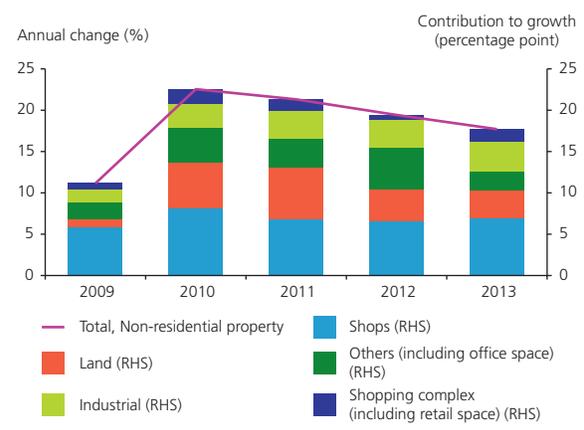
Source: National Property Information Centre

prices of shops and residential properties. Investing in shops and other non-residential properties entails a broader and differentiated set of risks. It is therefore important for households and retail investors to fully understand these risks and have more realistic expectations on the returns for these types of investments.

The compounded annual growth rate (CAGR) of shop prices between 2009 and 2013 was 11.1%. In 2013, shop prices rose by 7.3% along with higher and elevated rental rates (Chart 1.17). Similarly, land prices in major employment centres have been on an upward trend since 2009, recording a CAGR of 14.5% for the period up to the third quarter of

Chart 1.16

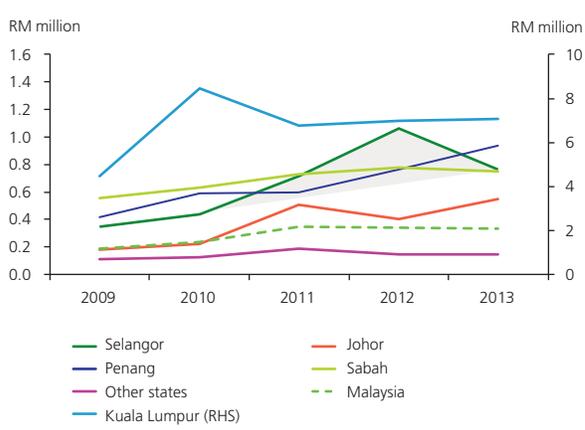
Property Market, Non-residential: Loan Growth and Contribution to Growth by Segment



Source: Bank Negara Malaysia

Chart 1.18

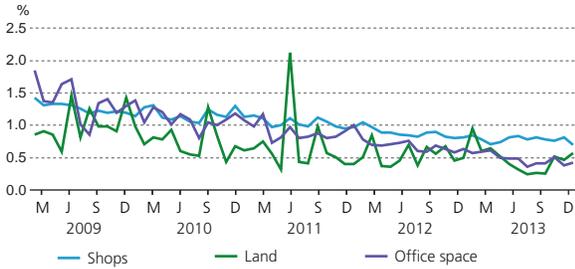
Property Market, Non-residential, Land: Average Transaction Value by State



Source: National Property Information Centre

Chart 1.19

Property Market, Non-residential: Loans-in-arrears Ratio



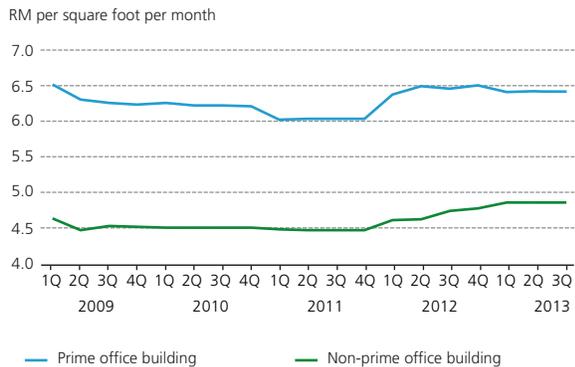
Source: Bank Negara Malaysia

2013 (Chart 1.18). Average land prices (measured as the ratio of average transaction value to volume) in Kuala Lumpur have been relatively stable since 2010, but remained significantly higher than the national average and levels observed in most states. The bulk of land transactions was purchases by property developers to replenish land banks and to gain exposure to high growth areas in and around major city centres. At present, financing exposures of banks for the purchase of shops and land remained small with a low and stable level of delinquencies (Chart 1.19).

In the office space segment, rental rates for older buildings improved slightly in 2013 but remained under pressure from the large incoming supply of newer buildings, particularly in the Klang Valley. Building owners of older office space continued to offer various incentives to attract prospective tenants. In contrast, office space in

Chart 1.20

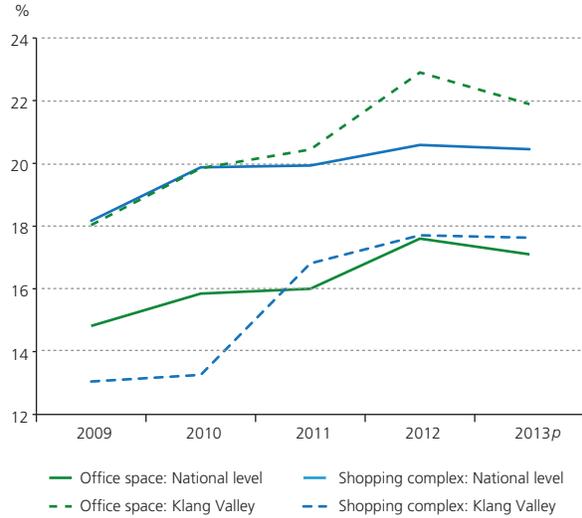
Property Market, Non-residential, Office Space: Rental Rate in Klang Valley



Source: Knight Frank

Chart 1.21

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



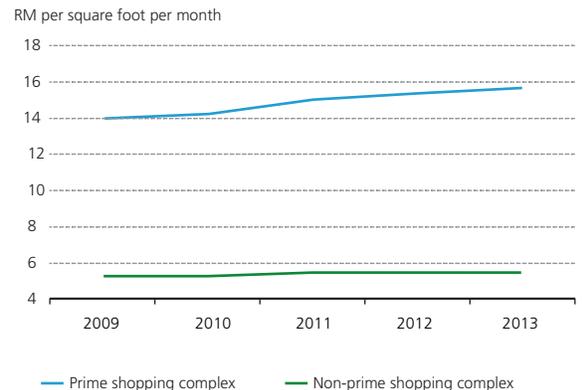
p Preliminary

Source: National Property Information Centre

newer buildings that are equipped with modern facilities, improved security and green features have been able to maintain higher rental rates, although rates have also started to come under downward pressure during the year as new supply outpaced demand (Chart 1.20). The overall vacancy rate for office space remained elevated at 17.1% and is expected to rise further with the planned incoming supply of office space over the next few years (Chart 1.21). The vacancy rate for shopping complexes has also been rising, averaging at

Chart 1.22

Property Market, Non-residential: Rental Rate of Shopping Complex in Klang Valley



Source: Jones Lang Wootton

20.2% for the period 2010-2013, with the entry of new supply into the market over the last few years. Despite the high vacancy rate, well-managed shopping complexes with large catchment areas continued to be in high demand, supporting a steady increase in rental rates (Chart 1.22).

Going forward, it is important to allow room for demand for commercial properties to catch up in order to avoid further increases in vacancy rates in the segment. While direct risks to domestic financial stability are limited as financing exposures of banks to the office space and shopping complex segments only accounted for 3% of total bank loans, and loans-in-arrears of between one and three months remained stable and below 0.6% of total loans in these segments, broader implications may arise from a general dampening of sentiment and a slowdown in the construction sector in the event of a sharp escalation in vacancy rates.

MANAGING CREDIT RISK EXPOSURES TO BUSINESSES

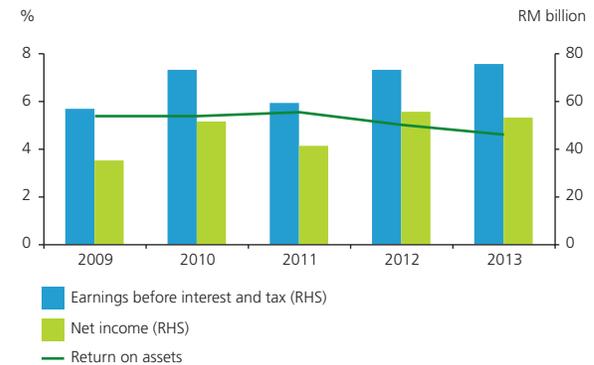
Credit risk to financial institutions arising from exposures to the business sector remained largely unchanged despite higher borrowings by businesses during the year. The continued strength of the financial position of businesses and sustained risk management and lending practices of financial institutions contributed towards lowering the risk of default. Steady economic prospects further added to the low potential for wide scale default incidences.

Lower aggregate leverage position of businesses, and further decline in business loans-in-arrears

The financial and balance sheet strength of businesses, including large borrowers in the banking system, were generally intact. Aggregate operating margins improved to 12.8% (2012: 11.7%), although the average return on assets was lower at 4.7% (2012: 5%) for the year amid elevated input costs and more volatile exchange rate movements (Chart 1.23). Businesses also recorded a lower aggregate leverage position with a debt-to-equity ratio of 39.7% (2012: 41.3%), while the overall liquidity position and cash balances were relatively unchanged (Chart 1.24).

Chart 1.23

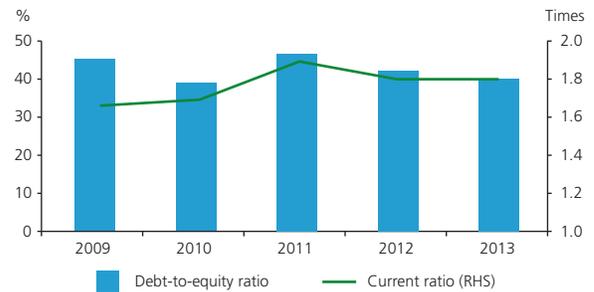
Business Sector: Profitability Indicators



Source: Bloomberg and internal computation

Chart 1.24

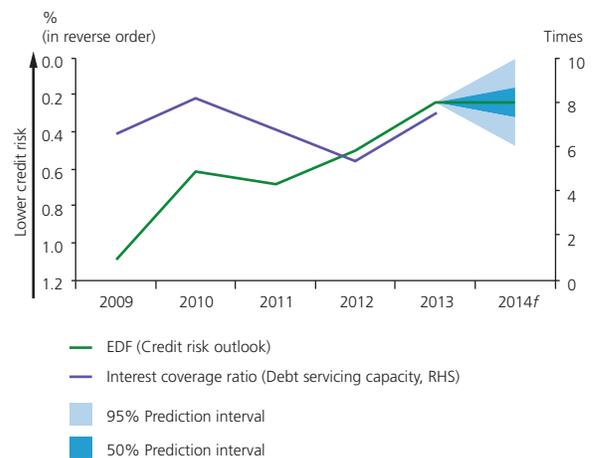
Business Sector: Leverage and Liquidity Indicator



Source: Bloomberg and internal computation

Chart 1.25

Business Sector: Debt Servicing Capacity and Credit Risk Outlook



f Forecast

Source: Moody's KMV Credit Edge™, Bloomberg and internal computation

Chart 1.26

Business Sector, Banking System: Delinquencies



Source: Bank Negara Malaysia

Table 1.10

Business Sector, Banking System: Gross Loans-in-arrears Ratio

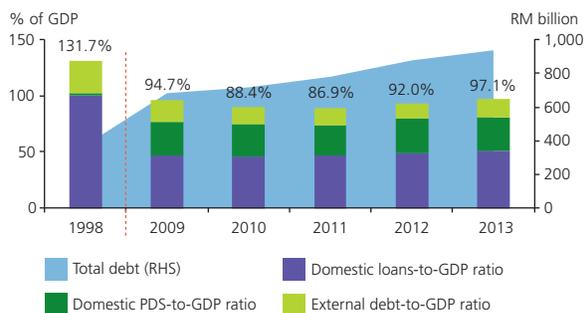
	2011	2012	2013
	%		
Overall	1.0	1.0	0.4
Construction	0.3	0.7	0.3
Real estate	0.1	0.1	0.1
Wholesale and retail trade, restaurants and hotels	0.7	0.6	0.4
Transportation	1.3	1.0	1.0
Utilities	0.1	0.1	0.02
Small and medium enterprises	1.5	0.9	0.5

Source: Bank Negara Malaysia

In addition, businesses continued to demonstrate strong debt servicing capacity as reflected in the improvement in the interest coverage ratio to 7.7 times (2012: 5.4 times) (Chart 1.25). The strong repayment capacity was also demonstrated in the steady repayment trends and high loan repayment-to-disbursement ratio of 94.1%. Business loans that are in arrears for between one and less than three months declined further to 0.4% (2012: 1%) of total business loans, with improvements observed in sectors with the largest credit exposures to Malaysian financial institutions (Chart 1.26 and Table 1.10). Reflecting the generally sound financial position of businesses, the loans-in-arrears ratio for small and medium enterprises (SMEs) improved further to 0.5% of total loans to the segment (2012: 0.9%).

Chart 1.27

Business Sector: Debt-to-GDP Ratio



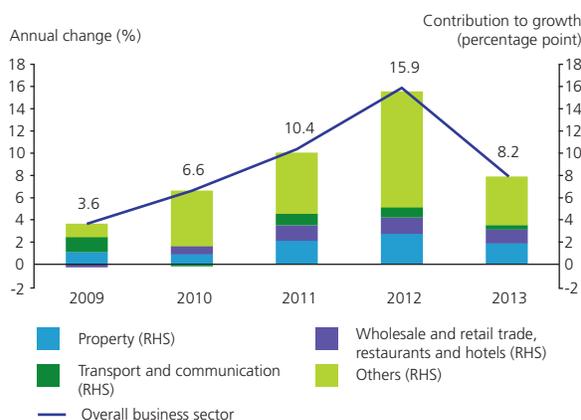
Source: Bank Negara Malaysia and Bloomberg

Total outstanding debts (both domestic and external borrowings) of businesses, comprising loan facilities and private debt securities (PDS) (including sukuk) issued (excluding financial institutions), expanded at a slower annual rate of 10.4% (2012: +12.7%). Borrowings by businesses in the form of PDS issued increased more moderately by 7.7% (2012: +24%) due partly to the temporary deferment of fund raising in the domestic capital market prior to confirmation of the timing of the general election. Banks, insurers and takaful operators constituted the major investors, accounting for about 53.9% of total PDS and sukuk issued by domestic businesses. Business loans from Malaysian banks recorded a growth of 8.5% (2012: +10.9%), with strong expansion observed in financing to SMEs (2013: +12.8%; 2012: +15.5%). The level of overall business debt-to-GDP ratio has increased to 97.1% (2012: 92%), but remained well below the levels recorded during the Asian Financial Crisis (Chart 1.27).

On aggregate, Malaysian financial institutions are most exposed to the property-related, wholesale and retail trade, transportation, utilities and infrastructure sectors, which accounted for 46.1% of total exposures to businesses. In 2013, the property-related and wholesale and retail trade sectors contributed the most to the overall expansion in business sector debt (Chart 1.28). Borrowings via both bank loans and PDS by the property-related sectors increased by 15.7% (2012: +23.4%) reflecting sustained activity in the domestic property market, while borrowings by the wholesale and retail trade sectors increased by 10.4% (2012: +11.5%) in tandem with sustained private consumption. Based on internal estimates by the Bank, banks have sufficient capacity and liquidity to meet the higher future financing needs of businesses including projects under the

Chart 1.28

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



Source: Bank Negara Malaysia

Economic Transformation Programme through direct financing and investments in debt securities, without crowding out other private sector funding needs, even with more stringent capital requirements based on Basel III in place.

The overall external debt exposures of Malaysian businesses increased by 22.3% (2012: +1.5%) during the year to RM168 billion to account for 17.6% (2012: 15.9%) of total business debt. This was driven partly by intra-group borrowings of onshore corporations from overseas parents. The level of external borrowings (as a proportion of GDP) remained below that seen during the period of the Global Financial Crisis (GFC). As the bulk of the borrowings was denominated in US dollars, some corporations with substantial external debt and in businesses with high import content (including corporations in the power, aviation, building- and construction-related materials and automotive sectors) were affected by the greater volatility in foreign currency denominated exposures. Thus far, these corporations did not show any significant deterioration in the capacity to service borrowing obligations, and continued to maintain strong balance sheets and cash flow positions. Greater flexibility given to corporations to hedge foreign currency exposures provided further protection from fluctuations in exchange rates. Under a simulated scenario of significant portfolio outflows which could result in a significant appreciation of the US dollar against the ringgit (more than twice the movement exhibited in 2013), the estimated potential credit

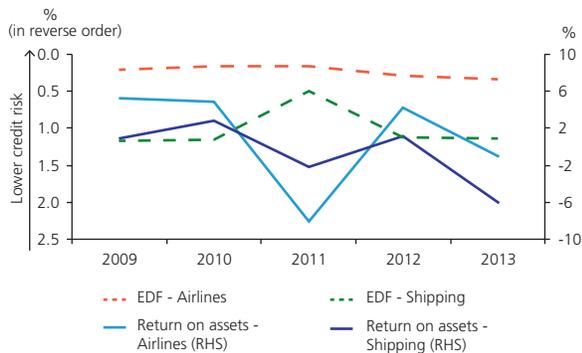
losses arising from the default of selected large Malaysian corporations affected by the adverse currency movements were small at about 4% of the excess capital of banks.

Aggregate exposures of banks and DFIs (both through direct financing and holdings of PDS) to large borrowers (corporations with borrowings exceeding RM1 billion from Malaysian financial institutions) accounted for 17.8% (2012: 19%) of total exposures of banks and DFIs. Aggregate exposures of the insurance and takaful sector to large borrowers accounted for 26.2% of total fund assets. The large borrowers mainly comprised companies in the infrastructure and utilities sectors and conglomerates with a diversified business focus. The financial strength of these large borrowers remained intact, supported by improved debt servicing capacity and sustained liquidity. The aggregate interest coverage ratio and current ratio for large borrowers was at 4.6 times (2012: 4 times) and 1.5 times (2012: 1.6 times) respectively. This in turn supported stable repayment trends and correspondingly low delinquencies amounting to 0.2% (2012: 0.1%) of business loans to the large borrowers.

The underwriting practices and risk management control functions of banks in managing credit risk exposures to the business sector continued to strengthen over the years. Apart from enhanced approaches in setting the risk appetite and risk acceptance criteria for different business sectors and target markets, the banks had further strengthened the management of credit concentration risk. This includes having limits on exposures to specific borrower groups and high-risk segments. Banks were also preparing towards full compliance with the revised requirements on the single counterparty exposure limit by March 2015. Compliance with this requirement will further strengthen the management of concentration risk particularly to large borrowers and their related entities. In this respect, banks continued to make good progress in enhancing internal methodologies to measure and monitor sectoral and counterparty concentrations which support the Internal Capital Adequacy Assessment Process (ICAAP) under Pillar 2 of the capital framework. Based on the Bank's supervisory assessments, the credit assessment standards of banks in relation to exposures to the business sector were generally well-supported by robust credit risk management infrastructures, sufficiently rigorous credit monitoring and recovery processes,

Chart 1.29

Business Sector: Profitability and EDF for Transportation Industry



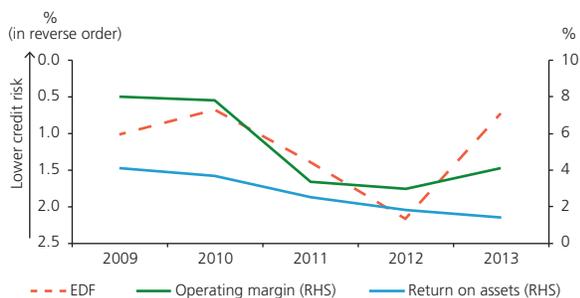
Source: Moody's KMV Credit Edge™, Bloomberg and internal computation

conservative loan loss provisioning practices, and strong oversight arrangements.

The overall debt servicing capacity of businesses is expected to remain intact as observed in the Expected Default Frequency (EDF) for 2014, a measurement of credit risk outlook, which improved further to 0.2% (2013: 0.5%) (Chart 1.25). The EDF for the top five industries that Malaysian financial institutions were most exposed to generally improved during the year, except for a marginal deterioration in the EDF for the transportation industry (Chart 1.29). The weak credit risk outlook for the transportation industry is due to the downward pressure on passenger yields in the global airline industry. Compared to the previous year, the building- and construction-related materials (BCM) industry recorded a marked improvement in the EDF to 0.7%

Chart 1.30

Business Sector: Profitability and EDF for BCM Industry



Source: Moody's KMV Credit Edge™, Bloomberg and internal computation

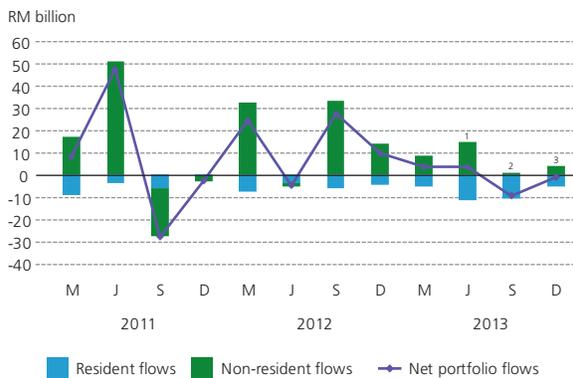
(2012: 2.2%) due to the cement sub-segment which has been experiencing strong demand from the on-going infrastructure construction, although the level remained higher than other industries (Chart 1.30). Domestic steel producers, however, continued to experience compression in profit margins from lower selling prices and sales volume amid competition from cheaper imports. A simultaneous materialisation of default incidences in the transportation and BCM sectors has been assessed to be manageable with estimated losses totalling RM1 billion or 1.3% of the excess capital of banks. Under a simulated adverse macroeconomic scenario applied over three years to business exposures as a whole, excess capital buffers of banks are estimated to be sufficient to cover potential credit losses by more than 4 times (refer to macro stress testing results under 'Financial Institution Soundness and Resilience' of this chapter).

MANAGING FINANCIAL MARKET VOLATILITY AND CONTAGION RISK FROM EXTERNAL EXPOSURES AND OVERSEAS OPERATIONS

The domestic financial markets remained orderly and facilitative of intermediation activity despite being confronted with the spillover effects of continued uncertainties and developments on the external front. These global developments weighed heavily on general investor sentiment and behaviour throughout the year and induced bouts of volatility in short-term capital flows. Domestic developments including concerns over domestic inflation and growth, as well as Malaysia's fiscal consolidation plans also contributed to the higher volatility. The deeper and more diversified domestic financial markets continued to support the smooth intermediation of the short-term and two-way capital flows while containing sharp movements in asset prices and yields, thereby preserving orderly market conditions. These conditions were further supported by the presence of strong domestic institutional investors in the markets. Financial institutions in Malaysia recorded net gains from trading and investment portfolios, while ringgit and the US dollar funding conditions remained favourable. Other exposures arising from claims of Malaysian financial institutions on overseas counterparties, and vice versa, and spillovers from the expansion in overseas operations of Malaysian banks were also well-contained. The potential impact from deleveraging

Chart 1.31

Financial Market: Quarterly Net and Gross Portfolio Flows

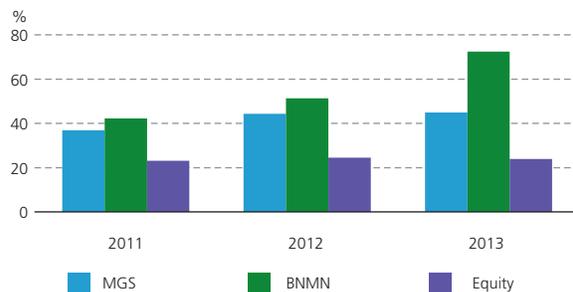


¹Federal Reserve Chairman Ben Bernanke first hinted tapering of asset purchases on 22 May 2013
²Continued uncertainty on Federal Reserve's strategy until the Federal Reserve unexpectedly announced "no-tapering" on 18 September 2013
³Federal Reserve announced first gradual tapering of USD10 billion on 18 December 2013

Source: Department of Statistics, Malaysia

Chart 1.32

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



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

Source: Bursa Malaysia, Bank Negara Malaysia and internal computation

by overseas financial institutions, particularly those in Europe, remained low and further subsided amid improving economic conditions.

Intermediation of volatile short-term portfolio flows in domestic financial markets

Short-term portfolio flows were volatile during the year, with large inflows recorded in the first five months. Between May and August 2013, heightened uncertainties on the timing and pace of the tapering of quantitative easing (QE) by the US Federal Reserve triggered capital flow reversals from emerging market economies including Malaysia. Net portfolio inflows resumed in September and October 2013 as the US

Chart 1.33

Financial Market: MGS Yields



Source: Bank Negara Malaysia

Federal Reserve maintained its large-scale asset purchases. In the last two months of the year, net portfolio outflows were again recorded on market expectations that QE tapering would begin amid improved US economic indicators. The US Federal Reserve subsequently announced that it would begin scaling back its asset purchases from January 2014 onwards. Overall, the year recorded net portfolio outflows of RM2.8 billion, compared to net inflows of RM58.4 billion in the previous year (Chart 1.31). Non-resident holdings of Malaysian Government Securities (MGS) were broadly unchanged at 44.9% of outstanding MGS (2012: 44.4%), while holdings of Bank Negara Monetary Notes (BNMN) increased substantially to 72.5% of outstanding BNMN (2012: 51.4%) as at end-2013. Non-resident holdings of equities were also broadly unchanged at 23.9% of total market capitalisation (2012: 24.5%) (Chart 1.32).

From May to August 2013, selling pressure by non-residents in the government bond market caused MGS yields to rise across the five- to ten-year tenures, increasing by as much as 58 to 92 basis points within the period (Chart 1.33). However, liquidity in the bond market remained intact during the period as domestic institutional investors provided strong support and continued to fill the void amid selling pressure by non-residents. Yields for 5-year MGS and 10-year MGS increased from a trough of 3.03% and 3.08% respectively in May 2013 to reach a peak of 3.68% and 4.14% in August and December 2013 respectively, before ending the year at 3.66% and 4.13%. In the equity market, the FBM KLCI rallied and hit a peak of 1,873 points in December 2013, before ending the year at

Chart 1.34

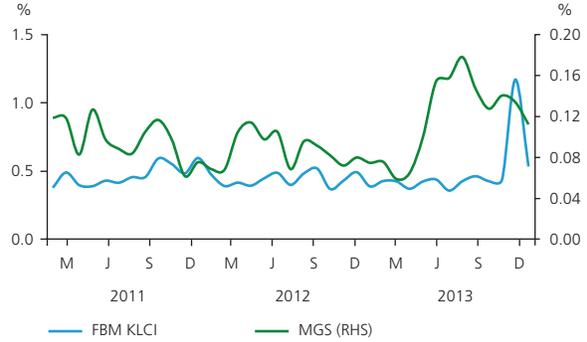
Financial Market: FBM KLCI Price Index and Price-to-earnings Ratio



Source: Bloomberg

Chart 1.36

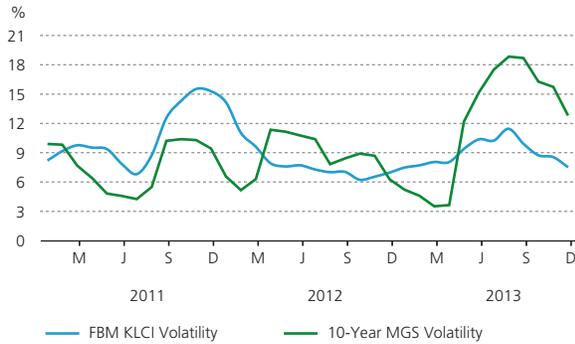
Financial Market: Average Bid-Ask Spreads of FBM KLCI and MGS (% of Mid-price)



Source: Bloomberg, Reuters and internal computation

Chart 1.35

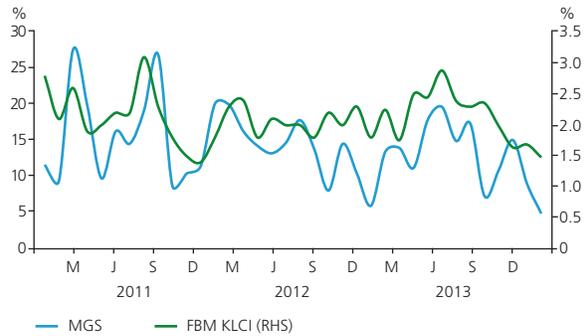
Financial Market: 90-Day FBM KLCI and MGS Yields Volatility



Source: Bloomberg

Chart 1.37

Financial Market: FBM KLCI and MGS Monthly Turnover Ratio



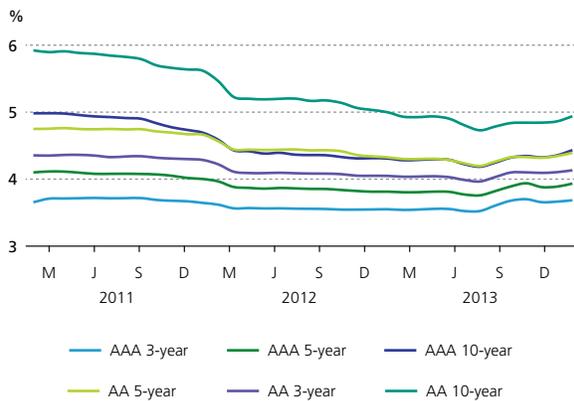
Source: Bloomberg

1,867 points (2012: 1,689 points). The price-to-earnings ratio of the FBM KLCI rose further to 17.7 times (2012: 15.1 times) as at end-2013. Equity prices continued to be driven by economic fundamentals and continued strong and stable earnings performance (Chart 1.34). Volatility in the domestic bond and equity markets increased to average at 11.6% and 9% respectively for the year, recording the highest levels between July and September 2013 (Chart 1.35). Volatility levels, however, remained substantially lower than that observed during the GFC and that of regional peers.

There was also no significant tightening in trading liquidity, both in terms of price and volume (Chart 1.36 and Chart 1.37). During the year, overall bid-ask spreads for MGS increased compared to the previous year in tandem with the movement of volatile portfolio flows, particularly in August,

Chart 1.38

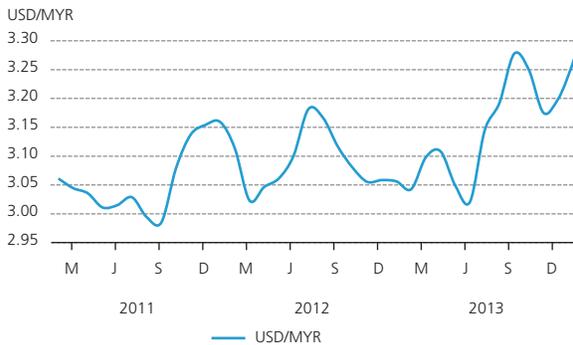
Financial Market: PDS Yields



Source: Bank Negara Malaysia

Chart 1.39

Financial Market: Ringgit Exchange Rate Movement



Source: Bank Negara Malaysia

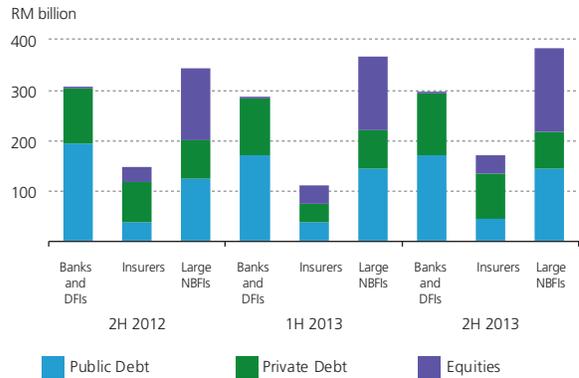
where average spreads increased to a high of 18 basis points before easing back to 13 basis points towards the end of the year. Meanwhile, average bid-ask spreads for the FBM KLCI rose sharply in December, but this was a one-off market reaction to corporate news and had an immaterial impact on the overall prices and volatility of the FBM KLCI. Despite the volatile movements in short-term capital flows, the cost and availability of funding in the domestic PDS (including sukuk) market were largely unaffected. Total new PDS issued (all issuers including financial institutions) amounted to RM121 billion in 2013. While PDS yields tracked the movements in MGS yields, overall levels remained conducive to fulfill the funding needs of businesses (Chart 1.38). Reflecting developments in movements of capital flows, for the year as a whole, the ringgit experienced increased volatility and depreciated by 6.8% against the US dollar at end-2013 (Chart 1.39).

Deeper financial markets and presence of strong institutional investors contributed to orderly intermediation of volatile short-term portfolio flows

During the episode of portfolio outflows between May and August, the sell-off by non-residents was largely absorbed by the large pool of domestic institutional players, namely banks, pension and provident funds, and insurance companies, which provided support for the domestic capital market

Chart 1.40

Financial Market: Holdings of Securities by Domestic Institutional Investors

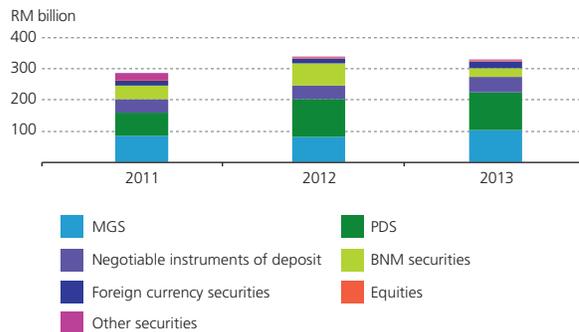


Source: Bank Negara Malaysia

(Chart 1.40). Over this period, MGS holdings by pension and provident funds and insurers expanded by 5.7% and 17.6% to account for 23.7% and 10.8% of total outstanding MGS respectively (end-May 2013: 23.1% and 9.4% respectively). Banks' holdings of MGS also grew by 29.5% or RM23.9 billion to account for 35% of total outstanding MGS (end-May 2013: 27.7%). At the same time, banks reduced holdings of BNMN as non-resident investors who remained in the domestic market increased demand for papers with shorter maturities. Consequently, by year-end, banks' holdings of BNMN declined substantially to account for 8.2% (2012: 21.3%) of the securities portfolio of the banking system, while holdings of government securities, PDS, negotiable instruments of deposit (NIDs) and equities increased correspondingly to account for 32.4%, 42.1%, 15.2% and 1% of the total

Chart 1.41

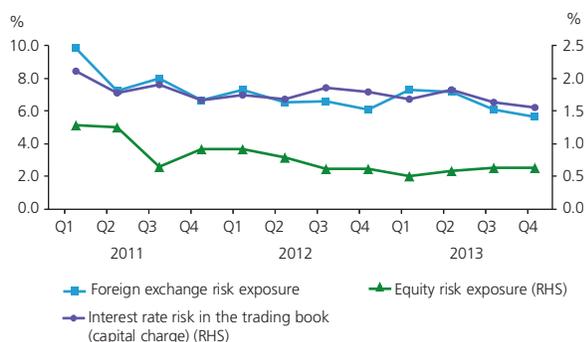
Banking System: Composition of Securities Portfolio



Source: Bank Negara Malaysia

Chart 1.42

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



Source: Bank Negara Malaysia

securities portfolio respectively (2012: 24.8%, 38.8%, 13.1% and 0.3% respectively) (Chart 1.41). In general, there were no material changes in the risk appetite and behaviour of financial institutions. Nevertheless, banks with larger trading book exposures experienced greater income volatility during the year (trading securities formed 3.2% of banking system total assets while trading income comprised 18.3% of banking system pre-tax profit). In particular, investment banks recorded lower pre-tax profit on account of lower gains from investment and trading activities. Overall, the banking system continued to record net gains from the trading and investment portfolios, which increased by 2.9% to contribute 20.1% (2012: 19.9%) of total pre-tax profit.

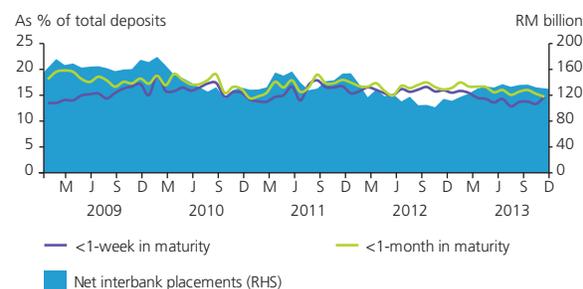
The continued active risk management and hedging by banks contained market risk exposures within manageable levels (Chart 1.42). Banking system exposures to equity risk continued to remain minimal at less than 1% of total capital despite the slight increase in holdings. The capital charge accorded to interest rate risk in the trading book declined to 1.6% (2012: 1.7%) of total capital during the period. During the year, banks continued to actively hedge interest rate exposures via interest rate swaps (IRS) and other interest rate-related derivative contracts, which grew in nominal value by 8.3% to RM786.2 billion. Basis risk remained manageable, supported by easing volatility of spreads between MGS and IRS rates. In 2013, the largest daily differential between changes in 10-year MGS yields and IRS rates narrowed by 4 basis points to 12 basis points (2012: 16 basis points).

The aggregate foreign exchange (FX) risk exposures of the banking system fluctuated in tandem with greater exchange rate volatility during the year, reaching a peak of 7.9% of total capital at the end of the first quarter. This reflected the activities and exposures of several locally incorporated foreign banks with active portfolios in FX-related derivatives and foreign currency (FCY) funding. The FX risk exposures were primarily attributed to derivative contracts arising from continued demand by businesses to better manage exchange rate-related risks, interbank transactions, and FCY lending and funding. Banks continued to actively manage the FX exposures, supported by internal value-at-risk limits, thus resulting in the narrowing of the net open position (NOP) to 5.7% (2012: 6.1%) of total capital by year-end as banks pared down US dollar exposures. Consequently, the US dollar NOP of the banking system remained stable at 0.3% (2012: 0.2%) of total capital, while the NOP of other major currencies, such as the euro, Singapore dollar, pound sterling and Australian dollar, were less than 0.3% of total capital for each respective currency. Banks also actively hedged the FCY positions via swaps, forwards and other FX-related derivative contracts, which grew in nominal value by 11.8% to RM585.3 billion.

The funding and liquidity positions of banks remained sound and stable throughout the year supported by four key factors. First, banks maintained a largely ringgit deposit-based funding structure. In 2013, total deposits placed with the banking system grew strongly by 8.5%. Meanwhile, the loan-to-deposit ratio rose slightly to 84.5% (2012: 82.1%). The profile of depositors remained generally unchanged and evenly distributed between individuals (35.8%),

Chart 1.43

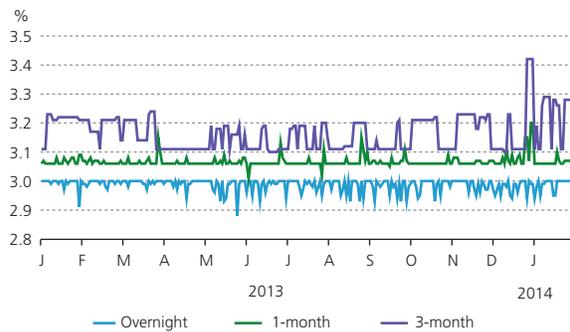
Banking System: Liquidity Buffer and Net Interbank Placements with Bank Negara Malaysia



Source: Bank Negara Malaysia

Chart 1.44

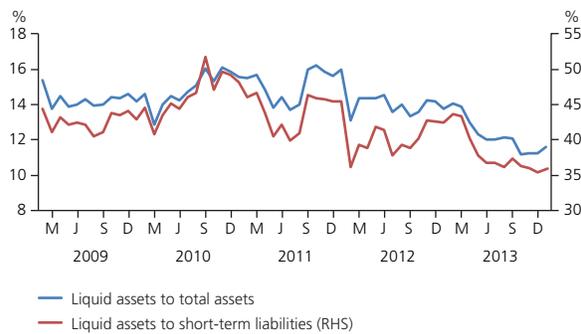
Financial Market: Ringgit Interbank Rates



Source: Bank Negara Malaysia

Chart 1.45

Banking System: Liquid Assets to Total Assets and Short-term Liabilities



Source: Bank Negara Malaysia

Note: Beginning January 2012, the computation of liquid assets excludes interbank deposit

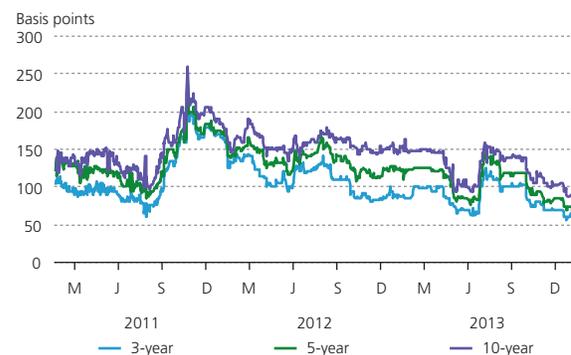
and domestic business enterprises (35.5%). Non-resident deposits only accounted for 3.8% of total deposits and remained relatively stable over the past five years. Despite a relatively high composition of 'at call' deposits comprising NIDs, current, saving and time deposits, these deposits continued to demonstrate a high level of stability even during periods of heightened volatility in the domestic financial markets. Second, existing ringgit and FCY liquidity buffers of the banking system remained well above the minimum regulatory requirements at 14.7% of total deposits for liquidity needs maturing in less than one week (or three days for investment banks). Net interbank placements with the Bank amounted to RM130.2 billion or 8.5% of total deposits (Chart 1.43) while ringgit interbank rates were relatively unchanged across all maturities, with little signs of market segmentation or heightened counterparty risk aversion across individual banks (Chart 1.44).

Banks also continued to maintain a comfortable level of liquid assets which accounted for 11.5% (2012: 13.8%) of total assets or 36.5% (2012: 42.5%) of short-term liabilities (Chart 1.45).

Third, banks have not been reliant on offshore wholesale funding markets to fund domestic operations. Such funds have consistently been less than 11% of total funding, thus minimising the risk of any disruption in domestic financial intermediation if global liquidity contracts or is reallocated to other parts of the world. Onshore US dollar liquidity remained intact as cross-currency swap spreads ended lower than the previous year, and narrowed significantly by between 45 and 77 basis points across different tenures from peak levels in June 2013 (Chart 1.46). Fourth, the banking system FCY funding gap also remained small at 0.2% of total capital, with low currency or maturity mismatches associated with external exposures to non-resident counterparties. During the year, some banks increased the amount of FCY borrowings as part of centralised FCY liquidity management operations to fund overseas operations and foreign investments, and to fulfil the FCY funding needs of local customers. This contributed to an expansion in the external liabilities of the Malaysian banking system. Although total external liabilities grew by 28.1% during the year, the banking system maintained a net external asset position of RM14.7 billion as at end-2013 on account of higher foreign lending and direct investments in foreign securities, partly due to portfolio diversification and increased overseas operations and transactions (Chart 1.47). In the final quarter of 2013, the banking system

Chart 1.46

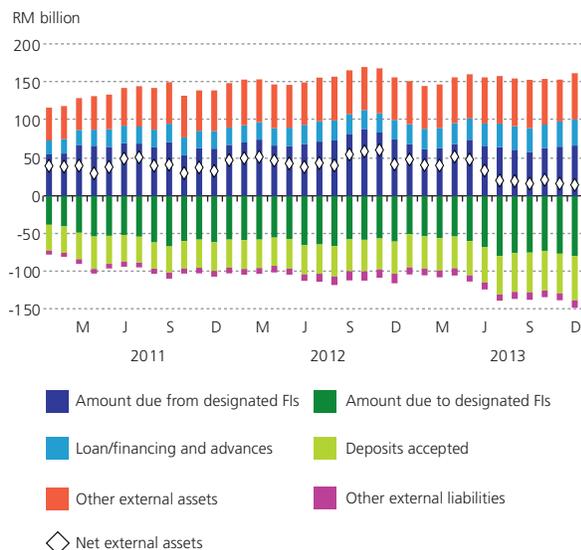
Financial Market: USD/MYR Cross-currency Basis Swap Spread



Source: Bank Negara Malaysia

Chart 1.47

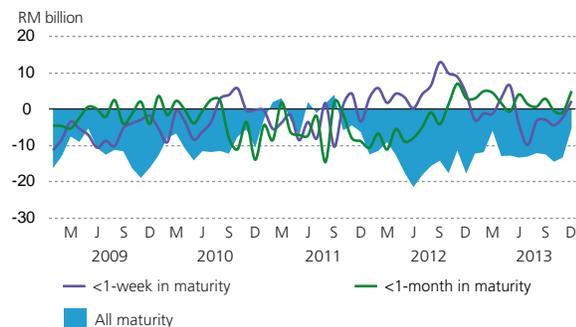
Banking System: External Assets and Liabilities



Source: Bank Negara Malaysia

Chart 1.48

Banking System: US Dollar Liquidity Mismatch



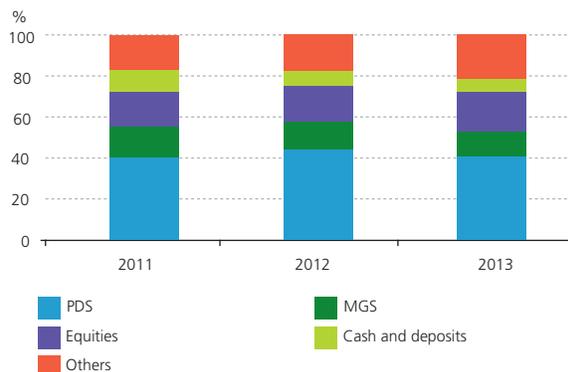
Source: Bank Negara Malaysia

recorded a net surplus position in US dollar liquidity of RM1.5 billion and RM5.3 billion in the less than one week and one month maturity buckets respectively (Chart 1.48).

Similar to the banks, there was no material shift in the risk taking behaviour of insurers and takaful operators. Investments in equities were higher by 22.6% to account for a larger share of 17.6% (2012: 15.4%) of total insurance and takaful fund assets but this had little effect on the overall investment profile of insurers and takaful operators. The higher equity holdings were attributed mainly to portfolio rebalancing strategies by life insurers and family takaful operators in efforts to improve

Chart 1.49

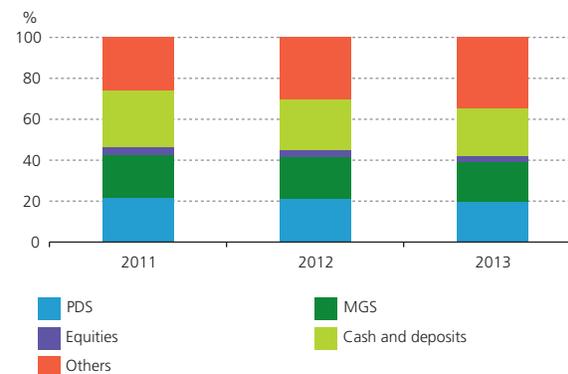
Life Insurance Sector: Assets Composition



Source: Bank Negara Malaysia

Chart 1.50

General Insurance Sector: Assets Composition



Source: Bank Negara Malaysia

overall investment returns on in-force policies under a prolonged low interest rate environment. In general, the investments of life insurers and family takaful operators continued to be concentrated in MGS and high-grade PDS rated AA and above, which accounted for 50.9% of total assets. FCY denominated assets remained small at 8.1% (2012: 8%) of total capital. Liquid asset holdings of general insurers and takaful operators, in the form of deposits placed with domestic financial institutions to meet short-term obligations, remained relatively stable at 22.8% (2012: 24.6%) of total assets (Chart 1.49 and Chart 1.50). On aggregate, the market risk exposures of the insurers and takaful operators declined slightly to account for 12.2% of total capital (2012: 12.5%), comprising mainly equity and interest rate risks (Chart 1.51). Some insurers and takaful operators with relatively larger investments in debt securities were more affected by the increased

Chart 1.51

Insurance Sector: Market Risk Composition



Source: Bank Negara Malaysia

market volatility during the year which resulted in higher mark-to-market losses and a decline in investment-related income. Overall, the life insurance and family takaful sector recorded lower excess income over outgo of RM13 billion (2012: RM17.9 billion), driven by a net capital loss of RM1.5 billion (2012: net gains of RM2.2 billion).

Banks and insurers are expected to withstand mark-to-market and credit losses under simulated scenarios of severe portfolio outflows

Two-way portfolio flows and volatile financial market conditions are expected to continue in 2014 although financial institutions have increasingly factored in key drivers such as the growth outlook and QE tapering in their investment strategies. Malaysian financial institutions remain well-positioned to manage the expected volatile portfolio flows. Under simulated scenarios of severe portfolio outflows (more than double the levels exhibited during the GFC) over a short duration, banks and insurers are expected to continue to record profits, albeit at lower levels. This assessment has incorporated a range of extreme shock parameters, including mark-to-market losses from holdings of equities, interest rate risk in the trading books and FCY exposures in the balance sheets, and credit losses from businesses affected by significant exchange rate volatility. Disregarding available retained earnings buffers to withstand such shocks, the total capital

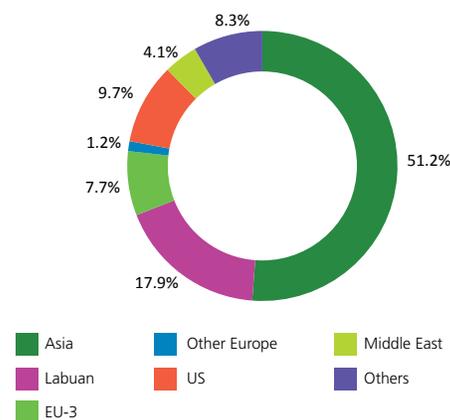
ratio of banks is estimated to remain close to 14% and the capital adequacy ratio of insurers will remain above 200%. In terms of US dollar liquidity shortfall under the simulated scenarios, the potential shortfall for the banking system is assessed to be limited at less than 5% of the Bank's international reserves as at end-2013.

Counterparty risk from financial institutions' external exposures

Counterparty risk arising from claims by Malaysian financial institutions on external parties remained manageable during the year. Claims by Malaysian onshore banks on all external or overseas counterparties (including counterparties in the Labuan International Business and Financial Centre (IBFC)), increased by 13.1% in 2013 to RM165.7 billion. Such claims represented 8% of banking system total assets and were largely attributed to higher claims on counterparties in Labuan IBFC, PR China and the US. About 69% of total external claims were on Asian economies, including Labuan IBFC, in line with the sustained intra-regional trade and continued overseas expansion of Malaysian banks (Chart 1.52 and Chart 1.53). These were mainly claims on Singapore, Indonesia, Hong Kong SAR and Thailand, of which the bulk was with the overseas branches and subsidiaries of domestic banking groups (DBGs) in the form of equity investments, retained earnings held, interbank placements and nostro account balances with these entities. More than 70% of these intra-group claims are denominated in the US dollar and Singapore dollar,

Chart 1.52

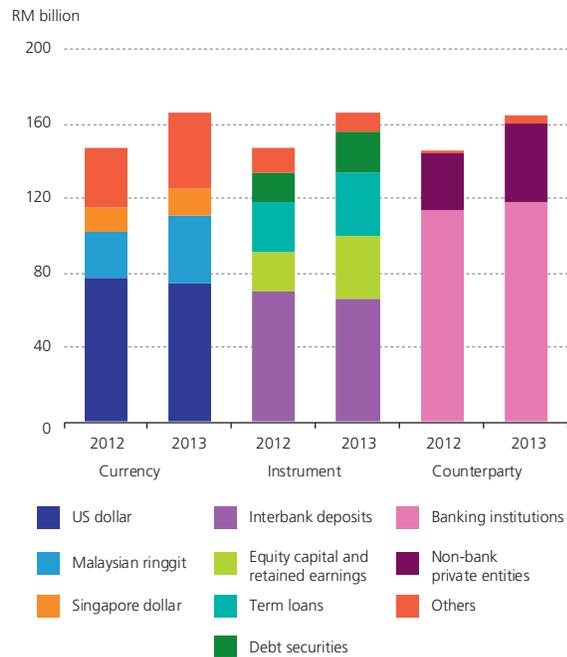
Banking System: Composition of External Claims by Location



Source: Bank Negara Malaysia

Chart 1.53

Banking System: Composition of External Claims by Currency, Instrument and Counterparty



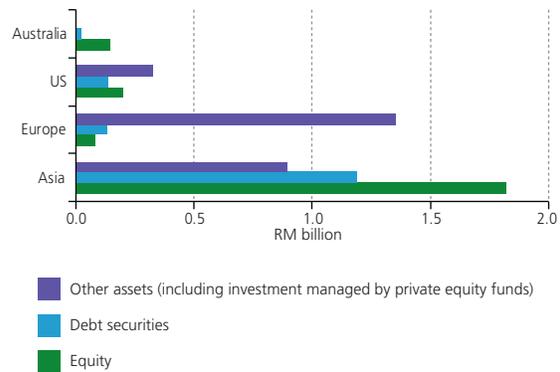
Source: Bank Negara Malaysia

and generally pose relatively low counterparty and contagion risks to onshore operations. Claims on Labuan IBFC counterparties were mainly against banks and financial institutions, more than half of which were related entities of Malaysian onshore banks. Similarly, a large portion of these claims was in the form of equity investments and interbank placements denominated in the US dollar.

Claims by Malaysian banks on counterparties in the US and Europe remained stable at 18.5% (2012: 18.4%) of total external claims during the year following the resumption of capital flows into the major advanced economies amid stronger indicators of growth. In 2013, claims on counterparties in the US increased by 61% to RM16 billion, of which more than 70% were in the form of US treasury securities, US dollar-denominated private debt securities and nostro account balances. Claims by Malaysian onshore banks on European counterparties declined slightly to RM14.7 billion on account of lower interbank placements and nostro account balances, where the bulk was primarily concentrated in the EU-3 (United Kingdom (UK), France and Germany). Other claims in the form of derivative transactions, and holdings of money market

Chart 1.54

Insurance Sector: External Investment Exposure by Region



Source: Bank Negara Malaysia

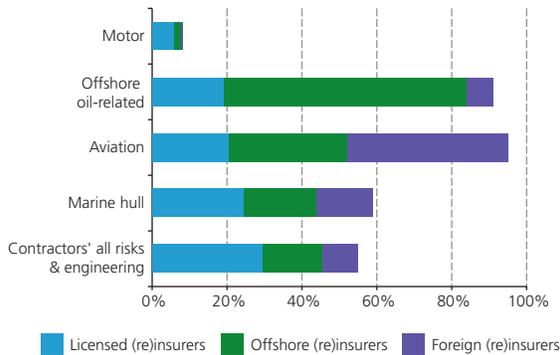
instruments, debt and equity securities issued by European counterparties remained very small at less than 0.4% of banking system total assets. Exposures to valuation losses arising from euro currency movements continued to be limited, as external claims denominated in the euro remained low at 0.9% (2012: 1.1%) of total capital. In addition, credit risk exposures of banks from term loans provided to non-bank private corporations in the euro area amounted to only 0.5% of total capital. The study on the potential contagion implications using the network simulation analysis on interlinkages via cross-border claims and liabilities also reaffirmed the limited contagion implications on the Malaysian banking system from a single or simultaneous event of distress in the banking systems of one or two countries (refer to the box article 'External Connectivity and Risk of Contagion to the Malaysian Banking System').

External claims by Malaysian insurers (including takaful operators) were predominantly in the form of direct overseas investments and reinsurance exposures. Total overseas investments remained small at 2.9% of total assets or 9.2% of total capital base, with about 58.6% in Asia comprising mainly equities issued in Indonesia and Singapore. Investments in Europe increased substantially to RM2.2 billion (2012: RM0.4 billion) or 3.1% of total capital base driven by a few large insurers amid economic recovery in Europe. These comprise mainly investments in private equity funds and equities issued in the UK, France and Germany (Chart 1.54).

During the year, Malaysian general insurers ceded a lower amount of premiums to (re)insurers

Chart 1.55

Insurance Sector: Reinsurance Ceded Ratio by Selected Business Classes



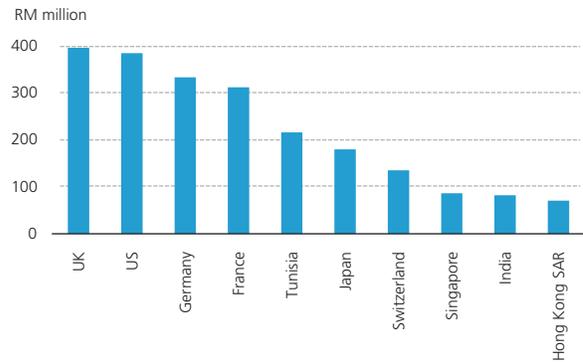
Source: Bank Negara Malaysia

operating in Labuan IBFC and abroad (reinsurance of life business is negligible). This amount declined by 3.7% to RM2.9 billion or 18.1% (2012: 20.1%) of total gross premiums, mainly on large and specialised risks in the aviation, fire, oil and gas, engineering and marine hull business classes (Chart 1.55). Reinsurance exposures to (re)insurers abroad were mainly to entities based in Europe and the US, which collectively accounted for 65.3% (2012: 52%) of total foreign reinsurance exposures. Exposures to European (re)insurers grew by 13.3% to RM1.75 billion or 18.5% of general insurers' total capital base. Counterparty risks from exposures to such entities, which are mainly headquartered in Germany, Switzerland and the UK (Chart 1.56), remained low given the sustained strong ratings and sound financial positions. About 30% of the exposures were from reinsurance placements with the Malaysian branch of three European-based (re)insurers. As at end-2013, the branches recorded a combined capital adequacy ratio of 239% (calculated based on net working funds held in Malaysia).

Reinsurance claims exposures to Labuan IBFC entities, comprising mainly branches or subsidiaries of global insurers with strong credit ratings and financial standing, amounted to RM1.5 billion or 17.6% of the total capital base for the general insurance industry. The global reinsurance market recorded lower estimated losses of about USD45 billion during the year (2012: USD75 billion; 2011: USD124 billion), the lowest level since 2009, on account of fewer catastrophes. Global reinsurers recorded sustained profitability with an average return on equity of 11.4% (2012: 12.2%). The

Chart 1.56

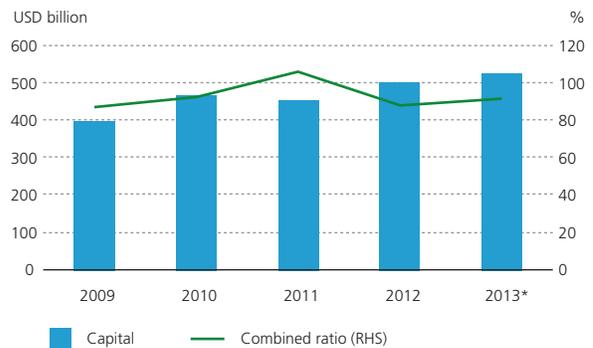
Insurance Sector: Foreign Based Reinsurance Exposure by Top Countries



Source: Bank Negara Malaysia

Chart 1.57

Insurance Sector: Global Reinsurers Capital and Combined Ratio



* Capital based on figure of third quarter 2013
Source: Aon Benfield and Standard & Poor's Ratings Services

combined capitalisation of global reinsurers reached a record level of about USD525 billion (2012: USD505 billion), providing additional surplus reinsurance capacity (Chart 1.57). The credit default swap spreads of global reinsurers narrowed and remained relatively low throughout the year.

The potential impact on Malaysia from deleveraging activities by European financial institutions remained low, with risks subsiding further since the GFC. As at end of the third quarter of 2013, European banks' claims on Malaysia (including Labuan IBFC entities) increased to USD66.5 billion (2012: USD63 billion) or 22% of GDP, according to the Consolidated Banking Statistics published by the Bank for International Settlements (BIS statistics). The profile of these

External Connectivity and Risk of Contagion to the Malaysian Banking System

The increasing complexity and globalisation of financial services has reinforced the interlinkages between financial institutions, markets and countries. This higher level of interconnectedness promotes innovation, growth and competition, allows for greater diversification and redistribution of risks, and enhances the efficiency of liquidity and credit allocation. However, extensive interlinkages of the financial system can also increase contagion risk across markets and borders through the network of on- and off-balance sheet financial obligations and reputational links between banks and their counterparties. Increasingly complex networks of financial obligations have further heightened the potential for idiosyncratic shocks affecting an internationally active financial institution (or a highly interconnected banking system) to cause wider spillovers to other financial systems as experienced during the Global Financial Crisis (GFC). The magnitude of such contagion shocks is also likely to be amplified.

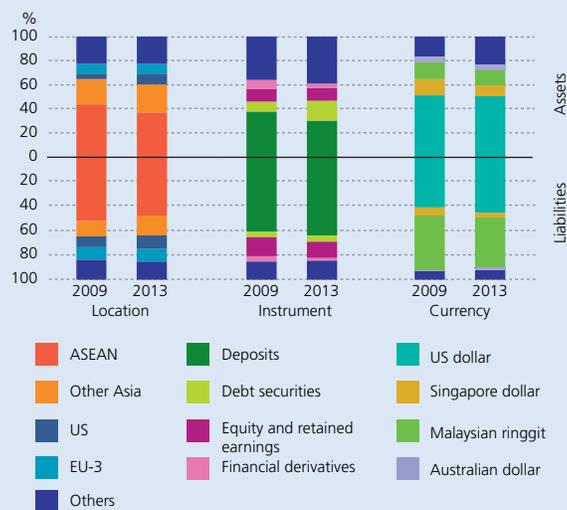
This article evaluates the cross-border claims and liabilities of Malaysian banks, and the potential risks associated with increased financial integration from a network analysis perspective. The network analysis is used to examine linkages between the Malaysian banking system and banking systems in other countries, including those that headquarter internationally active banks¹, to establish if and to what extent external linkages have resulted in heightened contagion risks to Malaysian banks.

Cross-border Interconnectedness of Malaysian Banks

The nature and extent of external financial linkages of the Malaysian banking system have evolved and increased steadily since the GFC. Claims on, and liability obligations to, non-resident counterparties grew at a compounded annual growth rate (CAGR) of 13% and 12% respectively over the past five years. Total external exposures however, remained low at less than 10% and 15% of the total assets and total funding of the banking system respectively as at end-2013. The bulk of the external exposures of the banking system relates to intra-group transactions between banking institutions in Malaysia and their overseas parents, subsidiaries and affiliates, mostly in the form of interbank

Chart 1

Banking System: External Assets and Liabilities by Location, Instrument and Currency



Source: Bank Negara Malaysia

¹ There are 12 global systemically important banks (G-SIBs) operating in Malaysia through locally-incorporated subsidiaries, some of which have extensive branch networks operating in the major cities.

placements and borrowings (Chart 1). The counterparty risks associated with these transactions are assessed to be manageable based on the low default probability of the counterparties, which also avoided destabilising credit or funding shocks during the peak of the GFC.

Apart from interbank placements and borrowings, the increase in cross-border exposures was also contributed by the higher holdings and issuances of debt securities (CAGR of 29% and 17% respectively). These exposures accounted for 16% and 5% of external claims and liabilities respectively. More than 40% of the banks' holdings of non-resident debt securities were papers of good credit standing issued by financial institutions, sovereigns and non-bank private entities in the US and Singapore. On the liability side, approximately 83% of total debt securities issued by domestic banks in the international capital markets were denominated in US dollar and Singapore dollar. The higher holdings and issuances of these debt securities were in part driven by the diversification of trading and investment portfolios, and to better meet growing liquidity and funding needs in significant currencies, particularly, for overseas operations. As for the locally-incorporated foreign banks, the steady expansion of the Malaysian operations during this period had also resulted in the paid-up capital and retained earnings to grow at a CAGR of 9%, constituting 13% of total external liabilities of Malaysian banks.

The country composition of cross-border exposures was dominated by on-balance sheet transactions with (i) regional financial centres; (ii) countries where Malaysian banks have overseas operations; and (iii) countries with internationally active banks, particularly those with locally-incorporated subsidiaries in Malaysia. Claims on, and liabilities to, Asian countries accounted for 62.8% of Malaysian banks' total external exposures. Cross-border claims on ASEAN grew steadily at a CAGR of 8% over the past five years in tandem with new business acquisitions and the organic expansion by several domestic banking groups in Singapore, Indonesia, Thailand, Vietnam, Laos and Cambodia. Within the same period, claims on East Asian countries also increased by 15%, driven by higher placement of interbank deposits and nostro balances with the parent and affiliates in Hong Kong SAR and PR China to facilitate growing regional trade and currency settlements. About a fifth of the cross-border claims were to the US and UK, predominantly arising from holdings of US Treasuries and interbank transactions between domestic banks or locally-incorporated foreign banks in Malaysia and the parent and affiliates in London and New York. As a result of the growth in cross-border exposures, banks in Malaysia were more exposed to adverse developments in the foreign exchange markets and yield movements across different economies. Moderate spillover effects were felt in the domestic market during periods of tightened US dollar conditions in 2008, as evident from the increased spreads of onshore USD/RM cross-currency swap rates and the widening of short-term US dollar liquidity mismatch positions of banks in Malaysia. This risk however, is mitigated largely by the low reliance of banks in Malaysia on cross-currency funding and offshore wholesale funding markets, limits on counterparty exposures and more active centralised liquidity management of US dollar funds within the banking groups. This is supported by the network analysis presented below.

A Network Approach to Assess Cross-border Contagion and Network Externalities

The network simulation analysis is used to (i) quantify and trace the propagation of credit and funding shocks (contagion paths) across banking systems induced by a hypothetical default event in a particular country; (ii) identify potential systemic linkages and cross-border domino effects between internationally active banks and the Malaysian banking system; and (iii) measure a banking system's susceptibility to external spillovers and its propensity to amplify cross-border contagion. For the purpose of this study, the network analysis is constructed from a matrix of inter-banking system cross-border claims and liabilities² involving selected countries with a higher relative degree of connectivity with the Malaysian banking system, either due to (i) high direct external claims and

² Data for the network analysis is derived from the Bank for International Settlements (BIS) Locational Statistics, with conservative interpolation and estimation of bilateral credit and funding exposures for selected countries. Alternatively, the cross country analysis can be undertaken using the BIS Consolidated Statistics (immediate borrower basis or ultimate risk basis).

funding obligations with Malaysian banks; (ii) the presence of significant regional operations of Malaysian banks; or (iii) high intra-group linkages of locally-incorporated foreign banks with parent or related institutions abroad. The banking systems of these 11 countries represented more than 80% of total external claims on, and of total external liabilities to, all Malaysian banks.

The network simulation model is applied by generating the impact on the capitalisation of the banking systems in the sample population from: (i) a hypothetical default by the banking system of a particular country (the 'trigger country'); or (ii) hypothetical simultaneous default by two banking systems. The model simulates the combined impact of credit and funding shocks on the cross-border interbank obligations³ without taking into account any policy response by the authorities such as liquidity assistance or capital support. To simulate a credit shock, the banking system in the trigger country is assumed to default on the outstanding cross-border interbank borrowings, causing other counterparty banking systems to incur a 100% loss⁴ which is then fully absorbed using system-wide capital. For funding shocks, the banking system in the trigger country ceases to provide cross-border interbank funding⁵, contributing to liquidity strains in other counterparty banking systems. The affected counterparty banking systems are assumed to replace a fraction of the lost funding⁶ through a fire sale of assets. Severe haircuts⁷ are applied in the model to capture the amplification of systemic risk that can arise from exposures to common asset classes, in turn reinforcing a downward spiral in asset values and triggering steep declines in the market value of the portfolios of other banks. The combined effects of credit and funding contagion shocks are simulated in an iterative manner until no additional banking system experiences a decline in capitalisation below 8%.

This analytical framework is not intended to predict the likelihood of distress of a particular banking system. Rather, it seeks to provide useful insights on the potential direct and indirect cross-border spillovers to the Malaysian banking system, and the ability of the system to absorb losses under tail-risk events. The hypothetical simulations using aggregated data treat each banking system as a single foreign counterparty and therefore, assume a widespread default by all individual banks within a country on its foreign exposures⁸. While the likelihood of such extreme events occurring in a contemporaneous and homogenous manner is low, the stringent assumption was used to estimate the maximum potential contagion impact arising from multiple credit defaults and funding shocks materialising simultaneously, disregarding the effects of credit risk transfers, loss mitigation response by banks or policy intervention by authorities. The static modelling of institutional behaviour at the aggregated level also allows an assessment of both the first order impact of distress (direct external contagion) and its amplified effects across banking systems as a result of indirect spillovers due to network externalities. Such self-reinforcing domino effects may not necessarily lead to system-wide failures, but can indicate the degree to which a particular banking system may be weakened by the transmission of cross-border financial distress.

Simulation Results

Single trigger country

The network analysis revealed that the simulated distress of the banking system in one trigger country has limited direct contagion impact on the Malaysian banking system. Out of the 11 individual

³ Cross-border exposures include (i) loans and deposits; (ii) holdings or own issues of debt securities; and (iii) other claims and liabilities.

⁴ Loss given default of 100% reflects the inability of a creditor banking system to recover any of the loans as banks typically face substantial uncertainty over recovery rates in the short run, particularly when it takes considerable time for distress-debt markets to price in recently defaulted instruments.

⁵ Assume no rollover of outstanding external funding irrespective of maturity and funding sources.

⁶ 50% of funding needs are assumed not to be refinanced in the simulations. The extent to which a bank is able to replace an unanticipated decline in interbank funding depends on the liquidity conditions in the global or domestic money markets. As demonstrated in the recent GFC, the complexity and opacity in cross-border banking led to a system-wide liquidity squeeze due to perceived solvency concerns and heightened counterparty risk aversion.

⁷ The model assumes that assets are traded at a discount (market value is less than book value) when the availability of abundant, instantaneous liquidity in the money and capital markets diminishes during stressed periods.

⁸ The simulations arbitrarily assume only a fraction (75%) of the banking system defaults.

hypothetical defaults, six trigger countries were found to have no contagion impact on the domestic banking system. The susceptibility of Malaysian banks to adverse cross-border spillovers is only heightened when a banking system distress spreads to two or more countries in subsequent contagion rounds. In all of the single trigger country simulations, the capitalisation of the Malaysian banking system was only severely affected in the final round of contagion (where the contagion loop from a simulation ends), after other banking systems in the sample have also suffered extreme financial distress. For example, in simulations where the trigger country is outside Asia, the total capital ratio of the Malaysian banking system only fell below 8% after system-wide distress has affected major internationally active banks in at least seven advanced economies within the sample. This indicates that indirect spillovers are only felt through losses amplified by network externalities.

As expected, the contagion impact on the domestic banking system was more pronounced when the financial distress originates from trigger countries with a stronger on- and off-balance sheet links with Malaysian banks. For example, the total cross-border claims by Malaysian banks on Singapore accounted for 23% of total external assets of the domestic banking system as at end-2013, while external liabilities of Malaysian banks to Singaporean counterparties represented 46% of total external liabilities of the domestic banking system. This is attributed primarily to the strong presence of Malaysian banks in Singapore and vice versa. The branch operations of Malaysian banks in Singapore alone accounted for at least 4% of the group assets, with profits from operations in Singapore contributing between 4% and 25% to group profits. Singaporean banks operating in Malaysia accounted for 8.4% of total Malaysian banking system assets. Despite these linkages, the simulated contagion impact on the Malaysian banking system arising from a hypothetical banking system distress scenario originating from Singapore was only felt in the third contagion round. For countries such as the US and UK which are headquarters to internationally active banks, the indirect contagion effects on the Malaysian banking system only occur after all major banking systems in the sample have experienced acute financial distress. This finding supports the limited susceptibility of the Malaysian banking system to the potential indirect spillovers originating from the Malaysian subsidiaries of six G-SIBs headquartered in the US and UK in the event of system-wide distress occurring in these countries. Similar findings were observed for the two European G-SIBs operating in Malaysia.

Two trigger countries

The potential direct contagion impact to the Malaysian banking system from a simultaneous banking system distress in two countries was also found to be contained. The simulated pair-wise defaults affect domestic banks in the second to fourth rounds of contagion, after all other banking systems in the sample have suffered extreme financial distress. The extent and speed of contagion paths were significantly augmented when a cross-border crisis affects major banking systems in both advanced and emerging economies simultaneously. New contagion paths were found to emerge for countries which did not induce financial distress in other banking systems under the single trigger country simulations. Conclusion derived from the different permutations of simulated joint distress of two banking systems showed that the probability of a contagion impact to the Malaysian banking system was found to be twice as high compared to simulations involving a single trigger country. This is explained partly by the new contagion paths caused by extreme distress in countries without cross-border spillovers on a standalone basis. In other words, potential losses could be further amplified by connections between a pair of banking systems that together can cause wider spillovers than individually.

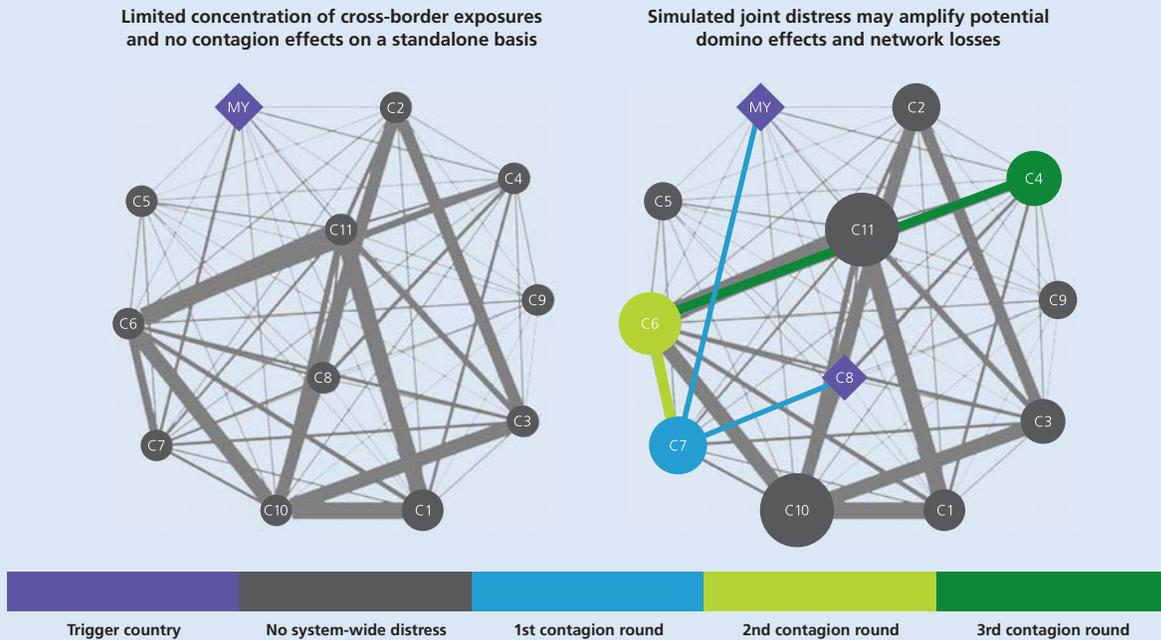
Contagion by Malaysian banks

The extent of potential direct and indirect contagion posed by the Malaysian banking system on cross-border banks in the regional and advanced economies was also found to be limited. The simulated financial stress in the Malaysian banking system alone does not threaten system-wide solvency in other countries. In addition, simulations of joint distress in the Malaysian banking system together with a banking system outside the Asia Pacific region that headquarters internationally active banks did not induce additional system-wide distress in other countries in the sample. This implies that potential losses from a widespread distress among banks headquartered in advanced economies

are not significantly amplified as a result of connections with the banking system in Malaysia. However, when the system-wide distress involves another banking system in the Asia Pacific region simultaneously, the potential contagion impact on other jurisdictions within the sample increases, with two additional contagion paths observed (Diagram 1). This is consistent with the more pronounced cross-border interconnectedness within the region, following the expansion of intra-regional trade and regionalisation activities of the Malaysian banks.

Diagram 1

Interconnectedness of Malaysian Banking System and Effects of Network Externalities on Contagion



Note: Each node represents the banking system of a country from the sample population (12 in total, including Malaysia). The width of the lines denotes the relative degree of interconnectedness between two banking systems, as measured on a net cross-border exposures basis. The size of the node in the right diagram represents the relative measure of cumulative capital losses arising from simulated credit and funding shocks in all contagion rounds.

Source: Bank for International Settlements, Bank Negara Malaysia and internal estimation

Policy Priorities

The increasing level of financial and non-financial linkages among internationally or regionally active banks underscores the importance of monitoring interconnectedness as a potential source of systemic vulnerability. However, financial network structures are complex, constantly in flux and therefore, often challenging to ascertain. While the Bank will continue to develop and enhance the use of macroprudential surveillance tools to monitor systemic financial linkages within and outside of the financial system, including the practical application of financial network analysis, there is a role for collective efforts by policymakers to improve the monitoring of global and regional systemic linkages. This should include effective arrangements for multilateral information sharing and surveillance, and wider coverage of reporting on cross-border financial obligations. At the regional front, the Executives' Meeting of the East Asia Pacific Central Banks (EMEAP) serves as an important platform in monitoring potential risks associated with greater global and regional interconnectivity. This multilateral cooperation framework has forged strong cross-border coordination within the region in areas relating to surveillance, financial safety nets and crisis prevention, management and resolution. Going forward, EMEAP will continue to play an important role in bolstering such regional arrangements as financial integration within Asia and between Asian and other regions deepens.

Given the potential for external contagion shocks to expose domestic vulnerabilities and exacerbate the risk of instability within the domestic financial system, the Bank places a high priority on ensuring strong domestic institutions that are prudently managed, and comprehensive and effective arrangements for crisis containment, management and resolution. This is critically supported by the enhanced financial stability arrangements that have been put in place under the Central Bank of Malaysia Act 2009 (CBA), the Financial Services Act 2013, the Islamic Financial Services Act 2013 and the Malaysia Deposit Insurance Corporation Act 2011. They include the ability of the Bank to take broad measures to address risks to financial stability arising from the exposures and activities of non-regulated institutions; strengthened governance arrangements to oversee and coordinate such measures through the Financial Stability Executive Committee which is established under the CBA; comprehensive powers to undertake resolutions of financial institutions and non-bank financial institutions; and an effective and comprehensive deposit insurance system that provides strong incentives for sound risk management. The strengthened prudential framework and enhanced cross-border cooperation arrangements that are being implemented for the oversight of financial groups (elaborated further in Chapter 3) will further reinforce the resilience of the domestic financial system against external contagion.

References

Allen, F. and D. Gale, (2000), 'Financial Contagion', *Journal of Political Economy*, Vol. 108, No.1, pp1-33.

Chan-Lau, J., M. Espinosa, K. Giesecke and J. Solé (2009), 'Assessing the Systemic Implications of Financial Linkages', *IMF Global Financial Stability Report*, 2.

Upper, C. (2007), 'Using Counterfactual Simulations to Assess the Danger of Contagion in Interbank Markets', *BIS Working Paper No. 234*.

claims has remained unchanged, with about 58% comprising ringgit-denominated claims by European banks' subsidiaries in Malaysia. Such claims represent equity investments by the parents and assets of the Malaysian subsidiaries. Malaysia has seven locally-incorporated European banking entities (LIEBs) with headquarters in the UK, France and Germany. The LIEBs continued to exhibit strong and consistent operating performance and returns while maintaining stable market shares. The local operations of these subsidiaries largely comprised lending to Malaysian borrowers, holdings of securities issued by Malaysian entities, deposits placed with financial institutions in Malaysia, and transactions involving financial contracts with Malaysian counterparts. Excluding UK-based banks, total foreign claims by European banks on Malaysia as reported in the BIS statistics only accounted for USD16 billion or 5.3% of GDP. For the insurance industry, European-based insurers in the domestic market accounted for 21.8% of total premiums. The parent entities of these insurers have continued to demonstrate strong financial positions throughout the year, thus limiting risk of contagion to the Malaysian operations.

Overseas operations of domestic banking groups

The overseas operations of DBGs expanded further in 2013 particularly in the Asian region, benefitting from continued growth in these economies. Total assets of overseas subsidiaries and branches of the DBGs expanded by 16.3% since end-2012 to RM410 billion as at end-

2013 (2012: RM353 billion). This accounted for 23.2% of total assets of the DBGs with overseas operations, ranging between 2.9% and 39.1% for individual DBGs. Indonesia and Singapore are hosts to a significant share of DBGs' overseas operations, with assets of overseas operations of DBGs in these two countries accounting for about 62% of total overseas operations of the banks (Chart 1.58). Exposures from overseas operations in the Labuan IBFC remained low at 2.8% of DBGs' total assets and ranged between 1.2% and 7.5% of individual DBGs' total assets.

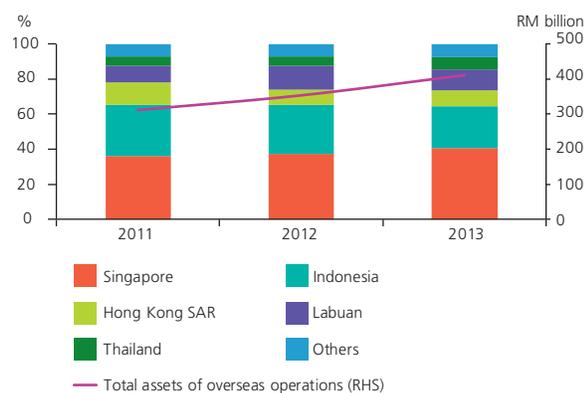
Contribution of overseas operations to profit of domestic banking groups remained stable, supported by strengthened group-wide risk management

The risk of adverse spillovers from the overseas operations of DBGs continues to be limited by the (i) stable asset profile, which comprises mainly traditional lending activities; (ii) low-risk funding structure, predominantly supported by local currency deposits; (iii) active risk management at the entity level and on a group-wide basis; and (iv) sound financial standing and performance. During episodes of more volatile regional financial market conditions and exchange rate movements, these factors supported the continued growth of consumer and commercial banking activities, and sustained the contribution of overseas operations to overall group profitability.

During the year, some regional economies where DBGs have a significant presence implemented tightening measures in the property and retail financing markets. While this has affected lending growth in these economies, the impact on the group as a whole has been limited. The implementation of tighter loan-to-value ratios for mortgage loans and tighter financing conditions in Indonesia, coupled with higher interest rates and weaker exchange rates resulted in slower lending growth of between 8% and 10% (2012: between 15% and 20%) for some of the large DBGs, while selected retail portfolios in other economies also expanded at a more cautious pace in response to new financing regulations. While overall assets from overseas operations continued

Chart 1.58

Banking System: Asset Composition of Operations in Labuan IBFC and Overseas



Source: Bank Negara Malaysia

Chart 1.59

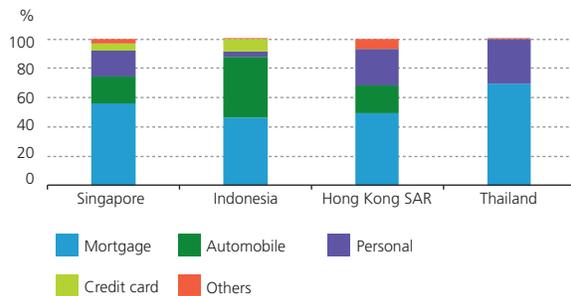
Banking System: Loan Composition of Selected Overseas Operations



Source: Bank Negara Malaysia

Chart 1.60

Banking System: Retail Loan Composition of Selected Overseas Operations



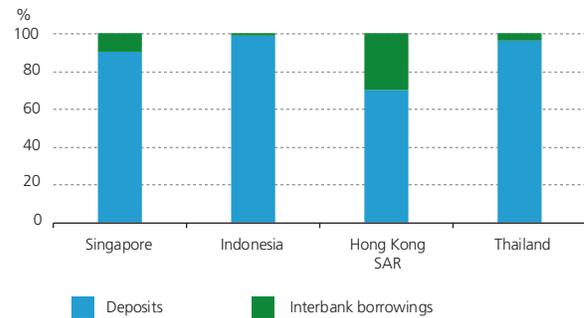
Source: Bank Negara Malaysia

to grow, the effects of exchange rate movements and economic and regulatory developments led to some retrenchment in the contribution to total assets from Hong Kong SAR and Indonesia, relative to contributions from Singapore and Thailand. On aggregate, however, overseas operations continued to record positive loan growth of 14.4% (2012: +17.1%) during the year.

Loans and investments in plain vanilla debt securities continued to dominate the asset profile of overseas operations, accounting for 62.3% and 14.5% of total assets of the overseas operations respectively. The bulk of the holdings of debt securities were in government papers and investment-grade PDS. The profile of lending activities differs across economies, reflecting the varying economic structure and stage of economic and financial sector development in the respective economies (Chart 1.59). To some extent, this contributed to the diversification

Chart 1.61

Banking System: Funding Structure of Selected Overseas Operations



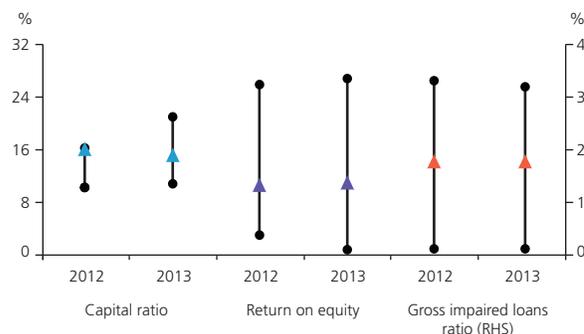
Source: Bank Negara Malaysia

of risks arising from the overseas operations of DBGs and softened the impact of slower growth experienced in some economies on overall group profit and capital. Retail loans are largely secured. Unsecured financing accounted for less than 20% of the total outstanding retail loans of overseas operations (Chart 1.60). There was also greater scrutiny observed over valuation and underwriting practices of DBGs, particularly in economies experiencing upward pressures on asset prices.

The overseas operations of DBGs continued to be funded largely by local customer deposits, hence limiting potential cross-border funding risks (Chart 1.61). The loan-to-deposit ratio of large overseas operations with significant financing activities remained relatively stable during the year, even in times of heightened financial market and exchange rate volatility in the region, ranging between 60.8% and 111% for individual entities.

Chart 1.62

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



Source: Bank Negara Malaysia

The larger DBGs have continued to steadily grow the local currency deposit base at an average rate exceeding 10% which has further strengthened the funding capacity of the overseas operations and reduced reliance on funding from the parent entity. This is further reinforced by strengthened group-wide risk management systems and practices, supported by improved risk indicators, which further reduce the potential for funding pressures from overseas operations to spread to the Malaysian operations.

The capital ratios of the large subsidiaries remained strong, ranging between 10.8% and 21% (Chart 1.62). These ratios already reflect strengthened capital adequacy requirements in some economies which have implemented Basel III standards. These economies also represent the economies in which DBGs have more significant overseas operations. Overall loan quality remained intact with the median gross impaired loans ratio remaining largely unchanged at 1.8%. Around 80% of revenue continued to be derived from core banking activities, while non-interest income sources contributed about 20% of revenue. Heightened volatility in regional exchange rates during the year resulted in higher foreign exchange translation losses for group earnings and lower net income from trading and investment portfolios for some DBGs. Nevertheless, the contribution of overseas operations to the profitability of individual DBGs remained quite stable and ranged between 1.2% and 36.2%, with a median return on equity of 11.2% (2012: 10.8%). Continued improvements in operational efficiency and funding strategies also contributed to a lower median cost-to-income ratio of 53.1% (2012: 60.6%).

Under assumptions of severe stressed scenarios for major overseas operations, which include a significant depreciation of local currencies and a large contraction in real sector activity and hence loan growth, DBGs are expected to remain generally profitable despite a significantly lower level of profit contribution from abroad. Even under assumptions of further capital injection into the overseas operations, DBGs are expected to remain well-capitalised with Total Capital Ratios ranging between 11% and 13%.

The cross-border operations of domestic insurers remained negligible. Total assets of the overseas operations of domestic insurers grew only marginally to RM1,046.4 million (2012:

RM959.8 million), representing 0.5% of total insurance industry assets, broadly unchanged from 2012. Such operations are mainly in the general insurance business segments in Singapore, Indonesia and Brunei.

The Bank's consolidated supervision of domestic financial institutions includes assessing risks that emanate from operations abroad. This is supported by periodic regulatory reports submitted by DBGs on overseas operations and annual on-site examinations for significant overseas operations. The Bank also conducts regular stress tests of the overseas operations under assumptions of adverse regional economic and financial conditions that may affect the asset quality and liquidity position of the entities. In 2013, the Bank continued to hold regular engagements with host regulators on the performance of three significant DBGs through the established supervisory colleges and bilateral meetings. These engagements also provided the opportunity to review developments in local economic and financial conditions, including the implications of recent macroprudential measures and other prudential regulations on the overseas operations of DBGs. The continued strengthening of such home-host engagements and consolidated supervision would enable the early identification of vulnerabilities at the entity and group levels, and facilitate timely supervisory responses by the Bank.

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

NBFIs have expanded over the years both in terms of balance sheet size and number of entities. The GFC has highlighted the importance of managing the role and scope of some NBFIs in the transmission of risks to the banking system, where highly complex activities involving liquidity and maturity transformation, excessive leverage and imperfect credit risk transfers can be sources of systemic risk that arise from the close interlinkages of some NBFIs with the regular banking system. The financial intermediation activities of NBFIs in Malaysia remain non-complex, predominantly focused on basic lending activities and investments in plain vanilla debt securities and equities. The level of liquidity and maturity transformation activities by NBFIs as a group also continues to be low. This limits the potential for risks to be transmitted to

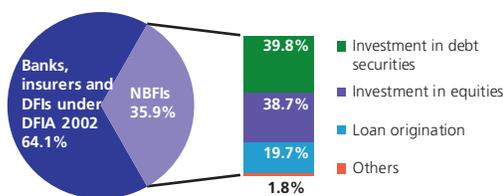
Diagram 1.1

Regulation and Interlinkages of NBFIs

Non-bank financial institutions (NBFIs) refer to institutions which undertake financial intermediation (including credit intermediation) activities that are **not** under the regulatory and supervisory purview of Bank Negara Malaysia.

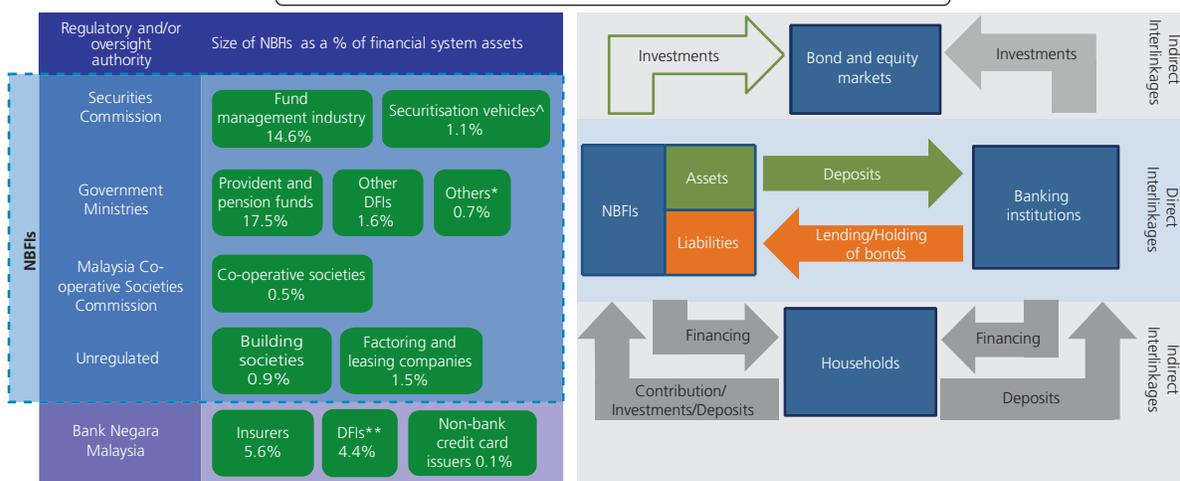
Financial intermediation activities comprise: (i) investment in equities; (ii) loan origination; (iii) investment in debt securities; (iv) securitisation; (v) issuance of credit guarantee or enhancement; and (vi) issuance of credit scoring or rating. **Credit intermediation** comprises (ii) – (vi).

Financial Intermediation in the Financial System



Source: Bank Negara Malaysia

Regulation and interlinkages of NBFIs with the banking system



[^] Refers to outstanding asset-backed securities and asset size of the national mortgage corporation. The offering of asset-backed securities is regulated by the Securities Commission

* Includes pawnbrokers, moneylenders, non-bank providers of hire purchase financing and social security organisations

** DFIs regulated under the Development Financial Institutions Act (DFIA) 2002 - Bank Pembangunan Malaysia Berhad, Small Medium Enterprise Development Bank Malaysia Berhad (SME Bank), Export-Import Bank of Malaysia Berhad (EXIM Bank), Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional and Bank Pertanian Malaysia Berhad (Agrobank)

Source: Bank Negara Malaysia survey, Securities Commission, Malaysia Co-operative Societies Commission, Ministry of Urban Wellbeing, Housing and Local Government, Ministry of Domestic Trade, Co-operatives and Consumerism, various financial statements and internal estimates

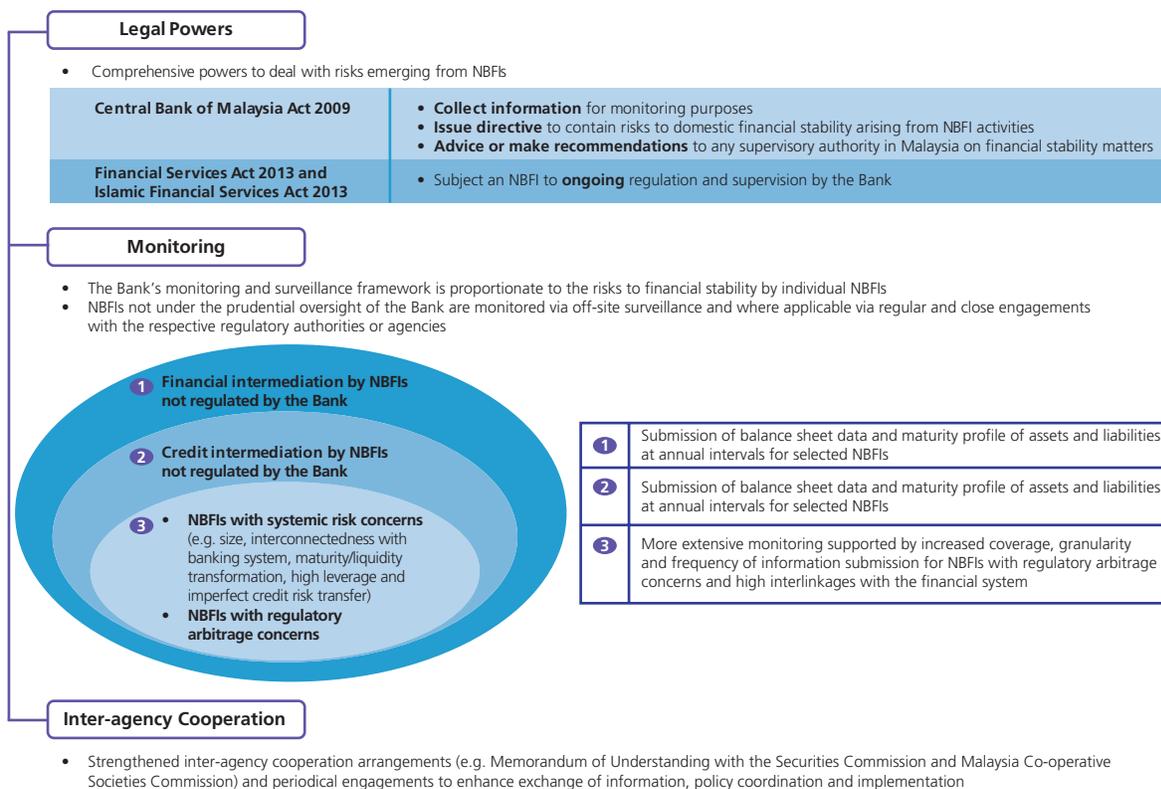
the banking system, which arise mainly from investments in common asset classes. For monitoring purposes, the Bank focuses on NBFIs that are not subject to the prudential oversight of the Bank, comprising provident and pension funds, other DFIs, mortgage corporations, building societies, co-operative societies, moneylenders, pawnbrokers, leasing and factoring companies and non-bank providers of hire purchase. These exclude insurance companies, takaful operators and six large DFIs which are directly regulated and supervised by the Bank.

Based on the above definition, the financial intermediation activities of such NBFIs amounted to 107.4% of GDP. Total assets of NBFIs accounted for 38.4% of financial system assets as at end-2013. Of this amount, assets held in the form of

loans and investment in debt securities accounted for about 65.9% of GDP or 16.1% of total assets in the financial system (Diagram 1.1). The level of financial intermediation by NBFIs is about half the size of financial intermediation activities undertaken by entities which are regulated by the Bank. The funding structure of NBFIs differs from entity to entity depending on the nature of financial activities undertaken. Generally, provident and pension funds are funded through member contributions whilst fund managers are funded by investors and unit holders. Non-bank credit providers are funded by a mix of internally-generated funds, bank borrowings, issuance of debt securities and for some, deposits. Apart from provident and pension funds and fund managers which make up the bulk (84%) of NBFIs assets, the vast majority of NBFIs are small in size, with average financial assets of less

Diagram 1.2

Powers, Monitoring and Inter-agency Cooperation



than RM7.5 million held individually. Given the diverse size and varying degree of interlinkages of NBFIs with the banking system, the Bank's monitoring and surveillance framework for NBFIs is designed to be proportionate to the risks posed by the entities, either individually, or as a group to the stability of the financial system (Diagram 1.2).

Over the past decade, NBFIs assets tripled as the financial system became deeper and more diversified. NBFIs grew at a compounded annual growth rate (CAGR) of 14.4% over this period, where 66.2% of NBFIs growth was driven by the provident and pension funds, and fund managers which grew at a CAGR of 11.8% and 22.3% respectively during this period. Based on the activities undertaken by NBFIs, risk transmission to the banking system can arise from the direct and indirect financial interlinkages associated with the assets and liabilities of NBFIs. Despite the expansion in size and activities, the nature of financial interlinkages between NBFIs and the banking system remains broadly unchanged. The potential transmission of risks to the banking system from NBFIs' assets arises from two channels: (i) directly via

deposit placements with the banks; and (ii) indirectly via investments in common assets held by banks. Potential risk transmission channels from NBFIs' liabilities are mainly from direct credit exposures in the form of bank lending to NBFIs and bank holdings of debt securities issued by NBFIs. While banking system exposures through these asset-liability channels have increased in value terms in tandem with the growth of the domestic economy and financial sector, the direct exposures from deposit placements in banks only accounted for 6% of the banking system deposit base, and bank lending to NBFIs and holdings of NBFIs debt securities accounted for 2.1% of banking system total assets.

Large NBFIs hold a portion of assets in the form of cash for liquidity management purposes. Cash holdings which include deposits with banks typically have maturities of less than a year and are actively managed, to yield optimal returns and to facilitate the rebalancing of asset allocations. While this results in some volatility in NBFIs' deposit placements with banks, the liquidity risk to banks is manageable for several reasons. First, as noted earlier, the banking system as

a whole is not overly reliant on NBFIs deposits as a major source of funding. Second, across individual banks, the concentration of NBFIs deposits remains low, with these deposits on average accounting for less than 5% of most individual banks' deposit base. Third, there is a high level of cumulative liquidity buffers in the banking system. This is also observed for the investment and Islamic banks that have a relatively higher deposit concentration, where the liquidity surplus ranges between 17% and 56.7%, and between 13.3% and 27.3% of deposits for the maturity buckets of one week and one month respectively.

While direct interlinkages between NBFIs' assets and banks are small and limited, the sizable presence of the larger NBFIs in the domestic capital market poses indirect interlinkages with the banking system. The investments of the larger NBFIs collectively accounted for 28.4% of outstanding public debt securities, 19.3% of outstanding PDS and 24.1% of equity market capitalisation as at end-2013. Over the period from 2007 to 2013, the broad composition of NBFIs' investment holdings has remained relatively stable. Investments in plain vanilla debt securities and listed equities continued to make up more than 65% of the portfolio of NBFIs. In the more recent period, some of the larger NBFIs had increased the holdings of MGS during periods of heightened selling pressure by non-resident investors, and progressively increased investments in overseas assets as part of portfolio diversification strategies. The risk from volatile exchange rates remained small as the composition of foreign financial assets to total financial assets of these NBFIs continued to be contained within a range of 2.8% and 19.9%. Overall, NBFIs remained profitable during the year and recorded healthy levels of return on assets, averaging between 5.6% and 7.3% across individual entities.

NBFIs typically adopt a strategic and long-term investment strategy to minimise the size and extent of maturity transformation. For example, long-term holding of assets allows better matching of the long-term pension and provident contributions received. The low maturity mismatch position of the NBFIs in turn mitigates the risk of a sudden and large-scale disposal of assets that will result in sharp movements in asset prices which could have adverse spillover effects on banks. Price

movements in equities are likely to have a negligible impact on the banking system as banks' equity holdings are less than 1% of banking system total capital. Banks are more likely to be exposed to movements in prices of fixed income securities given the relatively higher exposures. Nevertheless, under simulated stressed scenarios of adverse movements in bond yields and prices, the banking system continues to remain well-capitalised (refer to macro stress testing results under 'Financial Institution Soundness and Resilience' of this chapter).

The interlinkages of NBFIs liabilities to the banking system remain low and are of a non-complex nature. The larger NBFIs are not reliant on the issuance of debt securities or bank borrowings to fund financial intermediation activities. These NBFIs, namely the provident and pension funds and fund managers, have an independent funding structure where activities are funded from member contributions, unit holders and investors, thus limiting the direct interlinkages to the banking system. In addition, access to the interbank market and the use of collateralised funding, such as repurchase agreements and securities lending, to construct highly leveraged and complex interconnected positions by NBFIs remain negligible in Malaysia. The smaller NBFIs, namely non-bank credit providers which include co-operative societies, moneylenders, pawnbrokers, leasing and factoring companies, building societies and non-bank providers of hire purchase financing, have a simple funding structure of internally-generated funds, some bank borrowings and limited deposit collection. A few non-bank credit providers are additionally funded by the issuance of debt securities. The maturity mismatch remains low as the average tenure of PDS issued is 6.8 years, while average financing granted generally does not exceed 10 years. Total exposures of the banking system to the smaller NBFIs through these channels remained small. In aggregate, total bank lending to NBFIs and bank holdings of NBFIs debt securities respectively stood at 14.7% (2012: 12.6%) and 8.2% (2012: 7.4%) of banking system total capital, or collectively at 2.1% of banking system assets.

FINANCIAL INSTITUTION SOUNDNESS AND RESILIENCE

Financial institutions remained resilient throughout the year against the challenging operating environment. This was underpinned by sound risk management and governance practices and further improvements in operational efficiency.

The risk profile of the majority of financial institutions, as reflected in the Bank's supervisory ratings (also known as the composite risk rating (CRR)) of individual institutions, was stable in 2013. The financial positions of these institutions also remained strong. The CRR captures the Bank's annual assessment of the inherent risk and the quality of risk management of a financial institution across all significant activities and subsidiaries. It also takes into account the strength of an institution's capitalisation and capital management practices, as well as sustainability of earnings. For the year, six banks and insurers improved on their supervisory ratings following measures taken to strengthen internal risk management practices and financial buffers.

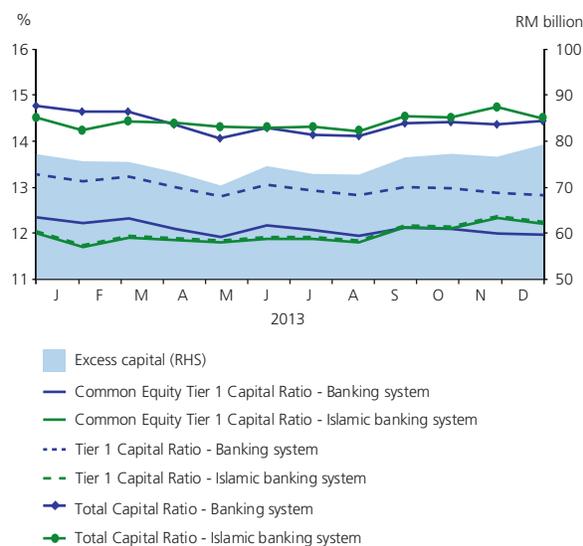
Banking sector

The level and quality of banks' capital remained solid, enabling the smooth implementation of the Basel III Capital Adequacy Framework which was phased in from January 2013. The banking system (including Islamic banks) as a whole maintained a strong Common Equity Tier 1 (CET1) capital ratio, Tier 1 capital ratio and Total Capital Ratio (TCR) of 12.1%, 13% and 14.4% respectively as at end-2013. Banks' capital strength was bolstered by the further build-up of reserves (+21%) and new issuances of equity (+9.1%) in anticipation of the maturing or phasing-out of capital instruments issued under Basel II. The capacity of banks to internally generate capital remained firm with retained earnings totalling more than RM56 billion at the system level. Retained earnings accounted for more than 30% of CET1 capital (before regulatory adjustments). The year also saw the successful implementation of dividend reinvestment plans by three large domestic banking groups to preserve capital strength, which was positive for both the equity level and market capitalisation of these banks.

The overall riskiness of the banks' portfolio remained largely stable in 2013. On aggregate, the ratio of total risk-weighted assets (RWA) to total assets (or RWA density) was at 63.3% (2012: 62.1%). Preliminary reports indicate that the leverage ratio for the banking system stood at more than 6% as at end-September 2013 based on the Basel III definition, which is substantially above the prescribed minimum level of 3%. There were no major shifts observed during the year on the structure of banks' business operations, risk appetite or internal regulatory capital models. As noted earlier, the steady expansion in

Chart 1.63

Banking System: Capital Adequacy Ratios and Excess Capital



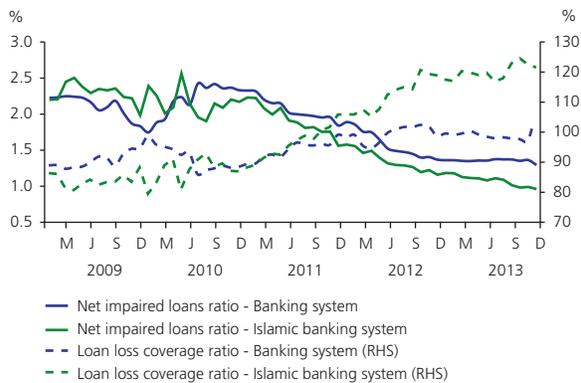
Source: Bank Negara Malaysia

banking system assets was also well-supported by the continued accumulation of high quality capital. This ensured that banks continue to have substantial loss absorbing buffers in excess of the minimum regulatory capital requirement, which stood at RM79.3 billion as at end-2013 (Chart 1.63). Under a conservative scenario where full compliance with the Basel III minimum capital levels were to be applied to the banking system today (i.e. disregarding any transitional arrangements), banks would still have a buffer of RM27 billion above the minimum TCR requirement.

For the year as a whole, the banking system registered pre-tax profit amounting to RM29.8 billion, around the same level as in the previous year, with annual returns on assets and equity averaging at 1.5% and 15.9% respectively (2012: 1.6% and 17.4% respectively). The main driver of earnings performance was from financing and funding activities (+7.3%), which contributed to 42.8% of the gross operating income of banks. Revenue from fee-based business, which has been growing steadily in recent years, continued to reflect a greater focus by banks on fee generation to counteract compressed lending margins in the highly competitive retail lending market. Despite greater income volatility from the trading and investment portfolios, corresponding with more volatile market conditions, higher net gains were recorded for the year as a whole.

Chart 1.64

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



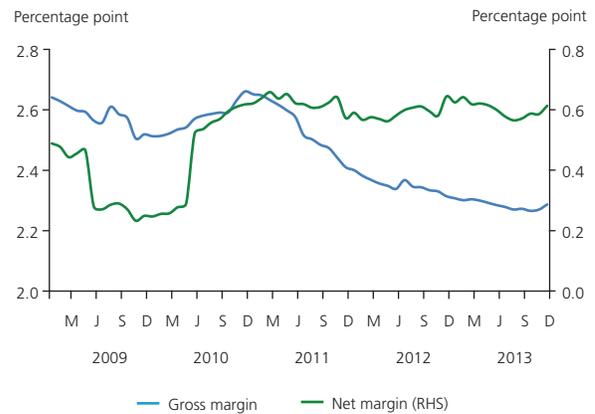
Source: Bank Negara Malaysia

Competitive pressures in the credit market continued to exert downward pressure on the already thin margins. While the historically low delinquency levels across major financing segments and high loan loss coverage ratio of above 100% provided some buffer (Chart 1.64), interest/financing margins (net of expenses on loss provisions) narrowed to 0.61 percentage points (2012: 0.66 percentage points) (Chart 1.65). Lending rates remained highly competitive in the retail segment, ahead of the requirement for banks to comply with risk-informed pricing practices which will take effect in March 2014.

Diversification into fee-based revenue (7.5% of gross income) has provided some stability in bank profit against compressed margins. Commission and service charges from brokerage activities (+39.6%), loan syndications and credit guarantees (+11.4%) and payment services (+159.4%) contributed the bulk of fee income growth (+14.1%). Active risk management by banks during episodes of heightened market volatility was also crucial in supporting bank earnings from proprietary trading and investment activities for the year as a whole. This reflected the enhanced risk management capability of banks in actively managing trading book positions, supported by more developed enterprise-wide and group-wide frameworks for monitoring and controlling market risk exposures. Such frameworks incorporate prudent internal limits, stop-loss and hedging strategies, and the effective use of trading book profit and loss attribution systems which allow better monitoring of treasury performance.

Chart 1.65

Banking System: Gross and Net Interest Margins



Source: Bank Negara Malaysia

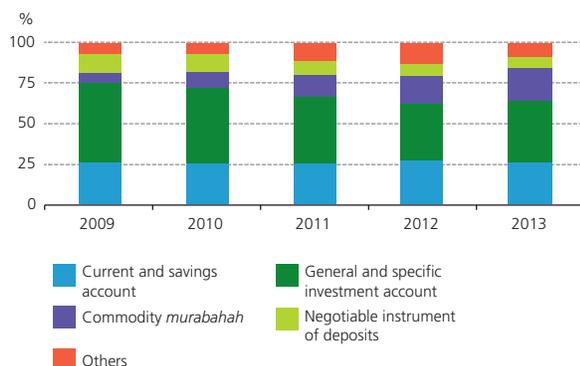
Initiatives taken by banks to improve productivity and operational efficiency helped to control operating costs which posted its most modest increase (+1.8%) over the recent five years. Administration, marketing and general expenses grew at a slower pace (+5.7%) relative to the preceding year, while staff expenses, representing half of banks' total operating costs, declined by 1.8%. This contributed to lower costs per employee which declined by 0.7%, while productivity measures in terms of pre-tax profit per headcount and the ratio of staff cost to revenue improved further.

Islamic banking sector

The rate of return risk in the Islamic banking industry remained manageable under the generally stable conditions in the ringgit funding market and persistent ample liquidity. Islamic banks continued to actively manage this risk through risk reduction strategies on both asset and liability exposures. On the liability side, Islamic banks issued more fixed rate funding instruments with longer tenures and lengthened the re-pricing date of liabilities to narrow the re-pricing gap between assets and liabilities. Fixed-return deposits such as commodity *murabahah* registered an exponential growth of 37.7% during the year (Chart 1.66), with the majority of new deposits having tenures of more than six months. As at end-2013, fixed rate deposits accounted for 20.8% (2012: 17.2%) of total funds of Islamic banks. The share of Islamic NIDs declined to account for a smaller share of 6.7% (2012: 7.4%) of total funds of Islamic banks. A shift was similarly observed in the maturity period of Islamic NIDs away from

Chart 1.66

Islamic Banking: Composition of Deposits



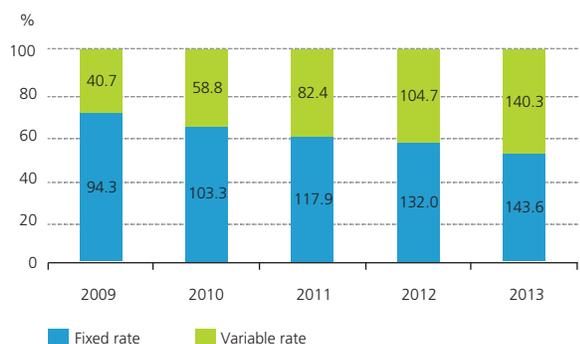
Source: Bank Negara Malaysia

tenures of less than a month into longer tenures of three to six months and six to nine months. Some Islamic banks have also lengthened the maturity structure of the funding base through issuances of medium-term sukuk. About 38% of deposits and investment instruments accepted by Islamic banks have maturities of between one week and six months. The share of funding from deposits and investments with remaining maturities between six months and up to one year increased from the previous year to 25.2% (2012: 23.4%). The lengthening of the overall duration of funding has contributed towards easing the pressure of managing funding mismatches by Islamic banks.

On the asset side, the rebalancing between fixed and variable rate financing continued to occur. As

Chart 1.67

Islamic Banking: Fixed Rate and Variable Rate Financing

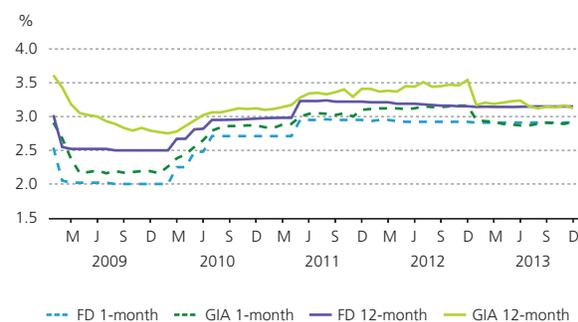


Note: All figures are in RM billion

Source: Bank Negara Malaysia

Chart 1.68

Islamic Banking: General Investment Account (GIA) Rates and Quoted Fixed Deposits (FD) Rates



Source: Bank Negara Malaysia

Islamic banks reduced further the concentration of long-term fixed return financing, thus shortening the duration of the financing assets, the share of variable rate assets in the financing book (Chart 1.67) expanded strongly at 34% to account for 49.4% (2012: 44.2%) of total financing. Such variable assets were mainly in the form of *musharakah* (partnership), *ijarah* (leasing) and variable *murabahah* (mark-up) contracts. Retail financing continued to dominate the financing portfolio of Islamic banks, accounting for 61.8% of total financing where about 42% was financing for the purchase of residential properties and motor vehicles.

Stable funding conditions also reduced the challenges associated with managing displaced commercial risk (DCR). DCR is the risk associated with Islamic banks forgoing part or all of the profits (or absorbing a portion or all the losses) in order to meet the expectations of investment account holders of receiving a competitive rate of return (in comparison with conventional products). This risk is inherent in a dual banking system structure such as that in Malaysia. The difference between the rate of return on general investment accounts and quoted conventional fixed deposit rates (Chart 1.68) narrowed during the year with continued stability observed in the funding base of Islamic banks. This further eased the pressure on Islamic banks to match the returns offered on conventional deposits given the more comparable returns to fund providers. Unlike in the past where profit equalisation reserves were typically used to match the returns offered on conventional fixed deposits, the management of DCR now relies on the use of the *tanazul* concept which enables Islamic banks to waive part or the

entire share of profits (in an agreed profit-sharing ratio contract) in order to meet the expectations of an investment account holder. While the use of *tanazul* concept could potentially increase the volatility of net income for the Islamic banks, this was not observed during the year. The average cost of deposit for Islamic banks remained stable at 2.53% (2012: 2.51%).

The Islamic Financial Services Act 2013 draws a clear distinction between a deposit instrument and an investment account. Under the legislation, general investment account instruments offered by Islamic banks which are not principal-guaranteed will have to be clearly designated as investment accounts and distinguished from principal-guaranteed deposits, both in the terms and conditions of the instruments and the way in which the instruments are managed. To allow for an orderly transition, Islamic banks have been accorded a two-year period, up to June 2015, to bring existing investment accounts in line with the provisions in the law. Most banks are expected to offer alternative deposit products which are principal-guaranteed to existing general investment account holders who wish to hold deposit, rather than investment, accounts. This should preserve a stable funding base for Islamic banks during the transition period. As at end-2013, general investment accounts comprised 26.2% (2012: 26.3%) of total Islamic deposits and investment accounts, with the composition ranging between 5% and 45.4% across individual Islamic banks.

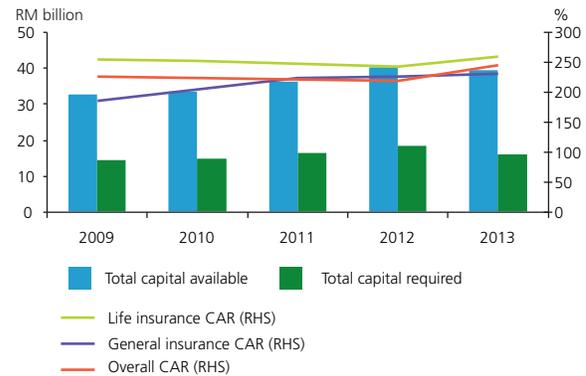
Based on the Bank's review on the operations of the Islamic banks, there was no material Shariah non-compliance event during the year. Islamic banks continued to strengthen the Shariah oversight and control functions, including the Shariah review process and audit functions. The Bank is currently at various stages of developing Shariah and operational standards on key Shariah contracts which will provide further clarity on regulatory requirements applicable to different Shariah contracts, thereby serving to minimise potential Shariah non-compliance risk (refer to the box article on 'Diversification of Islamic Banking Businesses and Products driven by Shariah Contracts').

Insurance and takaful sector

The capitalisation of the insurance industry strengthened further during the year. The aggregate capital adequacy ratio (CAR), computed as the ratio of total capital available

Chart 1.69

Insurance Sector: Capital Adequacy Ratio



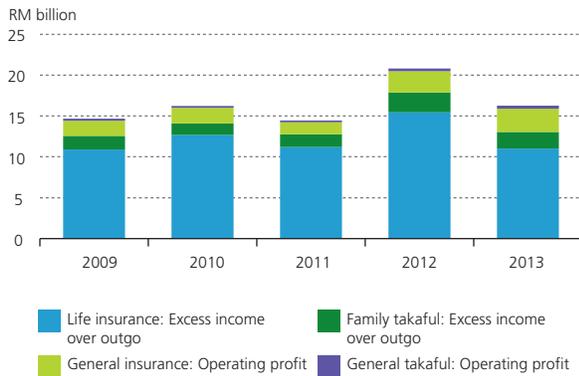
Source: Bank Negara Malaysia

to total capital required, for the industry improved to 245.9% (2012: 219.1%) with capital buffers totalling RM23.5 billion (Chart 1.69). Higher MGS yields had a positive and significant effect on life insurers' capitalisation through lower valuations of insurance liabilities (thereby increasing the surplus available to meet capital requirements which more than offset investment losses incurred during the year), and lower required capital charges for market risk. Insurance risk, which measures the risk of underestimation of insurance liabilities, adverse claims experience, expense and lapse risks, and to a certain degree the impact from the discounting of insurance liabilities, remained the largest component of risk, accounting for 50.7% of total capital required. Overall insurance risk charges remained stable for the year given the stability of reserving policies and key best estimate assumptions used in the absence of major catastrophe and pandemic incidences in the domestic market.

The more volatile financial market conditions and bond yield movements did, however, have an adverse effect on the overall financial performance and profitability of the life insurers and takaful operators. The life insurance and family takaful sector recorded a lower level of excess income over outgo of RM13 billion (2012: RM17.9 billion) for the year (Chart 1.70). Despite an increase in net premium, life insurers, and to a lesser extent takaful operators, suffered a large amount of portfolio revaluation losses, totalling RM1.5 billion (2012: net gains of RM2.2 billion). Revaluation losses from debt security investments contributed

Chart 1.70

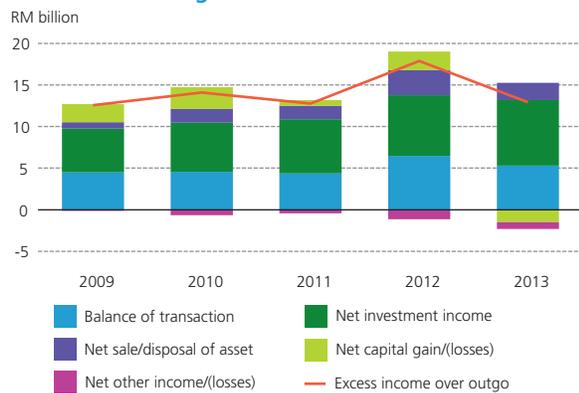
Insurance Sector: Profitability



Source: Bank Negara Malaysia

Chart 1.71

Life Insurance Sector: Composition of Excess Income over Outgo



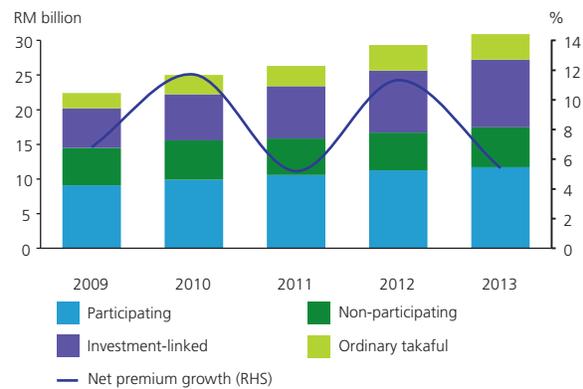
Source: Bank Negara Malaysia

to 88.6% of overall mark-to-market losses. In addition, net benefit payments were also higher by 14.8%, mainly due to payments on a larger number of policies that matured during the year and higher payments of medical benefits which increased by 26.4% over the previous year (Chart 1.71).

Overall net premiums for life insurance and family takaful business rose at a much slower rate of 5.4% (2012: 11.3%), driven by weaker growth from investment-linked policies which moderated sharply to 9.4% (2012: 18.8%), reflecting the more volatile market conditions (Chart 1.72). Since 2010, investment-linked policies have accounted for an increasingly significant share of

Chart 1.72

Life Insurance Sector: Net Premium Growth and Composition of Life Insurance Product



Source: Bank Negara Malaysia

new business premiums (40% of new business premiums in 2013) which has also resulted in greater volatility in new business growth in line with financial market conditions. This is more pronounced in the conventional insurance sector which can present some challenges for life insurers that have a higher concentration in this business segment. For such insurers, the associated volatility in growth would need to be weighed against the more efficient utilisation of capital typically associated with investment-linked business (investment-linked business is less capital-intensive as investment risks are borne by the policyholder). Net premium from participating and non-participating business continued to provide some stability to income for the industry as a whole. Premium growth in these segments has remained relatively stable, averaging 5.9% over the past five years from sustained demand for protection and savings products which continue to account for the bulk (56.5%) of total net premium. The rate of surrenders of policies also remained low at 1.7% of total policies in-force.

Overall investment yields of life insurers remained below the levels prior to the GFC. In 2013, the investment yield of life insurers ranged between 5% and 6% per annum, substantially lower than the yield of 9% per annum earned prior to the crisis. This continues to pose challenges to life insurers that had priced and sold products based on higher assumed rates of return in the past. For in-force policies, the yields on invested assets together with the buffers and surpluses accumulated over the years have largely been sufficient to maintain non-guaranteed benefits

Chart 1.73

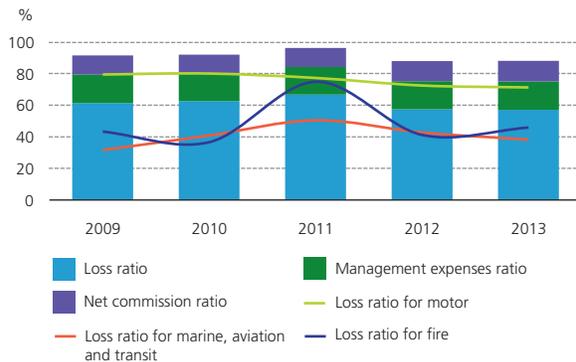
General Insurance Sector: Premium Growth and Composition of General Insurance Business



Source: Bank Negara Malaysia

Chart 1.74

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



Source: Bank Negara Malaysia

to policyholders, and the expectations of rising yields should mitigate reinvestment risks going forward. For newer products, insurers have begun to adopt more conservative assumptions to better reflect prevailing market conditions. Strengthened requirements on product risk management, disclosure and selling practices will also serve to further reinforce continued discipline in pricing practices by life insurers, while ensuring that policyholders are not misled in relation to expectations of future returns.

General insurers and takaful operators performed better, recording higher profits of RM3.2 billion (+11.1%) on the back of continued strong premium growth in the motor and fire insurance

segments and a stable loss ratio (57.1%) (Chart 1.73). Despite registering a stronger operating profit, the general insurers and takaful operators continued to be confronted with the challenge of managing the misalignment between premium rates and losses from claims for the compulsory motor third party liability insurance (motor 'Act') business. While the overall claims ratio for motor business improved marginally to 71.2% (2012: 72.4%), the much higher claims from the motor 'Act' business (which remains well in excess of 100%) continued to pose a significant drag on overall claims and underwriting performance for the motor segment (Chart 1.74). The progressive adjustments to the motor tariff since 2012 along with broader reforms being pursued under the New Motor Cover Framework to contain claims costs therefore remain critical to better align pricing to risk and preserve continued access to motor insurance coverage at reasonable rates over the long-term.

Stress testing of banks and insurers

Banks and insurers, both at the system and institutional levels, demonstrated sufficient earnings and capital buffers to weather extreme macroeconomic and financial conditions based on the macro stress test conducted by the Bank. The scenario-based solvency stress test for the period 2014 to 2016 incorporated simultaneous shocks on revenue, funding, credit, market and insurance risk exposures, taking into account a series of tail-risk events and downside risks to the global economic outlook. The simulated spillovers on the domestic economy were used to assess the compounding year-on-year impact on income and operating expenses, balance sheet growth and capitalisation of financial institutions, disregarding any loss mitigation responses by financial institutions or policy intervention by the authorities (Table 1.11). Scenarios assumed for the stress test purposes include disorderly fiscal and monetary policy adjustments in advanced economies, unresolved structural fragility of major banking systems, and more subdued growth in emerging market economies due to domestic structural adjustments, tighter external funding conditions and volatile capital movements.

Even under the adverse scenario, the post-shock aggregate TCR and CET1 capital ratio of the banking system were sustained at 10% and 7% respectively, remaining above the minimum regulatory requirement under Basel III based on the phase-in arrangements which are consistent with the global timeline. 75% of banks recorded

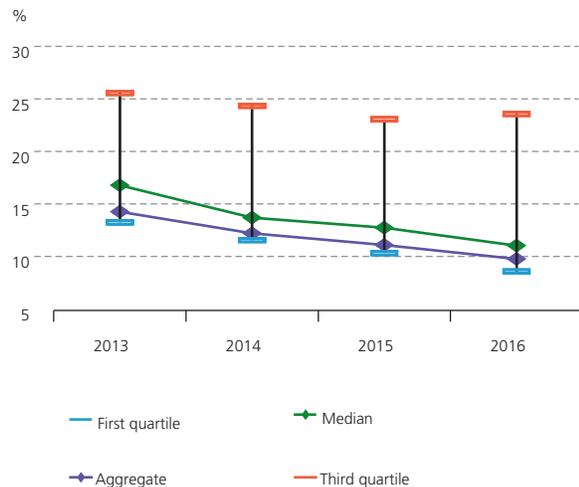
Table 1.11

Solvency Stress Test: Key Assumptions and Shock Parameters for the Adverse Scenario

Key assumptions	
Malaysia GDP shock	<p>Sharp slowdown (worse than the economic contraction in 2009) followed by a gradual recovery, taking into account:</p> <ul style="list-style-type: none"> • Spillovers from downside risks and tail-risk events from advanced economies, PR China and emerging market economies • Potential implications on the domestic financial system following disorderly adjustments in international financial markets due to tapering of quantitative easing in the US <ul style="list-style-type: none"> - Simulated reversal of capital flows worse than that experienced during the GFC (in terms of magnitude and pace)
Balance sheet and income projections	<ul style="list-style-type: none"> • Decline in income growth, differentiated across segments (interest income, fee-based and other income) of up to 62% • Moderation in credit growth of up to 2.7 percentage points
Credit risk shocks	<ul style="list-style-type: none"> • Probability of default (PD) shocks <ul style="list-style-type: none"> - Business loans up to 12% - Household loans up to 11% • Loss given default (LGD) shocks <ul style="list-style-type: none"> - Business loans up to 56% - Household loans up to 90% - Housing loans up to 30%, reflecting sharp adjustment in property prices • Default of selected business borrowers <ul style="list-style-type: none"> - Large corporations under close monitoring - Corporations affected by volatility in exchange rate movements
Market risk shocks	<ul style="list-style-type: none"> • Increase in MGS yields up to 330 basis points • Widening of PDS credit spreads up to 200 basis points • Higher basis risk • Decline in FBM KLCI of up to 40% • Depreciation in major currencies of up to 16%
External funding risk shocks	Reversal of claims by non-residents amounting up to 30% of interbank borrowings and deposits

Chart 1.75

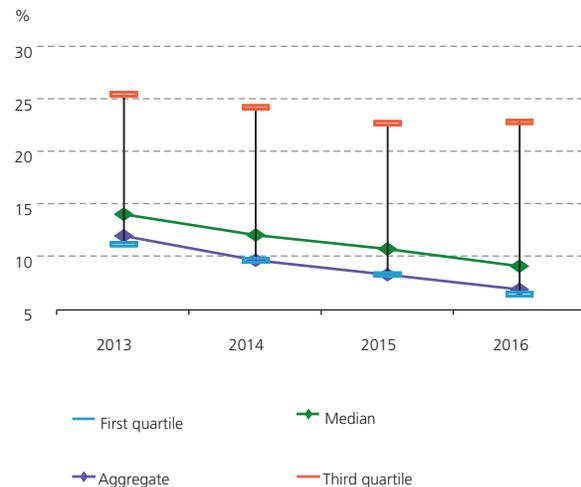
Banking System: Post-shock Total Capital Ratio in Adverse Scenario



Source: Bank Negara Malaysia and internal estimates

Chart 1.76

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



Source: Bank Negara Malaysia and internal estimates

a TCR above 8.8% and CET1 capital ratio of 6.7% at the end of the stress test horizon (Chart 1.75 and Chart 1.76). While cumulative losses from credit, market and funding shocks in the adverse scenario increased by 54.7% compared to the baseline scenario, the resultant 4.5 percentage points decline in the TCR over three years was well within the loss absorbing capacity of banks without taking into account planned capital raising activities during this period.

For the insurance industry as a whole, the post-stress capital adequacy ratio similarly remained above the minimum regulatory requirements under the adverse scenario, ranging between 157.1% and 256.4% for the period 2014 to 2016. The impact on capitalisation was more pronounced for the general insurance industry due to the impact of shocks applied in relation to higher provisions for motor claims. The resulting operating losses reduced the CAR for general insurers to 143% in 2014 (2013: 230.7%), before gradually improving to 153% in 2016. Life insurers on the other hand were more affected by mark-to-market losses in 2014, but maintained a strong CAR of 162%, before gradually improving to 297% in 2016.

OUTLOOK FOR DOMESTIC FINANCIAL STABILITY AND FOCUS OF SURVEILLANCE IN 2014

The Malaysian financial institutions continue to be well-positioned to manage external risks due to the exit from the unconventional monetary policies as prospects improve for economic recovery in the major advanced economies. Continued volatility is likely to persist in the domestic financial markets as investors adjust to changing expectations for the US monetary policy, as well as and developments in the euro area and PR China. Over the recent period, Malaysian financial institutions have demonstrated resilience particularly during such episodes of heightened volatility and have continued to strengthen the underpinnings of this resilience, notably by preserving strong financial buffers, ensuring that foreign currency funding mismatches remain low and observing continued prudence in risk taking. The deep and more efficient domestic financial markets will also continue to provide support for orderly market conditions.

Sustained favourable conditions in the domestic and regional economies will contribute towards managing the credit risk exposures of Malaysian financial institutions to businesses and households. This is further supported by the continued vigilance in financial institutions' liquidity, credit and market risk management, including in the overseas operations, and the improving overall debt servicing capacity (with low leverage positions) and balance sheet strength of businesses as noted in this Report. Coping with the higher cost of living will also be more challenging for vulnerable households while some businesses with high external borrowings and more rigid cost structures will need to deal with the more volatile exchange rate and elevated cost of materials and input. On aggregate, the risks to financial stability are manageable and are expected to remain well-contained. As the effects of the measures implemented by the Bank and the Government to promote the resilience of the households and ensure a sustainable property market continue to gain traction in the period ahead, this should mitigate any material adverse implications on financial institutions from exposures to the sector.

The impact on domestic financial stability conditions from both the external and domestic developments will depend critically on maintaining strong domestic fundamentals, including a resilient domestic financial system. The Bank's surveillance and supervisory priorities in 2014 will therefore continue to be focused on:

- ensuring that banks continue to maintain sound lending standards, and that improvements in the lending practices of NBFIs are sustained. This should contribute towards managing household leverage, especially among the more vulnerable groups;
- supporting the sustainable development of the property market, by ensuring that bank lending for the development and purchase of property are not encouraging speculative activity and valuation practices continue to be credible and robust;
- monitoring developments in the non-residential property market, focusing in particular on strong demand and rising prices in the shops segment, and rising risks of a possible oversupply of office space going forward;
- monitoring the level of external borrowings and business sector leverage positions and ensuring that banking system buffers remain strong

- against potential losses from businesses that are more exposed to potential financial stress;
- assessing changes in the risk appetite and business strategies of financial institutions and ensuring that such changes are aligned with prudent risk-taking in an environment where improving global recovery remains vulnerable to a disorderly exit from unconventional monetary policies in the advanced economies. The Bank will increase its vigilance over the overseas operations of domestic banking groups given the different challenges that will confront individual countries during the transition;
 - ensuring the continued robustness of the financial market infrastructure, in particular the payment and settlement systems;
 - assessing developments surrounding the systemically important NBFIs and the potential implications on the financial system;
 - further strengthening domestic crisis management arrangements in close coordination with other domestic regulatory authorities and government agencies; and
 - continuing to promote effective regional cooperation and coordination in financial regulation, consolidated supervision and crisis management through supervisory colleges and the Bank's active participation in multi-lateral platforms for central banks and supervisory authorities.

2013

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DEVELOPMENT OF THE FINANCIAL SECTOR

The financial sector saw further growth and development in 2013 to better serve the needs of the economy. Central to this was the progressive implementation of the strategies and initiatives set out in the Financial Sector Blueprint 2011-2020. The financing ecosystem was further strengthened to ensure that the financial sector continues to meet the evolving needs of the Malaysian economy, and financial intermediation remains uninterrupted against a more challenging global economic environment. Financial inclusion continued to be supported by a wider range of distribution channels, and the offering of new products and services by financial service providers to meet the needs of a diverse and evolving consumer base.

The progressive implementation of the strategies and initiatives set out in the Financial Sector Blueprint 2011-2020 continued to support the growth and development of the financial sector

Regional and international linkages further expanded as Malaysian financial institutions embarked on regional expansion to support the financing needs of Malaysian corporates that are increasingly establishing their footprint outside the country. The admission of new foreign financial institutions over the last few years had added diversity and is intended to create a more competitive market and contribute to the capacity of the domestic financial system to support Malaysia's economic transformation. The Association of Southeast Asian Nations (ASEAN) integration framework and developments in Islamic finance further reinforced the growing regional and international complexion of the financial sector. The development of talent to drive the financial sector forward continues to be an important agenda in 2013 and beyond. Along with the strengthening of institutional

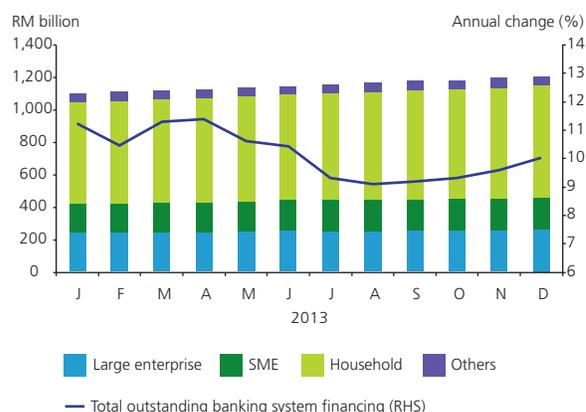
arrangements to meet the demands of a changing financial landscape, focus is now increasingly placed on growing a deep pool of high-calibre workforce characterised by high standards of professionalism, ethics and quality.

ENSURING EFFECTIVE AND EFFICIENT INTERMEDIATION

During the year, banking institutions and development financial institutions (DFIs) continued to effectively mobilise funds to support the financing needs of businesses and households. Loans to households continued to represent the bulk of financing assets in the banking system, increasing to 57.5% of total outstanding loans (2012: 56.4%). The pace of growth in new household loans has moderated in response to measures implemented by the Bank to reinforce responsible financing practices in an environment of rising household debt levels. Financing to small and medium enterprises (SMEs) increased to 42.1% of total business financing as at end-2013 (2012: 40.5%). The debt securities and sukuk markets continued to be the main avenue for the corporate sector to raise financing, accounting for 61.5% of total outstanding corporate financing (2012: 61%).

Chart 2.1

Outstanding Banking System Financing



Source: Bank Negara Malaysia

The sustained growth in financing to SMEs reflects a strong financing ecosystem in Malaysia that has been developed through deliberate and comprehensive strategies undertaken since the establishment of National SME Development Council in 2004. This is further elaborated in the box article 'Developing the SME Financing Ecosystem'. Existing special funds under the Bank also continued to ensure the availability of financing to SMEs at reasonable costs in selected sectors such as food, manufacturing and services. As at end-2013, a total of RM24.3 billion in financing had been approved to more than 58,000 SMEs under these funds. The continued financing support has enabled a steady stream of these companies to grow and develop into large enterprises. In 2013, another 563 SME accounts that had collectively received total financing valued at RM2.1 billion were re-designated as large enterprise accounts, reflective of the success of these initiatives.

Support for SME financing continued to benefit from the financing and guarantee schemes provided by Credit Guarantee Corporation Malaysia Berhad (CGC). During the year, CGC in collaboration with a participating Islamic financial institution launched its first Islamic Portfolio Guarantee Scheme (the Scheme), which enables SMEs to gain quick access to a Shariah-compliant financing facility of amounts ranging from RM100,000 to RM800,000 with a financing tenure of between 36 to 84 months. Under this Scheme, faster turnaround times for approval of guarantees and disbursement of loans are facilitated through a set of pre-determined eligibility criteria and simplified application procedures and documentation. These features are expected to attract more Islamic financial institutions to participate in the Scheme which is targeted to benefit up to 1,500 SMEs. CGC also launched two other guarantee schemes, Enhancer Bumi and Enhancer Bumi-i, which facilitate access to financing for Bumiputera SMEs by providing guarantees of up to 90% of financing, at competitive guarantee fees. Under Enhancer Bumi, CGC targets to provide guarantees for financing worth RM80 million to 200 SMEs in 2014.

Micro enterprises continued to receive financing support from the financial sector under the *Pembiayaan Mikro* scheme. Since its inception in 2006, total financing amounting to RM2.4 billion has been approved to more than 150,000 microfinance accounts. The average processing

time for financing applications under the scheme has also improved to five days (from seven days before), reflecting the further simplification of processes and better familiarity of banks and DFIs with credit assessments for this group of borrowers.

In line with efforts to enhance the capabilities of financial institutions to support high value-added activities, the Bank continued to facilitate engagement and knowledge sharing sessions for financial institutions to better understand the funding needs and business prospects of innovative enterprises, and to provide an avenue for dialogue on products and services required by these enterprises. In May 2013, the Bank, together with the Intellectual Property Corporation of Malaysia and the Association of Islamic Banking Institutions Malaysia, co-organised an Intellectual Property (IP) Valuation Roundtable to discuss issues around the use of IP as collateral and the methods employed in the valuation of IP. This is intended to pave the way for banking institutions to consider viable alternatives to traditional assets which may be accepted as collateral for financing.

Efforts continued to be undertaken to enhance the capabilities of financial institutions to support high value-added activities

Another important growth area which the Bank has continued to support is financing for green technology. As at end-2013, total financing under the Green Technology Financing Scheme (GTFS) increased to RM1.6 billion (2012: RM1.1 billion), extended to 120 companies. Findings of a survey conducted by the Bank in January 2013 observed that 36 banks or 58% of all banking institutions, including DFIs, participated in green technology financing, with an additional 10 banks indicating interest to support green technology financing under their business plans over the next three years. Several banks have also further expanded their product offerings during the year to support corporations carrying out environmentally-friendly activities and undertaking the installation of photovoltaic systems in houses. These trends are expected to continue as financial institutions deepen their knowledge and experience in financing green technology.

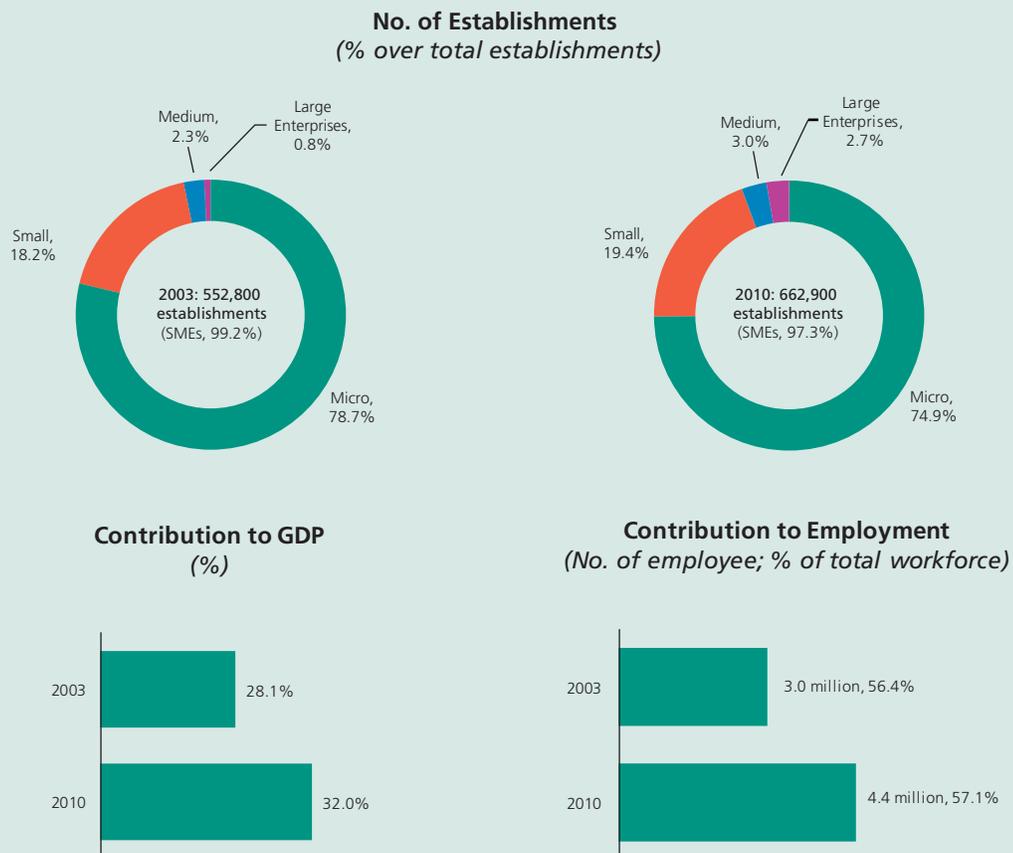
Developing the SME Financing Ecosystem

Introduction

SMEs are a critical component of the Malaysian economy, contributing a third of gross domestic product (GDP) and providing job opportunities to more than four million workers or 60% of total employment (Diagram 1). Based on the most recent census data compiled in 2011, the number of SMEs grew by 20% to over 662,000 compared with the last census of 2005. SMEs accounted for 97.3% (2005: 99.2%) of total business establishments. The development of the SME sector is crucial in ensuring balanced growth and shared prosperity as the country transitions into a high value-added, high-income economy. In particular, the sector contributes significantly to poverty alleviation due to the micro enterprises that make up more than three quarters of total SMEs. This sector is an important source of income and self-employment for low-income households, particularly in the sub-urban and rural areas.

Diagram 1

SME's Contribution to the Economy



Source: Department of Statistics, Malaysia

Recognising the importance of SMEs' contribution for sustainable growth, the Bank has collaborated with the relevant Ministries and agencies since 2001 to develop a holistic and coordinated framework for the development of this sector. This culminated in June 2004 with the establishment of the National SME Development Council (NSDC), chaired by the Prime Minister and comprising 16 Ministries and key agencies, as the highest policy-making body for SME development. The NSDC plays a pivotal role in driving policy, monitoring the implementation of development programmes and improving the quality

The Bank was the Secretariat for the NSDC until 2008, when the role was assumed by the Small and Medium Industries Development Corporation (SMIDEC), which was later transformed in 2009 as SME Corporation Malaysia (SME Corp). SME Corp acts as the central coordinating agency for SME policies and programmes across relevant Ministries and agencies. It also serves as the point of reference for information and advisory services.

An important element in this holistic development framework is an inclusive financing ecosystem. This includes establishing effective institutional arrangements for financing and development through the establishment of specific schemes and providing avenues for information, advice and redress as well as debt resolution and management, and outreach programmes.

Building the Foundations of an SME Financing Ecosystem

The initial stages of building a financing ecosystem involved developing key infrastructure and institutional arrangements that expanded access to financing while promoting a sound credit culture. Initiatives by the Bank included the SME Client Charter guidelines which lifted the standards of efficiency and effectiveness in providing financial services to the enterprises. These standards have been raised further under the ABMPARTNER initiatives in recent years which have streamlined application processes and turnaround times across the financial industry. The Central Credit Reference Information System (CCRIS) has also played a critical part in improving the ability of banking institutions to undertake credit assessments and monitor the performance of borrowers. This is complemented by the Credit Bureau Malaysia which enabled the development of credit history which would in turn, enhance the prospects for SMEs to obtain financing.

In 2006, *Skim Pembiayaan Mikro* was introduced under the National Sustainable Microfinance Framework. This scheme enables fast, easy and convenient access to business financing without collateral from participating financial institutions (PFIs), thereby overcoming problems arising from the lack of credit history and collateral which often prevented SMEs from qualifying and obtaining financing facilities. A common branding platform has enabled the scheme to achieve scale and enhance its outreach to micro enterprises across the country. Under this scheme, PFIs manage their credit risk exposures by placing greater emphasis on assessments of business viability and cash flow patterns of borrowers. In addition, amount of financing extended will be increased over time as borrowers build good repayment track records. PFIs are also given access to funding at a lower cost from the Bank's Micro Enterprise Fund. The sustainability of the scheme is further supported by guarantees from CGC covering groups of borrowers with similar risk profiles and the ability of PFIs to set financing rates that reflect the risks assumed. Experienced PFIs also have developed customised products meeting the needs of small borrowers. For example, certain financing products are packaged with training in financial management and advisory services that are provided by the PFIs or in collaboration with other agencies such as SME Corp. Such value-added services will help micro enterprises better manage their businesses and in turn contribute to the sustainability of the scheme.

The *Skim Pembiayaan Mikro* complements other Government-sponsored microfinance programmes such as Amanah Ikhtiar Malaysia (AIM) and Yayasan Tabung Ekonomi Kumpulan Usaha Niaga Nasional (TEKUN). Since its inception, a total of RM2.4 billion of financing was approved under the scheme, which is supported by over 2,400 access points nationwide. As at end-2013, the total number of accounts under the scheme stood at 68,000 with total financing outstanding of RM857 million.

Guarantee schemes also played an important role that enable viable SMEs but without adequate collateral or track records to obtain financing. In this respect, the CGC was established in 1972 to pioneer the provision of guarantee schemes and has since developed a wide range of products and services to meet the needs of SMEs through widely distributed branches nationwide. To date, CGC has assisted more than 417,100 SMEs to obtain financing worth RM50.3 billion. More recently, the adoption of risk-based pricing model and the offering of portfolio guarantees have enabled CGC to further expand its reach to a larger number of viable SMEs. The corporation has also rewarded

borrowers with excellent repayment track records with rebates as an added incentive. CGC has maintained a healthy financial position in performing its mandate, enabling it to repay RM2.2 billion in loans that were provided by the Bank, including a RM300 million loan of which RM150 million was repaid and the balance was converted into equity. This also demonstrates that, with the appropriate structure and proper governance processes established, policy initiatives with a social mandate could be implemented in a financially sustainable manner.

With the establishment of appropriate structure and proper governance processes, policy initiatives with a social mandate could be implemented in a financially sustainable manner

Development financial institutions (DFIs) play an important role in supporting priority sectors. Such institutions include the Small Medium Enterprise Development Bank Malaysia Berhad (SME Bank) which serves SMEs across all sectors, Bank Simpanan Nasional which focuses on the provision of microfinancing to micro enterprises, and Bank Pertanian Malaysia Berhad (Agrobank) which serves entrepreneurs in the agricultural sector. Since the responsibility for regulation and supervision of these institutions was vested in the Bank under the Development Financial Institutions Act 2002, broad measures were taken to significantly strengthen the institutional capacity and capability of these institutions to better serve their respective mandates in a sustainable manner. A customised prudential framework was implemented to promote sound corporate governance, risk management and financial prudence. As at end-2013, the total financing outstanding by DFIs amounted to RM13.3 billion, extended to 101,865 financing accounts. The DFIs' financial position has also improved substantially. Between 2005 and 2013, the gross impaired financing ratio had improved from 10.4% to 5.6% and the capital position remained strong at 20.9% as at end-2013 (end-2008: 22.4%).

The Bank has also set up special funds to ensure the availability of funds at reasonable costs. These include the Fund for Food (3F), Bumiputera Entrepreneur Project Fund-i (BEPF-i), Fund for Small and Medium Industries 2 (FSMI2), New Entrepreneurs Fund 2 (NEF2) and the Micro Enterprise Fund (MEF) which provide financing support for SMEs in specific sectors including new growth areas. With an initial allocation of RM11.4 billion, more than 58,000 SMEs have received financing from these funds. On a revolving basis, the total financing extended to date totalled RM24 billion as repayments of financing were used to finance new loans. In 2009, the Bank introduced BEPF-i managed by CGC to provide contract or project financing for Bumiputera entrepreneurs with an initial allocation of RM300 million. As at end-2013, a total of RM418 million financing was approved, benefitting more than 700 Bumiputera entrepreneurs. The asset quality remained stable attributed to the strengthened credit assessment process using cash flow analysis coupled with intensified recovery process undertaken.

Measures were also instituted to assist SMEs in managing challenges arising from economic and financial crises and natural disasters. During the Global Financial Crisis of 2008-2009, more than 10,500 SMEs received assistance through various channels including the Working Capital Guarantee Scheme (WCGS), the Industry Restructuring Loan Guarantee Scheme, and the SME Assistance and SME Modernisation Facilities. To enhance the safety net and emergency relief facilities due to natural catastrophes, a RM10 million SME Emergency Fund was established by SME Corp. Financial institutions have also stepped forward to provide other forms of financial relief, including temporary moratoriums for financing repayments, as demonstrated during the floods of December 2013. Similar support was provided under the Special Relief Guarantee Facility to 4,640 affected SMEs during earlier floods in 2007.

The Expanding Frontier for SME Financing

Building on the strong foundation laid by earlier measures to ensure access to financing, the policy focus has shifted towards facilitating financing for new growth areas and enhancing capacity and growth potential through advisory services and financial education.

The Bank, together with the financial sector, Government agencies and other stakeholders collaborated to spur investments and financing for new growth areas such as green financing and other innovative and strategic sectors. The Bank facilitated various avenues to bring businesses and financiers together to create a better understanding on the dynamics of financing required in these new areas. This included the Green Technology Financing Forum and seminars that were held in collaboration with the Institute of Bankers Malaysia (Institut Bank-Bank Malaysia, IBBM) to promote dialogue and increase awareness of transformative solutions for green technology financing. Support for financing facilities in new growth areas currently include GTFS established in 2010 with a fund of RM3.5 billion to facilitate financing in the energy, building, water and waste management, and transportation sectors. In addition, a RM200 million Creative Industry Fund was launched to spur commercial activity in the creative industry and a RM2 billion SME Financing Scheme-Islamic was established to cater for the various innovative sectors.

With increasing complexity in the financing ecosystem, the availability of avenues for SMEs to obtain information and redress has become more important. These avenues are widely available through the financial institutions, the Association of Banks in Malaysia (ABM) and SME Corp. This is further complemented by the Financial Mediation Bureau (FMB) as an additional avenue for borrowers to resolve disputes with financial institutions, and the Credit Counselling and Debt Management Agency (AKPK) which provides counselling and debt management services to individuals and sole proprietors. The Small Debt Resolution Scheme (SDRS) was established by the Bank in 2003 as a platform to assist SMEs in resolving debt and to avert defaults. Since its establishment, the scheme has helped 875 SMEs and restructured more than RM925 million of impaired loans.

Diagram 3

Key SME Financing Indicators

	2003 ¹	2006 ²	2013 ²
SME financing outstanding in RM mil (No. of accounts)	81,995 (406,086)	117,631 (615,634)	212,900 (676,144)
<i>Pembiayaan Mikro</i> outstanding in RM mil (No. of accounts)	-	84 (10,181)	857 (68,360)
Financing to green technology sector under GTFS in RM mil (No. of accounts)	-	-	1,580 (120)
% to total business financing	38.4	44.5	42.1
Average size of SME financing (RM)	202,000	191,000	315,000
Impaired loan ratio (%)	14.5	10.4	3.8

¹ Refers to banking institutions only

² Refers to banking institutions and DFIs

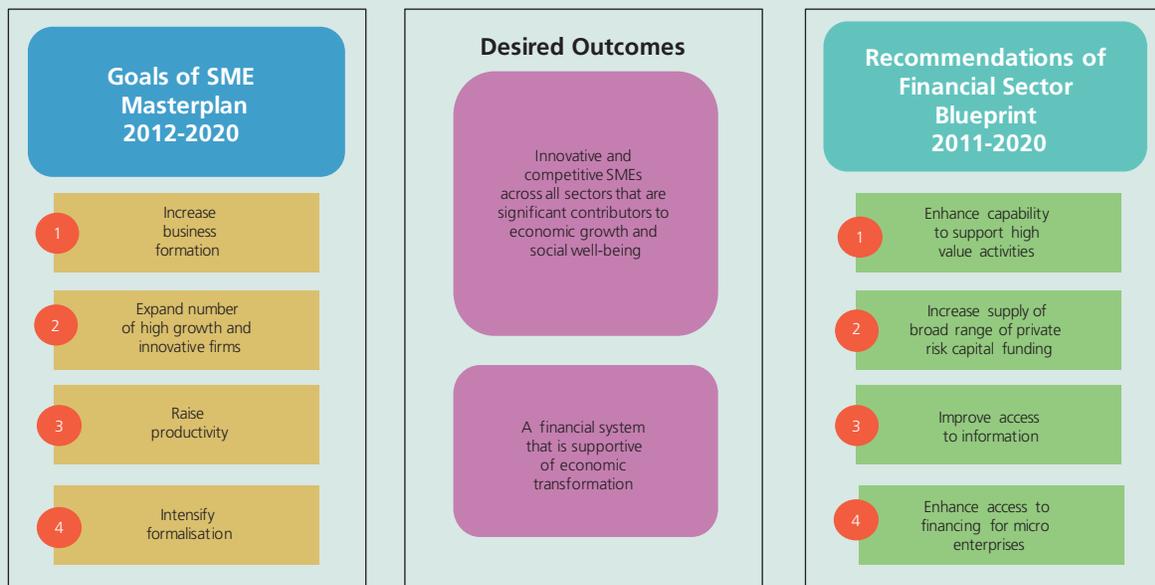
Source: Bank Negara Malaysia

Outreach programmes have been intensified to continuously educate SMEs especially micro enterprises on the availability of financing sources, assistance, and qualifying requirements. Chambers of businesses and associations have continued to run SME Financing Help Desks nationwide following training programmes initiated by the Bank for staff and members of the associations since 2011. The Bank also continues to disseminate educational materials and actively participate in outreach events organised by Ministries and agencies in collaboration with associations and other strategic partners.

The comprehensive and collaborative approach in developing the financing ecosystem has delivered significant outcomes. Total financing has doubled over the last decade, while the quality of financing has improved markedly from an impaired loans ratio of 14.5% in 2003 to 3.8% in 2013. Responsible financing practices by the financial institutions, and clients that are more informed and responsible in obtaining and utilising financing facilities, have also contributed to improved risk profiles of borrowers. These developments have seen Malaysia ranked 1st for six consecutive years by the World Bank in its 'Doing Business' reports since 2009 for 'Getting Credit'. Malaysia is also ranked 5th by the World Economic Forum for 'Ease of Access to Loans'.

Diagram 4

Holistic SME Development Framework



Source: Bank Negara Malaysia and SME Corporation Malaysia

Moving forward, continuous support for the development of the sector remains imperative for Malaysia's economic transformation. The SME Masterplan 2012-2020 (SMEMP) emphasises its importance as a strategic sector for achieving a high-income and high value-added economy while maintaining balanced and inclusive growth. With action plans directed at the focus areas of technology and innovation, marketing, human capital and entrepreneurship, infrastructure, the legal and regulatory environment, and access to financing, the sectors' contribution to GDP is projected to increase to 41% in 2020. This is complemented by recommendations under the Financial Sector Blueprint 2011-2020 (the Blueprint) which aims to further develop and expand the financing ecosystem. With the successful implementation of the SMEMP and the Blueprint, the SMEs will continue to be a key driver of sustainable growth of the Malaysian economy.

The Bank is also improving the quality and coverage of information captured on green technology financing activities and their performance, beginning with the reporting of key indicators on green technology financing trends and performance by financial institutions. The submission of this information will be on an annual basis beginning 2014 onwards. Information gathered from these submissions will be used as input to develop and refine policy strategies and shared with the industry where relevant to support financing activities. The Bank will also continue to engage closely with the Government and other key stakeholders to facilitate a holistic approach to the development of the green technology industry in order to realise its full potential as a future growth industry in Malaysia.

STRENGTHENING THE INSURANCE AND TAKAFUL INDUSTRY

The insurance and takaful industry has evolved over the years to become a significant contributor of economic growth. The industry registered positive net premium and contribution growth at an average of 8.9% annually from 2003 to 2013. Total combined assets of the insurance and takaful industry correspondingly grew by 7.3% to reach RM230.2 billion. Net premiums and contributions collected by the insurance and takaful industry in 2013 accounted for 4.9% of gross domestic product (GDP). For the life insurance and family takaful industry, the total number of policies in force as a percentage of total population has increased from 40.9% in 2003 to 53.1% in 2013. The industry is now more competitive with stronger institutional arrangements, including a wider range of intermediaries and distribution channels that deliver an array of products to consumers. Advances in the regulatory and supervisory framework have ensured that the growth in the insurance and takaful sector is also well-supported by adequate financial resources and sound risk management practices.

Building on these developments, the Bank published the concept paper on the Life Insurance and Family Takaful Framework (the Framework) in November 2013 to pave the way for market forces to work more effectively in further encouraging greater operational efficiency and innovation in the industry. This, in turn, will contribute to higher insurance and takaful penetration. The Framework outlines proposals to increase operational flexibility

accorded to insurers and takaful operators while improving consumer benefits, further diversify delivery channels, strengthen disclosures to consumers and drive higher professional standards among intermediaries. Further information on the Framework is provided in the box article 'Reforms in the Life Insurance and Family Takaful Industry'.

The Life Insurance and Family Takaful Framework to pave the way for market forces to work more effectively in further encouraging greater operational efficiency and innovation in the industry

In the general insurance and takaful sector, the Bank remains focused on achieving the two-pronged objectives set out under the New Motor Cover Framework introduced in 2011, which are to improve efficiency in the motor claims settlement process and to ensure continued access to motor insurance and takaful protection on a viable basis. During the year, further initiatives were advanced to this end, including:

- **The implementation of the second out of four rounds of motor premium adjustments which took effect from February 2013.** The adjustments are part of the transition towards a market-based pricing mechanism for motor insurance and takaful risks by 2016. The third party policy annual premium adjustments for the majority of motorcycles and private cars ranged between RM2 to RM34, similar to the level of adjustments implemented in 2012;
- **The establishment of an Accident Assist Call Centre (Accident Assist) which commenced operations on 3 June 2013.** Accident Assist provides a public service to those involved in road accidents by facilitating early claims notifications to insurers and takaful operators, and connecting vehicle owners to approved motor repair workshops. Members of the public are provided with 24-hour access to Accident Assist via its hotline number 1300-22-1188 for the following services which are provided nationwide:
 - Assistance in obtaining roadside emergency services such as arranging for towing services to approved workshops;

Reforms in the Life Insurance and Family Takaful Industry

In November 2013, the Bank published proposals to implement a package of reforms in the life insurance and family takaful industry aimed at raising the efficiency and effectiveness of delivery channels and promoting greater product innovation. The proposals, which were outlined in a concept paper on the Life Insurance and Family Takaful Framework (the Framework), are expected to improve consumer experience and drive higher productivity in the insurance sector, in turn contributing to a higher level of penetration of life insurance and family takaful products in Malaysia (refer to Table 1). The proposals support three key thrusts as follows:

Table 1

Summary of Proposals Under the Life Insurance and Family Takaful Framework

Accord greater operational flexibility	Improve effectiveness of delivery channels	Empower consumers and elevate intermediaries' professionalism
<ul style="list-style-type: none"> • Remove operating cost limits applicable to investment-linked products in the form of commission and agency related expenses <ul style="list-style-type: none"> ↳ To preserve policyholders' value, a certain percentage of the premium/contribution payable must be allocated to the policyholder's/participant's unit fund before any deduction of charges • Remove commission limits for pure protection products (pure term, medical and health and critical illness) subject to insurers and takaful operators offering those products via direct distribution channels 	<ul style="list-style-type: none"> • Align commission limits for bancassurance and corporate agents • Incentivise growth of financial advisers (FA) by: <ol style="list-style-type: none"> i. Lowering the paid-up capital requirement from RM100,000 to RM50,000 ii. Expanding the list of recognised qualifications iii. Ensuring broad access for FAs to a wide range of products that can be recommended to suit consumer needs and preferences 	<ul style="list-style-type: none"> • Implement balanced scorecard for the remuneration of intermediaries • Enhance disclosure standards to aid decision-making by consumers • Introduce product aggregator to facilitate product comparison • Introduce online insurance/takaful account to provide information on policy status • Remove limits on agency financing scheme

(i) Accord greater operational flexibility

The removal of prescribed operating limits on agency remuneration and management expenses aims to encourage investments by life insurers and family takaful operators in the development of new and innovative product offerings. This is expected to be achieved as insurers and family takaful operators gain more flexibility in managing their operating expenses. To facilitate an orderly transition towards a more liberalised environment, these flexibilities will be implemented in stages with appropriate safeguards for consumer protection. Operating limits will initially be removed for investment-linked and pure protection products. To ensure that policy premiums/contributions are preserved to create value for policyholders and are not eroded by excessive agency and management expenses, a minimum proportion of premiums/contributions (before charges) will be required to be allocated to policyholders' funds that are set aside for investments. These flexibilities will be progressively extended to a wider range of products, subject to effective competition and an adequate focus demonstrated by insurers and family takaful operators on promoting the interests of policyholders.

(ii) Improve effectiveness of delivery channels

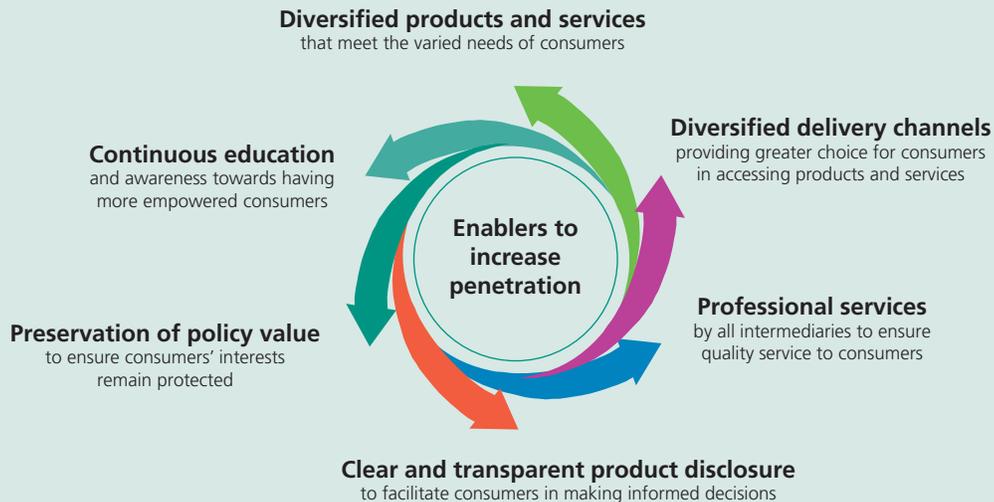
The use of bancassurance will be further promoted through a review of the commission structure, and the financial advisory channel will be further developed to complement the agency force in serving consumers in the more complex life insurance and family takaful product segments. These measures would promote a diversity of delivery channels for consumers to access products through the channel that is most convenient, cost-efficient and appropriate for their needs, thus ensuring that different segments of the society are well served.

(iii) Empower consumers and elevate intermediaries' professionalism

To elevate the quality of advice and service provided by intermediaries to policyholders, insurers and takaful operators will be accorded more flexibility to reward intermediaries through a differentiated remuneration system based on productivity, professionalism, quality of service and qualifications attained. This is expected to lift the professional standards of intermediaries by providing strong incentives to upgrade their skills and enhance the value added to consumers. The up-skilling of intermediaries will also enhance opportunities for business expansion. In addition to improving the quality of advice, support for consumers to make informed decisions will be strengthened through higher standards of disclosure, the establishment of an online product aggregator and introduction of online accounts to provide relevant and timely information to consumers in a form that promotes comparability between products and service providers. These measures will be supported by continuous financial education and awareness initiatives to strengthen consumers' financial capability.

Future landscape

The Framework is envisioned to raise operational standards across the industry, meeting the needs across all consumer segments through innovative products and services, diversity of delivery channels and proper product disclosure that is supported by quality advice. This will be underpinned by ongoing initiatives in empowering consumers to be able to discern their own life insurance and family takaful needs (refer to Diagram 1).

Diagram 1**Desired Attributes of the Life Insurance and Family Takaful Industry Under the Future Landscape****Consultation on the Framework**

During the two-month consultation period which ended on 9 January 2014, the Bank had received 254 submissions in response to the request for feedback. The Bank is reviewing all comments and will further engage key stakeholders prior to finalising the Framework.

- Information on making a motor insurance or takaful claim; and
- Information on the nearest hospital, police station, fire station and approved workshop from the location of the road accident;
- **The development and dissemination of a Motor Claims Guide (the Guide) containing key information on making a motor insurance or takaful claim.** The Guide, which is currently available electronically on the websites of the Bank, the General Insurance Association of Malaysia (Persatuan Insurans Am Malaysia) and the Malaysian Takaful Association, aims to help vehicle owners and road accident victims navigate the motor claims process with greater confidence and protect them from fraudulent and intimidating practices by unscrupulous parties after an accident. The Guide will also be made available at major public touch points across the country in 2014, including Government hospitals and police stations.

To date, eight out of 11 identified initiatives under the New Motor Cover Framework have been implemented. Collectively, these initiatives have contributed to improvements in the claims settlement process and practices, as observed in the shorter average time taken to settle a third party bodily injury claim in 2013, which reduced by up to three months compared to the time taken in 2011.

As part of the move towards more market-oriented pricing and incentive systems in the general insurance and takaful sector, measures are also being pursued to further improve underwriting efficiency and address escalating costs, in particular containing costs associated with frauds and abuses. These include arrangements to support more effective sharing of information among industry players in monitoring and preventing fraudulent activities. This will serve to curb the escalation of claims costs resulting from unscrupulous practices which are incurred by the industry and ultimately passed on to consumers through higher premiums. Such cost containment measures are important to ensure that insurance premiums and takaful contributions remain affordable in the long run under a market-based pricing environment.

PROMOTING AN INCLUSIVE FINANCIAL SYSTEM

Ensuring that all segments of the population have the opportunity to participate in the formal

financial system continues to be an important agenda of the Bank. During the year, the Bank continued to promote wider access to financial services through various delivery channels and supported more effective use of financial services through an expanded range of products and services tailored to the needs of the underserved. As a result, the number of deposit accounts per 10,000 adults continued to increase to 32,846 (2012: 30,735) as at end-2013.

Initiatives aimed at widening the outreach of financial services made significant inroads during the year. The Agent Banking Framework, after just over a year of implementation, made a significant impact in bringing financial services to Malaysians all over the country. All districts (*daerah*) and Parliamentary constituencies now have access to basic banking services. The total sub-districts (*mukim*) served has increased to 92.5% (2011: 46.4%), well ahead of the target level of 90% by the end of 2014. Similarly, the total State Legislative Assembly (*Dewan Undangan Negeri*) districts served has increased to 99.8% (2011: 72.9%) and is expected to reach 100% by March 2014. Agent banks have been very well received, with clear benefits for all the parties involved. The lower set-up costs provide substantial savings to financial institutions, agents have benefited from an increased flow of customers to their business premises, and consumers in smaller districts have welcomed the ability to conduct banking services in less formal and more familiar surroundings. The expansion of agent banking channels continues to be carried out within a regulatory framework that promotes the professional conduct of agents and safeguards the security and integrity of agent banking transactions. In 2014, a review of the Guidelines on Agent Banking will be undertaken by the Bank to expand the scope of services provided by the agent banks to better meet the needs of the underserved.

All districts and Parliamentary constituencies now have access to basic banking services

The implementation of MyMobile, the mobile banking and payments platform has also had an important impact on enhancing access to financial services. The MyMobile

platform is operated by Malaysian Electronic Clearing Corporation Sdn. Bhd. (MyClear) with participation by three banks and three mobile network operators. MyMobile leverages on mobile phone network coverage to enable customers with mobile phones to access services such as balance enquiries, fund transfers, bill payments and mobile prepaid reloads without needing an Internet connection or the use of smartphones. In the nine months since its launch in March 2013, MyMobile attracted over 130,000 subscribers and enabled transactions valued at RM16.2 million. Several measures are currently being undertaken by MyClear to further simplify the usage of MyMobile in order to promote wider adoption.

Reflecting the high priority placed on advancing the domestic financial inclusion agenda and the Bank's active role in supporting financial inclusion initiatives at the international level, the Bank co-hosted the 5th Global Policy Forum (GPF) with the Alliance for Financial Inclusion (AFI) in September 2013. The AFI is a global network of 108 financial policymakers from developing and emerging economies working together to increase access to financial services for the 2.5 billion people who do not have access to the formal financial system. With the theme 'Driving Policies for Optimal Impact', GPF was attended by more than 400 participants from 80 countries. The three-day event explored optimal financial inclusion policy strategies that achieve financial inclusion, financial stability and consumer protection objectives. Important themes that emerged from these discussions were the role of proportionate financial regulation in increasing financial inclusion, the importance of according equal attention to the quality aspects of financial inclusion and the need for more comprehensive data to support quantifiable and measurable national goals. The GPF concluded with the launch of the Sasana Accord by the AFI network, which aims to reinforce and strengthen the commitments of AFI members under the Maya Declaration towards increasing financial inclusion. Specifically, members committed to the following under the Sasana Accord:

- Further strengthen the AFI network's commitment to the Maya Declaration through the adoption of quantifiable and measurable financial inclusion targets;
- Ensure that financial inclusion policy making and strategies lead to results that are supported by credible evidence and data,

- and undertake robust measurement of the impact of financial inclusion programmes; and
- Focus on building institutional capacity and talent among the AFI network members for the formulation and implementation of financial inclusion policies that will deliver the optimal impact for financially unserved communities.

DEVELOPING DEEP AND VIBRANT FINANCIAL MARKETS

The debt securities market continued to develop as an efficient platform for fundraising and investment. The total outstanding debt securities in the market amounted to RM1,058.9 billion, a growth of 2.9% from 2012. The Malaysian debt securities market remained the largest in Southeast Asia, at 107.6% of GDP. Issuances during the year declined to RM504.4 billion (2012: RM639.5 billion), reflecting the challenging global economic conditions which restrained corporate fundraising activities. The Malaysian debt securities market nonetheless remained conducive for the issuance of debt with a wide range of maturity profiles. A significant development in the Government debt securities market during the year was the inaugural issuance of 30-year Malaysian Government Securities (MGS) worth RM2.5 billion in September 2013. The issuance, with a yield of 4.9%, received strong support from both local and foreign investors as a long-term investment option, which is evident from the high bid-cover ratio of 2.4. The issuance is also expected to serve as a catalyst for the issuance of longer-term securities, thus lengthening the maturity profile of issuances in the domestic market. On the demand side, the profile of investors in the debt securities market also continued to expand to include a more diverse mix of retail, corporate and institutional investors, with an increasing participation of international investors.

The inaugural issuance of 30-year Malaysian Government Securities is expected to serve as a catalyst for the issuance of longer-term securities in the domestic market

While the domestic financial markets have grown significantly in breadth and depth over the past decade, the further development of the financial

Chart 2.2

Outstanding Debt Securities and Sukuk (Public and Private)



Source: Bank Negara Malaysia

markets moving forward will focus on meeting the needs of a more developed and internationally integrated Malaysian economy. This entails having in place a wide range of liquidity management and hedging tools, flexible foreign exchange administration rules, a highly efficient payment and settlement infrastructure that enables seamless transfers and clearing of securities and funds, and an enhanced regulatory and supervisory framework.

In the money market, the submission of the Kuala Lumpur Interbank Offered Rate (KLIBOR) continues to be monitored closely by the Bank. Arising from the governance framework on the KLIBOR submission process issued by the Bank in 2013, all the KLIBOR contributors have now put in place the required governance framework

Chart 2.3

ASEAN Outstanding Local Currency Debt Securities Market



* As at end-September 2013
Source: Asian Bonds Online

to support more robust submissions. These have collectively further elevated the credibility and integrity of the domestic money market and specifically, the use of KLIBOR as a reference rate.

As part of efforts to support trade and investment activities, the use of renminbi as an additional currency of settlement continued to be enhanced. The range of available money market instruments and foreign exchange flexibilities was expanded to encourage the increased utilisation of renminbi by businesses and corporations. This included the introduction of the Renminbi Liquidity Facility (RLF), which stemmed from the Currency Swap Arrangement between the Bank and the People's Bank of China, to facilitate more effective renminbi liquidity management by financial institutions in Malaysia through an additional avenue to borrow or lend renminbi from/to the Bank. Instruments introduced under the RLF include renminbi money market instruments, renminbi/ringggit foreign exchange spot, forward and swap instruments and renminbi repurchase facilities provided against a range of eligible collateral issued by the Government, the Bank and member governments of Executives' Meeting of East Asia and Pacific Central Banks (EMEAP).

Wider range of money market instruments were introduced to support the use of renminbi as an additional currency of settlement

In the domestic foreign exchange market, the total turnover of foreign exchange transactions during the year recorded a slight decline of 2.6% to USD2.6 trillion (2012: USD2.7 trillion), largely reflecting the more cautious sentiment of non-residents due to uncertainties surrounding the scale back of the US Federal Reserve's asset purchase programme. Despite the demanding external conditions, the average daily turnover in the foreign exchange market remained relatively stable at USD10.4 billion (2012: USD10.8 billion), accounting for 3.4% of GDP. This provided continued support for cross-border investment, trade and business activities. This is further evidenced by Malaysia's strong position in the 2013 Triennial Central Bank Survey published by the Bank for International Settlements in December 2013, where Malaysia ranked the

third fastest growing foreign exchange market among 53 jurisdictions globally over the period of 2007-2013, recording a three-fold increase, or an expansion of 21.3% annually.

As part of ongoing efforts to deepen the domestic foreign exchange market, further liberalisation of the foreign exchange administration rules was undertaken during the year. Flexibilities for hedging were expanded to allow for more efficient management of foreign exchange risks and support innovative financial product offerings by domestic financial institutions to facilitate trade and investment activities. The expanded flexibilities included further room for residents and non-residents to undertake anticipatory hedging transactions involving ringgit with licensed onshore banks. Reflecting the increased hedging opportunities available, the total foreign exchange derivatives volume has expanded by over 2.5 times during the period of 2007-2013, or 16.6% annually and now comprises a wide range of instruments in a variety of currency pairs. These include foreign exchange and cross-currency swaps, which form 82% of the total domestic foreign exchange derivatives volume in 2013, foreign exchange forwards at 16% and options at 2%. In terms of gross notional exposure, the interest rate derivatives market continues to form the largest portion of the domestic derivatives market and has continued to serve the needs of financial institutions, businesses and institutional investors to manage interest rate risks, with a total gross notional outstanding of RM621.1 billion as at end-2013, representing growth of 3.5% from 2012.

Further flexibilities were also granted for investments in foreign currency assets and the offering of foreign currency securities in Malaysia to spur greater product innovation. Residents and non-residents are now allowed to invest in foreign currency assets offered onshore as well as to issue foreign currency securities in Malaysia. These flexibilities aim to increase liquidity in the domestic foreign exchange market through the accumulation of foreign currency funds and encourage the further diversification of asset classes in Malaysia, in addition to widening the spectrum of investors and issuers in the domestic market. Reflecting the increased flexibility, liquidity in non-ringgit currency pairs, as measured by the daily turnover of third currency pairs increased by 30% to USD2.4 billion in 2013 (2012: USD1.8 billion). Flexibility was also accorded to qualified non-resident financial

institutions that meet prudential requirements set by the Bank to offer ringgit trade financing facilities in collaboration with a licensed onshore bank. The flexibility aims to reduce the costs of doing business by facilitating trade settlements in local currencies, thereby reducing foreign exchange exposures. This measure has also enhanced potential business opportunities for licensed onshore banks through collaborations with non-resident financial institutions. As at end-2013, two branches of a Malaysian bank in the People's Republic of China (PR China) were granted flexibility to offer ringgit trade financing to facilitate trade settlements with Malaysia.

Foreign participation in the domestic debt securities market continued to be facilitated through an efficient payment and settlement infrastructure. In November 2013, services offered by Euroclear were further enhanced to enable same day income payment services for MGS and Malaysian private debt securities. Consistent with the service standards of many international financial centres, all International Central Securities Depositories participating in domestic markets will now be able to provide same value day settlement for ringgit securities thus enabling foreign investors to receive their debt securities proceeds within the same day. The participation of Malaysia in the Pan-Asian Central Securities Depository Alliance Initiative Platform has also increased investment in the Malaysian debt securities market. Since the launch of the platform in March 2012, total foreign investments in ringgit-denominated debt securities in the Malaysian financial markets has increased by 71.6%.

Recognising the importance of the enforceability of netting arrangements for investor confidence and the efficient functioning of the financial markets, the Government has proposed for the development of a netting legislation as part of measures announced in the 2014 Budget. In addition to measures in the near term to amend existing laws that may impede netting, the proposed netting legislation will secure a more permanent netting-friendly status for Malaysia by protecting netting rights under financial market contracts from any unintended impact of future legislation.

New regulations in the US prohibiting proprietary trading activities and investments in, or sponsoring of, hedge funds and private equities are likely to pose significant challenges to financial market

activities in major markets, which may have an impact on the liquidity in the bond and derivatives markets, particularly in relation to proprietary trading activities. Nonetheless, the implication on the domestic financial markets is expected to be minimal as trading of sovereign assets, such as MGS and Government Investment Issues (GII), by US banks in the host country is exempted under the rules, subject to certain conditions. This is further supported by a diversified market participant base, which would ensure continued liquidity in the domestic financial markets.

ENHANCING MALAYSIA'S INTERLINKAGES WITH REGIONAL AND INTERNATIONAL ECONOMIES

Malaysia's interlinkages with regional and international economies have continued to deepen. As at end-2013, six domestic banking groups now have overseas operations in 22 countries worldwide, including in all ASEAN countries. Total overseas assets of the domestic banking groups increased by 15.4% to RM362.1 billion in 2013 (2012: RM313.8 billion), accounting for 20.5% of the total assets of these groups (2012: 19.2%).

Further progress on the regional financial integration efforts was achieved in 2013, with the high-level principles and elements of the ASEAN Banking Integration Framework (ABIF) now being at an advance stage of being finalised. A key element of ABIF is the establishment of a set of principles for identifying a core of qualifying ASEAN banks that will serve as regional standard bearers and spearhead the banking integration process within the ASEAN region. It is envisaged that these qualifying ASEAN banks will progressively be accorded greater market access and operational flexibility based on the assessment of mutual benefits to home and host countries. This, in turn, will enhance the central role of ASEAN banks in facilitating intra-regional trade and investments, and contribute significantly to regional growth. ABIF will be supported by strengthened infrastructure and regulatory arrangements to ensure that financial stability is preserved. As part of efforts to ensure its effective implementation, ASEAN countries have also worked on defining clear arrangements for monitoring the implementation of ABIF and ensuring that the activities of qualifying ASEAN

banks are subject to effective regulatory and supervisory oversight on an ongoing basis, both on a solo and consolidated basis.

With ASEAN approaching the 2015 target date for the formation of an integrated economic community, the Central Bank Governors of ASEAN released a summary report in 2013 to guide the implementation of financial integration initiatives by 2020. Entitled 'The Road to ASEAN Financial Integration - A Combined Study on Assessing the Financial Landscape', the summary report is a joint initiative of the ASEAN central banks and monetary authorities, the ASEAN Secretariat and the Asian Development Bank. The report provides a regulator's perspective on the current financial landscape in ASEAN and details the recommended approach to integration for ASEAN as envisaged by the Central Bank Governors of ASEAN. Importantly, the report provides clarity on ASEAN's key preconditions and envisaged milestones for the liberalisation of financial services, capital account, payment and settlement systems, and capital markets in the region.

Promoting effective collaboration and coordination between regional regulatory agencies in maintaining financial system stability has become more important as more financial institutions engage in regional and international cross-border activities. Regional central banks continued to collaborate closely during the year through the EMEAP Monetary and Financial Stability Committee in the surveillance of risks and deliberation of emerging issues that may affect regional monetary and financial stability. Under this forum, the Bank led an initiative to strengthen the regional crisis management and resolution arrangements - including arrangements to improve information flows, coordinate regional central bank responses and enhance existing policy toolkits where relevant - for dealing with potential crisis scenarios. These arrangements were endorsed at the 18th EMEAP Governors' Meeting, which was hosted by the Bank in Kuala Lumpur on 29 June 2013.

Reflecting the deepening financial and economic ties between the PR China and Malaysia, the Bank established a representative office in Beijing which was officially launched in November 2013. In conjunction with the establishment of the Beijing representative office, financial cooperation between the two countries was further strengthened with the signing of a Cross-Border

Collateral Arrangement (CBCA) between the Bank and the People's Bank of China. Under this CBCA, home currency collateral in the form of securities or cash may be used by financial institutions operating in Malaysia and the PR China to obtain local currency liquidity in the host country, thereby facilitating cross-border liquidity management by financial institutions both during normal times and in crises. The Bank has also signed CBCAs with the Monetary Authority of Singapore and Bank of Thailand in 2011 and 2012 respectively.

Collaboration with the Hong Kong Monetary Authority (HKMA) was further enhanced during the year through newly established arrangements between the Bank and HKMA in August 2013 to develop the offshore renminbi business and to strengthen cooperation in the area of Islamic finance. This included the establishment of a platform to review the opportunities and enabling conditions for developing offshore renminbi products and services. In the area of Islamic finance, a private sector-led joint forum was held to discuss the current developments in Islamic finance and measures to advance the development of Islamic capital market in Hong Kong SAR. The joint forum also agreed to leverage on the established mutual recognition framework for Islamic funds between Hong Kong SAR and Malaysia to encourage a wider range of Shariah-compliant fund offerings in Hong Kong SAR and Malaysia.

Broader collaboration and cooperation with strategic partners were also promoted during the year through various bilateral cooperation agreements to strengthen financial and economic linkages and enhance mutual cooperation. The Bank signed several new Memoranda of Understanding during the year with Autoriti Monetari Brunei Darussalam, the Central Bank of the United Arab Emirates and the Central Bank of Myanmar, and a bilateral swap arrangement with the Bank of Korea. The Memoranda of Understanding encapsulate arrangements for cooperation in the development of the financial sector including Islamic finance, cross-border banking supervision, as well as in the development of human capital and capacity building initiatives. The bilateral local currency swap arrangement between the Bank and the Bank of Korea will facilitate the exchange of local currencies between the two central banks of up to KRW5 trillion or RM15 billion to support bilateral trade by reducing transaction costs through the use of local currencies for trade settlements.

MALAYSIA AS AN INTERNATIONAL ISLAMIC FINANCE MARKETPLACE

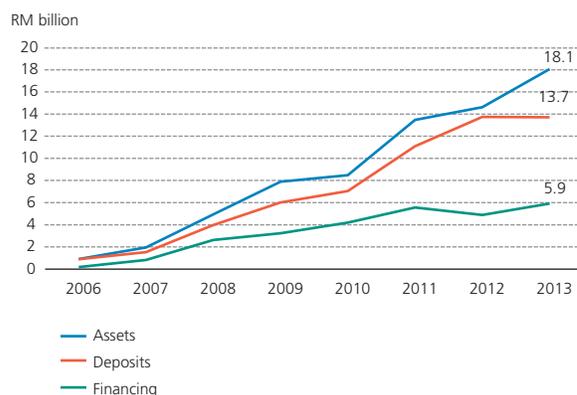
The Islamic finance industry continued its growth trajectory during the year supported by several key initiatives that have further advanced the internationalisation of Islamic finance. In 2013, the Islamic banking sector (including DFIs) recorded a growth of 16.5%, to account for 25.7% of total assets in the overall banking system. The volume of foreign currency business conducted by International Islamic Banks and International Currency Business Units also continued to grow, with total foreign currency assets amounting to RM18.1 billion in 2013 (2012: RM14.6 billion).

In the takaful sector, total assets of takaful funds grew by 10% to RM20.9 billion, while total takaful contributions accounted for 14% of total premiums and contributions in the insurance and takaful industry (including reinsurance and retakaful). To enhance the potential return to contributors, further flexibility was granted to takaful operators to invest abroad any amount of investment-linked funds of resident clients. This is an increase from the previous limit allowed of 50% of net asset value of funds belonging to their resident clients with domestic ringgit borrowing.

During the year, the Bank conferred the 'Emas' status, Malaysia's designation for foreign currency-denominated sukuk originating from

Chart 2.4

Foreign Currency Assets, Financing and Deposits of International Islamic Banks and International Currency Business Units



Source: Bank Negara Malaysia

Malaysia, to two sukuk issuances by Islamic Development Bank and a corporation in Malaysia. Since its introduction in 2009, 11 sukuk issuances have been conferred the 'Emas' status, reflecting Malaysia's evolution into a multi-currency platform for sukuk issuances. Malaysia remained the global leader in the sukuk market, with total sukuk issuance of approximately USD82.4 billion in 2013, accounting for 68.8% of global sukuk issuances, and total sukuk outstanding at USD158.2 billion as at end-2013.

As part of initiatives to expand the scope of Islamic financing activities, the Bank has continued to strengthen the end-to-end Shariah contract-based regulatory framework. The framework provides the necessary operating parameters that enable financial institutions to provide a wider range of risk-sharing products and services, while ensuring compliance with Shariah. The framework is underpinned by a comprehensive set of Shariah contract-based standards which address Shariah and operational requirements for different types of Shariah contracts. These standards provide greater clarity in respect of the application of Shariah contracts to the terms and conditions of Islamic financial products, in addition to strengthening the management of Islamic financial transactions. For details on the different risk and return profiles of various Shariah contracts, refer to the box article 'Diversification of Islamic Banking Business and Products Driven by Shariah Contracts'.

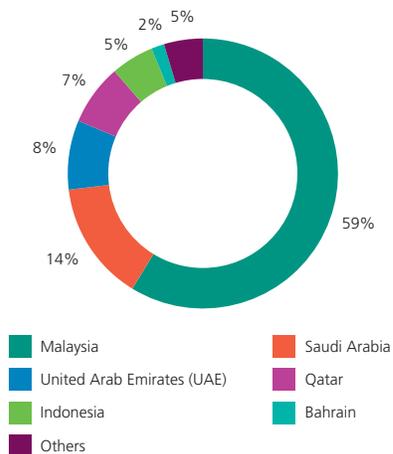
During the year, global interlinkages in Islamic finance were further enhanced through several key initiatives. This included expanding the availability

of financial instruments to support the efficient management of cross-border Islamic financial flows. To facilitate the efficient management of cross-border liquidity by Islamic financial institutions, in August 2013, the International Islamic Liquidity Management Corporation (IILM) issued its inaugural USD490 million short-term cross-border sukuk with an A-1 rating by Standard & Poor's Rating Services. The sukuk has a tenure of three months and is backed by sovereign assets. A network of seven multi-jurisdictional primary dealers from Asia (including two Malaysian banking institutions), the Middle East and Europe were appointed to trade the sukuk globally, thus promoting its liquidity. The Bank's Fully Automated System for Issuing/Tendering was utilised as the platform for issuance. The sukuk has been accorded regulatory recognition in Malaysia as a liquid asset for purposes of complying with the liquidity requirements, and a low risk credit under the capital adequacy framework applicable to banking institutions.

To facilitate the efficient management of cross-border liquidity by Islamic financial institutions, the International Islamic Liquidity Management Corporation issued its inaugural short-term cross-border sukuk

Chart 2.5

Total Outstanding Sukuk Globally in 2013



Source: Islamic Finance Information Service, Zawya, Bloomberg, Kuwait Finance House Research

As part of efforts to widen the investor base for sovereign sukuk, the Government issued an inaugural GII of RM4 billion in July 2013 based on the *murabahah* concept to replace the *bai'inah* concept which was used in the earlier issuances. Under the *murabahah* concept, the contract is a certificate of indebtedness arising from a deferred mark-up sale transaction of an underlying asset based on Shariah principles. This concept should attract greater participation from domestic and international investors and increase the depth and vibrancy of Malaysia's sukuk market. The encouraging response from investors was evident in the oversubscription to the issuance by almost three times.

On 1 August 2013, the Prime Minister unveiled the Malaysia International Islamic Financial Centre's

Diversification of Islamic Banking Business and Products Driven by Shariah Contracts

The Islamic Financial Services Act 2013 provides the legal foundation for a comprehensive regulatory framework for the Islamic finance industry in Malaysia. An important focus under this framework is the development of Shariah and operational standards for key Shariah contracts. The standards outline the underlying Shariah principles and provide guidance on sound practices and effective governance for each contract. These standards are intended to promote transparency and consistency of Shariah contract application to enhance certainty and strengthen Shariah compliance by Islamic financial institutions, as well as to serve as a key reference to catalyse greater mutual respect of Shariah opinions across jurisdictions. Ultimately, these standards are envisioned to promote the offering of a broad range of Islamic finance products that can cater to more diverse customer needs and preferences.

In the last few decades, the focus of Islamic banks has been the provision of financing services to individuals and corporations, mostly for the purchase of assets and working capital (this business will be described as ‘financing’ in this article). Nevertheless, there is now increasing attention on other forms of Shariah contracts, including equity-based or risk-sharing contracts such as *musharakah* (partnership), and exchange-based contracts such as *ijarah* (lease) (these contracts will be described as ‘primary’ in this article). These primary Shariah contracts can distinguish Islamic products from the products of conventional banks and underpin additional funding options that can be offered by Islamic banks. This article explores the implications of Shariah contracts with a range of risk-return profiles for Islamic banks and their customers, and how a diversity of Shariah contracts can enhance growth opportunities for Islamic banking business.

Risk-Return Profiles of Various Shariah Contracts

The relationship between risk and return in Islamic finance is captured in the Islamic legal maxim of ‘*Al ghum bil ghum*’, which in essence refers to the concept of ‘no risk, no return’. This legal maxim requires a contracting party to undertake risk and bear responsibilities as a precondition for entitlement to profits. This requires both Islamic banks and customers to assume certain responsibilities which may include mutual risk-taking. Profits earned by Islamic banks and the pricing of banking services must correspondingly reflect the responsibilities and the level of risk borne by each party.

Guided by this principle, Islamic finance provides a diverse spectrum of Shariah contracts with different risk and return profiles under two models, namely the primary and financing models. The primary model is operationalised through a single Shariah contract where contracting parties share the same types of risks (under risk-sharing contracts), or where Islamic banks assume specific risks (under exchange-based contracts). Under the primary model, Islamic banks would be exposed to a wider range of risks such as business risk and risks associated with the holding and management of physical underlying assets, in addition to financial risks.

On the other hand, the financing model is applied through a combination of certain primary Shariah contracts with other ancillary contracts, such as *wa’d* (promise) and *wakalah* (agent). These ancillary contracts enable Islamic banks to mitigate specific risks and achieve the principal objectives of a particular transaction. As an example, where the objective is for an Islamic bank to provide financing to a customer by purchasing an asset on behalf of the customer, *wa’d* is used to effect the eventual transfer of the asset to the customer since the bank does not have the intention to own the asset purchased. Hence, consistent with the principal objective of providing financing under this model, the ultimate risk and return profiles are similar to that of conventional financing.

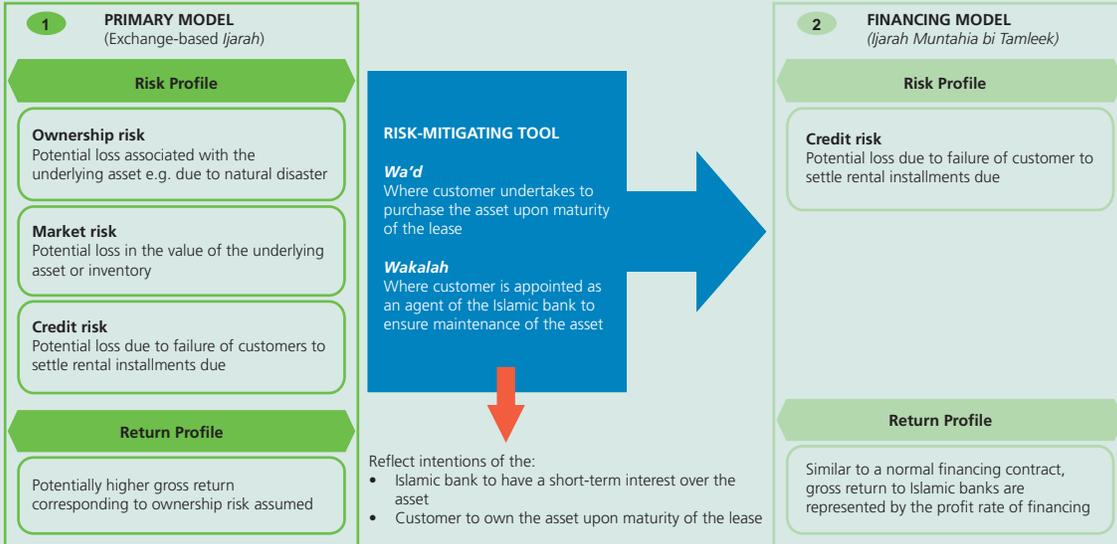
These models will give rise to different risk and return profiles corresponding to the degree of responsibilities and the level of risk borne by Islamic banks and customers. Diagram 1 provides an example of how risk and return profiles vary for different Shariah contracts under primary and financing models.

Diagram 1

Samples of Different Risk-return Profiles of Two Shariah Contracts (*Ijarah* and *Musharakah*) under Primary and Financing Models (from a Bank's Perspective)

Contract application

Ijarah contract is a lease contract that transfers ownership of usufruct of asset in exchange for rental payment. The ownership of the asset remains with the Islamic bank as lessor throughout the lease period.

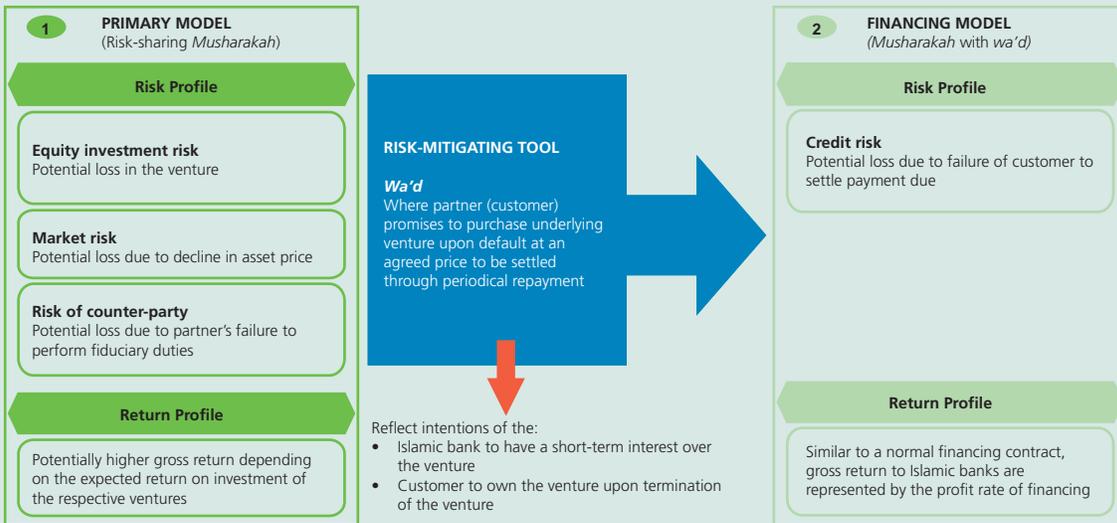


Alteration in risk profile

- Primary : Ownership risk entails Islamic banks to bear maintenance costs related to ownership of asset such as quit rent for house
- Financing : Transfer of asset ownership upon maturity of lease through *wa'd* create commitment from customer to purchase the asset, hence, enabling Islamic banks to eventually shift ownership risk to customer via *wakalah*

Contract application

Musharakah is primarily used to set up a business venture between partners who contribute capital and share profits of a business venture according to predetermined profit-sharing ratio. Upon default or termination of the venture, both partners will exit via a dissolution of the venture or selling of the venture to a third-party at a mutually agreed price.



Alteration in risk profile

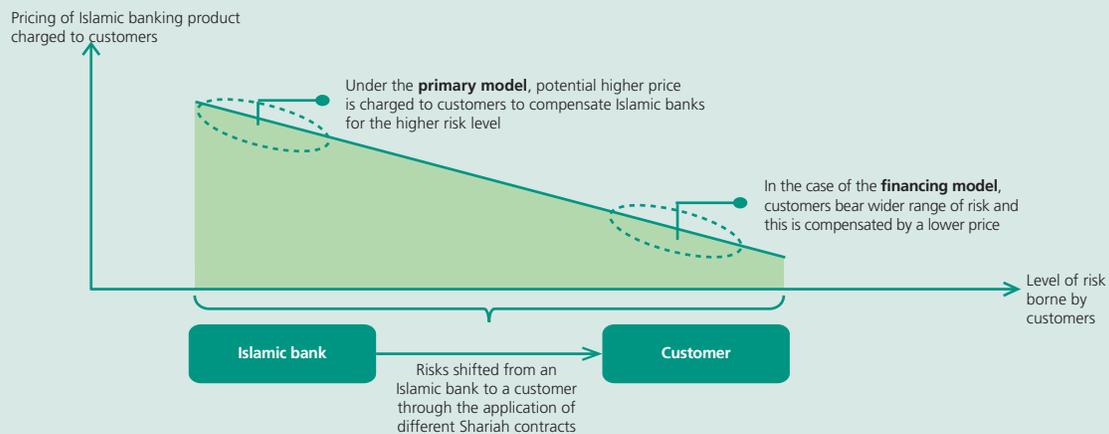
- Primary : Islamic banks and customers share the risk of a venture, hence bearing risks associated with equity investments
- Financing : A promise by the customer to eventually purchase the asset would ultimately expose Islamic banks mainly to credit risk

Impact on Pricing to Customers

Different levels of risks and obligations borne by Islamic banks and customers under various Shariah contract applications would translate into different pricing levels, as shown in Diagram 2.

Diagram 2

Illustration of the Inverse Relationship between the Level of Risks Borne by Customers to the Pricing of Islamic Banking Products



Under the financing model, Islamic banks assume mainly credit risks, with customers bearing greater responsibility of wider range of risks such as those arising from dealing directly with suppliers or defects in the acquired asset. The profit margin earned by the Islamic bank will be commensurately lower, while customers benefit from the lower pricing for the financing obtained. Conversely, under the primary model, the pricing of Islamic banking products will be relatively higher commensurate with the responsibility and level of risk assumed by the Islamic bank.

The different attributes of the financing and primary models thus provide a broader range of product options for customers with differentiated pricing to meet their specific preferences and needs. Diagram 3 illustrates an example of a product offered under *murabahah* contract.

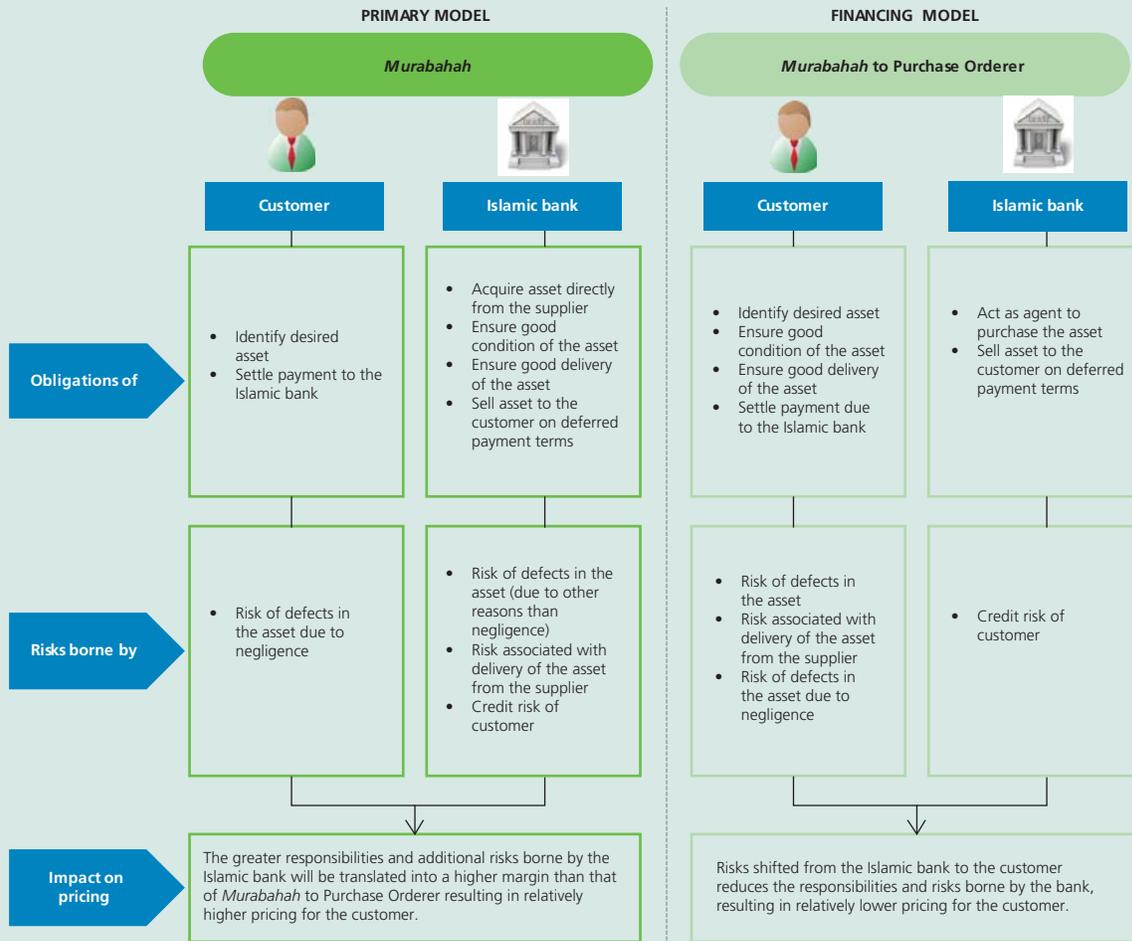
Regulatory Expectations on Islamic Banking Operations

The risks and obligations borne by Islamic banks under various Shariah contracts will require significant modifications on the design of existing infrastructures in Islamic banks. These risks and obligations also have direct implications on the appropriate governance arrangements, business conduct, strategies and risk management to ensure that Islamic banks perform their fiduciary duties effectively and efficiently.

Diagram 4 depicts the differentiated regulatory expectations for the operations of Islamic banks when offering products under the financing and primary models. These regulatory expectations form an integral part of the Shariah and operational standards of key Shariah contracts that are currently in various stages of development by the Bank. To date, the Bank has issued final Shariah and operational standards for *murabahah* in April 2013, while concept papers on 11 other Shariah standards and two operational standards have been published for industry feedback.

Products under the primary model require additional governance and risk management measures that are appropriate for the risks inherent in the contracts, in addition to existing arrangements for managing financial risks. Regulatory capital requirements should also reflect the types and level of risks involved to ensure that risk exposures of an Islamic bank are backed by an adequate amount of high quality capital. This is to ensure that risks and infrastructure required are adequately considered in the business strategies of Islamic banks that offer such products.

Diagram 3

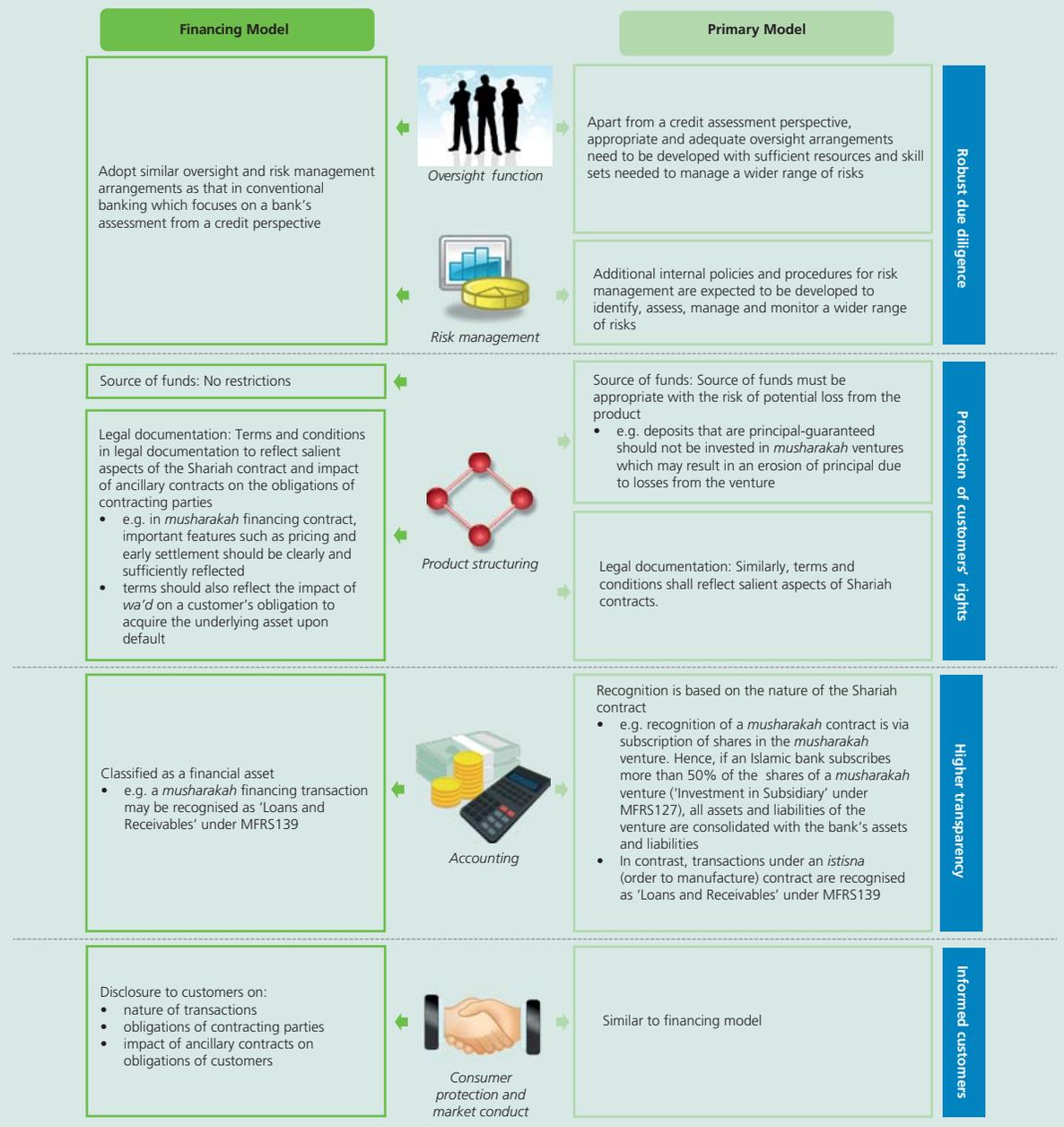
An Example of a Product Offered under *Murabahah* Contract

The terms and conditions of each product have to clearly reflect the salient aspects of the contracts, in order for customers to be fully informed of their rights and obligations. Market conduct requirements, including disclosures, also vary based on the nature of products offered to ensure a high level of transparency that commensurate with the risks borne by customers. Products must be structured to ensure that funds placed by customers are properly channelled in accordance to the agreed terms and conditions. These policies and infrastructure are important to ensure the interests of customers and other stakeholders are protected, which in turn will promote confidence and trust in Islamic banks.

Islamic banks should also conduct suitability assessments to ensure that products recommended, from among the different types of Shariah contracts available, are the ones that best serve the needs and preferences of customers. The active participation of customers in seeking a clearer understanding of Islamic products, especially how these products may differ from that of conventional banks, is also important to ensure that the expectations of customers are met by the benefits acquired and obligations assumed under an Islamic financial transaction. Significant efforts are needed to educate and promote greater awareness among customers on the different options available under both financing and primary models. Among initiatives by the Bank to promote more informed customers include the issuance of Guidelines on Product Transparency and Disclosure that outlines disclosure principles and requirements that must be observed by banks.

Diagram 4

Differentiated Regulatory Expectations on the Operations of Islamic Banks under Various Shariah Contracts



Conclusion

There are significant opportunities for the product offerings of Islamic banks, currently largely concentrated on the financing model, to expand into products based on the primary model. The potential for this new business area is growing given the demand for such products, particularly among small and medium enterprises. The evolution of a comprehensive mix of products based on primary and financing models is a major move which will significantly alter the current banking business model of Islamic banks. Hence, Islamic banks should ensure that the necessary infrastructures are developed to accommodate this change. Ultimately, this will place Islamic banks in an advantageous position to cater to a wider range of customers, in turn creating a competitive edge for Islamic banks while providing the conditions for the sustainable and expanded growth of the Islamic finance industry going forward.

(MIFC) new global brand identity 'Malaysia: World's Islamic Finance Marketplace'. It denotes the increasing connectivity of Malaysia's Islamic financial institutions with the global financial community through deeper markets in cross-border multi-currency transactions, which are supported by an enabling financial infrastructure. In conjunction with the launch, the enhanced MIFC portal was also rolled out. The portal provides Islamic finance news feeds, live market data on securities and indices and thematic analyses and research papers. Following these enhancements, traffic to the website has almost tripled in terms of monthly average visits from more than 145 countries.

As the international dimension of Islamic finance advances further, another key focus is developing Malaysia as a reference centre for Islamic financial transactions. An important development in this respect has been the comprehensive review of relevant legislation by the Law Harmonisation Committee (the Committee), aimed at creating a more conducive legal environment for the efficient conduct of Islamic financial transactions. The Committee produced the Law Harmonisation Committee Report in October 2013, which documented the Committee's recommendations. Among them are recommendations to:

- Introduce provisions in court rules on the imposition of late payment charges on judgments for debts in Islamic financial cases, as permitted by the Shariah Advisory Councils of the Bank and the Securities Commission. This recommendation has been successfully implemented;
- Enhance access to Islamic financing for consumers which involve the charging of reserve land, through recommended amendments to reserve land legislation in all states in Malaysia;
- Facilitate Islamic financing involving landed property through the recognition of Islamic finance in the National Land Code 1965; and
- Facilitate the introduction and use of innovative and globally accepted Shariah-compliant product structures for the Islamic money market through appropriate modifications to the Companies Act 1965 which would enable the more efficient conduct of collateralised commodity *murabahah* transactions.

The Committee is currently working together with the relevant Government ministries, departments and agencies to take these recommendations forward.

Moving forward, the Committee will focus on consequential legal issues that may arise from the issuance of Shariah operational standards under the Islamic Financial Services Act 2013 (IFSA 2013). The Committee will also be assessing the sufficiency of available mechanisms for resolving disputes involving Islamic financial transactions with the view to further improve existing arrangements for the resolution of cross-border disputes.

CONTINUED DEVELOPMENT OF HUMAN CAPITAL

In the past decade, initiatives for the development of human capital in the financial sector have centred on the provision of high-quality training and education for financial services professionals at all levels of the organisation. During this period, new institutions for education and training were established and existing ones have been transformed in line with the evolving needs of the financial sector. Going forward, these institutions will be crucial in meeting demands for the highest standards of quality, professionalism and ethics in the financial sector as it supports Malaysia's transition into a high-income economy.

Going forward, talent development initiatives will focus on ensuring higher standards of quality, professionalism and ethics in the financial sector

To better meet the needs of the industry, in December 2013, the Institute of Bankers Malaysia (Institut Bank-Bank Malaysia, IBBM) repositioned itself as the Asian Institute of Chartered Bankers and also launched the Asian Banking School. The transformation of IBBM should expand its outreach to banking professionals within the region and raise its profile as a professional body through instituting professional standards, conducting examinations and granting awards. The transformation also enables separate structures and mandates appropriate to the distinct strategic focus and operational independence of the Asian Institute of Chartered Bankers and the Asian Banking School. A new curriculum of the

Asian Banking School will be introduced in 2014, to cater to the evolving learning needs of the industry by moving beyond traditional classroom modes of instruction to leverage on the latest technologies in education.

To ensure that investments in training meet industry needs and raise standards in the quality of professional development, the Finance Accreditation Agency (FAA) was officially launched on 6 September 2013 with the support of the Bank and the Securities Commission. The FAA provides independent quality assurance and accreditation services for training and development programmes offered in the financial services industry. Considerable progress has been made during the year, with 97 learning programmes being accredited under the FAA Quality Framework and 15 worldwide training providers registered with the FAA as a precursor to the submission of programmes offered by these providers to FAA for accreditation in due course. The FAA is currently also developing Learning Standards for various sectors of the financial services industry as a clear guide to training providers on the minimum standards required for accreditation in terms of the design, development and delivery of learning programmes.

The establishment of a Financial Services Professional Board would provide assurance of the highest standards of competence and integrity of the financial services workforce

A key lesson from the crisis and more recent episodes of financial market manipulation is the importance of a strong culture of professionalism and ethics in the financial industry to ensure its long-term sustainability and public trust in the financial system. With this in mind, the board of the Asian Institute of Finance supported the establishment of a Financial Services Professional Board (the Board) to promote, advocate and facilitate the development and adoption of professional standards and ethical practices across the different sectors

of the financial industry, providing the public an assurance of the highest standards of competence and integrity of the financial services workforce. The Board will be industry-led comprising leading financial practitioners, and supported by non-financial industry experts, of international repute. Its role will include the advocacy of a strong professional code of conduct and an ethical framework for financial service professionals. In establishing professional standards, the Board will engage closely with both regulators and industry representatives from insurance, banking, Islamic finance and capital markets.

Existing institutes of education and training have continued to enhance their programmes to better serve the needs of the industry.

- For senior management and the board of directors of financial institutions, the Iclif Leadership and Governance Centre (Iclif) organised the inaugural Leadership Energy Summit and launched its 'Leaders Room' initiative which features a series of talks and interviews with notable leaders. The Asian Leadership Index (the Index), another new initiative planned for 2014, aims to profile the leadership landscape across 18 countries in the region. The Index will provide insights into leadership gaps in areas such as gender, generation, education level, nationality, type of organisation and industry, and will be used as input for Iclif's future development programmes for leaders.
- In Islamic finance, the International Centre for Education in Islamic Finance (INCEIF) introduced a new Industrial Doctor of Philosophy programme aimed at elevating the quality of core thought leaders in the industry and partnered with a global management consultancy group to develop a behavioural leadership competencies blueprint for the global Islamic finance industry.

Going forward, a high-level Financial Services Talent Council (the Council) will be established to formulate strategies aimed at ensuring a sustainable pool of high-quality talent for the financial sector. Through its work, it is expected that the Council will have a key role in shaping the direction of talent strategies to deal with the most pressing challenges faced by the financial industry in the management of human capital. This will include addressing challenges arising from the increasing talent mobility across

borders and institutions, a multi-generational workforce with diverse career motivations and aspirations, and the need for training programmes and delivery structures to remain relevant in a rapidly evolving industry.

KEY PRIORITIES MOVING FORWARD

Continued focus will be accorded to the development of a progressive, sustainable and inclusive financial sector that is able to drive Malaysia's transformation towards a high value-added, high-income economy within this decade. This will be guided by the Financial Sector Blueprint 2011-2020, with a focus on the following areas:

- First, efforts will be intensified to increase the capacity of financial institutions and financial markets towards providing value-enhancing products and services for new growth areas, particularly in the technology and knowledge-based sectors, which are critical to support the country's move up the economic value chain. This will entail more innovative financing schemes and approaches to support entities in the early start-up phases;
- Second, focus will be directed towards encouraging the development of a broader range of products and services to meet the diverse and distinct financial needs of consumers, including the underserved. The Bank will work with the industry to promote the provision of long-term savings products with favourable returns and low committed periodical savings to inculcate a healthy savings culture among low-income households that will help them meet financial goals, such as home ownership, and achieve financial security. To better protect lower income groups and small businesses against unexpected adverse events, the Bank will also seek to make affordable insurance and takaful products more widely available to vulnerable groups through accessible channels;
- The third area of focus will be the implementation of market-based reforms to

enhance competition and improve efficiency and transparency in the insurance and takaful industry. An immediate priority will be to ensure that adequate safeguards are in place and working effectively to protect the interests of consumers and support an orderly transition towards a more liberalised insurance and takaful landscape. Active engagement will be undertaken with the industry associations to enable them to play a more proactive role in facilitating the gradual liberalisation of the industry in an orderly manner while preserving market discipline among the insurers and takaful operators;

- The fourth area of focus will be the development of a comprehensive regulatory framework to facilitate a greater diversification of Islamic banking businesses and products. The Bank will implement a transition plan to facilitate the classification of different types of Islamic accounts offered by banks either as investment accounts (principal non-guaranteed) or Islamic deposits (principal-guaranteed), in accordance with the requirements of the IFSA 2013. Moving forward, efforts to promote certainty and strengthen Shariah compliance of Islamic financial transactions will continue through the issuances of Shariah and operational standards of key Shariah contracts. Necessary infrastructures to support a wider range of product offerings are also being developed, including a joint initiative between the Bank and the Islamic banking industry to create a platform that allows direct funding into business ventures by investment account holders; and
- The fifth area of focus will be to continue to build on and further strengthen Malaysia's regional and international financial linkages. This will include operationalising the ASEAN Banking Integration Framework and promoting a wider range of sukuk issuances to facilitate cross-border liquidity management and support the effective intermediation of the increasing flow of international Islamic funds.

2013

REGULATORY AND SUPERVISORY FRAMEWORK

- 97** Strengthening the Prudential Framework
- 103** Safeguarding the Integrity of the Financial System
- 106** *Box Article: Strengthening the Anti-Money Laundering and Countering the Financing of Terrorism (AML/CFT) Framework*

REGULATORY AND SUPERVISORY FRAMEWORK

The regulatory and supervisory framework continued to play a critical role in promoting conditions for financial stability, while supporting the development of the financial sector. The Financial Services Act 2013 (FSA) and the Islamic Financial Services Act 2013 (IFSA) came into force in June 2013, providing the Bank with enhanced powers to effectively perform its regulatory and supervisory roles in an increasingly complex financial landscape. Following this, the Bank's regulatory priorities have been directed at giving full effect to the new laws, including a re-orientation of the focus of financial supervision beyond individual financial institutions to take into account group-wide and system-wide risks. The year also saw the prudential framework strengthened in line with international regulatory reforms. This included the implementation of strengthened capital standards under Basel III and enhanced requirements on exposures to single counterparties. The Bank also continued to advance its work to further strengthen the liquidity standards for banking institutions, alongside broader initiatives to promote sound risk management practices in the financial industry.

The Bank's regulatory priorities have been directed at giving full effect to the new laws

Focus continued to be given to strengthening safeguards against threats of money laundering and terrorism financing. Further progress has been made in raising the standards of compliance with measures to combat these threats in the money services business industry. The Bank also intensified its review of the effectiveness of anti-money laundering and countering the financing of terrorism (AML/CFT) controls within financial institutions. Enforcement and supervisory actions were pursued against financial institutions that failed to effectively control money laundering and terrorism financing risks in their operations. These measures served to ensure that financial institutions remain alert to these risks, including emerging threats, and are taking appropriate measures to protect the integrity of the financial system.

STRENGTHENING THE PRUDENTIAL FRAMEWORK

Regulation and supervision of financial groups

The FSA and IFSA include provisions for the oversight of financial groups by the Bank to ensure that risks from the activities of licensed institutions' affiliates are appropriately managed and controlled. This represents a substantive enhancement to the legal framework for the financial sector and paves the way for the Bank to put in place a prudential framework for financial groups that would reinforce the existing entity-focused prudential framework to protect depositors and policyholders. Such a framework will become increasingly important as financial institutions offer innovative products and enter new geographical markets in pursuit of greater growth and diversification.

Following an extensive review of group structures and the nature and scope of group activities observed in Malaysia, the Bank outlined its intended approach to overseeing financial groups in early 2014. The Bank clarified how the boundaries of a financial group will be drawn for the purpose of prudential regulation and supervision, and correspondingly, the scope of regulation and supervision that will apply. In general, the Bank will hold a licensed institution or a financial holding company which is at the apex of a financial group responsible for ensuring compliance with group-wide prudential standards – including those on capital adequacy and liquidity, corporate governance and risk management. The apex entity will also serve as a focal point for supervisory activities, such as obtaining information for the purposes of assessing risks to the financial health of the group. These group-wide standards will complement the traditional regulatory and supervisory focus on the licensed institution on a standalone basis, by ensuring that the prudential framework also addresses risks to the licensed institution that may arise as a result of its associations and interdependencies with other entities within a financial group and the wider group. Where these entities are regulated by other authorities, the Bank will cooperate closely

with the relevant domestic and foreign regulatory authorities in ensuring that financial groups meet the required prudential standards. This includes cooperation with the home supervisory authorities of foreign-owned licensed institutions to ensure that the operations in Malaysia are subject to supervision and regulation that adequately addresses group-wide risks to the licensed institutions in Malaysia.

For groups with multiple entities operating in both the banking and insurance or takaful sectors, a separation will be required between the banking and the insurance or takaful entities. This allows group-wide capital standards which are central to the prudential framework to be applied in a meaningful way for groups of entities that operate in the two distinct sectors. The separation is also intended to ensure that the Bank and financial groups have a clear focus on the management and control of group-wide risks to banking institutions and insurance or takaful entities. Where an approved financial holding company is itself part of a wider industrial conglomerate, the Bank may require additional safeguards to be in place to mitigate contagion risks to the financial group and licensed institutions within it. This could include requirements to ensure that intra-group exposures are within prudent limits.

Group-level prudential standards will be gradually rolled out beginning from 2014

Most of the largest domestic banking groups are already headed by licensed banking institutions or financial holding companies designated by the Bank prior to the enactment of the FSA and IFSA. These will continue to serve as the apex entities for the purpose of group-wide supervision and regulation under the FSA and IFSA. For the remaining financial groups, the Bank expects to approve the relevant apex entities in the first half of 2015. An approved apex entity will be responsible for establishing and implementing group-wide policies and procedures that ensure the financial group's compliance with prudential requirements on a consolidated basis. This would also provide the Bank with an adequate view of material group-wide risks which may affect the licensed institution.

Group-level prudential standards will be gradually rolled out beginning from 2014. The first set of standards which relate to capital adequacy for banking groups headed by financial holding companies will be published for industry feedback in the first half of 2014. This will be followed by standards on corporate governance and risk management for all financial groups, and standards on liquidity management for banking groups.

The development of a capital adequacy standard for insurance groups is also planned, although not for the immediate term. This will allow the Bank to take into account the outcome of current work by the International Association of Insurance Supervisors (IAIS) to develop a global insurance capital standard which will provide an internationally harmonised approach to dealing with cross-border exposures. The proposed group capital adequacy standard will also be developed to address the combined risk exposures of conventional and takaful operations. At present, most insurance groups in Malaysia do not have material operations outside Malaysia or in non-insurance sectors. A small number of insurance groups are active in the fund management industry which is regulated by the Securities Commission. These factors currently limit the potential for contagion risk to threaten the safety and soundness of licensed insurance and takaful entities pending the implementation of group-wide capital standards for insurance groups in Malaysia.

Capital adequacy and liquidity requirements in the banking sector

Higher regulatory capital standards under the Basel III reform package were implemented in Malaysia beginning from 1 January 2013. In addition to raising the minimum required capital levels, the quality of the capital buffers in the banking system is being further enhanced through the requirements for capital instruments to have clear loss-absorbing features, such as the conversion to equity or write-off of instruments when a banking institution is no longer viable. A more prudent calculation of capital has also been adopted to account for, among others, the higher degree of uncertainty associated with valuations of certain financial instruments and properties.

Banking institutions continue to maintain strong capital positions under the higher capital standards and support domestic intermediation activities. The Common Equity Tier 1 capital ratio of the Malaysian banking system stood at 12.1%

as at end-2013, well above the 3.5% required in 2013 and 4.0% set to take effect in 2014. The year also saw banking institutions continue to use dividend reinvestment programmes and issue new Basel III compliant capital instruments to further strengthen capital buffers ahead of the timeline for the regulatory requirements to take full effect. As at end-2013, six banking institutions have raised over RM3.3 billion in Tier 2 capital instruments which meet the higher loss absorbency requirements.

Six banking institutions have raised over RM3.3 billion in Tier 2 capital instruments which meet the higher loss absorbency requirements

The calibration of new liquidity standards which are consistent with Basel III standards is also well advanced. As earlier announced by the Bank, these standards will be implemented in Malaysia in 2015. Following the revision to the Liquidity Coverage Ratio (LCR) by the Basel Committee on Banking Supervision in January 2013 to incorporate amendments to the definition of high-quality liquid assets (HQLA) and refinements to the cash inflow and outflow rates, the Bank updated its 'observation period' reporting requirements in July 2013 to facilitate its assessment of the quantitative impact of the new rules on the domestic banking sector. While the LCR is conceptually similar to the existing liquidity framework in place in Malaysia, the broader and more granular measurement of liquidity risk exposures under the LCR will reinforce the resilience of the banking system against severe liquidity shocks.

Banking institutions have improved their information capture and reporting systems to comply with reporting requirements on their liquidity positions based on the Basel III standards. The reporting requirements were introduced in 2012 as part of an observation period prior to the finalisation of the liquidity rules that will be adopted in Malaysia. While the actual LCR positions will be determined based on how the parameters are ultimately calibrated under the Bank's final liquidity rules, indicative reports suggest that the average LCR of the banking sector as at end-2013 stood at over 90%, with the majority of banking institutions reporting LCR

positions in excess of 100% – well above the minimum compliance level of 60% which will be required in 2015 under Basel III. However, these positions are expected to further improve as banking institutions continue to strengthen their funding positions – including by diversifying funding sources, developing new products such as fixed maturity term deposits with explicit restrictions on early withdrawal, and issuing long-term senior debt – and enhance the quality of internal systems for capturing and reporting liquidity risk information.

Data from the observation period reports also indicate that a large portion of the stock of HQLA held by banking institutions is of the highest quality, falling within the definition of 'Level 1' assets. These Level 1 assets – defined as assets which can be easily and immediately converted into cash at little or no loss of value even in times of stress, and which include securities issued or guaranteed by sovereigns and central banks – account for nearly 80% of HQLA reported, well above the 60% minimum specified in the rules. The remainder of the HQLA reported consists of 'Level 2' assets which include highly-rated corporate debt securities. Although the Basel Committee also allows for the limited recognition of lower-rated corporate debt securities, listed equities and residential mortgage-backed securities within Level 2 assets, these form only a small proportion (4%) of the stock of HQLA held by banking institutions. The domestic bond and sukuk market, which is one of the largest and deepest in the region, is expected to continue to provide sufficient supply of HQLA to meet the aggregate liquidity buffer needs of the banking system. As at end-2013, ringgit-denominated marketable securities which are eligible to be counted as Level 1 HQLA were valued at RM636.6 billion. Over the last five years, net issuances of ringgit-denominated HQLA grew by around 13% annually. This augurs well for the provision of a steady supply of assets to meet the needs of the banking system going forward.

An important consideration for the liquidity framework in Malaysia is the significance and unique characteristics of wholesale funding which accounts for more than 60% of total deposits accepted. A proportion of these wholesale funds in the banking system represents deposits placed by mandatory savings schemes such as the Employees Provident Fund and other retirement schemes. As these savings play a

key role in channelling a significant portion of funding from households to the banking sector, the proposed liquidity rules to be adopted in Malaysia will consider options for the treatment of such schemes. The treatment will consider, among others, the underlying stability of these funding sources and any restrictions placed on the investments abroad.

The domestic bond and sukuk market is expected to continue to provide sufficient supply of HQLA to meet the aggregate liquidity buffer needs of the banking system

The Bank expects to publish a concept paper on the new liquidity standards by mid-2014. In addition to the treatment of wholesale deposits, the proposals will address the scope of Level 2 assets that can be recognised as HQLA, the treatment of contingent funding obligations for which run-off rates are not specified by the Basel Committee, and the treatment of funding mismatches across currencies.

Qualitative requirements will also continue to play an important role in the regulatory and supervisory framework to ensure sound liquidity management practices by banking institutions. This was reflected in recent enhancements made to the Bank's risk-based supervisory framework to further strengthen the emphasis on supervisory assessments of liquidity risk. The Bank also plans in the near term to issue standards on the management of liquidity risk with the aim of elevating industry practices in areas such as stress testing and contingency planning, the setting of liquidity risk limits and liquidity transfer pricing. These standards will take into account current supervisory observations on liquidity risk management practices, and will reinforce the use of liquidity metrics such as compliance with the LCR and Net Stable Funding Ratio to further enhance the resilience of the banking system to liquidity stresses.

Limit on exposures to single counterparties

Enhanced regulatory requirements on exposures of banking institutions to a single counterparty

(also referred to as the Single Counterparty Exposure Limit or SCEL) were introduced on 1 March 2013. The SCEL serves as a backstop measure to avoid excessive concentrations in risk exposures that could materially threaten a banking institution's financial position. The key changes in the regulatory requirements were: (i) a broader definition of 'exposures' to better capture the different ways in which a banking institution may be financially exposed due to a deterioration in the credit standing of a counterparty; (ii) some scope for banking institutions to use credit risk mitigants as a way to expand their exposures to a single counterparty; and (iii) greater clarity provided for the aggregation of exposures to connected counterparties.

Following further feedback from the industry and additional data analysed by the Bank during the initial implementation period, the Bank made further refinements to the SCEL in December 2013 to mitigate the impact of the requirements on underwriting and hedging activities which did not materially increase concentration risks to banking institutions. Banking institutions are required to fully comply with the revised requirements by 1 March 2015.

Capital adequacy requirements in the insurance and takaful sectors

The Risk-Based Capital Framework for Takaful Operators (RBCT) came into effect on 1 January 2014 following a one-year parallel run. In preparation for the adoption of the RBCT, takaful operators undertook broad efforts in 2013, including a review of business and investment strategies, to improve risk profiles and strengthen risk management practices. This helped to achieve a smooth transition into the new regime. The risk-aligned capital charges under the RBCT significantly strengthen incentives for sound risk underwriting, and its implementation has seen takaful operators make significant investments in improving IT and management information systems that support more effective analysis and monitoring of risks. Aside from ensuring that takaful operators are well-capitalised, the Bank expects continued and accelerated improvements in risk management practices adopted by takaful operators as a result of the increased emphasis that the RBCT places on the boards and management of takaful operators to have in place effective capital management plans and strategies.

One of the objectives of the capital framework for financial institutions is to improve the consistency of standards across the banking, insurance and takaful sectors where appropriate. Accordingly, the Bank will consider the relevance of refinements being introduced under the capital adequacy framework for banking institutions to that for insurers and takaful operators. The Bank does not expect to make any substantive changes to the existing frameworks until work is more advanced on the development of a global insurance capital standard by the IAIS. Nevertheless, the Bank will proceed to identify changes necessary to update the valuation standards that apply to financial instruments and insurance contracts under the Risk-Based Capital Framework for Insurers (RBC) and RBCT in line with the adoption of new Malaysian Financial Reporting Standards which are consistent with International Financial Reporting Standards.

The Risk-Based Capital Framework for Takaful Operators came into effect on 1 January 2014 following a one-year parallel run

Internal capital adequacy assessments

Beyond the minimum regulatory capital requirements which banking institutions, insurers and takaful operators must comply with under the respective capital adequacy frameworks, a financial institution is also required to conduct an Internal Capital Adequacy Assessment Process (ICAAP) to ensure that it maintains adequate capital on an ongoing basis to support its business operations and to manage any unanticipated risks that may affect its financial position.

In the banking sector, the Bank completed a second review of individual banking institutions' ICAAPs during the year against the expectations set out in the ICAAP guidelines that were issued by the Bank in 2010. The reviews were focused on assessing not only the level of observance of institutions' ICAAPs to the Bank's guidelines, but also the effectiveness of these frameworks in delivering the intended sound risk and capital outcomes.

The Bank observed further advances by the banking industry in strengthening the

fundamental building blocks of the ICAAP, including the adoption of more forward-looking approaches to capital management and the use of more rigorous risk measurement techniques. A heightened level of engagement by the boards of directors and senior management in the oversight of the ICAAP was also observed, with the ICAAP serving as an increasingly important tool to integrate business strategy, risk management and capital management decisions in banking institutions. Notably, the establishment of more formal risk appetite frameworks has gained traction within the banking industry, serving to draw a clearer link between an institution's capital position and the risk exposures arising from business activities. This in turn is being used to guide strategic and business plans in a larger number of banking institutions. Banking institutions also continue to invest in information systems and reporting infrastructure to support the ICAAP, thus enhancing the decision making process.

As part of the ICAAP, banking institutions are also required to set internal capital targets that reflect their risk profiles and business plans, and develop strategies for achieving and maintaining these target capital levels. The Bank has observed the wider adoption of formal internal capital targets across banking institutions, with the majority of banking institutions targeting Total Capital ratios of 12% or more. However, the capital planning process can be further improved, in particular by strengthening the stress testing process to reflect more robust approaches to the identification of scenarios and assumptions of future economic and operating conditions. A diverse range of scenarios and assumptions should aid the evaluation of capital targets and the impact of adverse events on capital levels. Banking institutions should also consider further enhancing mechanisms in place to monitor and credibly maintain capital levels in line with internal capital targets and approved capital plans.

In the insurance sector, life and general insurers have been required to conduct the ICAAP since 2012 to reinforce the internal capital targets that insurers must comply with under the RBC. As with banking institutions, the Bank has similarly observed that insurers have accorded greater emphasis to the interaction between risk and capital, specifically through the development of risk appetite statements and the formalisation of capital management plans. Even so, there

remains scope for further integrating risk appetite frameworks with capital management policies. The Bank has also encouraged insurers to ensure that capital management plans provide clear guidance on remedial actions that will be taken when key capital thresholds are breached. As part of the supervisory process, the Bank will continue to review the implementation of ICAAP by insurers and evaluate progress made in closing any identified gaps. In the takaful sector, following the implementation of the RBCT, expectations on the conduct of the ICAAP by takaful operators will be issued in 2014. While this will be largely similar to the ICAAP for insurers, it will also take into consideration business models which are unique to takaful operators and the specificities of Islamic contracts that takaful operators enter into.

Role of actuaries

Appointed actuaries have an important role within the prudential framework in promoting the sound financial management of insurers and takaful operators. The prudential framework places responsibility on the appointed actuary for certifying the adequacy of reserves held by insurers and takaful operators to meet policy liabilities. Appointed actuaries are also responsible for preparing the financial condition report of the insurer or takaful operator as a basis for the board's oversight of the institution's financial affairs. The financial condition report is also used in supervisory assessments by the Bank. During the year, the Bank undertook a review to strengthen existing prudential standards on appointed actuaries. The Bank published its proposals, which reflect international best practices, for industry feedback in June 2013. In line with the expanded scope of provisions on appointed actuaries in the FSA and IFSA, the proposals will also be applicable to actuaries appointed by general insurers and takaful operators.

Proposals were made to enhance the stature of the appointed actuary by requiring the appointed actuary to have direct access to the board, and to ensure that actuaries take a more active role in raising the level of board and management understanding of actuarial issues. This includes a stronger emphasis on ensuring that the communication of actuarial issues is clear and timely, and the risk and financial implications of the issues are fully understood by those who are not experts in the field. Proposals were also directed at strengthening the effectiveness of the control function which is performed by

the appointed actuary. This included proposals that require the appointed actuary to be in the full-time employment of the insurer or takaful operator, and a clearer separation of the appointed actuary from pricing responsibilities which may conflict with his/her duties to certify the adequacy of insurance or takaful reserves.

Feedback from the industry has been mainly concerned with the demands that the proposals are likely to place on the actuarial talent pool in Malaysia. These demands are expected to be more pronounced in the general insurance and takaful industry. The Bank acknowledges that a pragmatic approach which includes appropriate transitional arrangements, with longer-term initiatives to further develop the actuarial talent pool, are likely to be needed in implementing the enhanced standards and to support the future expansion of domestic insurance and takaful operations. The Bank is close to finalising the standards which will reflect these considerations.

Standards were issued to promote the sound pricing of retail loans and financing products

Risk-informed pricing of retail loans

In 2013, standards were also issued to promote the sound pricing of retail loans and financing products. This is not only important for the long-term viability of lenders, but also to promote a sound credit market. While lending standards have generally remained prudent across the banking and development finance sectors, more aggressive pricing practices due to heightened competition have been observed in the retail lending space. This can increase portfolio risks especially where pricing models that are insufficiently robust do not allow lenders to identify and manage mispriced risk segments. The risk-informed pricing standards aim to mitigate this risk by requiring lenders to produce realistic estimates of the costs and expected losses of the different retail loan and financing product segments, and ensure that the implications of a chosen pricing strategy are well understood and reflected in a lending institution's capital and risk management plans. Over the last two years since the Bank first shared plans to put the standards in place, lenders have made considerable progress in

addressing important data and systems gaps which had constrained the adoption of the standards at an earlier date. The standards will now come into effect in March 2014.

Islamic investment accounts

Reflecting the continuing evolution of the Islamic financial system in Malaysia, the IFSA introduced a clear distinction between 'Islamic deposits' and 'investment accounts' in line with Shariah. Under the law, the terms of an investment account must not guarantee the repayment of principal and return on monies paid into the account; this will depend on the performance of assets underlying the account. Given the higher inherent risks to investors from these accounts relative to deposits, standards were proposed by the Bank in March 2013 to promote the sound management of such investment accounts. The proposals cover requirements to ensure that proper oversight and risk management arrangements are in place to manage the investments underlying these accounts and uphold compliance with Shariah. The proposals also address duties on disclosure and fair dealing for the protection of investors. Banking institutions will have to comply with the final requirements by June 2015, when the separation between Islamic deposits and investment accounts takes full effect under the law after a two-year transition period.

SAFEGUARDING THE INTEGRITY OF THE FINANCIAL SYSTEM

Money services business industry

Together with heightened supervisory activities, the strengthened regulatory regime under the Money Services Business Act 2011 (MSBA) continued to support the orderly development of the money services business industry. This industry comprises the money changing, remittance services and wholesale currency businesses.

In 2013, marked improvements continued to be observed in the record keeping practices of money services providers. This was reflected in the increased use of computerised systems and better documentation of money services business transactions. Money services providers have also put in place AML/CFT policies and procedures. These range from basic frameworks prevailing among the smaller entities, to more comprehensive arrangements in place within the larger entities. The Bank continues to work with the industry to improve the effectiveness of AML/CFT policies and practices

across the industry, with education, supervisory engagements and enforcement actions being important levers used by the Bank to achieve this.

During the year, the number of licensed entities reduced further to 474 from 515 in 2012. This was the result of the further consolidation of the industry and the surrender of licenses by smaller entities which opted to become agents of larger and more established money service providers. The number of agents correspondingly increased to 208 in 2013, including licensed entities that are approved to be agents in a different money services business line. These structural changes have produced greater business synergies and enabled more effective supervision and control of money services providers while promoting a healthy level of competition. There are presently ten principal licensees that are allowed to appoint agents, and these serve an important role in raising industry standards and strengthening safeguards against the risk of abuse of the industry for illegal purposes. The principal licensees are expected to provide effective oversight, training and systems that ensure compliance by the agents with regulatory requirements. These expectations are clearly set out in the money services business agent oversight framework issued by the Bank. In supervising the industry, the Bank also reviews the effectiveness of agent oversight arrangements implemented by principal licensees.

Two important outcomes of the enhanced regulatory and supervisory framework for money services business are providing wider public access to money services through formal channels and improving the capture of money services business transactions. Substantial progress has been achieved on both counts as evidenced by higher outward remittances in 2013 totalling RM25.1 billion, an increase of 27% from RM19.7 billion recorded in 2012. Of this amount, remittance agents accounted for about RM1 billion involving 1.1 million transactions, reflecting greater access to authorised remittance channels through the broader branch and agent network. At the same time, the money changing business turnover expanded further by 22% to RM52 billion, compared to RM42.5 billion in 2012, largely due to improvements in record keeping systems.

In the wholesale currency business sector, RM4.6 billion in domestic transactions were

recorded in 2013, an increase of 35% from the RM3.4 billion reported in 2012. This growth was supported by sustained demand for the exchange of foreign currencies, as well as the increasing presence of currency wholesalers throughout Malaysia which provided more reliable, efficient and cost-competitive services to meet the needs of licensed money changers for sourcing and clearing foreign currencies. The enlarged presence of currency wholesalers has also helped to reduce the risks associated with alternative means for obtaining foreign currency from questionable sources.

The Malaysian Association of Money Services Business was launched in January 2014 with the aim of building capacity and elevating professionalism in the money services industry

The Malaysian Association of Money Services Business, which was launched in January 2014, is expected to complement the Bank's efforts in driving and implementing initiatives to build capacity and raise standards of compliance and professionalism across the money services industry. The immediate priorities of the association are to develop a code of professional and ethical conduct for the industry; provide training and education on requirements under the relevant laws and sound business practices, including in respect of AML/CFT compliance; promote awareness among consumers of their responsibility to deal only with authorised money services providers; and facilitate constructive engagements with the Bank to achieve the consistent and effective implementation of regulatory requirements across the industry.

Assessment of Malaysia's AML/CFT framework against international standards

As a highly open economy, Malaysia is committed to safeguarding its financial system from being used to harbour or channel illegal funds linked to criminal and terrorist activities. Through its membership in the Asia/Pacific Group on Money Laundering (APG), Malaysia undergoes a periodic Mutual Evaluation Exercise to assess its conformity with international AML/CFT standards. A peer review exercise is scheduled to take place in 2014, following a similar exercise conducted in

2007. The assessment in 2014 will be based on the standards of the Financial Action Task Force (FATF) Recommendations which were enhanced in 2012. This review will also employ a more rigorous evaluation methodology which extends beyond an assessment of the technical compliance with provisions of the AML/CFT framework to include an appraisal of its effectiveness in deterring and preventing the use of the financial system to launder criminal proceeds or fund terrorist activities. The Bank considers the upcoming review as an opportunity to identify areas for further enhancing the AML/CFT regime in Malaysia.

The recent years have seen the Bank make significant strides in enhancing the AML/CFT framework, including the improvements articulated in the box article 'Strengthening the Anti-Money Laundering and Countering the Financing of Terrorism (AML/CFT) Framework'. The Bank, in collaboration with other Ministries and law enforcement agencies, also initiated a broad national-level effort in 2013 to identify and understand the money laundering and terrorism financing risks faced by the country. In line with international practice advocated by the FATF, this national risk assessment (NRA) aims to identify key vulnerabilities and risks across various sectors in the country. This will assist in prioritising the deployment of resources to tackle high-impact risks in a more effective and targeted way, including through a heightened supervisory focus on identified sectors or entities that are assessed to be of higher risk.

A peer review exercise with the Asia/Pacific Group on Money Laundering is scheduled to take place in 2014

Supervisory review on financial institutions' AML/CFT practices

Given the role of financial institutions in financial intermediation and in channelling flows of funds across borders, the financial system remains the focal point of the Bank's initiatives to combat money laundering and terrorism financing.

Supervisory reviews in recent years have revealed that most financial institutions have in place the necessary programmes to address evolving threats of money laundering and terrorism

financing. A thematic review conducted by the Bank in 2013 showed that a number of financial institutions were increasing investments in information systems. The management of AML/CFT risks is also being more closely integrated with the overall risk management functions of these institutions. The Bank has further observed a greater level of awareness among board members and senior management about the risks and implications of money laundering and terrorism financing. In respect of suspicious transaction reports (STRs), a general improvement in the STR quality has been observed in practices across financial institutions. Nonetheless, the Bank notes that a number of financial institutions have yet to fully develop and implement proper systems to facilitate effective ongoing monitoring of customer accounts and its pattern of transactions, leading to non-reporting of STRs in some instances. There is also scope for financial institutions to further improve how front-line employees conduct customer due diligence (CDD) and assess money laundering and terrorism financing risks when dealing with prospective and existing customers.

Enforcement

The effective enforcement of laws and regulations is critical to national efforts to protect the financial system from abuse. The Bank investigates and pursues criminal actions against offenders of the laws it administers. During the year, the Bank brought 1,823 charges against companies and individuals investigated for operating illegal schemes and activities (Table 3.1). A number of these enforcement actions were pursued jointly with other Ministries and law enforcement

agencies – such as the Companies Commission of Malaysia, the Inland Revenue Board of Malaysia and the Ministry of Domestic Trade, Co-operatives and Consumerism – particularly where the offences cut across the jurisdiction of other domestic authorities. In cases where the Bank is not directly involved in prosecuting an offence, the Bank plays a role in providing financial intelligence to the relevant authorities.

In addition to criminal sanctions, enforcement is also supported by administrative and civil actions which the Bank initiates against its regulated institutions for non-compliance. In particular, monetary penalties are imposed on financial institutions for failures to implement appropriate AML/CFT compliance measures. Such sanctions play an important role in complementing other supervisory actions to ensure that financial institutions effectively discharge their responsibilities for detecting and deterring money laundering and terrorism financing. In 2013, monetary penalties amounting to RM0.7 million were imposed on two banking institutions and eight money changers for various non-compliances with the Anti-Money Laundering and Anti-Terrorism Financing Act 2001 (AMLATFA) and AML/CFT standards. In the money services business industry, actions were taken against 24 entities in 2013. These include the imposition of monetary penalties for non-compliance with various regulatory and operational requirements under the Money-Changing Act 1998 and MSBA amounting to RM0.6 million and the removal of key responsible persons for more serious offences.

Table 3.1

Enforcement Actions Taken in 2013

Illegal deposit taking	<ul style="list-style-type: none"> 16 charges under section 25(1) of the Banking and Financial Institutions Act 1989 against two companies and seven individuals.
Money laundering	<ul style="list-style-type: none"> 1,793 charges under section 4(1) of the Anti-Money Laundering and Anti-Terrorism Financing Act 2001 (AMLATFA) against 33 individuals and companies involving RM8.3 billion and 11 kg of gold. One civil forfeiture application under section 56(1) of the AMLATFA filed against two respondents involving RM129,275.
Unauthorised provision of money services	<ul style="list-style-type: none"> Revocation of licence of one money changer under the Money-Changing Act 1998 (MCA) for unauthorised provision of money remittance services. 14 charges under the MCA and the Money Services Business Act 2011 against 11 entities, of which seven have been convicted.

Strengthening the Anti-Money Laundering and Countering the Financing of Terrorism (AML/CFT) Framework

In recognition of the increasing threats from money laundering and terrorism financing (ML/TF) in recent years, many countries including Malaysia have intensified efforts to develop and maintain an AML/CFT regime that is robust and can effectively respond to the constantly evolving risks and vulnerabilities. These efforts are aimed at protecting the integrity of the financial system and the economy. The AML/CFT regime in Malaysia is characterised by four pillars - a comprehensive legal framework, implementation of preventive measures, effective enforcement of laws and regulation and close cooperation between agencies, both domestically and internationally.

The first pillar is a comprehensive legal framework that provides for a wide range of ML/TF offences, sufficient powers of investigation and prosecution for relevant law enforcement agencies and a broad range of proportionate and dissuasive sanctions.

This is reinforced by the second pillar - the implementation of preventive measures to detect and deter ML/TF activities in financial transactions undertaken by financial institutions as well as designated non-financial businesses and professions (DNFBPs)¹. The Anti-Money Laundering and Anti-Terrorism Financing Act 2001 (AMLATFA) and relevant regulatory requirements collectively aim to ensure that reporting institutions implement the necessary preventive measures and establish AML/CFT risk controls and programmes that are commensurate with the ML/TF risks associated with the profile of their business. Efforts are currently underway to further strengthen the AMLATFA and regulatory requirements in response to new and emerging risks, and to reflect industry practices that have evolved in managing ML/TF risks.

The third pillar is the effective enforcement of the laws and regulations to promote an environment that dissuades ML/TF activities. Investigations and enforcement actions are carried out by the relevant law enforcement agencies and supported by timely financial intelligence. As the competent authority under the AMLATFA, the Bank serves as the Financial Intelligence Unit (FIU) which is responsible for analysing reports submitted by the reporting institutions and disseminating financial intelligence to the relevant law enforcement agencies. The FIU also conducts supervisory and enforcement activities on reporting institutions under the Bank's purview.

The fourth pillar is the close cooperation and coordination between agencies both in Malaysia and across borders. Domestically, the National Coordination Committee to Counter Money Laundering (NCC) which was established since April 2000 plays an important role in strengthening cooperation between the various agencies involved in combating ML/TF and in coordinating inter-agency strategic and policy initiatives. This has included joint efforts in investigating and prosecuting crimes that involve multiple law enforcement agencies. At the international level, membership in the Egmont Group of Financial Intelligence Units provides Malaysia with a platform to cooperate particularly in the areas of training and sharing of information. Cooperation with international counterparts also continues to be forged. In 2013, the Bank signed two Memoranda of Understanding (MoUs) with the financial intelligence units of the Republic of South Africa and St Kitts-Nevis, bringing the total number of such MoUs in place so far to 37.

Amendments to the AMLATFA

During the year, the Bank under the ambit of the NCC proposed several amendments to the AMLATFA and revised the existing regulatory requirements in line with global standards and to ensure that the AML/CFT framework remains relevant and effective in combating ML/TF threats.

¹ Designated non-financial businesses and professions (DNFBPs) include casino, lawyers, accountants, dealers of precious metals and stones, gaming business, money lenders, pawn brokers, trust companies and real estate agents.

The proposed amendments to the AMLATFA were tabled for the first reading in Parliament in December 2013. The proposed amendments are aimed at:

(i) Enhancing clarity of reporting obligations

The amendments will clarify regulatory expectations and obligations of reporting institutions when conducting customer due diligence (CDD), including an expansion of the requirements relating to document retention. The amendments will also include an explicit requirement for reporting institutions to submit suspicious transaction reports (STRs) on suspicion of terrorism financing. To safeguard the confidentiality of information reported to the Bank, specific amendments are also being proposed to criminalise the act of tipping-off customers after an STR has been submitted to the Bank.

(ii) Strengthening measures on declaration for cross-border transportation of cash / bearer negotiable instruments (BNIs)

Reflecting heightened international concerns with cross-border transportation of cash or BNIs for ML/TF purposes, requirements on cash declarations will be expanded to include transportation of cash or BNIs via cargo, mail or other means as well as new requirements on the declaration of cash received from outside Malaysia. The amendments also provide specific powers for enforcement authorities to seize any undeclared cash or BNIs.

(iii) Widening the scope of offences and strengthening enforcement powers

The proposed amendments will expand the scope of money laundering offences to include any thing or any property which is used in connection with the commission of a serious offence in addition to expanding the definition of proceeds of an unlawful activity. The practice of structuring transactions in order to evade cash threshold reporting requirements will also be made an offence.

Provisions relating to the freezing, seizure and forfeiture of assets under investigation will be enhanced, by including the power to vary or revoke an order to freeze property. To ensure that penalties serve as a credible deterrent, the amendments will increase the maximum penalty for an ML offence to 15 years imprisonment, and a fine of not less than five times the sum or value of the proceeds of unlawful activity or instrumentalities of an offence at the time the offence was committed, or RM5 million, whichever is higher.

Revised Regulatory Requirements

The AML/CFT requirements, first issued under the AMLATFA in 2006 were also revised in 2013 to support the more effective implementation of AML/CFT measures by both regulators and reporting institutions. This included changes that would promote a more consistent application of AML/CFT requirements throughout the financial sector including the securities industry and financial institutions in the Labuan International Business and Financial Centre. The requirements were also enhanced by incorporating higher expectations following the recent changes in international AML/CFT standards.

The revised regulatory requirements reflect a stronger emphasis on the implementation of a risk-based approach to the management and control of ML/TF risks. This approach seeks to ensure that AML/CFT measures implemented by reporting institutions are proportionate to risk, while responding to concerns that the indiscriminate implementation of AML/CFT measures can result in the exclusion of legitimate consumers and businesses from the formal financial system.

The Bank revised and issued five AML/CFT policies to the financial sector, including the money services business sector, DNFBPs and non-financial sector, which came into effect in September 2013 and November 2013 respectively. The revisions cover the following areas:

(i) Introduction of a risk-based approach to AML/CFT

Reporting institutions are now required to adopt a risk-based approach to identify, assess, and mitigate the ML/TF risks associated with their products, services and operations. This includes requirements for reporting institutions to conduct comprehensive risk assessments and risk profiling of customers, and to implement the appropriate internal controls, policies and procedures to prevent their businesses from being used as a conduit for ML/TF.

(ii) Refined and strengthened CDD requirements

Taking into consideration the average transaction size and feedback from enforcement agencies, the CDD thresholds for money changing transactions were revised downwards from RM20,000 to RM3,000 and RM10,000. Reporting institutions are now required to sight and record the identification information of the customer or beneficial owner for transactions above RM3,000; whilst for transactions above RM10,000, reporting institutions are also required to retain a copy of the identification document. The revised thresholds would further strengthen safeguards against ML/TF risks in the money services business sector.

In line with efforts to promote greater financial inclusion, the list of identification documents which can be accepted for CDD verification purposes has also been expanded. The revised requirements allow the use of any official document bearing the photograph of the customer or beneficial owner, provided that the reporting institution is satisfied with the authenticity of the document presented.

To streamline the requirements with international standards, the requirements relating to politically exposed persons (PEPs) have been extended to include domestic PEPs² and persons entrusted with prominent functions by an international organisation. Reporting institutions are now required to take reasonable measures to determine whether a customer or beneficial owner is a domestic PEP or person entrusted with prominent functions by an international organisation, perform a risk assessment, and apply the appropriate CDD measures for the level of risk identified.

(iii) Enhanced requirements on AML/CFT compliance programme

Revised requirements were introduced to raise standards of compliance by reporting institutions. This included higher expectations placed on the compliance function and requirements for compliance officers to meet minimum 'fit and proper' criteria. An important objective of these requirements was to ensure that reporting institutions give adequate priority to AML/CFT activities in the key business activities of the institution, and to enhance the role of compliance officers in driving AML/CFT improvements within the reporting institutions. Considering the significance of the banking and insurance sectors in the financial system, the Bank introduced additional requirements to ensure that compliance officers in these financial institutions have sufficient stature, authority and seniority to effectively influence decisions that affect the level of compliance with AML/CFT requirements.

In view of the critical role of the board of directors, particularly of financial institutions and the larger reporting institutions, in setting the tone and influencing the culture of their institutions, the revised requirements also make the board specifically responsible for maintaining overall accountability for and oversight of the AML/CFT programme within the reporting institution.

(iv) Introduced new requirements on financial group reporting

To ensure that the activities of a financial group do not result in undue risks to the integrity of the financial system, the Bank now requires financial groups to implement AML/CFT compliance programmes on a group-wide basis and to appoint a group compliance officer

² Domestic PEPs are defined as individuals who are or have been entrusted domestically with prominent public functions, for example Heads of State or of government, senior politicians, senior government, judicial or military officials, senior executives of state-owned corporations, important political party officials.

for AML/CFT. This will ensure that the AML/CFT compliance programme is consistent across the entire group and facilitate consolidated AML/CFT supervision by the Bank.

(v) Clarified requirements for dealing with customers from higher risk countries

In view of the increasing exposure to cross-border transactions and customers originating from other countries, the Bank enhanced regulatory expectations on financial institutions that transact with persons from countries deemed as higher risk by either the Financial Action Task Force (FATF)³ or the Government of Malaysia. In addition to the CDD, reporting institutions are required to apply counter-measures which are proportionate to the risk posed by these customers or transactions. These measures include reviewing existing relationships with customers or institutions in higher risk countries, and enhancing the intensity and frequency of audits on branches and subsidiaries operating in higher risk countries.

A series of awareness sessions on the revised requirements was conducted for all key sectors and will be continued in 2014 to support the effective implementation of the requirements by reporting institutions as part of their AML/CFT compliance and risk management programmes.

³ FATF is an independent inter-governmental body that develops and promotes policies to protect the global financial system against money laundering, terrorist financing and the financing of weapons of mass destruction. Currently, FATF's membership comprises 34 member countries and two regional bodies.

2013

MARKET CONDUCT AND CONSUMER EMPOWERMENT

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MARKET CONDUCT AND CONSUMER EMPOWERMENT

The Financial Services Act 2013 (FSA) and the Islamic Financial Services Act 2013 (IFSA) provide the Bank with an explicit mandate to promote fair, responsible and professional business conduct of financial service providers (FSPs) that will better protect financial consumers, supported by a wide range of regulatory, supervisory and enforcement instruments. During the year, the Bank further strengthened standards on business conduct, heightened the intensity of supervision and surveillance in areas where risks to consumers were assessed to have increased, and coordinated closely with various agencies and the industry in addressing conduct issues. Measures to strengthen existing mechanisms for resolving disputes involving FSPs were also advanced that will result in the introduction of a financial ombudsman scheme governed by the FSA and IFSA. Given the importance of financial capability in promoting individual financial well-being, financial literacy and education initiatives continue to form a crucial component of the Bank's consumer protection framework. These initiatives were focused on empowering financial consumers from all ages

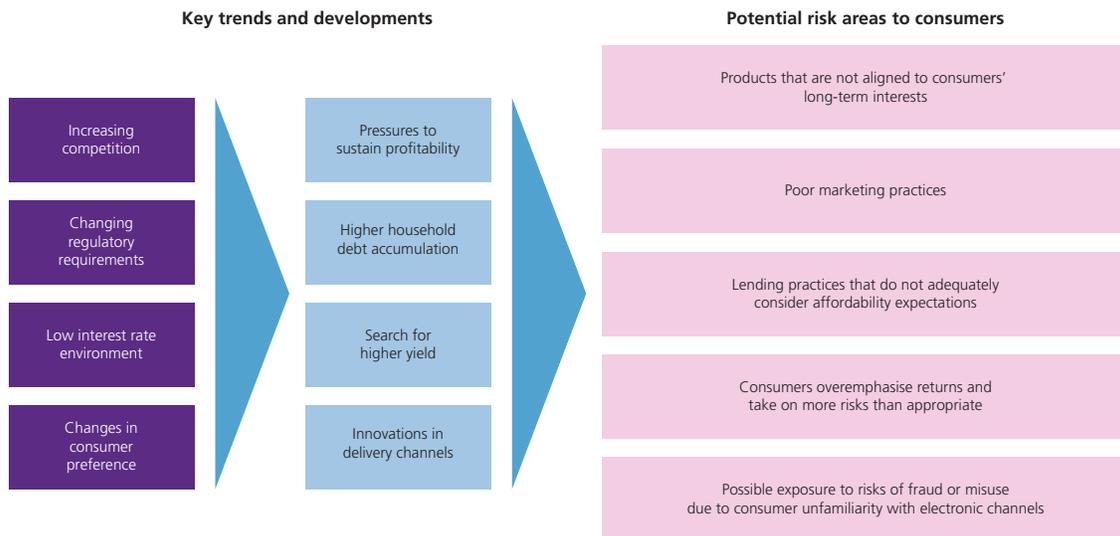
and walks of life to make financial decisions with confidence and protect themselves against unfair practices and from falling prey to financial scams.

KEY TRENDS AND DEVELOPMENTS

The focus of market conduct regulation and supervision by the Bank is guided by an assessment of key trends and developments in the operating environment that could heighten risks to financial consumers. In 2013, the prevailing low interest rate environment, stiff competition in the retail market (including from non-bank credit providers) and the strengthening of regulatory expectations remained the key factors that influenced consumer behaviours and the treatment of consumers by FSP. In addition, advancements in information technology have continued to alter the way in which financial products and services are sold, delivered and utilised. In the general insurance sector, the misalignment between premiums and losses from claims – now being gradually addressed with progressive revisions to the motor tariff since January 2012 – also presented continued challenges for general insurers.

Diagram 4.1

Key Trends and Developments, and Potential Risk Areas to Consumers



In consideration of these prevailing conditions, the Bank's market conduct priorities in 2013 were directed at monitoring and managing the following risks that could result in consumer detriment:

- **Continued pressures on the profitability of FSPs from intense market competition in the retail segments, potentially leading to:**
 - The promotion of more complex products by FSPs to a wider consumer segment, without considering whether the products marketed are suitable for the target segment. This includes products with less transparent pricing structures such as complex mortgage products, structured banking products and investment-linked insurance products that are less capital-intensive but with greater risks borne by consumers.
 - Adoption of aggressive sales practices by FSPs and their agents to meet growth targets, including misleading advertisements, misrepresentations of product features and recommending financial products without due consideration of suitability to consumers. The impact on consumers is more significant for long-term products such as life insurance, family takaful and long-term investment products given the potential mismatch in the investment assumptions and actual yields.
 - FSPs engaging in compulsory bundling of financial products to boost sales or cross-subsidise an unprofitable product line, whereby customers are pressured into purchasing products that they do not need.
 - Financing practices that are not aligned with responsible financing expectations resulting in borrowers taking on more debt than they can reasonably afford.
- **The continued accumulation of household debt under an environment of low borrowing costs and the rapid expansion of financing activities of non-bank financial institutions and moneylenders.** Households that make borrowing decisions without considering their ability to service the debt over a longer term may face risks of financial strains. The risks are compounded if borrowers have inadequate financial buffers to meet emergency expenditures or weather income shocks. Consumers who borrow from unlicensed moneylenders may be further exposed to extremely high interest rates and aggressive debt collection practices.

- **The search for yield which may lead consumers to make inappropriate financial decisions that are driven by high expected returns without properly understanding the related risks.** The search for returns may also result in consumers falling prey to fraudulent investment schemes and financial scams.
- **Development of new and innovative delivery channels and consumers' increasing utilisation of Internet and mobile banking channels.** While these alternative delivery channels have widened the access to financial services and afforded efficiency benefits to consumers, those who are ill-informed of security measures and do not exercise due care over the privacy of confidential information such as IDs and/or passwords may face potential risks from fraudulent activities.

REGULATION AND SUPERVISION OF FINANCIAL SERVICE PROVIDERS

Market conduct regulation and supervision by the Bank is focused on addressing risks posed to financial consumers through a regulatory framework that promotes responsible business conduct, and supervisory activities to check and enforce compliance with regulatory requirements on fair and responsible dealings. To better support these functions, a new unit was created within the Bank's Consumer and Market Conduct Department to identify, monitor and evaluate emerging conduct risks impacting financial consumers.

The Bank's regulatory priorities in 2013 were largely directed at implementing the new conduct provisions under the FSA and IFSA. New standards were issued to ensure that where customer information is permitted to be disclosed under the law, FSPs observe adequate safeguards to protect the information from misuse. The registration process for new adjusters was also improved for greater efficiency. Existing standards on responsible lending, investor protection, and product transparency and disclosure were enhanced to better protect consumers and harmonise requirements across financial products. Pursuant to provisions in the FSA and IFSA which prohibit FSPs from engaging in unfair business conduct, guidance was developed to clarify the treatment of industry practices and outline factors that would be taken into account in assessing if a conduct was prohibited. The guidance, which will

be issued in 2014, will cover any practice by FSPs to mislead or deceive consumers, exert undue pressure when marketing financial products, or coerce consumers to purchase a financial product as a condition of purchasing another financial product. The Bank is also developing a set of overarching standards on fair and responsible business conduct to strengthen the focus of financial institutions, in particular at the board and senior management levels, on ensuring high standards of fair dealing and professional conduct towards financial consumers. A key outcome of these standards is to provide greater confidence to financial consumers that they are offered products and services that meet their needs and financial circumstances, and can make informed choices.

Market conduct regulation and supervision by the Bank is focused on addressing risks posed to financial consumers through a regulatory framework that promotes responsible business conduct, and supervisory activities to check and enforce compliance with regulatory requirements on fair and responsible dealings

As part of the Bank's effort in fostering efficient payment services and promoting the usage of payment cards in place of cash, the Bank also took the opportunity to further strengthen existing business conduct requirements applicable to card issuers. The new requirements, which are also applicable to debit cards and charge cards, enhance the important information that card issuers must provide to consumers in relation to a card's features, fees and obligations of the cardholders, and prohibit card issuers from engaging in coercive practices to pressure customers to apply for new payment cards.

The Bank employs a wide range of supervisory tools, from thematic examinations to industry engagements and cooperation with other authorities, to identify poor conduct practices that

could be detrimental to consumers. The focus of the Bank's supervisory activities in 2013 took into account the key risks facing consumers, in particular that related to product offerings (including fees and charges) and sales and lending practices. These are elaborated under 'Managing Risks to Financial Consumers' below. During the year, the Bank completed assessments of the level of compliance by 12 significant FSPs (covering both banks and insurers) to existing standards on key 'treating-customers-fairly' (TCF) areas. The TCF areas include proper advice during marketing and sales of financial products, adequate transparency and disclosure throughout the product life-cycle, sales and remuneration practices that are aligned with responsible conduct towards consumers, safeguarding customers' information and effective complaints handling and redress mechanisms. The assessment will be extended to all major financial institutions regulated by the Bank as a basis for determining the level of supervisory scrutiny that will be applied to individual FSPs. Institutions that are not adequately managing risks in their conduct towards consumers will be supervised more closely with greater expectations placed on the control functions in ensuring weaknesses identified are effectively remedied.

The Bank also implemented measures to strengthen the capacity of FSPs in the insurance and takaful broking sectors and further raise the level of protection afforded to consumers. Broking companies have been required to increase their paid-up capital in stages to RM750,000 by 31 December 2013 and RM1 million by 31 December 2014. The requirement for broking companies to have a minimum level of professional indemnity (PI) insurance/takaful coverage has also been increased to RM1 million (from RM500,000 currently) with effect from 2014. Notwithstanding the minimum PI coverage required, broking companies must ensure that the level and scope of coverage commensurate with the volume and nature of business handled by the company. These developments were accompanied by an increased focus on elevating the professionalism and competency of insurance and takaful broking personnel. To this end, the Malaysian Insurance and Takaful Brokers Association, in consultation with the Bank, has implemented a Continuing Professional Development (CPD) programme with effect from January 2014 which will complement the minimum qualification requirement that broking personnel must meet in ensuring competent and professional services to customers.

During the year, the Bank took supervisory action against one insurance broking company by not renewing its licence due to breaches of regulatory requirements.

MANAGING RISKS TO FINANCIAL CONSUMERS

Promoting responsible financing practices

In managing risks arising from the accumulation of household debt especially among the more vulnerable groups, the Bank issued standards on responsible financing in January 2012 which require financial institutions to conduct assessments of a borrower's capacity to take on additional financing. In 2013, a thematic review by the Bank affirmed that affordability assessments made by FSPs have improved following the issuance of the standards, with more information being provided to borrowers on the process for demonstrating affordability and the implications of a potential rise in borrowing costs. This has helped to reduce longer turnaround times for processing loan applications, while encouraging borrowers themselves to be more responsible in considering their own ability to afford more debt. Overall, FSPs are adopting more realistic assumptions for essential expenditures in conducting affordability assessments and have demonstrated greater restraint in marketing financing products to more vulnerable borrowers. These measures have contributed to the moderation of new borrowing by households which recorded a slower growth of 11.7% in 2013 (2012: 13.5%).

While the overall household loan growth had continued to moderate, other market developments were contributing to an increase in indebtedness among low to medium income households. Firstly, there has been a strong expansion in personal financing in particular from the non-bank financial institutions. Part of this was the result of more stringent financing requirements, in particular, on credit cards, imposed on financial institutions and card issuers regulated by the Bank. In addition, financing tenures were being extended up to 25 years for personal financing and 45 years for home financing. While this had the effect of lowering the monthly repayments, the total debt burden of borrowers was higher as a result. Lending at low rates to civil servants by non-bank financial institutions also increased rapidly, encouraged by automatic salary deductions for loan repayments without sufficient regard to affordability.

The Bank acted to contain the rising risks that these developments presented to vulnerable households by introducing further measures during the year to reinforce responsible financing practices. Financing tenures were capped at 10 years for personal financing and 35 years for financing to purchase residential properties. Financial institutions were also prohibited from offering pre-approved personal financing products while the introduction of new personal financing products or variations to existing products must be approved by the Bank. To ensure consistent standards across the key credit providers and to minimise regulatory arbitrage, these measures have also been extended to credit co-operatives regulated by the Malaysia Co-operative Societies Commission (Suruhanjaya Koperasi Malaysia, SKM), the Malaysia Building Society Berhad (MBSB) and AEON Credit Service (M) Berhad.

Ensuring product suitability and proper advice

The lack of familiarity with the structure and general principles of insurance and takaful products represents a continuing challenge for many consumers in making informed choices to meet their needs. FSPs are therefore required to ensure that consumers have access to relevant and meaningful information, receive proper advice and are well-informed about their rights and obligations before purchasing an insurance or takaful product. In addition, the provision of proper advice by FSPs must be based on a sound understanding of the customer's financial circumstances and objectives.

During the year, the Bank conducted a review of insurance and banking practices in relation to the offering of bancassurance products. Over the years, banking channels have become a significant distribution outlet for insurance and takaful products, with 136 bancassurance partnerships established in the industry and 21.9% new insurance and takaful premiums/ contributions generated from this channel by the end of 2013. The review by the Bank covered the design of products sold through banking channels, sales and remuneration practices, the adequacy of training provided to sales representatives and the effectiveness of dispute and resolution arrangements. The Bank found that aside from credit-related products, assessments of whether an insurance or takaful product was suitable for individual banking customers could be improved. Weaknesses were observed in the provision of

advice to individual banking customers, resulting in some products recommended that do not match customers' financial objectives. This was mainly due to the failure of sales staff to provide complete and accurate information to customers and in some cases, customers choosing not to disclose information needed for product suitability assessments. FSPs have since strengthened internal processes with clear accountabilities for ensuring that bank customers receive proper advice on insurance and takaful products. This includes refining the target customer segments for different products, strengthening the process for approving sales to customers that are not within a defined target customer segment, providing better training to bank staff, and implementing more effective controls such as welcome calls and independent reviews of the Customer Fact Find Form.

In addition, the provision of proper advice by FSPs must be based on a sound understanding of the customer's financial circumstances and objectives

The Bank has also observed an emerging trend in the use of telemarketing channels to promote and market insurance and takaful products. Based on a review of telemarketing practices and mystery shopping calls, supervisory measures were taken by the Bank to ensure that FSPs improve telemarketing sales scripts which did not properly inform consumers about the products that were being sold. Affected FSPs were required to make call backs to consumers to confirm the product purchased. Where consumers have not expressly agreed to purchase the products, FSPs were required to make immediate refunds.

Ensuring meaningful disclosure

Meaningful disclosure enhances consumer protection by helping consumers understand the costs, benefits and risks associated with financial products and make informed judgments about the suitability of a product in meeting their needs. Conversely, disclosures that are misleading can distract consumers from considering factors that are important and relevant to informed financial decisions.

In the area of insurance and takaful, the FSA and IFSA introduce changes with respect to the pre-contractual disclosure obligations of consumers, and remedies available to insurers/takaful operators for misrepresentations. The changes which are applicable to consumer insurance/takaful contracts provide better protection to policyholders/participants, in particular against disproportionate actions by insurers/takaful operators to avoid insurance/takaful contracts in a situation where a misrepresentation by the consumer was not intentional. Under the new regime, greater responsibility will be placed on insurers and takaful operators to pose specific questions to consumers to solicit relevant information required for underwriting purposes. To prepare for the implementation of these new requirements which will come into force at a later date to be determined by the Bank, insurers and takaful operators are in the process of reviewing all existing proposal forms and relevant terms and conditions under consumer insurance/takaful contracts, and enhancing internal policies and procedures for underwriting and renewals to comply with the new provisions of the FSA and IFSA. Part of this review also includes providing greater clarity within internal processes on the types of remedies to be applied in the event of a misrepresentation by consumers.

Meaningful disclosure enhances consumer protection by helping consumers understand the costs, benefits and risks associated with financial products and make informed judgments about the suitability of a product in meeting their needs

During the year, insurers and takaful operators were required to enhance their disclosure under the Skim Anuiti Konvensional Kumpulan Wang Simpanan Pekerja (KWSP) and the Skim Anuiti Takaful KWSP, which had shown high rates of surrender by policyholders/participants approaching age 55. As this ran counter to the intent of the schemes to provide a regular income stream to individuals during retirement,

insurers and takaful operators were required to advise policyholders/participants who wished to surrender their policies/plans that these products were designed to provide a guaranteed monthly income from the age of 55 for the remaining life of the policyholder/participant. Policyholders/participants were also provided with a comparison between the value of surrender payouts and the value of annuity payments after age 55.

In the banking sector, the Bank reviewed more than 900 banking advertisements and marketing brochures as part of its continuing programme to identify and prevent misleading representations. Incidents of non-compliance with the Bank's Guidelines on Transparency and Disclosure have continued to decline despite intense competition in the retail deposit and lending space. In 2013, 11 incidents were detected, with the FSPs required to immediately modify or withdraw misleading advertisements to prevent consumers from relying on such representations.

To facilitate better consumer understanding of their obligations under loan agreements, commercial banking institutions have adopted standardised and simplified descriptions of key terms and conditions developed by the Association of Banks in Malaysia (ABM) for housing loans and home financing with principal sums of RM500,000 and below. Based on a survey by ABM, this initiative has also improved the turnaround time for the processing of housing loans mainly due to the shorter processing times in the early stages prior to the perfection of loan documentation.

To guide future initiatives by the Bank to continuously improve on standards on product transparency and disclosure, the Bank is currently undertaking a study, to be completed in 2014, on how consumers use information made available to them for financial decisions.

Equitable fees and charges

While the Bank seeks to leverage on competitive market forces to ensure that fees and charges imposed on financial products and services are not excessive, FSPs must comply with the Bank's guiding principles on fair and reasonable fees and charges. The Bank intervenes in cases where fees and charges are found to be inconsistent with these guiding principles. During the year, actions were taken for non-compliance with the guiding principles resulting in a refund of RM13.3 million to affected customers.

In addition, out of a total of 199 product applications received and reviewed by the Bank for new or upward revisions of fees and charges imposed on individual consumers and small and medium enterprises (SMEs), close to one-third (2012: 22%) were rejected or required to be moderated downward. This indicates that further improvements are needed in the internal oversight of the FSPs to ensure that fees and charges levied are reasonable and are in line with the guiding principles issued by the Bank. This will continue to be an area of close scrutiny by the Bank. The suspension of new fees and charges will be an action considered should a financial institution persistently fail to observe the Bank's guiding principles.

Preventing banking fraud

As a result of banking institutions' ongoing efforts to ensure a secure electronic banking (e-banking) environment, fraud cases involving Internet banking have continued to reduce from 1,992 cases in 2012 to 1,353 in 2013 despite the continuing growth of e-banking transactions. There has also been increased collaboration between the banking industry and other agencies in combating online fraud with the launch of a nationwide e-Banking Awareness Campaign in January 2013 to create awareness among the general public on e-banking scams. This collaborative effort involved the ABM, key member banks of the Association of Islamic Banking Institutions Malaysia, CyberSecurity Malaysia, the Malaysian Communications and Multimedia Commission and the Royal Malaysia Police which are part of the Bank's Internet Banking Task Force.

Monetary losses due to Internet banking fraud have declined significantly to account for only 0.0001% of the RM3.5 trillion in total value of Internet banking transactions in 2013, down from 0.0002% of the RM2.8 trillion in 2012. The main modus operandi continues to be 'phishing', which involves the use of fake e-mails or short message services purportedly sent from a banking institution to obtain customers' personal identification details for the purpose of performing fraudulent transactions.

The Bank is reviewing the Guidelines on the Provision of Electronic Banking Services to further strengthen the security measures required of banking institutions to enhance the safety of e-banking services and e-payment channels.

Combating financial scams

Criminal actions taken against illegal investment schemes continued to have an important role in providing a credible deterrent against financial scams. During the year, two illegal investment scheme operators and their key associates were charged for illegal deposit-taking under the Banking and Financial Institutions Act 1989 (BAFIA). The Bank also instituted 1,793 charges against 33 individuals and companies for money laundering offences under the Anti-Money Laundering and Anti-Terrorism Financing Act 2001 (AMLATFA). Inter-agency collaboration in combating illegal investment schemes continued to be strengthened with the Bank, the Ministry of Domestic Trade, Co-operatives and Consumerism, Companies Commission of Malaysia and the Inland Revenue Board of Malaysia mounting coordinated actions against a large illegal investment scheme operator. Collaboration with other law enforcement agencies was also enhanced in the sharing of information and conduct of joint surveillance and intelligence gathering activities which facilitated the Bank's monitoring of illegal activities.

In the longer term, more fundamental reforms to the institutional and legal framework will be considered to strengthen the multi-agency approach. These reforms underpin a more holistic response for stronger prevention and disruption measures against financial crimes

The Bank continued to elevate the awareness of financial consumers on financial scams, leveraging extensively on media channels to inform and caution the public on the modus operandi of the financial scams and enforcement actions taken against those who commit financial crimes. The Bank also collaborated with consumer associations and business chambers to educate consumers on precautionary measures to protect themselves from falling prey to illegal investment schemes. The Financial Consumer Alert List, which was introduced in 2012, continued to be an

important reference point for consumers to stay informed on suspected illegal providers of financial products and services.

These initiatives have helped to reduce the number of incidents of financial scams reported to Laman Informasi Nasihat dan Khidmat (BNMLINK) by 23% to 8,402 cases in 2013 from 10,913 cases in 2012.

Given the increasing sophistication of the nature and methods for perpetrating financial crimes, the current inter-agency mechanisms will continue to be enhanced in the areas of prevention, consumer education, complaint management, sharing of intelligence, and joint investigation and prosecution. In the longer term, more fundamental reforms to the institutional and legal framework will be considered to strengthen the multi-agency approach. These reforms underpin a more holistic response for stronger prevention and disruption measures against financial crimes.

Motor insurance sales and claims practices

In the general insurance sector, the Bank remained alert to practices in which general insurers were requiring policyholders to purchase personal accident insurance as a condition for, or together with motor insurance, in efforts to improve the balance between motor and non-motor risks. Supervisory activities by the Bank during the year uncovered more than 700,000 cases involving three insurers that were engaged in such practices. The insurers were directed to refund the premiums received to those policyholders who chose not to continue with the personal accident cover. Under the FSA and IFSA, the ability of the Bank to take strong enforcement actions would be significantly strengthened to address such practices.

The Bank also continued to pursue broader measures to improve the transparency and efficiency of motor claims settlements. This has been achieved in collaboration with a wide range of stakeholders, including government agencies, insurers, adjusters, repairers, Motordata Research Consortium Sdn Bhd, and the Financial Mediation Bureau (FMB). During the year, the Accident Assist Call Centre which is linked to all motor insurers was introduced to provide immediate assistance to vehicle owners involved in road accidents. This follows earlier measures implemented to improve the efficiency of claims settlement process including (i) reducing the time taken to submit medical reports to

insurers/takaful operators for the purpose of assessing bodily injury claims and ensuring the authenticity of these reports; (ii) improving the quality and coverage of data captured on motor vehicle repairs and valuations for the purpose of assessing claims; and (iii) linking up the systems of insurers/takaful operators and adjusters to enable adjusters' reports to be submitted online to insurers/takaful operators.

COLLABORATION WITH OTHER AGENCIES

The Bank continues to coordinate its market conduct oversight activities with the Securities Commission and the Malaysia Competition Commission (MyCC). A joint working group between the Bank and the Securities Commission was established in 2013 to address issues relating to the application of the Guidelines on Investor Protection to FSPs carrying out capital market activities under the Capital Markets and Services Act 2007 with the aim of streamlining, as far as practicable, the requirements relating to conduct of capital market intermediaries regulated by both the Bank and the Securities Commission. The Bank is also a member of the Technical Working Group on Financial Services established by MyCC in 2013. The working group which comprises MyCC, the Bank and the Securities Commission was active during the year in supporting the respective authorities on dealing with competition issues in the financial sector and harmonising current industry practices and policies with competition principles. To formalise the ongoing collaborative arrangements, a Memorandum of Understanding (MOU) between the two agencies is scheduled to be signed in the first half of 2014. An important focus of the MOU will be to support effective cooperation mechanisms between the Bank and MyCC in respect of tied selling and collusive actions which are governed by the Competition Act 2010, the FSA and IFSA.

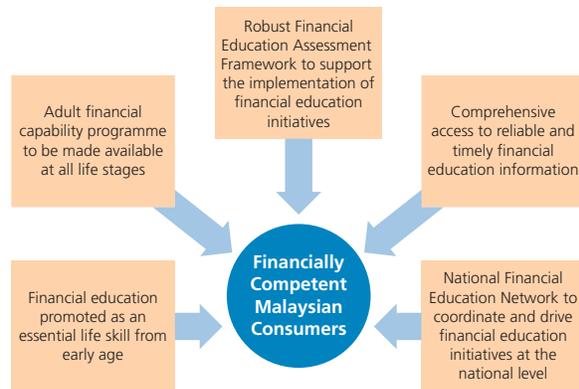
WELL-INFORMED AND RESPONSIBLE FINANCIAL CONSUMERS

Enhancing financial capability through financial education initiatives continued to be an important priority for the Bank in 2013. The challenges posed by the operating environment coupled with the growing complexity of financial products and services have further intensified the need to equip financial consumers with the capability to make informed

financial decisions with confidence. Recent studies by the Bank in partnership with a number of local universities revealed that two-thirds of Malaysian households are poorly prepared to deal with income shocks with savings of less than three months. This underscores the importance of prudent financial management to help individuals and households build adequate financial buffers against potential income and expenditure shocks. With longer life expectancies, it is also important to ensure adequate financial provisions for retirement.

Diagram 4.2

Key Strategies to Sustain Financial Literacy Efforts towards Building Financially Competent Malaysian Consumers



The Bank's ongoing collaboration with the Ministry of Education to integrate financial education into the school curriculum continued to make encouraging progress. The incorporation of financial education themes within the Bahasa Malaysia, English, Mathematics and Moral Education subjects was introduced in the Year Four curriculum in 2014 and will be progressively extended to the school curriculum for other primary school years. Similar initiatives will be undertaken for the secondary schools commencing from 2017. The Bank also supported the introduction of financial education as a compulsory module for vocational college students undertaking the Malaysian Vocational Diploma Programme. Financial education in schools presents an important opportunity to equip the future generation with fundamental financial management skills, thus ensuring that those entering the labour force in the future will have a strong knowledge base for making informed financial decisions. To complement and support these initiatives, the Bank realigned and enhanced the role of FSPs under the School Adoption Programme to

serve as subject matter experts to provide advice to teachers on the technical aspects of financial management, including on products and services. This will further reinforce financial education delivered in the classroom.

Financial education for adults has continued to leverage on the success of the POWER! programme.

This financial education module is directed at young adults aged 18-30 years old, to equip them with money management skills and promote prudent debt acquisition, thus pre-empting future over-indebtedness. A total of 167,478 participants have benefited from the POWER! programme's practical money management lessons. POWER! participants learn about borrowing for productive

Table 4.1

Key Achievements for Financial Education Initiatives in 2013

Strategy	Achievements
Promote financial capability from an early age	<ul style="list-style-type: none"> • Financial education elements incorporated in Year Four Mathematics, Bahasa Malaysia, English and Moral Education textbooks. • 14-hour financial education module rolled out for final semester trainee teachers at all Institut Pendidikan Guru. This is part of the efforts to prepare teachers for the nationwide roll-out of financial education in school curriculum. • Trained the trainers to support financial education in the Institut Pendidikan Guru curriculum, in collaboration with the Ministry of Education: <ul style="list-style-type: none"> - 100 Institut Pendidikan Guru main trainers gained skills and confidence to train their peers at respective Institut Pendidikan Guru. - Approximately 3,900 Institut Pendidikan Guru lecturers were exposed to personal financial management skills and trained to deliver 14-hour financial education modules. - 5,000 trainee teachers gained skills to manage personal finances. • Enhanced the competency of approximately 300 trainers from the Ministry of Education to train their peers in respective states to implement financial education in schools. • More than 1,000 teachers at nine Institut Pendidikan Guru benefited from the POWER! programme which provided them with practical lessons and tools for effective debt and cash flow management. • Financial education made compulsory for semester five students of the Malaysian Vocational Diploma Programme. • Lecturers from 15 vocational colleges in Malaysia received training to deliver financial education to semester five students at their respective colleges.
Delivery of timely and useful financial education information	<ul style="list-style-type: none"> • Developed lesson plans (Mathematics, Bahasa Malaysia, English and Moral Education) for Year Four and Year Five embedding financial education elements and activities that promote higher order thinking skills. • Disseminated financial management information and advisory services on financial-related matters through MobileLINK to over 15,000 individuals from rural communities in 91 sub-districts. • More than 1 million copies of <i>Buku Wang Saku</i> distributed to students, while <i>duitsaku.com</i> recorded more than 672,000 hits during the year as part of the outreach programme to children on basic money management skills.
Targeted financial capability programmes for adults based on significant events at life stages	<ul style="list-style-type: none"> • Over 32,000 individuals attended POWER! programme focusing on effective cash flow management and prudent debt acquisition. • A total of 2,724 seminars were conducted by AKPK on personal financial management, reaching more than 150,000 employees and students. • Collaborated with AKPK to conduct a programme for government employees primarily focusing on managing household debts and creating awareness on financial scams. During the year, 92 programmes were conducted involving 10,564 participants. • Disseminated financial education messages through popular radio stations and vernacular newspapers.

purposes, the true costs of borrowing and the concept of borrowing based on affordability. During the year, the Bank and the Credit Counselling and Debt Management Agency (Agensi Kaunseling dan Pengurusan Kredit, AKPK) enhanced the outreach and relevance of the financial education programmes by tailoring them to the life event model. With an initial focus on working adults, the Bank and AKPK initiated the delivery of financial education programmes at the work place through public-private sector partnerships, including with government agencies such as Amanah Ikhtiar Malaysia, Institut Pendidikan Guru Malaysia, Jabatan Kemajuan Islam Malaysia, the Royal Malaysia Police and the Royal Malaysian Navy.

Financial education in schools presents an important opportunity to equip the future generation with fundamental financial management skills, thus ensuring that those entering the labour force in the future will have a strong knowledge base for making informed financial decisions

As financial education in schools and for adults gains momentum, steps are also being taken to enhance the enabling infrastructure in support of financial education initiatives by further improving consumers' access to information and interactive financial management tools. In this respect, the development of a financial education portal to serve as a central gateway for all consumer-related financial management matters will begin in 2014. The new portal will replace the existing *bankinginfo*, *insuranceinfo* and *Islamicfinanceinfo* portals and provide the public with a single interface to access to quality, reliable, user-friendly and timely information as well as tools that can assist in financial decision making. The new portal will also bring together other key providers of financial education to integrate and further expand the available channels for consumers to obtain financial information, advice and assistance.

The Bank continues to ensure that investments in resources to carry out financial education initiatives are planned and delivered judiciously.

All major financial education programmes are assessed to evaluate their effectiveness in meeting the intended objectives through a Financial Education Assessment Framework. The Framework, developed in 2013, enables the Bank to gauge the impact of financial education programmes on the overall level of financial literacy of the Malaysian population. Findings from the assessment are also used to continuously improve education programmes. The assessment of the POWER! programme under the Framework in 2013 revealed that while participants acquired a significant increase in financial management knowledge, this has not resulted in a sustained behavioural change. This is consistent with anecdotal evidence which points to lifestyle pressures and cultural biases as significant factors that also influence consumers' financial behaviours. These insights have been used by AKPK to better customise the contents and delivery of the POWER! programme to the needs of the target audience for a more optimal learning experience. This is expected to effectively address the range of issues and influences that have an important effect on financial consumer behaviours.

STRENGTHENING AVENUES FOR CONSUMER REDRESS

The Bank's 'One-Stop-Contact' centre known as BNMLINK continued to serve as an important source of financial information and avenue for consumers to resolve complaints against FSPs. Investment by the Bank in infrastructure and arrangement for complaint management and dealing with customer queries is sizeable, estimated at more than RM10 million annually. This reflects the priority given by the Bank in ensuring effective redress for financial consumers. During the year, BNMLINK received 441,712 enquiries, an increase of 7.7% from 2012. Despite the increase in enquiries, the number of complaints against FSPs was lower (by 3.8%) during the period.

Complaints against banking institutions were mainly related to disputes over interest rate calculations, fees charged and outstanding loan balances as well as poor customer service quality. The number of complaints received against banking institutions in 2013 declined by 5.6%, from 5,516 complaints in 2012 to 5,208 complaints in 2013. Complaints received from SMEs, mainly relating to issues around the practices of banks in the restructuring and

rescheduling of loans, were also lower by 5.8%, from 433 complaints in 2012 to 408 complaints in 2013. This in part reflects more proactive engagements by banks with SME borrowers to manage non-performing loans. Common complaints against insurers and takaful operators were in relation to delays in the processing of claims, repudiation of claims as well as disputes over claims settlement amounts and benefits paid. The number of insurance complaints received in 2013 was broadly unchanged in comparison with complaints received in 2012.

The lower number of cases reported to the Bank partly reflects improvements in the management of complaints by the FSPs. Regular engagements between the Bank and FSPs' complaint units have resulted in further enhancements to the complaint management process through end-to-end integration of complaint management function and increasing empowerment to front-line officers to expedite resolution of complaints.

To promote the effective and fair handling of disputes by FSPs, the Bank under the FSA and IFSA can approve a financial ombudsman scheme (FOS). The establishment and operations of the FOS will be governed by regulations that will stipulate the functions, duties and scope of the FOS as well as oversight arrangements for its effective governance. The FOS' operations will be guided by the principles of independence, fairness and impartiality, accessibility, accountability, transparency and effectiveness. During the year, a joint working group between the Bank and the FMB completed a review of the current functions, operations and funding arrangements for the FMB and outlined initial proposals for transforming the FMB into a FOS approved under the FSA and IFSA. The Bank expects to publish the final proposals – which include recommendations for expanding the scope of disputes that can be handled by the FOS, improving the dispute resolution process, expanding the form of remedies provided to complainants and introducing a more equitable fee structure – for public feedback in April 2014.

AKPK continues to play an important role in helping financial consumers manage their debt.

Its debt management programme (DMP) supports borrowers in financial difficulty to restructure or reschedule outstanding loans with credit providers, thus helping them get out of debt. Since its inception in 2006, AKPK has provided credit counselling services to 248,491 consumers, of which 100,871 or 40.6% were enrolled in the DMP. 73% of borrowers enrolled in the DMP (with total debt between them of RM4.67 billion) continue to meet their repayment commitments under the programme or have fully settled their loan obligations. Measures are being taken by AKPK to further improve the assessment of the financial circumstances of borrowers who are enrolled in the DMP in order to enhance the prospects of borrowers staying with the programme until their obligations are fully settled. Individuals aged 40 years and below continue to represent the bulk (57.6%) of borrowers under the DMP, mainly due to poor financial planning (33.9%) and inadequate financial buffers to meet high medical expenses (18.1%).

AKPK continues to play an important role in helping financial consumers manage their debt. Its debt management programme supports borrowers in financial difficulty to restructure or reschedule outstanding loans with credit providers, thus helping them get out of debt

During the year, the scope of AKPK's debt management services was expanded to cover borrowers of credit co-operatives and MBSB. As loans from these credit providers are repaid by salary deductions, AKPK's DMP for these borrowers are designed to help lower their total loan repayment instalments to a manageable level of the borrowers' net monthly income in order to regain sufficient cash flows to meet daily expenses.

2013

PAYMENT AND SETTLEMENT SYSTEMS

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PAYMENT AND SETTLEMENT SYSTEMS

In 2013, the Bank's focus remained on ensuring the stability and resilience of the payments infrastructure in the country while enhancing the efficiency and cost effectiveness of the major payment systems. This was supported by the enhanced regulatory powers accorded to the Bank through the enactment of the Financial Services Act 2013 and the Islamic Financial Services Act 2013, particularly with respect to oversight on major payment systems that pose significant risks and legal certainty accorded on the enforceability of standards specified to promote the safety, integrity, efficiency and reliability of the major payment systems and designated payment instruments.

Supervisory activities remained centred on pre-emptive risk assessments and stress testing to detect vulnerabilities, and on ensuring that the major payment system service providers are able to respond to emerging risks and prevent major disruptions

During the year, regulatory initiatives continued to be directed at promoting sound risk management practices and safeguarding the operational resilience of the major payment system infrastructures in the country. This is particularly crucial in view of the anticipated increase in electronic payments (e-payments) volume as a consequence of intensified initiatives to accelerate the migration to e-payments. At the same time, a balanced regulatory regime is in place to promote innovation in the market without compromising financial stability and public confidence. Supervisory activities remained centred on pre-emptive risk assessments and stress testing to detect vulnerabilities, and on ensuring that the major payment system service providers are able to respond to emerging risks and prevent major disruptions.

PROMOTING THE STABILITY OF PAYMENT AND SETTLEMENT SYSTEMS

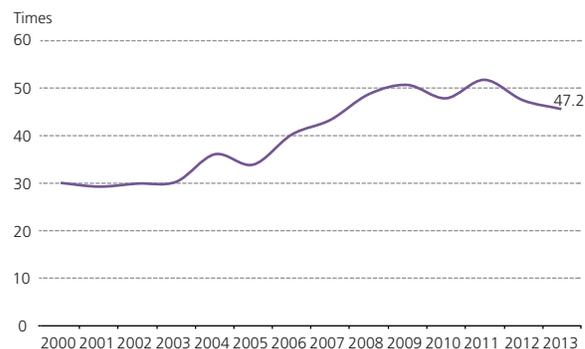
Oversight of RENTAS

The Real-time Electronic Transfer of Funds and Securities System (RENTAS) is the national payment system responsible for settlement of high-value interbank payments and securities transactions. In 2013, RENTAS settled 4 million transactions valued at RM46.4 trillion, which is 47.2 times of Malaysia's gross domestic product (GDP) (Chart 5.1), compared with 3.6 million transactions amounting to RM46.2 trillion in 2012. The total value of money market transactions, which make up the bulk of transactions performed in RENTAS, increased in 2013 as the Bank absorbed more liquidity on shorter term basis via direct borrowings due to the higher volatility of capital flows arising from concerns over the plan to taper the quantitative easing programme by the US Federal Reserve. Foreign exchange settlement and securities transactions moderated slightly from RM4 trillion in 2012 to RM3.8 trillion in 2013 due to uncertainties in global markets.

An average of 16,061 transactions with a total value of RM188 billion was settled via the system daily compared to 14,648 transactions with total value of RM188.4 billion in 2012 (Chart 5.2). RENTAS transaction volume continued to increase, driven by higher third party transactions from an

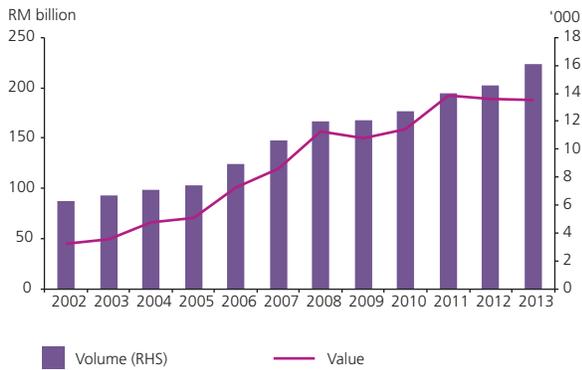
Chart 5.1

RENTAS: Transactions Turnover to GDP



Source: Bank Negara Malaysia

Chart 5.2

RENTAS: Daily Average by Value and Volume

Source: Bank Negara Malaysia

average of 2.2 million for the past five years to 3 million in 2013, in particular payments by the Government which increased by 86% in 2013 following the migration to RENTAS for payments valued at RM50,000 and above. Payments by individuals and corporations have also been growing at an average pace of 11.9% in the past four years, reflecting the wider adoption of e-payments.

RENTAS maintained 100% system availability throughout 2013

RENTAS maintained 100% system availability throughout 2013. However, there were ten incidents during the year compared with two in 2012 that resulted in delays in the settlement of Interbank GIRO (IBG) and cheque transactions, with some resulting in the extension of closing times. These incidents were caused by technical problems such as connectivity errors between the participant's internal system or RENTAS terminal with its server, or insufficient balances in participants' accounts. Normally, the participants would be granted the collateralised, interest-free intraday credit facility (ICF) in the event of insufficient funds. However, there were four incidents involving participants experiencing shortage of funds after the period of granting the ICF has ended. In all the incidents, existing contingency arrangements proved to be effective and on average the problems were resolved within an hour, preventing the incidents from escalating into major disruptions or causing inconvenience to customers.

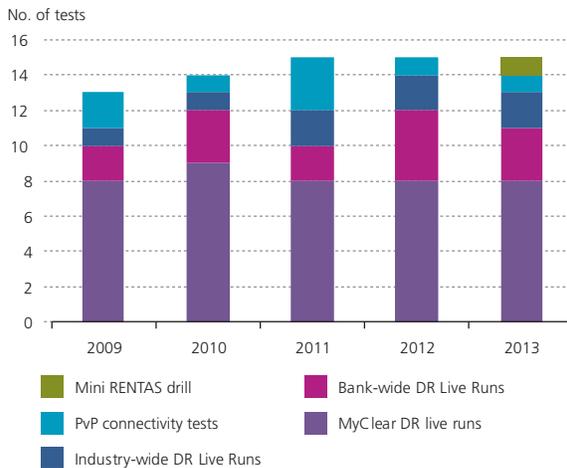
As a systemically important payment system, emphasis was on RENTAS continuing to perform effectively and efficiently. Throughout the year, the utilisation rate of each of the two RENTAS servers did not exceed the maximum threshold of 50%, indicating that system capacity remains adequate. The utilisation threshold is set at 50% so that in the event one server is down, RENTAS operations will not be impacted as the processing can be taken up by the other server seamlessly. A stress testing exercise was also conducted by simulating the settlement of an abnormal daily volume of 38,000 transactions to identify system limitations and vulnerabilities and the maximum transaction throughput that can be handled before the system performance is affected. The results indicated a high degree of resilience as RENTAS is able to process these transactions with a throughput of 2,600 transactions per 10 minutes, which is approximately four times the normal daily throughput without any degradation of performance.

In 2013, two industry-wide disaster recovery (DR) live runs were conducted on RENTAS and the National Electronic Cheque Information Clearing System (eSPICK) to assess the adequacy of the business continuity arrangement to minimise disruptions in the event of an operational incident or failure (Chart 5.3). The DR tests included the testing of the connectivity between the production servers and backup servers of the payment system participants with the Bank's backup server. In addition, the first annual drill of the fall-back arrangement using a separate but smaller scale RENTAS was conducted. The aim was to familiarise participants with the operational processes and ensure that the contingency system functions smoothly. Participants are required to perform an annual independent review of their business continuity exercises to identify any important gaps in the contingency arrangements, and to ensure that prompt measures are taken to address the gaps. This requirement was enforced in October 2013 and the annual independent review for 2013 is expected to be completed by March 2014.

During the Financial Sector Assessment Program (FSAP) exercise in 2012, Malaysia was assessed to have 'observed' all of the applicable Principles for Financial Market Infrastructures (PFMI) in relation to the RENTAS system. Since then, the Bank has continued to implement measures to further enhance resilience and strengthen various

Chart 5.3

Frequency and Types of DR Tests for RENTAS



Source: Bank Negara Malaysia

aspects of risk management processes in 2013. This included testing the portability of client holdings in RENTAS to ensure that customers' securities can be transferred smoothly following a merger, acquisition, insolvency or failure of any RENTAS participant. The first simulation test, which was conducted in August 2013, had proven to be successful in enabling the transfer of securities from the insolvent participant's account to another participant's account. The Bank has also continued to strengthen its cooperation with the Securities Commission, particularly in the exchange of information on RENTAS and on the clearing houses which are under the purview of the Securities Commission, to ensure that regulatory oversight over these connected entities is comprehensive and effective.

Oversight of Retail Payments

eSPICK and major retail payment systems

eSPICK functioned smoothly throughout the year, with the exception of a network outage incident in August 2013. With the activation of the established business continuity arrangements, eSPICK processing resumed with coordinated efforts by Malaysian Electronic Clearing Corporation Sdn. Bhd. (MyClear) and the banking institutions to ensure that cleared funds were credited into beneficiaries' accounts on time. A thorough review was conducted on the causes of the incident and operational procedures were further strengthened to mitigate the risk of similar outages in the future.

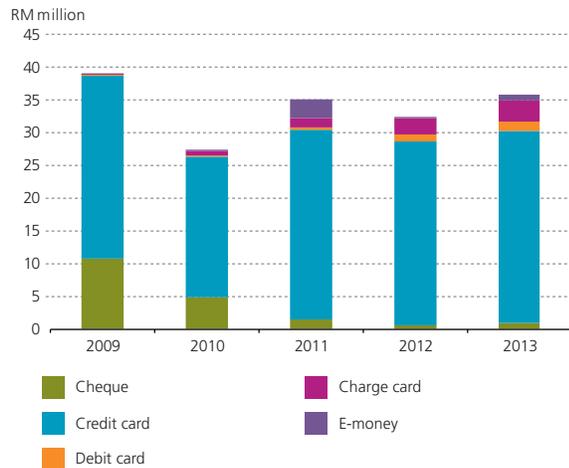
The resilience and reliability of the major retail payment systems, such as the IBG, Financial Process Exchange (FPX), domestic debit card and automated teller machine (ATM) systems, are essential to maintain public confidence in these systems and to support the increasing volume of e-payment transactions going forward. In 2013, two DR live runs were conducted on all retail payment services to assess the readiness of the application services in the event of a disaster at the primary data centre. A stress test was also conducted on the IBG system to evaluate whether the current system capacity will be able to cope with the expected increase in transaction volume following the fee reduction for IBG transactions via Internet banking and mobile banking beginning May 2013. The test was conducted by simulating the settlement of an abnormal daily volume of 2.1 million, which is three times the daily average peak volume. Results showed that the IBG system is able to manage the sudden spike without any degradation of performance. Similar stress tests will be conducted on the other major retail payment systems, such as the Malaysian Electronic Payment System Sdn. Bhd.'s (MEPS) Shared ATM Network, as the Bank will be promoting the use of funds transfer services via ATMs to provide the public with more access points to conduct e-payment transactions. Besides enhancing operational reliability, the Bank will also undertake measures to ensure that the operational rules, prudential requirements and settlement procedures remain effective in addressing and mitigating the exposure of the payment systems to settlement, credit and liquidity risks.

Payment fraud

Incidents of fraud related to the use of payment cards, electronic money (e-money) and cheques remained low, accounting for less than 0.006% of the total volume and value of retail payment transactions in 2013. Credit card fraud remained the most common form of payment fraud, with total losses amounting to RM29.4 million or an average loss of 0.03% in 2013 (Chart 5.4). Unauthorised Internet transactions remain the most prevalent type of fraud (Chart 5.5). However, in about 88% of these fraud cases, Malaysian cardholders and issuers did not suffer any financial loss as the fraudulent transactions involved online payment card transactions where the amounts can be recovered from the foreign acquirers who had not yet implemented the strong authentication method. Under the member rules of the payment card schemes, losses will be absorbed by the

Chart 5.4

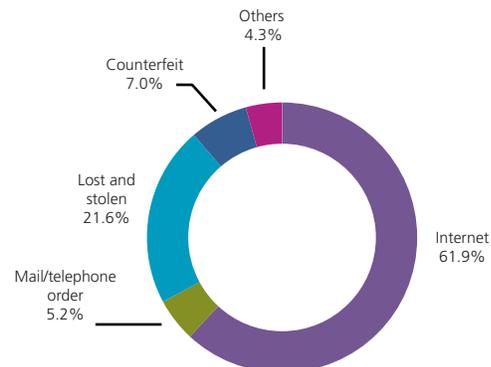
Fraud Losses by Type of Payment Instruments



Source: Bank Negara Malaysia

Chart 5.5

Credit Card Fraud by Type of Fraud, % Share of Losses



Source: Bank Negara Malaysia

party with the weakest security in place or who has yet to implement recommended security features. Malaysia had implemented the strong authentication method since 1 April 2012. Similarly, while fraud losses involving charge cards increased to RM3.4 million in 2013 (2012: RM2.5 million), about 92% of the losses, which are Internet-based fraud, were borne by foreign entities. Of the total payment fraud losses of RM35.8 million in 2013, the amount borne by consumers was RM3.3 million or 9.3% of the total fraud losses, which was mainly caused by cardholders' failure to promptly report fraudulent transactions upon receipt of transaction alerts.

On 19 April 2013, MasterCard implemented a global liability shift program for Maestro ATM transactions, which places liability for fraudulent ATM withdrawals on the party that has yet to become Europay-MasterCard-Visa (EMV)-compliant. As the implementation of EMV in Malaysian ATMs will only be completed by 1 January 2015, ATM acquirers have been absorbing the cost of fraudulent ATM transactions performed using foreign Maestro cards, which average RM0.1 million per month. However, these losses have been on a decreasing trend following enhancements to the risk management practices of the domestic ATM acquirers.

Virtual currencies

The recent years have seen considerable innovation in Internet-based payment methods and the emergence of virtual currencies, some of which have gained global popularity. One such example is Bitcoin, a virtual currency scheme that is not issued or controlled by any central authority, and which permits its users to maintain a high degree of anonymity. The use of Bitcoin has come under close scrutiny by regulators worldwide due to the inherent risks it presents, such as the potential for its use in money laundering and other criminal activities. In Malaysia, the usage of virtual currencies is very low, with only two merchants accepting Bitcoin for payments and an estimated total of 300 Bitcoin users. Nevertheless, the Bank published a cautionary statement on its webpage on 3 January 2014 to highlight the risks of using virtual currency and to caution the public that the operations of Bitcoin are not regulated by the Bank or any other authority.

KEY DEVELOPMENTS IN PAYMENT SYSTEMS**Interchange Fees**

Over the last few years, the subject of interchange fees for card-based payment transactions has attracted considerable attention and sparked many debates globally. Diagram 5.1 illustrates a typical payment card transaction which involves four parties – the merchant, cardholder, issuer (the party who issues payment cards to cardholders, such as a bank) and acquirer (the party who deploys point-of-sale (POS) terminals and accepts card payments on behalf of a merchant). The interchange fee is a fee which is paid typically by the acquirer to the issuer, to cover the costs incurred in facilitating the transaction (e.g. cost of authorisation, clearing and settlement, security

measures, funding, etc.). Interchange fees are determined by the payment card schemes and form a significant proportion of the merchant discount rate (MDR) paid by the merchant to the acquirer.

Payment card schemes often compete for market share by increasing interchange fees in order to entice issuers through higher interchange fee revenue to issue a particular brand of payment cards instead of another brand. This allows the issuers, who are also subject to competitive pressures, to increase the benefits offered to cardholders such as higher loyalty points or rebates to cardholders. If left unchecked, this may lead to a series of interchange fee hikes, which would increase the MDR paid by merchants, who may eventually pass on the higher costs to consumers by increasing the prices of goods and services. Another common trend is the shift from a flat interchange fee structure where the same interchange fee rate is payable regardless of card type, to a differentiated structure where a higher interchange fee rate is applied for premium cards such as those labelled 'Platinum' and above. This would result in higher issuance of premium cards as issuers strive to maximise interchange fee revenue, thus further escalating the cost to merchants and consumers.

These developments, which have also been observed to a certain extent in Malaysia, highlight the risks of unrestrained competition and the need for appropriate regulatory intervention to ensure the orderly development of the payment card industry. As a pre-emptive measure to prevent indiscriminate and prohibitive increases

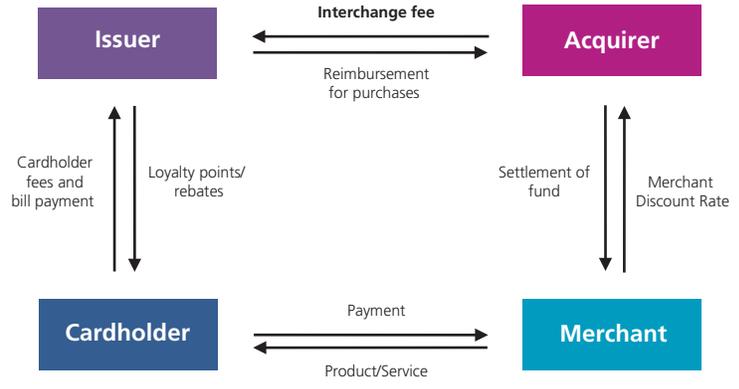
in interchange fees which could undermine the benefits of migrating to e-payments, the Bank is currently conducting a detailed assessment of how the interchange fees in Malaysia are determined by the payment card schemes. This will guide the development of an appropriate framework to regulate the process of setting domestic interchange fees. In Australia, interchange fees for credit and debit card transactions are already subject to regulation, while in the United States, interchange fees have been the subject of anti-trust lawsuits and legislation has been passed to regulate interchange fees for debit cards. The European Commission has also proposed to regulate both debit and credit card interchange fees in the European Union. While regulation has stemmed the indiscriminate increase in interchange fees and contributed to lower MDR to the merchants, experience in other jurisdictions also shows that there may be unintended consequences such as reduction in cardholders' benefits by banks and an increase in annual fees to recover lost interchange fee revenues. In developing the framework to regulate the setting of domestic interchange fees, the Bank will also take into cognisance such unintended consequences and develop parameters that will promote the growth and orderly development of the payment card industry while ensuring equitable benefits to all parties involved – merchants, cardholders, issuers and acquirers.

Electronic Payments

Over the past few years, the Bank has directed various efforts at encouraging the use of e-payments as a means of increasing economic efficiency, productivity and competitiveness.

Diagram 5.1

Four-party Payment Card Network



Source: Bank Negara Malaysia

Bold targets for achieving widespread adoption of e-payments were set by the Bank (Table 5.1) in the Financial Sector Blueprint 2011-2020 (Blueprint).

The Bank has adopted a three-pronged approach that is focused on tackling structural impediments, improving the supporting infrastructure and encouraging behavioural change

Achieving these targets will require innovative measures and coordinated industry efforts. To this end, the Bank has adopted a three-pronged approach that is focused on tackling structural impediments, improving the supporting infrastructure and encouraging behavioural change. This approach is discussed in detail in the box article 'Accelerating the Migration to Electronic Payments'.

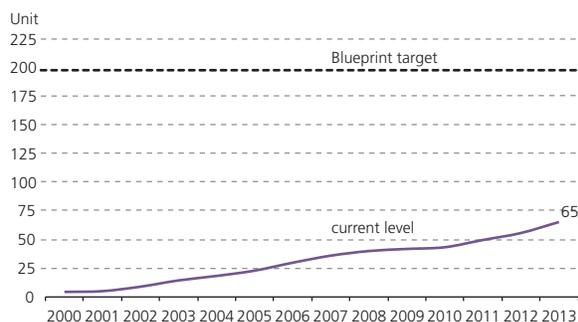
Payment trends

In 2013, the volume of e-payment transactions continued to grow at a rate of 18.8% to a total of 1.9 billion transactions valued at RM16.2 trillion. The increase in the number of transactions was mainly due to the higher usage of payment cards, e-money and Internet banking services. On a per capita basis, the number of e-payment transactions increased correspondingly from 55 transactions in 2012 to 65 transactions in 2013, with ongoing initiatives expected to further advance e-payment adoption towards the target of 200 transactions per capita in 2020 (Chart 5.6).

Retail spending using payment cards grew by 7.4% to 392.6 million transactions in 2013 (2012: 5.7%). Although the credit card remained the preferred payment card with 86.4% share of transaction

Chart 5.6

E-Payment Transactions Per Capita



Source: Bank Negara Malaysia

On a per capita basis, the number of e-payment transactions increased correspondingly from 55 transactions in 2012 to 65 transactions in 2013, with ongoing initiatives expected to further advance e-payment adoption towards the target of 200 transactions per capita in 2020

volume, the use of debit cards grew substantially faster, by 36.9% to almost 50 million transactions in 2013 (Chart 5.7). Debit cards are also increasingly being used to make payments (Chart 5.8), in line with efforts to promote the use of debit cards as a payment instrument.

The number of e-money transactions exceeded 1 billion for the first time in 2013, representing a growth of 13.6% and 17.5% by volume and value, respectively. Growth continues to be driven by the increasing utilisation of Touch 'n Go (TnG)

Table 5.1

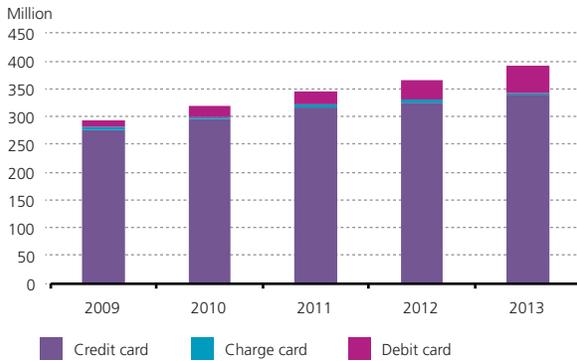
Progress Made in Achieving the Targets Outlined in the Blueprint

Key Performance Indicators	2012	2013	Target by 2020
1. E-payment transactions per capita	55	65	200
2. Debit card transactions per capita	1.2	1.7	30
3. Number of EFTPOS terminals per 1,000 inhabitants	9.2	9.5	25
4. Number of cheques issued	204 million	197 million	100 million

Source: Bank Negara Malaysia

Chart 5.7

Payment Card Spendings by Type of Cards (Transaction Volume)



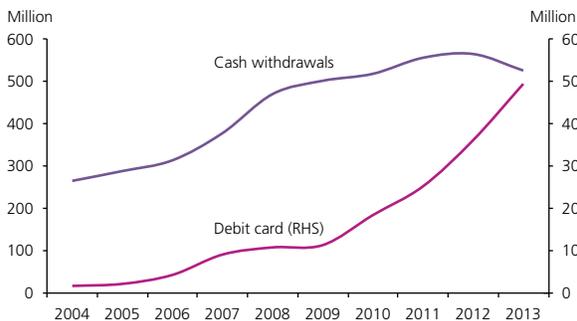
Source: Bank Negara Malaysia

cards and Paypal, which are the leading e-money schemes in the card-based and network-based e-money industries.

The use of electronic channels (e-channels) also expanded with over 350 million financial transactions worth RM3.6 trillion in 2013 compared with 290 million transactions worth RM3.1 trillion in 2012 (Chart 5.9). Internet banking continued to experience double digit growth rates, and remained the most popular e-channel, accounting for 76.1% and 95.4% of the total transaction volume and value, respectively (Chart 5.10). While the number of Internet banking subscribers increased to 15.6 million as at end-2013 from 13.7 million as at end-2012, active users accounted for only 44% of the total subscribers, indicating room for further growth in this area.

Chart 5.8

Number of Debit Card Transactions and ATM Cash Withdrawals



Source: Bank Negara Malaysia

Chart 5.9

The Use of Electronic Channels

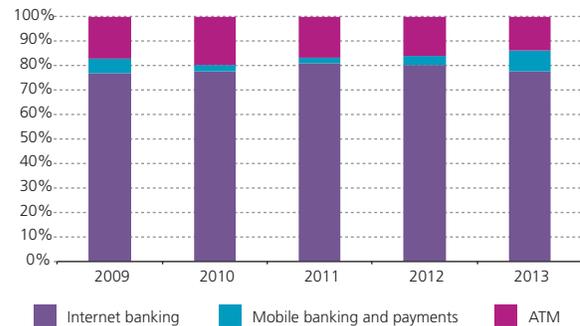


Source: Bank Negara Malaysia

The number of cheque transactions decreased at a faster pace of 3.3% in 2013 compared to the previous year (2012: -0.5%). Cheque usage as a proportion of total non-cash payments also saw a marked decline in terms of volume and value to 9% and 11%, respectively (2007: 18% and 21%). Nevertheless, the total number of cheques issued remains high at almost 200 million pieces, or 6.6 pieces per capita. In order to achieve the target of only 100 million cheques by 2020, usage needs to decline at a much faster pace of 9.2% per year over the next seven years (Chart 5.11), which has also been observed in other countries. Based on the World Payments Report 2013, cheque usage in mature Asia-Pacific countries, such as Japan, Singapore, Australia and South Korea, declined at an average annual rate of 10% between 2010 and 2012.

Chart 5.10

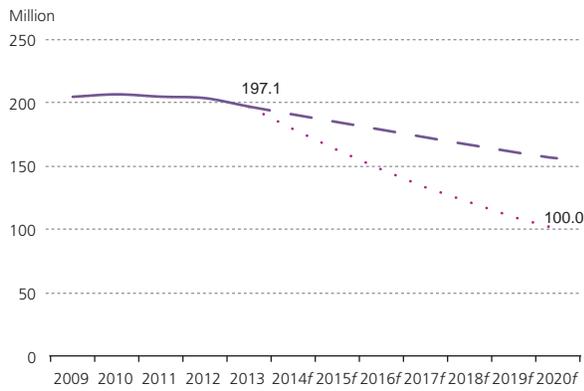
Composition of Electronic Channels Usage by Type, % Share



Source: Bank Negara Malaysia

Chart 5.11

Number of Cheques Issued



f forecast

Source: Bank Negara Malaysia

MOVING FORWARD

The ongoing oversight of major payment systems will continue to be strengthened in line with the PFMI and international best practices, with an emphasis on ensuring a high level of operational reliability, security and efficiency, including under stressed conditions. In encouraging the wider adoption of e-payments, the key strategic priorities in 2014-2015 will be the implementation of pricing reforms for payment services, the roll-out of the National Bill Payment Scheme (NBPS), and the introduction of appropriate regulation for interchange fee-setting arrangements. Collectively, these key initiatives will ensure that the payment systems continue to support the smooth functioning of the financial system and economy, while accelerating efficiency gains for the Malaysian economy.

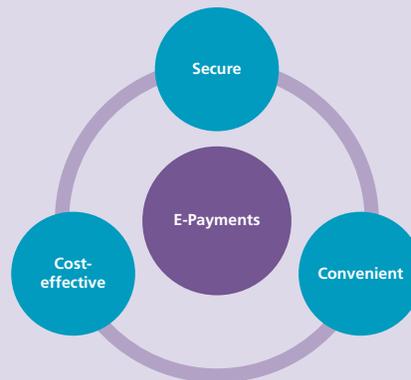
Accelerating the Migration to Electronic Payments

In the Bank's Financial Sector Blueprint 2011 - 2020, the Bank identified the migration to e-payments as a key enabler for greater economic efficiency, by transforming the payment landscape in Malaysia into one that is cost-effective, safe, fast and easy to use. To accelerate the migration to e-payments, the Bank has adopted a three-pronged approach:

- (i) Implementing a conducive pricing structure to incentivise the use of e-payments;
- (ii) Enhancing the e-payments infrastructure to widen accessibility, enhance convenience, and strengthen security; and
- (iii) Promoting greater awareness in the benefits of using e-payments.

Diagram 1

Key Features of E-Payments



Pricing Reform

In March 2013, the Bank introduced a Pricing Reform Framework aimed at aligning the price of payment instruments with the actual costs of production and processing. The objective is to incentivise the adoption of e-payments over paper-based payment instruments. The Pricing Reform Framework has three phases as depicted in Diagram 2.

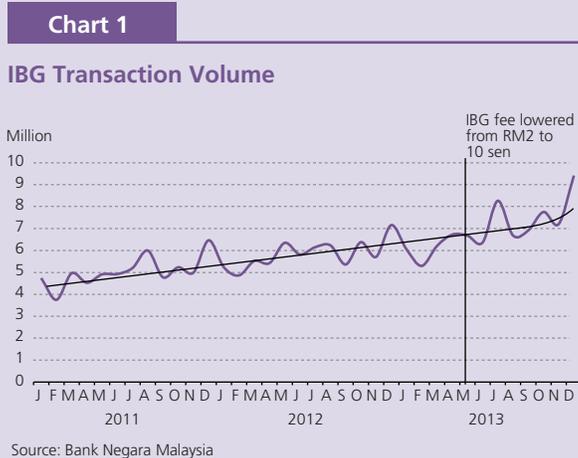
Diagram 2

Timeline of the Pricing Reform Framework



In the first phase, selected e-payment services will be deliberately priced below cost to encourage wider adoption by the public. Wider adoption would enable economies of scale while further drive unit costs down. At the same time, charges will be imposed for the use of paper-based payment instruments to reflect its higher cost. Consistent with this strategy, the fee for IBG services conducted via Internet and mobile banking was capped at 10 sen per transaction

beginning 2 May 2013, while a processing fee of 50 sen per cheque will be introduced from 1 April 2014 onwards. The response to these initiatives has been encouraging, with the average rate of growth of monthly IBG transaction volumes tripling to 6% from May to December 2013, compared to only 2% in the preceding 8 months, as illustrated in Chart 1.



The next initiative under phase one will be the introduction of a tiered pricing structure in 2014, to further differentiate the prices of payment services according to the relative costs. Transactions via online channels such as the Internet will attract the lowest fees, followed by transactions using ATMs. Based on this principle, the over-the-counter (OTC) services at bank branches will attract the highest fees for the same payment service.

It was observed that in many banking institutions, the revenue-generating business units (such as e-business and payment cards) and the cost centres (such as cash and cheque processing centres) are often in conflict over strategies for migrating to e-payments, due in large part to the misalignment of key performance indicators which fails to reflect an organisational perspective of performance. For instance, an initial decline in income due to the reduced fees for e-payment services may be desirable if it is more than offset by cost savings from fewer cheque and cash transactions. To better manage such trade-offs, banking institutions need to clearly define an organisation-wide strategy for migrating to e-payments and improve internal arrangements for coordinating the implementation of business plans that are in line with that strategy.

In the second phase of the Pricing Reform Framework, further measures will be undertaken to gradually increase the prices of cheques to better reflect the true underlying cost associated with processing cheque payments services, while in the final phase the prices of payment services should reflect the actual costs of providing the services.

Enhancing the E-Payments Infrastructure

Equally important is the existence of a robust e-payments infrastructure that meets the payment needs of the public. To this end, measures have been focused on widening accessibility and acceptability of e-payment services, enhancing user convenience, and improving public confidence in e-payments by strengthening transaction security.

Widening accessibility and acceptability

To date, almost all current and savings account holders have access to IBG services via the Internet channel or OTC services provided by the branch networks of 29 banking institutions across the country. To extend accessibility to customers with limited access to the Internet, banking institutions have committed to deploy at least one self-service Internet kiosk at each of their branches, and to enable IBG payments over the

ATMs by the end of 2014. Details of the e-payment options available in each banking institution will be published on the Bankinginfo website, as well as the websites of the Association of Banks in Malaysia (ABM) and the Association of Islamic Banking Institutions Malaysia (AIBIM).

Over the past few years, online bill payments have grown steadily from 34 million transactions in 2009 to 62.3 million transactions in 2013, reflecting the strong demand from consumers for convenient bill payment services and from corporations for efficient collection services. However, at present, customers could only use the online channel of a bank to make payments to corporations or merchants who maintain banking relationships with the same bank. To achieve the full potential of online facilities for bill payments, MyClear initiated the development of the NBPS which will provide a common and open platform for bank customers to make online bill payments from any bank to any corporation or merchant registered with NBPS. The NBPS system will be implemented in 2014 with banks joining the platform in phases from October 2014 until mid-2015.

Increasing the number of payment card acceptance points is a key strategy to further reduce the usage of cash. Efforts are being pursued by the Bank to accelerate the deployment of POS terminals, particularly among smaller businesses. An encouraging development has been the increased use of mobile POS terminals operated over wireless networks by small businesses that did not previously accept payment cards. There is also an ongoing industry initiative to migrate the ATM card or the domestic debit card from the existing proprietary standard to the EMV standard, which will facilitate interoperability and widen the acceptance of the ATM or domestic debit card for retail payments. These cards will also be equipped with a contactless functionality which significantly reduces transaction time for small value purchases. This will enhance convenience and increase payment efficiency for both customers and merchants, leading to a further shift away from the use of cash for such purchases.

Enhancing user convenience

To further improve the IBG service, the end-to-end IBG infrastructure is being enhanced in 2014. Currently, practices among banking institutions vary with respect to the time taken for funds to be credited into beneficiary's account. In 2014, the crediting times will be standardised across the banking institutions and published to provide more transparency and certainty to bank customers. The number of clearing windows will also be increased from 1 to 4 to enable payments to be credited faster into beneficiary's account.

Based on surveys of payment preferences conducted in the past, existing limitations surrounding the amount and type of information that can be captured with e-payment transactions were often identified as one of the main obstacles to greater adoption of e-payments by businesses. The description of funds received typically only indicated the type of payment, such as 'Electronic Funds Transfer' or 'IBG', and did not provide information about the sender or the purpose of the payment. To address this limitation, a payment reference standard was established in 2013 by MyClear in collaboration with ABM and the banking institutions. Senders of funds transfers will now be required to include a short description of the payment transaction when initiating a funds transfer. This description, together with the sender's name, will appear in the beneficiary's bank account statement, making it easier for the beneficiary to identify the source and purpose of the payment received, and facilitating payment reconciliations by businesses.

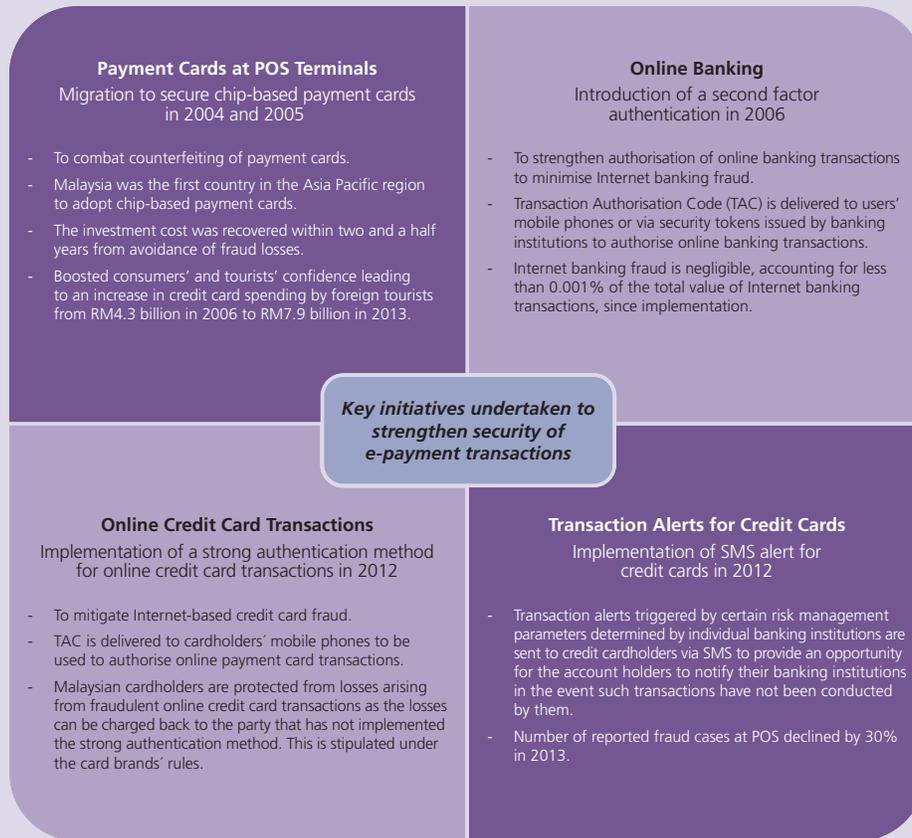
Strengthening security

Over the past decade, fraud losses on e-payment transactions have remained low as banks are required to comply with regulatory requirements which specify minimum security measures and standards for the protection of consumers. Various specific measures have also been taken to combat e-payment fraud, as depicted in Diagram 3.

Going forward, measures will continue to be taken to further enhance the security of e-payment transactions and educate customers on safe e-payment practices. This includes the implementation of chip and PIN-based card transactions in 2017.

Diagram 3

Key Initiatives Undertaken to Strengthen Security of E-Payment Transactions

**Building Awareness**

Efforts have also been directed at promoting greater awareness and educating businesses and the public on the benefits of e-payments. In December 2013, a Payment System Forum and Exhibition was organised by the Bank, ABM and AIBIM, to provide information to the public on the wide range of e-payment solutions available in the market and to facilitate the sharing of experience by businesses that have successfully migrated to e-payments. The forum attracted over 400 participants from the small and medium enterprises, chambers of business, corporates and government agencies.

To maintain the momentum of the awareness campaign, the Bank, in collaboration with ABM, AIBIM and the banking institutions, has also embarked on a series of 'Experience IBG' roadshows in 12 major towns nationwide. The roadshows, which commenced in October 2013 for a period of six months, focused on enhancing familiarity with the IBG service by providing detailed guidance on its usage with hands-on experience. To complement the roadshows and extend the outreach to smaller towns, banking institutions also organised a one-week 'Open Day' at bank branches in 16 other towns to promote online banking services. Separately, banking institutions are also engaging directly with customers that issue large numbers of cheques to offer assistance in migrating to e-payments.

2013

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Table A.1

Key Financial Soundness Indicators

	As at end				
	2009	2010	2011	2012	2013 ^p
	% (or otherwise stated)				
Banking System					
Risk-Weighted Capital Ratio	15.4	14.8	15.7	15.7	-
Core Capital Ratio	13.8	13.0	13.7	13.9	-
Total Capital Ratio ¹	-	-	-	-	14.4
Tier 1 Capital Ratio ¹	-	-	-	-	13.0
Common Equity Tier 1 Capital Ratio ¹	-	-	-	-	12.1
Return on Assets	1.2	1.5	1.6	1.6	1.5
Return on Equity	13.9	16.6	17.4	17.4	15.9
Liquid Assets to Total Assets ²	14.2	15.6	16.0	13.8	11.5
Liquid Assets to Short-term Liabilities ²	42.9	48.1	45.4	42.5	36.5
Net Impaired Loans Ratio	1.8	2.3	1.8	1.4	1.3
Capital Charge on Interest Rate Risk in the Trading Book to Capital Base ¹	3.2	2.0	1.7	1.7	1.6
Net Open Position in FCY to Capital Base ^{1,3}	10.2	8.5	6.7	6.1	5.7
Equity Holdings to Capital Base ¹	0.9	1.2	0.9	0.6	0.7
Insurance and Takaful Sector					
Capital Adequacy Ratio (conventional only)	225.7	224.6	222.5	219.1	245.9
Life Insurance and Family Takaful					
Excess Income over Outgo (RM billion)	12.6	14.1	12.7	17.9	13.0
New Business Premiums / Contributions (RM billion)	10.0	11.2	10.9	12.0	12.2
Capital Adequacy Ratio (conventional only)	254.4	253.2	248.5	242.3	260.5
General Insurance and General Takaful					
Underwriting Profit (RM billion)	0.9	0.9	0.5	1.7	1.8
Operating Profit (RM billion)	2.1	2.1	1.7	2.9	3.2
Gross Direct Premiums / Contributions (RM billion)	12.8	14.1	15.4	16.6	17.8
Claims Ratio	60.3	62.1	66.7	57.3	57.1
Capital Adequacy Ratio (conventional only)	184.9	204.4	222.9	227.7	230.7
Household (HH) Sector					
HH Debt (RM billion)	516.1	594.2	674.2	765.0	854.3
HH Financial Asset (RM billion)	1,241.1	1,399.5	1,519.6	1,711.8	1,904.3
HH Debt-to-GDP Ratio	72.4	74.5	76.2	81.3	86.8
HH Financial Asset to Total HH Debt Ratio	240.5	235.5	225.4	223.8	222.9
HH Liquid Financial Asset to Total HH Debt Ratio	168.1	166.9	159.2	159.8	159.9
Debt Repayment Ratio	43.1	44.1	45.2	43.9	43.5
Impaired Loans Ratio of HH Sector	3.1	2.3	1.8	1.5	1.3
Business Sector					
Return on Assets	5.4	5.4	5.5	5.0	4.7
Return on Equity	9.5	9.8	10.1	9.0	8.9
Debt-to-Equity Ratio	42.6	38.4	43.9	41.3	39.7
Interest Coverage Ratio (times)	6.6	8.2	6.8	5.4	7.7
Operating Margin	12.5	12.4	12.3	11.7	12.8
Impaired Loans Ratio of Business Sector	4.7	5.2	4.1	3.0	2.8
Development Financial Institutions⁴					
Lending to Targeted Sectors (% change)	18.5	13.0	7.1	10.1	8.0
Deposits Mobilised (% change)	14.4	20.5	16.1	7.1	7.1
Impaired Loans Ratio	6.8	9.0	7.3	6.3	5.6
Return on Assets	2.3	2.2	2.7	2.5	2.3

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 Beginning January 2008, the computation of net open position to capital base is based on Basel II Standardised Approach for Market Risk for foreign exchange risk

⁴ Refer to development financial institutions under the Development Financial Institutions Act 2002

^p Preliminary

Note: Beginning January 2010, loans are reported based on Financial Reporting Standards (FRS) 139. The adoption of FRS requirement is based on the financial year of the banks

Source: Bank Negara Malaysia, Bloomberg and internal computation

Table A.2

Key Financial Indicators - Islamic Banking and Takaful Sector

	As at end				
	2009	2010	2011	2012	2013 ^p
Islamic Banking System	RM million (or otherwise stated)				
Total assets ¹	303,244.1	351,195.0	434,665.5	494,705.2	556,508.5
% of total assets of entire banking system ¹	19.6	20.7	22.4	23.8	25.0
Total financing ¹	186,864.3	222,214.3	268,251.5	314,973.3	370,673.8
% of total financing of entire banking system ¹	21.6	22.7	24.3	25.8	27.5
Total deposits ¹	235,938.1	277,549.8	340,695.8	386,196.8	436,327.6
% of total deposits of entire banking system ¹	20.7	22.6	24.4	25.6	26.6
	% (or otherwise stated)				
Risk-Weighted Capital Ratio	15.2	14.9	15.0	14.5	-
Core Capital Ratio	12.8	12.7	12.1	12.0	-
Total Capital Ratio ²	-	-	-	-	14.6
Tier 1 Capital Ratio ²	-	-	-	-	12.3
Common Equity Tier 1 Capital Ratio ²	-	-	-	-	12.3
Return on Assets	1.3	1.3	1.0	1.3	1.2
Net Impaired Financing Ratio ³	2.2	2.1	1.6	1.2	1.0
Takaful Sector	RM million (or otherwise stated)				
Takaful Fund Assets	12,445.8	14,659.3	16,948.2	19,045.6	20,943.7
Family	10,536.6	12,420.9	14,377.2	16,289.8	17,966.7
General	1,909.2	2,238.3	2,570.9	2,755.9	2,977.1
% of insurance and takaful industry	7.9	8.3	8.8	9.0	9.2
Net Contributions Income	3,523.6	4,423.6	4,863.0	5,887.8	6,188.7
Family	2,719.8	3,392.8	3,703.6	4,574.8	4,788.0
General	803.8	1,030.8	1,159.4	1,313.0	1,400.7
% of insurance and takaful industry	11.1	12.6	13.0	14.3	14.0
Family Takaful					
New Business Contributions	2,177.8	2,587.1	2,695.1	3,474.5	3,563.5
General Takaful					
Gross Direct Contributions	1,052.1	1,325.7	1,599.1	1,737.6	1,912.1
Claims Ratio (%)	57.0	59.5	67.8	56.9	53.6

¹ Including development financial institutions under the Development Financial Institutions Act 2002

² Beginning January 2013, capital components are reported based on Basel III Capital Adequacy Framework

³ Beginning January 2010, loans are reported based on Financial Reporting Standards (FRS) 139. The adoption of FSR 139 requirement is based on the financial year of the banks.

^p Preliminary

Table A.3

Banking System¹: Income and Expenditure

	For the calendar year				
	2009	2010	2011	2012	2013 ^p
	RM million				
Interest income	56,364.5	65,681.9	73,681.0	83,760.1	83,079.3
Less: Interest expense	26,557.8	31,331.3	38,918.2	46,292.9	43,621.4
Net interest income	29,806.8	34,350.6	34,762.8	37,467.3	39,457.8
Add: Fee-based income	7,856.8	8,562.6	8,951.8	9,125.5	9,617.6
Less: Staff cost	9,838.8	11,467.0	12,841.9	13,810.3	13,561.4
Overheads	10,840.7	12,209.4	11,751.1	12,666.5	13,382.3
Gross operating profit	16,983.9	19,236.9	19,121.6	20,116.0	22,131.7
Less: Impairment ² and other provisions	4,903.7	4,366.9	2,835.6	1,501.9	2,393.1
Gross operating profit after provision	12,080.3	14,870.0	16,286.0	18,614.1	19,738.6
Add: Other income	4,910.5 ³	8,088.7	9,909.6	10,604.9	10,068.3
Pre-tax profit	16,990.8	22,958.7	26,195.6	29,219.0	29,806.8
Pre-tax profit / Average assets (%)	1.2	1.5	1.6	1.6	1.5
Pre-tax profit / Average shareholders' funds (%)	13.9	16.6	17.4	17.4	15.9
Pre-tax profit / Average employee (RM'000)	148.5	193.5	213.3	231.9	235.5
Cost incurred per ringgit of revenue earned (sen)	48.6	46.4	45.9	46.3	45.6
Cost incurred per ringgit of net interest income (sen)	69.4	68.9	70.7	70.7	68.3
Overheads to staff cost (%)	110.2	106.5	91.5	91.7	98.7
Staff cost per employee (RM'000)	86.0	96.6	102.7	108.8	107.5

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

³ Includes a significant non-recurring impairment on overseas investment by a commercial bank

^p Preliminary

Note: Figures may not necessarily add up due to rounding

Table A.4

Commercial Banks¹: Income and Expenditure

	For the calendar year				
	2009	2010	2011	2012	2013 ^p
	RM million				
Interest income	54,418.1	63,744.4	71,668.9	81,931.8	81,086.0
Less: Interest expense	25,402.6	30,103.6	37,417.0	44,943.9	42,165.1
Net interest income	29,015.5	33,640.8	34,251.8	36,988.0	38,920.9
Add: Fee-based income	6,289.2	6,590.5	6,904.9	7,620.1	7,874.4
Less: Staff cost	9,136.4	10,550.9	11,736.6	12,789.4	12,399.9
Overheads	10,065.5	11,105.8	10,747.1	12,031.4	12,570.1
Gross operating profit	16,102.9	18,574.5	18,673.1	19,787.3	21,825.3
Less: Impairment ² and other provisions	5,011.4	4,170.7	2,938.6	1,509.0	2,433.5
Gross operating profit after provision	11,091.5	14,403.8	15,734.5	18,278.3	19,391.8
Add: Other income	4,667.5 ³	7,802.8	9,360.4	9,920.3	9,422.7
Pre-tax profit	15,759.1	22,206.5	25,094.9	28,198.5	28,814.5
Pre-tax profit / Average assets (%)	1.2	1.6	1.6	1.6	1.5
Pre-tax profit / Average shareholders' funds (%)	13.9	17.2	17.7	17.7	16.1
Pre-tax profit / Average employee (RM'000)	148.4	201.9	219.9	242.3	245.9
Cost incurred per ringgit of revenue earned (sen)	48.0	45.1	44.5	44.2	44.3
Cost incurred per ringgit of net interest income (sen)	66.2	64.4	65.6	67.1	64.2
Overheads to staff cost (%)	110.2	105.3	91.6	94.1	101.4
Staff cost per employee (RM'000)	86.1	95.9	102.8	109.0	105.9

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

³ Includes a significant non-recurring impairment on overseas investment by a commercial bank

^p Preliminary

Note: Figures may not necessarily add up due to rounding

Table A.5

Investment Banks: Income and Expenditure

	For the calendar year				
	2009	2010	2011	2012	2013 ^p
	RM million				
Interest income	1,946.4	1,937.5	2,012.1	1,828.3	1,993.3
Less: Interest expense	1,155.2	1,227.7	1,501.1	1,349.0	1,456.4
Net interest income	791.2	709.9	511.0	479.3	536.9
Add: Fee-based income	1,567.5	1,972.1	2,046.9	1,505.4	1,743.2
Less: Staff cost	702.5	916.0	1,105.3	1,020.9	1,161.5
Overheads	775.2	1,103.6	1,004.0	635.1	812.2
Gross operating profit	881.0	662.4	448.5	328.7	306.4
Less: Impairment ¹ and other provisions	-107.7	196.2	-103.1	-7.1	-40.4
Gross operating profit after provision	988.7	466.2	551.6	335.8	346.8
Add: Other income	243.0	285.9	549.2	684.6	645.6
Pre-tax profit	1,231.7	752.1	1,100.7	1,020.4	992.3
Pre-tax profit / Average assets (%)	2.0	1.1	1.7	1.6	1.7
Pre-tax profit / Average shareholders' funds (%)	14.2	7.8	12.3	11.5	10.6
Pre-tax profit / Average employee (RM'000)	150.0	86.3	117.4	108.4	106.1
Cost incurred per ringgit of revenue earned (sen)	56.8	68.0	67.9	62.0	67.5
Overheads to staff cost (%)	110.4	120.5	90.8	62.2	69.9
Staff cost per employee (RM'000)	85.5	105.1	117.9	106.2	127.8

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

Table A.6

Islamic Banking System: Income and Expenditure

	For the calendar year				
	2009	2010	2011	2012	2013 ^p
	RM million				
Income	9,958.7	11,944.8	13,643.1	16,415.7	18,106.3
Less: Expense	3,862.2	5,105.5	6,535.8	8,306.6	9,522.6
Net income	6,096.4	6,839.2	7,107.4	8,109.1	8,583.7
Add: Fee-based income	595.2	790.1	835.7	1,039.6	1,024.7
Less: Staff cost	932.8	1,166.4	1,377.6	1,636.7	1,739.9
Overheads	2,098.1	2,398.6	2,388.1	3,016.8	3,079.2
Gross operating profit	3,660.7	4,064.4	4,177.3	4,495.2	4,789.2
Less: Impairment ¹ and other provisions	1,386.4	1,286.9	1,692.1	609.0	373.3
Gross operating profit after provision	2,274.3	2,777.5	2,485.2	3,886.1	4,415.9
Add: Other income	366.6	409.2	541.7	966.0	567.4
Pre-tax profit	2,640.9	3,186.8	3,026.9	4,852.1	4,983.3
Pre-tax profit / Average assets (%)	1.3	1.3	1.0	1.3	1.2
Pre-tax profit / Average shareholders' funds (%)	13.9	15.8	13.5	18.2	17.3
Pre-tax profit / Average employee (RM'000) ²	128.2	137.6	119.0	171.2	164.2
Cost incurred per ringgit of revenue earned (sen)	27.8	27.1	25.1	25.3	24.5
Cost incurred per ringgit of net income (sen)	49.7	52.1	53.0	57.4	56.1
Overheads to staff cost (%)	224.9	205.6	173.4	184.3	177.0
Staff cost per employee (RM'000) ²	45.3	50.4	54.1	57.7	57.3

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

² Number of employees is estimated based on the percentage of the institutions' Islamic assets

^p Preliminary

Note: Numbers may not necessarily add up due to rounding

Table A.7

Banking System: Network and Workforce

	As at end				
	2009	2010	2011	2012	2013 ^p
Number of institutions	54	55	56	56	55
<i>Commercial banks</i>	22	23	25	27	27
<i>Investment banks</i>	15	15	15	13	12
<i>Islamic banks</i>	17	17	16	16	16
Office network	2,298	2,312	2,435	2,481	2,511
<i>Commercial banks</i>	1,999	2,006	2,050	2,056	2,061
<i>Investment banks</i>	131	133	133	148	135
<i>Islamic banks</i> ¹	1,342	2,102	2,147	2,171	2,177
Number of banks with internet services	24	26	27	28	31
Number of employees	114,925	120,580	125,065	126,902	126,196
<i>Commercial banks</i>	98,846	103,093	106,274	107,541	106,899
<i>Investment banks</i>	8,250	8,972	9,577	9,610	9,092
<i>Islamic banks</i>	7,829	8,515	9,214	9,751	10,205

¹ Includes Islamic bank branches that are shared with conventional bank branches

^p Preliminary

Table A.8

Commercial Banks¹: Commitments and Contingencies

	As at end				
	2009	2010	2011	2012	2013 ^p
	RM million				
Assets sold with recourse and commitments with drawdown	5,871.4	6,247.1	6,509.9	6,053.5	5,590.8
Credit extension commitments	376,604.0	379,644.9	409,756.4	444,293.6	468,518.7
Direct credit substitutes	19,922.4	19,293.0	21,302.3	24,960.5	33,087.9
Foreign exchange related contracts	341,651.1	407,639.0	476,725.8	518,150.2	577,797.8
Interest rate related contracts	648,232.1	643,923.3	695,982.4	716,494.7	776,434.5
Trade-related contingencies	12,553.5	12,154.7	11,721.1	10,644.2	10,677.4
Transaction-related contingencies	35,873.1	35,037.2	41,059.9	45,928.8	50,561.5
Underwriting obligations	1,532.2	1,187.7	789.5	445.0	522.0
Others	54,334.2	61,185.2	65,938.4	72,179.0	55,541.2
Total	1,496,574.0	1,566,312.2	1,729,785.7	1,839,149.5	1,978,731.8

¹ Includes Islamic banks

^p Preliminary

Note: Figures may not necessarily add up due to rounding

Table A.9

Investment Banks: Commitments and Contingencies

	As at end				
	2009	2010	2011	2012	2013 ^p
	RM million				
Assets sold with recourse and commitments with drawdown	5.4	326.9	20.4	19.2	12.4
Credit extension commitments	2,640.4	2,796.8	3,353.6	3,666.1	5,454.8
Direct credit substitutes	484.3	258.2	322.6	201.5	316.6
Foreign exchange related contracts	801.5	2,864.4	3,958.7	5,536.6	7,548.1
Interest rate related contracts	10,018.0	13,852.2	10,573.4	9,161.6	9,779.4
Trade-related contingencies	0.0	0.0	1.1	1.1	0.0
Transaction-related contingencies	10.5	10.5	10.5	10.5	10.5
Underwriting obligations	987.6	693.3	717.5	190.3	680.8
Others	5,792.1	2,343.8	1,523.1	2,205.8	3,402.7
Total	20,739.7	23,146.0	20,480.9	20,992.6	27,035.8

^p Preliminary

Note: Figures may not necessarily add up due to rounding

Table A.10

Life Insurance¹: Income and Outgo

Item	For the calendar year				
	2009	2010	2011	2012	2013 ^p
	RM million				
Net premiums	19,870.1	21,854.2	22,877.7	25,005.7	26,458.7
Less: Net policy benefits	11,857.3	13,035.4	14,015.5	14,342.4	16,357.2
Agency remuneration	2,944.4	3,248.3	3,384.1	3,551.9	3,673.0
Total management expenses	1,648.6	1,852.4	2,092.9	2,287.6	2,487.6
Balance of transaction	3,419.7	3,718.2	3,385.2	4,823.8	3,940.9
Add: Net investment income	4,927.3	5,449.8	6,039.5	6,706.8	7,208.8
Net capital gain (loss)	2,104.8	2,590.0	659.0	2,181.6	-1,355.1
Net other income	454.0	907.1	1,112.7	1,735.7	1,227.6
Excess income over outgo	10,905.8	12,665.1	11,196.4	15,447.8	11,022.1

¹ Figures are based on global business of life insurance

^p Preliminary

Note: Figures may not necessarily add up due to rounding

Table A.11

General Insurance¹: Underwriting and Operating Results

Item	For the calendar year				
	2009	2010	2011	2012	2013 ^p
	RM million				
Earned premium income	9,911.2	10,715.2	11,236.9	12,418.7	13,821.2
Less: Net claims incurred	6,100.7	6,731.8	7,483.7	7,126.7	7,941.6
Net commission	1,228.6	1,284.0	1,374.3	1,587.4	1,786.7
Total management expenses	1,839.3	1,895.0	1,990.2	2,220.2	2,477.7
Underwriting profit	742.7	804.3	388.7	1,484.3	1,615.2
Add: Net investment income	772.0	813.3	924.6	970.1	1,013.2
Net capital gains	239.3	61.9	18.9	19.6	24.4
Net other income	94.5	229.9	127.2	114.9	182.3
Operating profit	1,848.5	1,909.4	1,459.5	2,588.9	2,835.0

¹ Figures are based on global business of general insurance

^p Preliminary

Note: Figures may not necessarily add up due to rounding

Table A.12

Family Takaful¹: Income and Outgo

Item	For the calendar year				
	2009	2010	2011	2012	2013 ^p
	RM million				
Net contributions	2,719.8	3,392.8	3,703.6	4,574.8	4,788.0
Less: Net certificate benefits	905.4	1,601.2	1,660.9	1,635.9	1,978.9
Net commissions	432.7	531.6	599.2	711.2	761.2
Total management expenses	317.9	414.3	476.5	574.6	684.2
Balance of transaction	1,063.8	845.7	967.0	1,653.2	1,363.7
Add: Net investment income	354.8	447.3	494.2	590.1	659.7
Net capital gain (loss)	60.3	45.0	27.8	54.6	-159.2
Net other income	184.3	92.4	78.1	155.8	162.0
Excess income over outgo	1,663.2	1,430.4	1,567.1	2,453.7	2,026.1

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

Table A.13

General Takaful¹: Underwriting and Operating Results

Item	For the calendar year				
	2009	2010	2011	2012	2013 ^p
	RM million				
Earned contributions income	722.4	938.6	1,090.3	1,282.1	1,389.9
Less: Net claims incurred	411.6	558.4	738.9	730.0	744.4
Net commission	53.0	85.8	96.7	156.7	192.0
Total management expenses	117.8	181.6	155.9	206.0	246.0
Underwriting profit	140.0	112.7	98.7	189.5	207.5
Add: Net investment income	57.7	68.4	84.5	96.3	102.8
Net capital gains	9.1	17.7	35.8	41.6	80.4
Net other income (loss)	9.6	3.8	17.5	-18.3	-6.5
Operating profit	216.5	202.5	236.5	309.1	384.3

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

Table A.14

Development Financial Institutions¹: Sources and Uses of Funds

	As at end				
	2009	2010	2011	2012	2013
	RM million				
Sources:					
Shareholders' funds	24,533.2	25,367.4	28,391.5	32,688.1	38,074.9
<i>Paid-up capital</i>	12,771.9	12,771.9	13,376.0	13,776.9	13,922.6
<i>Reserves</i>	5,298.6	6,041.2	6,644.5	8,968.7	9,983.9
<i>Retained earnings</i>	6,462.7	6,554.3	8,371.0	9,942.5	14,168.4
Deposits accepted	95,599.1	111,319.5	128,662.2	139,337.8	153,523.8
Borrowings	24,698.0	23,744.9	25,022.6	23,155.6	25,067.4
<i>Government</i>	14,066.2	18,086.7	18,428.6	17,554.4	15,655.0
<i>Multilateral/International agencies</i>	3,595.9	3,276.1	3,416.6	2,331.7	2,959.5
<i>Others</i>	7,035.9	2,382.1	3,177.4	3,269.5	6,452.9
Others	21,085.1	24,434.2	23,999.1	26,017.1	26,259.5
Total	165,915.4	184,866.0	206,075.4	221,198.6	242,925.6
Uses:					
Deposits placed	25,134.7	25,718.5	31,444.4	19,382.0	19,377.1
Investments	38,263.5	45,111.0	52,215.3	62,858.9	72,227.4
<i>of which:</i>					
<i>Government securities</i>	7,520.6	9,924.7	14,418.7	21,954.6	25,390.5
<i>Shares</i>	9,922.1	9,125.0	9,434.4	10,062.6	11,727.0
<i>Quoted</i>	9,012.8	8,681.4	9,241.8	9,862.1	11,273.9
<i>Unquoted</i>	909.3	443.6	192.6	200.5	453.1
Loans and advances	88,509.7	99,518.7	106,821.4	119,137.5	129,808.0
Fixed assets	5,869.0	5,865.5	6,027.2	7,128.6	8,433.5
Others	8,138.5	8,652.3	9,567.1	12,691.6	13,079.6
Total	165,915.4	184,866.0	206,075.4	221,198.6	242,925.6
Contingencies:					
Guarantee	3,305.9	2,514.5	1,998.2	2,132.4	2,517.4
Export credit insurance	835.8	807.7	496.6	1,571.6	976.3
Total	4,141.7	3,322.2	2,494.8	3,704.0	3,493.7

¹ Refers to Bank Pembangunan Malaysia Berhad, Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional, Export-Import Bank of Malaysia Berhad (EXIM Bank), Bank Pertanian Malaysia Berhad (Agrobank), Small Medium Enterprise Development Bank Malaysia Berhad (SME Bank), Malaysian Industrial Development Finance Berhad, Sabah Development Bank Berhad, Borneo Development Corporation (Sabah) Sendirian Berhad, Borneo Development Corporation (Sarawak) Sendirian Berhad, Credit Guarantee Corporation Malaysia Berhad, Sabah Credit Corporation and Lembaga Tabung Haji

Table A.15

Development Financial Institutions¹ under DFIA²: Sources and Uses of Funds

	As at end				
	2009	2010	2011	2012	2013
	RM million				
Sources:					
Shareholders' funds	18,840.8	19,598.4	23,084.6	25,890.0	27,776.0
<i>Paid-up capital</i>	10,132.4	10,132.4	10,486.5	11,002.4	11,111.1
<i>Reserves</i>	4,459.6	5,067.5	6,550.5	7,063.7	7,481.6
<i>Retained earnings</i>	4,248.8	4,398.5	6,047.6	7,823.9	9,183.3
Deposits accepted	71,268.6	83,050.7	95,867.0	99,994.0	109,569.0
Borrowings	17,806.7	18,485.8	19,890.0	17,077.9	18,196.9
<i>Government</i>	12,268.9	14,963.7	15,978.0	14,824.0	13,644.6
<i>Multilateral/International agencies</i>	3,237.8	2,872.1	3,317.0	2,053.9	2,932.3
<i>Others</i>	2,300.0	650.0	595.0	200.0	1,620.0
Others	16,797.7	21,757.2	21,494.0	23,360.7	23,569.2
Total	124,713.8	142,892.1	160,335.6	166,322.6	179,111.1
Uses:					
Deposits placed	14,325.5	17,309.7	22,407.8	12,219.6	9,435.4
Investments	19,097.5	23,199.3	27,355.3	33,850.6	38,401.7
<i>of which:</i>					
<i>Government securities</i>	7,520.6	9,924.7	14,418.7	21,954.6	25,390.5
<i>Shares</i>	1,428.1	1,697.4	1,110.0	858.3	802.7
<i>Quoted</i>	1,059.8	1,380.5	1,053.8	804.8	753.7
<i>Unquoted</i>	368.3	316.9	56.2	53.5	49.0
Loans and advances	83,354.5	94,201.1	100,866.6	111,071.8	119,984.8
Fixed assets	2,527.4	2,729.4	2,893.0	3,292.6	3,739.3
Others	5,408.9	5,452.6	6,812.9	5,888.0	7,549.9
Total	124,713.8	142,892.1	160,335.6	166,322.6	179,111.1
Contingencies:					
Guarantee	937.4	380.6	194.8	161.3	743.4
Export credit insurance	835.8	807.7	496.6	1,571.6	976.3
Total	1,773.2	1,188.3	691.4	1,732.9	1,719.7

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

² Development Financial Institutions Act 2002

Table A.16

Development Financial Institutions¹: Direction of Lending

	As at end				
	2009	2010	2011	2012	2013
	RM million				
Agriculture, forestry and fishery	6,340.3	6,169.9	6,627.4	7,126.3	7,120.4
Mining and quarrying	114.4	171.6	274.4	194.9	175.8
Manufacturing	5,560.1	6,359.0	5,613.1	5,106.0	5,295.2
Electricity, gas and water supply	3,590.5	3,345.8	2,651.8	3,167.2	3,608.9
Import and export, wholesale and retail trade, restaurants and hotels	1,989.4	1,981.9	1,921.8	1,993.8	2,451.7
Broad property sector	20,720.8	23,143.1	25,082.1	26,987.3	27,626.3
<i>Construction</i>	12,367.1	14,400.8	16,173.5	18,744.5	18,380.9
<i>Purchase of residential property</i>	6,875.4	6,590.7	6,268.0	6,390.9	7,392.7
<i>Purchase of non-residential property</i>	339.8	499.0	508.9	313.9	265.4
<i>Real estate</i>	1,138.5	1,652.6	2,131.7	1,538.0	1,587.3
Transport, storage and communication	5,847.5	5,750.7	5,433.5	5,394.8	5,482.9
Maritime	1,750.4	1,776.0	2,168.9	2,020.8	2,453.1
Finance, insurance and business services	1,209.0	1,292.0	2,073.7	3,603.3	3,875.6
Consumption credit	38,660.7	46,359.5	51,355.6	58,888.5	63,879.9
<i>of which:</i>					
<i>Purchase of motor vehicles</i>	2,370.0	2,053.7	1,679.0	1,261.9	1,233.8
<i>Credit card</i>	320.5	443.3	566.4	579.8	710.8
Purchase of securities	45.8	51.2	109.8	109.7	97.1
Others	2,680.8	3,118.0	3,509.3	4,544.9	7,741.1
Total	88,509.7	99,518.7	106,821.4	119,137.5	129,808.0

¹ Refers to Bank Pembangunan Malaysia Berhad, Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional, Export-Import Bank of Malaysia Berhad (EXIM Bank), Bank Pertanian Malaysia Berhad (Agrobank), Small Medium Enterprise Development Bank Malaysia Berhad (SME Bank), Malaysian Industrial Development Finance Berhad, Sabah Development Bank Berhad, Borneo Development Corporation (Sabah) Sendirian Berhad, Borneo Development Corporation (Sarawak) Sendirian Berhad, Credit Guarantee Corporation Malaysia Berhad, Sabah Credit Corporation and Lembaga Tabung Haji

Table A.17

Development Financial Institutions¹ under DFIA²: Direction of Lending

	As at end				
	2009	2010	2011	2012	2013
	RM million				
Agriculture, forestry and fishery	6,234.3	6,114.7	6,515.0	6,866.7	6,810.6
Mining and quarrying	112.3	122.5	204.5	133.9	126.8
Manufacturing	4,290.9	5,496.5	4,963.3	4,597.8	4,807.6
Electricity, gas and water supply	3,589.8	3,345.8	2,187.6	2,689.8	3,113.9
Import and export, wholesale and retail trade, restaurants and hotels	1,774.8	1,794.1	1,642.0	1,752.3	2,287.8
Broad property sector	18,956.8	21,127.0	22,965.9	24,567.3	24,631.6
<i>Construction</i>	11,895.2	13,934.9	15,947.1	17,564.0	16,696.8
<i>Purchase of residential property</i>	6,660.5	6,404.2	6,106.1	6,257.6	7,281.6
<i>Purchase of non-residential property</i>	256.1	413.6	344.9	253.8	231.6
<i>Real estate</i>	145.0	374.3	567.8	491.9	421.6
Transport, storage and communication	5,794.9	5,693.5	5,384.4	5,341.1	5,438.8
Maritime	1,750.4	1,776.0	2,168.9	2,020.8	2,453.1
Finance, insurance and business services	1,176.1	1,261.9	1,698.1	3,201.9	3,672.9
Consumption credit	37,733.1	45,362.5	50,159.9	57,456.3	61,936.0
of which:					
<i>Purchase of motor vehicles</i>	2,348.7	2,039.3	1,667.9	1,257.4	1,230.9
<i>Credit card</i>	320.5	443.3	566.4	579.8	710.8
Purchase of securities	45.8	51.2	109.8	109.7	97.1
Others	1,895.3	2,055.4	2,867.2	2,334.2	4,608.6
Total	83,354.5	94,201.1	100,866.6	111,071.8	119,984.8

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

² Development Financial Institutions Act 2002

Table A.18

Development Financial Institutions¹ under DFIA²: Impaired Loans and Impairment Provisions

	As at end	
	2012	2013
	RM million	
Collective impairment provisions	2,939.6	2,915.8
Individual impairment provisions	2,753.1	2,694.4
Impaired loans	6,942.6	6,625.5
	(%)	
Ratio of gross impaired loans to total loans	6.3	5.6
Ratio of net impaired loans to net total loans	3.9	3.4
Ratio of individual and collective impairment provisions to total impaired loans	82.0	84.7

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

² Development Financial Institutions Act 2002

Table A.19

Bank Pembangunan Malaysia Berhad

Year of establishment	1973					
Objectives	To provide medium and long-term financing for infrastructure projects, maritime, capital intensive and high technology industries in manufacturing sector and other selected sectors in line with the national development policy.					
Sector	Loans Outstanding		Loans Approved		Loans Disbursed	
	As at end		During the year		During the year	
	2012	2013	2012	2013	2012	2013
	RM million					
Infrastructure	21,526.2	21,873.6	2,498.5	2,719.0	802.5	1,645.4
<i>Government programmes</i>	19,498.4	19,688.7	1,855.3	1,747.7	642.4	1,085.1
<i>Private programmes</i>	2,027.8	2,184.9	643.2	971.3	160.1	560.3
Maritime	2,020.8	2,400.5	694.9	924.9	551.5	811.8
<i>Shipping industry</i>	1,741.2	2,113.8	194.9	924.9	299.8	590.2
<i>Shipyards industry</i>	279.6	286.7	500.0	0.0	251.7	216.8
<i>Marine-related services</i>	0.0	0.0	0.0	0.0	0.0	4.8
High technology	1,682.9	2,053.9	1,418.8	365.2	474.1	514.1
Others	14.3	12.9	0.9	0.2	1.1	0.5
Total	25,244.2	26,340.9	4,613.1	4,009.3	1,829.2	2,971.8

Source: Bank Pembangunan Malaysia Berhad

Table A.20

Small Medium Enterprise Development Bank Malaysia Berhad (SME Bank)

Year of establishment	October 2005					
Objectives	To provide financing and advisory services to SMEs involve in manufacturing, services and construction sectors, particularly Bumiputera entrepreneurs.					
Sector	Loans Outstanding		Loans Approved		Loans Disbursed	
	As at end		During the year		During the year	
	2012	2013	2012	2013	2012	2013
	RM million					
SMEs	3,905.9	4,651.6	2,835.6	2,419.2	1,850.0	2,780.0
<i>Micro</i>	1,088.8	1,128.3	402.2	286.5	295.8	340.6
<i>Small</i>	1,495.0	1,606.2	1,305.4	1,106.0	921.0	1,218.5
<i>Medium</i>	1,322.1	1,917.1	1,128.0	1,026.7	633.2	1,220.9
Others	253.1	279.8	78.1	307.7	37.9	76.0
Total	4,159.0	4,931.4	2,913.7	2,726.9	1,887.9	2,856.0

Source: Small Medium Enterprise Development Bank Malaysia Berhad (SME Bank)

Table A.21

Export-Import Bank of Malaysia Berhad (EXIM Bank)

Year of establishment	1995					
Objectives	To provide credit facilities to finance and support the exports and imports of goods, services and overseas project financing with concentration to the non-traditional markets, and to provide export credit insurance services, export financing insurance, overseas investment insurance and guarantee facilities, as well as other services which are normally offered by the export-import financial institutions and credit insurance financial institutions.					
Loans Facility	Loans Outstanding (RM million)		Loans Approved (RM million)		Loans Disbursed (RM million)	
	As at end- 2012	As at end- 2013	2012	2013	2012	2013
Buyer credit facility	748.7	861.8	24.6	13.4	735.1	45.3
Overseas project financing	2,221.3	3,012.2	2,698.3	1,323.4	1,022.1	872.5
Overseas contract financing	340.1	488.3	61.1	617.0	45.8	75.9
Supplier credit facility	310.3	603.4	230.2	407.5	1,110.3	1,938.4
Malaysia Kitchen financing facility	22.2	22.3	7.0	9.0	8.1	6.0
Export credit refinancing	571.2	381.6	3,002.4	2,165.5	3,002.4	2,165.5
Others	131.5	1,007.1	3,643.8	2,818.3	150.9	976.4
Total	4,345.3	6,376.7	9,667.4	7,354.1	6,074.7	6,080.0
Guarantee and Insurance Policy	Contingent Liabilities (RM million)		Commitment Approved (RM million)			
	As at end- 2012	As at end- 2013	2012	2013		
Guarantee	161.3	743.4	419.9	485.9		
Insurance	1,571.6	976.3	2,803.6	5,256.1		
Total	1,732.9	1,719.7	3,223.5	5,742.0		

Source: Export-Import Bank of Malaysia Berhad (EXIM Bank)

Table A.22

Bank Kerjasama Rakyat Malaysia Berhad

Year of establishment	1954					
Objectives	Mobilises savings and provides financing services to its members as well as non-members.					
Deposits Accepted	Deposits Accepted (RM million)					
	As at end-2012			As at end-2013		
	Members	Non-members	Total	Members	Non-members	Total
	2,419.5	60,291.8	62,711.3	2,996.2	62,313.6	65,309.8
Direction of Financing	Financing Outstanding (RM million)					
	As at end-2012			As at end-2013		
	Sector	Members	Non-members	Total	Members	Non-members	Total
Agriculture	4.2	527.7	531.9	4.7	440.3	445.0
Purchase of residential property	1,360.2	1,058.2	2,418.4	1,482.9	689.0	2,171.9
Purchase of non-residential property	32.4	163.9	196.3	43.0	134.0	177.0
General commerce	3.6	134.4	138.0	0.0	111.2	111.2
Purchase of securities	82.9	25.7	108.6	90.4	5.7	96.1
Consumption credit	24,693.3	22,883.7	47,577.0	24,351.2	26,117.8	50,469.0
<i>of which:</i>						
<i> Purchase of motor vehicles</i>	258.3	765.9	1,024.2	339.1	608.7	947.8
Manufacturing	0.0	1,218.7	1,218.7	0.0	761.9	761.9
Others	2.5	4,565.1	4,567.6	1.3	4,575.6	4,576.9
Total	26,179.1	30,577.4	56,756.5	25,973.5	32,835.5	58,809.0

Source: Bank Kerjasama Rakyat Malaysia Berhad

Table A.23

Bank Simpanan Nasional

Year of establishment	1974	
Objectives	To focus on retail banking and personal finance especially for small savers.	
Deposits Facility	RM million	
	As at end-2012	As at end-2013
Fixed deposits	7,068.4	9,640.0
GIRO deposits	5,419.5	5,142.7
Islamic deposits	7,607.5	8,975.4
Premium savings certificates	2,002.5	2,490.1
Others	97.8	304.6
Total	22,195.7	26,552.8
Investments	RM million	
	As at end-2012	As at end-2013
Quoted shares	92.2	132.0
Government securities	8,578.5	9,242.7
<i>of which:</i>		
<i>Malaysian Government Securities</i>	3,642.9	3,121.4
Private debt securities	504.3	450.6
Subsidiary companies	32.0	32.0
Associate companies	231.8	231.8
Others	146.1	149.5
Total	9,584.9	10,238.6
Direction of Lending	RM million	
	As at end-2012	As at end-2013
Purchase of securities	1.1	1.0
Purchase of residential property	3,832.0	5,109.6
Purchase of non-residential property	57.5	54.6
Consumption credit	9,885.6	11,466.9
Others	495.7	566.5
Total	14,271.9	17,198.6

Source: Bank Simpanan Nasional

Table A.24

Bank Pertanian Malaysia Berhad (Agrobank)

Year of establishment	1969					
Objectives	To promote Malaysia's sound agricultural development, through the provision of financing, advances and other credit facilities for the development of the agriculture sector and agriculture-related business. The main function of the bank is to provide, coordinate and supervise the financing facilities for agricultural purposes as well as to mobilise deposits for the purpose of uplifting the well-being of the agricultural community in general.					
Agriculture, Forestry & Fishery	Loans Outstanding (RM million)		Loans Approved (RM million)		Loans Disbursed (RM million)	
	As at end		During the year		During the year	
	2012	2013	2012	2013	2012	2013
Sub-sector						
<i>Oil palm</i>	1,013.2	1,005.5	283.4	599.6	182.0	199.1
<i>Food crops</i>	1,119.6	1,253.1	896.4	520.4	802.3	444.1
<i>Livestock</i>	687.3	700.8	199.3	322.4	147.9	149.4
<i>Fishery</i>	402.6	435.0	210.8	130.5	103.8	123.1
<i>Forestry</i>	22.5	40.5	8.9	2.9	3.8	1.6
<i>Tobacco</i>	1.3	1.0	0.1	0.0	0.7	0.0
<i>Rubber</i>	151.7	178.3	88.3	74.7	80.9	48.7
<i>Others</i>	2,897.0	2,714.0	2,520.4	1,328.3	1,966.5	1,236.9
Total	6,295.2	6,328.2	4,207.6	2,978.8	3,287.9	2,202.9

Source: Bank Pertanian Malaysia Berhad (Agrobank)

Table A.25

Development Financial Institutions: Selected Data

	As at end					
	2012			2013		
	Branch	ATM	Staff	Branch	ATM	Staff
DFIs under DFIA¹:						
Bank Pembangunan Malaysia Berhad	-	-	309	-	-	331
Bank Kerjasama Rakyat Malaysia Berhad	140	501	4,248	145	599	4,695
Bank Simpanan Nasional	395	986	6,348	400	982	6,760
Export-Import Bank of Malaysia Berhad	-	-	278	-	-	296
Bank Pertanian Malaysia Berhad	182	238	3,480	184	255	3,488
Small Medium Enterprise Development Bank Malaysia Bank	17	-	938	18	-	1,024
Sub-total	734	1,725	15,601	747	1,836	16,594
Other DFIs:						
Malaysian Industrial Development Finance Berhad	5	-	295	5	-	288
Sabah Development Bank Berhad	1	-	86	1	-	87
Borneo Development Corporation (Sabah) Sendirian Berhad	1	-	17	1	-	18
Borneo Development Corporation (Sarawak) Sendirian Berhad	1	-	33	1	-	34
Credit Guarantee Corporation Malaysia Berhad	17	-	485	17	-	478
Sabah Credit Corporation	12	-	189	12	-	186
Lembaga Tabung Haji	119	-	2,027	120	-	2,050
Sub-total	156	-	3,132	157	-	3,141
Total	890	1,725	18,733	904	1,836	19,735

¹ Development Financial Institutions Act 2002

Table A.26

Total Outward and Inward Remittances

	2009	2010	2011	2012 ⁵	2013
	RM million				
Total outward¹	10,537.8	13,414.9	15,682.1	19,736.6	25,116.8
<i>Remitted via:</i>					
Banks	6,594.0	6,712.3	7,791.1	8,922.4	10,976.9
Money services business licensees ²	3,943.8	6,702.6	7,891.0	10,814.2	14,139.9
Total inward³	4,617.1	4,696.0	5,215.1	6,359.4	8,024.1
<i>Remitted via:</i>					
Banks	4,351.4	4,202.1	4,654.0	5,755.7	7,243.9
Money services business licensees	265.7	493.9	561.1	603.7	780.2
<i>As at end of period</i>					
No. of remittance service providers	81	81	80	79	77
Commercial banks	39	40	41	43	43
Development financial institutions	2	2	2	2	2
Money services business licensees ⁴	40	39	37	34	32

¹ Refers to total funds remitted from Malaysia to other countries for workers' remittances and remuneration for employees

² Refers to non-bank remittance service providers and development financial institutions licensed under the Money Services Business Act 2011

³ Refers to total funds remitted from other countries to Malaysia for workers' remittances and remuneration for employees

⁴ Excludes development financial institutions

⁵ Refers to revised remittance transaction value for the year 2012

Table A.27

Basic Payments Indicator

	2009	2010	2011	2012	2013
Population (million)	28.1	28.6	29.1	29.5	29.9
GDP (RM million)	712,857	797,327	884,456	941,237	984,453
Cash in circulation (CIC) (RM million)	43,439.2	47,685.2	53,488.5	57,395.6	63,264.1
Transaction Volume Per Capita (unit):					
Cheque ¹	7.3	7.2	7.1	6.9	6.6
E-payments:	41.6	43.1	49.3	55.1	64.6
Credit card	9.8	10.3	10.9	11.0	11.3
Charge card	0.2	0.2	0.1	0.1	0.1
Debit card	0.4	0.6	0.9	1.2	1.7
E-money	25.5	24.5	27.7	31.3	35.0
Other cashless instruments ²	...	...	0.2	0.9	1.0
Interbank GIRO	1.6	1.7	2.1	2.4	2.8
Direct Debit	...	...	...	...	...
ATM ³	0.9	1.4	1.4	1.6	1.6
Internet banking ⁴	3.1	4.3	5.7	6.3	7.3
Mobile banking ⁴	...	...	0.1	0.2	0.5
RENTAS - Third party transactions ⁵	0.1	0.1	0.1	0.1	0.1
Standing instructions and intrabank direct debit ⁶	-	-	-	-	3.1
Transaction Value Per Capita (RM):					
CIC	1,546.9	1,668.0	1,840.5	1,944.4	2,112.5
Cheque ¹	59,669.2	64,437.9	68,125.3	68,880.7	68,769.3
E-payments:	295,375.8	340,331.4	453,014.5	513,846.8	542,142.4
Credit card	2,468.5	2,791.7	3,055.4	3,187.4	3,343.4
Charge card	135.9	164.0	185.4	218.8	240.2
Debit card	98.8	165.6	216.6	293.4	384.0
E-money	78.4	94.7	119.7	143.8	164.2
Other cashless instruments ²	...	...	1.0	2.6	4.4
Interbank GIRO	3,876.1	4,437.8	5,716.8	7,170.5	9,525.4
Direct Debit	67.6	132.0	166.3	279.4	375.7
ATM ³	704.1	1,094.3	1,282.9	1,387.3	1,475.5
Internet banking ⁴	23,264.5	47,430.5	70,355.6	64,259.5	77,257.0
Mobile banking ⁴	4.7	4.2	24.4	124.1	260.0
RENTAS - Third party transactions ⁵	264,677.3	284,016.5	371,890.5	436,780.0	428,065.0
Standing instructions and intrabank direct debit ⁶	-	-	-	-	21,047.4
Turnover to GDP:					
CIC (%)	6.1	6.0	6.0	6.1	6.4
Cheque ¹ (times)	2.4	2.3	2.2	2.2	2.1
E-payments (times):	11.6	12.2	14.9	16.1	16.5
% of GDP:					
Credit card	9.7	10.0	10.0	10.0	10.2
Charge card	0.5	0.6	0.6	0.7	0.7
Debit card	0.4	0.6	0.7	0.9	1.2
E-money	0.3	0.3	0.4	0.5	0.5
Other cashless instruments ²	...	...	...	...	...
Interbank GIRO	15.3	15.9	18.8	22.5	29.0
Direct Debit	0.3	0.5	0.5	0.9	1.1
ATM ³	2.8	3.9	4.2	4.4	4.5
Internet banking ⁴	91.6	170.1	231.2	201.5	235.0
Mobile banking ⁴	...	...	0.1	0.4	0.8
RENTAS - Third party transactions ⁵ (times)	10.4	10.2	12.2	13.7	13.0
Standing instructions and intrabank direct debit ⁶	-	-	-	-	64.0

¹ Cheques cleared via eSPICK

² Refer to single purpose payment cards

³ Refer to payment transactions via ATM, including own and third party funds transfer. Exclude cash withdrawals

⁴ Exclude non-financial transactions, credit card, IBG and RENTAS third party transactions performed online

⁵ 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

⁶ Refer to payments that are directly debited by the banks from the current and savings account. Data available from 2013

... Negligible

Note: Numbers may not necessarily add up due to rounding

Table A.28

Share of Non-cash Payments by Volume

	2009	2010	2011	2012	2013
	Transaction Volume, % share of total				
Cheque	14.9	14.4	12.5	11.1	9.2
Payment Instruments	73.5	70.7	70.7	71.7	69.0
Credit card	20.1	20.5	19.4	17.8	15.9
Charge card	0.4	0.3	0.2	0.2	0.2
Debit card	0.8	1.3	1.5	2.0	2.3
E-money	52.2	48.6	49.6	51.8	50.6
Payment Systems	3.4	3.7	3.9	4.1	8.5
RENTAS ¹	0.2	0.2	0.2	0.2	0.2
IBG	3.2	3.5	3.7	3.8	3.9
Direct Debit	...	...	...	...	...
Standing instructions and intrabank direct debit ²	-	-	-	-	4.4
Payment Channels	8.2	11.3	12.8	13.1	13.2
Internet banking ³	6.3	8.5	10.1	10.2	10.3
Mobile banking ³	...	...	0.1	0.4	0.7
ATM ⁴	1.8	2.7	2.6	2.5	2.3

¹ Malaysia's large-value payment system, Real-time Electronic Transfer of Funds and Securities System

² Refer to payments that are directly debited by the banks from the current and savings account. Data available from 2013

³ Exclude non-financial transactions, credit card, IBG and RENTAS third party transactions performed online

⁴ Refer to payment transactions via ATM, including own and third party funds transfer. Exclude cash withdrawals

... Negligible

Note: Numbers may not necessarily add up due to rounding

Table A.29

Cashless Payment Instruments: Transaction Volume

	2009	2010	2011	2012	2013	2012	2013
	Million					% Annual change	
Cheque¹	204.8	206.7	204.9	203.8	197.1	-0.5	-3.3
Credit card	276.1	294.9	316.9	325.3	339.1	2.7	4.2
Charge card	5.0	4.7	3.9	4.1	4.0	6.5	-2.1
Debit card	11.3	18.4	25.2	36.2	49.5	43.3	36.9
<i>International debit</i>	6.3	13.3	19.8	29.7	41.9	50.5	41.1
<i>e-Debit²</i>	5.0	5.1	5.5	6.4	7.5	17.4	17.4
E-money	717.2	699.3	806.5	925.3	1,051.0	14.7	13.6
<i>Card-based</i>	707.4	692.2	797.4	914.6	1,028.0	14.7	12.4
<i>Network-based</i>	9.8	7.1	9.0	10.7	23.0	18.8	114.5

¹ Cheques cleared via eSPICK

² Domestic PIN-based debit card

Table A.30

Cashless Payment Instruments: Transaction Value

	2009	2010	2011	2012	2013	2012	2013
	RM million					% Annual change	
Cheque¹	1,675,630	1,842,189	1,979,858	2,033,221	2,059,504	2.7	1.3
Credit card	69,321	79,810	88,797	94,085	100,129	6.0	6.4
<i>Purchases</i>	66,092	76,285	85,364	91,270	97,695	6.9	7.0
<i>Cash advances</i>	3,229	3,525	3,432	2,815	2,434	-18.0	-13.5
Charge card	3,816	4,689	5,388	6,459	7,193	19.9	11.4
<i>Purchases</i>	3,785	4,651	5,359	6,435	7,173	20.1	11.5
<i>Cash advances</i>	30	37	28	24	21	-15.6	-14.2
Debit card	2,774	4,735	6,294	8,661	11,500	37.6	32.8
<i>International debit</i>	1,198	2,202	3,239	4,954	7,092	52.9	43.2
<i>e-Debit²</i>	1,576	2,534	3,054	3,707	4,408	21.4	18.9
E-money	2,201	2,708	3,811	4,673	5,490	22.6	17.5
<i>Card-based</i>	2,020	2,113	2,424	2,983	3,361	23.1	12.7
<i>Network-based</i>	181	595	1,387	1,690	2,129	21.8	26.0

¹ Cheques cleared via eSPICK

² Domestic PIN-based debit card

Table A.31

Payment Systems: Transaction Volume and Value

	2009	2010	2011	2012	2013	2012	2013
	Million/RM billion					% Annual change	
RENTAS¹							
Transaction volume	3.0	3.2	3.4	3.6	4.0	4.8	10.5
Transaction value	37,258.9	39,434.6	47,175.6	46,169.4	46,437.7	-2.1	0.6
Interbank GIRO							
Transaction volume	43.8	49.8	60.4	70.1	83.4	16.1	19.0
Transaction value	108.8	126.9	166.1	211.7	285.3	27.4	34.8
	'000/RM million						
FPX							
Transaction volume	264.1	488.9	878.4	1,440.9	2,211.7	64.0	53.5
Transaction value	107.1	309.9	618.9	821.6	1,372.2	32.7	67.0
Direct Debit							
Transaction volume	288.2	438.6	575.7	708.8	924.2	23.1	30.4
Transaction value	1,899.1	3,774.0	4,832.0	8,248.2	11,251.9	70.7	36.4

¹ Malaysia's large-value payment system, Real-time Electronic Transfer of Funds and Securities System

Table A.32

Payment and Securities Transactions Handled by RENTAS

Transaction Volume	2009	2010	2011	2012	2013	2012	2013
	'000					% Annual change	
Total	3,001.7	3,152.7	3,425.0	3,588.7	3,967.1	4.8	10.5
IFTS¹	2,924.2	3,059.1	3,310.3	3,467.5	3,847.7	4.8	11.0
Money market operations	96.7	98.2	95.9	90.8	87.3	-5.4	-3.9
Foreign exchange settlement	64.6	74.0	85.9	91.8	100.0	6.9	8.9
<i>of which: USD CHATS²</i>	35.8	42.0	44.4	41.2	47.8	-7.1	16.1
Third party transactions	1,965.7	2,086.1	2,449.4	2,701.5	3,020.2	10.3	11.8
Others	797.1	800.8	679.0	583.4	640.2	-14.1	9.7
SSDS³	77.5	93.6	114.7	121.2	119.4	5.7	-1.5
Transaction Value	RM billion						
Total	37,258.9	39,434.6	47,175.6	46,169.4	46,437.7	-2.1	0.6
IFTS¹	35,653.1	37,437.6	44,227.9	43,153.2	43,903.3	-2.4	1.7
Money market operations	18,754.0	18,354.9	21,473.2	17,520.1	18,656.7	-18.4	6.5
Foreign exchange settlement	1,874.1	2,618.9	3,831.6	3,955.7	3,839.6	3.2	-2.9
<i>of which: USD CHATS²</i>	1,189.9	1,681.6	2,414.3	2,401.6	2,594.8	-0.5	8.0
Third party transactions	7,432.7	8,119.6	10,807.9	12,892.9	12,819.7	19.3	-0.6
Others	7,592.3	8,344.1	8,115.2	8,784.4	8,587.2	8.2	-2.2
SSDS³	1,605.8	1,997.0	2,947.7	3,016.3	2,534.5	2.3	-16.0
Turnover to GDP (times)	52.3	49.5	53.3	49.1	47.2		
Daily average:							
Transaction volume ('000)	12.1	12.7	14.0	14.6	16.1	4.8	9.6
Transaction value (RM billion)	150.2	159.0	192.6	188.4	188.0	-2.1	-0.2

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: Numbers may not necessarily add up due to rounding

Table A.33

Payment Channels: Transaction Volume and Value

Transaction Volume	2009	2010	2011	2012	2013	2012	2013
	Million					% Annual change	
Internet banking ¹	110.2	153.3	203.4	232.6	275.2	14.4	18.3
<i>Individual</i>	79.7	104.7	141.3	161.7	194.8	14.5	20.4
<i>Corporate</i>	30.6	48.6	62.1	70.9	80.4	14.1	13.4
Mobile banking ¹	0.6	0.7	2.2	7.1	16.1	231.8	124.6
ATM ²	24.7	38.8	42.1	46.4	48.8	10.3	5.1
Transaction Value	RM million						
Internet banking	702,045	1,415,351	2,136,987	3,078,088	3,570,502	44.0	16.0
<i>Individual</i>	87,680	115,575	153,648	171,825	224,830	11.8	30.8
<i>Corporate</i>	614,365	1,299,776	1,983,340	2,906,263	3,345,672	46.5	15.1
Mobile banking	141	138	852	4,237	9,243	397.2	118.2
ATM ²	19,774	31,286	37,283	40,950	44,189	9.8	7.9

¹ Exclude non-financial transactions

² Refer to payment transactions via ATM, including own and third party funds transfer. Exclude cash withdrawals

Note: Numbers may not necessarily add up due to rounding

Table A.34

Payment Transactions by Channels

Transaction Volume	2012			2013		
	Internet banking	Mobile banking	ATM	Internet banking	Mobile banking	ATM
	Million					
Funds transfer	93.0	2.8	28.5	111.6	6.8	33.0
Bill payment ¹	47.0	1.6	4.7	55.0	3.2	4.1
Investment in share and unit trust	4.2	...	0.1	5.8	...	0.1
Re-load	19.1	2.2	4.1	20.6	4.8	3.1
Card and loan repayment	16.4	0.6	9.1	19.1	1.2	8.5
Transaction Value	RM million					
Funds transfer	2,231,468	3,242	27,576	2,438,589	7,215	31,828
Bill payment ¹	10,709	350	4,144	12,813	463	3,473
Investment in share and unit trust	38,168	...	2,347	58,019	...	1,826
Re-load	332	36	214	365	72	145
Card and loan repayment	20,305	565	6,571	24,634	1,392	6,776

¹ Include insurance payments

... Negligible

Table A.35

ATM Cash Withdrawals in Malaysia

Transaction Volume	2009	2010	2011	2012	2013	2012	2013
	Million					% Annual change	
Total cash withdrawals	502.3	518.8	556.8	565.7	526.5	1.6	-6.9
<i>of which via:</i>							
MEPS Shared ATM Network	176.0	191.8	209.3	244.6	272.7	16.9	11.5
HOUSE network ¹	0.2	0.3	0.3	0.3	0.3	3.2	15.3
Transaction Value	RM million						
Total cash withdrawals	236,211.7	255,308.7	279,484.7	294,149.1	286,491.2	5.2	-2.6
<i>of which via:</i>							
MEPS Shared ATM Network	49,000.8	57,365.1	64,708.6	83,655.9	101,477.3	29.3	21.3
HOUSE network ¹	121.0	170.1	177.6	189.3	225.1	6.6	18.9
Average value per transaction (RM)	470.2	492.1	501.9	520.0	544.1	3.6	4.7

¹ ATM network launched in 2006 for locally-incorporated foreign banks

Table A.36

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

As at end of period	2009	2010	2011	2012	2013
	Unit				
International brand payment cards ¹	160,443	180,589	207,657	220,639	229,967
e-Debit ²	91,328	118,467	141,076	153,237	172,880
E-money	30,641	30,803	31,236	31,238	31,231
Terminals per 1,000 inhabitant ³	7.3	7.9	8.9	9.2	9.5

¹ MasterCard, Visa, American Express and Diners Club

² Domestic PIN-based debit card

³ International brand payment card, proprietary debit card and e-money terminals

Table A.37

Number of Cards and Users of Payment Instruments and Channels

As at end of period	2009	2010	2011	2012	2013	2012	2013
	'000					% Annual change	
Number of cards/accounts:							
Credit card	10,818	8,547	8,281	8,150	8,292	-1.6	1.7
Charge card	285	181	154	138	132	-10.4	-4.2
Debit card	27,296	29,941	34,993	39,275	42,029	12.2	7.0
<i>of which: e-Debit¹</i>	20,426	20,992	22,426	21,881	19,847	-2.4	-9.3
E-money	68,462	74,701	84,178	91,008	97,735	8.1	7.4
Number of subscribers:							
Internet banking	8,123	9,848	11,873	13,678	15,630	15.2	14.3
<i>Individual</i>	7,958	9,638	11,637	13,430	15,319	15.4	14.1
<i>Corporate</i>	165	209	236	248	311	5.0	25.4
<i>Penetration rate (%) to population</i>	28.9	34.4	40.9	46.3	52.2		
Mobile banking	675	898	1,560	2,446	3,793	56.8	55.1
Penetration rate (%):							
<i>to population</i>	2.4	3.1	5.4	8.3	12.7		
<i>to mobile phone subscribers</i>	2.2	2.6	4.3	5.9	8.8		

¹ Domestic PIN-based debit card

Table A.38

Number of Participants and Instrument Issuers

As at end of period	2009	2010	2011	2012	2013
	Unit				
RENTAS	61	64	68	68	68
<i>Bank Negara Malaysia</i>	1	1	1	1	1
<i>Banks</i>	54	55	56	56	55
<i>DFIs</i>	4	5	6	6	6
<i>Non-banks</i>	2	3	5	5	6
SPICK/eSPICK	44	45	46	48	47
Credit card	24	26	25	26	25
<i>Banks</i>	21	22	21	22	22
<i>Non-banks</i>	3	4	4	4	3
Debit card¹	23	23	22	22	25
<i>International debit card</i>	8	8	11	12	15
<i>e-Debit²</i>	14	14	13	13	13
<i>Others³</i>	8	9	9	8	8
Charge card	8	6	6	6	7
<i>Banks</i>	5	4	4	4	6
<i>Non-banks</i>	3	2	2	2	1
E-money⁴	21	21	21	25	25
<i>Banks</i>	5	6	6	7	6
<i>Non-banks</i>	16	15	15	18	19
Internet banking	23	25	26	29	29
Mobile banking	11	11	13	13	13
FPX	5	7	7	10	10
<i>Banks</i>	5	7	7	7	7
<i>Non-banks</i>	-	-	-	3	3
Direct Debit	11	12	13	16	17
<i>Banks</i>	11	12	13	13	14
<i>Non-banks</i>	-	-	-	3	3
Interbank GIRO	21	24	26	28	29

¹ There are banks issuing more than one type of debit card

² Domestic PIN-based debit card

³ Cards with both international debit and domestic debit (PIN-based) functions

⁴ Include international brand prepaid card

