LETTER OF TRANSMITTAL

Yang Amat Berhormat Dato' Sri Mohd Najib bin Tun Haji Abdul Razak,
Prime Minister/ Minister of Finance,
Malaysia.

YAB Dato' Sri,

In accordance with section 56 of the Takaful Act 1984 and section 192 of the Insurance Act 1996, I have the honour to submit for presentation to Parliament, reports on the administration of the Takaful Act 1984 and Insurance Act 1996, and other related matters for the year ended 31 December 2012 which are incorporated into this Financial Stability and Payment Systems Report 2012.

Respectfully submitted,

Zeti Akhtar Aziz
Governor
20 March 2013

PREFACE

The Financial Stability and Payment Systems Report 2012 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

Global financial and economic conditions continued to be highly challenging in 2012. While a sustained strength of the global economic recovery has yet to be fully secured, the resolution of the euro area crisis has also remained incomplete. Although international financial market tensions have eased in the recent months, capital flows to emerging economies can be expected to remain volatile.

In this environment, domestic financial stability in Malaysia has continued to be preserved. There have been no disruptions to credit flows and domestic financial markets have remained orderly. Financial institutions in Malaysia are sound with strong capital and liquidity buffers and continuing improvements in asset quality. Weakness in external demand has not impacted the balance sheets of financial institutions, which continue to be well-supported by a diversified lending portfolio and sound underwriting and risk management practices. This has preserved a high level of confidence in the domestic financial sector and its role in facilitating financial intermediation and providing risk protection to Malaysian households and businesses. A positive assessment by the International Monetary Fund and the World Bank under the Financial Sector Assessment Program further affirms the strength of the regulatory and supervisory framework in addressing risks to our financial stability.

The principal risks to domestic financial stability were largely unchanged. Household debt levels have continued to increase in 2012 but at a more moderate pace following the implementation of targeted macroprudential measures by the Bank since 2010. The growth in household borrowings remains broadly in line with rising household incomes, stable employment conditions and expectations of repayment capacity. Banks have also continued to observe prudent lending standards with greater attention to affordability assessments. During the year, the Bank has taken steps to address the growth in lending activities to the household sector from outside the banking sector. Such activities have increased the vulnerability of certain segments of the household sector to income shocks.

Nevertheless, risks to financial stability are well contained with the aggregate measures of household resilience remaining strong. The extension of financial education and debt resolution programmes to households that borrow from non-bank financial institutions is also aimed to promote responsible financial management by households. Equally important are the efforts to ensure prudent and responsible lending practices by institutions operating outside the banking sector, especially under the more competitive conditions.

Developments in the property market have also been a focus of surveillance by the Bank. House prices have continued to increase, reducing home affordability in some locations for Malaysians, particularly those in the lower- to middle-income groups. While house price increases have largely been explained by macroeconomic factors, in the more recent period, investor activity appears to have also had an influence on house prices. The Bank has progressively tightened measures on lending for speculative property purchases, and will continue to monitor the situation closely. To date, there is no evidence that changes in credit policies of banks have been driving house price increases. This mitigates the risks to financial stability, but affordability remains an issue and will need to be addressed through comprehensive measures, including fiscal and supply-side measures. Also important is the management of the incoming supply of commercial property space to preserve stable conditions in the commercial property sector.

In the international financial environment, the global reform agenda to safeguard financial stability has continued to advance forward during the year. While financial institutions in Malaysia have stood up well to the test of the recent crisis, the reforms are a useful benchmark against which the strength and resilience of Malaysian financial institutions can be judged. In a number of areas, including liquidity, the domestic regulatory framework already sets minimum standards for financial institutions in Malaysia which have already been in place for several years. The reforms do however present aspects of the prudential framework that can, and should be further strengthened as the financial system develops and expands in the scope and scale of activities. The implementation of the Basel III regulatory reforms in Malaysia, which commenced in early 2013 will follow the internationally determined timeline. Its implementation will be monitored closely to ensure that the intended benefits of a stronger financial system are delivered while minimising unintended consequences for domestic financial intermediation activities.

A major advancement in the regulatory and supervisory framework for the financial system in Malaysia is the new legislation for the financial sector that has been approved by Parliament in December 2012, and that will come into effect by mid-2013. With the enactment of the Financial Services Act 2013 and Islamic Financial Services Act 2013, Malaysia can have a high degree of confidence in the comprehensive legal framework for the financial sector. Collectively, the financial sector laws including the Central Bank of Malaysia Act 2009 have significantly strengthened the foundations for financial stability in Malaysia. The new legislation provides the Bank with the necessary powers to act effectively in a much more complex financial landscape, while holding the Bank accountable for those actions.

The governance arrangements for financial stability which have been put in place within the Bank have continued to be strengthened. This includes the Financial Stability Committee which has been reinforced by the Joint Policy Committee comprising members of the Monetary Policy Committee and Financial Stability Committee. The Joint Policy Committee has in the recent few years issued several macroprudential measures to ensure developments emanating from the economy and the asset markets would not become a risk to financial stability. The higher degree of integration, both within the financial sector as well as between the financial sector and other parts of the economy has now called for much deeper levels of inter-agency collaboration in promoting financial stability, addressing the risks to consumers and in supporting the development of the financial sector. Towards achieving this, the Bank also entered into arrangements for cooperation and coordination with other domestic authorities during the year to ensure a more complete assessment of the potential risks to financial stability, including that arising from financial intermediation activities from the non-banking sector.

In April 2012, the Bank entered into a Strategic Alliance Agreement with the Malaysia Deposit Insurance Corporation which outlines the roles and responsibilities of the Bank and the Malaysia Deposit Insurance Corporation in the resolution of stressed financial institutions, thus having in place the procedural arrangements for orderly resolutions. In October 2012, the Bank signed a memorandum of understanding with Securities Commission Malaysia to achieve a more effective supervision of financial groups and of banking activities in the capital market, and for monitoring potential systemic risks in the capital market and the broader financial system. During the year, the framework for financial sector regional cooperation was also strengthened further in view of the more pronounced cross-border dimension of financial services. Towards this endeavour, the Bank has during the year worked through supervisory colleges, bilateral engagements with central banks and supervisory authorities, and through regional groupings.

A further area of collaboration is with other law enforcement agencies in the country, in particular, the National Coordination Committee to Counter Money Laundering. This cooperation serves to facilitate inter-agency initiatives, the exchange of information and the coordination of enforcement actions. The legislation for anti-money laundering and anti-terrorism financing was also strengthened further during the year. Cumulatively, this has aimed to counter the use of the financial system for illegal activities and thus, safeguard the integrity of the financial system.

The regulatory framework for Islamic finance also broke new ground during the year, further contributing to the goals of financial stability in the Islamic financial system. The Bank took major steps towards the implementation of a contract-based regulatory framework in Malaysia which will reinforce the principles of Shariah and facilitate reducing the legal and operational risks in the conduct of Islamic financial transactions. The framework is an important foundation for future innovation in Islamic finance and will contribute towards further strengthening confidence in Islamic financial products and services. The contract-based regulatory framework will also contribute towards advancing the goals of financial stability which seek to preserve a financial system that works effectively and efficiently to serve real economic activity.

Financial inclusion remains an important agenda of the Bank with its dimensions having grown in significance. In addition to promoting greater access to financial services by households and small businesses, it has also become more important to ensure those that currently have financial access do not, over time, become financially excluded due to the growing complexity of financial products and services. The introduction of new channels of access, such as through mobile banking and agent banking, also places additional demands on the regulatory framework to provide for the adequate protection of consumers and effective management of operational risks by financial institutions.

The Bank expects to increase the intensity of its financial capability initiatives, working together with its partners, to ensure that the financial system remains inclusive as it becomes more developed. To better understand the impact of these efforts going forward, work has already commenced on the development of a framework for measuring the effectiveness of financial education initiatives in promoting responsible financial behaviour. In addition, the Bank has developed a financial inclusion index which measures accessibility to financial services and its usage.

A key part of modernising the financial system and raising the level of competitiveness of our economy has involved the transformation of the payment landscape. A decade ago, almost half of non-cash payments by volume were made by cheques. Today, e-payment channels account for close to 90% of all non-cash transactions. This trend has gained further traction in the recent two years with the sustained efforts to expand access to e-payment services and the enhancement of the supporting infrastructure and functionalities. In 2012, the Bank has announced the intentions to pursue pricing reforms to accelerate the migration to e-payments. While a new pricing framework for payment transactions will be announced in 2013, a one-year lead time will be given for its implementation. This will allow consumers and businesses to position themselves to effectively adjust to the new pricing arrangements. The reform will remove the current price distortions between e-payments and paper-based payment instruments, and encourage the transition to more cost-effective payment methods.

Looking ahead, the financial sector is well placed to cope with future challenges but continued vigilance is required by the Bank as well as the financial institutions. A continued focus on the development of a sound, progressive and inclusive financial sector, guided by the recommendations of the Financial Sector Blueprint 2011-2020, will also further reinforce the resilience of the financial system and its ability to support and drive Malaysia's transformation to becoming a higher value-added, high-income economy to be achieved in this decade.

Zeti Akhtar Aziz
Governor
20 March 2013

2012

EXECUTIVE SUMMARY

Risk Developments and Assessment of Financial Stability in 2012

Domestic financial stability remained intact throughout 2012, providing a supportive environment for continued growth of the Malaysian economy. The Malaysian financial system continued to demonstrate a high degree of resilience amid persistent uncertainties in several of the advanced economies and weaker global growth. This was supported by strong and well-capitalised financial institutions, orderly conditions in the domestic financial markets and ample liquidity, thus ensuring that financial intermediation continued to function efficiently to support domestic economic activity. Despite increased competition prevailing in the retail lending segment and a more buoyant property market, financial institutions have generally maintained sound underwriting and risk management standards. Overall confidence in the domestic financial system also remained firmly intact. The assessment of Malaysia under the Financial Sector Assessment Program conducted by the International Monetary Fund and World Bank in 2012 further reaffirmed the strength of the Malaysian financial sector, noting in particular its resilience to macroeconomic and financial stresses, and the high level of compliance of the domestic regulatory and supervisory frameworks, deposit insurance system and the financial market infrastructure with international standards.

Credit quality also remained sound. The financial condition of businesses has been healthy and generally improving, while income growth and stable employment prospects generally have continued to support the debt servicing capacity of households. Earlier precautionary measures undertaken to promote the resilience of households and sustainability of the property market have had a positive effect, although other developments have exerted additional pressures on the financial positions of households and on property prices. Overall growth in household lending was slower for the second consecutive year, with indicators in the banking sector continuing to support the sound credit quality of household financing by the banking system. Bank lending practices remain sound, and were further strengthened following the implementation of the Guidelines on Responsible Financing during the year. Non-bank financial institutions are, however, expanding their financing activities to the household sector. Equally prudent practices therefore need to be adopted to ensure that increases in the financial vulnerabilities of households will be avoided.

In the property market, pre-emptive macroprudential and fiscal measures undertaken have had a moderating effect on investment activities involving the purchase of residential property. However, overall house prices have continued to increase at a strong pace. Macroeconomic, rather than financial factors are mainly driving this trend as the supply of houses remains insufficient to meet genuine demand for new homes. Measures already being taken by the Government to increase the supply of affordable houses, along with additional fiscal measures, are aimed at mitigating such further price increases. Also important is for the supply of new commercial and retail spaces to be staggered and phased to avoid oversupply in the short term. Risks to financial stability from these developments, however, remain well-contained, mainly on account of continued discipline in lending standards and further improvements in the risk management practices of banks. Exposures of financial institutions to the non-residential property segment are also low.

Exposures of Malaysian financial institutions to counterparties in Europe remained low and were further reduced for exposures to the European countries that are most affected by the euro area crisis. Global reinsurance conditions have also improved considerably, reducing the risks associated with foreign reinsurance placements. Malaysia remains well placed to cope with the effects of potential deleveraging activities by European financial institutions, with the domestic institutions and other foreign banks in Malaysia in a position to replace any lost capacity. While Malaysian banks have continued to expand their regional operations, this has been at a relatively moderate pace and is commensurate with the greater capacity of the banks to manage risks on a group-wide basis.

Financial institutions continued to record strong capital positions and financial performance which improved the ability of banks to meet new capital

requirements under Basel III that are being phased in from 2013. Profit performance has continued to be driven by core lending and insurance activities and not from higher risk-taking in trading and treasury activities. In addition to continued discipline in lending, financial institutions have taken measures to manage exposures to market risk, insurance risk and displaced commercial risks. These strategies have further improved their resilience to a range of economic and market shocks.

The external environment is expected to remain challenging in 2013. The key risk to the Malaysian financial sector continues to stem from the general weakness in the external economic conditions which is transmitted through the trade channel. The more favourable domestic and regional economic and financial outlook is expected to provide some support against this risk. The Malaysian financial sector is well placed to cope with such adverse external developments given the strong financial buffers of financial institutions, comprehensive institutional arrangements in place for responding to system-wide risks, and most importantly, the sound and continuous improvements in credit, market and operational risk management practices of banks. Liquidity and funding conditions in 2013 are also expected to remain supportive of the domestic intermediation by financial institutions in Malaysia. The business expansion and lending activities of non-bank financial institutions, the high leverage of the lower-income households and developments in the property market are areas that will continue to be closely monitored by the Bank.

Development of the Financial Sector

Development initiatives in 2012 continued to focus on further enhancing the critical role of the financial sector in harnessing Malaysia's long-term growth potential. An important part of this involved promoting sound conditions for the intermediation of funds to new growth areas and strengthening Malaysia's interlinkages with regional and international economies as outlined in the Financial Sector Blueprint 2011-2020. The enactment of the new Financial Services Act 2013 (FSA) and Islamic Financial Services Act 2013 (IFSA) supports and strengthens the preconditions for these efforts.

During the year, investment banks gained greater scale and capacity through mergers and acquisitions to tap growth opportunities in the region, while the general insurance industry consolidated further, significantly improving the viability and competitiveness of smaller insurers in the industry. The implementation of the first phase of the new motor cover framework proceeded smoothly to bring the industry closer to sustainable pricing levels for motor insurance, while broader reforms to improve the efficiency of claims settlement processes and to control claims costs have started to produce results. With the development of a comprehensive regulatory and supervisory framework for the insurance industry and a more competitive insurance market achieved over the years, another important structural adjustment that will be pursued in the insurance sector relates to the review of existing cost controls that are applied to both life and general insurers. This is intended to allow market forces to work more effectively to encourage innovation and further develop alternative distribution channels for insurance, while also providing stronger incentives to develop the capacity of agents. The first phase of this review was implemented in January 2013.

Financing to small and medium enterprises (SMEs) continued to register strong growth. Lending indicators showed greater access to financing for SMEs, both in terms of an increase in the number of SMEs that have benefitted from the various financing facilities provided for SMEs, as well as in the higher average value of financing approved. More flexible financing products for micro-enterprises were also introduced by the financial industry which would allow more micro-enterprises to be eligible for financing. Financial institutions have continued to maintain a strong focus on the SME sector, with several banks continuing to raise the financing targets for SMEs and investing resources to enhance the capacity to further grow their SME financing portfolio. Financing for green technology ventures has similarly grown with improving prospects as a result of additional funding capacity provided by the Government, and further progress achieved to develop the credit assessment and risk management capabilities of banks in this area. Development financial institutions (DFIs) continued to have an important role in supporting the growth and development of strategic economic sectors. Financing by DFIs under the purview of the Bank recorded strong growth for the year and their risk profiles improved further. During the year, measures were advanced to improve the transparency of the performance of DFIs against their mandates and to provide greater clarity on the risk-sharing arrangements between the DFIs and the Government.

The debt securities market remained an important source of funding for corporations, with a larger

share of financing by businesses being met through the debt market compared with the banking system for more than a decade now since 2002. Malaysia continues to have the largest debt securities market in Southeast Asia and remains among only two countries in the region with a significant private debt securities market that is almost as large as the public debt securities market. The increased capital allocation by the Government to Danajamin Nasional Berhad will further enhance the capacity of Danajamin in improving cost-efficient access to the bond market for issuers seeking to raise longer-term funding. In the money market, the Bank continued to introduce new products to facilitate more efficient liquidity management by Islamic financial institutions. As concerns increased globally over rate-rigging practices in relation to financial market benchmark rates, the Bank and the financial industry took additional measures to preserve the credibility of key domestic benchmark rates and reinforce the confidence of market participants in the use of these rates. In efforts to further deepen the foreign exchange market, an immediate focus has been to improve the access to, and availability of a broader range of hedging instruments. To this end, the foreign exchange administration rules were further liberalised to encourage greater innovation in foreign exchange product offerings and demand for more efficient foreign currency management solutions.

Measures of financial inclusion showed improvement in terms of access to deposit accounts, while access to financing accounts remained at high levels. The work done by the Bank to develop a Financial Inclusion Index showed that Malaysians generally used financial services in a responsible manner and were reasonably satisfied with the financial products and services provided, but that there was scope to further improve convenient access to financial services. During the year, two key initiatives to improve access to financial services were the implementation of the agent banking framework and the MyMobile platform. This is expected to have a significant impact on widening the reach of financial services in Malaysia.

Domestic banking groups continued to extend their regional footprint, with overseas operations in 21 countries, from 19 previously. Efforts to deepen regional financial integration also gained further momentum under the ASEAN Financial Integration Framework. ASEAN member countries are in the final stages of launching a banking sector integration framework that will support a more dynamic and meaningful role by qualified ASEAN banks in the region. The launch of a pilot platform for the cross-border investment and settlement of debt securities under a joint initiative by the Bank, the Hong Kong Monetary Authority and Euroclear Bank will enable investors and market intermediaries to access bond markets in Malaysia and Hong Kong more efficiently, in turn contributing to the further deepening of the Asian bond markets. The commitment to develop well-functioning bond markets in the region was strengthened further with the agreement by ASEAN+3 member countries to adopt a new roadmap pursuant to the Asian Bond Market Initiative.

The central focus on promoting regional financial stability remains important to the regional integration agenda. In this regard, the preparedness of the region to respond to crises has been further strengthened, following enhancements effected to the Chiang Mai Initiative Multilateralisation Agreement and continuing work to strengthen existing communication protocols and institutional arrangements for crisis management and resolution within the grouping of the Executives' Meeting of East Asia Pacific Central Banks (EMEAP). Given the important bearing that global regulatory developments have on the domestic financial sector, the Bank continued to contribute actively to regional and international forums focusing on financial regulatory developments. This is important to forward concerns, in particular from emerging economies, so that due consideration would be given to these issues in the international policy making process.

The Islamic financial sector continued its growth trajectory, with robust growth recorded in Islamic banking assets, takaful assets, sukuk and foreign currency business. Malaysia remains a key centre for sukuk issuances globally. The foundations and institutional arrangements for the orderly growth of Islamic finance continued to be strengthened, notably in supporting effective end-to-end Shariah governance and compliance. Malaysia has taken significant steps forward to put in place a contract-based regulatory framework for the Islamic financial sector which aligns legal and regulatory principles with Shariah precepts, and will serve as a useful benchmark for evolving a more comprehensive regulatory framework that will promote greater legal and operational certainty in Islamic finance. This has been complemented

by continued innovations in the sukuk market, a strong focus on research and ongoing efforts to develop a deep pool of talent to meet the growing needs of the Islamic financial industry.

The various institutions and programmes that support the talent development agenda, including the Financial Sector Talent Enrichment Programme, the Asian Institute of Finance, the International Centre for Education in Islamic Finance, the Iclif Leadership and Governance Centre and other financial industry training institutes, have continued to expand their programme offerings in efforts to bridge talent gaps in the financial industry. These institutions have also built strong reputations that have enabled them to train more professionals for the industry, and forge strategic alliances that will further enhance their capacity. During the year, the Finance Accreditation Agency was established to provide independent accreditation of learning programmes and qualifications for the financial services industry. The aim is to support high-quality financial services training through the accreditation process and to provide a structure for the mutual recognition of professional learning and experience in financial services. Moving forward, a Financial Sector Talent Council will be established to provide strategic direction and develop coordinated strategies for talent development in the financial sector.

Regulatory and Supervisory Framework

The regulatory and supervisory framework in Malaysia will be placed on a substantially stronger footing with the enactment of the FSA and IFSA. The new laws significantly strengthen the foundations for a regulatory and supervisory framework that is effective, transparent and which contributes to an efficient financial system that is resilient to future stresses. The Bank's regulatory priorities continued to be guided by a domestic focus on further raising the standards in governance and risk management practices in keeping with the growing scale and complexity of activities of financial institutions in and outside Malaysia. This included strengthening and updating prudential rules in line with international regulatory reforms.

The domestic implementation of the Basel III global regulatory reform package has moved forward with the publication of final rules that will significantly raise the level and quality of banks' regulatory capital. The new requirements are being phased in from January 2013 to December 2018 in line with globally determined timelines. Malaysian banking institutions are in a strong starting position to meet the higher standards, and the extended transition period allows ample room for banks to gradually build up the required buffers. Projections by the banking institutions suggest that any impact on the costs and functioning of domestic financial intermediation will be minimal compared to the benefits from the substantially stronger capital buffers that reduce the probability and costs of bank failures to the economy. Changes made early this year to the global liquidity standards under Basel III which will come into effect in 2015 in general are more reflective of the characteristics of funding markets in Malaysia and are expected to support a smooth domestic transition to the new standards. The Bank also issued the final Risk-Based Capital Framework for Takaful Operators (RBCT) to significantly strengthen the prudential framework for takaful operators to be on par with the standards applicable to the insurance industry. Full compliance with the RBCT will take effect from 1 January 2014.

The Bank further strengthened requirements on effective risk governance that must be observed by all financial institutions. These address the role of the board, senior management and other control functions to ensure strong risk management systems in financial institutions, and require that incentive and remuneration structures are aligned with prudent risk-taking. Strong risk governance will be particularly important to support effective risk management on a group-wide basis for some of Malaysia's largest financial groups which have material operations in more than one regulated sector, or significant overseas operations. The prudential framework for managing exposures to single counterparties has also been enhanced to ensure that risk concentrations continue to be prudently managed by banks in an environment that is more interconnected. Under the FSA and IFSA, the Bank will be able to provide an appropriate level of oversight over financial holding companies to ensure that the activities of financial groups do not pose undue risks to the safety and soundness of financial institutions. This will include setting prudential standards for financial holding companies, conducting ongoing supervision on a consolidated basis and requiring corrective actions by financial holding companies to address identified risks. The Bank expects to publish its proposals on the scope of consolidated supervision that will be applied on financial groups, in the second half of 2013.

The Bank's supervision and enforcement activities which were aimed at preventing the financial sector from being used for illegal activities were also intensified in 2012. As a result of the re-licensing exercise undertaken for the money services business industry, the financial and operational capacity of licensed money changers and remittance service providers has improved substantially, along with more effective controls implemented by these entities against risks associated with financial crime. In total, the number of entities in the money services business industry declined to 515 from 839 in December 2011 following the re-licensing initiative. At the broader system level, the Bank continued to be actively involved in driving anti-money laundering initiatives in collaboration with other law enforcement agencies, working mainly through enhanced arrangements under the National Coordination Committee to Counter Money Laundering. During the year, the legal framework for countering the financing of terrorist activities was further strengthened to include an expanded scope of predicate offences. The enforcement capacity of law enforcement agencies has also increased. Work has commenced to further review the existing anti-money laundering and counter financing of terrorism (AML/CFT) framework to take into account revised international standards issued in February 2012 by the Financial Action Task Force.

To ensure effective oversight over the financial system as regional and international linkages continue to expand and deepen, the Bank further strengthened its cooperation arrangements with other central banks and supervisory authorities. Domestic arrangements for cooperation between the Bank and other authorities in Malaysia which contribute to financial stability, notably the Malaysia Deposit Insurance Corporation and Securities Commission Malaysia, have also been further enhanced.

Market Conduct and Consumer Empowerment

The Bank's oversight activities in the area of market conduct continued to focus on managing risks to consumers arising from the search for higher yields, the accumulation of higher debt by low-income households, and the promotion of more complex products in the market, including products which involve greater risks that are borne by consumers. In managing these risks, the Bank's priorities in 2012 has been on strengthening the legal framework through the FSA and IFSA for the oversight of market conduct, implementing an enhanced market conduct supervisory framework, increasing the scrutiny of insurance intermediaries and empowering consumers through targeted financial education programmes.

Generally, the Bank has observed further improvements in the attention accorded by financial service providers to market conduct issues, largely in response to supervisory engagements, but also as a result of a greater focus on consumer welfare in the business and growth strategies of financial service providers. In particular, banks have strengthened internal processes for assessing affordability to ensure that households are borrowing within their means. Disclosures made in the sales and marketing materials of financial service providers have been more balanced in presenting risks and returns, and the use of plain language has been extended to a wider range of financial contracts. The level of compliance with fair principles relating to fees and charges imposed by banks has also improved, along with strengthened security measures to prevent online fraud. During the year, the Bank strengthened existing requirements on product advice in the life insurance and family takaful sectors and imposed requirements on all Islamic banks to grant *ibra'* (rebates) to customers upon the early settlement of financing contracts. As part of its role in providing a credible deterrent against unfair practices, the Bank took supervisory and enforcement actions against unfair practices, including mis-selling, that were identified through the supervisory and surveillance activities.

The Bank continued to strengthen its efforts to stem the growth of illegal financial schemes and scams. In addition to the investigation of illegal schemes involving breaches of laws administered by the Bank, significant resources have been directed at generating wide publicity on the dangers of illegal schemes and educating consumers to be more vigilant. During the year, a White Collar Crime Taskforce was established to coordinate joint enforcement actions between law enforcement agencies. In another collaborative effort, an inter-agency platform will be established to conduct a comprehensive review of the gaps in the existing regulatory regime for credit providers, with the view to develop a comprehensive consumer credit law that will provide a more cohesive legal framework for regulating consumer credit activities in Malaysia.

The Bank continued in 2012 to advance financial capability and education initiatives to empower Malaysians to build, manage and protect their personal wealth. An immediate focus has been to promote financial capability skills from an early age through the school curriculum and to roll out financial capability programmes based on life event models for adults. The integration of financial education into the school curriculum has progressed well and is on track to be implemented progressively from 2014 for primary schools and 2017 for secondary schools. The focus for adult financial education continued to be directed at education for the young adult population and low-income households given their propensity to borrow and lower financial buffers. Further progress was also made to develop a Financial Education Assessment Framework that measures the financial literacy level of consumers to identify priority areas for financial education interventions and to assess the effectiveness of existing financial education initiatives. To further enhance institutional arrangements for consumer redress, work is in progress to transform the Financial Mediation Bureau into a financial ombudsman scheme with legal backing to deal with a wider scope of disputes and the ability to determine a range of remedies for consumers that have been unfairly treated.

Payment and Settlement Systems

The payment and settlement systems in Malaysia remained resilient and operated reliably without any major disruptions. With the enactment of the FSA, the Bank's powers in respect of payment systems have been rationalised and strengthened further to ensure effective oversight of payment systems and payment instruments. To ensure that the Real-Time Electronic Transfer of Funds and Securities System (RENTAS) continues to meet high international standards, several enhancements to the operations, systems and risk mitigation measures were implemented during the year. This included the Liquidity Optimiser Settlement Facility (LOSF), strengthened policies for accessing the Bank's intraday credit facility, enhancements to the rules and procedures of RENTAS, and the operationalisation of a third-level backup facility. Greater focus was also directed at ensuring the operational reliability of major retail payment systems operated by Malaysian Electronic Clearing Corporation Sdn. Bhd. (MyClear) and Malaysian Electronic Payment System Sdn. Bhd. (MEPS). In addition, measures were undertaken during the year to strengthen the security standards for payment instruments. As a result, losses due to retail payments fraud remained negligible in 2012.

Further progress was achieved during the year towards encouraging the wider use of electronic payments (e-payments), with a marked increase observed in the adoption of e-payments in the recent two years. Efforts were intensified to expand access and improve the functionalities of payment services. To complement these efforts and incentivise the adoption of more efficient e-payment modes, pricing reforms will be undertaken to address existing price distortions between paper-based payments and e-payments and allow the pricing of payment services to better reflect the cost of production. The implementation of the pricing framework will be carefully coordinated with enhancements to the e-payment infrastructure to ensure wide access and convenience, while providing sufficient time for the public and businesses to adjust to e-payment alternatives that are more cost-effective. The Bank also continues to work closely with key sectors of the economy to encourage the use of e-payments. This includes the public sector, the financial sector, participants in the capital markets and the transportation sector. At the regional level, the ASEAN Working Committee on Payment and Settlement Systems continued to drive enhancements to cross-border payment services between ASEAN countries. Engagements with the Asian Payment Network and the ASEAN Exchanges are being pursued to expand cross-border retail payment linkages and facilitate settlements for capital market transactions conducted via ASEAN trading links.

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RISK DEVELOPMENTS AND ASSESSMENT OF FINANCIAL STABILITY IN 2012

OVERVIEW

Domestic financial stability remained intact throughout 2012, providing an environment that supported the continued growth of the Malaysian economy. The Malaysian financial system continued to demonstrate a high degree of resilience amid persistent uncertainties in Europe and other major advanced economies, and an environment of weaker global growth. This ensured that financial intermediation continued to function efficiently to support domestic economic activity. Malaysian financial institutions maintained strong financial buffers with the capacity to withstand shocks and extreme market conditions. Despite increased competition prevailing in the retail lending segment and more buoyant property market, financial institutions have generally maintained sound underwriting and risk management standards. Conditions in the domestic financial markets were orderly despite continued, albeit lower, volatility following movements in short-term portfolio flows. Overall confidence in the domestic financial system also remained firmly intact.

In the 2011 Financial Stability and Payment Systems Report, it was highlighted that Malaysian banks and businesses were likely to face the spillover effects from adverse developments in global funding conditions. Financial institutions have taken early measures on exposures to foreign currency funding risk to mitigate any adverse consequences from such external developments. Credit quality has also remained sound. The financial condition of businesses has been healthy and generally improving despite risks associated with the weaker economic conditions in the advanced economies. The increasing income and stable employment prospects domestically, generally continued to support the debt servicing capacity of households. Earlier precautionary measures implemented by the Government and the Bank to promote the resilience of households and the sustainability of the property market have had a positive effect, despite other developments having exerted additional pressures on household financial positions and property prices. Risks to financial stability from these developments, however, remain well contained mainly on account of continued discipline in the lending standards of financial institutions and further improvements in risk management practices. This was further complemented by rigorous on-site surveillance and stress tests conducted by the Bank.

The Malaysian financial system continued to demonstrate a high degree of resilience amid persistent uncertainties in the external environment

Exposures of Malaysian financial institutions to counterparties in Europe remained low and were further reduced for exposures to the European countries that were most affected by the euro area crisis. Global reinsurance conditions improved considerably, reducing the risk profile of foreign reinsurance placements, including those with European reinsurers. Malaysia remains well placed to cope with the effects of potential deleveraging activities by European financial institutions, with the domestic institutions and other foreign banks in Malaysia in a position to replace any lost capacity. The expanding operations of Malaysian banks abroad have not increased contagion risks to domestic banks in Malaysia. This development has been accompanied by close monitoring of the capacity of domestic banking groups to identify and effectively manage the risks on a group-wide basis. The Bank has substantially strengthened its cooperation with host supervisors to manage this trend.

Financial institutions continued to record strong capital positions and higher profits in 2012. For the banks, these developments improved the ability to meet new capital requirements under Basel III that are being phased in from 2013. The strong profit performance in the recent few years were driven by core lending and insurance activities, and not from higher risk-taking in trading and

treasury activities. Generally, financial institutions have maintained prudent trading and investment strategies and were more active in managing exposures to market risks. These risk exposures have either been trending downwards or sustained during the recent two years. Strategies by life insurers to better manage insurance risk in the prevailing low interest rate environment have also improved the financial resilience of these institutions. Results of stress tests conducted at the macro and micro levels continue to show that banks and insurers are resilient to the range of economic and market shocks.

During the year, the Bank's Financial Stability Committee (FSC)[1] and the Financial Stability Executive Committee (Executive Committee)[2] met three and two times respectively. The focus of deliberations has been on developments in the lending and property markets, the potential for the expanding activities of non-bank financial institutions (NBFIs) to pose risks to financial stability and policy actions (including the effects of measures already taken) to pre-empt these risks. In particular, these include issues relating to managing challenges from financial system exposures to the household sector, rising prices of residential properties and shop lots, potential oversupply of shopping complexes and offices, and contagion implications from deleveraging activities by European financial institutions and from overseas operations of the Malaysian financial institutions. The Committees also, more broadly, considered risks posed by systemically-important financial institutions, in particular those that are outside the regulatory perimeter of the Bank. While the risks were assessed to remain low, continued vigilance remained.

Malaysia was assessed for the first time under the Financial Sector Assessment Program (FSAP) in 2012. FSAP assessments, conducted jointly by the International Monetary Fund and the World Bank, provide an in-depth review of a country's financial sector. The outcome of the assessment on Malaysia affirmed the strength and resilience of the Malaysian financial sector, the high level of compliance of the domestic regulatory and supervisory framework in the banking, insurance and securities sectors, as well as the deposit insurance system, with international standards, and robustness of the financial market infrastructure. The assessment also recognised efforts already well underway to further strengthen the regulatory and supervisory framework. This notably included the reform of the legislation for the financial sector which was passed in December 2012 and which substantially addresses many of the FSAP recommendations for enhancements. Risks identified under the assessment for close monitoring, namely high household indebtedness, rising house prices and rapid credit growth, have also been well within the Bank's surveillance radar.

The outcome of the Financial Sector Assessment Program on Malaysia affirmed the strength and resilience of the banking sector, the high level of compliance of the regulatory and supervisory framework and deposit insurance system with international standards, and robustness of the financial market infrastructure

The external environment is expected to remain challenging in 2013. The key risk to the Malaysian financial sector continues to be from a general weakness in the external economic conditions that is transmitted through the trade channel. The more favourable domestic and regional economic and financial outlook is expected to provide some support against this

[1] The FSC is the high level forum within the Bank that is responsible to deliberate and approve policy measures on emerging financial stability issues and areas of vulnerabilities which may pose risks to financial stability. The FSC decides on financial stability and macroprudential policies as well as supervisory actions on the Bank's regulatees, and where necessary make recommendations to the Financial Stability Executive Committee pursuant to the Central Bank of Malaysia Act 2009 (CBA).

[2] The Executive Committee, established under the CBA, decides on recommendations by the Bank to issue financial stability orders or extend liquidity assistance to entities not regulated by the Bank, or to provide capital support to the Bank's regulatees, for the purpose of averting or reducing risks to financial stability. The Executive Committee comprises the Governor, one Deputy Governor of the Bank, the Secretary General to the Treasury, Chief Executive Officer of the Malaysia Deposit Insurance Corporation, Chairman of the Securities Commission Malaysia (newly appointed member effective December 2012), selected independent technical experts and, where relevant, head of other supervisory authority.

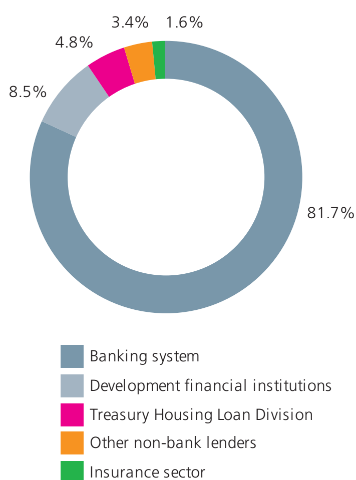
risk. The Malaysian financial sector is well placed to cope with such adverse external developments given the strong financial buffers, comprehensive institutional arrangements in place for responding to system-wide risks, and, most importantly, the sound and continuous improvements in credit, market and operational risk management practices of banks. Liquidity and funding conditions in 2013 are also expected to remain supportive of domestic intermediation by financial institutions in Malaysia. The business expansion and lending activities of the NBFIs, high leverage of the lower-income households and developments in the property market are areas that will continue to be closely monitored by the Bank. This also requires that coordination and engagement with other relevant authorities is being sustained at a high level.

MANAGING RISKS ARISING FROM HOUSEHOLD INDEBTEDNESS

Growth in household borrowings moderated for the second consecutive year, recording an annual growth of 13% (2011: +13.4%). This largely reflected the slower growth in bank lending to the household sector which declined further to 11.6% (2011: +12.9%; 2010: +13.4%). The level of household debt however increased to 80.5% of GDP following a slower growth in nominal GDP (2012: +6.4%; 2011: +10.8%). Banks remained the most dominant credit provider to households.

Chart 1.1

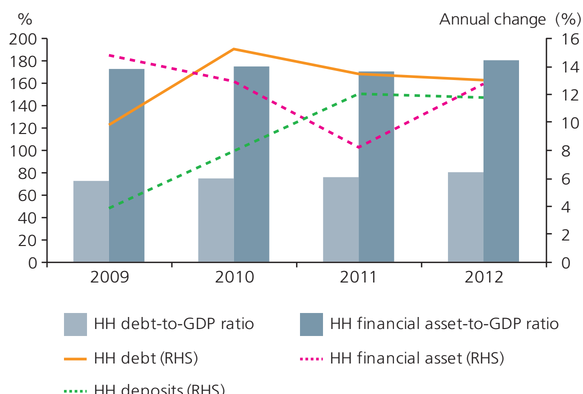
Household Sector: Composition of Credit Providers



Source: Bank Negara Malaysia, Treasury Housing Loan Division

Chart 1.2

Household Sector: Debts and Financial Assets



Source: Bank Negara Malaysia

Credit quality of household borrowings from the banking system remained sound and continued to improve during the year, underpinned by sound credit risk management and underwriting practices

Including insurance companies and development financial institutions (DFIs) which are also regulated by the Bank, the aggregate share of total credit to households by institutions regulated by the Bank is about 92% (Chart 1.1). Household lending as a share of total bank lending has remained fairly stable at around 54% to 56% since 2006. From a financial stability perspective, risks associated with the household sector remain broadly unchanged from 2011. Indicators of aggregate household resilience are sound with total and liquid household financial buffers remaining stable (Chart 1.2). More importantly, indicators in the banking sector continue to support the sound overall credit quality of household loans from the banking system. In addition, the stable outlook on the employment and income conditions for 2013, which indicates the potential for households to cope with financial stress, is also consistent with the FSAP assessment.

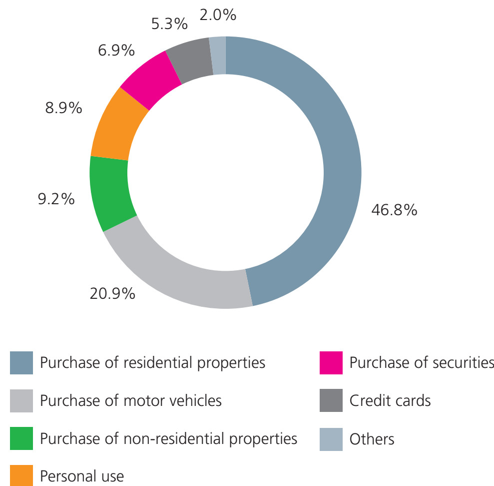
Bank lending to households

New bank lending to the household sector continued to be largely driven by lending for the purchase of assets. A total of RM166.3 billion, representing more than 80% of new loans made to households in 2012 was for purchases of properties, vehicles, and investments in fixed price Amanah Saham Nasional Berhad unit trusts which added to household wealth (Chart 1.3). Unsecured credit by banks contributed less than 10% of the increase in outstanding bank lending to the household sector, and its share of total banking system loans has remained flat since 2009 (2012: 8%). Since 2011, the growth in debt repayments by households has also outpaced that of disbursements (Chart 1.4). This has contributed to the slower pace in the accumulation of aggregate household debt. The overall impaired loans ratio for the banks' household portfolio improved further during the year to 1.5% from 1.8% as at end-2011 (Chart 1.5). Expected losses from the household portfolio also remained manageable on account of a stable average loss given default and probability of default (Table 1.1, 1.2 and 1.3). Assuming a simultaneous materialisation of all these default incidences, the amount of possible losses which banks have to bear could potentially amount to RM6.1 billion. Even if the incidences of default were to double, the estimated expected loss amount of RM12.2 billion is well within the available capital buffers of banks of more than RM80 billion as at end-2012.

As a significant bulk (56%) of loans to households is for the purchase of properties, promoting sustainable property prices, especially in the housing market, has been a policy focus to alleviate the debt burden on households and to prevent the build-up of risks in this market. This included ensuring that bank lending activities were not excessively fuelling speculative investments in property. Since the implementation of the cap on loan-to-value (LTV) ratio for the

Chart 1.3

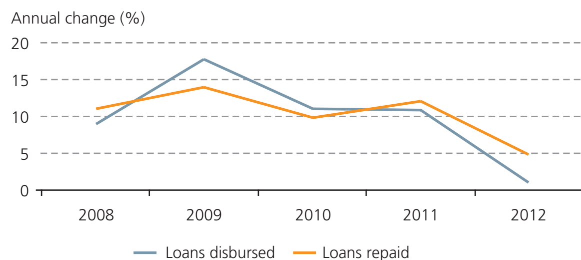
Household Sector, Banking System: Exposure by Purpose of Financing



Source: Bank Negara Malaysia

Chart 1.4

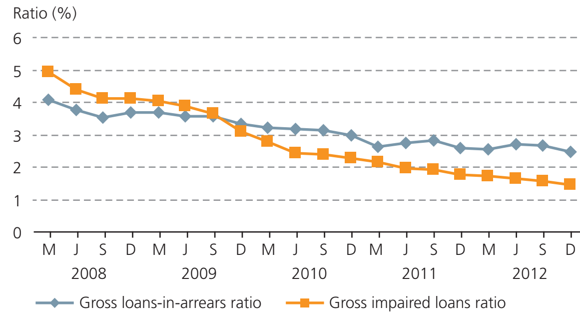
Household Sector, Banking System: Loan Disbursement and Repayment



Source: Bank Negara Malaysia

Chart 1.5

Household Sector, Banking System: Delinquencies



Source: Bank Negara Malaysia

Table 1.1

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

	2010	2011	2012
		%	
Purchase of residential properties	3.1	3.1	2.5
Purchase of motor vehicles	3.7	3.2	2.8
Unsecured financing	4.1	3.5	3.5

Source: Bank Negara Malaysia

Table 1.2

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

	2010	2011	2012
	%		
Purchase of residential properties	20	19	18
Purchase of motor vehicles	49	48	49
Unsecured financing	71	77	76

Source: Bank Negara Malaysia

Table 1.4

RPGT Applicable on Disposal of Properties

Disposal of properties	RPGT with effect from:		
	1 Jan 2010	1 Jan 2012	1 Jan 2013
Within 1st and 2nd year	5%	10%	15%
Within 3rd to 5th year	5%	5%	10%
After 5th year	0%	0%	0%

Source: Ministry of Finance, Malaysia

third and subsequent housing loans by a single borrower in November 2010, growth in bank lending for the purchase of residential properties has stabilised at 12.8% (2011: +12.7%; 2010: +12.9%; 2009: +8.8%). During the same period, lending to households for the purchase of shop lots grew at a slower pace for the second consecutive year at 15.4% (2011: +18.5%; 2010: +20.3%; 2009: +12.8%). The number of borrowers with multiple housing loans, nonetheless, has started to rise again during the year (+3.4%), albeit by a smaller quantum, signaling a resumption in demand for housing credit for investment purposes. However, this represented less than 3% of the total number of housing loan borrowers or 13.7% of outstanding housing loans, little changed from last year. A similar trend was observed in the number of multiple loan accounts for the purchase of shop lots. The implementation of the second round of upward revision to the real property gains tax (RPGT) which took effect on 1 January 2013 will have a moderating effect on the return for such investment purchases (Table 1.4). This will be important in ensuring that small businesses continue to have access to affordable business premises. Meanwhile, lending for the purchase of motor vehicles increased at a stronger pace of 7.7% to account for 20.9% of banks' exposures to households (2011: +5.9% to account for 21.6%) (Chart 1.3). More than 70% of bank loans to this segment were for the purchase of new motor vehicles following the increase in new models introduced during the year and the recovery in the supply chain after the severe disruption in supply as a result of the natural calamities in Thailand and Japan in 2011.

Table 1.3

Household Sector, Banking System: Expected Loss

	2010	2011	2012
	RM billion		
Purchase of residential properties	1.4	1.5	1.3
Purchase of motor vehicles	2.0	1.9	1.8
Unsecured financing	2.1	2.2	2.4

Source: Bank Negara Malaysia

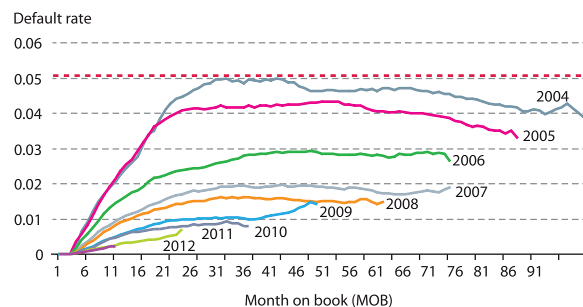
Repayment behaviour among credit card holders showed marked improvements during the year. The number of cardholders who were making prompt monthly payments on the minimum balances due on their credit cards increased by 2.3%. Cardholders were also paying down more on existing credit card debt, resulting in a decline of 5.5% in revolving balances (credit card balances that are rolled over). About a third of cardholders made full payment on total credit card usage each month. These trends contributed to a sharply slower rate of increase in outstanding credit card balances for the year of 1.5% (2011: +8.1%; 2010: +15%) even as a higher volume of card transactions was recorded for the year (2012: 309.2 million totaling RM99 billion; 2011: 302 million totaling RM93.7 billion; 2010: 284.1 million totaling RM84.9 billion). The year also saw further consolidation of credit card debts which resulted in a lower number of cards in circulation with revolving balances (from a share of 61% of the total number of cards in circulation to 51%). Banks were also more restrained in the extension of credit card facilities. Although new applications for credit cards increased to 2.3 million (2011: 2.2 million) during the year, less than half of the applications were approved, resulting in a more conservative approval-to-application ratio of 48.7% (2011: 50.1%). Following measures by the Bank to restrict the number of cards that individuals earning an annual income of less than RM36,000 can own, about 76% of principal cardholders held cards from 1 or 2 issuers only.

Bank lending practices have remained sound, and were further strengthened following the implementation of the Guidelines on Responsible Financing which came into effect on 1 January 2012. Banks have been more thorough in assessing af fordability to ensure that households who borrow, particularly in the lower-income group, have the capacity to repay the debt throughout the financing tenure without substantial hardship. This was observed in the more prudent buffers provided by banks in the computation of debt service ratios, improved processes and documentation for income verification, and enhancements to customer acceptance criteria. The Bank, through its supervisory oversight, continued to maintain close monitoring on the extent to which incidences of credit exceptions (loans approved outside a bank's credit acceptance criteria) were occurring in banks. This led to actions taken by some banks to further strengthen existing policies, procedures and governance for credit exceptions. A number of banks also reviewed existing retail credit score cards to capture additional and more granular information to improve risk profiling and monitoring by borrower segments grouped by age, income, debt service ratio, location of property and employment. The low delinquency ratios for household loans have also been supported by an efficient collection process in place within the banking institutions. This enabled banks to take early debt rehabilitation and recovery measures. During the year, the Bank found that the controls within the banks for this purpose were adequate.

Reflecting these practices, the quality of household loans of the banking system remained

Chart 1.6

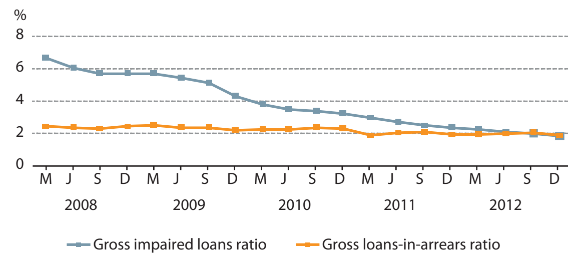
Household Sector, Banking System: Vintage Analysis for Housing Loans



Source: Bank Negara Malaysia

Chart 1.7

Household Sector, Banking System: Delinquencies - Purchase of Residential Properties



Source: Bank Negara Malaysia

Table 1.5

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

Ratio (%)	2010	2011	2012
Overall	3.0	2.6	2.5
Purchase of residential properties	2.3	2.0	1.9
Purchase of motor vehicles	6.2	5.5	5.5
Personal use	1.6	1.7	1.3
Credit cards	3.8	2.4	1.1
Purchase of securities	1.3	1.1	1.1

Source: Bank Negara Malaysia

Table 1.6

Household Sector, Banking System: Gross Impaired Loans Ratio

Ratio (%)	2010	2011	2012
Overall	2.3	1.8	1.5
Purchase of residential properties	3.2	2.3	1.9
Purchase of motor vehicles	1.2	1.2	1.1
Personal use	2.5	2.0	1.8
Credit cards	1.9	1.8	1.3
Purchase of securities	0.7	0.4	0.2

Source: Bank Negara Malaysia

sound and continued to improve during the year. In the largest segment of household loans, that is housing loans, the vintage analysis has continued to show a reduction in default rates over the years (Chart 1.6). The gross impairment ratio for housing loans correspondingly declined further in 2012 to 1.9% (2011: 2.3%) (Chart 1.7) led

primarily by the decline in the gross impairment amount (2012: -10.4%; 2011: -17.9%). Housing loans-in-arrears also remained low, accounting for only 1.9% of total housing loans.

Similar trends were observed in other categories of household loans in the banking system. Impairment ratios have been trending downwards across the board since 2006 (Table 1.5 and 1.6). The combined total expected losses from banks' household lending portfolio, at RM6.1 billion in 2012, has more than halved since 2006. With improved affordability assessments, bank exposures to the lower-income segment of borrowers (earning a monthly income of RM3,000 and below) were lower at 15.9% of total banking system loans (2011: 17.2%). Based on historical loss experience, potential losses from possible defaults by this group are unlikely to exceed RM1.9 billion or 1% of the banking system capital base.

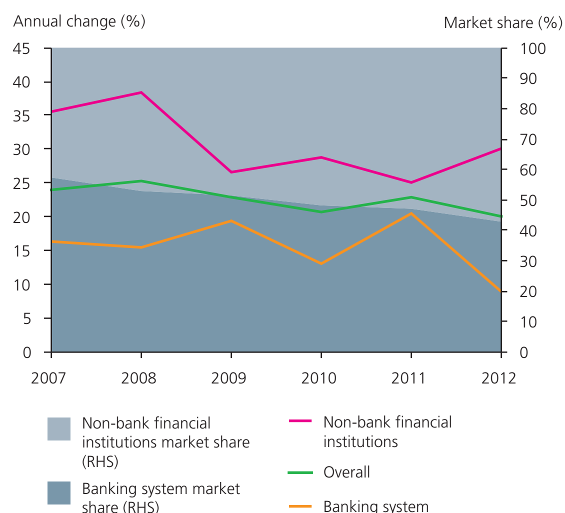
Bank lending rates held generally steady during the year across all categories of loans. Although banks continue to face some data and system limitations to varying degrees in efforts to move towards more robust risk-informed pricing practices, improvements have been observed since the 2011 Report, notably in the use of enhanced assumptions for estimating potential credit losses for specific borrower segments which drew on longer historical data and loss experience. This allowed for financing rates to be closer to levels that reflected the risk profile of loans.

Non-bank financial institution (NBFI) lending to households

NBFIs, including DFIs which are regulated by the Bank, accounted for about 12% of total credit to the household sector (Chart 1.1). But collectively, these institutions provide a significant share (57%) of personal financing credit to households, and such credit has been increasing significantly in the recent years. In 2012, overall credit on all facilities extended by the three largest NBFIs (encompassing a DFI, a large cooperative, and a building society) expanded at a faster rate of 23.1% (2011: +17.1%). The strong credit expansion was primarily driven by the increase in personal financing activity which rose at its fastest pace to date by 30% (2011: +25.1%; 2010: +28.7%) (Chart 1.8). For these NBFIs, more than 80% of the lending portfolio comprised personal financing, compared to only 5% in the case of banking system loans. During the year,

Chart 1.8

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



Source: Bank Negara Malaysia

NBFIs approved more than 600,000 new personal financing facilities worth RM43 billion (+63.7%). This was substantially higher than new personal financing facilities approved by banks which declined by 6.2% to RM19.4 billion. With other segments of household lending growing at a slower pace, personal financing as a proportion of total household debt rose further during the year to 17% (2011: 16%; 2010: 14.8%).

Personal financing by non-bank financial institutions expanded at a stronger pace, and have increased in size and tenure

About 80% of the personal financing by NBFIs are granted to salaried households in the Government service based on automatic salary deduction scheme administered by the Biro Perkhidmatan Angkasa (BPA). By income categories, the majority of the borrowers of NBFIs earn a monthly income of less than RM3,000. The BPA scheme prescribes an aggregate deduction threshold of 60% of a borrower's total income net of statutory and other direct deductions from salary. These features

serve to significantly reduce credit risk and have been critical in supporting the quality of the NBFIs' financing portfolio given the credit risk management infrastructure of most NBFIs. The impairment ratio for personal financing made by NBFIs consequently has remained low at 1.6% compared with 1.8% for personal financing in the banking system.

Developments in the lending activities by NBFIs are not a significant concern from the perspective of financial stability at present in view of the low credit risk profile of the financing portfolio and the relative job security enjoyed by the vast majority of the borrowers. DFIs that are major providers of personal financing are also subject to the direct oversight of the Bank and must comply with both prudential and responsible financing requirements set by the Bank. Notwithstanding this, the Bank remains vigilant on the activities by other NBFIs and its potential wider spillovers on the household sector.

The lending practices of NBFIs to the household sector, particularly those in the lower-income segments, are being closely monitored. Under the financing packages more recently introduced by some NBFIs, the maximum financing amounts offered were observed to have doubled in the past four years. In 2012, the average financing amount for personal financing facilities extended by NBFIs (at RM68,000) was higher by 26% from the preceding year, and 30.2% higher than the average personal financing facility provided by banks. The proportion of new personal financing facilities by NBFIs which were for amounts that exceeded RM100,000 also increased significantly to 26% of total new facilities approved (2011: 15%). In order to comply with the salary deduction threshold, these packages allow for extended repayment tenures, or in some cases, bullet repayment of principal and interest upon reaching retirement. Financing rates for personal financing facilities offered by NBFIs have also declined to as low as 3.25% per annum on a flat rate basis or about 5.5% per annum on an effective rate basis. The financing operations of these large NBFIs are typically funded from fixed deposits which comprised up to 85% of total funding, with the balance partly sourced from bank borrowings. The long maturity of the financing portfolio of NBFIs (of up to 20 to 25 years for personal financing) vis-à-vis shorter-term funding sources (largely deposits with maturity of not exceeding 12 months) gives rise to material funding mismatch and liquidity risk. As at end-2012, the loan-to-deposit ratio for these NBFIs ranged between 77% and as high as 125%. The low reliance on bank borrowings of about RM2.6 billion or 1.4% of banking system capital base, however, limits the potential spillover of risks from the NBFIs to the banking system.

The wide distribution of these financing packages by NBFIs has encouraged the build-up of leverage among households and compressed the buffers available for households to cope with income shocks. The leverage position of borrowers earning a monthly income of RM3,000 and below is considerably higher than those in other income groups. It also encourages higher spending by households beyond their means as reflected in the higher delinquencies of the lower-income group. In addition, the number of borrowers with more than two outstanding personal financing accounts from NBFIs has also increased by 27% since 2008, and the proportion of younger borrowers in the age group of 20 to 29 years has increased to account for 29.2% of total outstanding personal financing by NBFIs over the same period.

These trends have been shared with the Suruhanjaya Koperasi Malaysia, the regulator for the cooperatives sector, which has issued requirements for the cooperatives to observe responsible lending practices similar to the Guidelines on Responsible Financing issued to the banks. The Bank has also raised these views directly to the Board and senior management of the larger NBFIs that are not currently subject to any form of regulatory oversight, with recommendations for these institutions to observe responsible financing practices, which should also include a review of lending growth targets to more sustainable levels in line with responsible financing practices. The Bank has in turn increased the intensity of its supervisory reviews of NBFIs under the regulatory purview of the Bank. These NBFIs have been required to enhance the calculation of debt service ratios by including, among others, repayment obligations which are not part of the automatic salary deduction in order to sufficiently reflect prudent buffers for households to meet essential and contingent expenditures, and to review the features of the lending products, including repayment tenure, that are likely to encourage irresponsible and imprudent borrowing by

households. The recent passage of new legislation and the amendments to the Central Bank of Malaysia Act 2009 empowers the Bank to address risks from the entities outside of its regulatory perimeter.

The Government has continued to introduce targeted measures to assist individuals in the low- to middle-income groups to cope with the rising cost of living, particularly in the urban centres. These included additional financial assistance provided to targeted household segments and the work that is already in progress on improvements to the public transportation system. In addition, the construction of houses under the 1Malaysia People's Housing Scheme (PR1MA) which has commenced will increase the supply of affordable homes. The Government has also allocated a further RM1.9 billion in 2013 for the construction of an additional 123,000 affordable housing units in various strategic locations nationwide. During the year, the Bank continued to work closely with relevant government agencies to expand the outreach of the My First Home Scheme to help eligible low- to middle-income households to own homes. The eligibility requirements for the My First Home Scheme was expanded with effect from January 2013 by raising the maximum monthly income threshold and maximum limits on house prices covered under the scheme to benefit more house buyers. To ensure that this will not over-stretch the finances of eligible households, financing under the scheme continues to be subjected to underwriting and affordability assessments.

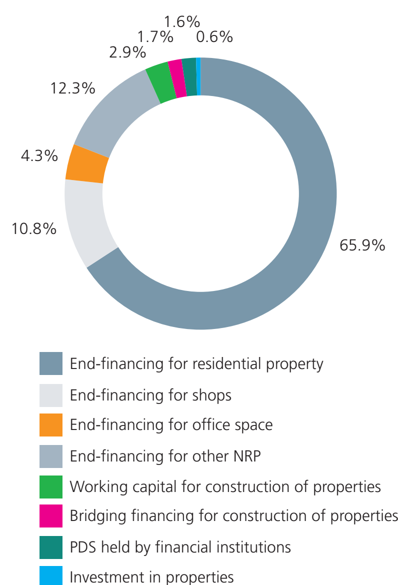
For borrowers experiencing financial difficulties, the institutional arrangements already in place for debt counselling, restructuring and consolidation continued to provide important avenues for borrowers to seek assistance to better cope with the debt obligations. In 2012, a higher number of borrowers (an increase of 13% from 2011) sought debt counselling services from the Credit Counselling and Debt Management Agency (Agensi Kaunseling dan Pengurusan Kredit, AKPK). Of the 35,825 borrowers who approached AKPK, a total of 16,137 or 45% were further assisted through AKPK's debt management programme. About 66% of individuals who enrolled in the debt management programme comprised those with a monthly income of RM3,000 and less. In view of the growth in lending by NBFIs, AKPK is in the process of extending its debt management and counseling services to include borrowers from NBFIs.

MANAGING DEVELOPMENTS IN THE DOMESTIC PROPERTY MARKET

Developments in the property market affect financial stability through the impact of potential losses from delinquent loans including those which are secured by property, default in fixed income securities held, and changes in the valuation of real estate assets which are in the balance sheets of financial institutions. In the event of weakness in the property market, default risk may increase when associated with a more generalised decline in real sector activities and conditions of high unemployment. As at end-2012, total exposures of financial institutions to the domestic property market amounted to about RM480 billion (Chart 1.9). These were primarily in the form of direct lending and to a lesser extent, holdings of debt securities. Banks' exposures to the property market amounted to RM458.9 billion, or 24% of banking system assets. The bulk (66.2%) of this was in the form of end-financing for the purchase of residential properties which also accounted for the largest share (27.4%) of outstanding loans in the banking system. End-financing for

Chart 1.9

Property Market: Financial Institutions' Exposures to the Property Market

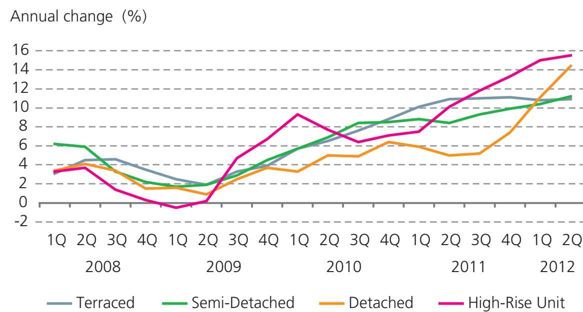


Source: Bank Negara Malaysia

the purchase of non-residential properties, working capital and bridging financing for the construction of properties accounted for another 32.8% of total bank exposures to the property market. Meanwhile, holdings of debt securities issued for property development were not significant (conventional banks are restricted by regulation from holding direct investments in properties). While exposure of the banks to the property market was sizeable, the potential credit losses from an adjustment in property prices are assessed to be within the banks' capacity to absorb. Exposure of the insurers and takaful operators to the property sector, mainly through holding of securities and investment in properties, amounted to RM8.9 billion, representing 4.1% of total assets. Some larger life insurers also extend loans for the purchase of property to match the maturity profile of life insurance liabilities, but this remains small relative to the total market for property loans.

Chart 1.10

Property Market, Residential: Growth of House Prices by Segment



Note: Data is based on 3 quarters moving average

Source: National Property Information Centre

Aggregate house prices continued to trend upwards in 2012. The Malaysian House Price Index (MHPI) registered an annual increase of 11.2% in the second quarter (2011: +9.9%), driven mainly by higher prices and transactions in the detached, semi-detached and luxury high-rise property segments (Chart 1.10 and Table 1.7). Growth has diverged markedly from the long-term trend since the third quarter of 2010 (Chart 1.11). As elaborated in the box article 'Developments in Housing Market and Implications on Financial Stability', movements in house prices in Malaysia are largely explained by macroeconomic factors. The widening of the supply-demand gap in residential properties, particularly in the low- to medium-priced segment and in locations close to and in major employment centres, has contributed to the upward trend in house prices.

The upward trend in residential property prices largely reflected macroeconomic, rather than financial factors. Investment purchases, while contributing to price increases, have not been fuelled by excessive credit

The effect of medium-term factors, most importantly changes in demography and rate of urbanisation, appear to be more pronounced. Over the next few years, the increase in new

Table 1.7

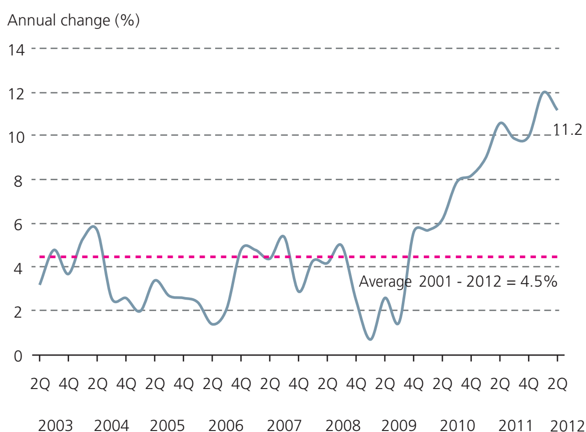
Property Market, Residential: Growth of House Prices by State

Annual change (%)	'01-'09 Average	4Q'10	4Q'11	2Q'11	1Q'12	2Q'12
Malaysia	3.2	8.2	10.0	10.6	12.0	11.2
Kuala Lumpur	4.3	7.1	13.9	12.7	18.0	9.1
Selangor	2.3	13.0	11.9	13.9	15.2	16.5
Johor	-0.2	4.4	9.1	8.7	7.1	8.1
Penang	4.3	4.0	11.4	7.8	11.4	11.9

Source: National Property Information Centre

Chart 1.11

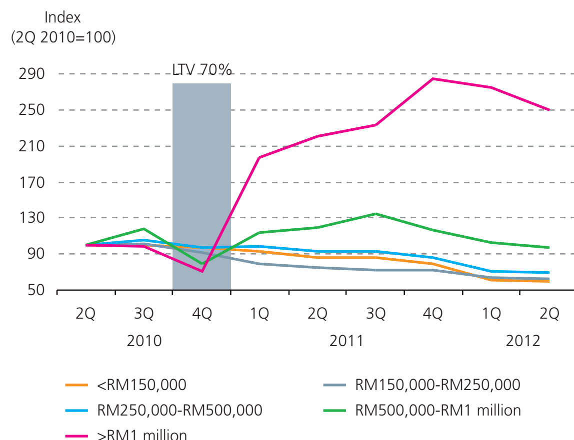
Property Market, Residential: Growth of Malaysian House Price Index (MPHI) and Long Term Trend



Source: National Property Information Centre

Chart 1.13

Property Market, Residential: Index of Units Launched by Price



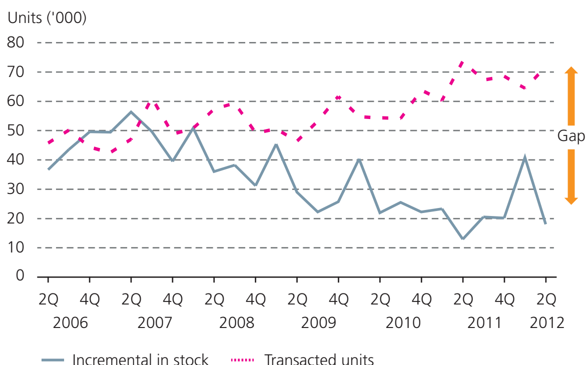
Source: National Property Information Centre and internal computation

home buyers is likely to continue, exceeding the average growth in housing stock, notwithstanding measures already announced by the Government to add to new supply which are focused mainly on the low- to medium-priced segments. Since the second quarter of 2007, demand (using average transacted units as a proxy) has consistently outpaced the new supply of houses (as measured by the incremental stock of houses) by a large margin (Chart 1.12). Given the higher concentration of new developments in properties priced above RM1 million (Chart 1.13), approximately 80% of property transactions to meet demand by the general population has been taking place in the secondary market. This has partly supported house prices at higher levels, particularly in Kuala Lumpur, Selangor and Penang. Higher prices paid by existing home owners to upgrade to new properties, as well as opportunistic sales to benefit from the higher prices of new property launches in and around prime locations, have also caused prices transacted in the secondary market to trend higher. Rising construction costs have also partly explained house price increase between the third quarter of 2009 to the third quarter of 2011, but these costs have been increasing at a slower rate in 2012.

Shorter-term demand factors – in particular lower interest rates leading to lower borrowing costs and the higher attraction of property as an asset class and a hedge against inflation – have had a

Chart 1.12

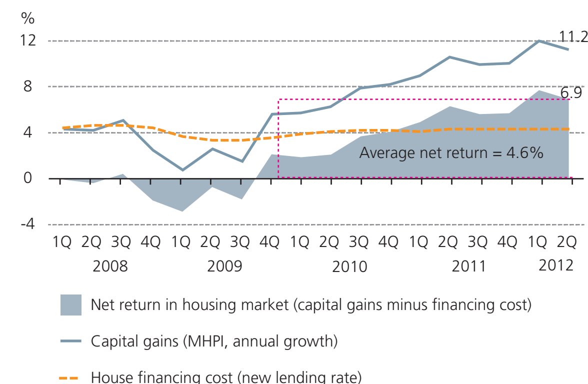
Property Market, Residential: Transaction and Incremental in Stock of Houses



Source: National Property Information Centre

Chart 1.14

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



Source: National Property Information Centre and internal computation

smaller relative effect, compared to demographics, on recent movements in house prices. The return on investments in residential properties averaged at about 4.6% over the fourth quarter of 2009 to the second quarter of 2012 (Chart 1.14). This has attracted more investors to the property sector, which is seen as a relatively safe investment given the scarcity of land in prime locations, stable rental yields (outside the Klang Valley) and relatively low speculative elements compared with property markets in other countries. However, the stable growth in housing credit in the recent three years, and importantly, continued discipline observed in the underwriting standards of banks would suggest that investment purchases, while contributing to the price increases, are not being fuelled by excessive and unaffordable credit. This is particularly important for financial stability, but also keeping houses affordable for the average household. Investment purchases by foreigners – usually with cash and at the high-end of the property market – have had some effect in driving house prices higher in specific locations, but these transactions remained minimal, accounting for less than 2% of the total number of property market transactions.

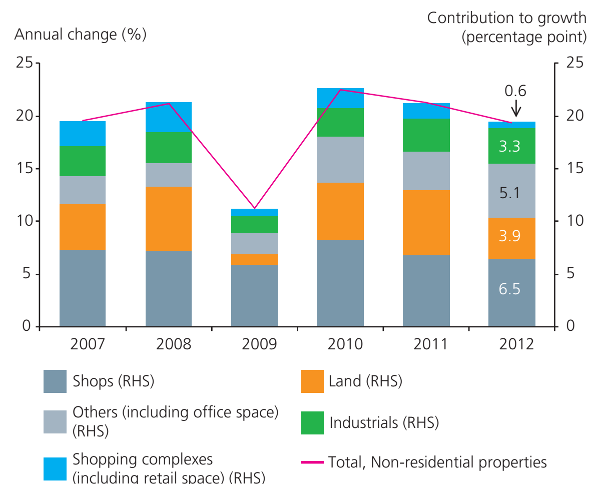
Since introducing pre-emptive macroprudential and fiscal measures in 2010, some moderation in investment activities in the housing market have been observed. Of significance, the annual growth in the number of borrowers with multiple housing loan accounts declined sharply, while the number of transacted housing units (particularly for houses priced below RM250,000) also grew at a moderately slower rate over the recent nine quarters. These developments however, did not have a significant impact on overall house prices which has continued to increase. The number of new borrowers with multiple housing loans has started to increase again since June 2012.

While overall housing affordability at the national level improved marginally during the year, affordability deteriorated in major cities and employment centres. Measures taken by the Government, including raising the RPGT, implementation of PR1MA and My First Home Scheme, and increasing the supply of affordable houses, will help to address affordability. As measures to increase the supply of affordable houses will take some time to take effect, it will be important for financial institutions to continue to observe prudent underwriting standards to avoid a buildup of financial imbalances in the property market. In this regard, banks have been more vigilant in their lending standards in a number of aspects. New housing loans with a LTV ratio below 80% were higher than in the previous two years. Several banks took steps to extend the lending considerations (for both end-financing and financing for the development of housing projects) to cover a broader set of factors that bear on prices. This included the level of development in a particular location, population density, status of overhang, existing and potential demand and rate of turnover of properties within and around the area. These factors were also more regularly updated to take account of new developments and trends.

Some banks have reviewed and strengthened internal policies for financing of projects or the purchase of residential properties in locations where price increases have been stronger. For certain locations, margins of financing have been reduced. In cases where banks have entered into end-financing tie-ups with selected property developers to offer attractive financing packages together with the project's launch, assessments of a property developer's track record and background have been more rigorous than previously. Banks have also tightened internal controls over credit exceptions, with improved documentation and strengthened processes for monitoring compliance with risk limits. In addition, valuation processes have been more robust, along with improvements to banks'

Chart 1.15

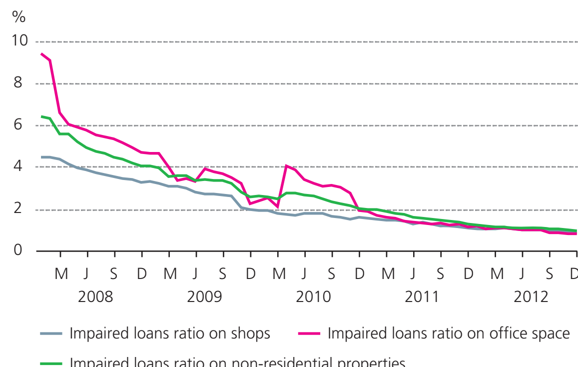
Property Market, Non-residential: Loan Growth and Contribution to Growth by Segment



Source: Bank Negara Malaysia

Chart 1.16

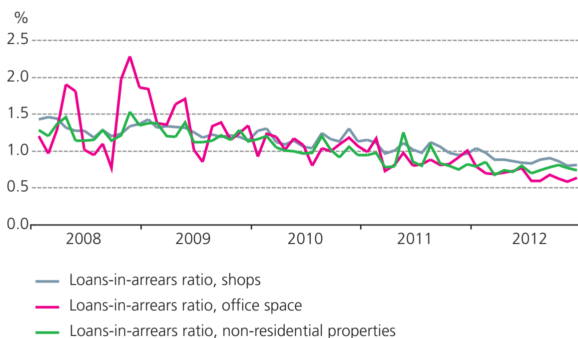
Property Market, Non-residential: Impaired Loans



Source: Bank Negara Malaysia

Chart 1.17

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



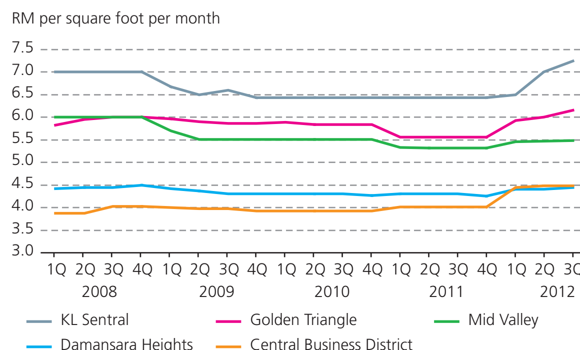
Source: Bank Negara Malaysia

collateral management systems. As higher house prices have implications for household debt, proper assessments of affordability by banks will also continue to be important to moderate expectations of borrowers who may be tempted to take on excessive debt in the desire to own a home. With the implementation of Guidelines on Responsible Financing, affordability assessments within banks have improved considerably.

In the non-residential property (NRP) segment, the bulk of bank lending has been for the purchase of shop lots and land (Chart 1.15). Bank lending for these purposes grew by 16.6% during the year. About two-thirds of bank lending for the purchase of shop lots was estimated to be for investment purchases by households and retail investors. With demand outpacing the expansion in supply, compounded annual growth rate (CAGR) of prices of shop lots have risen by 7.2% between 2006 and 2012. The CAGR for land

Chart 1.18

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



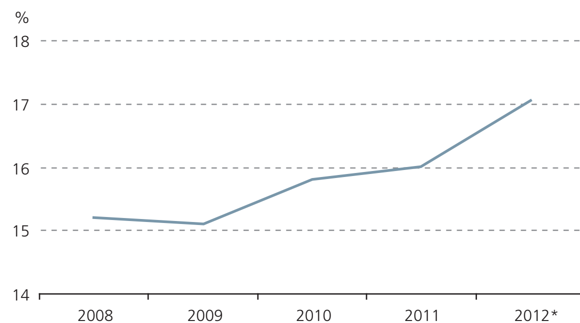
Source: Knight Frank

prices (measured as average transaction value over volume) in major employment centres increased by 8% over the same period, mostly in the recent three years (+24%), reflecting higher purchases by developers for land banking purposes, particularly in the major business centres. Bank lending for the purchase of shop lots and land was less than 8% of total bank loans, with impaired loans remaining below 1% and improving in 2012 (Chart 1.16). Overall, the asset quality of bank exposures to the NRP segment remained intact with a low and stable incidence of delinquencies (Chart 1.17).

During the year, bank lending for the purchase of office space and other buildings contributed a larger share of loan growth in the NRP segment compared to previous years. The demand for new office buildings with modern and improved facilities, security and green features helped push

Chart 1.19

Property Market, Non-residential: Vacancy Rate of Office Space in Malaysia

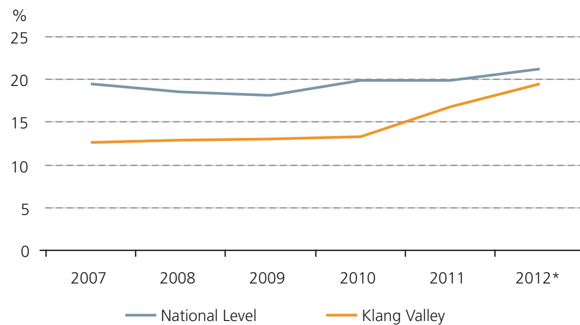


* Based on third quarter 2012 preliminary figure

Source: National Property Information Centre

Chart 1.20

Property Market, Non-residential: Vacancy Rate of Shopping Complex

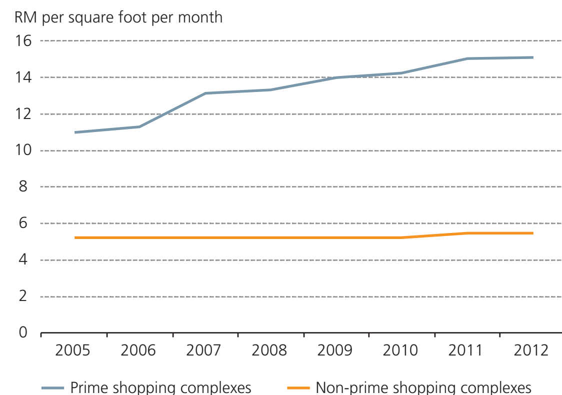


* Based on the third quarter 2012 preliminary figure

Source: National Property Information Centre

Chart 1.21

Property Market, Non-residential: Rental Rate Index of Shopping Complexes in Kuala Lumpur



Source: Jones Lang Wootton

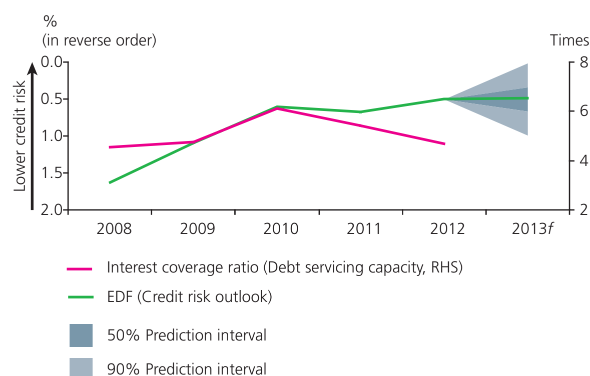
rental rates up to RM5.56 per square foot after a prolonged period of stagnation (2009 to 2011: RM5.20 per square foot) (Chart 1.18). Existing and older office space, however, has been experiencing rising vacancy rates (Chart 1.19), reflecting some migration from older to newer buildings rather than new demand. Correspondingly, unplanned and uncoordinated construction and completion of new buildings could result in an oversupply of office space. The Government has stepped up monitoring of such projects to stagger the supply of new office space. As at end-2012, total end-financing exposures for office space and other buildings were only 1.9% of total bank loans. On aggregate, credit risk from exposures of the banking system to this segment remained manageable with the impaired loans ratio remaining low at 0.8% (2011: 1.1%) of total loans to the segment and relatively small exposures to older office buildings. The vacancy rate for shopping complexes, particularly in the Klang Valley, remains significantly below the historical high of 32.6% in 1998 (Chart 1.20). Rental rates have also improved in recent periods (Chart 1.21). As with office space, banks' end-financing to the segment are similarly low at 1% of total bank loans, with the impaired loans ratio at 1.6%.

MANAGING CREDIT RISK EXPOSURES TO BUSINESSES

Domestic businesses continued to be in a relatively good position, supported by sustained domestic and regional demand, and the financial and operational flexibility to cope with the challenges from slower external trade. The credit risk outlook for businesses, as measured by the Expected Default Frequency (EDF), improved to 0.5% (2011: 0.68%), with the overall debt servicing capacity remaining at healthy levels (Chart 1.22). Most industries with sizeable borrowings from the banking system (Chart 1.23 and 1.24) recorded an improvement in the EDF, with the exception of the building- and construction-related materials (BCM) and water industries. The EDF for the BCM industry deteriorated as domestic steel producers experienced continued compression in profit margin from lower sale prices and competition from cheaper imports (Chart 1.25). Progress in the implementation of construction projects under the

Chart 1.22

Business Sector: Debt Servicing Capacity and Credit Risk Outlook

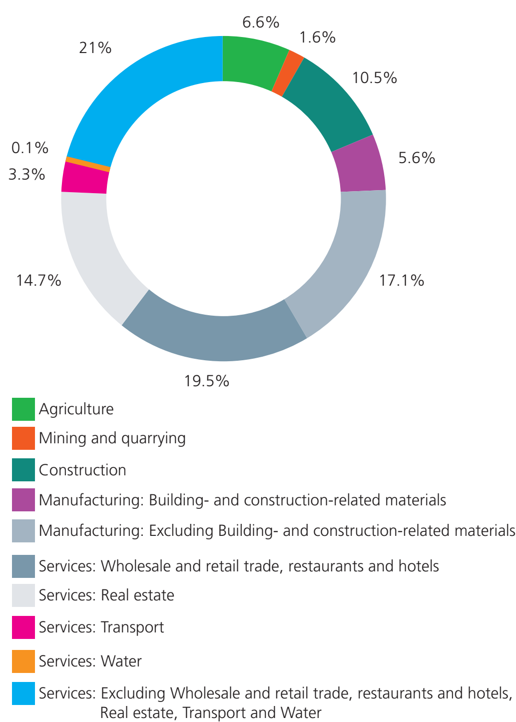


f forecast

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

Chart 1.23

Business Sector, Banking System: Loans to Business Sector by Industry

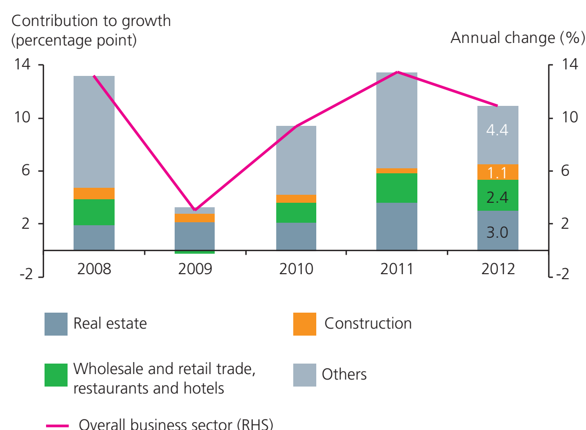


Source: Bank Negara Malaysia

Economic Transformation Programme (ETP) and 10th Malaysia Plan is expected to increase demand for domestic steel products. The higher credit risk in the water industry reflected the increasing operating costs and the prolonged uncertainties around the restructuring of the industry which was expected to improve efficiency and productivity, and lower operating costs (Chart 1.26).

Chart 1.24

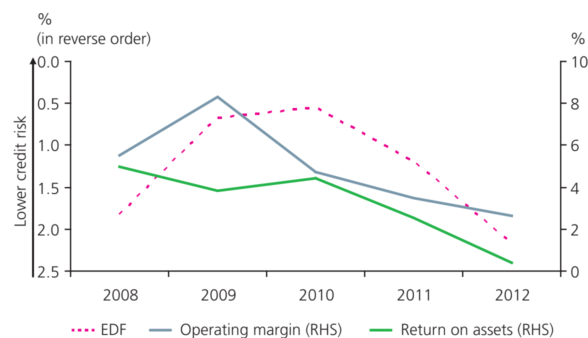
Business Sector: Loan Growth and Contribution to Growth by Industry



Source: Bank Negara Malaysia

Chart 1.25

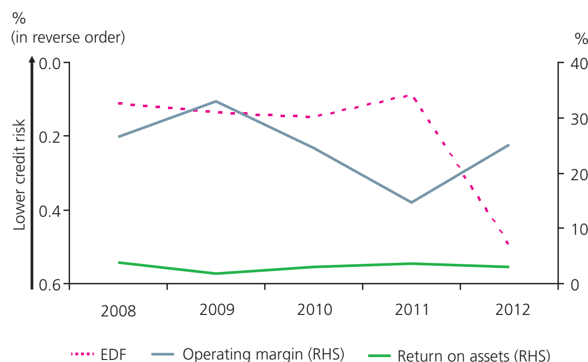
Business Sector: Profitability and EDF for BCM Industry



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

Chart 1.26

Business Sector: Profitability and EDF for Water Industry



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

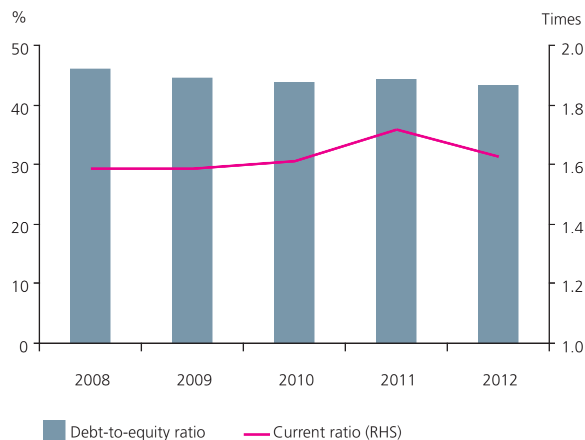
The overall financial performance of domestic businesses, including large borrowers in the banking system, was sustained during the year. Aggregate leverage of businesses improved with sustained liquidity position (Chart 1.27). Overall business sector recorded stable revenue and improved earnings before interest and tax on lower input cost, with the exception of commodities and export-oriented sectors, which were affected by lower commodity prices and weaker external demand (Chart 1.28). Cash balances of businesses remained ample and grew by 6.3% during the year. While the overall indebtedness of businesses has been gradually increasing in tandem with economic expansion, the level remained manageable and

well below the levels leading into the Asian Financial Crisis (Chart 1.29). Total outstanding debts of the business sector expanded by 12.5% (2011: +8.7%), driven mainly by debt raising in the capital market. New issuances of private debt securities (PDS) and sukuk by businesses (excluding financial institutions) during the year amounted to RM94.4 billion. Banks, insurers and takaful operators held 67.2% of total PDS and sukuk issued by domestic businesses. Bank lending to businesses grew strongly albeit at a slower pace of 10.9% (2011: +13.5%), with a divergence observed between the strength of lending to large businesses and small and medium enterprises (SMEs). The higher level of overall debt reflected the expansion of activities in the real sector, led mainly by the construction-related industries. Borrowings via both loans and PDS by the construction and infrastructure sectors increased by 27% (2011: +0.1%) on the implementation of major infrastructure projects by the Government sector, while borrowings for property-related sectors increased by 25.1% (2011: +23.6%) on continued strong demand for properties. Based on internal estimates by the Bank, banks will have sufficient capacity and liquidity buffers to meet the higher future financing needs for projects under the ETP through direct financing and investments in debt securities, even under the more stringent Basel III standards.

The overall external debt position of businesses was lower compared to 2009. External debts of Malaysian corporations accounted for about 14.6% of total corporate debt and comprised

Chart 1.27

Business Sector: Leverage and Liquidity Indicator



Source: Bloomberg and internal computation

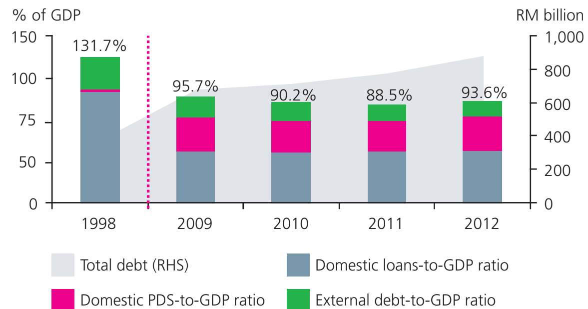
Chart 1.28

Business Sector: Profitability Indicators

Source: Bloomberg and internal computation

Chart 1.29

Business Sector: Debt-to-GDP Ratio



Source: Bank Negara Malaysia and Bloomberg

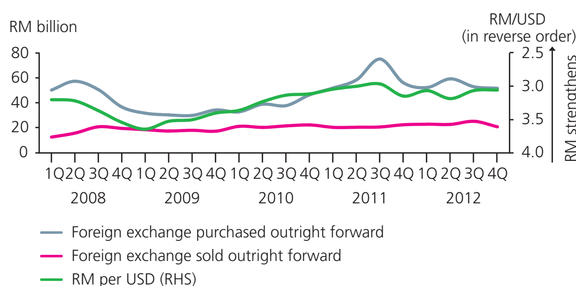
mainly loans and debt securities. External borrowings by businesses, which were mostly denominated in US dollars declined by 1.7% (2011: +2.1%). The debt servicing capacity of Malaysian corporations with substantial foreign borrowings remained satisfactory, supported by strong balance sheets and cash flows, and hedging activities against foreign exchange risk (Chart 1.30).

Exposures of banks and DFIs to large borrowers[3] (in the form of direct financing and holdings of PDS and sukuk) accounted for 19.9% (2011: 21.5%) of total bank financing and investments in PDS and sukuk in 2012. About 51% of this amount was extended to government-linked companies. The aggregate exposures of the insurance and takaful sector to large borrowers accounted for 19% of fund assets. The large borrowers mainly comprised diversified businesses, and companies in the infrastructure and utilities sectors. On aggregate, loans to these borrowers continued to exhibit

[3] Large borrowers refer to corporations with total borrowings > RM1billion (both loans and PDS)

Chart 1.30

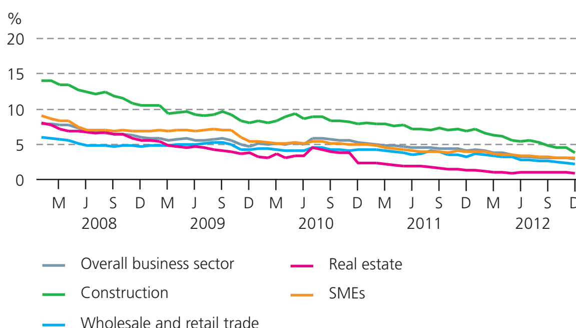
Banking System: Hedging Activities by Domestic Non-bank Entities



Source: Bank Negara Malaysia

Chart 1.31

Banking System: Gross Impaired Loans Ratio in Business Sector



Source: Bank Negara Malaysia

strong repayment trends. Delinquencies remained small at 0.3% of loans to the segment (2011: 0.4%). Bank financing to SMEs grew strongly by 15.5%, in tandem with the expansion in economic activity. Reflecting the generally sound financial position of businesses, the gross impaired financing for large businesses and SMEs declined to RM7 billion and RM5.3 billion respectively, with the impaired loans ratios correspondingly improving to 2.9% (2011: 4.2%) and 3% (2011: 3.9%) respectively (Chart 1.31). The ratio of repayment-to-disbursement for the business sector also improved to 94.8% (2011: 91%) demonstrating the continuing ability of businesses to prudently manage higher debt levels. Under the adverse macroeconomic stress test scenario over three years, credit risk losses from exposures to domestic businesses are estimated to remain manageable at 5.4% of banking system capital base.

The underwriting practices and risk management control functions applied by banks to business exposures have strengthened significantly over the years. There have been marked improvements in banks' approaches to setting the risk appetite for different economic sectors and target markets. These include ensuring that credit concentration risk is managed well through limits on exposures to specific borrower groups and high-risk segments. In line with requirements for banks to have in place an Internal Capital Adequacy Assessment Process under Pillar 2 of the capital framework, banks have made considerable progress in enhancing the methodologies to measure and monitor credit and counterparty concentration risks. Risk acceptance criteria for business exposures are also substantially more robust. The Bank, based on its supervisory assessments, is satisfied that overall credit assessment standards are adequate and supported by a robust and comprehensive credit risk management infrastructure, conservative loan loss provisioning practices and strong oversight functions.

MANAGING CONTAGION RISK FROM EXTERNAL EXPOSURES, EUROPEAN DELEVERAGING AND OVERSEAS OPERATIONS

The domestic financial system continued to be resilient despite being confronted with heightened risks emanating from developments on the external front, mainly associated with developments in Europe, fiscal concerns in the United States (US), debt levels in Japan, and moderating growth in emerging market economies. These developments have contributed to the continued volatility in the domestic financial markets during the year. Contagion risks to domestic financial stability mainly arise from four channels: (i) the impact of market volatility on the market risk exposures of financial institutions; (ii) the external claims of financial institutions on overseas counterparties; (iii) deleveraging activities by foreign financial institutions; and (iv) spillovers from the expanding overseas operations of Malaysian banks. These risks were well-contained, supported by the orderly intermediation of short-term portfolio flows by the domestic financial markets; limited credit exposures of Malaysian financial institutions to counterparties in Europe; low impact from deleveraging activities by European banks; and the sound capital and funding positions supporting the overseas operations of Malaysian banks.

Intermediation of short-term portfolio flows by financial markets

Short-term portfolio flows remained volatile during the year, reflecting the dynamic external environment and persistent uncertainties in the advanced economies. Following large and volatile two-way capital flows, particularly in the first half of the year, an amount of RM59.2 billion in total net portfolio inflows was recorded for the year as a whole. A lower Government budget deficit and the positive outlook for domestic and global growth, particularly after the implementation of quantitative easing in the US (Chart 1.32), attracted strong inflows to Malaysia. This contributed to a corresponding increase in the holdings of public debt securities – mostly in Bank Negara Monetary Notes (BNMN) and Malaysian

Chart 1.32

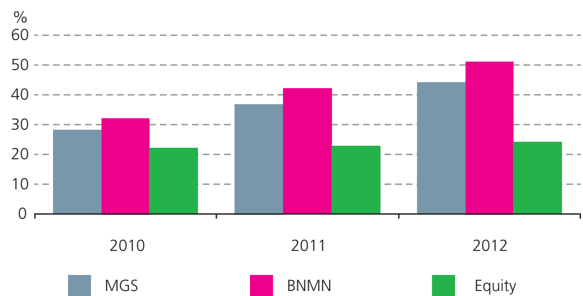
Financial Market: Quarterly Net Portfolio Flows

[1]Lehman bankruptcy
[2]US debt downgrade
[3]Federal Reserve third quantitative easing and European Central Bank rate cut

Source: Department of Statistics, Malaysia

Chart 1.33

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

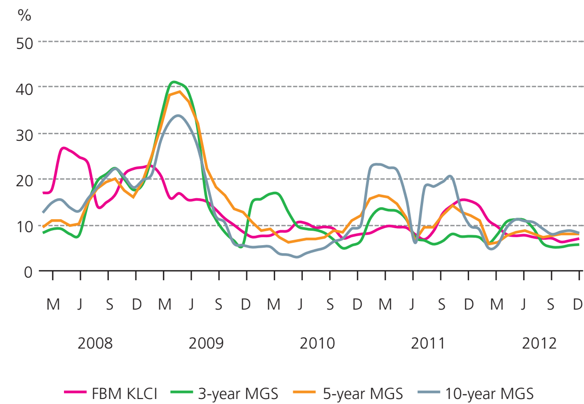


Holdings of MGS and BNMN quoted as percentage of total outstanding while holdings of equity quoted as percentage of total market capitalisation

Source: Bursa Malaysia, Bank Negara Malaysia and internal computation

Chart 1.34

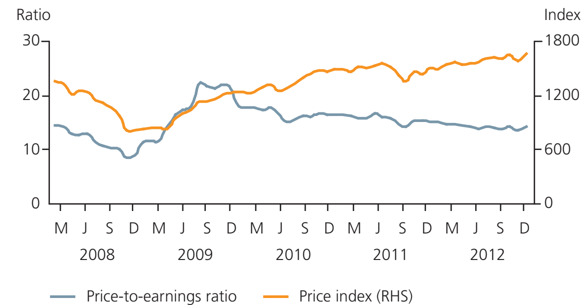
Financial Market: 90-Day FBM KLCI and MGS Yields Volatility



Source: Bloomberg

Chart 1.35

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

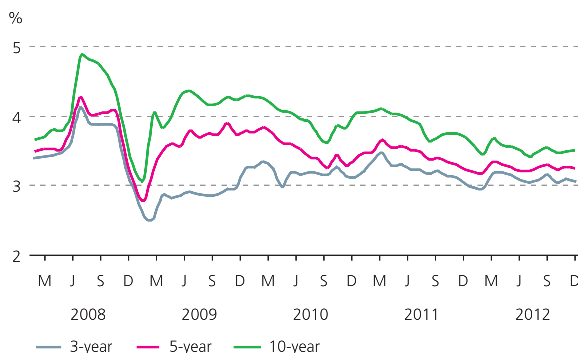


Source: Bloomberg

Government Securities (MGS) – by non-residents to account for 35.3% (2011: 29.9%) of outstanding public debt securities. Investments by non-residents in equities also increased slightly to 24.5% (2011: 23.1%) of total market capitalisation (Chart 1.33). In general, the inflows were well intermediated. While the FBM KLCI trended upward and reached multiple highs during the year, volatility in the equity market improved to 7% (end-2011: 15.3%) (Chart 1.34) and remained significantly lower than the level of volatility observed regionally and at the height of the Global Financial Crisis (GFC). Overall equity prices continued to be supported by sustained earnings, with the price-to-earnings (PE) ratio remaining stable but lower compared with the previous year (Chart 1.35). The strong domestic and external demand for MGS led to declining yields, particularly in the longer end of the maturity

Chart 1.36

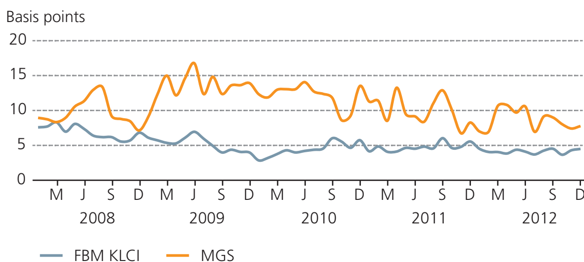
Financial Market: MGS Yields



Source: Bank Negara Malaysia

Chart 1.37

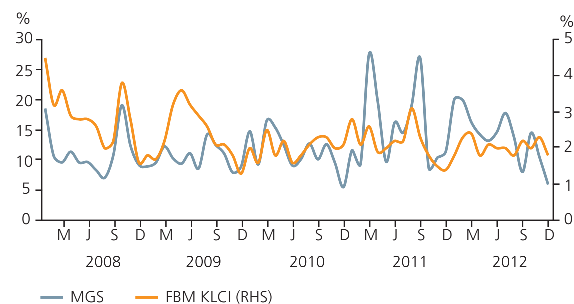
Financial Market: Average Bid-ask Spreads of FBM KLCI and MGS



Source: Bloomberg, Reuters and internal computation

Chart 1.38

Financial Market: FBM KLCI and MGS Monthly Turnover Ratio

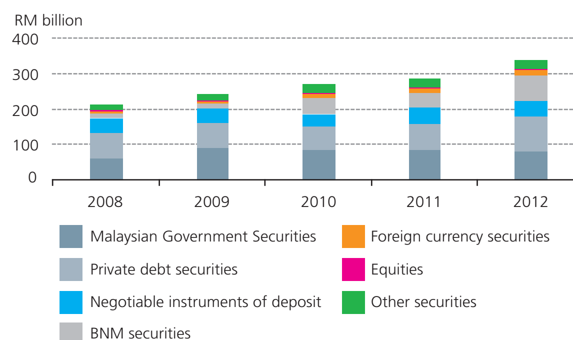


Source: Bloomberg, Bank Negara Malaysia and internal computation

spectrum (Chart 1.36). Market liquidity in the domestic equity and bond markets remained intact with stable turnover ratios and bid-ask spreads observed (Chart 1.37 and 1.38). In the event of a sudden reversal of the non-resident investments, domestic institutional investors such as insurance companies, and pension and provident funds have

Chart 1.39

Banking System: Composition of Securities Portfolio



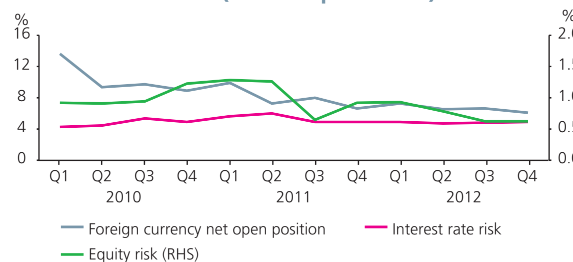
Source: Bank Negara Malaysia

sufficient capacity to step in to absorb the debt instruments that are being sold by the non-residents. On average, pension and provident funds account for over 20% of total outstanding public debt securities over the recent three years.

Activities of financial institutions showed no evidence of significant shifts in risk-taking behaviours. The structural composition of treasury assets held by banks remained broadly unchanged, although strong demand for high quality assets has led to a doubling of the holdings of BNMN (Chart 1.39). The investments in equities by banks remained minimal at less than 1% of capital base (Chart 1.40). The active management of market risk exposures enabled banks to record continued net gains from trading activities and investment portfolios which accounted for 14.6% of total net income (2011: 15.7%). The banks continued to actively hedge interest rate and foreign exchange exposures, resulting in a higher outstanding notional amount of interest rate

Chart 1.40

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



Note: The computation of net open position to capital base is based on Basel II Standardised Market Risk Approach for foreign exchange risk.

Source: Bank Negara Malaysia

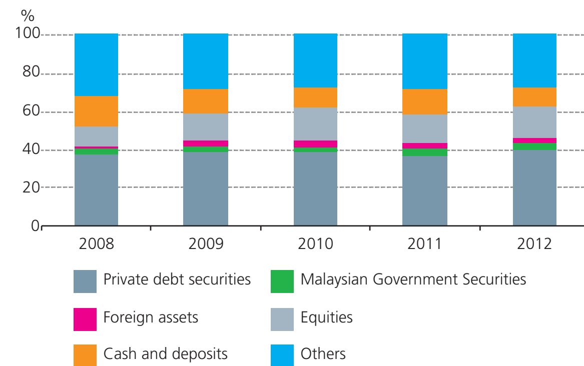
and foreign exchange related derivative contracts which expanded by 2.7% to RM726 billion and 8.9% to RM523 billion respectively. The interest rate exposures remained manageable with the aggregate duration-weighted interest rate risk position stabilising at 4.9% of capital base (Chart 1.40). Basis risk trended upwards in the second half of the year as spreads between MGS and interest rate swap (IRS) rates widened across all maturities driven by expectations of higher inflation and interest rate levels. However, spread movements remained within the historical range and were less volatile compared to the previous year and at the height of the GFC. The potential loss from basis risk arising from an increase of 30 basis points in the differential between changes in MGS yields and IRS rates, as seen during the GFC, remained small at 1% of banking system capital base.

The aggregate foreign currency net open position of the banking system was lower at 6.1% of capital base (2011: 6.7%) (Chart 1.40). Banks continued to actively manage their foreign currency exposures, supported by internal value-at-risk limits. At the aggregate level, the banking system recorded a small short US dollar open position of 0.2% of capital base, while the net short positions in other major currencies such as the euro, Singapore dollar, pound sterling and Australian dollar were less than 0.3% of the capital base for each respective currency. Generally, market risk shocks have had a much smaller impact on banking institutions than credit risk shocks. Most commercial and Islamic banks have small net open foreign exchange positions, such that a substantial exchange rate shock (about 20% depreciation in the ringgit) would have a limited adverse impact on capital. While most banks hold Government securities mainly for liquidity purposes, for the system as a whole, an increase in the risk weight of Government securities from 0% to 20% would only result in a 25 basis point decline in capital ratios. Investment banks and some commercial banks may be more severely impacted, but these institutions have high levels of capitalisation to absorb the potential losses.

Investments of insurers and takaful operators continued to be concentrated in high-grade PDS rated 'AA' and above. Such papers accounted for 37.9% of total assets of insurance and takaful funds (Chart 1.41 and 1.42). Total investments in equities by the industry expanded by 16.1% to RM31.8 billion to account for a slightly

Chart 1.41

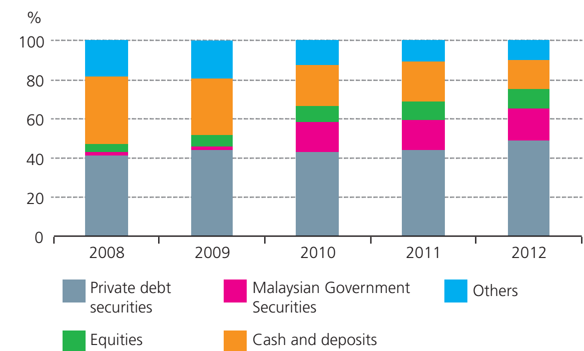
Insurance Sector: Asset Composition



Source: Bank Negara Malaysia

Chart 1.42

Takaful Sector: Asset Composition



Source: Bank Negara Malaysia

Chart 1.43

Insurance Sector: Market Risk Composition

Source: Bank Negara Malaysia

higher share of 19% of total assets (2011: 18%). Overall, market risk exposures of insurers remained relatively stable at 12.2% of capital base (2011: 12.6%). Collectively, equity and interest rate risks formed 83.3% of insurers' total market

risk exposures (Chart 1.43). Foreign currency denominated assets of the insurance sector were at 8% of capital base, as foreign investments of insurance funds (excluding funds supporting businesses outside Malaysia) are subject to a prudential limit of 10% of total assets for each individual fund.

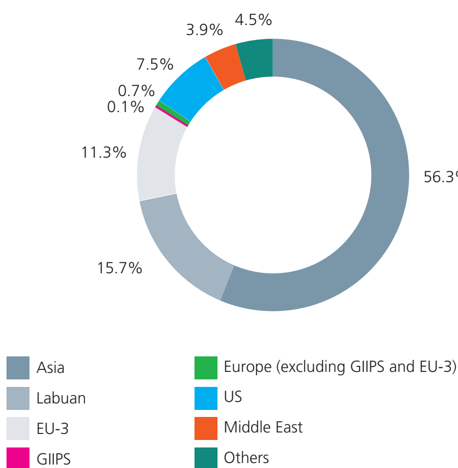
Counterparty risk from financial institutions' external exposures

Claims by Malaysian onshore banks on entities in Labuan International Business and Financial Centre (IBFC), Europe and the rest of the world grew by 12% in 2012 to RM129.6 billion or 6.8% of total assets. This was attributed mainly to claims on regional economies, in line with the continued expansion in intra-regional trade and overseas expansion of Malaysian banks (Chart 1.44). While Malaysia's exports to the European Union currently account for approximately 8.8% of Malaysia's gross exports, exposures of financial institutions via loans and PDS holdings to businesses that have trade relations with European countries accounted for only 0.7% of total outstanding loans and PDS holdings of all financial institutions.

External claims by Malaysian banks on all European counterparties increased by 2.8% to RM15.5 billion or 8.5% of capital base, due mainly to higher claims on Germany, France and the United Kingdom (UK). The bulk of these claims are in the form of interbank deposits, swaps and nostro balances (Chart 1.45). European

Chart 1.44

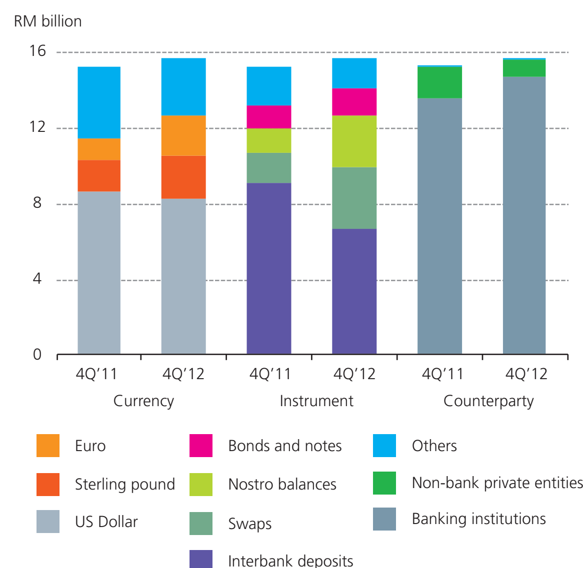
Banking System: Composition of External Claims by Location



Source: Bank Negara Malaysia

Chart 1.45

Banking System: Exposures to Europe by Currency, Instrument and Counterparty



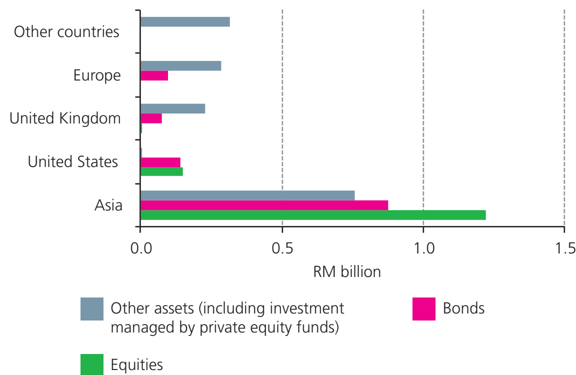
Source: Bank Negara Malaysia

counterparties of Malaysian banks were largely unaffected by rating downgrades and maintained strong international ratings. Other claims in the form of derivative transactions, and holdings of money market instruments, debt and equity securities issued by European counterparties remained very small at less than 0.3% of total assets or 3% of the capital base of the banking system, substantially limiting any impact from potential trading and valuation losses on the banking system in the event of heightened market volatility. Malaysian banks' exposures to valuation losses arising from euro currency movements were also limited, as external claims denominated in the euro remained low at 2.3% of capital base (2011: 1.5%). In addition, credit risk exposures of banks from term loans provided to non-bank private corporations in the euro area, which could be affected by weaker growth prospects for the European region, amounted to only 0.5% of capital base.

External claims on all counterparties domiciled in Greece, Ireland, Italy, Portugal and Spain (GIIPS) were less than 0.1% of banks' capital base. The composition of these claims was largely unchanged, mainly comprising long-term loans to non-bank private entities, with the remainder in the form of interbank deposits and nostro account balances with correspondent banks to facilitate

Chart 1.46

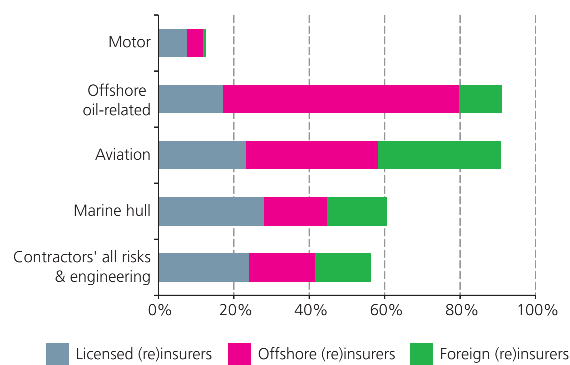
Insurance Sector: External Investment Exposures by Region



Source: Bank Negara Malaysia

Chart 1.47

Insurance Sector: Reinsurance Ceded Ratio by Selected Business Classes



Source: Bank Negara Malaysia

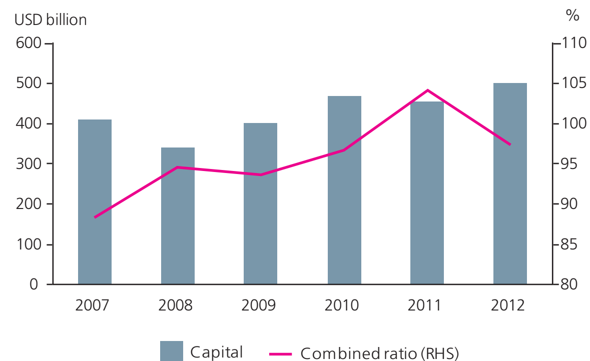
currency settlements. As reported in 2011, the simulated impact of a 100% loss given default for all asset exposures to GIIPS countries is small, both at the system and institutional levels. Updated simulations show this impact to have reduced further at the individual bank level, with the largest impact amounting to only 0.4% of capital base.

External claims by Malaysian insurers were mainly in the form of reinsurance exposures and overseas investments. Overseas investments remained small at 2.5% of total assets or 8% of total capital base. Approximately 56% of overseas investments are in Asia, particularly in Indonesia and Singapore, and mainly in equities. Malaysian insurers' investment exposure to Europe was low, at RM0.4 billion or 0.6% of total capital base, mainly invested in private equity funds (74.4%) and bonds (25.6%) in the EU-3 countries (Chart 1.46).

During the year, Malaysian insurers ceded a total of RM3 billion in premiums, representing 16.5% of total premiums written, to (re)insurers abroad (including (re)insurers operating in Labuan IBFC). These were mainly on large and specialised risks in the aviation, oil and gas, engineering and marine hull classes of business (Chart 1.47). Counterparty risks from Malaysian insurers' exposures to global (re)insurers were low as general conditions in the global reinsurance market improved significantly during the year. Global reinsurers posted stronger profit to register a return on equity of 10.7% (2011: 5%). This was primarily attributed to the lower catastrophe losses in 2012. Following the record high catastrophe losses in the previous year,

Chart 1.48

Insurance Sector: Global Reinsurers Capital and Combined Ratio



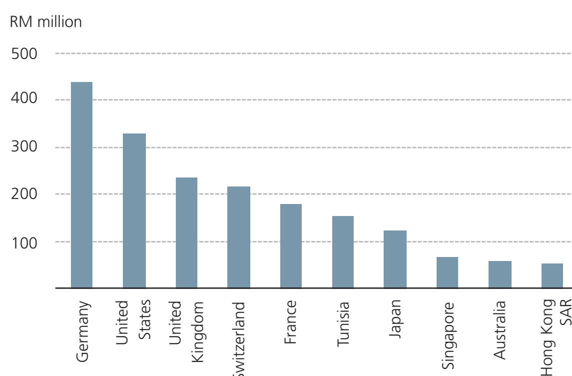
Source: Aon Benfield

credit default swap spreads of global reinsurers widened but remained relatively low. The combined capitalisation of global reinsurers reached a record level of USD480 billion in 2012, providing additional surplus reinsurance capacity (Chart 1.48).

Reinsurance exposures to European-based (re)insurers accounted for 52% of total outstanding claims against foreign (re)insurers. These exposures were lower in 2012 at RM0.8 billion (2011: RM0.9 billion) or 9.4% of total capital base. The majority of the exposures were to (re)insurers headquartered in Germany, Switzerland and the UK which have continued to record strong capital positions and financial results (Chart 1.49). About half of the exposures were from reinsurance placements with the Malaysian branch of three

Chart 1.49

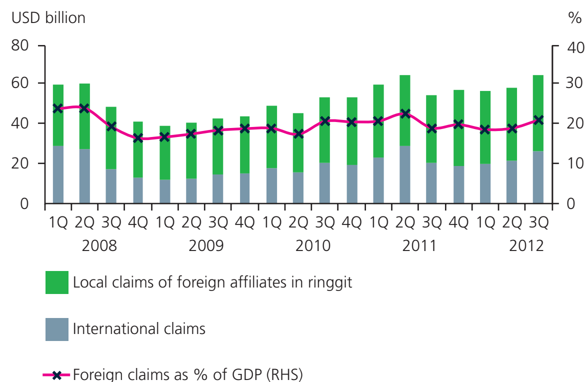
Insurance Sector: Foreign-based Reinsurance Exposure by Claims Outstanding



Source: Bank Negara Malaysia

Chart 1.50

European Banks' Foreign Claims on Malaysia



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

European-based (re)insurers. These branches are required to set aside dedicated capital earmarked for the Malaysian operations. As at end-2012, the branches had a combined capital adequacy ratio of 216% (2011: 277%), well above the domestic supervisory capital requirement. Reinsurance claims exposures to Labuan IBFC entities, comprising mainly branches or subsidiaries of well-established companies with strong credit ratings and financial standing, amounted to RM1.5 billion or 17.6% of total capital base for the general insurance industry.

Implications from deleveraging and scaling back of operations by European financial institutions

Deleveraging activities by the European financial institutions have had a negligible impact on the Malaysian financial system and domestic financial intermediation. This has been notwithstanding an increase in European banks' claims on Malaysia (including Labuan entities) during the year according to the Consolidated Banking Statistics published by the Bank for International Settlements (BIS statistics). Claims on Malaysia rose to USD63.8 billion (2011: USD56.6 billion) or 20.9% of GDP as at the end of the third quarter of 2012. The profile of these claims remains unchanged, with the bulk (58.6%) of claims amounting to USD37.4 billion or 12.2% of GDP arising from ringgit-denominated claims by the European banks' subsidiaries in Malaysia (Chart 1.50 and Table 1.8). Such claims represent equity investments by the parents and assets of the Malaysian subsidiaries. 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 accounted for only USD18.5 billion or 6% of GDP, comparable to most regional peers.

The Bank's assessment remains that the potential impact on Malaysia from deleveraging activities by the European banks is low. As noted earlier, the bulk of BIS reported foreign bank claims on Malaysia arose mainly from the operations of Malaysian subsidiaries of the European banks (locally-incorporated European banks or LIEBs) where the assets and deposits are predominantly denominated in ringgit. Malaysia has seven LIEBs based in the EU-3 countries, of which three banking groups are from the UK. The LIEBs continued to exhibit strong and consistent operating performance and returns while maintaining stable market shares (8.2% of total banking system assets, 7.4% of total banking system loans and 8.2% of total deposits). Although outstanding trade finance moderated slightly, this was reflective of the slower trade performance for Malaysia and for the overall global economy. Domestic banks also remained well-positioned with the capacity and capability to fulfill the trade financing requirements of local businesses. This is further supported by the fact that there appears at present to be no material differences or specialisation between trade

Table 1.8

European Banks' Claims on Malaysia[1]

		As % of Malaysia GDP	(A) Cross-border claims[2] of European banks on Malaysia	(B) Local claims[3] of foreign affiliates[4] of European banks in foreign currency		(C) Local claims of foreign affiliates of European banks in ringgit	
				Locally-incorporated European banks in Malaysia	Other foreign affiliates	Locally-incorporated European banks in Malaysia	Other foreign affiliates
(i)	Foreign claims (A + B + C)	20.9[5]					
(ii)	International claims (A + B)	8.6					
(iii)	Local claims of foreign affiliates in ringgit (C)	12.2					
(iv)	Claims of seven locally-incorporated European banks	16.7					

Note: [1] Each claim in row (i) to (iv) refers to the sum of corresponding shaded columns. Claims in row (i) to (iii) are based on BIS Consolidated Banking Statistics. Claims in row (iv) are estimated from the ringgit and foreign currency denominated total outstanding loans, net interbank placement with Bank Negara Malaysia, securities held and capital base of the seven locally-incorporated European banks
[2] Claims that are granted or extended to non-residents
[3] Claims of reporting banks' foreign affiliates (branches and subsidiaries) on the residents of the host country (country of residence of affiliates)
[4] Foreign affiliates refer to foreign subsidiaries and branches of reporting banks
[5] UK banks' foreign claims on Malaysia based on BIS statistics accounted for 14.8% of GDP
[6] Consolidated claims of domestic banking groups, i.e. domestic banks with head offices in a given country and their foreign offices (branches and subsidiaries)

Source: BIS Consolidated Banking Statistics[6] (immediate risk basis) and internal computation

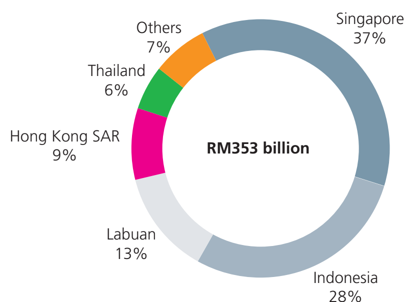
financing instruments offered by domestic and foreign banks. European-based insurers in the domestic insurance industry accounted for 21.8% of total premiums. During the year, two European insurers downsized their Asian operations due to regulatory constraints at the parent. This had a negligible impact on the domestic insurance industry as the Malaysian operations of these entities were quickly acquired by other insurers looking to expand and consolidate their presence in Asia and Malaysia.

Overseas operations of domestic banking groups

The risk of contagion from the cross-border operations of Malaysian banks remains low. While banks have been growing their regional operations, this has been at a pace that is in line with the capacity to manage the attendant risks. Business expansions abroad are subject to the Bank's prior approval based on an assessment of the banking institution's ability to manage the expanded scope and scale of operations.

Chart 1.51

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



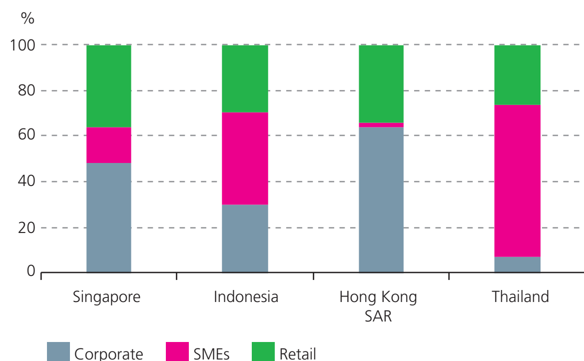
Source: Bank Negara Malaysia

Ongoing supervisory reviews by the Bank affirm the resilience of the domestic financial institutions to external shocks, both at the entity and group levels.

Total assets of branches and subsidiaries of domestic banking groups in the Asian region and other parts of the world amounted to RM353 billion as at the end of the fourth quarter of 2012, of which almost 70% was from operations in Singapore and Indonesia (Chart 1.51). The contribution of overseas operations to total assets of individual domestic banking groups ranged between 0.1% and 18.6%. The profile of the overseas operations of these banks remained broadly unchanged. Traditional lending activities and investments in debt securities continued to dominate the asset profile of these overseas entities, which accounted for 79% of total assets of overseas operations. The risk profile of these activities remains low.

Chart 1.52

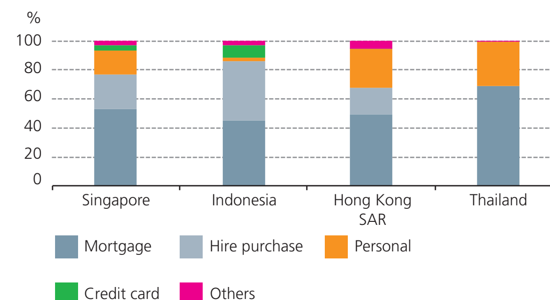
Banking System: Loan Composition of Selected Overseas Operations



Source: Bank Negara Malaysia

Chart 1.53

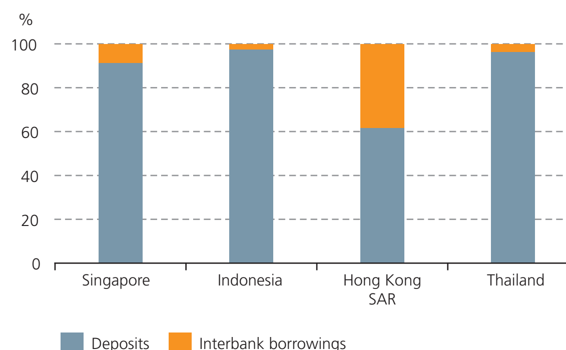
Banking System: Retail Loan Composition of Selected Overseas Operations



Source: Bank Negara Malaysia

Chart 1.54

Banking System: Funding Structure of Selected Overseas Operations

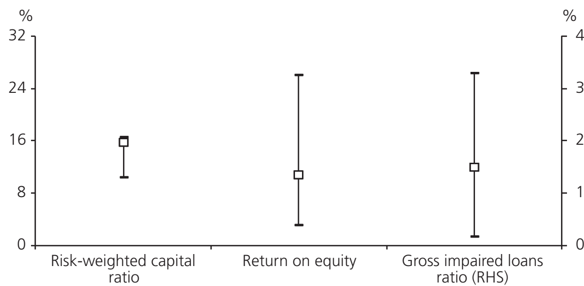


Source: Bank Negara Malaysia

Business loans extended by the overseas affiliates of domestic banking groups mainly comprised working capital facilities, bank guarantees and letters of credit for international trading activities (Chart 1.52). Retail loans are largely secured, mostly for the purchase of residential properties (51%) and vehicles (28%), while unsecured financing accounted for 22% of the total outstanding loans of overseas operations (Chart 1.53). Operations of overseas establishments continued to be funded predominantly by customer deposits (75%) (Chart 1.54). The loan-to-deposit ratio of selected overseas operations ranged between 65% and 108% and has remained relatively stable during the year, reinforced by improved group-wide risk management systems and practices which further limited the potential for funding pressures from overseas operations to spread to the Malaysian operations. The financial positions of overseas operations of domestic banking groups also

Chart 1.55

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



Source: Bank Negara Malaysia

remained sound. The risk-weighted capital ratios of selected subsidiaries remained robust, ranging between 10.4% and 16.4%. Overall loan quality remained intact with the level of impairment remaining broadly unchanged from 2011 (Chart 1.55). The contribution of selected overseas operations to individual domestic banking groups' profitability ranged between 1.2% and 33.8% for the year. The cross-border operations of domestic insurers remained small with total assets of RM959.9 million (amounting to only 0.4% of total insurance industry assets) spanning three countries in 2012 (2011: RM979.8 million).

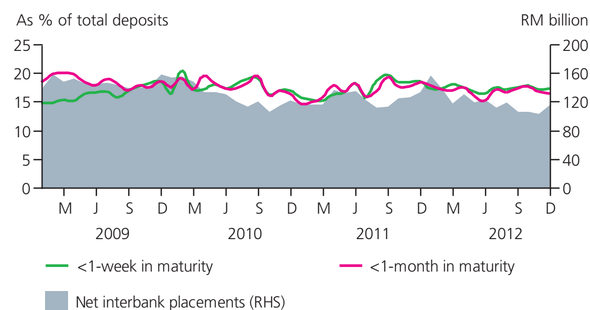
The Bank's consolidated approach for the supervision of domestic financial institutions includes assessing risks that could emanate from the overseas operations of domestic financial institutions. This is undertaken through regular reporting requirements on all the overseas operations and for material overseas operations, the Bank undertakes on-site examinations on an annual basis. As regional expansion by domestic banking groups continued to grow, the Bank has strengthened existing arrangements for the regular exchange of information with host supervisors on developments in local economic and financial conditions, and on supervisory concerns and actions. The Bank hosted supervisory college meetings for three domestic banking groups with significant cross-border operations. These home-host engagements support the early identification of entity and group-wide vulnerabilities and timely supervisory responses.

MANAGING LIQUIDITY RISK

The domestic banking system continued to exhibit ample liquidity and stable funding positions to meet deposit withdrawals and other liability obligations. The total ringgit and foreign currency liquidity buffers of the banking system remained well above the minimum regulatory requirement at 17% and 16.2% of total deposits for liquidity needs maturing in less than one week and one month respectively. Net interbank placements with the Bank amounted to RM114 billion or 8.1% of total deposits (Chart 1.56) while the ringgit interbank rates were stable across all maturities, with little sign of market segmentation or heightened counterparty risk aversion across different banks. The level of liquid assets remained stable at 17.1% of total assets or 52.8% of short-term liabilities (Chart 1.57). While the liquidity strains in the eurozone and selected Asian money markets eased during the year, the Malaysian banking sector was not materially affected by variations in the US dollar and foreign currency funding conditions. Malaysian banks have not been reliant on external funding from offshore wholesale markets, which accounted for less than 10% of total

Chart 1.56

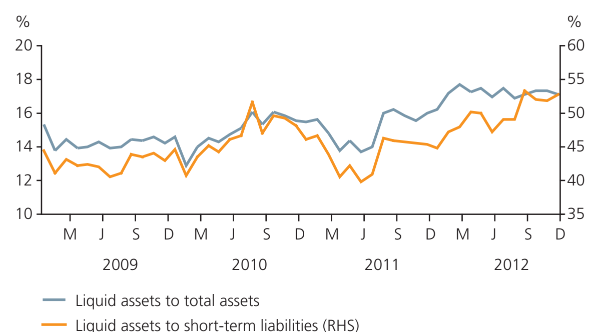
Banking System: Liquidity Buffer and Net Interbank Placements



Source: Bank Negara Malaysia

Chart 1.57

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



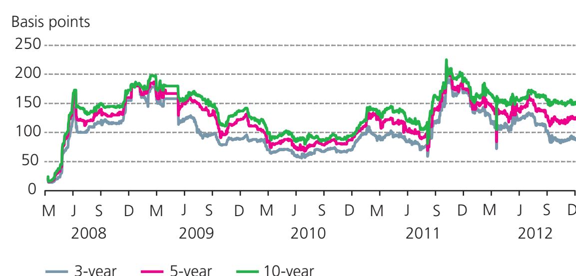
Source: Bank Negara Malaysia

funding. The ringgit deposit-based funding structure among banks in Malaysia has been well supported by the continued strong growth of 8.4% in deposits, resulting in a loan-to-deposit ratio of 82.1%. The profile of deposits was largely unchanged with an almost equal distribution between deposits from individuals (36.2%) and domestic business enterprises (36.3%). In terms of instrument type, 32.3% of bank deposits comprised current and saving accounts and negotiable instruments of deposit, while 37.9% were time deposits. Although these deposits are typically at call, in reality, they have and continued to demonstrate a high level of stability, including throughout the recent GFC and periods of higher capital outflows. Non-resident deposits only accounted for 3.2% of total deposits.

Overall foreign currency funding and liquidity positions also remained stable, taking into consideration that Malaysian banks are not reliant on cross-currency funding for domestic operations. Onshore US dollar liquidity conditions eased, with the USD/MYR cross-currency swap spreads narrowing to between 10 basis points and 40 basis points across the different tenures since the third quarter of 2012 (Chart 1.58). The banking system's foreign currency funding gap also remained stable and small at 0.3% of capital base (Chart 1.59), with low cross-border currency or maturity mismatches from external exposures to non-resident counterparties. Total foreign claims of the banking system continued to exceed foreign liabilities across all currencies, reflecting the relatively balanced net external asset positions for exposures denominated in US dollar, Singapore dollar, euro and other foreign currencies. The banking system maintained a surplus US dollar liquidity position in the less than one-week maturity bucket, while the mismatch for the less than one-month maturity bucket

Chart 1.58

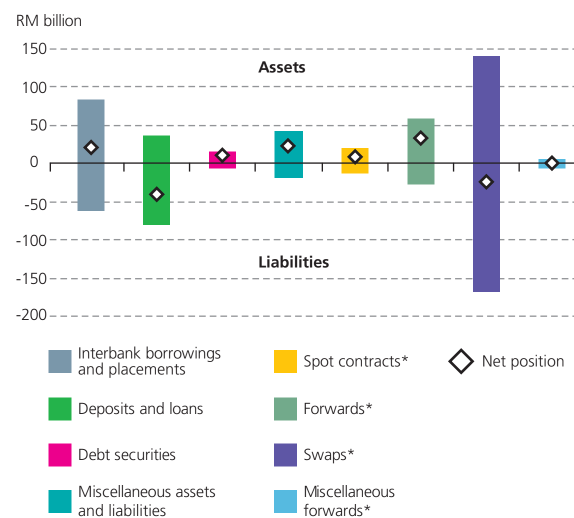
USD/MYR Cross-currency Basis Swap Spread



Source: Bank Negara Malaysia

Chart 1.59

Banking System: Foreign Currency Denominated Assets and Liabilities

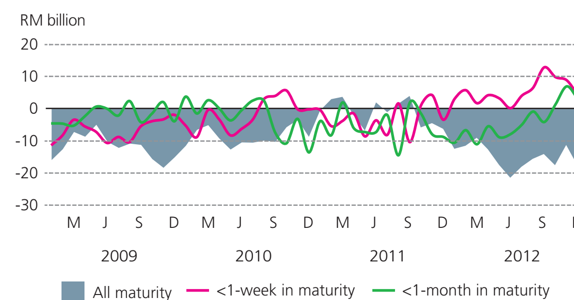


* In notional amount

Source: Bank Negara Malaysia

Chart 1.60

Banking System: US Dollar Liquidity Mismatch



Source: Bank Negara Malaysia

improved significantly from a negative mismatch position for most of the year to a surplus position in the final quarter of 2012 (Chart 1.60). Over the years, banks have been paring down holdings of US dollar-denominated investments that were funded by short-term unsecured borrowings. This has reduced the vulnerability of Malaysian banks to potential roll-over risks that could arise from disruptions to US dollar wholesale funding markets. Since the GFC, Malaysian banks have also been more proactive in managing US dollar exposures through centralised liquidity management functions, particularly for US dollar funds, and ensuring a more balanced composition of foreign currency funds by maturity.

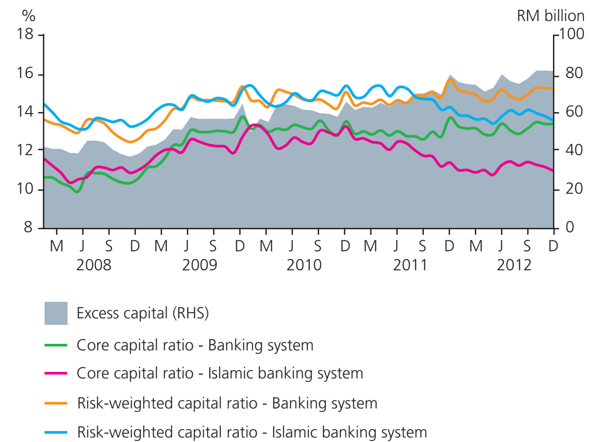
Liquidity stress tests conducted on the Malaysian banking system under the FSAP affirmed the resilience of Malaysian banks to adverse multi-factor shocks over a one-month horizon. For ringgit-denominated assets and liabilities, banks on aggregate recorded a post-shock net cumulative surplus of 3.2% of total deposits to accommodate liquidity stress over the one-month horizon; while in terms of US dollar denominated assets and liabilities, the banking system recorded a shortfall of USD6.4 billion. This is expected to be manageable relative to the level of the Bank's international reserves which stood at approximately USD140 billion as at 28 February 2013. The FSAP assessment also noted that although the GFC saw severe liquidity and funding shocks propagating across multiple financial systems in 2008 to 2009, Malaysian banks continued to maintain strong ringgit and US dollar liquidity buffers without experiencing severe funding pressures or sudden fund withdrawals. Using significantly higher run-off rates for deposits experienced by other banks in some emerging market economies which were more exposed to the GFC shocks, the top-down liquidity stress test conducted under the FSAP concluded that even in a higher stress scenario, only about half a dozen of the smaller commercial banks could potentially face a liquidity shortfall for the less than one-week maturity horizon. While the FSAP raised the potential vulnerability posed by the high level of reliance on deposits which are at call, such retail and corporate deposits have demonstrated a high level of stability throughout the GFC and other stress periods including the 2001 dot-com bubble and the 2003 SARS episode. The high level of corporate deposits is partly reflective of the high savings of businesses. Contagion risk across banks via the ringgit and foreign currency interbank markets was also well-contained with stress test results showing a severe impact only in the situation of an extreme distress involving the simultaneous defaults of large domestic commercial banks. Simulated defaults of foreign banks under assumptions of a further worsening of the eurozone crisis or conditions similar to the GFC showed that neither of these events were likely to trigger widespread contagion defaults of other Malaysian banks.

FINANCIAL INSTITUTION SOUNDNESS AND RESILIENCE

Financial institutions remained resilient throughout the year, sustaining their financial performance while continuing to strengthen operational and risk

Chart 1.61

Banking System: Capital Adequacy Ratios and Excess Capital



Source: Bank Negara Malaysia

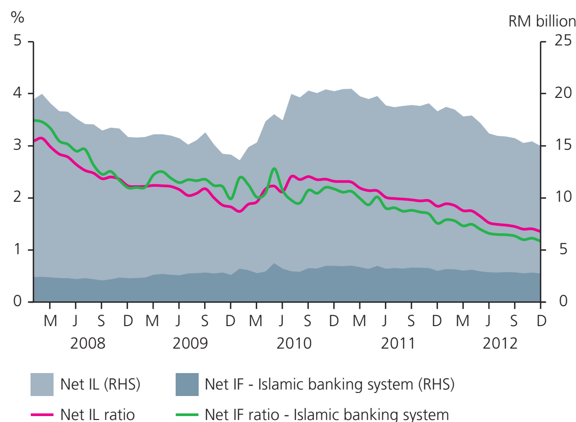
management. This was reflected in improvements to the composite risk rating (CRR) of 13% of banks and insurers. The CRR is a supervisory rating assigned by the Bank and represents the overall assessment of the inherent risk and quality of risk management of a financial institution across all its significant activities, taking into account the strength of the institution's capital and sustainability of earnings. The CRRs for the bulk of institutions were unchanged. As a group, financial institutions continued to manage their businesses prudently, and accorded close attention to the effective management of risks within each institution.

The capital position of financial institutions remained solid, both in the level and quality of capital. The banks' aggregate risk-weighted capital ratio and core capital ratio stood at 15.2% and 13.4% respectively (2011: 15.7% and 13.7% respectively) (Chart 1.61), with financial buffers amounting to more than RM80 billion to support business needs and withstand potential stresses. With a significant (85%) proportion of banks' capital in the form of equity capital (comprising common equity and reserves), banks are well placed to comply with the phased implementation of Basel III which began in January 2013. The aggregate common equity tier 1 capital ratio, tier 1 capital ratio and total capital ratio were at 12.1%, 13% and 14.5% respectively as at end-January 2013. Excess buffers for the banking system as a whole are estimated to remain high at above RM70 billion under Basel III.

Banks (including Islamic banks) registered a higher profit for 2012 from the continued expansion in lending and fee-related activities, while asset quality remained sound. Pre-tax profit increased by 12.3% to RM29.4 billion, with the average returns on assets and equity unchanged at 1.6% and 17.5% respectively. The Islamic banking system alone registered a strong profit growth of more than 60% for the year to RM4.9 billion (2011: RM3 billion), pushing average returns on assets and equity to 1.4% and 19.6% respectively (2011: 1% and 13.5% respectively). Profits of the banking system were mainly driven by higher interest/financing income (+12.9%) from the expansion in the financing portfolio of banks, which more than offset the higher funding costs on the expanded deposit base (+17.5%). In addition, expenses on loan loss provisions reduced significantly by almost half in tandem with lower new delinquencies and improved bad debt recoveries. Notwithstanding this, banks continued to maintain conservative loan loss provisioning practices with the loan loss coverage ratio remaining above 100% (Chart 1.62). Lower charges for loan losses during the year led to an improvement in net interest/financing margin which widened to 0.64 percentage point (2011: 0.57 percentage point) (Chart 1.63). Also contributing to profit was further growth in fee-based activities (largely from credit facilities, guarantees, underwriting, bancassurance and wealth management products) (+7.6%). Net treasury and investment gains grew modestly (+0.8%). While higher staff cost

Chart 1.62

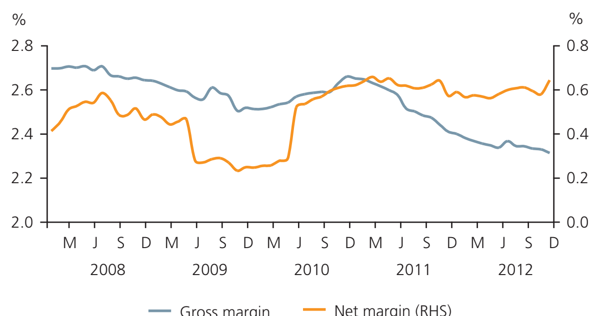
Banking System: Impaired Loans (IL)/ Impaired Financing (IF) Level and Ratio



Source: Bank Negara Malaysia

Chart 1.63

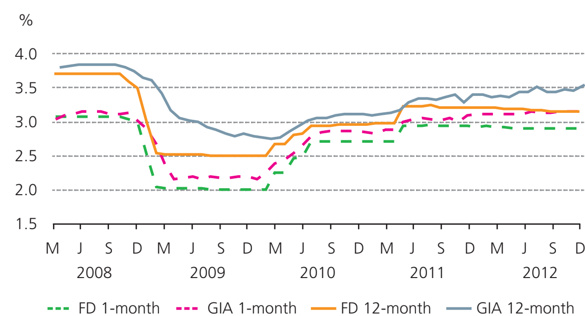
Banking System: Gross and Net Interest Margins



Source: Bank Negara Malaysia

Chart 1.64

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



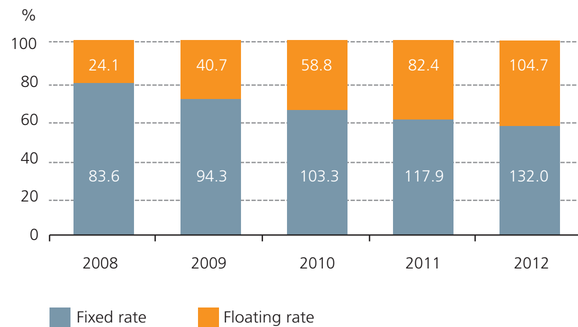
Source: Bank Negara Malaysia

and overheads continued to increase, growing by 8.3% and 10.6% respectively, these have moderated compared to previous years. The highly competitive talent market in the financial sector continues to be a major challenge for banking institutions with the talent shortage observed across many levels including in specialist, technical and management roles, and was more the case for the Islamic finance industry.

The active management of the rate of return risk by the Islamic banks and stable cost of funding reduced displaced commercial risks (DCR) confronting Islamic banks (Chart 1.64). DCR arises from the general expectations of the General Investment Account (GIA) depositors (representing 27.5% of Islamic banks' deposits) that the principal investment is protected and that there is certainty in returns which are comparable to conventional products. In managing the risk, Islamic banks pursued risk

Chart 1.65

Islamic Banking: Fixed Rate and Floating Rate Financing



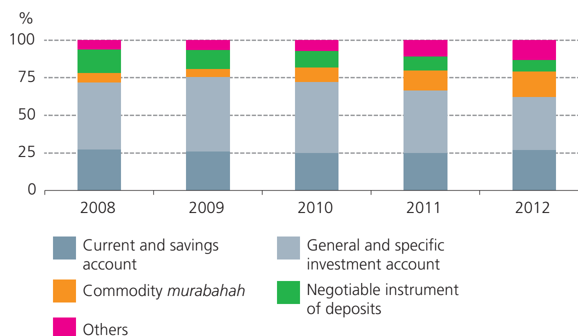
Note: All figures are in RM billion

Source: Bank Negara Malaysia

reduction strategies on both the asset and liability sides of the balance sheet. On the asset side, the share of floating rate assets in the financing books expanded by 27% to account for 44.2% of total financing (2011: 41.1%). These were mainly in the form of *musharakah mutanaqisah* (diminishing partnership) and *ijarah* (leasing) contracts. The higher composition of floating rate assets mitigates the re-pricing gap risk due to the mismatch between returns earned on assets and re-pricing of liabilities (Chart 1.65). On the liability side, more fixed-return commodity *murabahah* deposits were offered to lengthen the re-pricing date of liabilities in efforts to similarly narrow the re-pricing gap between assets and liabilities. Such deposits grew by 47.4% to RM52.7 billion or 17.2% of total deposits (Chart 1.66). Islamic banks have also taken measures to reduce the reliance on profit equalisation reserves (PER) as an instrument to manage depositors' return expectations. These

Chart 1.66

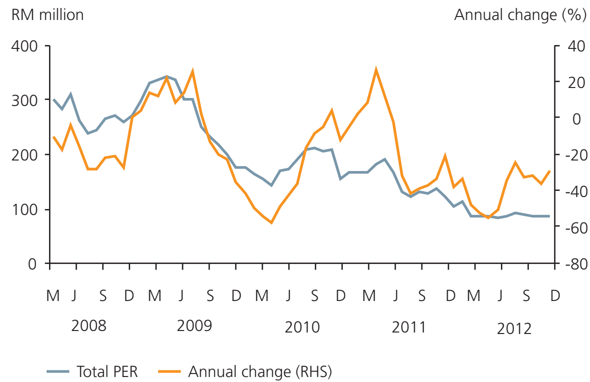
Islamic Banking: Composition of Deposits



Source: Bank Negara Malaysia

Chart 1.67

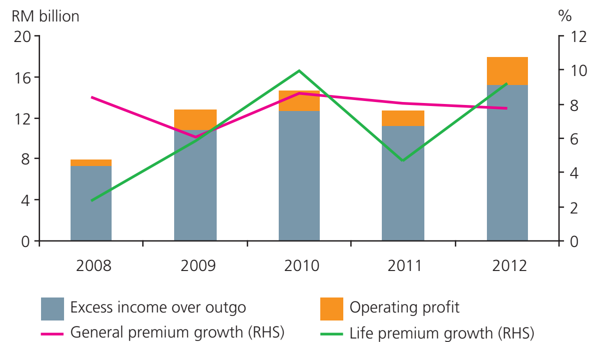
Islamic Banking: Profit Equalisation Reserve (PER)



Source: Bank Negara Malaysia

Chart 1.68

Insurance Sector: Profitability and Premium Growth



Source: Bank Negara Malaysia

included flexibilities provided in the profit-sharing ratio for banks to waive the share of profits, and reducing the concentration in long-term fixed return financing. The level of PER declined by 29.4% to RM85.6 million as at end-2012 (Chart 1.67). There was continued use of negotiable instruments of deposit, which accounted for 7.4% of total deposits, to achieve greater stability and diversification in the funding structure. Some Islamic banks also lengthened the maturity structure of the funding base through issuances of medium-term sukuk, thus further lowering the risk of funding mismatches.

The insurance and takaful industry recorded strong improvements in profitability on account of continued expansion in new business, better claims experience and improved investment returns. This reduced the relative level of risk exposures in the industry even as insurers

(including takaful operators) continued to deal with the challenges of operating in an environment of persistently low yields. The life and family takaful sector reported a strong rebound in its excess of income over outgo which increased by 38.2% to RM17.6 billion, supported by higher net premiums and contributions of 11.2% and a significant increase of about 200% in net capital gains (Chart 1.68). Operating profits of the general insurance and general takaful sector increased by 72.6% to RM2.9 billion, following a lower combined ratio of 96.9% (2011: 104.7%) and higher earned premiums which grew by 11.1% (Chart 1.69).

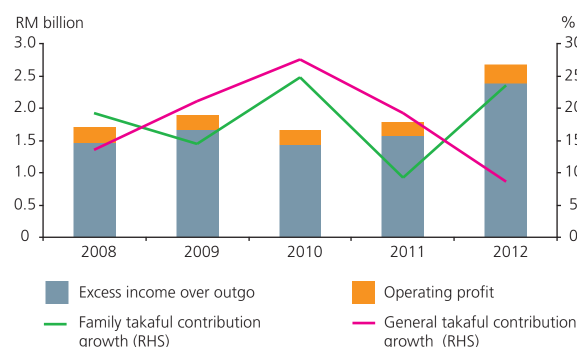
The industry has remained well-capitalised with the aggregate capital adequacy ratio (CAR) of the general and life insurance industry unchanged at 222.3% (2011: 222.5%). This was supported by stable levels of retained profits and bonus reserves (Chart 1.70). Total capital required increased slightly in tandem with continued business growth. Insurance risk, which measures the underestimation of insurance liabilities, claims experience and to a certain extent, impact from the discounting of liabilities, remained the largest component at 50.7% of total capital required, while market risk accounted for 30.6% of total capital required.

The prolonged low interest rate environment increases the challenge of managing insurance risk, particularly among life insurers. As insurance funds are invested in lower yielding assets, insurers' exposures to future claims costs are higher, particularly if products were priced assuming higher returns. Due to discounting effects, and the requirement for life insurers to discount their liabilities using risk free discount rates, higher valuations of liabilities as a result of lower MGS yields will increase the amount of regulatory capital that an insurer must hold. For well-matched portfolios, asset valuations will also increase in tandem, thereby increasing the value of capital available, but the relative impact on capital may not be fully offset, particularly for much longer term liabilities. In 2012, the capital position of insurers was generally not significantly affected by the aggregate decline of about 20 basis points in MGS yields. Based on a stress scenario of a 50 basis points decline in MGS yields, all life insurers are still able to meet the minimum supervisory target capital levels.

Thus far, the average investment yield of life insurers has been sufficient to meet total benefits.

Chart 1.69

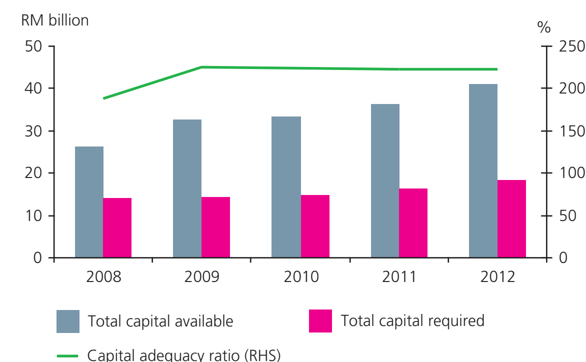
Takaful Sector: Profitability and Contribution Growth



Source: Bank Negara Malaysia

Chart 1.70

Insurance Sector: Capital Adequacy Ratio



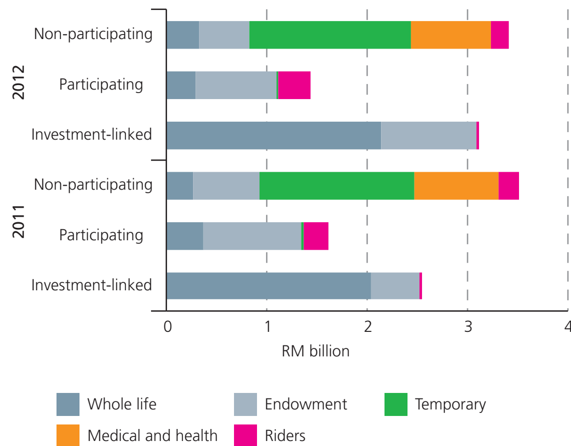
Source: Bank Negara Malaysia

Investment yield has been in the range of 5% to 6% in the recent five years, but improved to 7.3% in 2012. The generally conservative product design and strategies adopted by many of the life insurers in the more recent years are producing positive results. Assumed breakeven yield used for pricing insurance benefits has been low – at about 3% for guaranteed benefits and 5% for total benefits of participating products. A number of life insurers have also taken steps to rebalance their portfolios to increase the composition of less capital-intensive investment-linked and non-participating products (Chart 1.71). Given the current limitations on the ability of life insurers to fully match long-term insurance exposures with assets of similar maturity, these strategies have helped to reduce the vulnerability of insurers to interest rate risk.

In the general insurance sector, risks associated with the structural misalignment between premiums and

Chart 1.71

Insurance Sector: Composition of Life Insurance Products



Source: Bank Negara Malaysia

claims losses remained high. The claims incurred ratio for compulsory motor third party liability insurance (motor 'Act') was substantially lower for the year at 236% (2011: 302.8%), likely due to actions by insurers to pass on more loss-making risks to the Malaysia Motor Insurance Pool which in turn would redistribute the risks equally among all general insurers. Greater premium flexibility allowed under the Pool would have contributed to the improved claims ratio. The equal sharing of losses, while having an uneven impact on individual insurers, has not had a material impact on the overall profitability of the industry.

Financial institutions remain resilient to extreme macroeconomic and financial conditions based on stress tests conducted by the Bank (refer to the box article 'Macroprudential and Microprudential Applications of Stress Testing in Malaysia'). The solvency stress test conducted on banks simulated the effects of a series of tail-risk

Table 1.9

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

	Key assumptions	**Largest point-in-time deviation from baseline scenario**
Malaysia GDP shock	Sharp slowdown (comparable to economic contraction in 2009) followed by a gradual recovery taking into account spillovers from adverse movements in Europe, the US and PR China	
Balance sheet and income projections	Decline in annual growth of: • Net interest income • Net trading and investment income • Fee-based and other income	 More than 60% More than 250% More than 300%
Capital growth (taking into account Basel III phase-out treatment)	• Increase in retained earnings ratio (only organic capital growth allowed)	More than 30%
Credit risk shocks	• Probability of default (PD) shocks – Business loans (including default of selected large borrowers) – Household loans • Loss given default (LGD) shocks – Business loans – Household loans	 More than 180% More than 170% More than 27% More than 17%
Market risk shocks	• Decline in FBM KLCI • Yield shocks – 10-year MGS – 10-year A-rated corporate bonds • Appreciation/depreciation in major currencies against the ringgit	More than 40% More than 12% More than 23% More than 20%

events materialising for the period 2013 to 2015, including contagion effects from the intensification of the sovereign debt crisis leading to a potential euro break-up, a sharper-than-expected cut in public spending in the US, and a hard landing in the People's Republic of China. Assuming no policy intervention by authorities, the corresponding spillovers on domestic conditions through the trade and financial channels were used to simulate the compounding year-on-year impact on banks' balance sheet growth, income generation, credit and market risks exposures, retained earnings and capitalisation. The impact has also taken into account the phased implementation of Basel III capital requirements (Table 1.9). Based on the results of the stress test, the total capital ratio of the banking system remained above 11% even under the adverse scenario in which major downside risks to the global economy occur simultaneously. The post-shock common equity Tier 1 capital ratio was more than twice the minimum requirement of 4.5% under the Basel III environment.

FSAP solvency stress test also revealed that the banks, at both the system and institutional levels, are able to withstand the impact of a sharp slowdown in the economy, followed by a swift recovery or a prolonged low GDP growth path. The stress test also indicated that due to the lower starting capital position, some smaller Islamic banks appear to be more susceptible to higher credit losses. This is not a concern as such banks are subsidiaries of commercial banks which adopt an efficient group-wide capital management strategy and therefore maintain relatively lower capital buffers at the subsidiary level. The adoption of such capital strategy is required to be supported by a strong capital commitment by the parent to ensure that solvency deterioration at the subsidiary level does not pose reputational risk to the overall banking group.

Table 1.10

Contagion Risk Stress Test: Assumptions and Shock Parameters

Shock parameters	Shock magnitude
Solvency hurdle rate or default threshold	Total capital ratio of 8%
Risk-weight for interbank loans	20%
Loss given default of interbank loans	100%
% of funding not refinanced upon each default	50%
Haircut on assets under fire sale	50%

The degree of contagion effects arising from a simultaneous occurrence of credit and funding shocks through the interbank channel was also assessed to be limited and largely contained within the banking group (Table 1.10). The potential system-wide capital impairment due to such network externalities was less than 1.5 percentage points. The systemic impact from the interconnectedness of banks in the interbank market was also observed to be limited, with only two bank failures resulting from the simulated defaults of 56 institutions and the knock-on effects. No new failures were observed after two rounds of contagion. Simulations of simultaneous defaults (two or more simulated initial defaults), based on size, interconnectedness and type of banking institutions, also indicated manageable system-wide contagion effects.

Stress test results reaffirmed the resilience of financial institutions to extreme macroeconomic and financial market conditions. The capacity of banks to withstand shocks was reinforced by assessment under the Financial Sector Assessment Program

The multi-year stress test was also conducted for the insurance industry with a slight variation introduced to incorporate the insurance risk element. In particular, an MGS yield shock of 50 basis points was used to simulate the impact of revaluation of future liabilities for the life insurers and a higher claims shock mirroring worst experience in the past was incorporated for the general insurers. Similar to the banks, the shocks were applied on insurers' profitability and capital position. The stress test revealed that all the large insurers and most of the smaller insurers will remain profitable post-stress, thus providing continuity in capital generation. The overall insurance industry's profit was estimated to reduce by 18.4%, while the post-stress capital adequacy ratio for the insurers as a whole remained above the minimum regulatory requirement.

OUTLOOK FOR DOMESTIC FINANCIAL STABILITY AND FOCUS OF SURVEILLANCE IN 2013

Malaysian financial institutions are well positioned to face the prevailing concerns on the banking sector and fiscal issues in Europe, as well as the US fiscal position, that are expected to continue in 2013. The balance sheets and funding positions of global banks have yet to be fully restored, hampering efforts to rebuild and enhance the resilience of financial systems in the advanced economies. This is also demonstrated in the slower-than-desired progress in the implementation of Basel III in these jurisdictions. The modest global growth outlook will continue to affect regional economies including Malaysia via the trade channel although intra-regional economic and trade linkages are expected to continue to increase. Bouts of higher volatility are likely to return intermittently to the global financial markets causing periodic swings in domestic financial markets. This is likely to be amplified by the effects of large volumes of capital flows as quantitative easing continues in many of the large advanced economies.

The new financial services legislation will strengthen the capacity of the Bank to deal with risks to financial stability at an early stage and in a comprehensive manner

Against more favourable conditions in the domestic and regional economies, the Malaysian financial sector is well placed to cope with the uncertain external developments. Credit risk exposures of banks are expected to be contained within acceptable levels in 2013 following the sound credit risk management practices of the banks, balance sheet strength of businesses and continued expectations of stable income and employment prospects that will preserve household incomes. However, the business expansion and lending activities of the NBFIs and the high leverage of the lower-income households are key areas that will continue to be closely monitored by the Bank. There will also be greater engagement and coordination with other relevant authorities. Appropriate measures will also continue to be taken to manage the sources of risks that are increasing the vulnerability of lower-income households.

The new financial services legislation will further strengthen the capacity of the Bank to deal with risks to financial stability at an early stage and in a more comprehensive manner. The new legislation also empowers the Bank to impose regulations on entities that are not regulated by the Bank in order to preserve overall financial stability. The retail lending market will continue to remain highly competitive, and will require supervisory attention to remain focused on the effective implementation of responsible financing practices, banks' risk appetite, lending standards and risk pricing practices. The market risk exposures of financial institutions are expected to remain at the levels seen in 2012. The domestic financial markets are also expected to remain orderly and have the capacity to intermediate the volatile movements in capital flows. Liquidity and funding conditions in 2013 are also expected to remain supportive of efficient domestic intermediation by financial institutions in Malaysia.

The Bank's surveillance and supervisory priorities in 2013 will continue to be focused on:
- monitoring developments in household sector leverage, residential property prices and supply conditions in the office space segment;
- monitoring changes in the risk-taking activities, including the risk appetite, of financial institutions, with a particular focus on lending standards, risk pricing and valuation practices, and responsible conduct towards consumers;
- continued assessments of the nature, scale and scope of the activities of NBFIs involved in extending credit to the household sector and of other systemic non-bank entities;
- continuing the engagement with other domestic regulatory authorities, including in addressing risks involving the activities of NBFIs, in enhancing the framework for improving the transparency of over-the-counter derivative exposures and in strengthening domestic crisis management framework;
- enhance further the supervision and oversight of the overseas operations of the Malaysian financial institutions;
- further strengthening the domestic regulatory and supervisory framework for implementation of the Financial Services Act 2013 and Islamic Financial Services Act 2013;

- further strengthening the financial market infrastructure, in particular the payments and settlements systems to support the increasing volumes of cross-border and multi-currency transactions; and
- promoting effective regional cooperation and coordination in financial regulation and crisis management through active participation in the multi-lateral groupings of central banks and supervisory authorities.

Developments in the Housing Market and Implications on Financial Stability

Developments in the housing market can have an important impact on financial stability. Changes in house prices have both direct and indirect impact on the demand for credit by households and their debt servicing capacity, particularly in situations in which rising house prices has not been accompanied by rigorous lending standards and if it results in excessive debt accumulation by households and housing developers. In the event of sharp downward adjustments in house prices, the impact on the balance sheets of banking institutions could be severe, with significant risks to financial stability.

As with most economies, the housing market in Malaysia is an important component of the domestic economy. For households and businesses, residential properties have also become an attractive form of investment. Over the period from 1Q 2010 to 2Q 2012, house prices in Malaysia, measured by the Malaysian House Price Index (MHPI), registered a strong average increase of 9.1% annually, surpassing the average annual growth of 3.2% in the preceding 10-year period. During the same period, bank financing for property acquisition and development also recorded robust annual growth, expanding at double digit levels since February 2008. Bank lending (including holdings of debt securities) is highly concentrated in the property market, particularly in the residential segment. Aggregate financing by the banking system for property acquisition and development amounted to RM454.3 billion or 41% of total financing as at end-2012, while bank holdings of private debt securities was RM4.6 billion. Of this amount, the banks' exposures to the residential property market in the form of end financing stood at RM303.9 billion or 27.4% of total banking system loans (2011: RM269.2 billion), with another RM19 billion in the form of working capital and bridging loans for construction of properties. The lending market for purchase of residential properties is, however, competitive and relatively well-dispersed across institutions, with the normalised Herfindahl-Hirschman Index valued at 0.08 at the end of 2012.

As a pre-emptive measure, macroprudential policies were introduced by the Bank in late 2010 to mitigate unsustainable developments in the property sector. Importantly, this has also been accompanied by heightened supervisory scrutiny over bank lending practices which are observed to have remained intact with no evidence of a systematic easing of prudent lending standards. The Bank also took early actions to address weaknesses in the pricing practices for home loans observed among some banking institutions.

The Bank's assessment remains that risks to financial stability from price adjustments in the housing market are contained. Impaired financing for the residential property sector by the banking system remained low at 1.9% of total financing for purchase of residential properties (2011: 2.3%). Apart from some positive signs that the macroprudential measures are taking effect and that continued discipline is being observed in bank lending practices, risks to financial stability are also assessed to be modest based on evidence that suggests macroeconomic fundamentals continue to drive house price developments. This article presents an analysis on the factors driving trends in house prices in Malaysia based on findings from a multivariate regression model of the MHPI.

Modelling House Prices in Malaysia

While the increase in house prices has generally been broad-based, the trend has been more pronounced in certain locations such as in Kuala Lumpur, Selangor and Penang (Table 1) and for certain types of properties such as high-rise and detached properties.

To analyse the factors driving trends in Malaysian house prices, a set of independent variables was identified and tested to establish their preliminary significance in the Malaysian context. They are organised into three clusters (macroeconomic factors, financial factors and policy measures) and regressed against the MHPI using the ordinary least squares method. These 13 variables are presented

Table 1

Annual Growth of House Prices in Malaysia

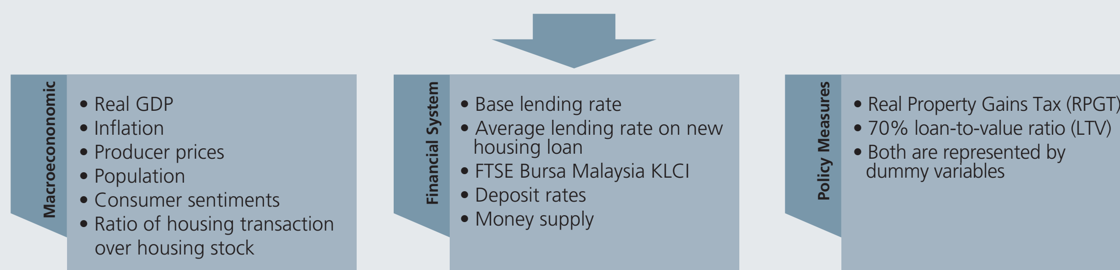
	Average growth rate (%)	
	1Q 2001 - 4Q 2009	1Q 2010 - 2Q 2012
Malaysia	**3.2**	**9.1**
Kuala Lumpur	4.0	12.2
Selangor	2.4	11.3
Penang	4.3	8.9
Sarawak	4.1	5.1

Source: National Property Information Centre

in Diagram 1. The selection of these variables was made on the basis of an array of published studies on determinants of house prices in developing as well as developed economies. Two key studies were instructive for this purpose (i) a study by Glindro et al. (2011)[1] of nine Asia-Pacific economies, including Malaysia, from 1993 to 2006 using 13 variables[2] which found that house prices tend to be more volatile in markets with lower elasticity of housing supply and a friendlier[3] business environment; and (ii) a study by Tsatsaronis and Zhu (2004)[4] across 17 industrialised countries between 1970 and 2003 based on six variables[5], which found that house prices are driven by economic growth, inflation, term spread between a long-maturity government bond and short-term interest rates, and bank credit[6].

Diagram 1

Selected Variables for Analysis of Factors Driving Malaysian House Prices



Note: Indicators of housing supply and variables related to bank credit, such as loans outstanding, applications, approvals and disbursements, have been excluded from the regression analysis due to endogeneity bias. In addition, bank credit has been assessed not to be significant in influencing house prices according to a study on the Malaysian housing market by the IMF-World Bank Financial Sector Assessment Program Mission 2012

Source: Bank Negara Malaysia

1 Glindro, E.T. et al. (2011), 'Determinants of House Prices in Nine Asia-Pacific Economies', International Journal of Central Banking, September, 163-204.

2 Quarterly data for nine Asia-Pacific economies. Data include house prices, real gross domestic product (GDP), population, construction index, land supply index, mortgage credit-to-GDP ratios, real mortgage rates, real effective exchange rates, stock price index, business freedom index, financial freedom index, corruption index and property rights index.

3 Refers to a business environment characterised by a high degree of ease to do business, better regulatory conditions, lower corruption, a wider range of intermediation functions by the financial sector, a higher degree of flexibility in acquiring land and better legal protection to land/home owners.

4 Tsatsaronis, K. and Zhu, H. (2004), 'What Drives Housing Price Dynamics: Cross-Country Evidence', BIS Quarterly Review, March, 65-78.

5 Quarterly data for 17 advanced economies. Data include house prices, real GDP, consumer price inflation, short-term interest rate, term spread and bank credit.

6 For further reading on international house prices, see Adams, Z. and Füss, R. (2010), 'Macroeconomic Determinants of International Housing Markets', Journal of Housing Economics, Vol. 19, Issue 1, 38-50.

The period under consideration was from 1Q 2001 to 2Q 2012 and was further divided into two sample periods. The first sample period was from 1Q 2001 to 2Q 2010. The second and slightly longer sample period was from 1Q 2001 to 2Q 2012, to capture the steeper increase in house prices during the period 3Q 2010 to 2Q 2012.

Results of the Model

The results showed that, in general, house prices in Malaysia are driven primarily by macroeconomic factors and to a lesser degree by financial factors, Government regulations and policies (Table 2). In the more recent period, previous values of house prices were also found to be a relevant determinant of house prices (Diagram 2 and Chart 1).

Table 2

Modelling House Prices in Malaysia

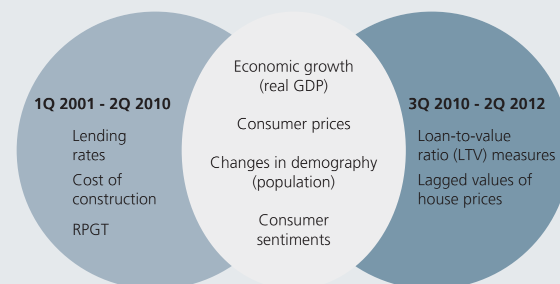
Dependent variable = Malaysian House Price Index		
	Model 1	Model 2
Constant	2.41***	5.48***
Real GDP(-2)	-	0.28***
Real GDP(-4)	0.49***	-
Consumer Sentiment	0.06***	0.04***
Consumer Sentiment (-1)	0.09***	0.03*
Consumer Sentiment (-2)	0.06***	0.02***
Consumer Sentiment (-4)	0.03***	-
Population (-4)	7.14***	7.75**
RPGT	-0.48*	-
Base Lending Rate (-1)	-2.87***	-
Inflation	0.88***	0.36**
Inflation (-2)	0.31**	-
Cost of Material for Construction (-3)	-0.34***	-
LTV	-	-4.24***
MHPI (-5)	-	0.33**
Adjusted R-squared	0.90	0.88

Note: OLS estimation, ***,** and * indicate significance at the 1, 5 and 10 percent levels

Source: Bank Negara Malaysia

Diagram 2

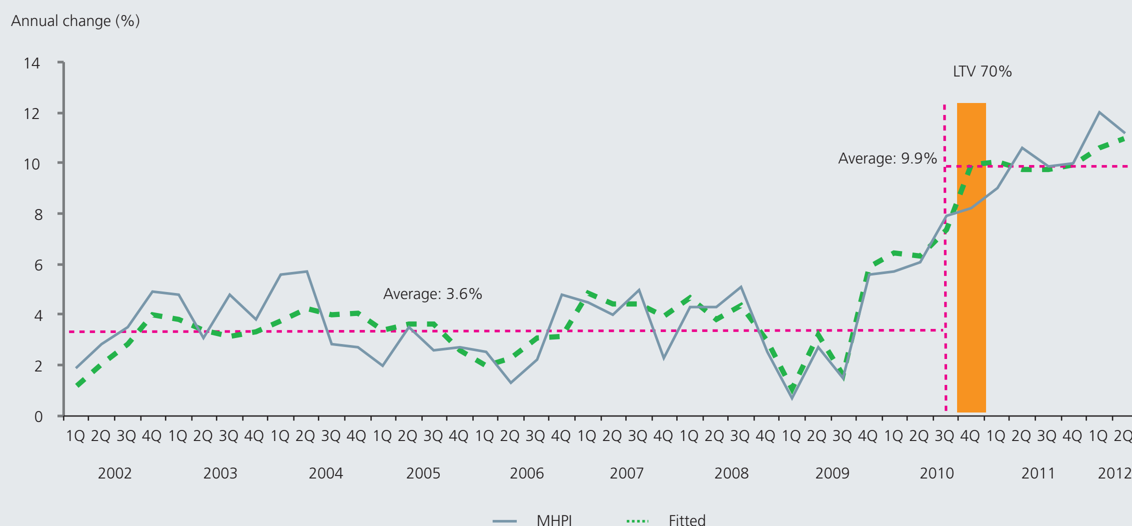
Factors Affecting Increase in House Prices



Source: Bank Negara Malaysia

Chart 1

MHPI and Fitted Values (1Q 2002-2Q 2012)



Source: National Property Information Centre and internal computation

1Q 2001 to 2Q 2010

During this period, house prices in Malaysia rose by an average annual rate of 3.4%. The increase in house prices was driven primarily by the following factors:

(i) Economic growth (real gross domestic product)

During the period of steady economic growth and stable lending rates from 2002 to 2008, house prices increased modestly at an average annual rate of 3.6% before moderating to a rate of 0.7% in 1Q 2009 when the domestic economy experienced a contraction following the global recession. This suggests a positive impact of rising household incomes on house prices. With economic growth, household incomes increase along with the means to own houses. This, in turn, induces demand for housing, consequently raising prices.

(ii) Demographic changes

Based on the highest coefficient result, changes in demographic structures are the main determinant of house prices. As an increasing number of younger Malaysians enter the job market, more are likely to begin acquiring their first property at an early age, adding to existing demand. According to the 2010 Census by the Department of Statistics Malaysia, the working age population (15 to 64 years old) increased to 67.3% in 2010 from 62.8% in 2000. In addition, rapid urbanisation in major states and employment centres has also contributed to higher demand for housing in urban areas.

(iii) Consumer price inflation

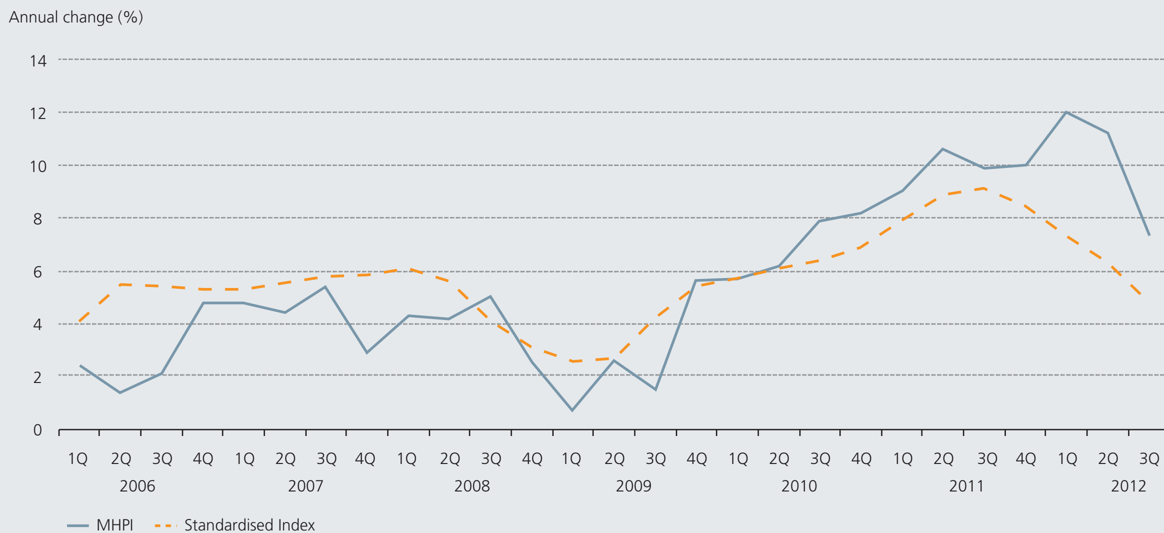
Consumer price inflation has a positive impact on house prices. Inflation can directly impact house prices through two channels. The first is via higher input cost - as prices for construction materials, land prices and labour wages increase, newer houses become more expensive than older ones. The second relates to rental yields - increases in consumer prices and related inflation expectations are typically factored into higher rents, which in turn translate into higher house prices. Inflation also has an indirect impact by increasing the attractiveness of houses as a hedge against inflation. This has been exacerbated by the search for higher yield, given lower or more volatile returns on other forms of investments, such as deposits and equities.

(iv) Producer Price Index

The cost of construction has an effect on house prices. To ascertain this relationship, a standardised index that aggregates prices of essential construction materials, such as roofing, cement, glass and timber, was also developed in order to deal with the underlying volatility in the prices of these materials. This index was then used as a leading indicator for house prices in Malaysia. This analysis which covered the period 1Q 2005 to 3Q 2012 found that the rise in house prices has been preceded by an increase in the index level (Chart 2).

Chart 2

Standardised Index of Construction Materials for Housing Market



Source: National Property Information Centre and internal computation

(v) Lending rate

Consistent with expectations, lending rates have an inverse effect on house prices. In general, higher lending rates would make it more costly for consumers to acquire new housing loans, leading to lower demand for houses. Given the inelastic supply of houses in the short run, which constrains the ability to adjust to changes in demand, house prices would be driven lower.

(vi) Real Property Gains Tax (RPGT) and consumer sentiment

The implementation of RPGT had the intended inverse effect on house prices. By compressing net returns on property investments, RPGT serves to counter-balance rising consumer sentiments. This reins in over-exuberance among property investors and has a dampening effect on over-investment and speculative activities in the housing market.

These results are consistent with the rational behaviour of economic agents in the property market. Developments in house prices are therefore largely explained during this period by the expected actions of house buyers and property developers in response to economic factors and policy measures. This contributed to prices that closely resemble the 'fair' or 'equilibrium' value of property in the housing market[7].

[7] The 'fair' or 'equilibrium' price for a house should be equal to the discounted value of future services that one would derive from the property. In the short run, however, house prices could deviate from the 'fair' or 'equilibrium' values due to shocks or some unique features of the property.

3Q 2010 to 2Q 2012
During this sample period, house prices increased at a higher rate, averaging 9.9% annually. Similar to the previous sample period, real economic activity, consumer sentiments, demographic changes and consumer price inflation continued to influence the evolution of house prices. In addition, the following variables were also found to be significant:

(i) Macroprudential measures
In late 2010, the imposition of a loan-to-value (LTV) ratio of 70% on individuals with more than two housing loans had a dampening effect on the increase in house prices and also contained short-term expectations and speculative activity. The annual growth in lending to individuals with three or more housing loans declined sharply, from 14.5% in November 2010 to 1.9% in December 2012 (Chart 3).

Chart 3

Number of Borrowers with Multiple Housing Loan Accounts

Source: Bank Negara Malaysia

(ii) Lagged value of house prices
Previous house prices had a positive impact on current house prices. This contrasts with the period preceding 3Q 2010 when the variable was found to be statistically insignificant. This could be explained by the large increases in house prices over a short period of time which may have impacted the way economic agents respond to new information in the pricing of properties. Theoretically, in a situation where new information on economic and financial activity is lagging or costly to acquire within a very short time, some economic agents may form extrapolative expectations[8]. By 2Q 2012, house prices had increased by 33% from the observed lows in 1Q 2009. This could have encouraged economic agents to believe that house prices will continue to rise, leading some of them to engage in over-investments and speculative activities in order to reap the higher expected return on investments. The resultant additional demand particularly in an environment of an intensified search for higher yield, in turn, feeds into higher prices of houses.

[8] For a discussion on this concept, see Brunnermeier, M.K. and Oehmke, M. (2012), 'Bubbles, Financial Crises and Systemic Risk', National Bureau of Economic Research, NBER Working Paper Series, No. 18398.

Conclusion

The analysis shows that the increase in house prices over the period 2001 to 2012 has been largely driven by macroeconomic factors, and to a lesser degree financial variables, Government regulations and policies, and previous values of house prices. Economic growth, changes in demography and inflation are the main drivers of house prices as observed throughout the period of the study. In the more recent period, house price developments have shown some divergence from the explanatory variables observed in earlier periods, indicating the possibility of early signs of the build up of risks from over-investments and speculation in certain preferred locations. The role of lagged house prices, though having a smaller effect relative to other factors in driving the recent steeper increase in house prices, will require continued close monitoring and where appropriate, targeted actions to address any market distortions and ensure the continued affordability of housing.

It is important to note that the recent steeper increase in house prices in Malaysia has not been influenced by changes in banks' credit policies. This was the conclusion of the IMF in a separate assessment of price developments in the Malaysian housing market in 2012, which showed that the increase in the rate of loans for the acquisition of residential property has remained stable relative to current and future expectations of borrowers' income, and general conditions in the credit market. This further supports the Bank's assessment that risks to financial stability from house price developments remain modest. While the growth momentum in lending for purchase of residential properties was sustained after 2010, the implementation of the LTV ratio by the Bank had the intended effect of moderating bank lending associated with purchases of residential property for investment and speculative purposes, while preserving access to financing for genuine home purchasers. Together with recent measures by the Government to raise the RPGT (with effect from 1 January 2013), increase housing supply and improve public transportation, these measures should continue to support a more sustainable trend in house prices going forward.

Macroprudential and Microprudential Applications of Stress Testing in Malaysia

Stress testing is an integral component of the Bank's financial stability framework. Used in conjunction with other microprudential and macroprudential assessment tools, stress testing supports the Bank's financial stability assessments and facilitates pre-emptive policy actions through forward-looking examinations on the performance of banks' capital and liquidity positions under various adverse market conditions and the robustness of their contingency plans. Since the late 1990s, stress testing applications have evolved to provide a wider coverage of risks and include multi-faceted approaches, reflecting the increasing complexity and interdependency of systemic and institutional risk dimensions.

Stress tests have been more widely used for some time now by financial institutions to formulate business strategy and planning, for capital management, and to set an institution's risk appetite and limits. Experience with the use of stress tests during the Global Financial Crisis also demonstrates the importance of their informational value to markets during times of stress – both on the extent of institutional soundness of banks and on the potential for wider spillovers to the financial system. As observed during the crisis, such information can contribute towards significantly reducing market uncertainty, especially under stressed conditions, and potentially, the cost of resolution.

This article provides an overview of the Bank's stress testing framework, covering the main approaches used and the key features of the design and application of stress tests.

Multiple and Integrated Applications

The Bank's approach to stress testing combines top-down and bottom-up approaches both to detect and assess vulnerabilities in the financial system as a whole, and to identify specific risks to individual financial institutions. A top-down approach to stress testing is one which applies a defined set of macroeconomic scenarios and related stress factors to aggregate portfolios of exposures in order to identify vulnerabilities in the financial system which can arise from changes in economic and financial conditions. In contrast, a bottom-up stress testing process adopts a more granular approach that is tailored to an institution's specific portfolio mix and historical experience, and allows room to capture variations in institutional responses to changes in market conditions. Given the margin for error in modelling techniques and key assumptions used in the conduct of stress tests, and the inherent limitations of both top-down and bottom-up approaches, the combination of multiple stress testing approaches in Malaysia serves to support a more robust assessment of systemic stability and institutional soundness. These approaches are illustrated in Diagram 1 and elaborated below.

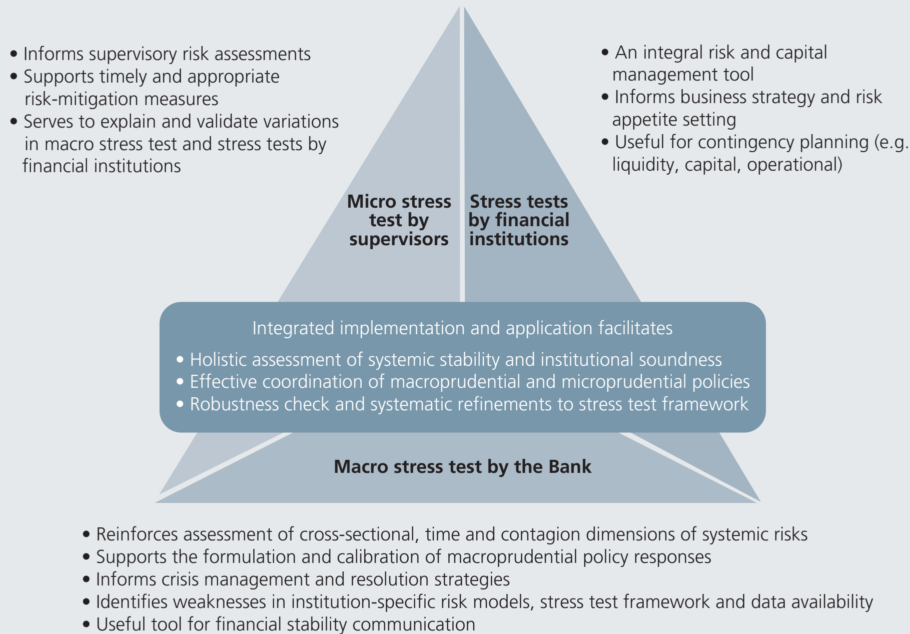
(i) Macro stress test by the Bank

The macro stress test represents a top-down approach that is used to (i) assess system-wide resilience and behaviour under exceptional but plausible risk events; (ii) identify systemic risks and vulnerabilities, including cross-sector or cross-institution contagion, and the potential spillovers to the broader economy; and (iii) determine potential system-wide capital and liquidity needs under stress conditions.

Macro stress tests were first used during the Asian Financial Crisis in 1997/98 to form the basis for decisions on the formulation of a holistic resolution strategy to address the crisis. By projecting the potential deterioration in asset quality and impairment in the revenue generating capacity of banks across the financial system, the stress tests facilitated the assessment of the potential scale, scope and financial resources required of the institutional arrangements that were put in place at that time. Information obtained through the stress tests on the potential losses and capital shortfalls was critical in shaping the recapitalisation and asset carve-out strategies which followed. Since then, macro stress tests have become a regular feature of the Bank's financial stability assessments and are used to evaluate pre-emptive actions by the Bank to address emerging risks well before conditions deteriorate to the point of an imminent

Diagram 1

Multiple Approaches and Applications of Stress Testing



system-wide crisis. When used in conjunction with sensitivity analyses and other early warning indicators, the macro stress tests provide valuable information for deciding on the nature, timing and calibration of macroprudential policy responses. The results of macro stress tests are deliberated at the Financial Stability Committee of the Bank.

(ii) Stress tests by financial institutions

Stress testing by financial institutions has been a prudential requirement since 1998, a bottom-up approach to complement the macro stress test. When first introduced, these stress tests were conducted by financial institutions using a set of scenarios and shock parameters prescribed by the Bank. This offered an opportunity for financial institutions to build internal stress testing capabilities while providing useful, if relatively generic, insights into potential vulnerabilities of individual institutions to risks. This prescriptive approach was substituted in 2007 with a more customised approach following significant improvements in the risk management capacity, infrastructure and practices of financial institutions over time. Today, financial institutions are required to conduct stress tests that reflect the unique risk profiles and major risk drivers of their business. Such tests must comply with the Guidelines on Stress Testing issued by the Bank which set out expectations on the design, implementation and governance of the stress testing process by financial institutions. In addition, to bolster the efficacy of stress tests as a risk and capital management tool, the tests must satisfy the 'use-test' criteria, where financial institutions must be able to demonstrate that the stress test results are actually used by management for the purpose of business planning, setting of risk appetite and limits, and for the management of capital and liquidity. The results of the stress tests are submitted bi-annually to the Bank and used by the Bank to validate and enrich the micro stress tests undertaken by supervisors. The stress tests by financial institutions also feed into and complement the conduct of forward-looking multi-year stress testing as part of the Internal Capital Adequacy Assessment Process (ICAAP) for the purpose of determining institutional regulatory and internal capital targets.

(iii) Micro stress tests by supervisors

Micro stress tests by supervisors, also a bottom-up approach, are conducted primarily to assess vulnerabilities and the risk-bearing capacity of individual financial institutions. Forward-looking information derived from these tests has become increasingly important to better inform the Bank's supervisory assessments and interventions which aim to identify and address risks in a timely manner. Results of the tests are deliberated during regular engagements between supervisors and financial institutions to obtain a view on the adequacy of an institution's contingency plans, risk mitigation strategies and financial buffers. Where relevant, the Bank may, based on these engagements, require institutions to increase capital and liquidity buffers, including through adjustments to dividend payments or by reining in expansion plans. In addition, micro stress tests serve to cross-check the results of macro stress tests and stress tests by financial institutions. Supervisory micro stress testing serves a particularly important role in (i) reducing the risk of overdependence on complex and computationally-intensive models; (ii) identifying institution-specific vulnerabilities and cross-institutional interlinkages that might be obscured in aggregated data and system-wide estimations; and (iii) encouraging financial institutions to observe an appropriate degree of prudence in conducting internal stress tests and to maintain an adequate focus on tail-risks.

The three stress testing approaches are closely coordinated and integrated within the Bank. The macro stress test provides an important robustness check to bottom-up tests, while achieving consistent applications of stress factors across all institutions to support the identification of system-wide vulnerabilities. It can also promptly surface weaknesses in the data quality and risk management models and practices of individual financial institutions. It also fosters a deeper understanding of the impact of collective behavioural responses to stress and the potential for second-order effects arising from systemic linkages between the financial system and the macroeconomy, thus contributing to more comprehensive risk assessments by supervisors and financial institutions.

Micro stress tests, in turn, draw on and refine the shock parameters used in macro stress tests to provide a better depiction of institution-specific risk profiles, taking into account different degrees of each institution's sensitivity and behavioural responses to common risk factors. This reflects an institution's specific internal risk control and business strategies, while preserving a level of consistency in application (through a reference to macroeconomic scenarios provided by macro stress tests) and an appropriate focus on tail-risks. Coordination between the stress tests also works in the other direction, where inputs from micro-level supervisory stress tests are used to validate and refine the system-wide calibration of shock parameters used in macro stress tests. Combining the forward-looking analyses from these multiple approaches provides a sound basis for the Bank's risk outlook and policy decisions.

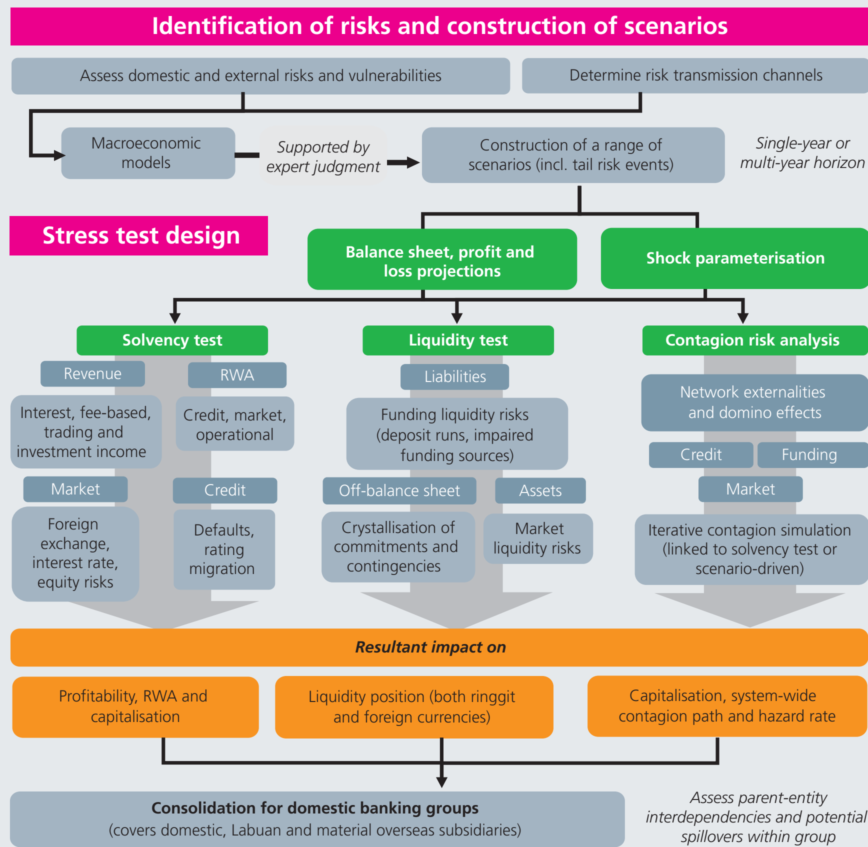
Key Features of the Bank's Stress Testing Framework

(i) Identification of risks and construction of stress test scenarios

For the purpose of the stress tests, three scenarios – baseline, adverse and extreme – are constructed from a range of economic and financial indicators using macroeconomic modelling techniques that capture domestic and global economic conditions and the channels through which risks are likely to be transmitted based on defined relationships between different economic sectors (Diagram 2). The stress scenarios are generally applied over a one-year horizon (except where the Bank judges that institution-specific circumstances call for an extended horizon, for example to more fully capture the impact of stress, or to assess the potential impact of planned material changes in strategy). In the stress tests conducted for the Financial Sector Assessment Program in 2012, the time horizon was extended to five years to assess the resilience of the banks to different recovery paths of the economy following an economic shock event. By applying econometric models and statistical approaches, the identified scenarios and corresponding macro-financial variables are used to calibrate shock parameters for all risk areas covered in the stress tests and then applied to project financial institutions' balance sheets.

Diagram 2

Key Elements and Processes of the Bank's Stress Testing Framework



Three principal stress tests are conducted – a solvency test, a liquidity test and an analysis of contagion risk. To minimise model risks associated with non-linearities and structural breaks that are typically observed during severe stress periods, expert collective judgment and cross-country historical experience are used in the calibration process to mitigate the underestimation of shocks.

(ii) Scope of application

Macro and micro stress tests are conducted at the entity level and consolidated at the group level for banking groups. The capacity of the parent entity to absorb losses is further assessed if the results of entity-level stress tests of any subsidiary within the group breach the minimum thresholds. In this event, the shock parameters are further refined to take into account parent-entity interdependencies and potential contagion or spillovers within the group. Stress tests are also performed on the material overseas operations of financial institutions based on macroeconomic and financial scenarios and shock parameters that are calibrated to the operating environment in the host jurisdictions and the risk profiles and internal controls of such operations.

(iii) Solvency stress test

The scenario-based solvency stress test incorporates simultaneous shocks on revenue, credit and market risk exposures. These shocks are simulated at the system-wide or institutional level using the Bank's internal satellite models. Revenue shocks are applied by simulating the effect

of slower loan repayments and lower income from securities held and proprietary trading activities on gross operating, trading and investment income. Credit risk shocks typically involve simulating the impact of macroeconomic conditions and changes in the credit quality of major asset classes on profit (through increased provisions and write-offs due to changes in debt servicing capacity) and capital (through higher risk weights applied to exposures to provide for unexpected losses). The relevant shocks include (i) an increase in the probability of default and loss given default for various financing segments; (ii) accelerated credit rating migrations and higher corresponding defaults on fixed income securities and rated business loans; and (iii) higher utilisation of undrawn commitments and contingencies, combined with higher defaults during stress periods. To simulate potential mark-to-market and valuation losses from trading book portfolios, shocks are applied to interest rate, equity and foreign exchange risk exposures. Interest rate risk shocks include (i) the steepening or flattening of yield curves; (ii) the widening of credit spreads between Malaysian Government Securities and private debt securities; and (iii) increasing basis risks. Foreign exchange shocks simulate the effects of extreme volatility in the exchange rate of multiple major currencies against the ringgit on financial institutions' net long or short positions, while equity shocks are translated into extreme declines in the equity market and applied to financial institutions' proprietary equity holdings and share margin financing portfolios.

(iv) Liquidity stress test

The liquidity stress test involves multi-factor cash flow analyses to assess the potential liquidity shortfall of banks within a one-month horizon for both ringgit and major foreign currency-denominated assets and liabilities. The scenarios feature a combination of market-wide and institution-specific stress events such as rating downgrades and acute capital erosion leading to heightened risk aversion. On the liability side, runs on deposits are simulated based on the historical worst run-off rates experienced by financial institutions, covering negotiable instruments of deposit (NID), and retail, corporate and short-term deposits. The potential impact from a sudden drying-up of interbank funding and impairment of foreign currency swap markets is simulated by restraining the rollover of interbank borrowings and foreign exchange swaps payable maturing within a specified time horizon. In addition, the drawdown of commitments and contingencies is assumed to increase to capture potential outflows from all off-balance sheet liquidity or credit facilities extended by banks. On the asset side, an erosion in the value of liquefiable assets to buffer against liquidity shocks, differentiated by types of securities, is simulated using market risk shocks applied in the solvency test.

(v) Network contagion analysis

The Bank's stress testing framework also includes an assessment of potential contagion effects from simultaneous credit and funding shocks in the interbank market. This is used to identify and assess the effects of systemic linkages associated with banks that are 'too big to fail' or 'too interconnected to fail'. The approach applies an analysis of network externalities arising from interbank relationships within the banking system to measure the extent of spillover (or domino) effects propagated by simulated bank failures in the interbank market. This is achieved by tracking the contagion path and quantifying potential capital losses arising from iterative credit and funding shocks. The simulation begins with a particular bank failure or a set of bank failures (defined as trigger banks). Two forms of contagion shocks are then simulated, disregarding any policy responses by the Bank. The first is a credit shock, in which the trigger banks default on interbank borrowings from all banks, compelling these banks to absorb losses. The second contagion effect is that of a funding shock in which the trigger banks cease to provide interbank funding, causing liquidity strains for the banks that they fund. Affected institutions are assumed to replace the 'lost' funding, through asset fire sales to restore their balance sheets. Depressed asset prices in turn trigger a wide-spread decline in the market value of other banks' portfolios. The simultaneous credit and funding contagion shocks are simulated in an iterative manner until no additional bank falls below the specified solvency threshold. By observing the reverberation of credit and funding shocks, this stress test seeks to identify (i) banks that are significant sources of contagion; and (ii) banks that are highly vulnerable to contagion effects.

2012

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83 Talent Development in the Financial Sector

During the year, the Bank forged ahead with medium- to longer-term initiatives to develop and strengthen the financial sector in facilitating and catalysing Malaysia's transition towards becoming a high value-added, high-income economy. Along with ongoing enhancements to the regulatory and supervisory framework, a key focus of the Bank's development initiatives has been on promoting sound conditions for the intermediation of funds to new growth areas and strengthening interlinkages with regional and international economies as outlined in the Financial Sector Blueprint 2011-2020. The new Financial Services Act 2013 (FSA) and Islamic Financial Services Act 2013 (IFSA) are critical to these efforts. Firstly, the legislation better supports effective regulation and supervision in anticipation of a more sophisticated and expanding financial system.

The Bank's development initiatives focused on promoting sound conditions for the intermediation of funds to new growth areas and strengthening interlinkages with regional and international economies

Secondly, it maintains a clear focus on risk and fair conduct towards consumers while allowing for differentiation between financial institutions. This, in turn, supports healthy competition and productive innovation in the financial sector. Thirdly, as the financial sector becomes more open and interconnected with the regional and global financial system, it ensures that financial sector activities will continue to support and positively contribute to the Malaysian economy. Finally, it improves regulatory efficiency by reducing unnecessary regulatory costs, while ensuring that the necessary safeguards for a sound financial system are preserved.

ENHANCING MARKET STRUCTURE

Merger and acquisition activities in the banking and insurance sectors continued to be pursued in 2012, as a more competitive environment provided the impetus and opportunities for financial institutions to gain greater scale and capacity. This resulted in some consolidation within the investment banking sector, strengthening in particular those belonging to the domestic banking groups, in anticipation of growth opportunities especially in capital market activities in the region. The total number of investment banks in Malaysia reduced from 15 to 12 as at end-2012, comprising eight bank-backed investment banks and four stand-alone investment banks. Domestic banking groups remain dominant in the banking sector, with a stable combined market share of total banking system assets (73.3%) and deposits (73.8%), affording continued support for the development of the domestic financial system and financial inclusion. The Malaysian banking sector also has a sizeable presence of foreign banks, which has contributed to a more efficient and competitive market while enhancing the breadth and depth of the financial sector. In 2012, two new foreign commercial banks commenced operations in Malaysia, increasing the total number of foreign commercial banks operating in Malaysia to 19.

Further progress was also achieved in reducing the high level of fragmentation within the general insurance industry. During the year, six more merger and acquisition schemes were completed, bringing the number of composite and general insurers down from 33 in 2008 to 23 as at end-2012. The 10 smallest general insurers now account for 25.7% of total gross premiums in the general insurance industry, from only 13.6% in 2008, substantially improving the viability and competitiveness of these institutions. The liberalisation of the foreign equity participation limit in insurance companies to 70% since 2009 has also enhanced prospects for insurers to forge value-adding joint ventures with foreign financial institutions. During the year, approval was granted to six new foreign financial institutions to negotiate for acquisitions of equity interests in

Foreign Banks in Emerging Economies: Malaysia's Perspective

In the recent two decades, the financial sectors of many countries have become more internationalised, driven by the forces of global economic integration, new technology and increased financial sector liberalisation. This trend is more pronounced in the emerging economies where foreign bank representation in the banking systems has increased from 18% to 36% between 1995 and 2009, compared to an increase of only 19% to 24% for OECD[1] countries over the corresponding period. The number of banks from the emerging economies that have expanded beyond domestic borders has also increased from 147 in 1995 to 279 in 2009[2]. The internationalisation of finance has brought about benefits by enabling greater cross-border trade and investments, facilitating more efficient mobilisation of funds as well as creating new business and employment opportunities.

Nevertheless, there continues to be a plurality of views regarding the impact of foreign bank presence in the emerging economies. While potentially contributing to financial sector development and growth through fostering increased efficiency, market discipline, access to credit, as well as more sophisticated products and services, the preference of some foreign banks to operate only in high-value, high-return customer segments have reduced the overall benefits of liberalisation. In particular, the lower-end segments would be excluded from enjoying the same access as other segments to the products and services that are being offered by such foreign banks. Excessive competition could also encourage unhealthy practices in price competition and risky lending behaviour, thus affecting the soundness of banks and increasing the risks to financial stability.

Views also differ on the impact of foreign bank participation on the stability of the domestic financial system. Research on financial crises has found that emerging countries with less developed deposit insurance systems showed evidence of reduced cross-border 'flight to quality', with depositors shifting funds to the foreign-owned banks with a local presence, instead of repatriating funds out of the country. However, there are also views that the presence of foreign banks amplifies the effects of a domestic financial crisis. Observations show that foreign banks without a strong deposit base in the host economy tend to reduce lending more than their local counterparts during periods of stress, thus exacerbating the impact of a domestic financial crisis.

The recent Global Financial Crisis also exposed new sources of risks arising from a more internationalised financial system. One channel of risk transmission that has potentially adverse implications for the host economy is deleveraging activities by foreign banks in response to losses and the contraction of lending activity in their home economies. The increased interconnectedness of emerging markets with the global economy from trade and financial linkages has amplified the speed and scale of the transmission of external shocks, thus posing a significant challenge for countries in managing and mitigating cross-border contagion risks, especially where domestic financial markets are less developed. These developments hence reinforce the importance of having clear accountabilities and cooperation mechanisms among home and host regulatory authorities in overseeing the operations of foreign banks, especially on information sharing, supervision and surveillance, institutional failure resolutions and burden sharing. This would contribute towards bridging the differences in approaches and practices of home and host regulators, which would facilitate speedier and more effective management of cross-border contagion risks.

Considerations for Foreign Bank Participation: Malaysia's Perspective

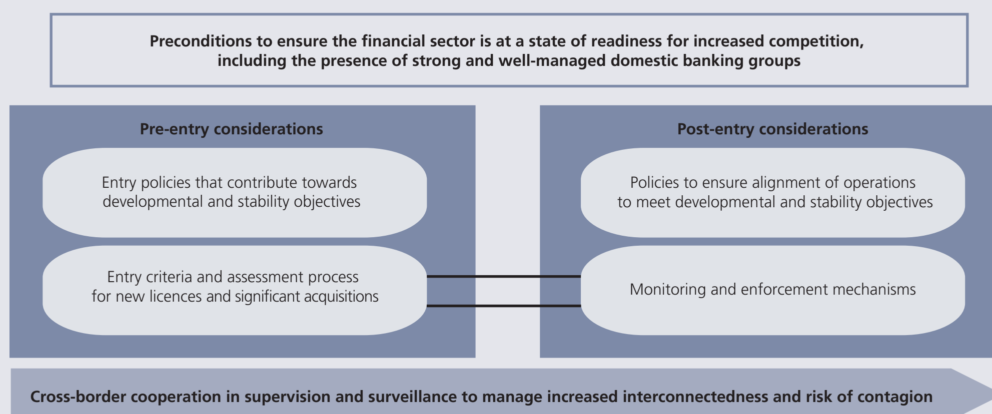
Taking these views together, a key question that requires careful consideration by the emerging economies in developing policies on foreign bank participation is the extent of net benefits accruing to the local economy. A key objective of the Bank in this regard has been to minimise the risks, while allowing maximum benefits to be gained from financial sector liberalisation and ensuring that the

[1,2] Classens, K. and van Horen, N. (2012) 'Foreign Banks: Trends, Impact and Financial Stability', IMF Working Paper, International Monetary Fund.

growth of the financial sector as a whole is commensurate with real economic growth. This entails consideration on both stability as well as developmental objectives. The remainder of this article will discuss Malaysia's experience and policy considerations in liberalising the financial sector. This is summarised in Diagram 1.

Diagram 1

Key Policy Areas in Financial Sector Liberalisation in Malaysia



The Malaysian financial system has long been home to foreign-owned banking institutions, with foreign banks being pioneers in the development of the Malaysian financial system more than a hundred years ago. The oldest bank in Malaysia was a foreign bank that was established to meet the financial requirements of the early European traders. Other major foreign banks followed suit as the strong prospects for growth in trade drew keen interest in establishing presence in Malaysia. Since then, foreign banks have become key players with a significant contribution to the Malaysian economy. Today, foreign banks account for approximately 27% of market share in the assets of the banking sector. Several foreign banks with a sizeable presence in Malaysia have also acknowledged Malaysia's growth potential and connectivity with other economies, and have positioned Malaysia as a priority market within the Asia-Pacific region.

Malaysia has always adopted an approach towards liberalisation that takes into consideration the capacity and readiness of the financial sector to benefit from it, while promoting orderly growth and development of the financial sector in a liberalised environment. Greater foreign participation has been sequenced and managed following the establishment of the necessary preconditions (Diagram 2), as articulated in the Financial Sector Masterplan 2001-2010. Central to this approach is a continued presence of strong and well-managed domestic banking groups and a comprehensive financial safety net. In this regard, efforts to strengthen the resilience and competitiveness of domestic financial institutions have led to the emergence of strong Malaysian-owned banking institutions, with significantly improved performance indicators over the years (Table 1).

A key expectation from increased liberalisation is that strong and well-managed foreign banks will contribute to the orderly growth and development of the Malaysian financial sector. The new Financial Services Act 2013 and Islamic Financial Services Act 2013 further elaborate and provide greater transparency on the criteria for market entry by codifying the key expectations on the prudential soundness and quality of the value propositions put forward by prospective entrants (Diagram 3). These considerations are common across many countries that have liberalised and open financial systems, including developed economies.

Diagram 2

Preconditions to Financial Sector Liberalisation in Malaysia

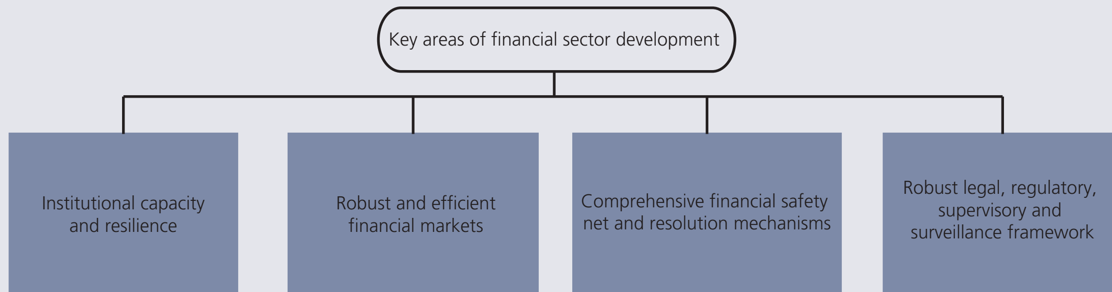


Table 1

Improved Performance Indicators by Domestic Commercial Banks

	2000		2010		2012	
	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign
Capitalisation						
Risk-Weighted Capital Ratio (%)	11.7	14.0	14.2	14.6	15.0	16.1
Asset quality						
Net Impaired Loans Ratio (%)	9.2	5.7	2.6	1.2	1.5	1.2
Profitability						
Return on Assets (%)	1.1	2.1	1.6	1.6	1.7	1.5
Return on Equity (%)	13.3	26.4	16.7	19.6	17.4	17.7

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

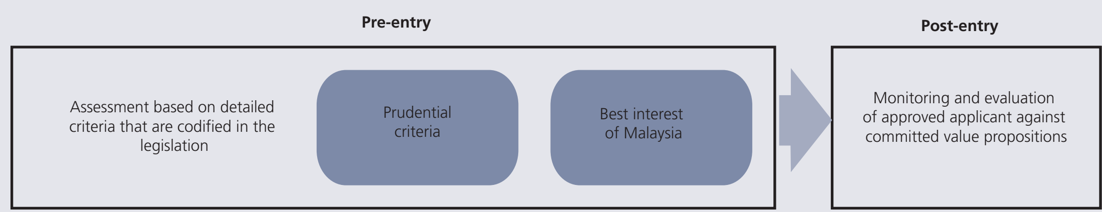
Source: Bank Negara Malaysia

Another key requirement for foreign commercial banks, which equally applies to domestic banks, is to locally incorporate in Malaysia. This is to provide a greater degree of protection to Malaysians through having a permanent commitment of capital that safeguards the sustainability and continuity of the domestic operations, and having a dedicated board of directors with accountabilities and fiduciary duties that are specific to the local entity. Throughout the Global Financial Crisis, the operations of the locally-incorporated foreign banks in Malaysia have remained resilient, with high capitalisation levels, sustained credit quality and positive levels of profitability.

Foreign banks have been accorded operational flexibilities to expand their network through electronic channels, agent banking and the establishment of a further number of physical branches. This has enabled the foreign banks to have an important role in the financial intermediation process and contribute to the functioning and growth of the economy. Moving forward, similar to domestic banks, foreign banks will be allowed to expand their branches more freely, while maintaining a balanced distribution of branch locations by all banks to support the needs of the underserved areas. This would be implemented with measures to further accelerate the development of alternative delivery channels which would promote greater convenience and efficiency in the provision of financial services to consumers.

Diagram 3

Assessment and Evaluation of New Licences and Significant Shareholders



Prudential criteria:

- Character and integrity of applicant or reputation for operating with good governance and integrity standards;
- Soundness and feasibility of applicant's business plans;
- Nature and sufficiency of the financial resources of the applicant;
- Business record and experience of the applicant;
- Transparency and supervisability of the applicant's group structure;
- Whether the institution will be operated by persons with suitable competence and experience; and
- Whether the business is detrimental to public interest.

Best interest of Malaysia criteria:

- The effect of the investment on the level and nature of economic activity in Malaysia;
- The contribution towards enhancing international trade and investment linkages between Malaysia and other countries;
- The effect of the investment on the stability of the financial system; and
- The degree and significance of participation of Malaysians in the financial sector. This includes the continued presence of strong and well-managed domestic banking groups that continue to mobilise more than 50% of resident deposits.

In view of enhanced foreign participation in the financial sector, the pace of cross-border cooperation in surveillance and supervision has intensified over the last few years. Malaysia proactively collaborates with home country supervisory authorities to ensure that pre-emptive actions can be taken to preserve financial stability in the event of an imminent shock. This includes developing arrangements for information exchange and supervisory cooperation through memoranda of understanding, as well as participating in supervisory colleges relating to these internationally-active banks. These efforts are consistent with the broad principles recommended by the Financial Stability Board on cross-border cooperation in the management of financial crises.

existing insurance companies. The participation of well-established and strong foreign financial institutions in the domestic insurance market will contribute towards elevating the performance and capacity of existing insurers through the transfer of expertise and enhanced financial resources.

In the life insurance sector, an important outcome of a more competitive market with a broad representation of diverse institutions is the introduction of an expanded product range for individuals to better plan and obtain financial security for their retirement, education and health requirements. With economic progress and changes in the demographic structure in Malaysia, financial solutions for retirement have become increasingly important to meet the demands of the maturing population. Hence, a sustainable pension system for retirement is important to promote a sufficient standard of living in retirement. To spur the growth of the pension business, the Government granted an 8% tax exemption on investment income in a deferred annuity fund to life insurers and takaful operators. This complements the existing 10-year tax relief of RM3,000 on voluntary contributions to insurance and takaful annuities. Collectively, these tax incentives are expected to translate into lower insurance premiums for the benefit of policyholders.

The first phase of the new motor cover framework was implemented with only a small financial impact on consumers

In the general insurance industry, the first phase of the new motor cover framework was implemented in January 2012 as planned. This involved the first tranche of adjustments to the premium tariff to more closely reflect underwriting risks. Although the previous review was conducted in 1978, the commitment is for gradual adjustments. Third party policy premiums for the majority of motorcycles and private cars were adjusted by between RM2 to RM4 and RM6 to RM34, respectively per annum, thus having only a small financial impact on consumers. While the adjustments remain substantially short of adequate pricing levels that are commensurate with the loss experience arising from motor bodily injury claims against insurers, this first review represents a significant step in the transition towards a market-based pricing framework by 2016.

The Bank has been clear from the onset that premium adjustments alone are inadequate to address the considerable challenges confronting the motor insurance industry. To provide the necessary conditions for the sustainable provision of motor cover over the longer term, the new motor cover framework therefore has equal emphasis on measures aimed at improving the efficiency of claims settlement processes and controlling claims costs. This entailed close coordination with multiple Government agencies, the insurance industry, the legal fraternity, and consumer and transport associations which was facilitated through a joint working committee chaired by the Bank. The Committee has facilitated the following initiatives:
- Reducing the interest rates used for judgment awards from 8% per annum to not more than 5% per annum;
- Promoting wider use of court mediation for dispute settlements;
- Strengthening collaboration between Government hospitals and insurers to improve the quality and authenticity of medical reports submitted to insurers for claims purposes; and
- Improving the turnaround times for producing police and medical reports through more transparent commitments to standard timelines.

The early impact of these initiatives were observed in the shorter time taken for insurers to pay motor bodily injury claims, which improved by up to three months from the date that a claim is filed with complete documentation. Plans to establish a 24-hour nationwide toll-free call centre to provide immediate roadside assistance to road accident victims will also provide useful aid to consumers, while further expediting claims settlements and reducing claims fraud in the event of a road accident. The call centre will be operational in the first half of 2013.

Plans to review regulatory requirements applicable to the cost structures for life insurance and family takaful businesses which are subject to the Guidelines to Control the Operating Costs of Life Insurance and Family Takaful Businesses (including investment-linked business) were taken forward during the year. The Guidelines were first

introduced in the 1990s with the aim of instilling greater financial discipline among insurers while promoting higher efficiency levels. Over the years, the Guidelines have had an important role in containing the operating costs of insurers and delivering better value to policyholders. The expense ratio in the life insurance industry (as measured by total expense incurred against earned premium income) improved significantly from 44% in 1995 to 27.5% in 2011. This was achieved while ensuring that incentive structures for agents, which are also regulated under the Guidelines, worked to support the objectives of increasing insurance penetration in Malaysia and encouraging the professional development of agents. In this recent decade, the insurance penetration rate (as measured by the ratio of the total number of life insurance and family takaful policies to the working population) has increased from 40% in 2002 to 67% in 2012, while the average annual income of a full-time insurance agent has increased from RM65,000 to RM91,000. The number of full-time agents has also increased in proportion to the total number of agents, from 23% in 2002 to 39% in 2012.

A more comprehensive regulatory and supervisory framework is now in place for the insurance industry, which includes substantially strengthened policies for the sound financial management of insurers (such as risk-based capital requirements) and the protection of policyholders (in particular, specific requirements to provide suitable advice to consumers and ensure that policyholders' reasonable expectations under policies sold to them are met). A more competitive insurance market has also evolved with wider distribution options including bancassurance, and improved disclosures that provide consumers with a better understanding on the products in the market. Taken together, these developments provide the conditions for the Bank to review the Guidelines, with the view of allowing market forces to work more effectively to encourage innovation and the further development of alternative distribution channels, while also providing stronger incentives for the agency force to upgrade itself to better serve policyholders as the financial needs of Malaysians evolve. The first phase of the review was implemented on 1 January 2013 and involved a revision to existing limits on agency benefit schemes and agency financing facilities to attract and retain the best talent. This is being followed by a review of the cost controls, including agency commission structures and payment of agency-related expenses, together with measures to minimise market dislocations and preserve value to policyholders.

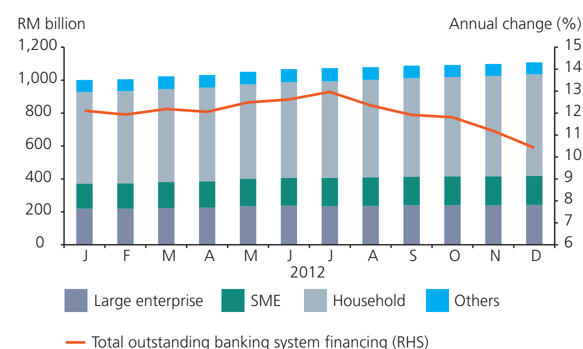
ENSURING EFFECTIVE AND EFFICIENT INTERMEDIATION OF FUNDS

Despite a more challenging economic environment in 2012, financial intermediation activities continued to be well-supported by the financial sector. Total outstanding banking sector financing increased by 10.4% to RM1,108 billion as at end-2012, while the approval-to-application ratio for the year remained stable at 50.9%.

Financing by banking institutions and development financial institutions (DFIs) to small and medium enterprises (SMEs) increased by 14.3% to account for 40.5% or RM189 billion of total business financing with approval rates remaining stable above 83%. In addition, SMEs continued to benefit from existing special funds under the Bank, which provide financial assistance to SMEs, namely the Fund for Food, Bumiputera Entrepreneur Project Fund-i, Fund for Small and Medium Industries 2, New Entrepreneurs Fund 2, and the Micro Enterprise Fund. As at end-2012, total financing approved under these funds amounted to RM22.6 billion benefitting over 54,000 SMEs. In April 2012, the Islamic financial industry introduced a new RM2 billion Shariah-compliant SME Financing Scheme with support from the Government. Under the Scheme, the Government provides a subsidy of 2% on the profit rate for financing provided by Islamic banks to SMEs for a period of up to five years. With the participation of 13 Islamic banks in the Scheme, SMEs now have broader access to a

Chart 2.1

Outstanding Banking System Financing



Source: Bank Negara Malaysia

Shariah-compliant alternative for financing. As at end-2012, financing amounting to RM65 million has been approved under the Scheme for SMEs in the various economic sectors. Financial institutions have continued to maintain a strong focus on the SME sector in their financing activities with several banks continuing to progressively raise financing targets for SMEs and investing resources to enhance capacity to further grow their SME financing portfolio. In addition, banks have established dedicated SME units to enhance their reach and services to SMEs. Lending indicators for SMEs also showed an increase in the average value of financing approved for SMEs from RM570,000 to RM600,000. Combined with the various capacity building measures for SMEs taken by the SME Corporation Malaysia and SME associations, these developments continue to significantly improve the financing prospects for Malaysian SMEs.

The financial sector continued to mobilise funds to support the financing needs of micro-enterprises, which constitute over 75% of businesses in Malaysia. Through the *Pembiayaan Mikro* scheme that was launched in 2006, total financing amounting to RM870.3 million was channelled to more than 68,000 microfinance accounts. During the year, the financial industry also introduced more flexible microfinancing products, which cater to the irregular or seasonal cash flow streams typically experienced by micro-enterprises, which had previously prevented such enterprises from qualifying for financing. This flexibility enables the prompt drawdown of financing in times of need, with higher loan ceilings for borrowers that demonstrate responsible credit behaviour.

Access to financing for green technology initiatives continued to improve. As at end-2012, 78 companies had successfully secured funding amounting to RM1.1 billion from the Government's Green Technology Financing Scheme, up from RM0.6 billion as at end-2011. The fund's capacity of RM1.5 billion will be further boosted by an additional RM2 billion allocated by the Government for the Scheme under the Budget 2013. This will be complemented by the planned roll-out in 2013 of specialised training programmes on credit assessments for green technology financing projects by the Institute of Bankers Malaysia (Institut Bank-Bank Malaysia, IBBM), in collaboration with the Bank and the Malaysian Green Technology Corporation. A more pronounced focus on training represents an important strategy to overcome the lack of familiarity and relevant expertise within financial institutions to accurately identify, measure and manage the risks associated with green technology projects, which has been a key impediment to greater access to financing for green technology initiatives. Further visibility among banking institutions for green technology financing opportunities was also promoted through the Green Technology Financing Bankers' Conference jointly organised by the Bank and IBBM in October 2012. Banking institutions committed during the Conference to several measures to further enhance access to financing for green technology ventures. These include:

- Programmes by the industry to raise awareness on the importance of green technology solutions among businesses and the general public;
- Improving the quality of data on green technology financing performance reported to the Bank, which will help track the involvement of financial institutions in green technology financing; and
- Increasing investments in human capital development programmes to build expertise among bankers and develop higher education courses to develop a pool of experts in green technology financing.

Going forward, the development and sustainability of a vibrant and dynamic green technology and clean energy ecosystem extends beyond financing initiatives and necessitates a holistic strategy by the Government and other key stakeholders

Going forward, the development and sustainability of a vibrant and dynamic green technology and clean energy ecosystem extends beyond financing initiatives and necessitates a holistic strategy by the Government and other key stakeholders. This includes, for example, the realignment of fossil fuel subsidies to support a more rapid transition towards green technology by strengthening incentives for higher private sector investment in green technology.

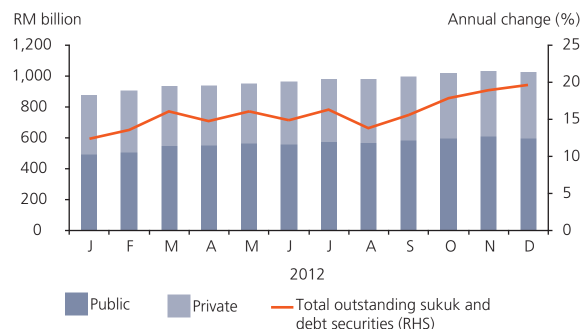
DFIs continued to have an important role in supporting the growth and development of strategic economic sectors, including agriculture, infrastructure, SMEs, as well as export-oriented, capital-intensive and high-technology industries. In 2012, financing by DFIs under the purview of the Bank registered a strong growth of 10.1% to RM111.1 billion as at end-2012, driven mainly by financing to the business services, construction, utility and agriculture sectors. The risk profiles of DFIs improved further, as evidenced by a decrease in the gross impaired loans ratio to 6.3% (2011: 7.3%). Their capital position remained sound, with the risk-weighted capital adequacy ratio at 22.7% as at end-2012 (2011: 23.3%). In December 2012, the Bank strengthened requirements on financial reporting and disclosures by DFIs to improve the transparency of the performance of DFIs against their mandates, and provide greater clarity on the risk-sharing arrangements between DFIs and the Government. These are contained in the Guidelines on Financial Reporting Requirements issued to DFIs, which require DFIs to publish (i) information on their mandate, strategic objectives, action plans and key performance indicators; (ii) the performance of schemes managed by the DFIs; and (iii) the future outlook for the strategic sectors supported by the DFI, including its broad strategies to grow in these sectors. These initiatives are important to ensure that the performance of DFIs is continuously strengthened to enable them to meet their mandates.

DEVELOPING DEEP AND VIBRANT FINANCIAL MARKETS

The debt securities market continued to be an important source of funding for corporations, breaching RM1 trillion (or 110% of GDP) in 2012 in terms of total outstanding value of debt securities issued. Total financing through the corporate debt securities and sukuk markets increased further during the year, extending the trend which has seen a larger share of financing by businesses being met through the debt market compared with the banking system since 2002. The debt securities market now accounts for 61% of total outstanding corporate financing (2011: 58.3%). Malaysia also has the largest debt securities market in the Southeast Asian region and remains among only two countries in Southeast Asia with a significant private debt securities market that is almost as large as the public debt market.

Chart 2.2

Outstanding Sukuk and Debt Securities



Source: Bank Negara Malaysia

Chart 2.3

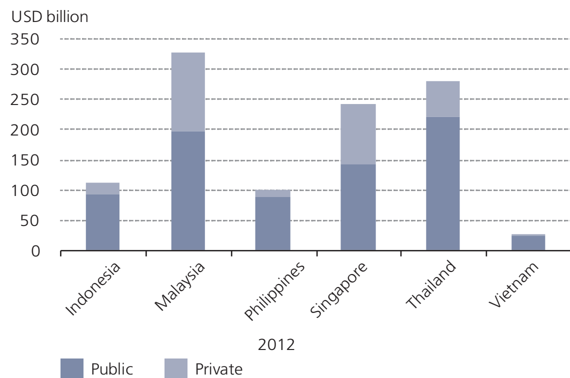
Sukuk and Debt Securities Issuance (Public and Private)

Source: Bank Negara Malaysia

During the year, Danajamin Nasional Berhad, Malaysia's only financial guarantee insurer, approved RM2.8 billion in guarantees for bond and sukuk issuances. This increased the total guarantees approved to date to RM10.1 billion as at end-2012. Of these, RM4.9 billion in bonds and sukuk have been issued (2011: RM3.2 billion). Although general risk aversion has subsided since the time of Danajamin's establishment in 2009, Danajamin continues to have an important role in enhancing access to the bond market for issuers seeking to raise longer-term funds at reasonable cost. Credit enhancements provided by Danajamin continued to benefit issuers from diverse economic sectors, including the construction, property, plantation, oil and gas, and manufacturing sectors, with sizeable bond issuances typically exceeding RM100 million. Danajamin's co-guarantee

Chart 2.4

ASEAN Outstanding Local Currency Debt Securities Market



Source: Asian Bonds Online

and syndicated guarantee arrangements with commercial banks, introduced since 2011, saw further collaborations pursued with banking institutions during the year on four new schemes. Such arrangements have enabled commercial banks to participate in larger bond issuances with longer maturities.

Danajamin has continued to invest heavily in strengthening its risk management capabilities, with a particular focus on capital and liquidity management policies and processes, to support its role and ensure its continued ability to meet guarantee obligations. Danajamin's guarantee exposures are also subject to prudential capital and liquidity requirements imposed by the Bank. To further enhance Danajamin's capacity in supporting the genuine needs of businesses, particularly in priority economic sectors, for efficient access to funding from the capital market, the Government has allocated an additional RM400 million to boost Danajamin's capital over the next two years.

In the money market, the Bank continued to introduce new products to facilitate more efficient liquidity management by Islamic financial institutions. Malaysia has a deep and vibrant Islamic money market, with 16 approved Islamic financial institutions participating in the interbank market and an annual trading volume exceeding RM1 trillion. In May 2012, the Bank launched another new Islamic monetary instrument, the Collateralised *Murabahah*. This low credit-risk financial instrument combines *murabahah* financing transactions with sukuk as the pledged asset, enabling interbank transactions to be conducted on a collateralised basis. The instrument can also be pledged to the Bank for liquidity support. To date, the Bank has signed Collateralised *Murabahah* agreements with 11 Islamic banks.

As probes by financial regulators into rate-rigging practices escalated in key financial centres across the world, the Bank took steps to further strengthen expectations on the internal oversight processes within banking institutions to prevent the manipulation of rate submissions in the setting of financial market benchmark rates. In Malaysia, concerns over the potential for rate manipulation in the domestic financial markets are largely mitigated by the clear roles and responsibilities imposed on approved Kuala Lumpur Interbank Offered Rate (KLIBOR) contributors appointed by the Bank. The Bank also has in place stringent internal processes in the selection of contributors and has the authority to remove a contributor that does not perform its obligations. Further, rates submitted by the contributors are closely monitored by the Bank.

> The Bank strengthened expectations on the internal oversight processes to prevent the manipulation of rate submissions in the setting of financial market benchmark rates

These existing practices were further enhanced through self-policing initiatives introduced by the Financial Markets Association Malaysia (Persatuan Pasaran Kewangan Malaysia, PPKM), which among others, require rate contributors to provide credible two-way bid and offer prices which are deal-able among the contributors. In December 2012, the Bank issued additional requirements for the KLIBOR setting process, which included more specific expectations on the roles and responsibilities of the board of directors and senior management of financial institutions as well as internal control requirements. Collectively, these measures serve to preserve the credibility of KLIBOR as a key domestic benchmark rate, and reinforce the confidence of market participants in its use. In addition, in determining the USD/MYR rate,

all licensed onshore banks are now required to use only the domestic rate as reference for pricing of foreign exchange contracts involving the ringgit. Existing parameters in determining the fixing process set by PPKM have also been enhanced to further promote the quality and integrity of the fixing process, and to ensure that it is reflective of the prevailing market conditions.

As part of the broader review of the financial sector legislation which was completed during the year, amendments were made to the Central Bank of Malaysia Act 2009 and the new provisions were incorporated in the FSA and IFSA. These provisions aim to preserve the contractual rights and obligations of the counterparties under close-out netting and collateral arrangements in situations where the Bank is able to exercise specific powers accorded to it to undertake orderly resolutions of financial institutions. This substantially removes uncertainties surrounding the enforceability of close-out netting arrangements in financial market contracts, which is important both for the efficient functioning of the financial markets and in enhancing the capacity of Malaysian financial institutions to more effectively manage risks through the use of such contracts. With the changes to the legislation, the International Swaps and Derivatives Association (ISDA) has opined that prior to insolvency interventions, the exercise of close-out netting rights under the ISDA Master Agreement would generally be enforceable against a Malaysian-incorporated counterparty, but identified a few remaining areas under other legislations which would need to be addressed by the authorities concerned to secure Malaysia's status as a netting-friendly jurisdiction.

As a result of wide-ranging initiatives pursued to deepen the foreign exchange market, it has grown six-fold over the 2001 to 2010 period

Over the recent years, wide-ranging initiatives have been pursued to deepen the foreign exchange market, starting with a focus on increasing business efficiency for trade and financing activities, to meet the needs of the real sector and on facilitating direct investment abroad. As a result of these initiatives, the foreign exchange market has grown six-fold, representing an average annual growth rate of 20.4%, over the 2001 to 2010 period. The average daily turnover of the foreign exchange market was USD10.8 billion in 2012 (2011: USD9.6 billion), accounting for 3.6% of GDP, reflecting the continued expansion of regional and international trade, the sustained onshore investments by non-residents and the venturing of Malaysian corporations abroad.

The priority moving forward is to develop greater access to, and availability of a broader range of hedging instruments to meet the financing needs of Malaysians as cross-border trade and investment linkages intensify further. Currently, the Malaysian foreign exchange market is largely dominated by spot transactions, which form 70% of total foreign exchange volume in 2012, while swaps and forwards comprise 23% and 7%, respectively.

Towards this end, further liberalisation measures were announced in 2012, including flexibilities allowing (i) licensed onshore banks to trade foreign currencies against another foreign currency with a resident; (ii) licensed onshore banks to offer ringgit-denominated interest rate derivatives to non-bank non-resident customers; and (iii) residents to convert existing ringgit or foreign currency debt obligations into a debt obligation of another foreign currency. These measures are expected to encourage greater innovation in foreign exchange product offerings and demand for efficient foreign currency management solutions.

PROMOTING AN INCLUSIVE FINANCIAL SYSTEM

Malaysia continued to advance the financial inclusion agenda with some notable developments in 2012. The number of deposit accounts per 10,000 adults increased during the year to 30,735 (2011: 30,355) deposit accounts. Meanwhile, financing accounts per 10,000 adults were lower but remained high at 8,337 (2011: 8,949).

In November 2012, the Bank shared its work on the development of a Financial Inclusion Index at the Workshop on Financial Inclusion Indicators, jointly organised with the Irving Fisher Committee on Central Bank Statistics, which operates under the Bank for International Settlements. The Index measures financial inclusion levels based on four

dimensions that are (i) convenient accessibility; (ii) take-up rate; (iii) responsible usage; and (iv) satisfaction level. Its main purpose is to provide policymakers with a tool for assessing the impact of financial inclusion initiatives in the short and medium term. It also facilitates the comparison of financial inclusion levels between different segments of the population, thereby focusing efforts to increase financial inclusion in a way that achieves an even progress across the country. The composite index for Malaysia as a whole was 0.77 out of a total score of 1, where 1 reflects full inclusion. Results of the component measures of the Index indicated that while Malaysians generally use financial services in a responsible way and are reasonably satisfied with the products and services provided, there remains substantial scope to further improve convenient access to financial services and correspondingly, the take-up rate of financial products and services. Composite measures of the Index will continue to be refined with ongoing improvements in capturing data that increases the informational value of the Index in supporting the Bank's strategic and policy priorities in the area of financial inclusion.

Two initiatives that were implemented during the year to improve access and which are expected to have a significant impact on widening the reach of financial services were the roll-out of agent banking channels and Malaysia's mobile banking and payment platform, MyMobile. Further information on the agent banking channel and the MyMobile platform is provided in the box article 'Agent Banking: Advancing Malaysia's Financial Inclusion Agenda', and in Chapter 5, respectively.

The Financial Inclusion Index

- An index of financial inclusion was developed by the Bank to measure the progress and impact of policies to achieve greater financial inclusion in Malaysia.
- The Index encompasses four financial inclusion dimensions of equal weight which comprise eight main indicators of financial inclusion.
- Higher values indicate better performance while dimensions with lower values require further policy improvements.

Table 1

The Four Dimensions and Eight Main Indicators of the Index

Dimension	Indicators	Equally weighted Sub-indices	Equally weighted Index
Convenient Accessibility	% of sub-districts with a population of 2,000 or more with at least one access point	0.64	0.77
	% of population living in sub-districts with at least one access point		
Take-up Rate	% of adult population with deposit accounts	0.7	
	% of adult population with financing accounts		
	% of adult population with life insurance/takaful policies		
Responsible Usage	% of customers with active deposits	0.98	
	% of customers with performing financing accounts		
Satisfaction Level	% of customers who are satisfied with overall financial services	0.76	
0 – 0.25: Low; 0.25 – 0.5: Moderate; 0.5 – 0.75: Above Average; 0.75 – 1: High			0-1.00

Source: Bank Negara Malaysia

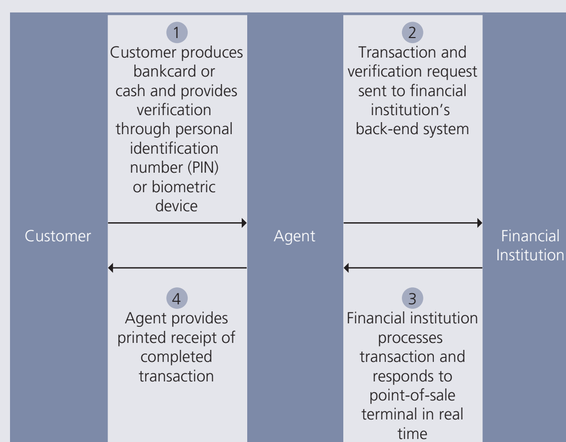
Agent Banking: Advancing Malaysia's Financial Inclusion Agenda

Over this recent decade, Malaysia has made significant strides in pursuing the financial inclusion agenda. The articulation of the Bank's primary function to promote a sound, progressive and inclusive financial sector in the Central Bank of Malaysia Act 2009 further reinforced the Bank's strategic focus on driving financial inclusion policies. To date, 92% of the total adult population has formal savings accounts[1] and all 144 districts in Malaysia are served by at least one financial access point[2]. Malaysia is also highly ranked in several of the international financial inclusion rankings[3].

As one of the key initiatives under the Financial Sector Blueprint 2011-2020, the introduction of agent banking by the Bank in 2012 will further contribute to the financial inclusion agenda by enhancing accessibility to quality and affordable financial services, particularly in the underserved and remote areas. Agent banking is the provision of banking services by a licensed financial institution to customers through a third-party agent, such as retail outlets and post offices. By substantially lowering the cost of providing banking services, and making it easier for individuals to access banking facilities in an environment they are familiar with, agent banking channels can help bridge commercial and inclusion imperatives, especially for high-volume, low-value accounts. Diagram 1 illustrates the conduct of deposit and withdrawal transactions through an agent bank on a real-time basis.

Diagram 1

Real-Time Deposit and Withdrawal Transactions through an Agent Bank



Note : For deposit and withdrawal transactions, both agent and customer must have an account with the financial institution

Agent Banking Regulatory Framework

Agent banking in Malaysia operates within a regulatory framework that promotes the professional conduct of agents, and safeguards the security and integrity of agent banking transactions. Central to the framework is the proper authorisation and oversight of agent banks by financial institutions, and the provision of adequate information to consumers about how to protect their financial transactions conducted through agent banks. These matters are dealt within the Guidelines on Agent Banking issued by the Bank in 2012 as summarised in Table 1.

[1] Financial Inclusion Demand-Side Survey, Bank Negara Malaysia, 2011.
[2] Financial access points are channels where the basic financial services of deposits and withdrawals can be performed, which include financial institutions' branches, mobile units and agents.
[3] 1st since 2008 for 'Getting Credit' (Doing Business Report, World Bank, 2008-2012); 8th out of 144 countries on 'Ease of Access to Loans' (The Global Competitiveness Report, World Economic Forum, 2012).

Table 1

Key Features of the Guidelines on Agent Banking

Agent appointment and monitoring process	• Only legally-established non-bank entities with fixed business premises can be contractually appointed as agents. • Agents must be financially sound and have the knowledge and competency to conduct banking services on behalf of the financial institutions. • Financial institutions must establish a management oversight mechanism to monitor agent conduct and ensure that associated risks are managed effectively.
Provision of basic banking services offered	• Agents can accept deposits, facilitate withdrawals, perform fund transfers, and facilitate bill payments and financing repayments. • The opening of bank accounts, money-changing services and appraisals of financing applications must continue to be performed only by financial institutions to ensure compliance with 'know-your-customer', customer suitability and responsible financing requirements.
Safeguards to promote secure transactions	• Transactions are conducted on a real-time basis at the agent's business premise. • Financial institutions must have in place robust infrastructure to support agent banking facilities, including a minimum 2-factor authentication system for agent banking transactions.
Consumer awareness and protection	• Details of authorised agents must be published and updated on the financial institution's website. • Financial institutions must implement measures to ensure customers are adequately informed of their rights and responsibilities, which includes mechanisms to verify authorised agents, a dispute resolution and redress mechanism, and efforts to educate customers on agent banking. • The national agent banking logo (Diagram 2) must be prominently displayed together with the financial institution's logo, at the business premise of agents to facilitate easy identification of authorised agents by consumers. **Diagram 2: National Agent Banking Logo**

Impact of Agent Banking

The agent banking initiative has already produced promising results. Three financial institutions, namely Malayan Banking Berhad, RHB Bank Berhad and Bank Simpanan Nasional have a combined agent network of 4,120 agents as at end-December 2012, which includes post offices, petrol stations, retail outlets and telecommunication agents (Chart 1). Bank Simpanan Nasional has announced plans to further expand their agent banking network to 5,000 agents in rural areas nationwide by 2014.

Since its implementation in 2012, a geographical mapping exercise by the Bank found that 75% out of 837 *mukims* (sub-districts) with a population of more than 2,000 have at least one financial access point, a significant increase from only 46% in 2011 (Diagram 3). This is expected to increase further to 90% by the end of 2014. The total number of transactions conducted through agent banks since the introduction of agent banking has exceeded three million, with a total value of more than RM446 million. Compared with branches, financial institutions reported that agent banking channels delivered cost savings in terms of set-up costs of more than 80%, while agents have also benefitted from the increased customer flow to their business premises.

Chart 1

Agent Banking by Type of Agent

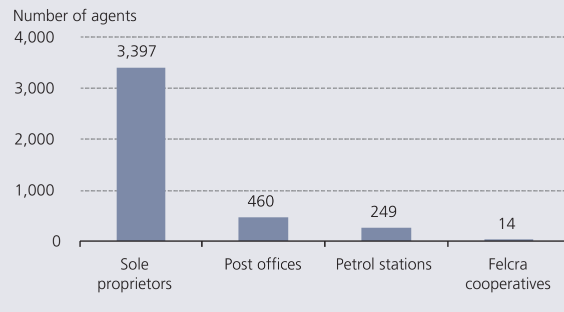
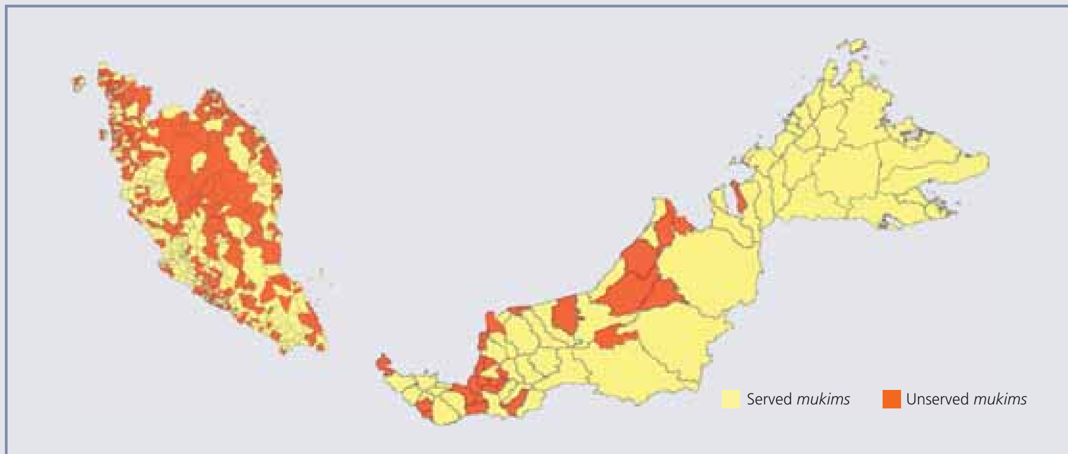


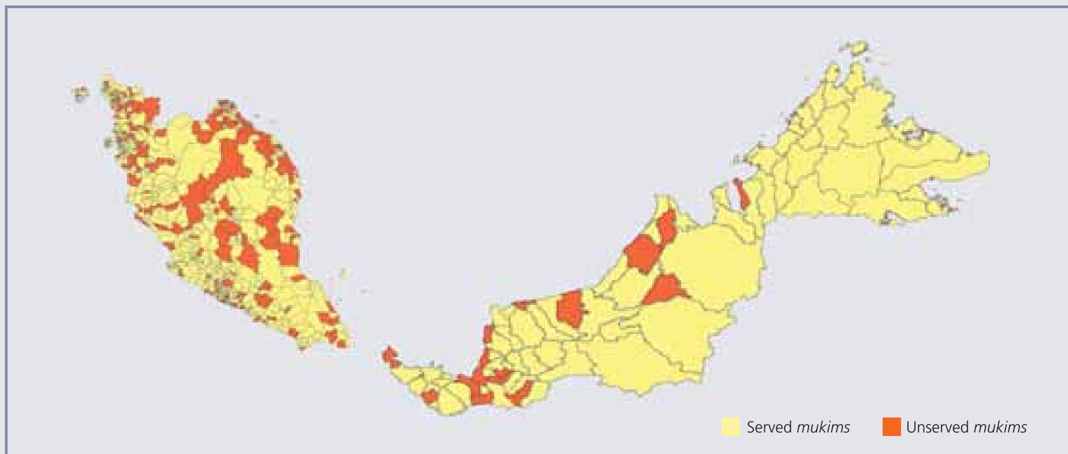
Diagram 3

Access to Basic Financial Services

Before the introduction of agent banking



After the introduction of agent banking



The Bank will be releasing proposals to further enhance the Basic Banking Services Framework for public consultation. First introduced in 2005, the Framework makes it mandatory for banks and DFIs to offer no-frills savings and current accounts to all Malaysians at minimal or no cost. In these five years, the demand for basic savings and basic current accounts has stabilised at about 15% and 10% of total savings accounts and total current accounts, respectively. The review of the Framework aims to ensure that it continues to meet the general banking needs of retail customers, which includes providing for the increased use of more efficient electronic payment channels. Proposed enhancements include unlimited and free debit card payment transactions with basic deposit accounts, and extending access to all individuals residing in Malaysia including foreigners with valid identification and documents to encourage the use of formal payment channels for making remittances abroad.

Bank Simpanan Nasional, in its role as a specialised financial institution with a specific mandate to promote financial inclusion, facilitated greater access to financing for targeted groups under several schemes that were introduced during the year. This included financial services provided to 1,145 taxi owners and hired-car owners to secure financing to purchase vehicles amounting to a total of RM58.8 million since January 2012. More than 8,000 low-income individuals also received financing amounting to a total of RM38.8 million through the Skim Amanah Rakyat 1Malaysia to purchase Amanah Saham 1Malaysia units to enhance their financial well-being.

The Bank has been accorded the privilege to co-host the Alliance for Financial Inclusion (AFI) annual Global Policy Forum at Sasana Kijang in September 2013. The Forum serves as an arena for high-level representatives from AFI members comprising central banks and ministries of finance, as well as other relevant stakeholders to exchange knowledge and experiences to work together in advancing the financial inclusion agenda. The goal of the AFI network is to accelerate the adoption of innovative financial inclusion policy solutions, with the ultimate aim of making financial services more accessible to the 2.5 billion people who do not have access to the formal financial system. The AFI network's peer-to-peer learning model helps AFI members to share knowledge, and identify and implement effective evidence-based policy solutions in their home countries.

ENHANCING REGIONAL AND INTERNATIONAL FINANCIAL LINKAGES

Malaysia's interlinkages with regional and international economies have continued to deepen in recent years. In 2012, domestic banking groups extended their footprint in the region, with six of the eight domestic banking groups having overseas operations in 21 countries, from 19 countries previously. Total overseas assets of the domestic banking groups increased by 19% to RM313.8 billion in 2012 (2011: RM264.7 billion), accounting for 19.2% of total assets of these groups (2011: 19%). This, in turn, resulted in a higher contribution of overseas operations to the groups' operating income, which has increased from RM10.3 billion to RM12.8 billion in 2012. The enhanced overseas presence of domestic banking groups is supported by more rigorous oversight by the Bank and closer cooperation with relevant host supervisory authorities to promote more effective supervisory activities and assessments on a group-wide basis across borders.

The ASEAN member countries are in the final stages of launching a banking sector integration framework, which will support a more dynamic and meaningful role by qualified ASEAN banks in driving regional financial integration

Efforts to deepen financial integration within the Association of Southeast Asian Nations (ASEAN) gained further momentum under the ASEAN Framework Agreement on Services. Following the endorsement of the ASEAN Financial Integration Framework in 2011, the ASEAN member countries are in the final stages of launching a banking sector integration framework, which will support a more dynamic and meaningful role by qualified ASEAN banks in driving regional financial integration. This Framework provides an enabling mechanism for well-managed and capable ASEAN banks to expand and operate in the region, supported by strengthened cross-border regulatory collaboration and cooperation amongst home and host countries to facilitate the effective sharing

of information and supervision of ASEAN banks. Given the differing stages of development of financial sectors in ASEAN member countries, the Framework provides flexibility for member countries to participate based on assessments of mutual benefits to the participating countries, and the ability of their financial sectors and regulatory frameworks to cope with new entrants. Central to this is the existence of key preconditions to support the integration process, which includes having the necessary infrastructure and regulatory framework to ensure that regional financial stability continues to be preserved in a more liberalised environment. The integration process will also be complemented by capacity building initiatives to support the readiness of countries to participate in the Framework.

Regional cooperation in crisis management intensified further with the agreement of the ASEAN+3 member countries (comprising all ASEAN members, the People's Republic of China, Japan and South Korea) to enhance the Chiang Mai Initiative Multilateralisation (CMIM) Agreement to incorporate a crisis prevention facility. The enhancement allows participating countries to tap into the CMIM facility in the event of impending stress to their balance-of-payments or short-term liquidity positions, thus allowing a more pre-emptive response to challenges that could pose risks to financial stability. Prior to the enhancement, the facility was only available when countries were faced with a balance-of-payment or short-term liquidity shock. The CMIM facility was also enlarged from USD120 billion to USD240 billion in May 2012, signalling the region's commitment to strengthen regional frameworks for crisis management to preserve financial stability in the region. Meanwhile, work continued to progress on strengthening existing communication protocols and institutional arrangements for crisis management and resolution within the grouping of the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP). An important part of this work includes examining the constraints of current policy toolkits for managing crises across borders and exploring appropriate enhancements or new instruments for supporting regional responses to crises.

Global regulatory developments have an important bearing on the domestic financial sector. Assessments of Malaysia's financial sector are based on standards that are set by international standard-setting bodies. Such standards are observed in more than 140 countries, including countries whose financial institutions operate in Malaysia, as well as countries in which Malaysian financial institutions have a presence. There are substantial benefits for the seamless operation of cross-border activities and effective cross-border supervision of financial institutions if domestic and international regulatory standards are closely aligned. For these reasons, the Bank continued to contribute actively to regional and international forums, focusing on financial regulatory developments to ensure that Malaysia's interests, and those of emerging economies in the region are given due consideration in the international policy-making process. The Bank co-chairs the Financial Stability Board (FSB) Regional Consultative Group for Asia, one of the six regional consultative groups established by the FSB in 2011, which discusses vulnerabilities affecting financial systems globally, and current and proposed initiatives to promote international financial stability. It also supports the implementation of policy initiatives and global regulatory standards within the region by examining issues that are pertinent to the region in general and emerging markets in particular, and raising important issues to the FSB. The Group met twice during the year, and agreed at its second meeting to form two working groups to examine in greater detail the developments in shadow banking activities in the region and the impact of the policy framework for systemically-important financial institutions on the Asian financial sector. Additionally, the Bank also became the regional coordinator for training initiatives under the International Association of Insurance Supervisors which supports implementation of training and education initiatives aimed at enhancing supervisory capacity and improving cooperation among insurance supervisors in the region.

An important infrastructure arrangement to support regional financial integration was also put in place with the launch of a pilot platform for cross-border investment and settlement of debt securities. The collaborative effort by the Bank, the Hong Kong Monetary Authority and Euroclear Bank marks a key milestone towards achieving a unified bond market within the region by enabling investors and market intermediaries to access the bond markets in Malaysia and Hong Kong more efficiently and effectively. This, in turn, contributes to the deepening of the Asian bond market. Additionally, to support the development of well-functioning bond markets in the region, the ASEAN+3 member countries have agreed to

adopt the New Roadmap+ pursuant to the Asian Bond Markets Initiative, which encapsulates key strategies such as the establishment of a regional settlement intermediary, developing government bond markets and the introduction of guarantee programmes.

As economic and financial integration in the region deepens, the Bank further strengthened its bilateral relationships with other central banks to promote mutually-reinforcing growth and development. The bilateral currency swap agreement between the Bank and the People's Bank of China was renewed for a further term of three years in tandem with the continued growth of Malaysia's trade and investment linkages with the People's Republic of China over the last few years. The RMB/MYR swap fund was also increased from RM40 billion (equivalent to RMB80 billion) to RM90 billion (equivalent to RMB180 billion) to facilitate larger settlements of trade and investment in renminbi. The Bank also signed a memorandum of understanding with the Central Bank of the Republic of Turkey, paving the way for both countries to collaborate strategically in the development of the financial services sector and to enhance economic and financial linkages through bilateral trade and investment.

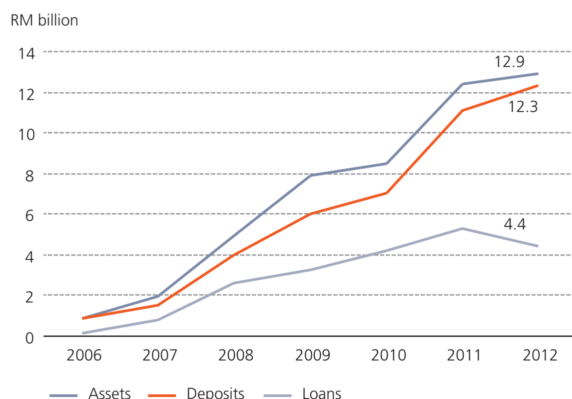
INTERNATIONALISING ISLAMIC FINANCE: EVOLVING AN INTERNATIONAL ISLAMIC FINANCE MARKETPLACE

The Islamic banking sector continued its growth trajectory, recording a double-digit growth of 13.8% in total assets, to account for 23.8% of total assets in the overall banking system (including DFIs). As Malaysia's Islamic financial system transitions to become more international in orientation, the volume of foreign currency business, including those conducted by the International Islamic Banks and International Currency Business Units, has increased over the years (Chart 2.5). There are now 16 Islamic banking institutions in Malaysia that operate as separate subsidiaries and 10 Islamic banking operations conducted through windows as at end-2012. In the takaful sector, total assets of takaful funds grew by 12.4% to RM19 billion, while total takaful contributions accounted for 13.6% of total premiums and contributions in the insurance and takaful industry. Despite the challenging global environment, sukuk issuances in Malaysia remained strong, with a series of notable multi-currency sukuk issuances by multinationals, corporations and multilateral agencies. As a result, Malaysia continued to be a key participant in the global sukuk market, with sukuk issued in Malaysia accounting for 74% of total global sukuk issuances (2011: 71.6%). Malaysia also continues to have one of the largest US dollar-denominated sukuk market globally (Chart 2.6).

Developments during the year further strengthened the foundations and institutional arrangements for the orderly growth of Islamic finance in Malaysia, while supporting the internationalisation of Islamic finance.

Chart 2.5

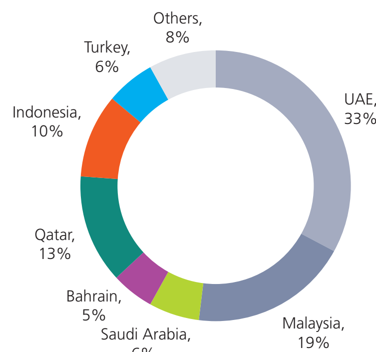
Islamic Foreign Currency Assets, Loans and Deposits of International Islamic Banks and International Currency Business Units



Source: Bank Negara Malaysia

Chart 2.6

Total Outstanding US Dollar-denominated Sukuk Globally in 2012



Source: Bloomberg

In a move to strengthen the elements supporting end-to-end Shariah governance and compliance, the IFSA, which also modernises and significantly strengthens the regulatory and supervisory framework for Islamic financial institutions, introduced an important foundation for the evolution of a contract-based regulatory framework for the Islamic financial sector. This is described in the box article 'Contract-Based Regulatory Framework for Islamic Finance'.

Developments during the year further strengthened the foundations and institutional arrangements for the orderly growth of Islamic finance in Malaysia, while supporting the internationalisation of Islamic finance

As the pace of internationalisation of Islamic finance gathers stronger momentum, the enforceability of Islamic commercial contracts executed on a cross-border basis becomes increasingly important. Hence, the role of the Kuala Lumpur Regional Centre for Arbitration (KLRCA) to adjudicate Islamic finance disputes was enhanced with the development of the 'i-Arbitration Rules' that govern the arbitration of domestic and international disputes in Islamic finance. The Rules, which adopt the United Nations Commission on International Trade Law Arbitration Rules, lend added support to the KLRCA as an arbitration centre for the resolution of disputes in international Islamic commercial transactions. In addition to arbitration, a guide was provided on the application of Shariah principles for court proceedings.

A deep and liquid Islamic financial market has continued to develop in Malaysia. During the year, innovations in the sukuk market resulted in several notable issuances, which have further expanded the range of sukuk structures, sizes and maturities. These include a multi-tenured RM500 million sukuk using the *wakalah bil istithmar* structure, Malaysia's first perpetual sukuk issuance amounting to RM2.5 billion and the largest rated sukuk *murabahah* issuance amounting to RM5 billion based on the *tawarruq* arrangement. A sukuk with a programme size of RM30.6 billion and maturities ranging from five to 27 years was issued to fund one of Malaysia's largest privatisation exercises. The Government also issued *Sukuk Perumahan Kerajaan* amounting to RM4.5 billion to refinance existing housing loans granted to civil servants and to fund new Government housing loans. During the year, the Bank conferred '*Emas*' status, which is Malaysia's designation for foreign currency-denominated sukuk originating from Malaysia, to three multi-currency sukuk issuances by a multilateral agency and corporations in Malaysia. The launch of the Bloomberg-AIBIM-Bursa Malaysia Corporate Sukuk Index in September 2012 marked another important advancement in the development of the domestic Islamic financial market, providing a key benchmark for investors of ringgit-denominated Islamic bonds to track and measure the performance of corporate sukuk in Malaysia.

As the international dimension of Islamic finance grows, it is becoming a more significant component of the global financial system and Islamic financial institutions are also increasingly enlarging their international footprint. There is a critical need to catalyse the development of high-quality liquid Shariah-compliant instruments to facilitate more effective and efficient cross-border liquidity management. To meet this need, a collaboration by 10 central banks and the Islamic Development Group established the International Islamic Liquidity Management Corporation (IILM) in Kuala Lumpur in 2010 with a mandate to issue high-quality liquid sukuk for the purposes of facilitating liquidity management in a Shariah-compliant manner. IILM is finalising the rating of its first short-term sukuk programme to facilitate its first issuance.

To support talent development for the Islamic financial system, the International Centre for Education in Islamic Finance (INCEIF), which was established in 2005, continued to build on its strong global reputation as a provider of professional and advanced education in Islamic finance to develop and supply high-calibre talent to meet the needs of the Islamic financial industry. INCEIF has attracted more than 2,000 students since its establishment, including more than 1,800 students pursuing the Chartered Islamic Finance Professionals qualification and 300 students pursuing a Masters or PhD in Islamic finance. Its students hail from 78 countries, bringing important diverse perspectives and dimensions into the learning process for INCEIF students.

Contract-Based Regulatory Framework for Islamic Finance

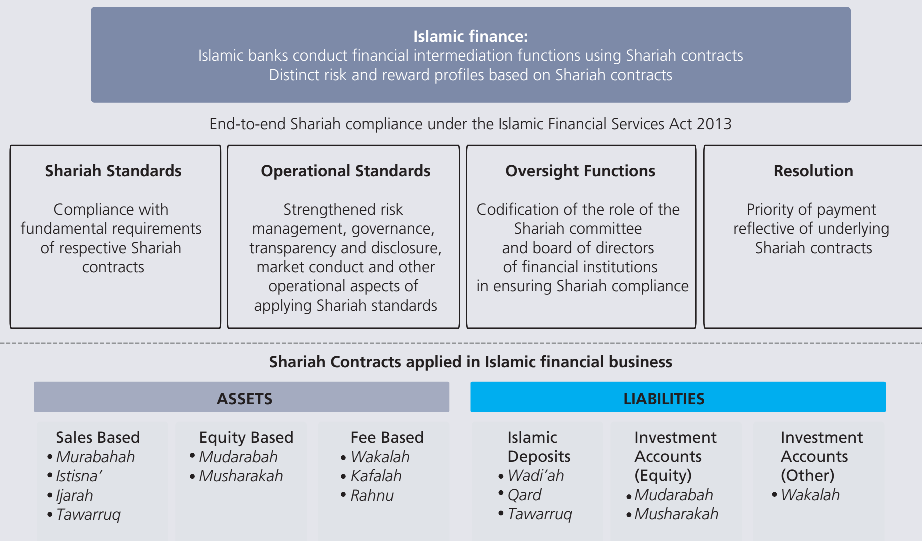
Islamic finance draws its value propositions from the application of a diverse spectrum of Shariah contracts in financial transactions that provide for different risk and return profiles. The strict adherence by Islamic financial institutions to Shariah principles under such distinct contracts preserves the sanctity and validity of Islamic financial transactions. This article highlights the main initiatives undertaken in Malaysia to put in place a comprehensive contract-based regulatory framework for Islamic finance.

Providing a Strong Legal Foundation

The foundations for end-to-end Shariah governance and compliance for the Islamic finance sector have been further strengthened by the Islamic Financial Services Act 2013 (IFSA). The Act provides the legal premise for a comprehensive regulatory framework for Islamic finance in Malaysia that reflects the specificities of the various types of Shariah financial contracts, and supports the effective application of Islamic contracts in the offering of Islamic financial products and services - from the entering into a contract to the resolution of a failed Islamic financial institution (Diagram 1). This represents a significant step forward in aligning legal and regulatory principles with Shariah precepts, and can serve as a useful benchmark for evolving more comprehensive regulatory frameworks globally that promote greater legal and operational certainty in Islamic finance.

Diagram 1

Contract-Based Regulatory Framework



In terms of achieving greater alignment with Shariah, three elements of the new legislation are noteworthy:

- **The Act clearly defines the scope of assets and liabilities in Islamic banking business based on the underlying contractual features.** On the liability side, the use of principal-guaranteed Shariah contracts such as *qard, wadi'ah* and *tawarruq* in deposit-taking is clearly distinguished from principal non-guaranteed Shariah contracts for investment such as *mudarabah* and *wakalah*. On the asset side, the scope of financing activities similarly draws on the distinctive features of Islamic contracts to include equity and partnership financing contracts such as *musharakah mutanaqisah*, lease-based financing contracts such as *ijarah muntahia bittamleek,* and fee-based activities under *wakalah* contracts.

- **Provisions governing takaful business clearly account for the nature of Shariah contracts that underpin the takaful operational framework.** The new legislation gives legal effect to the segregation of ownership of funds between the takaful participants and the shareholders of a takaful operator in accordance with Shariah. This is reinforced through regulatory requirements that emphasise the fiduciary relationship between takaful operators and takaful participants as stipulated in *mudarabah* or *wakalah* contracts employed in takaful business by requiring takaful funds to be managed on behalf and in the best interests of the takaful participants.

- **The legislation brings the legal framework for the resolution of Islamic financial institutions in line with distinctive elements of the relevant Islamic contracts (Diagram 2).** Assets that are managed by Islamic banks on behalf of investors are legally ring-fenced from the assets of the Islamic banks to reflect the prohibition of any co-mingling of profits and losses attributed to the investment account with other funds. A similar separation is applicable to Islamic windows within licensed commercial banks and investment banks, where Islamic assets and funds are ring-fenced from the conventional banking business. In the event of the resolution of an Islamic financial institution, payments to Islamic depositors are prioritised in a manner that is consistent with the guaranteed nature of contracts employed in Islamic deposit products. Similarly for takaful business, assets of takaful funds and shareholder funds are separated and utilised to meet the respective liabilities in the event of a winding-up of a takaful operator. These obligations differ in priority based on the specific contracts underlying the takaful business model.

Strengthening the Regulatory Framework

The legislation also contains provisions that enable the Bank to specify regulatory requirements that promote and are consistent with Shariah contract-based operational frameworks. In this regard, the Bank may specify Shariah standards for key Islamic contracts in consultation with the Bank's Shariah Advisory Council. The standards serve to define essential features of the underlying Shariah principles that are adopted by Islamic financial institutions, while enhancing certainty and public confidence in Islamic financial transactions. The Bank issued the Shariah Standard on *Mudarabah* in October 2012, while Shariah standards on *murabahah*, *musharakah*, *ijarah*, *wadi'ah* and *istisna*' are expected to follow in 2013 and 2014.

To support the effective implementation of Shariah standards and ensure compliance by Islamic financial institutions, the Bank also issues guidance or operational standards on Shariah matters. Such guidance and operational standards address sound practice principles and the Bank's expectations for effective risk management, governance, disclosures and appropriate legal and accounting treatments for key Islamic contracts that are necessary to ensure compliance with Shariah under different Islamic contracts. Over the years, the Bank's expectations of the board and management of Islamic financial institutions and their Shariah committees to ensure end-to-end compliance with Shariah have been progressively raised in tandem with the increasing significance of Islamic finance business at the institutional, group and system-wide levels. In 2012, the Guidelines on Financial Reporting for Islamic Banking Institutions were revised to improve the quality of information provided to users of financial statements on the different risk and return profiles and characteristics associated with various Islamic contracts. Enhancements to existing guidance and standards will continue to be developed under a three-year work plan to further strengthen the regulatory framework for application of Shariah contracts.

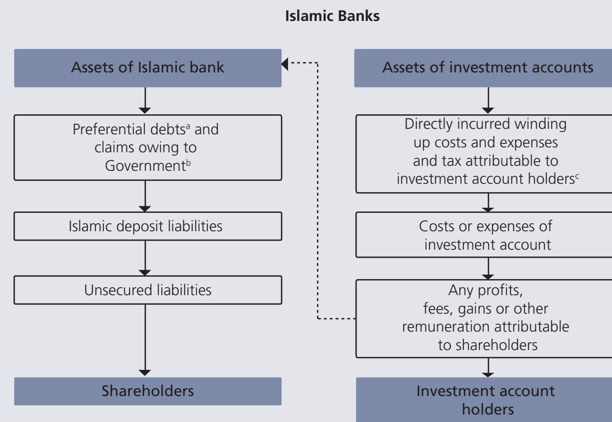
The Bank has wide powers under the law to address non-compliance with Shariah and operational standards. These include the ability to require prompt corrective actions through supervisory intervention as well as a comprehensive penalty framework that provides a credible deterrent.

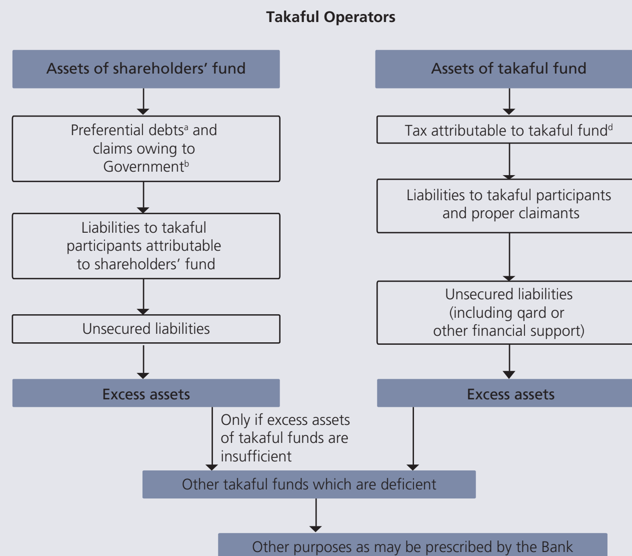
Promoting a Cohesive National Infrastructure

Malaysia has also developed a comprehensive legal infrastructure and framework that promotes effective enforceability of Shariah contracts beyond financial services laws and regulations. In 2010, the Law Harmonisation Committee was established with a mandate to undertake objective reviews of other relevant laws, recommend appropriate changes to provide legal recognition to Shariah

Diagram 2

Priority of Payment Reflective of Underlying Shariah Contracts





[a] Section 292(1) of Companies Act 1965
[b] Section 10 of Government Proceedings Act 1956
[c] Section 292(1) (a) & (f) of Companies Act 1965
[d] Section 292(1) (f) of Companies Act 1965

contractual features, and enhance the legal certainty of financial transactions based on Shariah principles. A current focus of the Committee, working in collaboration with relevant stakeholders, is the development of effective mechanisms to recognise beneficial interests arising from financing under contracts such as *ijarah* and *musharakah mutanaqisah* in the National Land Code 1965 in order to safeguard the interests of contracting parties engaged in Islamic financing. Greater legal certainty is also promoted through the recognition in law of the Bank's Shariah Advisory Council as the reference point for courts and arbitrators on any Shariah matter in relation to Islamic finance business. This has been important to ensure the consistent application of Shariah contractual principles in Islamic financial transactions.

From the taxation perspective, the tax neutrality principle administered by the Tax Neutrality Committee ensures that transactional costs from the application of Shariah contracts in Islamic finance are not structurally higher than conventional financial transactions that produce the same economic impact, thus preserving equivalent tax treatments.

During the year, INCEIF launched its first Executive Master Class programme, which aims to develop leaders in the Islamic finance industry. The programme has attracted more than 300 local and international participants from 36 countries since its launch in September.

To further extend its global reach and contribution to the deepening of a global talent pool for Islamic finance, INCEIF also forged new collaborative arrangements with international partners, including the World Bank, the Islamic Corporation for the Development of the Private Sector (the private sector arm of the Islamic Development Bank Group) and the *Centre Africain D'Etude Superieure en Gestion* (the training institute of the Central Bank of the West African States). INCEIF also collaborated with BNP Paribas Malaysia Berhad to establish the BNP Paribas-INCEIF Islamic Wealth Management Centre in Malaysia, which is a dedicated research and development centre that aims to catalyse innovation in Islamic wealth management. The Centre is currently undertaking applied research in specialised Islamic wealth management areas focusing on innovative financial solutions to meet the more sophisticated investment demands of the increasingly affluent population, particularly in Asia and the Middle East.

In the area of applied research in Shariah and Islamic finance, the International Shariah Research Academy for Islamic Finance (ISRA) continued to actively engage and support international Islamic bodies, including the International Islamic Fiqh Academy, the Islamic Financial Services Board and the International Islamic Financial Market to promote greater innovation in Islamic products that comply with Islamic principles and are supported by appropriate governance and risk management structures. Most of the engagements have sought to promote more consistent practices and rules to reduce variances in Shariah standards and interpretation, as part of efforts to achieve greater harmonisation across jurisdictions. ISRA launched the Islamic Financial Knowledge Repository Portal (i-Fikr) in 2012 as a comprehensive database of rulings and *fatwa*, legal and regulatory requirements, articles, books and compendiums on Islamic finance. It is envisaged that i-Fikr will promote greater understanding of Islamic finance principles among industry practitioners, policymakers, researchers and academicians.

TALENT DEVELOPMENT IN THE FINANCIAL SECTOR

Human capital development initiatives continued to focus on attracting, developing, and retaining talent to build and sustain a highly qualified and competent workforce, which is a key imperative in the development of a dynamic and competitive financial sector. These efforts, which strive to holistically address issues relating to the supply of talent from entry to leadership levels, have been instrumental in bridging the talent gaps in the financial industry.

Since its establishment by the Bank in 2007, the Financial Sector Talent Enrichment Programme (FSTEP), has now become an industry-led initiative, producing more than 1,240 high-calibre and industry-ready individuals for employment in its workforce. FSTEP continues to deliver an

Survey on Performance of FSTEP Graduates

An independent study was commissioned by the Steering Committee of FSTEP in August 2012 to assess the performance of FSTEP graduates. The study involved a survey of 104 FSTEP graduates (representing 36% of total graduates from three intakes between 2009 and 2012), which covered aspects such as general working attitude, English proficiency, technical knowledge, soft skills, business conduct, teamwork, result orientation and communication, as well as overall satisfaction of employers with FSTEP graduates. Findings from the survey concluded that:

- FSTEP graduates performed distinctly better than other new graduates and met the needs of employers;
- Employers prefer FSTEP graduates to other new directly-recruited graduates;
- FSTEP is effective in preparing entry-level executives for their careers in the financial services industry; and
- Employers are unanimous that they are satisfied with FSTEP graduates.

excellent record of individuals who enrol in FSTEP and are subsequently absorbed into the workforce at a rapid pace. Since 2011, close to 100% of the graduates are employed in the financial services industry with a small proportion of graduates absorbed by other sectors. Improvements continue to be made to the design and delivery of programmes to ensure they remain effective and relevant. Today, FSTEP provides highly-sought exposure to the financial industry and professional competencies required in the workplace to graduates seeking employment in the financial services industry. Further enhancements continue to be made to the programme by leveraging on strategic collaborations with domestic and international bodies, such as CPA Australia Ltd, the Malaysian Insurance Institute (MII) and the Chartered Insurance Institute, to develop mutually-beneficial learning opportunities for participants. With effect from May 2013, FSTEP will be extending its programme to foreign participants working in subsidiaries and associate companies of Malaysian-owned financial institutions operating in the Southeast Asian region. This will provide cross-cultural learning opportunities and support the talent needs of Malaysian financial institutions expanding into the region.

The Iclif Leadership and Governance Centre continued to grow its capacity and capability, strengthening its faculty to support its objectives of developing world-class leaders to helm financial institutions. During the year, a total of 2,802 participants have attended programmes conducted by Iclif, including directors of financial institutions who participated in the Financial Institutions Directors' Education (FIDE) programme. Iclif has also contributed to developing leaders towards facilitating Malaysia's economic transformation process by expanding its reach beyond the financial sector, and providing training to non-financial institutions and multinational corporations. With a strong domestic footprint, Iclif has also expanded into new markets such as Indonesia, Saudi Arabia and Egypt. As part of its thought leadership in the area of leadership and governance, Iclif initiated its first in-house research on the development of an 'Asian Leadership Index', which aims to be a benchmarking tool for countries to assess the quality of their top executive leaders. A sample of 18 countries across the Asian region was selected to participate in this research exercise. The research, expected to be published in 2013, will provide valuable input to the development and design of future programmes. During the year, Iclif added the 'Business Leadership Programme', provided in collaboration with the University of Michigan's Ross School of Business, to its programme offerings. The Programme covers the critical skills and knowledge gaps relevant to executives advancing into leadership positions to enable them to effectively lead their organisations.

In May 2012, the Asian Institute of Finance (AIF) launched the Microfinance Management Programme designed to enhance the effectiveness and capacity of microfinance providers in supporting the financial services for micro-enterprises. The Programme, developed by AIF's Financial Inclusion Centre, addresses skill gaps that are essential to the effective and responsible delivery of microfinance solutions. Building on this initiative, another flagship programme providing high-level management and leadership training to senior executives in microfinance institutions has been rolled out in February 2013. In 2012, AIF also extended its existing strategic and operational risk management, auditing, as well as governance programmes to Islamic financial institutions. To support these new initiatives, AIF facilitated 54 capacity building projects totalling RM54 million to enhance the capacity of its affiliate training institutions, comprising IBBM, the Islamic Banking and Finance Institute Malaysia, MII and the Securities Industry Development Corporation.

A Financial Sector Talent Council will be established in 2013 to provide advisory and strategic direction for talent development in the financial sector which takes into account ongoing and future trends

As part of efforts to provide strong incentives for investments by financial institutions in high-quality training for their workforce, and to set clear standards against which training programmes for financial service professionals can be measured, the quality assurance and accreditation division of the AIF was carved out of AIF, and established as a separate entity called the

Finance Accreditation Agency. Its primary role will be to provide accreditation of learning programmes and qualifications for the financial services industry, which will serve as a stamp of quality for financial services training programmes, and facilitate the mutual recognition of professional learning and experience in financial services.

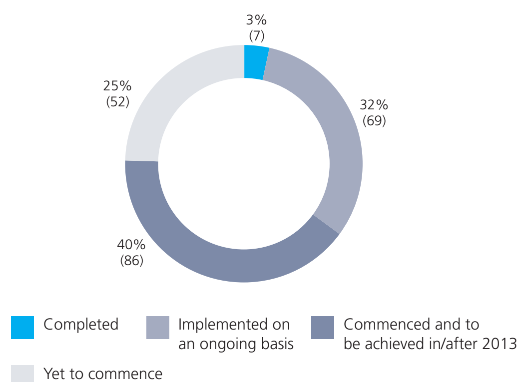
Recognising the importance of having a holistic and comprehensive approach towards human capital development, a Financial Sector Talent Council will be established in 2013 to provide advisory and strategic direction for talent development in the financial sector which takes into account ongoing and future trends. The Council will be industry-driven, in collaboration with regulators, Government agencies, academia and training providers. An immediate focus of the Council will be to oversee the identification of the industry's human capital requirements and talent needs, as well as develop coordinated strategies to advance talent development in a cohesive manner.

Implementation Progress of the Financial Sector Blueprint 2011-2020

Following the launch of the Blueprint in December 2011, the Bank has put in place an internal governance framework within the Bank's business planning process to facilitate monitoring and implementation of the Blueprint initiatives. Under this framework, initiatives will be reviewed periodically in terms of relevance and priority, taking into account its criticality to the vision of the Blueprint, the capacity of key stakeholders in supporting the implementation, as well as the impact of prevailing market conditions on desired outcomes.

Chart 2.7

Progress of Implementation of Blueprint Initiatives



Source: Bank Negara Malaysia

In 2012, initiatives under the Blueprint were largely focused on strengthening the foundations for further development of the financial sector. 76 initiatives representing 35% of the total number of initiatives have been completed or are being implemented on an ongoing basis. Of these, the following seven initiatives have been completed:

- 2.2.1 (iii) : Liberalise non-resident participation in the onshore interest rate derivatives market and encourage greater use of interest rate derivatives by market players;
- 2.2.5 (ii) : Permit institutional funds and retail investors to trade in foreign currencies subject to suitable safeguards;
- 2.3.1 (i) : Develop a comprehensive agent banking framework to enable outreach of financial services at lower costs;
- 2.3.2 (i) : Encourage flexible microfinancing products that enable prompt drawdown of financing in times of need and prepayment of financing during good times;

- 3.2.6 (i) : Recognise qualified foreign currency instruments as liquid assets and eligible for use as collateral;
- 4.1.1 : Enactment of a comprehensive legal framework for the Islamic and conventional financial systems; and
- 5.1.1 (vi) : Facilitate higher transaction limits via electronic channels.

The remaining 69 initiatives are being implemented on an ongoing basis in the following areas:
- Promoting effective and efficient intermediation in the financial sector, including supporting the development of a vibrant private pension industry;
- Widening the product range and participation in the foreign exchange market, and money market through the introduction of new instruments, facilitative foreign exchange measures and expanded trading platforms;
- Strengthening the institutional arrangements for the provision of financial services to the underserved in an effective and sustainable manner;
- Supporting initiatives to advance regional financial integration and the regionalisation and internationalisation of qualified Malaysian financial institutions; and
- Developing Malaysia as a reference centre for Islamic financial transactions and to evolve Malaysia as an international Islamic finance marketplace.

Work on 86 other initiatives has commenced and are at various stages of implementation. In 2013, the Bank's focus will be on accelerating the migration to electronic payments, which includes reviewing the pricing structure for payment instruments. To ensure the availability of a deep and sustainable pool of talent for the financial sector, a Financial Sector Talent Council will be established to provide advisory and strategic direction on talent development initiatives in the financial sector. At the same time, efforts will continue to be undertaken to reinforce a sound, transparent and accountable system for effective regulation and supervision. This will entail enhancing the transparency of the suitability criteria for significant controlling interests in financial institutions, and strengthening the supervisory oversight over financial holding companies.

REGULATORY AND SUPERVISORY FRAMEWORK

89 Regulatory Developments and Supervisory Assessments

90 *Box Article: The Legal Framework for Financial Stability*

100 Safeguarding the Integrity of the Financial System

103 Supervisory Capacity and Cooperation

105 *Box Article: Assessment of Malaysia's Compliance with the Basel Core Principles for Effective Banking Supervision*

109 *Box Article: Assessment of Malaysia's Observance of the IAIS Insurance Core Principles*

REGULATORY AND SUPERVISORY FRAMEWORK

The regulatory and supervisory framework in Malaysia is now placed on a substantially stronger footing with the recent enactment of key financial services legislation. The Financial Services Act 2013 (FSA) and the Islamic Financial Services Act 2013 (IFSA), together with related amendments to the Central Bank of Malaysia Act 2009, provide a new and significantly strengthened foundation on which to build and maintain a regulatory and supervisory framework that is effective, transparent and which contributes to an efficient financial system that is resilient to future stresses. More information on the legal framework for the Malaysian financial sector can be found in the box article 'The Legal Framework for Financial Stability'.

Malaysia's regulatory and supervisory system received a positive review from the International Monetary Fund and World Bank under the Financial Sector Assessment Program

The Bank's regulatory priorities continue to be guided by a domestic focus on further raising standards in governance and risk management practices in keeping with the growing scale and sophistication of the activities of financial institutions in and outside Malaysia. A good part of this work included strengthening and updating the prudential rules in line with international regulatory reforms, and in consideration of the more developed financial institutions and their growing presence in the region. At the same time, the regional and international dimensions of regulation and supervision continued to feature prominently in the Bank's work. The Bank has also taken an active role in shaping international regulatory standards, particularly to ensure emerging market perspectives are taken into account, and in further strengthening its relationships with home and host supervisors of financial institutions in Malaysia.

Malaysia's regulatory and supervisory system received a positive review from the International Monetary Fund (IMF) and World Bank under the Financial Sector Assessment Program (FSAP). This involved a full evaluation of the Bank's regulatory and supervisory framework for the banking and insurance sectors against international core principles for effective supervisory systems. The review affirmed the strength and quality of the regulatory and supervisory framework applied in Malaysia, and served to confirm the direction of the Bank's current priorities and initiatives to further strengthen the regulatory and supervisory system. A summary of the assessments and recommendations by the FSAP assessors for banking and insurance supervision is provided in the box articles 'Assessment of Malaysia's Compliance with the Basel Core Principles for Effective Banking Supervision' and 'Assessment of Malaysia's Observance with the IAIS Insurance Core Principles' respectively.

REGULATORY DEVELOPMENTS AND SUPERVISORY ASSESSMENTS

Regulatory capital and liquidity standards

A major step in the domestic implementation of the global regulatory reform package relating to the new capital and liquidity standards under Basel III was taken during the year with the publication of final rules by the Bank in November 2012 that will raise the **level and quality of regulatory capital** that banks must hold. Under the new rules, banking institutions are required to maintain high-quality loss-absorbing capital consisting predominantly of Common Equity Tier 1 (CET1), which comprises paid-up capital, retained earnings and disclosed reserves, at 7% of a banking institution's risk-weighted assets, an increase from 2% previously. The new requirements are being phased in from January 2013 to December 2018 in line with globally determined timelines.

While the rules are broadly consistent with Basel III parameters, the Bank has adopted a more prudent approach in some areas. The Bank views this to be appropriate having regard to domestic market conditions and the desire to preserve the strength and quality of capital buffers, particularly in times of stress. The key areas are: (i) requiring significant

The Legal Framework for Financial Stability

The enactment of the Financial Services Act 2013 (FSA) and Islamic Financial Services Act 2013 (IFSA), which were approved by Parliament in December 2012, marks another important milestone in modernising Malaysia's financial sector laws. These new laws are the culmination of more than six years of work which started concurrently with the review of the Central Bank of Malaysia Act 1958, and involved a wide-ranging review of the various laws for the regulation and supervision of the financial sector, particularly taking into account important changes that were occurring across the domestic and global financial landscapes. The review and modernisation of Malaysia's financial sector laws ensure that these laws continue to be relevant and effective in preserving financial stability and supporting the growth of the Malaysian financial system and the real economy.

Over the decade, the focus of and the approach to financial sector regulation and supervision has evolved substantially, not just in Malaysia but also internationally. As the financial system has become more diverse, more sophisticated and more interconnected, financial regulation has correspondingly evolved from detailed and prescriptive rules to a principles-based approach that combines greater supervisory judgment and intensity with high-level principles of sound practice that can be applied to institutions according to the nature, scale and complexity of their activities. There has also been a fundamental re-orientation of the focus of financial supervision to take into account system-wide developments and risks, in addition to the traditional focus on individual financial institutions. This has involved a widening of the scope of oversight to include the supervision of financial groups and non-bank financial institutions that engage in financial intermediation activities. Beyond prudential regulation, the other aspects of financial sector regulation such as business conduct regulation that focuses on consumer protection and financial inclusion have also become more prominent, driven by changing demographics, the increasing complexity of financial products and public policy goals to alleviate poverty, improve equity and enhance growth. Another important feature in the development of Malaysia's financial system has been the growing significance and role of Islamic finance. The development of a comprehensive legislation for Islamic finance has further extended the frontier of financial regulation in Malaysia. These developments have had a significant role in shaping the key statutes which were introduced over the decade and which form part of the legal framework for the financial sector, including the Development Financial Institutions Act 2002 (DFIA), Payment Systems Act 2003 (PSA) and the Malaysia Deposit Insurance Corporation Act 2011 (MDICA). The enactment of the new central bank legislation in 2009, the Central Bank of Malaysia Act 2009 (CBA), and the FSA and IFSA in 2013 capped off the series of comprehensive legislative reforms that have been undertaken.

In the post 9/11 era, global efforts to combat money laundering and terrorism financing have intensified in response to new political realities and increasingly sophisticated money laundering techniques and methods. Preserving the integrity of the financial system and preventing its abuse for criminal and terrorism purposes became an important agenda of the Government. While Malaysia already had in place a rigorous legislation for these purposes in 2001, the scope of reporting institutions under the Anti-Money Laundering and Anti-Terrorism Financing Act 2001 (AMLATFA) has now been extended to include non-financial institutions to more effectively address money laundering risks in activities that fall outside the financial sector. The AMLATFA also supports more effective collaboration between the Bank, financial institutions and law enforcement agencies in the areas of crime prevention and national security. Recognising that certain sectors, such as money-changing and remittance services, can be particularly vulnerable to the flow of illicit funds, the Money Services Business Act 2011 (MSBA) and supporting regulatory and supervisory frameworks were put in place to strengthen the Bank's oversight of these sectors.

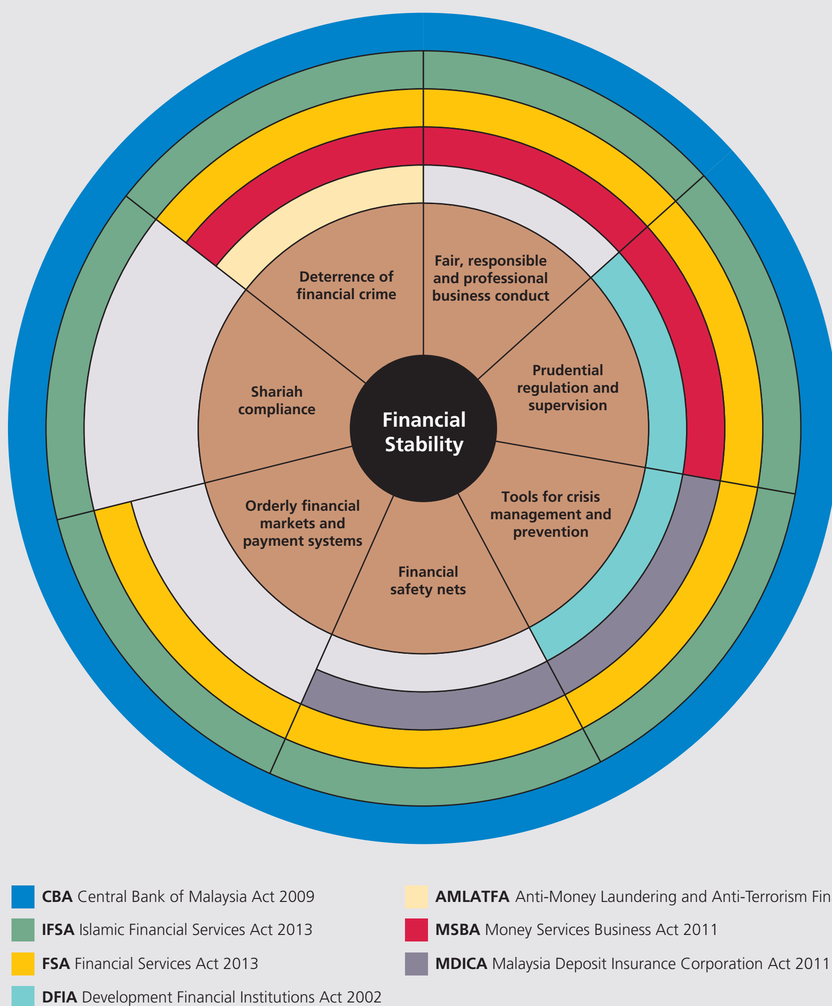
Taken together, the modernisation of Malaysia's financial sector laws serves to promote greater resilience and efficiency of the financial sector and its continued growth, strengthen the regulatory and supervisory environment, provide greater protection for consumers, and preserve a high level of confidence in the financial system. These are supported by enhanced arrangements for inter-agency

collaboration and coordination to better cope with the increasing interconnectedness across industries and national boundaries. The financial sector laws are also intended to keep pace with changes in the financial landscape in a way which will allow financial institutions to tap new opportunities and better manage future challenges, while preserving strong conditions for financial stability. Diagram 1 illustrates the key aspects of a strong regulatory and supervisory system in Malaysia which the statutes address.

The remainder of this article describes the key pieces of legislation that make up the legal framework for the financial sector in Malaysia, including highlights of the main legislative changes that were introduced.

Diagram 1

Comprehensive Laws for Financial Stability



Central Bank of Malaysia Act 2009

A high point of the legislative changes was the enactment of the CBA, coinciding with the Bank's 50th anniversary. The CBA replaced the former Central Bank of Malaysia Act 1958 following a comprehensive two-year review on the role, powers and responsibilities of a modern central bank, providing clarity to the Bank's mandates on promoting monetary stability and financial stability. With respect to its financial stability mandate, the Bank's statutory responsibilities are clearly set out in

the CBA, namely to regulate and supervise financial institutions, provide oversight over the money and foreign exchange markets, exercise oversight over payment systems, and to develop a sound, progressive and inclusive financial system. It is upon these responsibilities that the regulatory laws administered by the Bank are founded.

Taking into account a more developed and mature domestic financial sector as well as the challenges presented by the more integrated and globalised economic and financial environment, the CBA vests in the Bank expanded macroprudential powers and instruments to safeguard financial stability. These include wider powers for the Bank to obtain information for purposes of monitoring risks to financial stability and strengthened conditions and powers to take early action to avert and manage crises. It also includes specific powers to resolve systemically-important financial institutions that are not regulated by the Bank, where necessary, to preserve financial stability. In addition, the law enables the Bank to effectively coordinate with other regulatory authorities across sectors and borders, reflecting the greater overlaps in financial services and products offered by different financial institutions, and the wider geographical footprint of financial institutions. These enhanced powers are complemented by a strengthened framework for governance, transparency and accountability for the financial stability mandate. It also includes the establishment of the Financial Stability Executive Committee to provide additional oversight over major financial stability decisions such as the provision of capital support to financial institutions and orders to avert or reduce risk to financial stability for entities not regulated by the Bank.

Financial Services Act 2013 and Islamic Financial Services Act 2013

The FSA and IFSA build upon the foundations of the Bank's financial stability mandate in the CBA and provide the Bank with the necessary powers to effectively perform its regulatory and supervisory roles. They reflect an increased focus by the Bank on early interventions to address emerging problems in financial institutions, and the more risk-focused and integrated approach to the regulation and supervision of financial institutions under the Bank's purview in response to the rapid changes taking place in the financial sector, including the emergence of financial groups that offer a broader range of financial services and products. The FSA and IFSA have respectively combined six pre-existing statutes, namely the Banking and Financial Institutions Act 1989, Insurance Act 1996, PSA and Exchange Control Act 1953 (ECA), and the Islamic Banking Act 1983 and Takaful Act 1984. The new legislation provides a more cohesive and integrated legal framework that delivers a consistent and comprehensive treatment of similar risks, thus minimising the prospect for regulatory arbitrage and gaps, while substantially easing the process of review and update going forward. Key features of the new legislation include:

- Greater transparency and accountability of the Bank in carrying out its principal object to safeguard financial stability;
- Differentiated intensity of regulation and supervision applied to institutions and markets under the Bank's purview, commensurate with the nature of activities and levels of risk posed by such institutions and markets to the overall financial system;
- Transparent assessment criteria for authorising institutions to carry on regulated financial business, and for shareholder suitability;
- New provisions for the oversight of financial holding companies and non-regulated entities to take account of systemic risks that can emerge from the interaction between regulated and unregulated institutions, activities and markets;
- Strengthened business conduct and consumer protection requirements to promote consumer confidence in the use of financial services and products;
- Specific provisions to support the Bank's role in the oversight of the money and foreign exchange markets in cooperation with Securities Commission Malaysia, where relevant;
- Strengthened provisions for effective enforcement and supervisory intervention, including the ability for the Bank to issue directions of compliance or accept legally enforceable undertakings that commit financial institutions to take specific actions to address identified risks, and higher penalties to act as a credible deterrent. The legislation further provides *locus standi* for the Bank to initiate civil actions in court against financial institutions; and

- A clear focus on Shariah compliance and governance in the Islamic financial sector. In particular, the IFSA provides a comprehensive legal framework that is fully consistent with Shariah in all aspects of regulation and supervision, from licensing to the winding-up of an institution.

Development Financial Institutions Act 2002

Six development financial institutions (DFIs) are regulated and supervised by the Bank pursuant to the DFIA to ensure that their development mandates can be achieved in a financially sustainable manner, while contributing to the overall stability of the financial system. The DFIA supports the effective regulation and supervision of DFIs to ensure sound financial management, and strengthens the accountability of DFIs in the performance of their mandated roles. This in turn contributes towards the development of a sound, progressive and inclusive financial sector in Malaysia. As part of the ongoing programme by the Bank to regularly review and update the legal framework for the financial sector, amendments to the DFIA are being proposed to further enhance the regulatory and supervisory framework for DFIs. Proposals will focus on reforms to further improve governance practices within DFIs, strengthen their mandates in filling gaps in the financial system, and promote greater operational efficiencies.

Anti-Money Laundering and Anti-Terrorism Financing Act 2001

The AMLATFA, previously known as the Anti-Money Laundering Act 2001 (AMLA), provides a legal framework to counter the laundering of money from the proceeds of crime, thus preserving the integrity of and confidence in the financial system. Under the AMLA, the Bank was appointed and continues to carry out the functions of the competent authority which include the responsibility to ensure the implementation of reporting obligations by the reporting institutions, and the gathering and dissemination of financial intelligence. In 2003, the Government of Malaysia enacted amendments to five different pieces of legislation, including the AMLA, to enable accession to the International Convention for the Suppression of the Financing of Terrorism. With the coming into force of the Anti-Money Laundering (Amendment) Act 2003 on 6 March 2007, the AMLA was renamed and extended to provide a comprehensive framework of measures for the prevention of money laundering and terrorism financing, and for the forfeiture of terrorist property and property involved in money laundering.

Money Services Business Act 2011

The AMLATFA is also complemented by the MSBA which aims to modernise and elevate the status of the money-changing and remittance businesses into a more dynamic, competitive and professional industry, while strengthening safeguards against the threats of money laundering, terrorist financing and other illegal activities. The MSBA came into effect from 1 December 2011 following the consolidation of the Money-Changing Act 1998 and parts of both the PSA and ECA. Licensed money-changers, approved remittance service providers and approved wholesale currency providers are now regulated and supervised under one law. Under the MSBA, the Bank's surveillance capabilities and powers of examination and investigation have been further strengthened. At the same time, broader enforcement powers, including administrative penalties and civil actions, have further enhanced the Bank's ability to effectively address weaknesses in the industry that could give rise to the risk of abuse for money laundering and financial crimes.

Malaysia Deposit Insurance Corporation Act 2011

The Malaysia Deposit Insurance Corporation Act 2005 established the deposit insurance system in Malaysia to protect deposits placed with licensed commercial and Islamic banking institutions. This law also established the Malaysia Deposit Insurance Corporation (Perbadanan Insurans Deposit Malaysia, PIDM) to administer the deposit insurance system, provide strong incentives for sound risk management through differential deposit insurance premiums and act as a resolution agency. In 2011,

the law was replaced by the MDICA. Key changes that were made to provide for a wider financial safety net also include a takaful and insurance benefit protection system and powers for the Minister to extend insurance or protection coverage beyond the scope of the normal protection for deposits as well as takaful and insurance benefits, for purposes of protecting the stability of the financial system. This legislation complements the Bank's regulatory laws, in promoting sound risk management in financial institutions and maintaining public confidence in the financial system, particularly during times of financial stress.

investments in capital instruments of insurance, takaful and other financial entities to be fully deducted from CET1 to more effectively address double-leveraging and to provide a stronger defence against contagion risk within financial groups; (ii) limiting the recognition of unrealised fair value gains of financial instruments in view of the uncertainty in the valuation of certain instruments, especially instruments which are not actively traded or during times when the market for such instruments is illiquid; (iii) strengthening loss-absorbing requirements for Additional Tier 1 and Tier 2 capital instruments; and (iv) requiring capital instruments issued by Islamic banks to be structured in a manner that adheres to established Shariah principles based on the contract used.

A concern raised by the industry has been with the potential for competitive distortions created from an uneven implementation of the Basel III standards in the international financial system, either in timing or detail. On this, the Bank has carefully considered the strong starting positions of the Malaysian banking institutions to meet the higher standards and the generous transition period (which the Bank has elected to follow without acceleration in most areas) which will allow for a gradual build-up of the required buffers. The Bank also holds the view that like-for-like comparisons are likely to be difficult across countries given the different approaches taken by national authorities where either more conservative or concessionary approaches have been reflected in different ways in the domestic rules. For example, some authorities have elected for specific reasons to specify higher minimum levels of regulatory capital while others have adopted more conservative treatments in specific areas. Authorities also have some scope to apply the discretion provided under Basel III to specify a different treatment for the calculation of regulatory capital in respect of particular exposures. These differences considerably complicate the international comparability of reported regulatory capital ratios.

The more important consideration in Malaysia has been the potential implications, and in particular, unintended consequences, of the reforms for domestic intermediation activities. The Bank's assessment, based on detailed capital calculations and growth projections provided by banking institutions under the new rules, is that the Malaysian banking sector is well placed to meet the strengthened capital requirements as defined by the Bank with the impact on the costs and functioning of domestic financial intermediation likely to be minimal (the CET1 capital ratio of the Malaysian banking industry, computed based on the Basel III standard, stood at more than 12% at end-2012, well above the 3.5% minimum that comes into effect in 2013). In contrast, the benefits of the stronger capital buffers, as implied by the results of stress tests under extreme but plausible adverse scenarios, are significant in terms of reducing the probability and costs of bank failures and disruptions in financial intermediation. The benefits are greater in an environment of greater uncertainty and volatility, and with the increased interdependencies and inter-linkages of the financial system.

The Malaysian banking sector is well placed to meet the strengthened capital requirements under Basel III, with the impact on the costs and functioning of domestic financial intermediation likely to be minimal

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In June 2012, the Bank also began an observation period during which the leverage and liquidity positions are reported by banking institutions using Basel III parameters. This is intended to enable the Bank to monitor the implications of the Leverage Ratio and liquidity standards which represent the other major components of the Basel III reform package, and to appropriately calibrate policy measures to ensure the smooth implementation of the standards. As a result of this reporting exercise, banking institutions have started to take steps to improve the quality of information captured in relation to the behaviours of their depositors, in particular wholesale depositors with operational relationships with the banking institution, in order to determine their regulatory treatment for purposes of meeting the liquidity standards.

Based on early results from the observation period, the strong capital position of the banking system is likely to ease the implementation of the **Leverage Ratio** in 2018. However, it remains too early to obtain a clear assessment on the

potential for a binding leverage standard to induce a shift by banking institutions in favour of higher-risk activities over lower-risk but productive economic activities such as trade financing. One reason for this is that leverage levels in the banking system are at substantially more prudent levels than the minimum contemplated under Basel III, thus allowing some room for computational adjustments in accordance with Basel III rules to take effect without materially affecting current business directions. The banking system leverage position currently stands at more than 6% under Basel III rules, well above the minimum of 3%. It should also be noted that as part of the Bank's supervisory and macrosurveillance activities, leverage has been and continues to be a key metric that is already monitored by the Bank to identify the potential build-up of excessive risks in the financial system. This has contributed to keeping leverage levels from increasing beyond what would be regarded as prudent. Nevertheless, the potential impact of a binding leverage standard on the ability of banks to continue supporting productive economic activity remains a concern that will be closely monitored by the Bank in the implementation of the Leverage Ratio in Malaysia.

The expected challenges that banking institutions would face in complying with the **Liquidity Coverage Ratio (LCR)** (based on the original parameters set by the Basel Committee on Banking Supervision in December 2010) were confirmed in the early reports from the observation period. The LCR promotes a bank's short-term resilience to liquidity shocks by requiring banks to hold adequate liquidity buffers to survive a 30-day period under a liquidity stress scenario. Challenges faced by banking institutions in complying with the LCR were largely due to the significance of wholesale deposits as a source of funding for the Malaysian banking sector. Such deposits account for more than 60% of total deposits of the banking system.

Compliance levels should improve with recent changes made to the LCR standard by the Basel Committee in January 2013. These changes address some of Malaysia's concerns with the implementation of the liquidity standards in three important ways. The first relates to the severe assumptions on withdrawals (or 'run-off' rates) that were initially applied to corporate deposits. This has now been adjusted to provide lower run-off rates for corporate deposits. While not directly addressed in the revised rules, the Bank will continue to consider suitable options for the treatment of deposits placed by institutional savings schemes in Malaysia, and in particular the Employees Provident Fund, which have an important role in channelling stable funding from households to the banking sector.

A second concern was the potential impact on market liquidity conditions due to the restrictive pool of eligible liquid assets recognised under the liquidity standard. Under the revised rules, the range of high-quality liquid assets (HQLA) which can count towards compliance with the LCR has been expanded, notably to include lower-rated corporate debt securities, unencumbered equities and residential mortgage-backed securities, subject to appropriate valuation discounts and prudential limits. The third area relates to the structural constraints faced by Islamic banks due to the lack of Shariah-compliant instruments available in the market to meet the LCR. The revised rules have included an additional option for national supervisors to develop alternative liquid asset frameworks for application to Islamic banks only. The option provides explicit national discretion for supervisors to define Shariah-compliant financial products as alternative HQLA for Islamic banks, subject to conditions and valuation discounts that the supervisor may require.

The Bank welcomes these changes which better reflect realistic market behaviours and funding conditions in Malaysia. In addition, a longer phase-in period extending to 2019 (from 2015 originally) for full compliance with the standard has also been provided under a revised timetable announced by the Basel Committee. This should further help to achieve a smooth transition to the new LCR standard in Malaysia. Further insights from the observation period will be important to obtain a more complete picture of the likely market implications and behavioural adjustments of banks in response to the liquidity standard. This will also inform the Bank's approach to the implementation of the LCR which will be outlined for consultation with the industry in early 2014, and the Net Stable Funding Ratio thereafter. Meanwhile, the Bank will continue to actively engage the international standard setting community to provide a perspective on the implications of the new standards for emerging markets through its participation in international and regional groupings of central banks and supervisors.

As part of the Bank's efforts to promote more effective **management of liquidity risk among development financial institutions (DFIs)**, the

Guidelines on Liquidity Management Framework for Development Financial Institutions which was previously applicable only to Bank Kerjasama Rakyat Malaysia Berhad (Bank Rakyat) and Bank Simpanan Nasional was extended to include the three remaining deposit-taking DFIs, namely Bank Pertanian Malaysia Berhad (Agrobank), Bank Perusahaan Kecil & Sederhana Malaysia Berhad (SME Bank) and Bank Pembangunan Malaysia Berhad in May 2012. The Guidelines, which are substantially similar to the current Liquidity Framework applicable to banks, seek to ensure that DFIs maintain sufficient high-quality liquid resources to meet unexpected deposit withdrawals, both in the ordinary course of business and in times of stress. Similar to the Liquidity Framework for banking institutions, it also aims to limit funding concentrations.

In the takaful sector, a major component of regulatory reforms to strengthen the prudential framework for takaful operators was completed during the year with the issuance of the final **Risk-Based Capital Framework for Takaful Operators (RBCT)** in October 2012 following extensive industry consultations and quantitative impact assessments. The RBCT is similar in concept to the Risk-Based Capital Framework for Insurers in that it provides for capital assessments on a total balance sheet approach. This approach is more sensitive to the risk profiles of individual takaful operators compared to the existing simplistic solvency regime. However, the RBCT has important differences that reflect the business models which are unique to takaful operators and the specificities of Islamic contracts that takaful operators enter into.

A major component of regulatory reforms to strengthen the prudential framework for takaful operators was completed with the issuance of the final Risk-Based Capital Framework for Takaful Operators in October 2012

A number of refinements were made to the RBCT in consideration of the feedback received from the industry during the consultation process and results from the quantitative impact assessments conducted by the Bank. This included amendments to provide for the wider recognition of capital resources in the capital adequacy ratio used to meet the Supervisory Target Capital Level. The capital charges for contribution liabilities and expense liabilities were also recalibrated, having considered recent improvements in provisioning practices by the industry.

The RBCT will be fully implemented as a binding requirement on takaful operators beginning 1 January 2014, following a further one-year parallel run period for takaful operators to enhance their operations and systems in preparation for full implementation.

The rules-based prescriptions on regulatory capital which apply to banks and insurers/takaful operators (under Pillar 1) are supplemented by a rigorous process of supervisory reviews of an individual institution's capital management practices under Pillar 2 which require institutions to assess and hold sufficient capital relative to its risk profile, including risks which are not covered or fully captured under Pillar 1. In this regard, banking institutions are expected to comply with Guidelines on the **Internal Capital Adequacy Assessment Process (ICAAP)** issued by the Bank from January 2013. Since the issuance of the Guidelines in 2010, banking institutions have demonstrated good progress in strengthening the fundamental building blocks of the ICAAP, including in particular the establishment of a formal risk appetite framework and enhancements to information technology (IT) and data systems to support the identification and measurement of risks at more granular levels. Comprehensive on-site supervisory reviews of the ICAAP of banking institutions will be undertaken by the Bank in 2013.

Banking institutions also continue to further refine their methodologies for measuring material risks and for allocating capital under Pillar 2. One area in which considerable divergence in practice continues to be observed is the measurement of, and correspondingly, capital allocated to, **interest rate risk in the banking book (IRRBB)/rate of return risk in the banking book (RORBB)**. This reflects the different modelling approaches adopted by banks in the treatment of the material drivers of IRRBB/RORBB. Given the significance of IRRBB/RORBB to bank exposures, it is important to ensure that institutional modelling practices are

well supported by sufficiently prudent assumptions and effective oversight arrangements. With this in view, the Bank has initiated work to enhance the existing regulatory reporting requirements for IRRBB/RORBB to support more detailed supervisory assessments. This will also enable the Bank to determine the need for more specific industry guidance to provide greater clarity around supervisory expectations on the treatment of IRRBB/RORBB.

In the insurance industry, the corresponding **Guidelines on ICAAP for Insurers** were finalised by the Bank in March 2012 and became effective on 1 September 2012. Progress towards putting in place systematic approaches to the ICAAP has been more even across the industry with the issuance of formal guidance by the Bank. A number of insurers have strengthened internal oversight arrangements for capital planning and management, and formalised processes for measuring the impact of business strategies on the insurer's solvency position to support the implementation of the ICAAP. The Bank continues to engage individual insurers on specific aspects of the implementation of the Guidelines where gaps remain. This includes the proper reflection of the overall risk appetite of an insurer in operational limits set for business units, more robust assessments and reporting of risk exposures and improvements to stress testing approaches for significant risks. Takaful operators will similarly be required to set appropriate individual target capital levels with the implementation of the RBCT from January 2014.

Risk management and prudential requirements

In 2012, the Bank stated its intention to develop requirements on effective **risk governance** to be observed by all financial institutions. This work was completed with the issuance of the Guidelines on Risk Governance for banking institutions, insurance companies, takaful operators and DFIs in March 2013 following two rounds of industry consultation. The Guidelines clarify the board's role in setting and controlling a financial institution's risk appetite and risk strategy, and require financial institutions to establish independent and suitably competent risk management functions with clear roles and mandates, an appropriate stature within the organisation and with direct access to the board and senior management. The Guidelines also address expectations for institutions to ensure that incentive and remuneration systems are aligned with prudent risk taking. While many institutions are already practising much of what is required under the Guidelines, some institutions will need to undertake more fundamental reviews of existing organisational arrangements and practices to comply with the Guidelines. Most institutions also indicated the need to continuously improve the technical skills and knowledge among risk management professionals, and address limitations in current risk management systems to support effective risk management on an enterprise- and group-wide basis as their activities increase in scale and complexity. Overall, significant investments were made in strengthening risk management infrastructures in the banking sector over the last decade and more substantial changes are expected to come from institutions in the insurance, takaful and DFI sectors. An important expected outcome of the Guidelines is the strengthening of preconditions for effective risk management on a group-wide basis for some of Malaysia's largest financial groups which have material operations in more than one regulated sector within the financial industry, or significant overseas operations.

Related to efforts by the Bank to strengthen risk governance practices in financial institutions was an exercise undertaken by the Bank to review the existing **prudential requirements applicable to Appointed Actuaries**. A key objective of the review was to strengthen the effectiveness of the actuarial function in general, and the Appointed Actuary in particular, in supporting an insurer's or takaful operator's management of insurance/takaful and financial risks. The Bank's proposed enhancements to existing Guidelines on the Appointed Actuary are expected to be released for consultation in April 2013. Among others, the proposals limit the Appointed Actuary's involvement in the pricing of insurance/takaful products. The proposals also set out requirements to support more effective communications of key issues and concerns by the Appointed Actuary to the board and management, and greater expectations for the board to have a good understanding of important actuarial issues and how these bear on an insurer or takaful operator's risk appetite and business strategy. The Bank also proposes to extend the Guidelines, which were previously applicable only to life insurers and family takaful operators, to general insurers and takaful operators. This will entail the formal appointment of Appointed Actuaries in general insurers and takaful operators

to undertake specific functions in ensuring an institution's sound and prudent management of its insurance/takaful business, including the preparation of financial condition reports for the board.

With competition becoming increasingly intense in the market for retail loans and financing, the Bank maintained a close oversight on developments in **credit risk management practices** in the banking industry. Although credit discipline has generally remained intact, some banking institutions were observed to price retail loans at more aggressive levels than might be implied by realistic assumptions of expected credit losses. The Bank's supervisory activities remained alert to systematic weaknesses in pricing policies which can distort capital allocations and potentially increase losses incurred by banking institutions in the event of loan defaults. For the most part, more aggressive pricing practices have been supported by stringent lending criteria. However, the wider adoption of risk-informed pricing practices across the industry continues to be challenged by data and system limitations – a priority that the Bank expects banking institutions to address to be firmly in step with credit growth in the retail segment. Pending the resolution of implementation issues of the proposed Guidelines on Risk-Informed Pricing for Retail Loans/Financing, individual banking institutions have been encouraged to adopt sound pricing practices based on the principles advocated under the Guidelines. Further engagements will be carried out to assist banking institutions to overcome remaining implementation challenges, particularly on issues that relate to data limitations and systems constraints, which will be essential to elevate the standards of credit risk management in this segment. The Bank expects that the Guidelines will be finalised in the second half of 2013.

The strengthened rules for managing exposures to single counterparties came into effect on 1 March 2013

In February 2012, the Bank outlined its detailed proposals for strengthening the **prudential framework for managing exposures to single counterparties**. The proposals seek to contain risk concentrations in a more interconnected environment by expanding the scope of exposures subjected to the prudential limits, and training the focus of banking institutions on risk correlations that can arise from economic dependence between connected counterparties. Submissions from the industry mainly centred on the operational challenges of monitoring compliance with the limits and the need for suitable transitioning arrangements to address the immediate impact of the proposals on certain aspects of banking institutions' operations. Taking these into consideration, the Bank refined the requirements in a number of key areas. This included the incorporation of criteria based on considerations of materiality and ease of substitution to be applied for the purpose of aggregating exposures to connected counterparties. Exclusions for interbank exposures in the domestic interbank money market from the limits have been preserved under the new rules to facilitate liquidity management activities, although this will continue to be reviewed by the Bank as international standards on large exposures begin to take shape. Transitioning arrangements have also been clarified, both for existing exposures and for phasing in the more comprehensive requirements under the new rules. The finalised rules came into effect on 1 March 2013.

Work on the sixth pillar of the risk management framework applied to the financial industry was largely completed during the year with the development of the Guidelines on **Operational Risk Management** which will be published for consultation in the first half of 2013. The other pillars consist of the Guidelines on Risk Governance, which are supplemented by more specific guidelines on the management of credit risk, market risk, liquidity risk and insurance risk. The concept paper outlines key principles of sound operational risk management, based on a comprehensive review of domestic practices, and guidance drawn from international standards as well as leading operational risk management practices. It also sets out to specifically address some of the root causes of the more recent experiences of significant operational risk failures experienced among leading global financial institutions despite the appearance of reasonably effective risk management controls practised by these institutions. A key thrust of the Guidelines is the emphasis on cultivating an environment within financial institutions which makes operational risk management a shared responsibility at all levels of the institution, supported by platforms for the deliberation of operational risk matters; clear and

appropriate operational risk tolerance limits; and effective processes for monitoring operational risk and exposures to losses.

One aspect of operational risk that must continue to be rigorously managed by banking institutions is the risk of security threats in the online banking space which can affect broader confidence in electronic banking facilities. This is to avoid attempts by fraudsters to intercept access by individuals to their accounts through online channels. While incidents of actual losses to banking institutions have been low, the Bank has required banking institutions to implement strengthened safeguards – including enhancements to existing infrastructure and improved processes for monitoring and detecting security threats – to better protect their Internet banking systems. The Bank also extended the application of the Guidelines on Data Management and Management Information System (MIS) Framework to DFIs in November 2012 to strengthen the internal data management capabilities within DFIs to support sound business judgments and effective risk management.

The increasing complexity, interconnectedness and span of cross-border operations of financial groups in recent years have raised the need for more effective **oversight over financial groups** to ensure that the groups' activities do not pose undue risks to the safety and soundness of regulated financial institutions, and by extension, the stability of the financial system as a whole. The monitoring and supervision of group-wide risks has long been an important element of the Bank's supervisory oversight. The Bank's primary concern is with the risks to regulated institutions that can arise from an institution's interaction and association with the wider group to which the institution belongs. However, until now, important elements of the legal framework were insufficient to enable the Bank to apply and enforce appropriate prudential standards on the holding companies of regulated institutions to promote the financial and operational soundness of the group as a whole. This gap is closed by the FSA and IFSA which provide the Bank with explicit powers to specify prudential standards for financial holding companies, conduct ongoing supervision on a consolidated basis, and require corrective actions by financial holding companies to address identified risks to regulated institutions.

With the enactment of the new legislation, the Bank aims in the second half of 2013 to publish initial proposals on the scope of consolidated supervision that will be applied on financial groups; the limitations on non-financial activities that can be undertaken by approved financial holding companies; and key prudential standards on capital, liquidity, corporate governance and risk management that financial holding companies will be required to observe. This will also entail the strengthening of prudential requirements concerning intra-group transactions and exposures, which will include a review of the existing Guidelines on Credit Transactions and Exposures with Connected Parties applicable to banking institutions. The implementation of the prudential standards is expected to be gradually phased in from 2014, with the timeline for financial requirements to be determined after a further consultative process with affected financial groups and planned impact assessments.

SAFEGUARDING THE INTEGRITY OF THE FINANCIAL SYSTEM

An important responsibility of the Bank is to safeguard the integrity of the financial system by requiring regulated businesses to have in place effective controls to counter the risk of being used for illegal activities and the monitoring of their implementation. This is also complemented with enforcement actions against the unauthorised conduct of business which is regulated under the banking, insurance and money services legislation.

The Bank's supervision and enforcement activities in this respect were intensified in 2012. A large part of this work involved the reassessment and confirmation of licences issued to entities in the **money services business industry**, comprising money changing, remittance services and wholesale currency businesses, as part of the transition to a strengthened regulatory regime under the Money Services Business Act 2011. The main objective of the re-licensing exercise is to strengthen the industry's defences against the risk of abuse for illegal purposes by ensuring that only entities that are controlled and managed by persons of integrity, and that are able and willing to comply with regulatory requirements, are granted licences to operate money services business. A secondary objective is to raise the standards of professional conduct and the image of the industry. In ensuring a smooth transition to the new regime, the Bank closely engaged the industry and sought to ensure that the exercise

was conducted in a manner without affecting access by the public to money services.

The re-licensing process, which was completed in December 2012, achieved the following outcomes:

- More than 100 entities that failed to demonstrate basic record keeping and compliance systems which are essential to detect and prevent illicit activities, or where persons in control had failed to meet fit and proper requirements, were required to cease operations;
- The financial and operational capacity of entities was strengthened, enhancing the ability of these entities to implement effective controls against risks associated with financial crime. This resulted from a combination of the higher capital commitments to the entities as required under the new legislation, mergers between smaller entities, and the opportunity for entities that opt to become agents to leverage on the systems and controls provided by larger and more established money service providers;
- More than 190 additional access points were provided for the public to conduct remittance transactions as a result of the approval of qualified money changers as remittance agents for licensed remittance service providers. The increased access is expected to facilitate the migration of remittances, especially by foreign workers, from informal to formal channels;
- A greater number of well-managed licensees were authorised to conduct wholesale currency business (importing and exporting foreign currency for supply to local money changers) in different parts of Malaysia. This is expected to address the difficulties that had been faced by money changers in clearing and sourcing currency stocks, leading to a reliance on transactions with individuals carrying foreign currencies across borders into Malaysia, for which the sources of funds may not have been properly verified; and
- Three new global money services business operators were admitted to the industry with the potential to significantly raise the standards of controls against money laundering and other illegal activities across the industry through their appointment of a wide network of local money changers as agents. The companies will have a direct role in implementing effective systems and controls on their agents. In addition, they are expected to contribute to industry training and other development initiatives to raise the overall level of professionalism and image of the industry.

In total, the number of entities in the money services business industry fell sharply to 515 from 839 in December 2011, following the re-licensing initiative. The entities that obtained licences under the new Act are generally better positioned to provide professional services and to meet regulatory expectations for stronger defences against financial crime. Notwithstanding this, a good number of these entities will be required to significantly improve existing processes and controls for addressing money laundering risks over the next six to twelve months. Weaknesses found in the operations of money services business include a high tolerance for risk in facilitating transactions for which sources of funds are suspicious or unknown, the inconsistent conduct of minimum customer due diligence procedures, and the lack of an effective programme for building competencies to monitor, handle and report suspicious transactions. Enforcement actions have been or are being taken against more than 170 entities in relation to these failures to comply with regulatory requirements, ranging from monetary compounds to the rejection of key responsible persons or the revocation of licences for the more serious offences. Corrective and remedial actions by money services businesses will be closely monitored by the Bank. On a positive note, the Bank has also observed significant improvements in record keeping across the industry and a better understanding of regulatory requirements as a result of the Bank's on-site visits and a sustained programme of industry engagements and briefings implemented by the Bank throughout the year.

During the year, the Bank also provided detailed guidance to facilitate compliance by entities in the industry with legal and regulatory requirements. This covered reporting obligations and specific requirements on minimum oversight as well as operational and control arrangements that promote effective safeguards against illicit activities and ensure adequate protection for customer transactions.

At the broader system level, the Bank continued to take a central role in driving **anti-money laundering/counter financing of terrorism**

(AML/CFT) initiatives at the national level in collaboration with other law enforcement agencies. The national framework for combating financial crimes in Malaysia is supported by the National Coordination Committee to Counter Money Laundering (NCC). The Committee is chaired by the Bank and serves to coordinate inter-agency initiatives and facilitate the exchange of information among 16 Ministries and Government agencies involved in combating financial crimes. The institutional structure of the NCC was enhanced in 2012 to allow for greater focus and better oversight by the Committee of strategic priorities to combat financial crime. This saw the formation of a working level committee to provide more effective operational support for the implementation of AML/CFT measures by agencies and Ministries under the NCC.

The institutional structure of the National Coordination Committee to Counter Money Laundering was enhanced in 2012 to allow for greater focus and better oversight by the Committee of its strategic priorities to combat financial crime

The legal framework for combating money laundering and countering the financing of terrorist activities was also further strengthened in 2012 with the expansion of predicate offences under the Anti-Money Laundering and Anti-Terrorism Financing Act 2001 (AMLATFA) to include the financing of activities which contribute to the proliferation of weapons of mass destruction under the Strategic Trade Act 2010, money laundering activities arising from human trafficking under the Anti-Trafficking in Persons and Anti-Smuggling of Migrants Act 2007, direct selling and pyramid scheme activities under the Direct Sales and Anti-Pyramid Scheme Act 1993, as well as offences under the Companies Act 1965, Control of Supplies Act 1961 and Control of Supplies Regulations 1974.

During the year, financial institutions were required by the Bank to conduct self-assessments on the level of money laundering and terrorist financing risks faced in their operations and to identify compliance gaps. The results of the self-assessments suggest a heightened level of awareness and understanding, particularly by boards of directors, of AML/CFT compliance issues and financial crime risks. Financial institutions also reported continued efforts to improve the overall effectiveness of their compliance programmes, particularly in relation to the management of customer due diligence and ongoing monitoring of suspicious transaction patterns. This has been supported by a larger pool of AML/CFT specialists within financial institutions. Collectively, these efforts have contributed not only to a steady increase in the number of suspicious transaction reports (STRs) reported by financial institutions to the Bank over the past several years, but also in their quality for further analysis and investigation.

The collective enforcement capacity of law enforcement agencies also increased in 2012, with a higher number of AMLATFA accredited investigation officers and the establishment of dedicated AML/CFT units within all law enforcement agencies with expanded resources to better coordinate and undertake investigations and prosecutions on money laundering and terrorist financing. In 2012, the number of money laundering and terrorist financing investigations initiated by the police and other agencies correspondingly increased. Between 2008 to 2011, 73 offenders were brought to court for money laundering offences, on account of 4,371 charges involving about RM2 billion, with 27 convictions obtained.

Malaysia's efforts to strengthen the legislation and implementation of AML/CFT measures have been recognised by the IMF and the World Bank during the recent FSAP when Malaysia was accorded a 'Compliant' rating for the Basel Core Principles (BCP 18) and 'Observed' for the Insurance Core Principles (ICP 22) relating to AML/CFT. Moving forward, the Malaysian AML/CFT regime will be undergoing its third round of the Mutual Evaluation Exercise by the Asia/Pacific Group on Money Laundering in 2014. In preparation for this, multi-agency working groups have been established under the NCC to review the existing AML/CFT framework to ensure it remains relevant and effective, and to take into account the Revised International Standards on Combating Money Laundering and the Financing of Terrorism and Proliferation issued by the Financial Action Task Force in February 2012.

SUPERVISORY CAPACITY AND COOPERATION

To ensure effective oversight over the financial system as regional and international linkages continue to expand, the Bank further strengthened its cooperation arrangements with other central banks and supervisory authorities. Supervisory colleges continued to be a key platform for exchanging information and coordinating supervisory activities involving cross-border financial groups. This enables the Bank to assess, and where appropriate, take measures to mitigate, the potential for the international operations of financial institutions to amplify the cross-border transmission of risks. During the year, the Bank hosted supervisory college meetings for two regionally-active Malaysian financial groups, and participated in supervisory college meetings involving five foreign financial institutions with operations in Malaysia. In addition to deliberations on key risks and developments affecting the financial groups in question, discussions also centred on the impact of implementing various national and global regulatory reform initiatives on the business and operations of these groups.

More recently, national authorities have started to focus on strengthening the framework for resolving systemically-important, internationally active financial groups. This follows the call of the Financial Stability Board to establish crisis management groups for all global systemically-important financial institutions with the objective of enhancing preparedness for, and facilitating the management and resolution of, a cross-border financial crisis affecting significant financial groups. The Bank continues to support these initiatives through its participation in regional discussions on crisis management. While these initiatives are still at an early stage and various implementation challenges – such as that concerning differences in national resolution and insolvency regimes, and the sharing of sensitive information – remain at the fore, efforts to build a comprehensive and robust resolution regime are gaining traction at the global level. On the regional front, the Executives' Meeting of East Asia Pacific Central Banks has an instrumental role in supporting national-level efforts to strengthen resolution frameworks, as well as in developing a regional framework for timely, effective and cohesive responses to various crisis scenarios, which include the failure of regionally-active financial groups.

Domestic arrangements for cooperation between the Bank and other authorities which contribute to financial stability also continued to be strengthened. These arrangements allow the Bank to obtain a more complete view of potential risks to financial stability, including risks associated with financial intermediation activities carried out by non-bank financial institutions and the operations of systemically-important payment and settlement systems. They also serve to give clarity to the way in which the Bank will coordinate with other authorities in areas of surveillance, regulation, supervision and enforcement where the Bank shares oversight responsibilities with another authority.

Under the FSA and IFSA, the Bank has specific obligations to cooperate with relevant authorities in the oversight of the money market; on issues falling under the purview of the competition authority; and in regulating the deposit-taking activities of co-operatives from persons that are not members of the co-operatives. To operationalise such obligations, the Bank signed an enhanced memorandum of understanding (MoU) with Securities Commission Malaysia in October which significantly expands the scope of cooperation between the Bank and the Securities Commission in line with the expanded roles and mandates of both agencies. The MoU provides for more effective supervision of financial groups by the Bank, closer cooperation in the oversight of conduct issues in relation to banking activities in the capital market, and strengthened protocols for the exchange of information for purposes of monitoring systemic risks in the capital market and the broader financial system. It also provides arrangements for the cooperation and exchange of information between the Bank and the Audit Oversight Board established under the Securities Commission, on issues relating to the quality of external audits of financial institutions. Similar arrangements for cooperation with the Malaysia Competition Commission and Malaysia Co-operative Societies Commission are being developed.

The Bank also continued to cooperate closely with the Malaysia Deposit Insurance Corporation (Perbadanan Insurans Deposit Malaysia, PIDM) under the new Strategic Alliance Agreement (SAA) between the Bank and PIDM which was signed in April 2012. The SAA clarifies, among others, the roles and responsibilities of PIDM and the Bank in the process of resolving financial institutions that are member institutions.

This is now reflected in the FSA and IFSA and will contribute to improving the 'legal and procedural clarity for orderly resolutions' as promoted by the Financial Stability Board's Key Attributes of Effective Resolution Regimes for Financial Institutions.

In ensuring that the supervisory regime remains effective and responsive to the more dynamic conditions in which financial institutions operate, the Bank has continued to invest heavily in strengthening its supervisory capacity and resources. Advanced supervisory skills training consumed a significant portion of the Bank's training budget in 2012, reflecting efforts to solidify the Bank's core of frontline supervisors. A continuing challenge for the Bank has been its ability to retain a deep pool of staff with extensive supervisory and industry experience needed to support the Bank's supervisory and policy-making functions. While the average supervisory or relevant industry experience of supervisory staff in the Bank has remained relatively stable at above seven years for core supervisory staff, the attrition of supervisory staff will continue to be a risk that needs to be managed by the Bank. Over the years, the Bank has continued to improve its approaches to staff development and profiling to accelerate the time-to-competence for new hires, and building strong leadership competencies among senior supervisors who will be able to effectively develop direct reports under them. In addition, the Bank's pool of specialists has been expanded to include accounting and Shariah specialists to complement the work of frontline supervisors. These initiatives have helped to preserve the high quality of staff in supervisory roles who ensure that the Bank's risk-based approach to supervision continues to be effective.

During the year, the Bank also invested in upgrading its internal supervisory IT systems to improve the efficiency of the Bank's supervisory processes. The enhanced infrastructure includes the development of an electronic supervisory dashboard that facilitates continuous monitoring and surveillance of financial institutions, and a centralised system for document management which will further improve the quality and consistency of the documentation of the Bank's supervisory assessments. It has also substantially increased the efficiency of internal reviews of supervisory assessments by improving information flows across supervisory teams.

A major undertaking to merge the Financial Intelligence and Special Investigation Units of the Bank was completed in 2012, to form a new Financial Intelligence and Enforcement Department. The department will be responsible for formulating AML/CFT policies and strategies, carrying out investigation, surveillance and intelligence activities while acting as the central agency to disseminate financial intelligence to relevant law enforcement agencies for investigations. Under the new structure, all investigation and enforcement activities across the Bank will be consolidated under one department. This provides a clearer accountability and governance structure for enforcement actions by the Bank, while enabling the Bank to capture important synergies and leverage common skill sets within these functions.

In ensuring that the supervisory regime remains effective and responsive to the more dynamic conditions in which financial institutions operate, the Bank has continued to invest heavily in strengthening its supervisory capacity and resources

The initiatives elaborated above largely complete plans laid out by the Bank in 2011 to enhance its supervisory resources, processes and tools which had five key thrusts: (i) further strengthen its stress testing capabilities (see Chapter 1); (ii) improve the allocation and optimal use of the Bank's supervisory resources; (iii) increase automation and better integrate surveillance systems; (iv) implement an improved framework for the supervision of consumer conduct issues (see Chapter 4); and (v) strengthen the oversight of enforcement activities.

Assessment of Malaysia's Compliance with the Basel Core Principles for Effective Banking Supervision

Malaysia demonstrated a high level of compliance with the Basel Core Principles for Effective Banking Supervision (BCPs) as assessed by the International Monetary Fund (IMF) and the World Bank under the Financial Sector Assessment Program (FSAP). The 25 BCPs represent an international standard of high-level principles against which a country's regulatory and supervisory system is benchmarked and assessed. The BCPs are elaborated through more detailed 'essential' and 'additional' criteria that guide a compliance assessment. Malaysia was assessed to be either 'compliant' or 'largely compliant' against all 25 BCPs (Table 1).

The IMF has acknowledged that the new financial services legislation – the Financial Services Act 2013 (FSA) and the Islamic Financial Services Act 2013 (IFSA) – together with enhancements to existing regulatory standards and processes that were already well in progress at the time of the assessment would address almost all of the recommendations for improvements. Issues identified under six BCPs, which are currently rated largely compliant, will be resolved with the improvements that have already been made.

This article presents a summary of the assessment and key observations of Malaysia's compliance with the BCPs. The detailed assessment is published separately on both the IMF's and the World Bank's websites.

The key findings from the assessment are:

- **Regulatory and supervisory functions are well supported by a comprehensive legal framework that clearly defines the objective of the Bank, sound institutional arrangements and adequate resources.** The legal framework enables the Bank to authorise the establishment of banking institutions, issue a wide range of prudential regulations, access and obtain information, take the necessary supervisory actions and provide legal protection for staff acting in good faith when pursuing their duties. A high level of operational independence is accorded to, and demonstrated by, the Bank in determining its regulatory and supervisory focus and allocation of resources to carry out its functions. These functions are staffed with qualified and competent personnel with a high degree of professionalism and integrity.

- **Entry into the industry via new licences and the acquisition of significant shareholding is subject to rigorous review.** A comprehensive and robust assessment process exists to ensure that any new entry into the banking market is subject to prudential standards.

- **A comprehensive compendium of prudential requirements and guidance is in place, aimed at promoting safety and soundness, market discipline and integrity of the financial system.** The capital adequacy framework is consistent with international standards and effectively implemented. This will be further enhanced with the implementation of the Basel III reform package beginning 2013. Prudential standards on risk management provide a sound basis for the effective supervision and assessment of the quality of risk management in banking institutions. The liquidity framework ensures sufficient liquidity buffers under both normal and stress conditions, while requiring funding sources to be adequately diversified. Requirements, including prudent provisioning practices, are also in place for dealing with problematic assets and are effectively reviewed by supervisors. The implementation of corporate governance standards and guidelines on internal controls, together with a strong regulatory focus on directors' education, promotes effective governance arrangements and internal controls in banking institutions. A comprehensive legal framework further supports an effective anti-money laundering/counter financing of terrorism regime in Malaysia, enabling the Bank to have access to information and records, conduct investigations, issue directives and cooperate with other regulatory and enforcement agencies to safeguard the integrity of the financial system.

Table 1

Level of Compliance with the Basel Core Principles

	Basel Core Principles	Level of Compliance
1.	Objectives, independence, powers, transparency, and cooperation	
1.1	Responsibilities and objectives	C
1.2	Independence, accountability and transparency	LC
1.3	Legal framework	C
1.4	Legal powers	C
1.5	Legal protection	C
1.6	Cooperation	LC
2.	Permissible activities	C
3.	Licensing criteria	LC
4.	Transfer of significant ownership	LC
5.	Major acquisitions	LC
6.	Capital adequacy	LC
7.	Risk management process	LC
8.	Credit risk	C
9.	Problem assets, provisions, and reserves	C
10.	Large exposure limits	LC
11.	Exposure to related parties	LC
12.	Country and transfer risks	LC
13.	Market risks	C
14.	Liquidity risk	LC
15.	Operational risk	LC
16.	Interest rate risk in the banking book	LC
17.	Internal control and audit	C
18.	Abuse of financial services	C
19.	Supervisory approach	C
20.	Supervisory techniques	C
21.	Supervisory reporting	C
22.	Accounting and disclosure	C
23.	Corrective and remedial powers of supervisors	LC
24.	Consolidated supervision	LC
25.	Home-host relationships	C

- **Compliant (C)** – All applicable essential criteria under the Core Principle are met without any significant deficiencies, or when the objectives of the Core Principle are achieved through alternative means.
- **Largely compliant (LC)** – Only minor shortcomings are observed that do not raise any concerns about the authority's ability and intent to achieve full compliance with the Core Principle. For essential criteria that are not met, the overall effectiveness of the authority's regime should be sufficiently high to ensure that no material risks are left unaddressed.
- **Materially non-compliant (MC)** – There are severe shortcomings, despite the existence of formal rules, regulations and procedures. There is evidence that supervision has clearly not been effective, that practical implementation is weak, or that the shortcomings are sufficient to raise doubts about the authority's ability to achieve compliance.
- **Non-compliant (NC)** – There has been no substantive implementation of the Core Principle, several essential criteria are not complied with or supervision is manifestly ineffective.

- **The Bank's supervisory framework provides effective support to its mandates and objectives of maintaining financial stability.** The risk-based supervisory framework provides a systematic and consistent approach to supervision, incorporating a well-integrated programme of on-site and off-site reviews which are also informed by the Bank's macrosurveillance activities. This is further supported by a horizontal risk assessment that facilitates the identification of emerging risks and assessment of the impact on the individual institutions and the overall industry. The Bank communicates its supervisory assessments and concerns in a timely and effective manner, and requires and follows up on corrective actions. The Bank also has the ability to obtain information necessary for its supervisory purposes, can take a wide range of supervisory intervention actions at early stages to avert potential problems and impose penalties for non-compliance with regulatory and legal requirements. This is complemented by a well-developed programme that is in place for information exchange and supervisory cooperation with both domestic and foreign regulatory agencies.

Key Recommendations

The compliance assessment put forth several recommendations that will ensure existing regulatory and supervisory arrangements continue to be effective in the light of market developments and reflect leading practice. The new financial services legislation addresses many of these recommendations, while the Bank will continue to remain focused on further improving the efficacy of its regulatory and supervisory practices.

The main recommendations are as follows:

- **Further improve the industry consultation process on proposed policy measures to increase the level of public transparency, and provide additional clarity around supervisory expectations and priorities in guidelines and supervisory directives issued by the Bank.** The Bank already widely engages with the industry on proposed regulatory requirements as required under its internal policy development framework. The Bank recognises that engaging effectively with the industry early in the development of regulatory policy can enhance regulatory outcomes. To this end, the industry consultative process on regulatory changes have been extended to include more targeted engagements through focus groups and impact assessments based on detailed inputs from banking institutions to ensure that all relevant views are well understood and carefully considered. In keeping with its principle-based regulatory approach, the Bank is also reviewing its prudential documents to provide better guidance on standards that must be adhered to, and the range of practices that banks may consider to meet such standards that are also proportionate to the size and complexity of the institution. All new prudential guidelines are published on the Bank's website, while existing guidelines which are under review will be published upon completion of the review.

- **Enhance transparency of licensing standards and suitability requirements for shareholders.** This will be achieved under the FSA and IFSA which set out clear criteria for licensing and for the acquisition of significant interests in banking institutions, including criteria applied to assess the suitability of shareholders. Criteria for the assessment of applications for a banking licence have also been enhanced under the new legislation to include an assessment of whether the activities of financial groups will impede effective regulation and supervision by the Bank.

- **Widen the scope of application of the legislative and prudential framework to include financial holding companies and to allow for the supervision of financial groups on a consolidated basis.** To this end, the FSA will empower the Bank to designate and authorise a financial holding company, and apply prudential standards, including capital requirements, liquidity standards, risk management and stress testing expectations on financial groups on a consolidated basis.

- **Issue specific regulations on interest rate risk in the banking book (IRRBB), country risk and operational risk, and fully implement Pillar 2.** The assessment noted that these areas are already the subject of the Bank's ongoing supervisory reviews of banking institutions to ensure that risks are properly identified, assessed and reported to the Bank. The full implementation of Pillar 2 in 2013, following a two-year transition period, will see the intensification of the Bank's supervisory review and examination of internal capital assessment processes, covering, among others, the management of IRRBB and credit concentration risk by banking institutions.

- **Align existing Guidelines on Single Counterparty Exposure Limits with international standards, and expand the scope of application of prudential requirements on credit transactions with related parties to capture significant minority shareholders.** The implementation of the revised Guidelines on Single Counterparty Exposure Limits in March 2013, and the planned review of the Guidelines on Credit Transactions with Connected Parties also in 2013, will significantly enhance compliance in these areas.

- **Establish a comprehensive resolution framework, with clear legislative provisions for determining non-viability of banking institutions, to complement the existing supervisory intervention framework. The framework should also be sufficiently broad in scope and application to allow for the resolution of financial holding companies.** The revised Strategic Alliance Agreement between the Bank and the Malaysia Deposit Insurance Corporation (Perbadanan Insurans Deposit Malaysia, PIDM), executed in April 2012, improves the coordination of intervention and resolution actions and provides an important platform on which to build the resolution framework. Clear triggers for the determination of non-viability are also addressed under the agreement, thus strengthening the accountabilities of both agencies in ensuring prompt resolutions of troubled institutions. These triggers have been reproduced in the Bank's recently-revised standard on the Capital Adequacy Framework (Capital Components) as conditions under which the Bank may impose losses on holders of bank capital instruments.

- **Expand the application of penalties on individuals under Civil Law.** The new financial services legislation will enable this through provisions that support a more comprehensive penalty framework which encompasses civil, administrative and criminal penalties for breaches of regulatory and legal requirements.

- **Leverage opportunities to foster greater coordination and information exchange with other supervisory agencies, including the home authorities of foreign banks which are active in Malaysia.** Efforts continue to be pursued to further strengthen the Bank's cooperation with domestic regulatory agencies and home supervisors of locally-incorporated foreign banks. Key enhancements were made during the year to cooperation arrangements with Securities Commission Malaysia and PIDM, and the formalisation of information sharing arrangements with the Malaysia Co-operative Societies Commission. The Bank also pursued bilateral engagements with foreign supervisors, and actively hosted and participated in supervisory colleges to enable the exchange of information and coordination of supervisory activities involving cross-border financial groups.

Assessment of Malaysia's Observance of the IAIS Insurance Core Principles

The Insurance Core Principles (ICPs), first published by the International Association of Insurance Supervisors (IAIS) in 2000, were substantially revised in 2011. The new ICPs are based on a set of high-level principle statements, supported by more specific standards and guidance which are used to assess observance of the ICPs. The new ICPs place greater emphasis on risk-based approaches to regulation and supervision, and provide for the application of the ICPs based on proportionality. Enhancements were also made, particularly in the areas of corporate governance, risk management, group-wide supervision and macroprudential surveillance, to reflect developments in insurance markets and supervision, and to incorporate recommendations of the Group of Twenty Finance Ministers and Central Bank Governors, and the Financial Stability Board (FSB). Malaysia was among the first few countries to be assessed by the International Monetary Fund (IMF) and the World Bank against the revised set of improved ICPs.

This article presents a summary of the assessment and key observations of Malaysia's observance of the ICPs. The detailed assessment is published separately on both the IMF's and the World Bank's websites.

Malaysia was assessed to have either 'observed' or 'largely observed' 22 out of the 26 ICPs (Table 1). Four ICPs relating to prudential requirements on enterprise risk management, group-wide supervision, arrangements for the legal protection of customer funds held by insurance intermediaries, and cross-border cooperation in crisis management were rated 'partly observed'. The assessment noted that the Financial Services Act 2013 (FSA) and Islamic Financial Services Act 2013 (IFSA) will address many of the recommendations for improvements, while ongoing enhancements to existing regulatory requirements to formalise the Bank's supervisory expectations will further enhance Malaysia's level of observance. These enhancements are already well advanced. In particular, the implementation of the Internal Capital Adequacy Assessment Process and the issuance of new requirements on risk governance will strengthen enterprise risk management within insurance companies, while the new legislation affords legal protection for monies received and held in trust by intermediaries for the benefit of insurance/takaful customers.

Malaysia's level of observance of the ICPs on group-wide supervision and cross-border cooperation and crisis management largely reflect the current nature and scope of group-wide exposures and cross-border activities of insurers situated in Malaysia, and the risks that they pose to financial stability. The assessment noted that currently there are no significant domestic insurance groups and that the cross-border activities of Malaysian insurers are limited. For these reasons, the scope and intensity of the Bank's supervision on a group-wide basis as well as the focus on more formal cross-border arrangements for crisis management corresponds to the Bank's view of the relatively low risks from group exposures to insurers in Malaysia. The Bank expects to intensify measures to address group-wide and cross-border issues as and when the activities of insurers expand more significantly and have a wider cross-border presence.

The key findings from the assessment are:

- **A comprehensive legal framework is in place that clearly defines the authority and responsibility of the Bank, and the Bank is accorded with a range of powers that supports its mandate.** Legislation provides for the Bank to be an operationally-independent statutory body, with effective control of its strategic focus and resource allocation to carry out its regulatory and supervisory activities. Officers of the Bank are required to adhere to a code of conduct that promotes high ethical standards. Legal protection is provided to enable the effective performance of their duties.

- **Entry into the industry is subject to rigorous review.** New licences and significant shareholders are assessed against a broad set of financial and non-financial requirements, and a regulatory framework is in place to ensure that the directors, senior management and key persons in control functions possess the competence and integrity to carry out their roles effectively.

Table 1

Degree of Observance of the Insurance Core Principles

	Insurance Core Principles	Level of Observance
1.	Objectives, powers and responsibilities of the supervisor	LO
2.	Supervisor	LO
3.	Information exchange and confidentiality requirements	LO
4.	Licensing	LO
5.	Suitability of persons	LO
6.	Changes in control and portfolio transfers	LO
7.	Corporate governance	LO
8.	Risk management and internal controls	LO
9.	Supervisory review and reporting	O
10.	Preventive and corrective measures	O
11.	Enforcement	LO
12.	Winding-up and exit from the market	O
13.	Reinsurance and other forms of risk transfer	LO
14.	Valuation	O
15.	Investment	LO
16.	Enterprise risk management for solvency purposes	PO
17.	Capital adequacy	LO
18.	Intermediaries	PO
19.	Conduct of business	LO
20.	Public disclosure	LO
21.	Countering fraud in insurance	LO
22.	Anti-money laundering and combating the financing of terrorism	O
23.	Group-wide supervision	PO
24.	Macroprudential surveillance and insurance supervision	O
25.	Supervisory cooperation and coordination	O
26.	Cross-border cooperation and coordination on crisis management	PO

- **Observed (O)** – All applicable standards are observed. The authority has the legal powers to carry out its duties and demonstrates the exercise of the powers to a satisfactory level.
- **Largely observed (LO)** – Only minor shortcomings are observed, which do not raise any concerns about the authority's ability to achieve full observance.
- **Partly observed (PO)** – Shortcomings are observed that are sufficient to raise doubts about the authority's ability to achieve full observance.
- **Not observed (NO)** – No substantive progress toward observance has been achieved.

- **A comprehensive compendium of prudential requirements and guidance is in place, aimed at promoting safety and soundness, market discipline and integrity of the insurance industry.** This includes extensive expectations on corporate governance and effective risk management and control functions covering an insurer's significant activities. A key cornerstone of the prudential framework is the Risk-Based Capital Framework for Insurers, which captures risks on a total balance sheet approach and requires insurers to maintain sufficient capital to absorb significant unforeseen losses. Valuation and disclosure requirements are aligned with the International Financial Reporting Standards and specifically address required disclosures relevant to insurance contracts. In addition, the Bank publishes an extensive set of industry data on its website.

- **Regulatory requirements address expectations for the fair treatment of customers and are reinforced through the Bank's market conduct surveillance and a structured consumer education programme.** Insurers are required to observe standards of fair dealing in the development of new products, sales and marketing practices including proper advice and disclosures to consumers, and claims settlement. Assessments from the Bank's off-site and on-site monitoring of market conduct practices prompt supervisory actions and decisions to renew the licences of insurance intermediaries. The legislation also provides for severe penalties for insurance fraud and money laundering. The Bank also actively monitors and shares information with relevant authorities to support effective enforcement actions.

- **The supervisory regime is robust and supports effective risk assessments of insurers.** The risk-based supervisory framework enables the systematic and consistent supervision of all licensed insurers, through continuous off-site monitoring, regular on-site inspections and thematic examinations. This is well-integrated with the Bank's macrosurveillance activities and supported by a rigorous stress testing programme. Legislation enables the Bank to take appropriate preventive measures in a timely manner. Supervisory concerns are clearly communicated to insurers and corrective actions closely monitored by the Bank. The Bank also has at its disposal a broad range of tools to implement corrective and enforcement actions, and to cooperate with the Malaysia Deposit Insurance Corporation to resolve distressed insurers in a manner which safeguards the interests of policyholders and minimises costs to the financial system.

- **The Bank adopts a macrosurveillance approach that is commensurate with the nature, scale and complexity of the insurance sector.** The surveillance framework tracks key financial soundness indicators and trends within the insurance industry. Stress testing is conducted regularly, and combines both a macro (top-down) and micro (bottom-up) approach. In addition, work by the Bank is underway to develop a framework to assess the systemic importance of insurers based on guidance developed by the FSB.

Key Recommendations

The assessment noted several recommendations for further improving Malaysia's observance of the ICPs. A number of these recommendations are relevant to more developed insurance markets and are expected to gain greater significance for Malaysia as the domestic industry grows further in size and complexity. These recommendations are included in the Bank's medium- to longer-term plans.

As with the assessment on Malaysia's compliance with the Basel Core Principles for Effective Banking Supervision, similar recommendations have been made for improving transparency in licensing and suitability requirements for shareholders, and for the regulation and supervision of financial holding companies to support the supervision of insurers on a group-wide basis (refer to box article 'Assessment of Malaysia's Compliance with the Basel Core Principles for Effective Banking Supervision'). This has been addressed in the new FSA and IFSA. As also noted above, risks associated with the cross-border activities of domestic insurance groups remain low at present. In practice, informal arrangements have been established with host supervisors in jurisdictions where Malaysian insurance groups have cross-border operations. The supervisory approach also incorporates an ongoing assessment of potential risks arising from activities of related entities that may impact the

financial condition of insurers in Malaysia. The Bank remains committed to further strengthening its existing cooperation and exchange of information arrangements with other supervisors and authorities, including through wider participation in bilateral memoranda of understanding and by strengthening capabilities to support effective cross-border crisis management and resolution as appropriate to the risks posed by insurers' cross-border activities.

Recommendations were also made to review and update a number of regulatory requirements to incorporate principles of sound practice that the Bank already demands of insurers through its supervisory activities. This is being implemented under an ongoing programme to regularly review the existing requirements in line with the Bank's internal policy development framework.

Other recommendations include the following:

- **Strengthen enforcement tools and implement a supervisory framework specific to market conduct activities.** The new FSA and IFSA establish specific provisions for the Bank to issue and enforce standards of business conduct. A major development in the Bank's regulatory agenda has been the development and implementation since 2011 of a more structured and integrated framework for supervising market conduct risks. This is now fully operational, providing for more effective assessments of risks to consumers that draw on a broad range of information and more targeted supervisory activities. Provisions for administrative and civil penalties in the new FSA and IFSA will further support effective enforcement of market conduct standards by the Bank.

- **Develop a more comprehensive capital framework for financial guarantee insurance.** Danajamin Nasional Berhad, Malaysia's only financial guarantee insurer, is subject to equivalent requirements on corporate governance and risk management that apply to other financial institutions regulated by the Bank. It must also comply with prudential exposure limits on a single and aggregate basis which are commensurate with its financial capacity. Moving forward, the Bank intends to put in place a more comprehensive and risk-sensitive capital framework for financial guarantee insurance business which will better capture the risks inherent in the business, while reinforcing incentives for sound risk management. This will also lend support to the sustainable growth of Danajamin as it continues to expand its role in providing credit enhancements to more Malaysian corporations and in a wider array of economic sectors.

- **Provide for interdependencies between and within risk categories under the capital framework**. Stress testing requirements currently help to identify risk correlations and inform management decisions regarding the adequacy of financial buffers for addressing synchronous risks and spillovers from specific risk events. The Bank intends to further enhance the capital requirements in the future to account for the effects of risk correlations as more data becomes available to support such refinement to the framework.

MARKET CONDUCT AND CONSUMER EMPOWERMENT

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The Financial Services Act 2013 (FSA) and Islamic Financial Services Act 2013 (IFSA) accord the Bank with a clear mandate to foster fair, responsible and professional conduct by financial service providers (FSPs) that are regulated by the Bank. The Bank discharges its mandate by setting expectations and requirements for regulating the conduct of FSPs towards consumers and assessing the behaviour of FSPs against those expectations; promoting transparency to consumers; taking enforcement actions against breaches of conduct; and equipping consumers with the financial knowledge, skills and access to effective redress avenues to better protect their own interests. While it would not be possible to completely eliminate the potential for FSPs to act in a way that may not be in the best interests of consumers, the Bank commits to providing a credible deterrent against unfair practices towards consumers through its supervisory and enforcement activities, and ensuring that when there is unfair treatment, there are effective avenues through which consumers can seek remedy. This will allow for healthy competition and innovation in the financial industry which ultimately benefits consumers, while mitigating moral hazard in the longer term by also advocating the responsibility of consumers to take appropriate measures to protect their financial interests.

KEY TRENDS AND DEVELOPMENTS

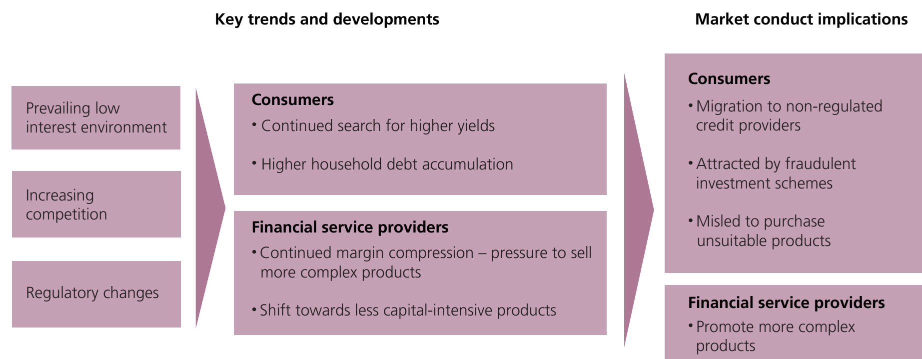
The Bank's strategic priorities in the area of market conduct are guided by developments and conditions in the operating environment and the key risks that they present to consumers. To a large extent, developments in the retail financial markets in the recent period have been substantially influenced by the low interest rate environment, increasing competition including from non-bank FSPs and the strengthening of prudential requirements that have had an important bearing on the structure, design and distribution of financial products in the market. Since 2006, the general insurance industry has also been confronted with considerable challenges in the motor insurance sector as claims costs continue to escalate beyond sustainable levels that are not supported by premiums, leading to fundamental reforms that are set to significantly change the motor insurance landscape. In turn, these conditions influence the behaviour of FSPs and consumers, sometimes in ways which can affect the interests of consumers (Diagram 4.1). The Bank closely monitors such conditions and takes action to mitigate identified risks to consumers.

Against this backdrop, the Bank's oversight activities in 2012 continued to focus on managing the following key risks to consumers:

- **In search for higher yields,** more consumers may seek out investment alternatives without sufficient understanding of the risks involved or making adequate enquiries on the legitimacy of the service providers. The relatively low appreciation of financial risk management among consumers further increases the risk of making ill-informed financial decisions. A study undertaken by the Organisation of Economic Co-operation and Development (OECD) in 2011 observed that while financial literacy levels of Malaysia's financial consumers are comparable to those in developed economies, Malaysian consumers pay little attention to risk reduction in managing their finances;
- **The accumulation of higher debt by low income households** in response to lower borrowing costs. Households become overly burdened when borrowing decisions are made without due regard to the ability to service the debt over the longer term. The risks are increased when borrowers have no financial buffers to meet contingencies. This has been compounded by an increasing trend in borrowings by lower-income households from non-bank credit providers, which are not subject to underwriting standards imposed by the Bank;
- **Continued pressure on FSPs' margins,** resulting in the promotion of more complex products with higher expected returns without considering whether the products are suitable for the targeted consumers. Some of these products are also being bundled together and sold through alternative and multiple distribution channels without proper training

Diagram 4.1

Key Trends and Developments, and Market Conduct Implications



of sales staff. This in turn can lead to poor sales practices and behaviour; and

- **The offering of less capital-intensive structured products by FSPs with greater risks borne by consumers,** partly in response to the increasing demands of prudential regulation which are necessary to ensure that FSPs are financially sound and have the ability to meet their obligations to consumers, including under adverse market conditions.

The Bank's priorities in 2012 were directed at strengthening the legal foundation for the oversight of market conduct, implementing an enhanced market conduct supervisory framework, increasing the scrutiny of insurance intermediaries and empowering consumers through targeted financial education programmes

In managing these risks, the Bank's priorities in 2012 were directed at strengthening the legal foundation for the oversight of market conduct, implementing an enhanced market conduct supervisory framework, increasing the scrutiny of insurance intermediaries and empowering consumers through targeted financial education programmes. The Bank also significantly increased its engagements with other authorities and agencies, and continued to maintain constructive dialogue with consumer associations on the issues confronting consumers.

STRENGTHENING THE LEGAL AND SUPERVISORY FRAMEWORK

Specific provisions in the FSA and IFSA have significantly strengthened the preconditions for an effective regulatory and supervisory regime for business conduct and consumer protection. The new legislation provides explicit and expanded powers for the Bank to set and enforce business conduct standards on FSPs in areas that include disclosure requirements, fairness of contract terms, financial promotion, provision of advice and complaints handling. In addition, the legislation clearly identifies prohibited conduct that is inherently unfair to consumers, enhances the legal protection provided to consumers in relation to dealings with insurance and takaful companies and intermediaries, and provides for the evolution of avenues for consumer redress. Key features of the new legal framework are further described in Table 4.1.

Implementation of market conduct supervisory framework

The implementation of the risk-based market conduct supervisory framework continued to be a priority in 2012. This entailed moving towards a more pre-emptive, risk-based, and outcome-focused framework, with an emphasis on conduct risks that have the highest potential of causing widespread detriment to consumers or a loss of confidence in the financial system.

Table 4.1

Key Features of the New Legal Framework

Wider market conduct powers	• Powers for the Bank to specify standards on business conduct • Clear identification of prohibited conduct by FSPs – Engaging in misleading or deceptive conduct – Making false, misleading or dishonest representation – Exerting undue pressure when marketing financial products or in seeking payments – Demanding payments for unsolicited financial products or services – Coercing consumers to purchase a financial product as a condition of purchasing another financial product – Colluding to fix or control the features or terms of financial products or services to the detriment of consumers • The Bank may provide guidance on prohibited conduct
Strengthened provisions for insurance and takaful business	• Enhanced protection for consumers with respect to their pre-contractual disclosure obligations. Among others, an insurer or takaful operator must pose specific questions to consumers for its underwriting purpose. Remedies available to insurers or takaful operators for careless or innocent misrepresentations by consumers shall also be proportionate to the action that would have been taken by the insurer or takaful operator had the consumer not made the misrepresentation • New provisions on family takaful certificates that require a person to have a permissible takaful interest on a person covered to avoid moral hazard or manipulation of the takaful contract • New provisions on compensation on claim amount to expedite the payment of family takaful benefits • New provisions on nominations, including a provision on conditional *hibah*, to provide greater clarity on the nomination process
More efficient regulatory framework for insurance and takaful intermediaries	• Introduction of an approval and registration regime for insurance and takaful intermediaries which is more reflective of the risks presented by such entities • Recognition of Islamic financial advisers as a new distribution channel for family takaful products • New requirement to have in place professional indemnity insurance or takaful cover to protect clients' interests • New requirement to maintain separate accounts to ensure ring-fencing of clients' monies
Enhanced avenues for consumer redress	• Enabling power for the Bank to approve financial ombudsman schemes aimed at ensuring effective and fair handling of complaints and resolution of disputes • The Bank may prescribe the function, duties and scope of the scheme • Obligations on FSPs to be members of an approved financial ombudsman scheme and to comply with the awards granted under the scheme
Strengthened enforcement powers	• Monetary and non-monetary administrative actions in addition to civil and criminal penalties • Includes public reprimand, orders to remedy a breach and for the FSP to make restitution to any person aggrieved by the breach
Cooperation with other regulatory agencies	• The Bank to: – coordinate with Securities Commission Malaysia on the regulation of business conduct relating to capital market activities conducted by FSPs under the purview of the Bank – consult the Malaysia Competition Commission (MyCC) on the development of guidance on tied selling and collusive actions, and to refer complaints related to these actions to MyCC

The supervisory approach combines thematic issue specific and individual firm reviews based on an identification of key conduct risks over the period of review. During the year, three thematic reviews and 19 individual firm reviews were conducted by the Bank, the outcomes of which are discussed in the next section on 'Addressing Consumer Issues'. The Bank is in the process of developing baseline conduct risk assessments for institutions with significant retail business segments in each regulated sector. This involves an assessment of the risks present in an institution's main retail activities and the manner in which these risks are controlled through its operational management and oversight activities. The assessment covers (i) product development and governance; (ii) fairness and transparency of contract terms; (iii) sales and marketing practices; (iv) incentives and remuneration structures; (v) competencies of sales and marketing personnel; (vi) after-sales support; (vii) advisory and redress channels; (viii) protection of customer information; and (ix) handling of clients' monies. The Bank expects to complete the risk assessments for 15 institutions in the banking, insurance and takaful sectors by end-2013. These institutions account for about 30% of FSPs with significant operations in the retail market segment in the respective subsectors. The assessment of the remaining institutions is expected to be completed by the end of 2015. Once completed, the risk assessments will be updated regularly and will be used as a basis to prioritise supervisory activities, including thematic and institutional reviews.

Generally, the supervisory reviews in this recent year showed that FSPs have a higher level of awareness of the impact that consumer issues have on their business and risk strategies. This was observed with some consistency at the senior management level but less at the board level, which suggests that processes within FSPs for escalating conduct issues to the attention of the board still requires improvement. Beginning 2013, the Bank will start to include conduct assessments in its annual supervisory meetings with the boards of FSPs which discuss the Bank's risk assessments of individual FSPs. This is to encourage a broader deliberation of conduct risks at the boards of FSPs and to facilitate the prioritisation of management attention and resources towards addressing key conduct issues facing an FSP.

Few FSPs have set a strong and consistent 'tone at the top' on how the board and management expect the FSP to treat its customers. Conduct obligations are often viewed as a compliance requirement, rather than a core value proposition of the FSP. This is slowly changing with some FSPs placing fair and responsible practices towards consumers at the centre of their growth strategies. These FSPs have made the consumer experience a key focus of their business plans and are strengthening the alignment between growth and performance targets, with a clear focus on consumers. The Bank also continues to observe improvements in the level of transparency and disclosure in FSPs' marketing and sales materials following previous interventions by the Bank. However, the Bank believes there is scope to further improve the level of comparability and reduce the complexity of information provided by FSPs, which is important to help consumers compare and understand the disclosures made. The Bank plans to undertake research in 2013 regarding the use of information that is made available by FSPs as a basis for more specific improvements to current disclosure requirements and practices.

> Business practices that promote positive consumer outcomes not only serve to protect individual consumers from excessive risks, but also protect individual institutions from losses that can threaten their safety and soundness

Since the Global Financial Crisis, the nexus between conduct risks and prudential outcomes has become more pronounced. Business practices that promote positive consumer outcomes not only serve to protect individual consumers from excessive risks, but also protect individual institutions from losses that can threaten their safety and soundness, thus reducing the risks to financial stability. Within the Bank, supervisory reviews of market conduct practices, while serving on their own to promote and reinforce fair and responsible practices among the FSPs, also provide important inputs into the overall risk assessment of banks, insurers and takaful operators.

Significant conduct developments which can have implications on financial stability are deliberated by the Bank's Financial Stability Committee. More work is being undertaken by the Bank to better understand the primary ways in which conduct issues can manifest into increased risks to the safety and soundness of institutions. This will also contribute to the development of more robust approaches by the Bank to account for conduct risks in the overall supervisory risk ratings of FSPs.

ADDRESSING CONSUMER ISSUES

Responsible lending practices

While sustained income growth and favourable employment conditions have strengthened the capacity of consumers to borrow, lower-income households continue to be highly leveraged, increasing this group's vulnerability to income shocks and adjustments to borrowing costs. The Guidelines on Responsible Financing, which was implemented in January 2012, requires FSPs to focus on affordability assessments and their obligations to ensure that borrowers have the capacity to take on additional financing, based on more robust income verifications and prudent debt service ratios that take into account the circumstances of the borrowers. Since the implementation of the Guidelines, most FSPs have adjusted their internal underwriting standards, notably to strengthen documentation requirements for verifying income, and to provide more prudent buffers in setting the debt service ratio for borrowers to meet essential and contingency expenditures. FSPs have also been more circumspect on lending into retirement. These changes have contributed to improvements in the level of engagement between FSPs and potential borrowers as part of efforts by FSPs to obtain a better understanding of borrowers' financial circumstances before loans are made.

Public concerns that the Guidelines would significantly constrict access to financing by households proved to be unfounded. Annual growth in outstanding loans to the household sector by the banking system remains strong, and consumers who can afford to take on new debt continue to have access to financing. However, consistent with the objective of the Guidelines, new borrowings by households have started to moderate towards more sustainable levels, with growth recorded at 11.6% as at end-2012 (12.9% at end-2011). Approval rates for housing loans and vehicle financing which account for the bulk of household loans declined marginally in line with more robust affordability assessments and measures by the Bank to curb borrowing for speculative property purchases. The approval rate for credit cards similarly continued to decline following the measures implemented in 2011 that raised the minimum income eligibility for owning a credit card, and imposed limits on the number of credit cards that can be issued to individuals earning annual incomes below RM36,000. The requirement for FSPs to perform their own affordability assessments rather than to rely on the possession of a credit card from another FSP as proof of affordability, also contributed to lower approval rates for credit cards.

Approval rates for personal financing however, continued to rise. The Bank has intensified its review of lending practices in this segment to ensure compliance with the Guidelines on Responsible Financing. With higher expectations being imposed on FSPs to conduct proper affordability assessments, there has been some migration of borrowers to other credit providers to obtain financing. This had been observed in the growth in personal financing offered by non-bank lenders in 2012, following the implementation of the Guidelines for banks. The uneven practices of responsible financing by the non-bank lenders have contributed to the increase in indebtedness among lower-income groups. As these institutions are not directly regulated by the Bank, the Bank has intensified its engagements with the relevant oversight authorities and government agencies during the year to promote a more consistent implementation of responsible financing practices for the household sector. As a result of these engagements, the Malaysia Co-operative Societies Commission (Suruhanjaya Koperasi Malaysia, SKM) issued formal requirements on responsible financing practices for credit co-operatives in December 2012.

Product suitability and appropriate advice to consumers

Improving the quality of advice provided to consumers continued to be a key focus of conduct regulation and supervision. Particular attention was accorded to the insurance and takaful industry to ensure that in the persistent low interest rate environment, insurers which were taking steps to improve their portfolio mix between new and previous policies that were priced with much higher interest rates did so responsibly. During the year, the Guidelines on

Proper Advice Practices for Life Insurance and Family Takaful Business were revised to further strengthen expectations for insurers and takaful operators to conduct sufficient enquiries to better understand consumers' financial needs and priorities. The Guidelines, which have been extended to insurance brokers and financial advisers, also require intermediaries to disclose any conflicts of interest that may affect the advice they may provide to consumers.

The Bank's ongoing surveillance and supervisory activities found mis-selling practices in the sale of insurance products by three institutions during the year. These incidents were attributed mainly to inadequate training and controls implemented by these institutions over the selling practices of their agents, as well as the use of misleading marketing materials by agents. The Bank required these institutions to take immediate actions to identify and suspend further sales by the errant agents, review all agent training materials, and strengthen controls over the use of marketing and sales materials by agents. The institutions were further directed to furnish over 1,400 affected policyholders with accurate product materials and information, and allow policyholders to review their decisions to purchase or retain their policies. Policyholders that chose not to continue with their policies were given the option to discontinue the policies with a full refund, or convert their policies to other products at no additional cost. As a result of the supervisory intervention, more than RM30 million in premiums were refunded to the affected policyholders. As part of the efforts to identify increased risks of mis-selling at an earlier stage, the Bank will be taking a closer look at the effects of incentive structures on the quality of insurance and takaful advice provided to consumers. The review will also include an assessment of whether controls within institutions are adequate to provide a countervailing influence on incentives that encourage sales staff to promote some products over others, or to churn existing policies.

Meaningful consumer disclosures

Meaningful disclosures to help consumers make informed decisions are primarily achieved through product transparency and disclosure requirements, the use of simple language in financial consumer contracts and comparative tables published by the Bank on financial product fees and charges. These efforts aim to provide consumers with the means to better understand information on products being offered and to make informed decisions.

As part of its monitoring activities, the Bank reviewed more than 1,400 advertisements and promotional materials published by banks, insurers and takaful operators during the year to ensure compliance with the Bank's product transparency and disclosure requirements. Of these, over 30 non-compliant incidents were observed, with the respective FSPs directed to withdraw or modify the misleading disclosures with immediate effect. In addition, the Bank has prohibited insurers and takaful operators from making direct comparisons of returns between products with different features and risks in their product illustrations. Such comparisons are generally misleading to consumers, providing an imbalanced presentation of risks and returns on products with very different risk profiles. Insurers and takaful operators were further prohibited from illustrating returns based solely on optimistic scenarios and representing guaranteed benefit payments that have already been imputed in premiums paid by policyholders as additional income or investment returns.

The use of plain language in insurance contracts and takaful certificates facilitates consumers' understanding of their contractual rights and responsibilities and complements existing measures on product transparency and disclosure. At the industry level, the Life Insurance Association of Malaysia (LIAM), the General Insurance Association of Malaysia (Persatuan Insurans Am Malaysia, PIAM) and the Malaysian Takaful Association (MTA) continue to have an important role in driving the plain language initiative which is being implemented in stages. All houseowner and householder insurance policies have adopted plain language since March 2012. This is being followed by the translation of private car insurance and hospital and surgical insurance policies into plain language which is on track to be completed in the first half of 2013. The use of plain language has important benefits to both FSPs and consumers. It reduces gaps in expectations between FSPs and consumers and consequently reduces the incidence of disputes and litigation. In addition, the use of plain language facilitates consumers in ensuring that products are suitable for their specific needs. For FSPs, it can enhance the appeal of products to a wider market. The adoption of plain language for hospital and surgical insurance policies will be particularly significant for many

consumers given the important conditions and exclusions that consumers need to be aware of when purchasing such products and the technicalities that can often obscure the visibility of important information to consumers.

At the industry level, the Life Insurance Association of Malaysia, the General Insurance Association of Malaysia and the Malaysian Takaful Association continue to have an important role in driving the plain language initiative

Similarly, the Association of Banks in Malaysia (ABM), in consultation with the Bank and the Government's Special Task Force to Facilitate Business (Pasukan Petugas Khas Pemudahcara Perniagaan, PEMUDAH), has developed a template to standardise and simplify the description of key terms and conditions for housing loans and home financing agreements to ensure that they are presented in a manner that is clear, consistent between institutions offering similar products and easy to understand. The template is applicable to loan and financing agreements involving a principal sum of RM500,000 and below, which covers 80% of straightforward housing loans extended by banks. This initiative is expected to reduce the length of housing loan or financing contracts, making it easier for consumers to read and understand the terms and compare them across institutions. While banks remain free to compete on the terms that they offer to consumers, consumers would be in a much better position to compare these terms as they are now presented in a consistent manner. The Islamic banking industry has embarked on a similar initiative to develop standardised key terms to cater for all Shariah contracts for home financing agreements involving a principal sum of RM500,000 and below.

Fair marketing and claims practices in motor insurance sector

While measures are progressing to reform the motor insurance sector, the Bank has been concerned with actions by some insurers during the transition period to increase, through unfair practices, the balance of non-motor business in their portfolio as a means of cushioning the impact of continued losses experienced on the motor insurance business lines. A specific concern has been with the forced selling of personal accident insurance as a condition for obtaining motor insurance cover. The Bank took action in more than 50 identified cases of forced selling of personal accident products together with motor insurance covers. In all the cases, policyholders received a full refund.

The Bank also implemented several measures to promote fair motor claims assessments and reduce the time taken to settle claims. This included extending the requirement for loss adjusters to make reference to a centralised database on prices of motor parts and labour time operated by Motordata Research Consortium Sdn. Bhd. (MRC) for all motor claims, including third party claims. The standardised motor parts prices and labour time provided through the MRC database will support more transparent and objective claims assessments. Enhancements to the MRC system have also been made to facilitate the online submission of third party claims assessments directly to insurers, which is expected to improve the turnaround time for processing claims.

With more complete information captured on motor claims assessments, the MRC database will facilitate monitoring of trends in the practices of the industry for approving and assessing motor claims, and to gauge progress in improving the efficiency of claims settlements. It will also enable the undertaking of broader industry analyses on trends in parts prices, trade discounts and labour costs, as well as facilitate more effective fraud detection and control.

Safeguarding customer information

FSPs and their employees have a statutory and contractual duty not to disclose customer information to any third parties unless express consent has been given by the customer. Banking institutions and payment instrument issuers in particular are specifically prohibited from giving out customer information except under legally permitted circumstances such as disclosure to law enforcement agencies for purposes of investigating or prosecuting an offence, or disclosure to regulatory authorities. FSPs must establish policies, procedures, and effective internal controls in respect of disclosure

of customer information to permitted external parties. FSPs are also required to ensure that any complaint on wrongful disclosure or detection of a breach of customer confidentiality is fully investigated and remedial actions are taken.

The supervisory review of FSPs includes an assessment of controls and practices for safeguarding customer information. During the year, the Bank conducted a thematic review covering the retrieval, access and disposal of customer information by selected banks. The Bank found that most FSPs have effective control measures to safeguard customer information, including promoting a high level of staff awareness on the importance of proper handling of customer information. A small number of FSPs were required to strengthen the controls associated with the sharing of customer information with affiliated companies or strategic partners for marketing and promotion purposes. The Bank was satisfied that the sharing of information in these situations did not include specific information on customer accounts, but was confined mainly to contact information. Nevertheless, the Bank required that the FSPs strengthen their controls by requiring a customer's permission for his or her contact information to be shared. The Bank was also generally satisfied with the procedures and practices for handling complaints on wrongful disclosures, and for ensuring that all complaints are investigated and addressed. In isolated instances where breaches were found to have occurred, mainly with fraudulent intent, the Bank has taken legal and supervisory actions against persons responsible for the breach, while FSPs also took swift disciplinary actions, including suspension or termination of the employees concerned.

Equitable fees and charges

The regulation of fees and charges in the financial services sector has two main aims (i) ensuring sufficient transparency to consumers on costs that they may incur in procuring a financial product or service; and (ii) preventing unfair or excessive fees and charges that are not reflective of the costs incurred by the FSPs.

FSPs have considerable flexibilities to determine the appropriate level of fees and charges to recover the costs incurred in providing a financial product or service, but in doing so, must demonstrate that the principles of fair practice as set out by the Bank are observed. This includes ensuring that the charges for ad-hoc services reasonably reflect the costs incurred and not the passing on of charges to customers for activities that are part of an FSP's internal processes for managing its risks. At present, the introduction of new or upward revisions in fees by FSPs must be approved by the Bank. About 160 of such applications are received annually for the Bank's consideration. In 2012, about 22% of applications received by the Bank were not approved or required to be adjusted as the proposed fees were inconsistent with the principles established by the Bank under the Guidelines on Imposition of Fees and Charges on Financial Products and Services. Enforcement actions were also taken against seven FSPs for non-compliance with the Bank's Guidelines, which resulted in a total refund of about RM4.7 million in fees and charges to affected customers.

Over the years, the Bank has observed progressive improvements in the level of FSPs' compliance with the principles on fair practices in the imposition of fees and charges. This in turn has led to a progressive reduction in interventions on fees and charges, suggesting a better understanding of the Bank's expectations by FSPs. Furthermore, complaints received on unfair or excessive fees and charges have remained low. These developments provide the necessary conditions for the Bank to undertake a review of the current approval regime, with a view towards reducing compliance costs for banks and enabling competitive forces to work more effectively for the benefit of consumers. A key premise of the review is the increased responsibility of the board and senior management of FSPs to ensure that fees and charges are fair and commensurate with the quality of services offered and the costs of providing a financial product or service. This review will be in tandem with strong disincentives for unfair fee practices under the FSA and IFSA, including public sanctions and orders to remedy a breach or make restitution to any person aggrieved by the breach. Careful consideration will also be given to the safeguards that should be preserved which will include an outright prohibition against specific fees and charges that are clearly unfair to consumers. A concept paper on the Bank's review proposals will be published for feedback in 2013.

Table 4.2

Features of the Guidelines on Ibra' (Rebate) for Sale-Based Financing

Key Areas	Policy Requirement	Implementation Date
Eligibility of *ibra'*	• *Ibra'* must be granted to customers of sale-based financing upon settlement prior to maturity (includes early settlement arising from prepayment, default cases and restructuring exercise)	1 Nov '11
Disclosure on *ibra'*	• Full disclosure on the Islamic financial institution's commitment to provide *ibra'*, the formula used to compute *ibra'* and its terms and conditions in relevant legal documentation at the inception of financing, during the recovery process and in connection with court litigations • During the inception of the contract, Islamic financial institutions are required to provide customised illustrations comprising the application of the *ibra'* formula and an indicative payment schedule to enhance customers' understanding on the workings of *ibra'*	1 Jul '12
Calculation on *ibra'*	• Determination of *ibra'* shall be based on the prescribed methodology. The amount of *ibra'* is equal to the unaccrued profit net of early settlement charges	
Early settlement charge	• Imposition of early settlement charges is allowed to reflect a reasonable estimate of costs incurred by Islamic financial institutions as a direct result of settlement prior to maturity	

In the Islamic financial sector, consumer interests are protected with the requirement to grant *ibra'* (rebate) to all customers upon early settlement of sale-based financing contracts such as *murabahah* and *bai' bithaman 'ajil*. The granting of *ibra'* by Islamic financial institutions provides equivalent financial effects as per conventional banking practices in which customers only repay the principal and accrued profits up to the date of early settlement. The Guidelines on *Ibra'* overcome problems previously associated with the discretionary nature of *ibra'*, the lack of clarity on the circumstances for granting *ibra'*, and insufficient disclosures in legal documentation which had resulted in varying outcomes for consumers and a common misconception that Islamic financing is more expensive than a conventional loan where early settlement is made by customers (Table 4.2).

Combating financial scams

The Bank continued to strengthen its efforts to ensure that consumers do not fall prey to fraudulent financial schemes or scams. The proliferation of scams – particularly get-rich-quick schemes, internet investment schemes and fake lotteries – continues to affect people of all backgrounds, ages and income levels.

As financial scams evolve in form and sophistication over time, it is vital for consumers to remain vigilant and to come forward to the authorities when offered suspicious investment schemes that promise unrealistically high returns with low risks

During the year, 11 illegal schemes which involved breaches of the laws administered by the Bank were investigated, of which one case was successfully prosecuted with jail sentences meted to the accused, two cases have been brought to court for prosecution, three are pending charge,

and investigations on five cases are expected to be completed during the first quarter of 2013. Given that enforcement activities on illegal financial schemes involve numerous enforcement agencies, a White-Collar Crime Taskforce was established in 2012 comprising the Bank, Securities Commission Malaysia, the Companies Commission of Malaysia, the Malaysian Communications and Multimedia Commission, the Royal Malaysia Police, the Ministry of Domestic Trade, Co-operatives and Consumerism, and the Inland Revenue Board. This Taskforce provides a platform for coordinating joint enforcement actions. In October 2012, the Taskforce conducted joint raids and investigations against four companies suspected of conducting illegal financial schemes based on gold trading.

As financial scams evolve in form and sophistication over time, enforcement activities alone are not enough to protect consumers from these fraudulent schemes. It is vital for consumers to remain vigilant and to come forward to the authorities when offered suspicious investment schemes that promise unrealistically high returns with low risks. During the year, significant resources have been directed at generating wide publicity on the dangers of such illegal schemes. In addition to wide mass media coverage, educational materials (including booklets, posters and leaflets) on financial scams entitled *Awas Penipuan Kewangan* have been distributed nationwide through the Bank's LINK and MobileLINK channels and strategic partners. To reach a wider audience, the Bank also utilises social networking platforms, such as Facebook and Twitter, to publish alerts and create interactive discussion forums. Consumers are also advised to refer to the Financial Consumer Alert List available on the Bank's website, which provides information on the modus operandi of different financial scams, as well as the names of companies and websites which are not authorised or approved under the laws administered by the Bank.

Preventing online fraud

In efforts to combat online fraud, banking institutions have implemented strengthened security measures for electronic banking, which include the deployment of customised picture or word verification to authenticate electronic banking users. This is in addition to the use of user identities and passwords, additional authentication mechanisms for high-risk transactions, and more stringent controls on the registration of electronic banking accounts.

Despite persistent electronic banking fraud attempts, actual electronic banking fraud cases have continued to decline dramatically from 4,380 cases in 2010 to 1,992 cases in 2012, reflecting the effectiveness of measures taken. Monetary losses due to electronic banking fraud accounted for only 0.0002% of the RM2.8 trillion worth of online transactions recorded last year. The primary modus operandi of online fraud remained largely unchanged, and mainly involved phishing (the use of fake e-mails or short message services purportedly sent from financial institutions to deceive unsuspecting customers into divulging login credentials and personal details), fraudsters masquerading as persons in authority to direct users to transfer funds to the fraudster, and spoofing (where fraudsters contact users online anonymously and trick them into revealing their account information). These methods are reliant on accountholders voluntarily giving their personal information and account details, without which the fraud attempts would not succeed. Hence, in an effort to raise consumer awareness, banking institutions have further increased the visibility of consumer alerts on the modus operandi of online fraud and on the importance of not responding to requests to divulge personal information.

Cohesive supervision of consumer credit activities

The regulatory framework governing the provision of consumer credit in the country remains fragmented given the involvement of multiple authorities in regulating consumer credit activities and the diversity of credit providers in the market, including banks, credit co-operatives and non-bank credit providers. This invariably gives rise to inconsistent expectations and enforcement of fair and responsible financing practices which can increase risks to consumers as elaborated earlier in this Chapter. The Bank sees important benefits to be gained from enacting a consumer credit law that will provide a more comprehensive and consistent framework for regulating consumer credit activities in Malaysia. This should address important protections for consumers in areas that include disclosures, responsible lending, fair debt collection practices, and debt restructuring. With this in view, the Bank will be collaborating with the relevant Ministries and Government agencies towards the enactment of a national credit law. An inter-agency platform will be established to conduct a comprehensive review of the gaps in the existing regulatory regime for credit providers in Malaysia and recommend

appropriate measures for a more cohesive legal framework to address the gaps, including gaps associated with major credit transactions and providers that are currently unregulated.

REGULATION AND SUPERVISION OF INSURANCE AND TAKAFUL INTERMEDIARIES

During the year, the Bank increased its scrutiny of insurance and takaful intermediaries. While agent activities have traditionally been an important focus of market conduct supervisory activities, the Bank's approach to the oversight of the activities of brokers and adjusters, given their limited direct interface with consumers, has generally been to rely more on other controls that have been put in place to protect consumers. These include the requirement for brokers to have adequate professional indemnity protection, proper disclosure of a broker's interests in an insurance or takaful transaction, and a system of checks and balances by insurers over adjusters through the panelling process. Recent developments, in particular the wide-ranging measures being undertaken to reform the motor insurance industry and weaknesses in controls of some insurers over the activities of intermediaries, have necessitated a review of this approach. The Bank's increased scrutiny of insurance intermediaries is also in preparation for changes in the legal regime governing intermediaries under the FSA which will introduce a more flexible regulatory framework for intermediaries commensurate with their risks, but with stronger ongoing supervision and enforcement by the Bank on the conduct of the intermediaries.

During the year, the Bank's regulatory and supervisory priorities for insurance intermediaries were focused on (i) the proper handling of clients' monies by insurance and takaful brokers; (ii) proper handling of introducers' arrangements and fees by insurance and takaful brokers; (iii) the proper submission of third-party property damage claims by loss adjusters (refer to previous section on 'Fair Marketing and Claims Practices in Motor Insurance Sector'); and (iv) strengthening the competencies of staff in the industry. During the year, supervisory actions, including the revocation or non-renewal of licences, were taken against three insurance brokers for various breaches of conduct. Steps were also taken in collaboration with the Malaysian Insurance Institute (MII), Malaysian Insurance and Takaful Brokers Association (MITBA) and the Association of Malaysian Loss Adjusters (AMLA) to enhance the professional qualification standards for the brokers and loss adjusters and to better support existing professionals in the industry to meet those standards. The Bank also intensified its pre-licensing engagements with insurance and takaful brokers, including on-site reviews for larger intermediaries, prior to the renewal of licences to obtain further assurances of the intermediaries' compliance with the Bank's licensing and regulatory requirements.

COLLABORATION WITH OTHER AGENCIES

The Bank mainly coordinates its market conduct oversight activities with two regulatory authorities, namely the Securities Commission and the Malaysia Competition Commission (MyCC). This ensures that regulatory overlaps are effectively and efficiently managed, and that the authorities are working in a common direction to promote confidence in the financial system. During the year, the Bank together with the Securities Commission strengthened the Guidelines on Investor Protection, which was first issued in 2010 for FSPs carrying out capital market activities under the Capital Markets and Services Act 2007. The enhancements were aimed at providing greater clarity to FSPs on the scope and applicability of the Guidelines and introducing a new professional examination requirement for employees of FSPs who are involved in marketing and selling of structured products and unlisted debt securities. Joint working groups were also established to develop a mutual recognition framework for financial advisers and financial planners, and to improve and rationalise existing mechanisms for handling disputes against FSPs that fall under the remit of both the Financial Mediation Bureau (FMB) and the Securities Industry Dispute Resolution Centre (SIDREC).

The Bank also worked with MyCC during the year to address issues raised by the industry on the effect of the competition law and its supporting requirements on current practices in the financial industry. The Bank will continue to coordinate closely with MyCC on the development of guidance on tied selling and collusive actions in 2013.

WELL-INFORMED AND RESPONSIBLE FINANCIAL CONSUMERS

Financially empowered consumers are essential in exerting market discipline on FSPs, thus contributing towards the development of an efficient and competitive financial sector. There is growing recognition that empowering consumers through financial education is an important complement to market conduct and prudential regulation. In particular, financially literate and alert consumers remain the first line of defence against financial fraud. In this regard, initiatives to better equip consumers with knowledge, skills and tools to build, manage and protect their personal wealth continued to be a key priority of the Bank in 2012. An immediate focus has been to promote financial capability skills from an early age through the incorporation of financial education elements in school curriculum and to roll out financial capability programmes based on the life event model for adults. As the goals of promoting financial literacy and empowering consumers are common across several agencies in Malaysia, the Bank is leading an initiative to provide a shared platform among the stakeholders to facilitate a more coordinated approach that would increase the reach and effectiveness of existing financial education efforts. Table 4.3 summarises the key achievements for financial education initiatives in 2012.

Encouraging progress was achieved during the year to integrate financial education into the formal school curriculum with the strong support of the Ministry of Education. In this regard, the Bank helped to develop materials and a structure for progressing financial learning outcomes for incorporation into the school curriculum. In the longer term, it is envisaged that financial

Table 4.3

Key Achievements for Financial Education Initiatives in 2012

Strategy	Achievements
Promote financial capability from an early age	• Integration of key elements on saving and investing, spending, credit and debt management, financial risk management and consumer responsibilities into core school subjects, namely mathematics, languages, commerce and basic economics. Implementation of the new curriculum will be carried out in stages, beginning in 2014 for primary schools *(Kurikulum Standard Sekolah Rendah)* and in 2017 for secondary schools *(Kurikulum Standard Sekolah Menengah)* • Financial education elements incorporated in year three Bahasa Malaysia and mathematics beginning 2013, ahead of the 2014 targeted implementation date • Over 1,200 teachers at the teachers' training institutes completed training on money and debt management as part of the efforts to prepare teachers for the nationwide roll-out of financial education
Targeted financial capability programmes for adults based on significant events at life stages	• More than 117,000 individuals benefited from the POWER! programme which provided young adults and first-time borrowers practical lessons and tools for effective debt and cash flow management • Over 200 seminars conducted by AKPK on personal financial management, reaching out to about 22,000 tertiary students and employees • Delivery of a customised financial capability programme for more than 1,500 1AZAM participants to help individuals better manage cash flows and encourage good savings habits. About 120,000 poor households are targeted to be reached through the programme by end-2015
Delivery of timely and useful financial education information	• 20% increase in visits to *insuranceinfo* website • Dissemination of financial management information and advisory services on financial-related matters through MobileLINK to over 15,000 individuals from rural communities in 45 sub-districts nationwide • More than 1 million copies of *Buku Wang Saku* distributed to students, while *duitsaku.com* recorded more than 670,000 hits during the year as part of the outreach to children on basic money management skills

education will be fully integrated into the school ecosystem in a way that promotes action learning by students in planning and managing their finances on a day-to-day basis. The Bank has also supported programmes to elevate the level of financial understanding and capability among teachers and equip them with the necessary resources to ensure the effectiveness of financial education in schools.

Empowering consumers through financial education is an important complement to market conduct and prudential regulation

The focus for adult financial education continued to be directed at education for young adults and low-income households given their propensity to borrow and their relatively lower financial buffers. The Credit Counselling and Debt Management Agency (Agensi Kaunseling dan Pengurusan Kredit, AKPK) established by the Bank has put in place a targeted financial education programme to address specific risks and concerns associated with these target groups. The POWER! Programme continued to extend its reach during the year with its incorporation into the National Service Training Programme module and the nationwide roll-out of a customised version of the programme for highly-leveraged, low-income households with significant debt burdens. With an online learning portal introduced in 2011, more individuals will have access to POWER!. Building on the positive public reception to POWER!, the Bank, in collaboration with the Government's Performance Management and Delivery Unit (PEMANDU), implemented a financial capability programme customised for households earning below RM1,000 in October 2012 to complement the Government's poverty alleviation measures under the 1AZAM initiative.

Work also continues to progress on the development of a Financial Education Assessment Framework that measures financial literacy levels of consumers to identify priority areas for financial education interventions, and to assess the effectiveness of existing financial education measures. Building on the work done by the OECD on the financial capability of Malaysian households, the Bank expects to complete the Framework in time to undertake a baseline evaluation in 2014. This will be followed by periodic assessments to track progress of the level of awareness, knowledge, skill, attitude and behaviour of consumers in making financial decisions. Findings from the assessment will aid the development of future financial literacy strategies to address identified gaps and target segments.

STRENGTHENING AVENUES FOR CONSUMER REDRESS

The number of consumers benefiting from access to financial information and consumer redress mechanisms provided by the Bank continued to increase. LINK received 400,971 enquiries from individuals and businesses in 2012, 25% higher than in 2011. A lower number of complaints (by 15%) was received by the Bank against FSPs during the year. For the banking sector, the complaints were mainly related to rejections of requests to reschedule and restructure loans, disputes over interest calculations and outstanding loan balances, and poor customer service. Meanwhile, for the insurance industry, common issues raised by complainants were in relation to delays in the processing of claims and dissatisfaction with the amount of claims paid. Through engagements between the Bank and FSPs on these issues, it has been apparent that a significant number of complaints received by the Bank were the result of ineffective processes within FSPs for communicating with customers and poorly trained staff who were not able to properly explain and clarify issues raised by customers. This has been highlighted to the FSPs concerned, which have since made improvements to their complaints and claims handling processes and the quality of their customer service resources. During the year, the Bank also continued to assist borrowers affected by abandoned housing projects by facilitating negotiations on revised financing repayment terms and providing support for efforts by financial institutions to revive the abandoned projects. While these efforts have helped affected borrowers to some extent, a holistic approach to address the issue of abandoned housing needs to be undertaken to prevent such problems from recurring in the future.

Since its inception in 2006, AKPK remains a key channel for assisting consumers through the provision of financial counselling and debt management services. To date, AKPK has provided credit counselling to 207,997 consumers, of which 85,994 or 41% received assistance under its debt management programme. During the year,

AKPK counselled 35,825 borrowers, of which 16,137 or 45% were further assisted through AKPK's debt management programme. Individuals falling within the 30- to 40-year-old age group continued to top the list of borrowers under the debt management programme, mainly attributed to poor financial planning.

In its role as the integrated dispute resolution centre for FSPs under the purview of the Bank, FMB handled 4,459 cases during the year, of which 1,919 were new cases. The number of new cases received by FMB declined by 13.6%, suggesting gradual improvements in the internal complaints handling processes of FSPs in resolving customer complaints. Consistent with previous years, insurance-related cases accounted for the largest proportion of complaints at 68.7%, with motor own damage claims contributing the highest number at 25.3% of the total number of disputes referred to FMB during the year.

To further enhance the oversight framework and effectiveness of the arrangements for consumer redress, work is in progress to transform the FMB into a financial ombudsman scheme (FOS) approved under the FSA and IFSA. In ensuring the FOS is fair, accessible and effective, the Bank may prescribe the functions, duties and scope of the scheme including the appointment of directors to strengthen the governance and oversight of the FOS. The scheme will be governed by rules which ensure adherence by members to the terms of membership of the scheme and compliance with the awards granted by the FOS. As part of the transformation, the scope of disputes that can be referred to the FMB will be expanded, along with the ability to determine a range of remedies or awards to consumers that have been treated unfairly. The proposed transformation will also involve a review of the existing membership fee structure to better reflect the utilisation of services of the financial ombudsman scheme by FSPs.

2012

PAYMENT AND SETTLEMENT SYSTEMS

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In 2012, the payment and settlement systems operated reliably without any major disruptions, and continued to support the growth of the financial system and the broader economy. While preserving stability in the payment systems remained a central focus, the Bank also continued to devote resources towards strengthening the payment and settlement infrastructure and further enhancing efficiency in the provision of payment services. During the year, the Bank's priorities were directed at ensuring the Real-time Electronic Transfer of Funds and Securities System (RENTAS) continued to operate at a high level of compliance with international standards, further improving industry practices in the areas of risk and crisis management and standards of business conduct, and continually strengthening the security standards of payment instruments. To increase efficiency of payment services, measures were taken to promote competition as a means of encouraging the wider adoption of electronic means of payment, expand access to a variety of payment products and services in the market, and increase the expediency in the clearing and settlement of payments, both in the retail and wholesale payment space.

PROMOTING STABILITY OF PAYMENT AND SETTLEMENT SYSTEMS

The Bank's responsibilities and powers for the oversight of payment systems are set out in the Central Bank of Malaysia Act 2009 and the Payment Systems Act 2003 (PSA). Under the Financial Services Act 2013 (FSA), the oversight powers of the Bank in respect of payment systems have been rationalised and consolidated under the FSA to provide a comprehensive legislative framework for the financial stability functions of the Bank.

Regulation of Payment Systems under the Financial Services Act 2013

The FSA incorporates strengthened provisions to regulate payment system operators that pose the most significant risks to the payment system and the public. Operators of systems that enable the transfer of funds from one banking account to another, such as Interbank GIRO (IBG), Shared ATM Network and Financial Process Exchange (FPX), and payment instrument networks, such as Visa and MasterCard, will require approval from the Bank to operate such systems or networks. Additionally, those wishing to offer merchant acquiring services will need to register with the Bank. These new requirements will replace the existing notification regime under the PSA and provide the Bank with enhanced powers to provide effective oversight over major payment systems in Malaysia.

For issuers of designated payment instruments such as credit cards, charge cards and electronic money, the regulatory approach remains largely unchanged under the FSA. In addition, debit cards will also be designated and brought under more robust regulatory oversight, reflecting their wider use among the public as a means of making payments.

The FSA empowers the Bank to specify standards to promote the safety, integrity, efficiency and reliability of the payment systems and designated payment instruments, as well as to issue directives for the purpose of promoting efficiency. It also provides a broader range of supervisory and enforcement tools to support the Bank in the performance of its oversight functions. This includes expanded intervention powers to address risks to the stability of important payment systems which enable the Bank to issue directions of compliance, remove a director, chief executive officer or senior officer who no longer fulfils the fit and proper requirements or who contributes to the contravention of any provision of the Act or the Bank's direction of compliance, and to appoint a receiver and manager.

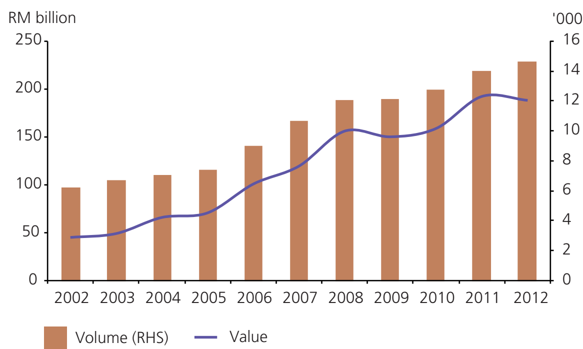
Oversight of RENTAS

RENTAS facilitates the transfer and settlement of high-value interbank payments and securities transactions in Malaysia. In 2012, the value of transactions settled in RENTAS accounted for 49.2 times of Malaysia's gross domestic product (GDP), with an average of RM188 billion settled via the system daily (Chart 5.1). The total value of money market transactions, which form the bulk of transactions performed in RENTAS, moderated in 2012 as the Bank's approach to managing excess liquidity in the banking system shifted from direct borrowing to issuance of Bank Negara Monetary Notes. However, the number of transactions cleared in RENTAS continued to increase, driven by higher third party payments by individuals and corporations as the adoption of electronic payments (e-payments) continued to gain pace (Chart 5.2). The ample liquidity in the financial system during the year enabled RENTAS participants to settle obligations well before the system's cut-off time. On average, 52% of total settlement value was settled by noon and 71% by 3 p.m. each day, in line with international best practices.

To ensure that RENTAS continues to meet high international standards, several enhancements to the operations and systems, and risk mitigation measures were implemented during the year. In March 2012, the Liquidity Optimiser Settlement Facility (LOSF) was introduced in RENTAS as an additional tool to manage liquidity. With LOSF, participants are able to settle transactions on a net basis at 15-minute intervals to reduce liquidity costs. However, given the ample liquidity in the system, the LOSF was not widely used by participants. The guidelines on the Bank's intraday credit facility, which is a collateralised interest-free credit line provided to eligible participants to prevent gridlock and ensure smooth operations of the system, was also revised in June 2012 to facilitate better management of the Bank's credit risk by providing that only high-quality papers, which includes Malaysian Government securities, securities issued by the Bank and AAA-rated private debt securities, would be accepted as collateral. The rules and procedures

Chart 5.1

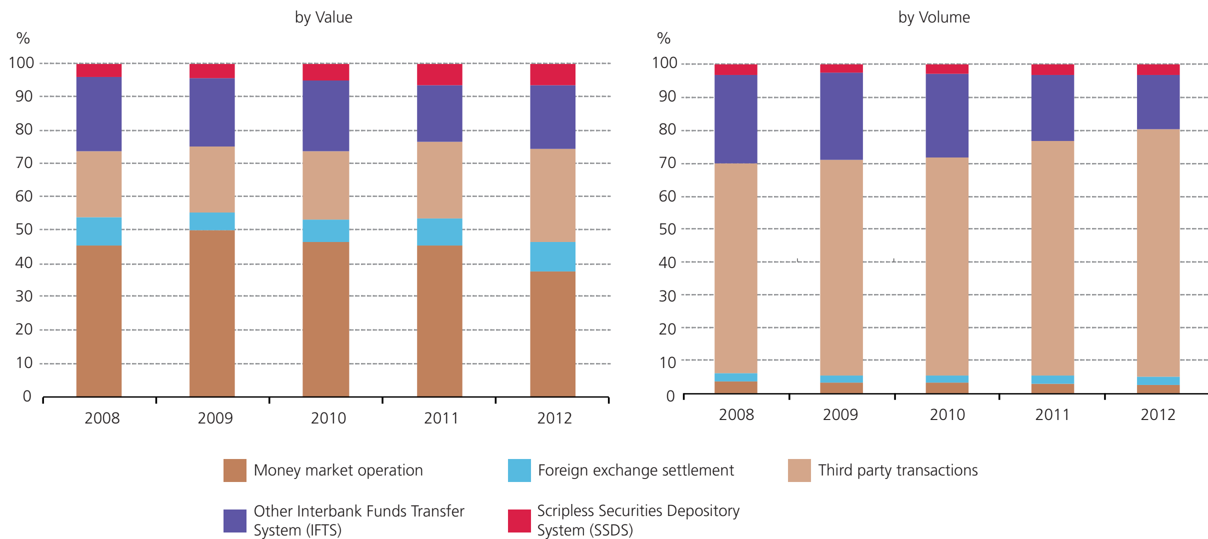
RENTAS: Daily Average by Value and Volume



Source: Bank Negara Malaysia

Chart 5.2

RENTAS: Share of Transactions



Source: Bank Negara Malaysia

Assessment of Malaysia's Observance with the Principles for Financial Market Infrastructures

Financial market infrastructures refer to the payment and settlement systems through which all financial market transactions are settled. In April 2012, the Bank for International Settlements (BIS) Committee on Payment and Settlement Systems and the Technical Committee of the International Organization of Securities Commissions (IOSCO) issued the Principles for Financial Market Infrastructures (PFMI). The PFMI replaced the previous standards issued by the BIS and IOSCO, namely the Core Principles for Systemically Important Payment Systems, the Recommendations for Securities Settlement Systems and the Recommendations for Central Counterparties. This single standard harmonises and enhances the existing international standards for payment systems that are systemically important, central securities depositories, securities settlement systems and central counterparties to ensure effective risk management, leveraging on the lessons learnt during the recent global financial crisis. As part of the Financial Sector Assessment Program conducted by the International Monetary Fund (IMF) and the World Bank in 2012, Malaysia was among the first countries to be assessed for compliance with the new PFMI.

This box article presents a summary of the IMF's assessment and key observations of Malaysia's compliance with the PFMIs. The IMF's detailed assessment will be published separately on its website.

Malaysia was assessed to have 'observed' all 19 Principles that are applicable to Real-time Electronic Transfer of Funds and Securities System (RENTAS) and its operator, Malaysian Electronic Clearing Corporation Sdn. Bhd. (MyClear) (Table 1). In addition, there are five recommendations outlined for authorities responsible for the oversight of financial market infrastructures. Of these, the Bank and Securities Commission Malaysia (as the responsible authority for the financial market infrastructures operated by Bursa Malaysia Berhad) were collectively assessed to have 'observed' or 'broadly observed' all five responsibilities.

The key findings from the IMF's assessment are:

- **Activities of RENTAS are supported by a robust legal basis that provides certainty to the enforceability of the rights and obligations of the RENTAS operator with clear and predictable consequences.** The Central Bank of Malaysia Act 2009 provides the mandate for the Bank to own and operate payment and settlement systems while the Payment Systems Act 2003 (PSA) accords the Bank with oversight powers and recognises the Bank as the authority responsible for promoting the reliable, efficient and smooth operation of the national payment and settlement systems. Meanwhile, the Contracts Act 1950 governs the participation agreement that binds the participants to the operating rules and procedures of RENTAS. As RENTAS is a designated payment system under the PSA, MyClear is required to comply with the conditions stipulated in the Supervisory Expectations and Requirements on Designated Payment Systems issued by the Bank, which includes the requirement for MyClear to ensure the reliability, efficiency, and smooth operation of the system.

- **Existing credit and liquidity risk management practices, including policies and procedures to handle participant defaults, provide a high degree of confidence that RENTAS is able to continue operating and meet settlement obligations.** Rules and procedures in managing the failure or insolvency of participants are clearly defined in the Participation and Operation Rules for Payments and Securities Services. This facilitates timely action by both MyClear and the participants to minimise potential losses and mitigate contagion risks. The design of RENTAS only permits settlement of transactions if the necessary funds or securities are available in the respective accounts. The Liquidity Optimiser Settlement Facility and the intraday credit facility provided by the Bank promote efficient liquidity management by the participants.

Table 1

Level of Observance of the Principles for Financial Market Infrastructures and Responsibilities of the Central Bank, Market Regulators, and Other Relevant Authorities for Financial Market Infrastructures

Principles for Financial Market Infrastructures	Level of Observance
1. Legal basis	O
2. Governance	O
3. Framework for the comprehensive management of risks	O
4. Credit risk	O
5. Collateral	O
6. Margin	NA
7. Liquidity risk	O
8. Settlement finality	O
9. Money settlements	O
10. Physical deliveries	NA
11. Central securities depositories	O
12. Exchange-of-value settlement systems	O
13. Participant-default rules and procedures	O
14. Segregation and portability	NA
15. General business risk	O
16. Custody and investment risks	O
17. Operational risk	O
18. Access and participation requirements	O
19. Tiered participation arrangements	NA
20. FMI links	O
21. Efficiency and effectiveness	O
22. Communication procedures and standards	O
23. Disclosure rules, key procedures, and market data	O
24. Disclosure of market data by trade repositories	NA
Responsibilities of the Central Bank, Market Regulators, and Other Relevant Authorities for Financial Market Infrastructures (FMIs)	**Level of Observance**
A. Regulation, supervision, and oversight of FMIs	O
B. Regulatory, supervisory, and oversight powers and resources	O
C. Disclosure of policies with respect to FMIs	BO
D. Application of the principles for FMIs	O
E. Cooperation with other authorities	BO

- **Observed (O)** – Any identified gaps and shortcomings are not issues of concern and are minor, manageable, and of a nature that can be taken up in the normal course of activities.
- **Broadly observed (BO)** – The assessment has identified one or more issues of concern that are to be addressed and followed up in a defined timeline.
- **Partly observed (PO)** – The assessment has identified one or more issues of concern that could become serious if not addressed promptly. High priority should be accorded to addressing these issues.
- **Not observed (NO)** – The assessment has identified one or more serious issues of concern that warrant immediate action. Highest priority should be accorded to addressing these issues.
- **Not applicable (NA)** – Does not apply because of the particular legal, institutional, structural or other characteristics of the financial market infrastructure.

- **Clear and comprehensive rules and procedures are in place to provide settlement finality and mitigate settlement risk.** The PSA provides for all funds and securities settled in a designated payment system to be final and irrevocable, while operational procedures issued by MyClear clearly define the actual point at which settlement is considered final. All ringgit transactions in RENTAS are settled in the books of the Bank, while foreign currency transactions are settled in the books of commercial banks. These foreign currency settlements are conducted via a Payment versus Payment (PvP) arrangement that is jointly supervised with a foreign regulatory authority or through an appointed banking institution that is regulated and supervised by the Bank.

- **Appropriate rules, procedures and controls are in place to ensure the integrity of securities transactions and minimise principal risk of exchange-of-value settlement systems.** As the central securities depository for public and private debt securities, MyClear ensures that the rights of securities issuers and holders are adequately protected. These include prevention of unauthorised creation or deletion of securities and daily reconciliation of securities issued. RENTAS adopts PvP and Delivery versus Payment (DvP) processes for exchange-of-value settlements where both securities and foreign currency settlements are conducted by simultaneously debiting and crediting the respective accounts, provided sufficient balances are available to effect the transaction. The occurrence of finality is synchronised for both legs of the transaction thus eliminating principal risk.

- **Effective controls are in place for general business and operational risk management.** As the operator of RENTAS, MyClear is required to put in place controls to effectively monitor and manage its financial performance and liquidity position to address any business risk. The system infrastructure was upgraded in 2011 to support the future expansion of RENTAS services. Since its implementation in 1999, RENTAS has consistently achieved at least 99.9% of system availability. Stress testing on the processing capacity of RENTAS is undertaken periodically to ensure that there would not be any degradation in performance as a result of increased transaction volumes. Business continuity planning for RENTAS is comprehensive with three levels of backup facilities, as well as rigorous and regular contingency plan testing.

- **The operation of RENTAS is guided by policies which ensure fair and open access, efficiency and effectiveness in meeting the requirements of the participants and markets it serves, as well as transparency to inform sound decision making and foster confidence.** In practising fair and open access, criteria for access to RENTAS and orderly exit procedures are clearly stipulated in the Rules and Operational Procedures, which are published on MyClear's website. RENTAS is designed and operated based on best practices and international standards. The services provided by RENTAS are continuously improved to reflect international developments and to meet the evolving needs of the participants, the financial market and the economy. This includes the recent introduction of renminbi settlement services and the link up with the International Central Securities Depository (ICSD), Euroclear. Moving forward, RENTAS will be enhanced to adopt the Society for Worldwide Interbank Financial Telecommunication (SWIFT) messaging standard to enhance operational efficiency for its participants and the system as a whole. This initiative is expected to be completed in 2014. Formal meetings with relevant stakeholders are held prior to effecting changes to system rules. Current information on the design and operations of RENTAS is accessible on MyClear's website.

Key Recommendations

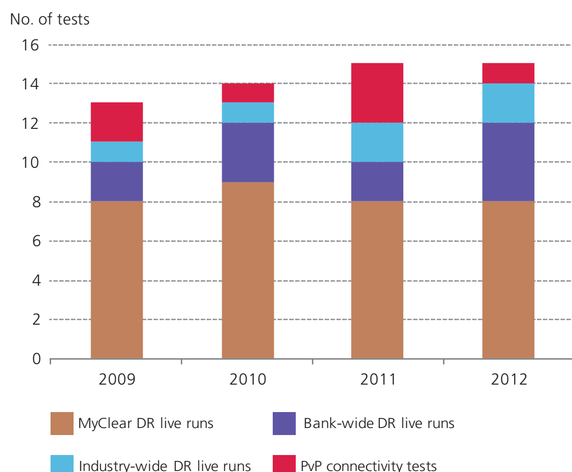
The compliance assessment made several recommendations to further enhance the risk management practices of MyClear. This would ensure that RENTAS continues to achieve a high level of observance of the PFMIs as the financial market develops. The recommendations also included

suggestions for further improving disclosures of policies and cooperation with authorities in promoting the safety and efficiency of financial market infrastructures.

Going forward, the regulatory framework governing RENTAS operations is to be strengthened under the FSA, to provide explicit protection for the collateral placed by participants for intraday credit facilities and repurchase arrangements. MyClear has indicated its commitment to further enhance the robustness of its risk management systems, including ensuring the portability of customers' securities following a merger or acquisition, and addressing risks associated with Euroclear as more transactions build up in the future. To further strengthen its default management procedures, periodic tests with the involvement of its participants are being planned by MyClear. The disclosure framework will also be enhanced to promote better understanding and management of risks by participants. In addition, efforts will continue to be taken to further strengthen existing cooperation and exchange of information arrangements between the Bank and other supervisors and authorities, including the Securities Commission.

Chart 5.3

Frequency and Types of DR Tests for RENTAS



Source: Bank Negara Malaysia

of RENTAS were also enhanced to more clearly define the point of settlement finality for securities settlements to provide greater certainty to RENTAS participants. The enhanced rules further provide detailed procedures for handling participant defaults and other abnormal situations to support timely actions to contain losses and liquidity pressures and ensure that obligations of RENTAS participants continue to be met.

As an added measure to improve operational risk management, the Mini RENTAS, a third-level backup facility, has been made available since July 2012 to facilitate settlement of critical payments in the event that both the main production site and disaster recovery centre are down simultaneously. The disaster recovery centre is regularly tested, involving monthly live-run exercises, an annual contingency drill on the RENTAS-USD Clearing House Automated Transfer System (CHATS) Payment vs Payment (PvP) link and a disaster recovery test for Euroclear transactions (Chart 5.3). The recovery time objective for RENTAS is one hour, which is in compliance with international standards.

Oversight of retail payments

Driven by technological advancements and innovation, the range and reach of payment services continued to expand with the entry of new players to the retail payments market such as Internet portals, telecommunication companies, online enterprises and social networks. The rapid development in mobile technologies has also positioned mobile billing as an increasingly popular payment method within the Internet space.

Mobile billing, which involves the use of prepaid mobile airtime to make payments, is currently used not only to purchase mobile services offered by the telecommunication companies, but also to pay for digital or virtual products such as ringtones and online games offered by social networking sites or online merchants worldwide. The Bank has provisionally allowed telecommunication companies to offer mobile airtime to be used as a mode of payment for limited products and services while the Bank assesses its usage pattern and associated risks to form the basis for the development of a suitable regulatory framework for such payment services. The Bank will continue to support the development of new and innovative payment services that provide consumers with greater choice and convenience, while ensuring adequate security of these services for the protection of consumers.

The Bank will continue to support the development of new and innovative payment services that provide consumers with greater choice and convenience, while ensuring adequate security of these services for the protection of consumers

With the rapidly changing payment landscape, the Bank has further intensified its surveillance and supervisory efforts to promote the safety and security of the payment systems and instruments and raise the level of compliance with prudential and business conduct standards by the operators and issuers. The approval process for new entrants and new products was tightened to reflect the Bank’s higher expectations of continuous compliance with the relevant regulatory requirements and to encourage greater diversity in the range of quality products that are available to consumers and businesses. In 2012, the Bank approved three new entrants to the retail payment market and 16 submissions by existing issuers to launch new products or variations. These have brought about the introduction of new and innovative payment methods, enhanced cost-efficient infrastructure for merchants to accept e-payments, and

provided greater benefits to consumers via rewards and discounts. During the year, the Bank also withdrew the approvals granted to two electronic money (e-money) issuers, for failure to comply with regulatory requirements.

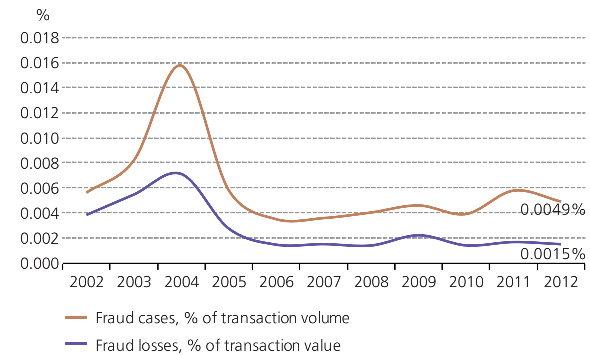
A key focus of the Bank's oversight activities is the level of operational resilience and the adequacy of contingency planning to ensure uninterrupted availability of major retail payment systems. In 2012, the operations of the National Electronic Cheque Information Clearing System (eSPICK) were affected by several intermittent technical glitches. This did not have a significant impact on the industry and the public as the system continued to maintain a high level of operational availability which allowed cheque clearing to proceed smoothly. The Bank and Malaysian Electronic Clearing Corporation Sdn. Bhd. (MyClear) are conducting a comprehensive review of the eSPICK infrastructure, capacity, redundancies and incident management processes with a view to resolve any identified system constraints and develop solutions to further improve the overall system resilience. The other major retail payment systems, i.e. IBG, FPX, Direct Debit and e-Debit systems, operated by MyClear, and the Malaysian Electronic Payment System Sdn. Bhd.'s (MEPS) Shared ATM Network, continued to function smoothly without any major disruptions.

While payment cards continue to be predominantly used for retail purchases and transportation (petrol and highway tolls), the growing number of e-commerce merchants and increasing popularity of mobile Internet devices have led to rapid growth in Internet payment transactions. To strengthen safeguards against fraud (as the physical presence of the purchaser and the card is not required to conclude a purchase), requirements for transaction alerts and a strong authentication method for online transactions were implemented effective 1 January and 1 April 2012, respectively. Transaction alerts are sent to the cardholder via short message service (SMS) as soon as a transaction that exceeds a value threshold set by the issuer is performed, thus providing an early opportunity for the cardholder to notify the issuer of a possible fraudulent transaction. The adoption of a strong authentication method also enhances the security of online transactions by requiring cardholders to enter a one-time password in order to authorise each payment. Transactions conducted without the password can be reversed, thus providing further protection to cardholders against fraudulent online transactions. These requirements, which are currently applicable to credit cards, will be extended to provide the same level of security for transactions using debit and charge cards as well as large e-money schemes.

Payments fraud remained negligible and continued its declining trend, with fraud incidents accounting for less than 0.005% of total volume and value of retail payment transactions in 2012 (Chart 5.4). In general, the level of card fraud in Malaysia remains significantly lower than the fraud experience reported by other countries, including developed countries. Credit card fraud remained the most common forms of payment fraud, with an average loss of 0.03%, that is, a loss of 30 sen for every RM1,000 transacted (Chart 5.5). The level of fraud

Chart 5.4

Fraud, % of Total Transactions

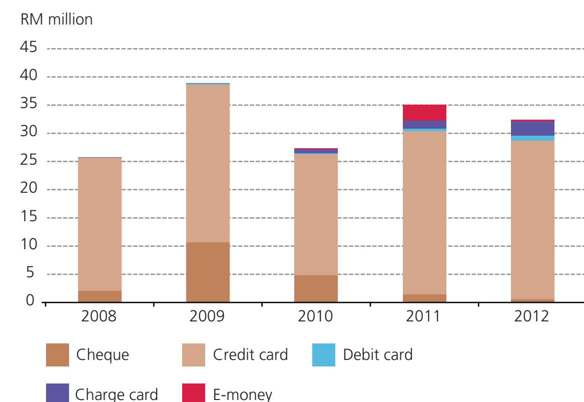


Note: Consists of cheque, credit card, debit card, charge card and e-money

Source: Bank Negara Malaysia

Chart 5.5

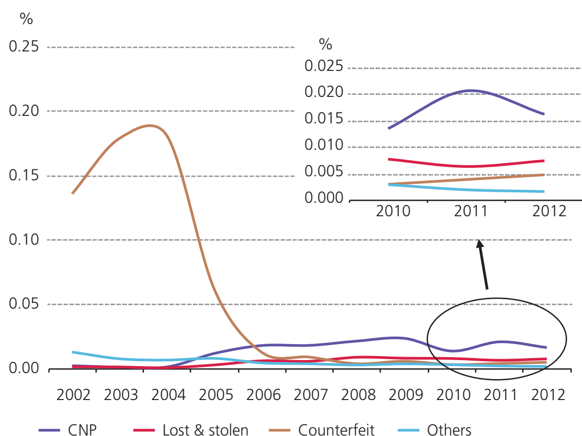
Fraud Losses by Type of Instruments



Source: Bank Negara Malaysia

Chart 5.6

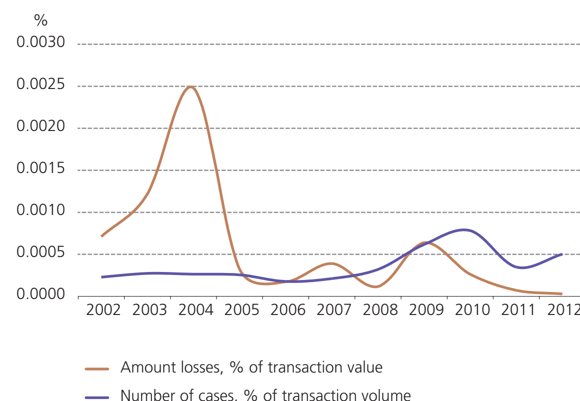
Credit Card: Fraud Losses, % of Total Transactions



Source: Bank Negara Malaysia

Chart 5.7

Cheque Fraud, % of Total Transactions



Source: Bank Negara Malaysia

had declined significantly since the introduction of the more secure chip-based cards in 2004 and 2005 to counter fraudulent skimming or counterfeiting of automated teller machines (ATM) and credit cards respectively. However, incidents of fraud have now shifted to card-not-present (CNP) fraud, which involves the theft of credit card information which is then used to make fraudulent payments via the Internet, mail and telephone (Chart 5.6). CNP fraud accounted for about half of total credit card fraud losses in 2012.

With the recent implementation of the strong authentication method for online transactions by all Malaysian issuers and acquirers, incidents of CNP fraud mostly involved transactions with foreign e-commerce merchants in countries that have yet to adopt the additional security feature. In such cases, Malaysian cardholders and financial institutions are protected from losses as the amount associated with the fraudulent transaction can be recovered from the foreign acquirer. This practice, known as 'chargeback', requires those who have yet to implement the recommended security features to absorb any losses arising from fraudulent transactions, as a means of encouraging wider adoption of security measures to combat fraud. Other types of credit card fraud which have shown an increasing trend involve lost and stolen cards, and the fraudulent use of counterfeited Malaysian cards in countries that have not adopted the EMV (Europay, MasterCard and Visa) chip standard. However, as Malaysia has migrated to a fully EMV-compliant credit card infrastructure, Malaysian cardholders and issuers are similarly protected by the chargeback mechanism against losses from these types of fraud.

Similar trends are observed for fraud involving debit and charge cards, which also remained relatively low. Fraud losses were largely associated with CNP fraud, which accounted for about 80% of total fraud losses involving these payment instruments. The Bank will be requiring issuers and acquirers of debit and charge cards to enhance security measures for these instruments to the same standard as that implemented for credit cards, particularly as the use of these instruments as a mode of payment increases further.

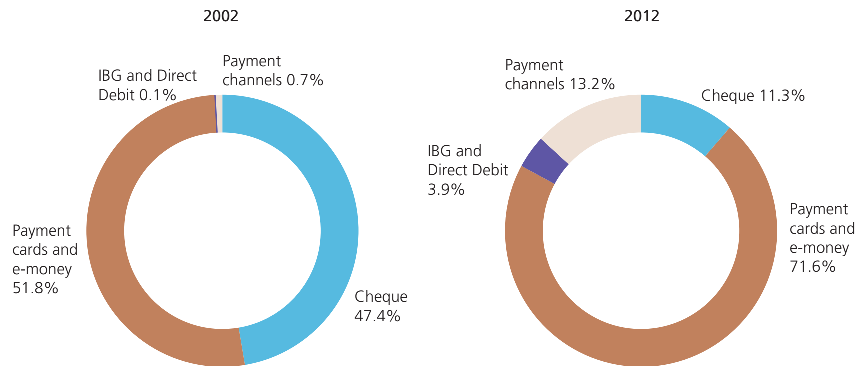
Compared to the other payment instruments, the average losses from cheque fraud are relatively higher, with an average loss per incident of RM3,430 in the recent five years compared to RM498 for credit card fraud and RM191 for e-money fraud. The most common forms of cheque fraud are forgery and stolen cheques, which accounted for more than 80% of fraud incidents. While the number of cheque fraud attempts has been on the rise in recent years, the actual losses incurred have declined due to the continued vigilance of the industry and the enforcement by the law enforcement agencies in combating cheque fraud (Chart 5.7).

PAYMENT TRENDS

The use of e-payments has continued to expand while the use of cash and cheques declined relative to other payment methods. Nearly 90%

Chart 5.8

Share of Non-Cash Payments by Volume



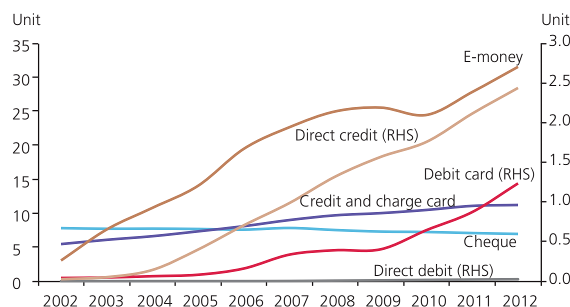
Source: Bank Negara Malaysia

of the 1.8 billion non-cash payments (including cheques), amounting to RM17.1 trillion, are now made via electronic means compared to 52.6% a decade ago (Chart 5.8). On average, the number of e-payment transactions per capita increased further from 49 in 2011 to 56 in 2012. This was mainly attributable to the higher use of e-money, debit card, Internet banking, IBG and ATM, continuing the trend which has been observed since 2002 (Chart 5.9).

E-money, which is mainly used in the transportation sector, remained the most frequently used e-payment instrument, accounting for three out of every five e-payment transactions conducted in 2012. A total of 925 million transactions worth RM4.7 billion were recorded in 2012, representing a growth of 14.7% and 22.6% by volume and value, respectively. With the Government's efforts to improve the public transport ticketing system, and as more Malaysians experience the speed and convenience of contactless payment for tolled highways and public transport, the growth in e-money transactions is expected to sustain its double-digit growth rate in the coming years.

Chart 5.9

Non-Cash Payments per Capita



Source: Bank Negara Malaysia

The number of purchases using payment cards grew by 5.5% to 365 million in 2012, reflecting the higher number of cards issued and continued migration from cash. While credit cards still account for the bulk of the transaction volume, its share has declined from 94% in 2007 to 89% in 2012, with a corresponding increase in the use of debit cards. Three million debit card purchases were made every month in 2012 compared to less than 0.8 million in 2007. The average transaction value for debit cards has also increased over the years reflecting greater consumer confidence in using debit cards for higher-value transactions. In 2012, the average amount spent per debit card transaction was RM240 compared to RM290 for credit cards. The growth of payment cards is also attributed to an increase in the number of Electronic Funds Transfer at Point of Sale (EFTPOS) terminals with more than 17,500 terminals deployed during the year, bringing the total number to 276,304 as at end-2012. Of these, 80% accept international scheme payment cards, whilst 57% accept domestic debit cards and 11% accept e-money.

The use of the three major retail electronic funds transfer systems namely IBG, Direct Debit and FPX continued to register encouraging growth. Over 70 million transactions amounting to RM221 billion flowed through these three systems, representing an annual increase of 16.8% and 28.6% in volume and value terms, respectively. The total value of transactions processed through

the IBG system, which has the widest network of 39 member banks, has more than doubled over the last five years to account for 22.6% of GDP in 2012 as compared to 10.1% in 2007. This significant growth was largely due to the wider use of IBG for salary payment by companies, electronic tax refunds by the Inland Revenue Board of Malaysia (Lembaga Hasil Dalam Negeri, LHDN) and the provision of additional online services by the Government such as the acceptance of payments to the Federal Court of Malaysia for submission of court cases via its online filing system.

Malaysian households and businesses performed 280 million financial transactions via e-payment channels in 2012, comprising mainly fund transfers, bill payments, top-ups for prepaid cards, purchases of phone cards and investments in the equity market. Internet banking remained the preferred online payment channel, contributing 81% of the total transaction volume through e-payment channels, followed by ATMs (17%) and mobile banking (3%).

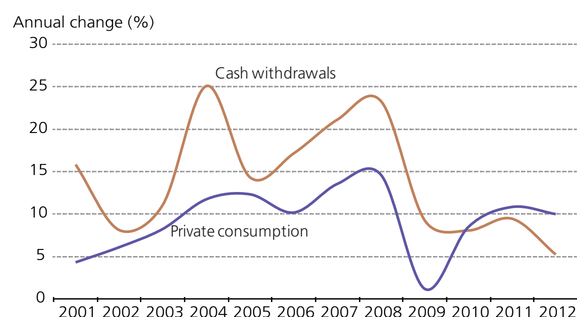
The number of financial transactions conducted via Internet banking grew by 16.3% in 2012 to 226 million payments, supported by the wider participation of banks in facilitating payments to statutory bodies and the increase in the number of households having access to the Internet. The number of active individual Internet banking subscribers increased by 24% to 5.7 million in 2012. The value of these Internet banking transactions recorded remarkable growth, reaching RM2.8 trillion in 2012, from RM418 billion in 2007. Two major factors behind the growth have been the larger number of businesses that credit salary payments directly to bank accounts and an increase in online transfers of contributions to social security organisations.

Banking institutions continued to increase the deployment of ATMs to replace counter services. In 2012, a total of 46 million financial transactions valued at RM41 billion were conducted through ATMs, representing an annual increase of 10.3% in volume and 9.8% in value, respectively. The use of mobile banking also increased in 2012, accounting for 7.1 million transactions valued at RM4.2 billion, as more banks enhanced their mobile banking services to leverage on the continued growth in smartphone usage and to cater for consumers who prefer banking on the go.

More efficient electronic means of payment continued to displace the use of cheques. Cheque volume fell below seven pieces per capita in 2012, with the total number of cheques cleared decreasing to 204 million (2011: 205 million) and declines observed in usage by all customer segments. Notably, LHDN disbursed 2.6 million tax refund transaction via e-payments, which represented almost 60% of the total number of tax refund transactions.

Chart 5.10

Value of Cash Withdrawals and Private Consumption



Source: Bank Negara Malaysia

Cash-in-circulation, a proxy for cash usage, increased by 7.3% from RM53.5 billion in 2011 to RM57.4 billion in 2012. Its growth, however, trailed the rise in total consumption expenditure, reflecting the continued migration to non-cash payment methods which are increasingly being used to displace cash. The total amount of ATM cash withdrawals correspondingly grew at a slower pace than private consumption at 5.2%, broadly consistent with trends observed over the past two years (Chart 5.10).

PROMOTING EFFICIENT AND EFFECTIVE PAYMENT SERVICES

Considerable efforts and resources have been devoted by the Bank and the industry over the recent decade to develop a highly efficient payment system that delivers speed, security, convenience and cost savings. Whilst the migration from paper-based payments to electronic means of payment has been gradual, a marked increase in the adoption of electronic means of payment has been observed in the recent two years. This reflected the sustained efforts to expand access, improve delivery, and enhance functionalities of payment services, including measures to address impediments to the desired transformation of the national payment landscape in Malaysia.

Wider access to payment services

The Bank continued to foster greater industry collaboration to further enhance access to payment services. This included initiatives to increase access to RENTAS via electronic channels, widen the payment card infrastructure to include smaller merchants and capitalise on the mobile channel to broaden outreach and promote a more inclusive financial sector.

The Bank continued to devote its efforts to expand access, improve delivery and enhance functionalities of payment services

Access to RENTAS

Nearly all banking institutions offer businesses the convenience of initiating RENTAS payments via Internet banking to achieve greater efficiency for corporate disbursements. This facility enables a higher degree of automation for corporate treasury operations as payments can be initiated electronically compared to facsimile or over-the-counter services.

Wider payment card infrastructure

Efforts to deploy more EFTPOS terminals to increase payment convenience and encourage the switch from cash to cards continued to be pursued in 2012. During the year, the Bank collaborated with Multimedia Development Corporation and SME Corporation Malaysia to enable 1.1 million small and medium enterprises (SMEs) and micro-enterprises to accept payment card facilities by 2020 under the 'Enabling e-Payment Services for SMEs and Micro-enterprises' initiative of the Digital Malaysia Masterplan.

Outreach via mobile channels

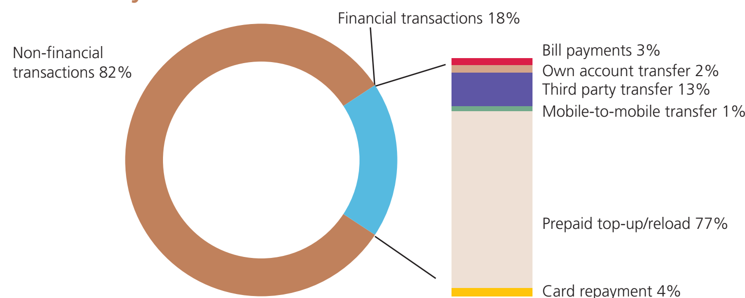
The MyMobile service, a national mobile ecosystem platform operated by MyClear, went live in February 2012, in partnership with three banks and two mobile network operators. The third major mobile network operator joined the platform in June 2012, thus covering more than 90% of mobile phone subscribers in Malaysia. These subscribers can register for the MyMobile service with the participating banks to enjoy easy and convenient access to banking and payment services. Registered users can view their transaction history, perform balance enquiries, and conduct mobile prepaid reload, funds transfer, bills payment and credit card repayment transactions through their mobile phones. New payment services are progressively being added to the suite of MyMobile services, including the payment of tax assessments to the local councils and placements of savings deposits with the National Education Savings Scheme managed by the National Higher Education Fund Corporation (Chart 5.11).

Speed of payment services

The banking industry continued to undertake measures to improve the speed of interbank fund transfers to allow individuals and businesses to manage and optimise their cash flow more effectively. Having achieved same-day funds availability for IBG payments to bank accounts in 2011, efforts were directed at increasing the efficiency of third party payments via RENTAS. In August 2012, the Bank instituted rules that enabled these funds to be made available to the beneficiary within one hour from the time the payment is initiated. Efforts are also underway to offer same-day fund posting for credit card and loan repayments by customers via IBG and to review the interbank direct debit service to offer

Chart 5.11

Share of MyMobile Activities by Volume



Source: Bank Negara Malaysia

same-day settlement for recurring payments such as insurance premium contributions.

Assurance of payments to correct beneficiary

The Bank, in collaboration with the National Registration Department of Malaysia and the Association of Banks in Malaysia (ABM), facilitated efforts by the financial institutions to update the identification details of bank account holders, which were captured prior to the implementation of the MyKad system. The updating of bank account holders' identity details is necessary for banks to validate the identity details in addition to the bank account number of fund recipients prior to the crediting of funds. Such additional validation is performed by banks at the request of payers and is often utilised for bulk payments that require greater assurance that the payment reaches the intended recipients, such as social benefits disbursements by Government agencies and business payments. The exercise is largely complete and will reduce the incidence of rejected payments due to the incompatibility of new identity card numbers provided by the payer with the old identity card numbers maintained in the records of receiving financial institutions.

Better identification and reconciliation of payments

Work is also underway to improve payment reference information in e-payment transactions to facilitate more efficient reconciliation of payment transactions by both individuals and businesses. MyClear, as the operator of the major retail payment systems, is engaging with ABM and the financial institutions to develop a framework for payment reference standards that would allow payers to tag payments with transactional details to enable payees to easily identify the source and purpose of payments. Enhancements to the electronic banking infrastructure will be undertaken by the banking industry in stages, starting with Internet banking payment transactions, followed progressively by cash management systems, over-the-counter transactions and also telephone banking. The initial phase is expected to be completed by the middle of 2013, and will enable IBG services to carry a short payment description. In the next phase, a study will be conducted on the adoption of international standards such as ISO 20022 to enable comprehensive invoicing and remittance information to be included.

Incentive structure to accelerate the migration to e-payments

Despite the increase in e-payment options and efficiency, promoting the adoption of more efficient e-payment modes has proved to be challenging, due in part to the relative price of paper-based payments and e-payments. To address the price distortion and induce the payment behavioural change, the Bank has formulated a pricing reform framework after extensive engagements with the financial institutions and MyClear. The framework will be implemented in three phases. During the first phase, the transaction fee for IBG services performed electronically via Internet banking and mobile banking, which currently ranges up to RM2 will be reduced, while a new fee will be introduced for cheques.

> In promoting the adoption of more efficient e-payment modes, a pricing reform framework will be implemented, whereby during the first phase, the fee for online IBG transactions will be reduced, while a new fee will be introduced for cheques

The implementation of this new pricing structure will be carefully coordinated with the introduction of the payment reference framework in 2013, the increase in online banking transaction limits to facilitate higher value e-payments, as well as the broader participation of banks in the major retail payment systems such as IBG, FPX and Direct Debit to ensure wide access to e-payment facilities. In the second phase, as greater efficiency is achieved in the provision of e-payment services, the price of cheques will be increased further to better reflect the true underlying cost associated with processing cheque payments. In the final phase, the price of payment services will be directly determined by financial institutions based on their respective cost structures. While addressing existing price distortions is important to accelerate the migration to e-payments in order to promote greater economic efficiency, equally important are the

Table 5.1

E-Payment Collaborative Initiatives in Key Sectors

Sector	Initiatives	Adoption
Government *Adoption of e-payment to improve the delivery of public services*	• Continued active engagement with the Government, banking industry and relevant stakeholders to support the implementation of public e-payment initiatives • MyMobile platform enabled as another medium for making payments to the Government • Launch of the Stamp Assessment and Payment System (STAMPS) on 1 November 2012 by the Inland Revenue Board of Malaysia (LHDN) for businesses to make stamp duty payments online	• 250 agencies offer 551 online payment services (2011: 236 agencies, 449 services) • 155 agencies offer FPX: 655,765 transactions valued at RM193.8 million (2011: 333,771 transactions valued at RM120.9 million) • 1.9 million payment card transactions valued at RM1.1 billion (2011: 1.7 million transactions valued at RM1 billion)
Capital Market *Provide comprehensive e-payment infrastructure for the capital markets*	Collaborative efforts between the Bank and Securities Commission Malaysia were broadened with new initiatives rolled out in 2012: • Bursa Malaysia extended its e-Dividend facility to cover payments of interest or profit rates on listed debt securities or sukuk, income distribution by Real Estate Investment Trusts (REIT) or Exchange Traded Funds (ETF) and capital repayments • More unit trust companies offer direct crediting of income distribution and redemption • Enabled unit trust investments through Internet banking channels to enhance convenience for investors • Piloted e-subscription for rights issues in early 2013	Share of e-payment adoption in volume terms: • e-IPO for electronic subscription to new share issuance: 81% • e-Share Payment for settlement of equity trades: 35% • e-Dividend for disbursement of dividend payouts: 68%
Financial Sector *Migrate internal payments and encourage customers to use e-channels*	**Banking institutions** • Introduced attractive bank account products that promote online transactions • Sustained awareness campaigns on the benefits of e-payments • Increased limits on online transactions to support higher value fund transfers via online banking from RM5,000 on average to RM10,000 per day	• 1,124,011 fewer cheques issued by banks and their customers in 2012 • 12 or 44% of the banks with Internet banking facilities have increased their funds transfer limit to at least RM10,000 with the appropriate risk controls in place
	Insurance companies • General insurers showed greater commitment to migrate internal payments such as payments to agents, staff, reinsurers and statutory bodies to e-payments • All insurers and takaful operators have committed to offer e-payments as an option to policy holders and beneficiaries. The initiative is progressively being rolled out throughout the industry in 2013 **Non-bank card issuers** • The Bank engaged with non-bank card issuers to adopt e-payment for settlement with merchants and refunds to customers	• 70% of premium contributions to life insurance are paid through various modes of e-payments such as credit card, auto debit from bank account or credit card, Internet banking, mobile banking and ATM
Transportation Sector *Promote use of payment cards for greater convenience*	The Bank, in collaboration with Performance Management and Delivery Unit (PEMANDU), Ministry of Transport, the Land Public Transport Commission (SPAD), Touch 'n Go Sdn. Bhd. and the transit operators, will implement an Integrated Cashless Payment System (ICPS) to further increase the use of card payments within the transportation sector, from the current penetration rate of 20% in 2012. This initiative is aligned with the implementation of an Integrated Smart Ticketing System under the National Key Result Area 'Improving Urban Public Transport' of the Government Transformation Programme (GTP), to facilitate the seamless use of transport services across multiple transit operators	This would potentially migrate approximately 340,000 cash transactions daily to e-payments

strategies and initiatives of the banking industry that are aligned towards shaping the desired payment preferences and facilitating a smooth transition towards more efficient and cost-effective e-payment services.

Driving e-payments in key sectors

For several years now, the Bank has been working closely with several key sectors of the economy to further encourage the use of e-payments. These sectors have high payment transaction flows and the migration from cheques to e-payments would result in significant efficiency gains to the wider economy (Table 5.1).

Moving forward

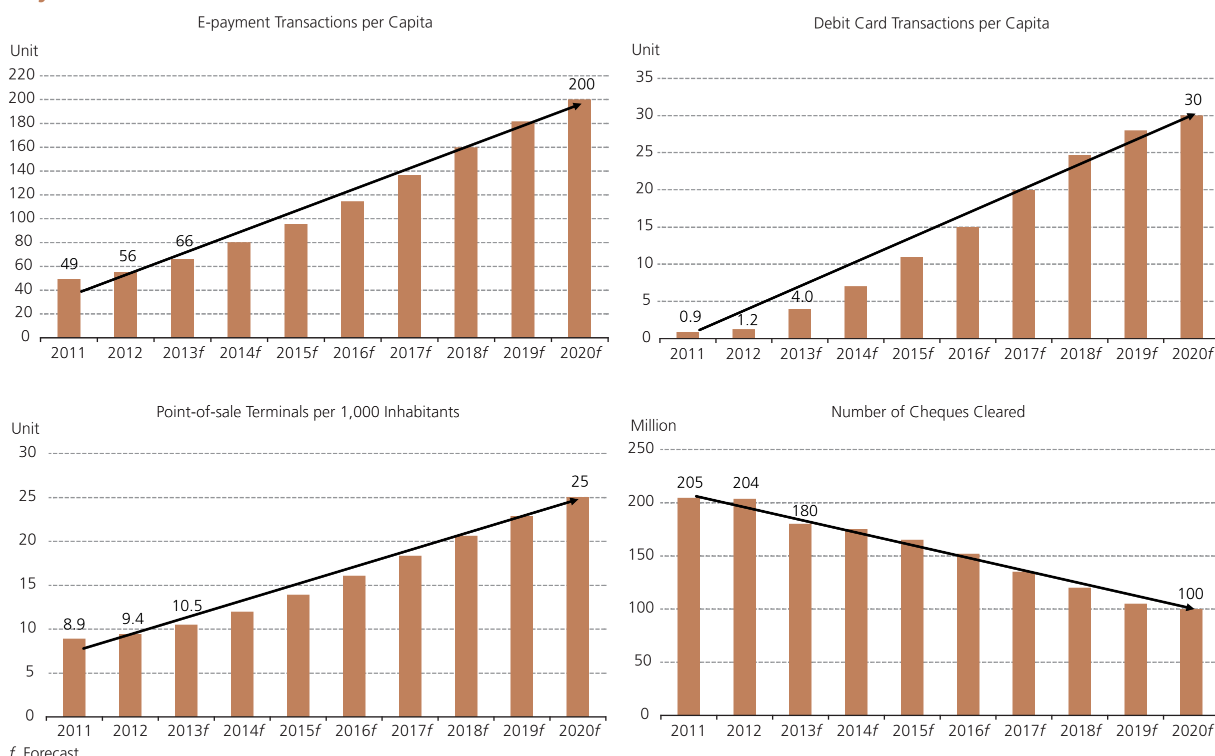
Malaysia is still at a considerable distance from achieving the targets set out in the Financial Sector Blueprint 2011-2020 (Chart 5.12). Of significance is the popularity of cheques, which continue to be widely used for payments even as more convenient e-payment methods are now being introduced in the market. The use of debit cards is also still relatively low, while efforts to deploy point-of-sale terminals more widely to smaller merchants has been challenging due to the continued preference for cash.

The Bank and the industry will embark progressively to build on the momentum achieved thus far and intensify efforts to achieve the targets set by 2020. The key initiatives that will be rolled out in 2013 are:

- Implementation of a new pricing framework for payment services to promote the use of more cost efficient payment services;
- Introduction of banking products that promote the use of e-payments over paper-based payments;
- Improve transparency by banking institutions of online banking fees for small and medium enterprises;
- Disclosure of simple payment reference and sender's identity for IBG and intrabank fund transfers initiated via electronic channels to facilitate reconciliation of payments;

Chart 5.12

Key Performance Indicators



f Forecast

Source: Bank Negara Malaysia

- Greater flexibility for customers to determine the limit for fund transfers through Internet banking channels for greater payment convenience;
- Increase in the number of banks in the MyMobile service to widen payment outreach;
- Development of a National Bill Payment Scheme which will enable bank customers to pay a wide range of billers from any bank to enhance the convenience of paying bills; and
- Require banking institutions, insurance companies, takaful operators and non-bank card issuers to migrate all of their own payments to e-payments.

Collectively, these initiatives are expected to have a pronounced impact on changing payment behaviour. It is recognised that changing payment habits takes time but the efforts undertaken are expected to yield pay-offs with inflection points in the growth of e-payment transactions in the future.

ENHANCING REGIONAL COOPERATION IN CROSS-BORDER PAYMENT SERVICES

Collaborations to further enhance cross-border payment services between the ASEAN countries continued to be pursued through the ASEAN Working Committee on Payment and Settlement Systems. The Committee has a key role in coordinating initiatives to achieve the key milestones endorsed by the ASEAN Central Bank Governors, with the aim of improving the efficiency and affordability of cross-border trade and securities settlement, retail payments and remittance, while promoting greater standardisation of cross-border payments. Among the priorities in the near term are the formulation of principles on product transparency and disclosure for trade settlement, creation of standards on the conduct of pre-departure orientation programmes for migrant workers by labour exporting countries to promote the use of formal channels for remittance, and the undertaking of a feasibility study on the adoption of international standards for cross-border payments. Work also commenced on exploring the feasibility of introducing an ASEAN cross-border debit card scheme to support more convenient and cost-efficient retail purchases. In 2012, the Committee also engaged with the Asian Payment Network to expand cross-border retail payment linkages and the ASEAN Exchanges to facilitate settlement for capital market transactions conducted via the ASEAN trading links.

2012

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Table A.1

Key Financial Soundness Indicators

	As at end				
	2008	2009	2010	2011	2012*p*
	% (or otherwise stated)				
Banking System					
Risk-Weighted Capital Ratio	12.6	15.4	14.8	15.7	15.2
Core Capital Ratio	10.6	13.8	13.0	13.7	13.4
Return on Assets	1.5	1.2	1.5	1.6	1.6
Return on Equity	18.6	14.0	16.6	17.4	17.5
Liquid Assets to Total Assets	14.6	14.2	15.6	16.0	17.1
Liquid Assets to Short-term Liabilities	41.9	42.9	48.1	45.4	52.8
Net Impaired Loans Ratio	2.2	1.8	2.3	1.8	1.4
Duration-Weighted Net Position to Capital Base	3.8	5.0	4.9	4.9	4.9
Net Open Position in FCY to Capital Base[1]	10.5	12.6	8.9	6.7	6.1
Equity Holdings to Capital Base	0.9	0.9	1.2	0.9	0.6
Insurance & Takaful Sector					
Capital Adequacy Ratio (conventional only)	187.6	225.7	224.6	222.5	222.3
Life Insurance & Family Takaful					
Excess Income over Outgo (RM billion)	8.7	12.6	14.1	12.7	17.6
New Business Premiums / Contributions (RM billion)	9.4	10.0	11.2	10.9	12.0
Capital Adequacy Ratio (conventional only)	200.0	254.4	253.2	248.5	241.8
General Insurance & General Takaful					
Underwriting Profit (RM billion)	0.2	0.9	0.9	0.5	1.6
Operating Profit (RM billion)	0.8	2.1	2.1	1.7	2.9
Gross Direct Premiums / Contributions (RM billion)	12.0	12.8	14.1	15.4	16.6
Claims Ratio	61.2	60.3	62.1	66.7	57.3
Capital Adequacy Ratio (conventional only)	181.1	184.9	204.4	222.9	226.4
Household (HH) Sector					
HH Debt (RM billion)	465.2	510.8	588.7	667.8	754.6
HH Financial Asset (RM billion)	1,068.2	1,225.8	1.383.4	1,497.4	1,687.5
HH Debt-to-GDP Ratio	60.4	71.7	74.0	75.8	80.5
HH Financial Assets to Total HH Debt Ratio	229.6	240.0	235.0	224.2	223.6
HH Liquid Financial Assets to Total HH Debt Ratio	141.5	152.6	152.0	144.7	145.8
Debt Repayment Ratio	39.7	43.1	44.1	45.2	43.9
Impaired Loans Ratio of HH Sector	4.1	3.1	2.3	1.8	1.5
Business Sector					
Return on Assets	4.6	4.9	5.3	5.0	4.4
Return on Equity	8.2	9.6	9.7	9.4	8.3
Debt-to-Equity Ratio	46.3	44.6	43.8	44.4	43.5
Interest Coverage Ratio (times)	4.5	4.8	6.1	5.4	4.7
Operating Margin	9.9	11.2	12.1	11.1	10.1
Impaired Loans Ratio of Business Sector	6.0	4.7	5.2	4.1	2.9
Development Financial Institutions[2]					
Lending to Targeted Sectors (% change)	16.3	18.5	13.0	7.1	10.1
Deposits Mobilised (% change)	18.5	14.4	20.5	16.1	7.1
Impaired Loans Ratio	6.4	6.8	9.0	7.3	6.3
Return on Assets	2.9	2.3	2.2	2.7	2.5

[1] 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

[2] Refers 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 139 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 Sectors

	As at end				
	2008	2009	2010	2011	2012*p*
Islamic Banking System	RM million (or otherwise stated)				
Total assets[1]	250,988.1	303,244.1	351,195.0	434,665.5	494,585.7
% of total assets of entire banking system[1]	17.4	19.6	20.7	22.4	23.8
Total financing[1]	150,499.0	186,864.3	222,214.3	268,251.5	314,980.9
% of total financing of entire banking system[1]	18.9	21.6	22.7	24.3	25.8
Total deposits[1]	194,385.5	235,938.1	277,549.8	340,695.8	386,196.8
% of total deposits of entire banking system[1]	18.8	20.7	22.6	24.4	25.6
	% (or otherwise stated)				
Risk-Weighted Capital Ratio	14.0	15.6	15.5	15.0	14.3
Core Capital Ratio	11.8	13.2	13.3	12.1	11.7
Return on Assets	1.0	1.3	1.3	1.0	1.4
Net Impaired Financing Ratio[2]	2.3	2.2	2.1	1.6	1.2
Takaful Sector	RM million (or otherwise stated)				
Takaful Fund Assets	10,570.0	12,445.8	14,659.3	16,948.1	19,043.3
Family	8,900.6	10,536.6	12,420.9	14,377.2	16,285.2
General	1,669.4	1,909.2	2,238.3	2,570.9	2,758.1
% of insurance and takaful industry	8.0	8.3	8.7	8.6	8.8
Net Contributions Income	3,026.8	3,523.6	4,342.4	4,863.0	5,880.5
Family	2,374.7	2,719.8	3,392.8	3,703.6	4,567.7
General	652.1	803.8	1,015.5	1,159.4	1,312.8
% of insurance and takaful industry	10.7	11.8	14.5	12.5	13.6
Family Takaful					
New business contributions	1,981.7	2,177.8	2,587.1	2,695.1	3,501.2
General Takaful					
Gross direct contributions	869.4	1,052.1	1,325.7	1,599.1	1,737.6
Claims ratio (%)	50.1	57.0	59.6	67.8	57.4

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

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

p Preliminary

Table A.3

Banking System[1]: Income and Expenditure

	For the calendar year				
	2008	2009	2010	2011	2012*p*
	RM million				
Interest income	63,146.9	56,364.5	65,681.9	73,681.0	83,213.3
Less: Interest expense	34,058.1	26,557.8	31,331.3	38,918.2	45,723.4
Net interest income	29,088.8	29,806.8	34,350.6	34,762.8	37,489.9
Add: Fee-based income	7,385.8	7,856.8	8,562.6	8,951.8	9,629.8
Less: Staff cost	9,342.5	9,838.8	11,467.0	12,841.9	13,913.8
Overheads	10,826.0	10,840.7	12,209.4	11,751.1	13,000.7
Gross operating profit	16,306.1	16,983.9	19,236.9	19,121.6	20,205.2
Less: Impairment[2] and other provisions	4,170.1	4,903.7	4,366.9	2,835.6	1,422.0
Gross operating profit after provision	12,136.0	12,080.3	14,870.0	16,286.0	18,783.2
Add: Other income	7,033.8	4,910.5[3]	8,088.7	9,909.0	10,637.6
Pre-tax profit	**19,169.7**	**16,990.8**	**22,958.7**	**26,195.6**	**29,420.8**
Pre-tax profit / Average assets (%)	1.5	1.2	1.5	1.6	1.6
Pre-tax profit / Average shareholders' funds (%)	18.6	13.9	16.6	17.4	17.5
Pre-tax profit / Average employee (RM'000)	169.5	148.5	193.5	212.1	233.2
Cost incurred per ringgit of revenue earned (sen)	46.4	48.6	46.4	45.9	46.6
Cost incurred per ringgit of net interest income (sen)	69.3	69.4	68.9	70.7	71.8
Overheads to staff cost (%)	115.9	110.2	106.5	91.5	93.4
Staff cost per employee (RM'000)	82.6	86.1	96.6	104.0	110.3

[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 Banks[1]: Income and Expenditure

	For the calendar year				
	2008	2009	2010	2011	2012*p*
	RM million				
Interest income	60,568.2	54,418.1	63,744.4	71,668.9	81,175.9
Less: Interest expense	32,180.0	25,402.6	30,103.6	37,417.0	44,194.1
Net interest income	28,388.2	29,015.5	33,640.8	34,251.8	36,981.8
Add: Fee-based income	5,967.2	6,289.2	6,590.5	6,904.9	7,619.7
Less: Staff cost	8,515.3	9,136.4	10,550.9	11,736.6	12,782.5
Overheads	9,949.8	10,065.5	11,105.8	10,747.1	12,015.0
Gross operating profit	15,890.3	16,102.9	18,574.5	18,673.1	19,804.0
Less: Impairment[2] and other provisions	4,128.3	5,011.4	4,170.7	2,938.6	1,429.2
Gross operating profit after provision	11,762.0	11,091.5	14,403.8	15,734.5	18,374.9
Add: Other income	6,726.6	4,667.5[3]	7,802.8	9,360.4	9,905.1
Pre-tax profit	**18,488.6**	**15,759.1**	**22,206.5**	**25,094.9**	**28,280.0**
Pre-tax profit / Average assets (%)	1.5	1.2	1.6	1.6	1.6
Pre-tax profit / Average shareholders' funds (%)	19.6	13.9	17.2	17.7	17.8
Pre-tax profit / Average employee (RM'000)	176.2	148.4	201.9	219.9	243.2
Cost incurred per ringgit of revenue earned (sen)	44.9	48.0	45.1	44.5	45.5
Cost incurred per ringgit of net interest income (sen)	65.0	66.2	64.4	65.6	67.1
Overheads to staff cost (%)	116.8	110.2	105.3	91.6	94.0
Staff cost per employee (RM'000)	81.2	86.1	95.9	102.8	109.9

[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				
	2008	2009	2010	2011	2012*p*
	RM million				
Interest income	2,578.6	1,946.4	1,937.5	2,012.1	2,037.3
Less: Interest expense	1,878.0	1,155.2	1,227.7	1,501.1	1,529.3
Net interest income	700.6	791.2	709.9	511.0	508.0
Add: Fee-based income	1,418.5	1,567.5	1,972.1	2,046.9	2,010.1
Less: Staff cost	827.2	702.5	916.0	1,105.3	1,131.3
Overheads	876.1	775.2	1,103.6	1,004.0	985.7
Gross operating profit	415.8	881.0	662.4	448.5	401.2
Less: Impairment[1] and other provisions	41.8	-107.7	196.2	-103.1	-7.1
Gross operating profit after provision	373.9	988.7	466.2	551.6	408.3
Add: Other income	307.1	243.0	285.9	549.2	732.5
Pre-tax profit	**681.1**	**1,231.7**	**752.1**	**1,100.7**	**1,140.8**
Pre-tax profit / Average assets (%)	1.0	2.0	1.1	1.7	1.8
Pre-tax profit / Average shareholders' funds (%)	7.5	14.2	7.8	12.3	12.9
Pre-tax profit / Average employee (RM'000)	83.6	150.0	86.3	117.4	115.1
Cost incurred per ringgit of revenue earned (sen)	70.2	56.8	68.0	67.9	65.1
Cost incurred per ringgit of net interest income (sen)	243.1	186.8	284.5	412.8	416.7
Overheads to staff cost (%)	105.9	110.4	120.5	90.8	87.1
Staff cost per employee (RM'000)	101.6	85.5	105.1	117.9	114.2

[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				
	2008	2009	2010	2011	2012*p*
	RM million				
Income	9,123.7	9,707.7	11,795.2	13,594.4	16,375.1
Less: Expense	4,161.6	3,611.3	4,955.9	6,487.1	8,266.0
Net income	4,962.2	6,096.4	6,839.2	7,107.4	8,109.1
Add: Fee-based income	489.0	595.2	790.1	835.7	1,055.1
Less: Staff cost	886.2	932.8	1,166.4	1,377.6	1,636.7
Overheads	1,873.0	2,100.4	2,398.5	2,388.1	3,032.9
Gross operating profit	2,692.0	3,658.4	4,064.4	4,177.3	4,494.6
Less: Impairment[1] and other provisions	1,200.6	1,386.4	1,299.9	1,692.1	565.6
Gross operating profit after provision	1,491.4	2,272.0	2,764.5	2,485.2	3,929.0
Add: Other income	319.3	368.9	434.4	541.7	966.0
Pre-tax profit	**1,810.7**	**2,640.9**	**3,198.9**	**3,026.9**	**4,894.9**
Pre-tax profit / Average assets (%)	1.0	1.3	1.3	1.0	1.4
Pre-tax profit / Average shareholders' funds (%)	12.4	13.9	15.8	13.5	19.6
Pre-tax profit / Average employee (RM'000)[2]	107.7	100.6	138.2	119.0	172.7
Cost incurred per ringgit of revenue earned (sen)	27.8	28.4	27.4	25.2	25.4
Cost incurred per ringgit of net income (sen)	55.6	49.8	52.1	53.0	57.6
Overheads to staff cost (%)	211.4	225.2	205.6	173.4	185.3
Staff cost per employee (RM'000)[2]	52.7	45.3	50.4	54.1	57.7

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

[2] Number of employees is estimated based on the percentage of institution's Islamic assets

p Preliminary

Note: Figures may not necessarily add up due to rounding

Table A.7

Banking System: Network and Workforce

	As at end				
	2008	2009	2010	2011	2012*p*
Number of institutions	54	54	55	56	56
Commercial banks	*22*	*22*	*23*	*25*	*27*
Investment banks	*15*	*15*	*15*	*15*	*13*
Islamic banks	*17*	*17*	*17*	*16*	*16*
Office network	2,271	2,298	2,312	2,435	2,481
Commercial banks	*1,979*	*1,999*	*2,006*	*2,050*	*2,056*
Investment banks	*131*	*131*	*133*	*133*	*148*
Islamic banks[1]	*2,039*	*2,087*	*2,102*	*2,147*	*2,171*
Number of banks with internet services	21	24	26	27	28
Number of employees	114,856	114,804	120,572	125,065	128,301
Commercial banks	*99,593*	*98,846*	*103,089*	*106,274*	*108,361*
Investment banks	*8,561*	*8,129*	*8,972*	*9,577*	*10,338*
Islamic banks	*6,702*	*7,829*	*8,511*	*9,214*	*9,602*

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

Table A.8

Commercial Banks[1]: Commitments and Contingencies

	As at end				
	2008	2009	2010	2011	2012*p*
	RM million				
Assets sold with recourse and commitments with drawdown	12,744.2	5,871.4	6,247.1	6,509.9	6,053.5
Credit extension commitments	348,118.2	376,604.0	379,644.9	409,756.4	444,225.0
Direct credit substitutes	21,179.7	19,922.4	19,293.0	21,302.3	24,960.5
Foreign exchange related contracts	364,511.3	341,651.1	407,639.0	476,725.8	517,740.5
Interest rate related contracts	752,070.1	648,232.1	643,923.3	695,982.4	716,494.7
Trade-related contingencies	13,608.4	12,553.5	12,154.7	11,721.1	10,644.2
Transaction-related contingencies	34,035.8	35,873.1	35,037.2	41,059.9	45,928.8
Underwriting obligations	1,383.5	1,532.2	1,187.7	789.5	445.0
Others	52,838.9	54,334.2	61,185.2	65,938.4	72,179.0
Total	**1,600,490.1**	**1,496,574.0**	**1,566,312.2**	**1,729,785.7**	**1,838,671.3**

[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				
	2008	2009	2010	2011	2012*p*
	RM million				
Assets sold with recourse and commitments with drawdown	79.1	5.4	326.9	20.4	18.7
Credit extension commitments	2,328.8	2,640.4	2,796.8	3,353.6	3,666.4
Direct credit substitutes	729.4	484.3	258.2	322.6	201.5
Foreign exchange related contracts	464.4	801.5	2,864.4	3,958.7	5,536.6
Interest rate related contracts	14,154.2	10,018.0	13,852.2	10,573.4	9,161.6
Trade-related contingencies	0.0	0.0	0.0	1.1	1.1
Transaction-related contingencies	151.4	10.5	10.5	10.5	10.5
Underwriting obligations	2,551.8	987.6	693.3	717.5	185.3
Others	8,988.4	5,792.1	2,343.8	1,523.1	2,202.9
Total	**29,447.6**	**20,739.7**	**23,146.0**	**20,480.9**	**20,984.4**

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

Table A.10

Life Insurance[1]: Income and Outgo

Item	For the calendar year				
	2008	2009	2010	2011	2012*p*
	RM million				
Net premiums	18,772.4	19,870.1	21,854.2	22,877.7	24,979.3
Less: Net policy benefits	10,025.4	11,857.3	13,035.4	14,015.5	14,333.0
Agency remuneration	2,718.7	2,944.4	3,248.3	3,384.1	3,553.9
Total management expenses	1,557.1	1,648.6	1,852.4	2,092.9	2,288.1
Balance of transaction	4,471.2	3,419.7	3,718.2	3,385.2	4,804.3
Add: Net investment income	4,912.5	4,927.3	5,449.8	6,039.5	6,704.3
Net capital gain (loss)	-2,644.6	2,104.8	2,590.0	659.0	1,986.1
Net other income	533.2	454.0	907.1	1,112.7	1,756.6
Excess of income over outgo	**7,272.4**	**10,905.8**	**12,665.1**	**11,196.4**	**15,251.4**

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

Table A.11

General Insurance[1]: Underwriting and Operating Results

Item	For the calendar year				
	2008	2009	2010	2011	2012*p*
	RM million				
Earned premium income	9,109.4	9,911.2	10,715.2	11,236.9	12,416.0
Less: Net claims incurred	6,007.1	6,100.7	6,731.8	7,483.7	7,153.2
Net commission	1,136.7	1,228.6	1,284.0	1,374.3	1,585.2
Total management expenses	1,863.1	1,839.3	1,895.0	1,990.2	2,223.2
Underwriting profit	102.5	742.7	804.3	388.7	1,454.4
Add: Net investment income	820.0	772.0	813.3	924.6	969.9
Net capital gains	0.0	239.3	61.9	18.9	43.3
Net other income (loss)	-311.6	94.5	229.9	127.2	159.9
Operating profit	**610.9**	**1,848.5**	**1,909.4**	**1,459.5**	**2,627.5**

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

Table A.12

Family Takaful[1]: Income and Outgo

Item	For the calendar year				
	2008	2009	2010	2011	2012*p*
	RM million				
Net contributions	2,374.7	2,719.8	3,392.8	3,703.6	4,567.7
Less: Net certificate benefits	633.4	905.4	1,601.2	1,660.9	1,632.1
Net commissions	297.1	432.7	531.6	599.2	711.4
Total management expenses	246.5	317.9	414.3	476.5	608.6
Balance of transaction	1,197.8	1,063.8	845.7	967.0	1,615.6
Add: Net investment income	298.8	354.8	447.3	494.2	594.6
Net capital gain (loss)	-55.7	60.3	45.0	27.8	55.0
Net other income	19.3	184.3	92.4	78.1	114.5
Excess of income over outgo	**1,460.1**	**1,663.2**	**1,430.4**	**1,567.1**	**2,379.7**

[1] Figures are based on the 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 Takaful[1]: Underwriting and Operating Results

Item	For the calendar year				
	2008	2009	2010	2011	2012*p*
	RM million				
Earned contributions income	611.8	722.4	938.6	1,090.3	1,281.3
Less: Net claims incurred	306.3	411.6	558.4	738.9	735.6
Net commission	32.0	53.0	85.8	96.7	157.0
Total management expenses	191.1	117.8	181.6	155.9	210.1
Underwriting profit	82.5	140.0	112.7	98.7	178.6
Add: Net investment income	50.6	57.7	68.4	84.5	95.0
Net capital gains (loss)	-1.5	9.1	17.7	35.8	41.6
Net other income (loss)	9.4	9.6	3.8	17.5	-15.9
Operating profit	**141.0**	**216.5**	**202.5**	**236.5**	**299.2**

[1] Figures are based on the 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 Institutions[1] : Sources and Uses of Funds

	As at end				
	2008	2009	2010	2011	2012
	RM million				
Sources:					
Shareholders' funds	23,057.2	24,533.2	25,367.4	28,391.5	35,485.4
Paid-up capital	*12,526.8*	*12,771.9*	*12,771.9*	*13,376.0*	*13,976.9*
Reserves	*5,004.2*	*5,298.6*	*6,041.2*	*6,644.5*	*9,044.5*
Retained earnings	*5,526.2*	*6,462.7*	*6,554.3*	*8,371.0*	*12,464.0*
Deposits accepted	79,542.8	95,599.1	111,319.5	128,662.2	136,889.2
Borrowings	21,501.0	24,698.0	23,744.9	25,022.6	22,950.7
Government	*13,599.1*	*14,066.2*	*18,086.7*	*18,428.6*	*17,348.8*
Multilateral/International agencies	*2,420.4*	*3,595.9*	*3,276.1*	*3,416.6*	*2,113.0*
Others	*5,481.5*	*7,035.9*	*2,382.1*	*3,177.4*	*3,488.9*
Others	20,328.2	21,085.1	24,434.2	23,999.1	25,684.3
Total	**144,429.2**	**165,915.4**	**184,866.0**	**206,075.4**	**221,009.6**
Uses:					
Deposits placed	20,118.8	25,134.7	25,718.5	31,444.4	19,376.0
Investments	36,535.1	38,263.5	45,111.0	52,215.3	62,866.5
of which:					
Government securities	*6,300.9*	*7,520.6*	*9,924.7*	*14,418.7*	*21,954.4*
Shares	*8,707.5*	*9,922.1*	*9,125.0*	*9,434.4*	*10,053.4*
Quoted	*8,422.7*	*9,012.8*	*8,681.4*	*9,241.8*	*9,852.4*
Unquoted	*284.8*	*909.3*	*443.6*	*192.6*	*201.0*
Loans and advances	75,376.7	88,509.7	99,518.7	106,821.4	119,140.6
Fixed assets	5,398.9	5,869.0	5,865.5	6,027.2	7,130.5
Others	6,999.7	8,138.5	8,652.3	9,567.1	12,496.0
Total	**144,429.2**	**165,915.4**	**184,866.0**	**206,075.4**	**221,009.6**
Contingencies:					
Guarantee	4,780.5	3,305.9	2,514.5	1,998.2	1,601.1
Export credit insurance	1,068.8	835.8	807.7	496.6	1,832.5
Total	**5,849.3**	**4,141.7**	**3,322.2**	**2,494.8**	**3,433.6**

[1] Refers to Bank Pembangunan Malaysia Berhad, Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional, Export-Import Bank of Malaysia Berhad, Bank Pertanian Malaysia Berhad (Agrobank), Bank Perusahaan Kecil & Sederhana 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 Institutions[1] under DFIA[2] : Sources and Uses of Funds

	As at end				
	2008	2009	2010	2011	2012
	RM million				
Sources:					
Shareholders' funds	16,814.5	18,840.8	19,598.4	23,084.6	26,009.7
Paid-up capital	*9,374.9*	*10,132.4*	*10,132.4*	*10,486.5*	*11,002.4*
Reserves	*4,092.8*	*4,459.6*	*5,067.5*	*6,550.5*	*7,165.2*
Retained earnings	*3,346.8*	*4,248.8*	*4,398.5*	*6,047.6*	*7,842.1*
Deposits accepted	59,210.4	71,268.6	83,050.7	95,867.0	99,994.0
Borrowings	15,913.3	17,806.7	18,485.8	19,890.0	17,073.2
Government	*12,162.6*	*12,268.9*	*14,963.7*	*15,978.0*	*14,819.2*
Multilateral/International agencies	*2,257.0*	*3,237.8*	*2,872.1*	*3,317.0*	*2,054.0*
Others	*1,493.7*	*2,300.0*	*650.0*	*595.0*	*200.0*
Others	16,238.8	16,797.7	21,757.2	21,494.0	23,075.3
Total	**108,177.0**	**124,713.8**	**142,892.1**	**160,335.6**	**166,152.2**
Uses:					
Deposits placed	11,673.7	14,325.5	17,309.7	22,407.8	12,219.1
Investments	19,597.9	19,097.5	23,199.3	27,355.3	33,865.0
of which:					
Government securities	*6,300.9*	*7,520.6*	*9,924.7*	*14,418.7*	*21,954.4*
Shares	*464.2*	*1,428.1*	*1,697.4*	*1,110.0*	*853.0*
Quoted	*421.1*	*1,059.8*	*1,380.5*	*1,053.8*	*799.0*
Unquoted	*43.1*	*368.3*	*316.9*	*56.2*	*54.0*
Loans and advances	70,338.4	83,354.5	94,201.1	100,866.6	111,081.5
Fixed assets	2,319.7	2,527.4	2,729.4	2,893.0	3,290.7
Others	4,247.3	5,408.9	5,452.6	6,812.9	5,695.9
Total	**108,177.0**	**124,713.8**	**142,892.1**	**160,335.6**	**166,152.2**
Contingencies:					
Guarantee	1,086.1	937.4	380.6	194.8	161.3
Export credit insurance	1,068.8	835.8	807.7	496.6	1,832.5
Total	**2,154.9**	**1,773.2**	**1,188.3**	**691.4**	**1,993.8**

[1] Refers to Bank Pembangunan Malaysia Berhad, Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional, Export-Import Bank of Malaysia Berhad, Bank Pertanian Malaysia Berhad (Agrobank) and Bank Perusahaan Kecil & Sederhana Malaysia Berhad (SME Bank)
[2] Development Financial Institutions Act 2002

Table A.16

Development Financial Institutions[1]: Direction of Lending

	As at end				
	2008	2009	2010	2011	2012
	RM million				
Agriculture, forestry and fishery	4,976.9	6,340.3	6,169.9	6,627.4	7,122.6
Mining and quarrying	26.5	114.4	171.6	274.4	194.9
Manufacturing	5,852.2	5,560.1	6,359.0	5,613.1	5,663.5
Electricity, gas and water supply	3,763.1	3,590.5	3,345.8	2,651.8	3,167.2
Import and export, wholesale and retail trade, restaurants and hotels	1,493.2	1,989.4	1,981.9	1,921.8	2,012.3
Broad property sector	16,984.9	20,720.8	23,143.1	25,082.1	26,251.4
Construction	*8,637.2*	*12,367.1*	*14,400.8*	*16,173.5*	*16,570.6*
Purchase of residential property	*7,021.2*	*6,875.4*	*6,590.7*	*6,268.0*	*6,752.3*
Purchase of non-residential property	*296.3*	*339.8*	*499.0*	*508.9*	*1,119.7*
Real estate	*1,030.2*	*1,138.5*	*1,652.6*	*2,131.7*	*1,808.8*
Transport, storage and communication	5,705.5	5,847.5	5,750.7	5,433.5	5,395.0
Maritime	1,916.7	1,750.4	1,776.0	2,168.9	2,020.8
Finance, insurance and business services	785.5	1,209.0	1,292.0	2,073.7	2,760.6
Consumption credit	31,356.6	38,660.7	46,359.5	51,355.6	58,888.5
of which:					
Purchase of motor vehicles	*2,513.3*	*2,370.0*	*2,053.7*	*1,679.0*	*1,261.9*
Credit card	*174.8*	*320.5*	*443.3*	*566.4*	*579.8*
Purchase of securities	218.9	45.8	51.2	109.8	109.7
Others	2,296.7	2,680.8	3,118.0	3,509.3	5,554.1
Total	**75,376.7**	**88,509.7**	**99,518.7**	**106,821.4**	**119,140.6**

[1] Refers to Bank Pembangunan Malaysia Berhad, Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional, Export-Import Bank of Malaysia Berhad, Bank Pertanian Malaysia Berhad (Agrobank), Bank Perusahaan Kecil & Sederhana 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 Institutions[1] under DFIA[2] : Direction of Lending

	As at end				
	2008	2009	2010	2011	2012
	RM million				
Agriculture, forestry and fishery	4,862.9	6,234.3	6,114.7	6,515.0	6,866.7
Mining and quarrying	22.8	112.3	122.5	204.5	133.9
Manufacturing	4,646.7	4,290.9	5,496.5	4,963.3	5,169.3
Electricity, gas and water supply	3,762.2	3,589.8	3,345.8	2,187.6	2,689.8
Import and export, wholesale and retail trade, restaurants and hotels	1,276.2	1,774.8	1,794.1	1,642.0	1,762.2
Broad property sector	15,301.7	18,956.8	21,127.0	22,965.9	23,841.8
Construction	*8,072.6*	*11,895.2*	*13,934.9*	*15,947.1*	*16,568.3*
Purchase of residential property	*6,747.8*	*6,660.5*	*6,404.2*	*6,106.1*	*6,257.0*
Purchase of non-residential property	*237.4*	*256.1*	*413.6*	*344.9*	*253.8*
Real estate	*243.9*	*145.0*	*374.3*	*567.8*	*762.7*
Transport, storage and communication	5,640.8	5,794.9	5,693.5	5,384.4	5,341.2
Maritime	1,916.7	1,750.4	1,776.0	2,168.9	2,020.8
Finance, insurance and business services	750.7	1,176.1	1,261.9	1,698.1	2,359.9
Consumption credit	30,417.6	37,733.1	45,362.5	50,159.9	57,456.3
of which:					
Purchase of motor vehicles	*2,512.8*	*2,348.7*	*2,039.3*	*1,667.9*	*1,257.4*
Credit card	*174.8*	*320.5*	*443.3*	*566.4*	*579.8*
Purchase of securities	218.9	45.8	51.2	109.8	109.7
Others	1,521.2	1,895.3	2,055.4	2,867.2	3,329.9
Total	**70,338.4**	**83,354.5**	**94,201.1**	**100,866.6**	**111,081.5**

[1] Refers to Bank Pembangunan Malaysia Berhad, Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional, Export-Import Bank of Malaysia Berhad, Bank Pertanian Malaysia Berhad (Agrobank) and Bank Perusahaan Kecil & Sederhana Malaysia Berhad (SME Bank)
[2] Development Financial Institutions Act 2002

Table A.18

Development Financial Institutions[1] under DFIA[2]: Impaired Loans and Impairment Provisions

	As at end	
	2011	2012
	RM million	
Collective impairment provisions	2,675.8	2,734.6
Individual impairment provisions	3,044.8	2,612.7
Impaired loans	7,242.4	6,999.8
	(%)	
Ratio of gross impaired loans to total loans	7.3	6.3
Ratio of net impaired loans to net total loans	4.3	4.1
Ratio of individual and collective impairment provisions to total impaired loans	79.0	76.4

[1] Refers to Bank Pembangunan Malaysia Berhad, Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional, Export-Import Bank of Malaysia Berhad, Bank Pertanian Malaysia Berhad (Agrobank) and Bank Perusahaan Kecil & Sederhana 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	
	2011	2012	2011	2012	2011	2012
	RM million					
Infrastructure	21,185.7	21,526.2	886.2	2,498.5	2,878.3	802.5
Government programmes	*18,917.0*	*19,498.4*	*260.1*	*1,855.3*	*2,497.9*	*642.4*
Private programmes	*2,268.7*	*2,027.8*	*626.1*	*643.2*	*380.4*	*160.1*
Maritime	2,168.9	2,020.8	400.5	694.9	829.5	551.5
Shipping industry	*1,851.1*	*1,741.2*	*400.5*	*194.9*	*780.9*	*299.8*
Shipyard industry	*245.8*	*279.6*	*0.0*	*500.0*	*48.6*	*251.7*
Marine-related services	*72.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Manufacturing: High technology	1,435.5	1,682.9	328.5	1,418.8	111.2	474.1
Others	15.3	14.3	1.6	0.9	1.2	1.1
Total	**24,805.4**	**25,244.2**	**1,616.8**	**4,613.1**	**3,820.2**	**1,829.2**

Source: Bank Pembangunan Malaysia Berhad

Table A.20

Bank Perusahaan Kecil & Sederhana Malaysia Berhad (SME Bank)

Year of establishment	October 2005					
Objectives	To provide financing and advisory services to SMEs involved 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	
	2011	2012	2011	2012	2011	2012
	RM million					
SMEs	3,649.9	3,915.9	1,736.6	2,835.6	1,643.1	1,850.0
Micro	*300.1*	*1,098.8*	*332.4*	*402.2*	*139.0*	*295.8*
Small	*1,396.7*	*1,495.0*	*768.0*	*1,305.4*	*686.5*	*921.0*
Medium	*1,953.1*	*1,322.1*	*636.2*	*1,128.0*	*817.6*	*633.2*
Others	270.3	253.1	0.0	78.1	19.2	37.9
Total	**3,920.2**	**4,169.0**	**1,736.6**	**2,913.7**	**1,662.3**	**1,887.9**

Source: Bank Perusahaan Kecil & Sederhana Malaysia Berhad

Table A.21

Export-Import Bank of Malaysia Berhad

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-2011	As at end-2012	2011	2012	2011	2012
Buyer credit facility	667.3	748.7	30.2	24.6	141.2	735.1
Overseas project financing	1,259.9	2,221.3	2,389.6	2,698.3	641.4	1,022.0
Overseas contract financing	354.0	340.0	105.7	61.1	47.2	45.9
Supplier credit facility	207.3	312.9	1,544.2	230.2	343.6	1,116.6
Malaysia Kitchen financing facility	17.4	22.2	11.4	7.0	6.5	8.2
Export credit refinancing	976.1	571.2	5,075.0	3,002.4	5,075.0	3,002.4
Others	32.1	129.0	301.0	3,223.9	32.6	144.5
Total	**3,514.1**	**4,345.3**	**9,457.1**	**9,247.5**	**6,287.5**	**6,074.7**

Guarantee and Insurance Policy	Contingent Liabilities (RM million)		Commitment Approved (RM million)	
	As at end-2011	As at end-2012	2011	2012
Guarantee	194.8	161.3	318.3	419.9
Insurance	496.6	1,832.5	1,815.0	2,803.6
Total	**691.4**	**1,993.8**	**2,133.3**	**3,223.5**

Source: Export-Import Bank of Malaysia Berhad

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-2011			As at end-2012		
	Members	Non-members	Total	Members	Non-members	Total
	2,060.1	56,495.6	58,555.7	2,419.5	60,291.7	62,711.2
Direction of Financing	Financing Outstanding (RM million)					
	As at end-2011			As at end-2012		
Sector	Members	Non-members	Total	Members	Non-members	Total
Agriculture	6.3	496.5	502.8	4.2	527.7	531.9
Purchase of residential property	1,871.5	905.9	2,777.4	1,360.2	1,058.2	2,418.4
Purchase of non-residential property	63.5	221.2	284.7	32.4	163.9	196.3
General commerce	0.0	125.0	125.0	3.6	134.4	138.0
Purchase of securities	97.5	11.1	108.6	82.9	25.7	108.6
Consumption credit	22,516.6	19,420.1	41,936.7	24,693.3	22,883.7	47,577.0
of which:						
Purchase of motor vehicles	*559.0*	*911.6*	*1,470.6*	*258.3*	*765.9*	*1,024.2*
Manufacturing	0.0	862.9	862.9	0.0	1,218.7	1,218.7
Others	2.2	4,102.8	4,105.0	2.5	4,565.1	4,567.6
Total	**24,557.6**	**26,145.5**	**50,703.1**	**26,179.1**	**30,577.4**	**56,756.5**

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-2011	As at end-2012
Fixed deposits	6,238.0	7,068.4
GIRO deposits	5,303.4	5,419.5
Islamic deposits	6,351.6	7,607.5
Premium savings certificates	1,578.0	2,002.5
Others	113.6	97.9
Total	**19,584.6**	**22,195.8**
Investments	RM million	
	As at end-2011	As at end-2012
Quoted shares	53.0	92.2
Government securities	7,685.7	8,578.5
of which:		
Malaysian Government Securities	*3,474.1*	*3,642.9*
Private debt securities	517.5	504.3
Subsidiary companies	32.0	32.0
Associate companies	231.8	231.8
Others	94.2	146.1
Total	**8,614.2**	**9,584.9**
Direction of Lending	RM million	
	As at end-2011	As at end-2012
Purchase of securities	1.2	1.1
Purchase of residential property	3,328.7	3,838.6
Purchase of non-residential property	60.0	57.5
Consumption credit	8,305.3	9,878.5
Others	313.5	495.6
Total	**12,008.7**	**14,271.3**

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, co-ordinate and supervise the financing facilities for agricultural purposes as well as to mobilize 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	
	2011	2012	2011	2012	2011	2012
Sub-sector						
Oil palm	*1,090.7*	*1,013.2*	*573.6*	*283.4*	*256.1*	*182.0*
Food crops	*818.3*	*1,119.6*	*643.4*	*896.4*	*619.7*	*802.3*
Livestock	*699.1*	*687.3*	*168.2*	*199.3*	*174.5*	*147.9*
Fishery	*384.8*	*402.6*	*214.7*	*210.8*	*86.8*	*103.8*
Forestry	*83.9*	*22.5*	*3.9*	*8.9*	*2.8*	*3.8*
Tobacco	*1.5*	*1.3*	*0.0*	*0.1*	*1.3*	*0.7*
Rubber	*105.1*	*151.7*	*132.0*	*88.3*	*47.2*	*80.9*
Others	*2,786.8*	*2,897.0*	*1,953.8*	*2,520.4*	*1,540.9*	*1,966.5*
Total	**5,970.2**	**6,295.2**	**3,689.6**	**4,207.6**	**2,729.3**	**3,287.9**

Source: Bank Pertanian Malaysia Berhad

Table A.25

Development Financial Institutions: Selected Data

	As at end					
	2011			2012		
DFIs under DFIA[1]:	Branch	ATM	Staff	Branch	ATM	Staff
Bank Pembangunan Malaysia Berhad	-	-	325	-	-	309
Bank Kerjasama Rakyat Malaysia Berhad	134	433	4,150	140	501	4,248
Bank Simpanan Nasional	390	929	6,123	395	986	6,348
Export-Import Bank of Malaysia Berhad	-	-	246	-	-	278
Bank Pertanian Malaysia Berhad	166	228	3,181	182	238	3,480
Bank Perusahaan Kecil & Sederhana Malaysia Berhad	18	-	881	17	-	938
Sub-total	708	1,590	14,906	734	1,725	15,601
Other DFIs:						
Malaysian Industrial Development Finance Berhad	5	-	318	5	-	295
Sabah Development Bank Berhad	-	-	88	-	-	86
Borneo Development Corporation (Sabah) Sendirian Berhad	-	-	17	-	-	17
Borneo Development Corporation (Sarawak) Sendirian Berhad	-	-	34	-	-	33
Credit Guarantee Corporation Malaysia Berhad	17	-	481	17	-	485
Sabah Credit Corporation	12	-	188	12	-	189
Lembaga Tabung Haji	119	-	1,994	119	-	2,027
Sub-total	153	-	3,120	153	-	3,132
Total	**861**	**1,590**	**18,026**	**887**	**1,725**	**18,733**

[1] Development Financial Institutions Act 2002

Table A.26

Total Outward and Inward Remittances

	2008	2009[5]	2010[5]	2011[5]	2012
	RM million				
Total outward[1]	**8,574.5**	**10,537.8**	**13,414.9**	**15,682.1**	**19,754.5**
Remitted via:					
Banks	6,563.1	6,594.0	6,712.3	7,791.1	8,940.3
Money services business licensees[2]	2,011.4	3,943.8	6,702.6	7,891.0	10,814.2
Total inward[3]	**4,788.3**	**4,617.1**	**4,696.0**	**5,215.1**	**6,356.7**
Remitted via:					
Banks	4,705.0	4,351.4	4,202.1	4,654.0	5,753.0
Money services business licensees	83.3	265.7	493.9	561.1	603.7
As at end of period					
No. of remittance service providers	**67**	**81**	**81**	**80**	**79**
Commercial banks	38	39	40	41	43
Development financial institutions	2	2	2	2	2
Money services business licensees[4]	27	40	39	37	34

[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] Refer to revised remittance transaction value for the years 2009 through 2011.

Table A.27

Basic Payments Indicator

	2008	2009	2010	2011	2012
Population (million)	27.6	28.1	28.6	29.0	29.3
GDP (RM million)	769,949	712,857	795,037	881,080	937,532
Cash in circulation (CIC) (RM million)	40,424.6	43,439.2	47,685.2	53,488.5	57,391.1
Transaction Volume Per Capita (unit):					
Cheque[1]	7.5	7.3	7.2	7.1	6.9
E-payments:	39.8	41.6	43.0	49.4	55.5
Credit card	9.5	9.8	10.3	10.9	11.1
Charge card	0.2	0.2	0.2	0.1	0.1
Debit card	0.4	0.4	0.6	0.9	1.2
E-money	25.0	25.5	24.5	27.8	31.5
Other cashless instruments[2]	…	…	…	0.2	0.9
Interbank GIRO	1.3	1.6	1.7	2.1	2.4
Direct Debit	…	…	…	…	…
ATM[3]	0.8	0.9	1.4	1.5	1.6
Internet banking[4]	2.5	3.1	4.2	5.7	6.4
Mobile banking[4]	…	…	…	0.1	0.2
RENTAS - Third party transactions[5]	0.1	0.1	0.1	0.1	0.1
Transaction Value Per Capita (RM):					
CIC	1,466.4	1,546.9	1,668.0	1,846.7	1,956.3
Cheque[1]	63,899.1	59,669.2	64,437.9	68,355.1	69,306.2
E-payments:	305,635.1	295,375.8	328,986.8	441,430.9	512,619.3
Credit card	2,368.3	2,468.5	2,791.7	3,065.7	3,207.1
Charge card	111.0	135.9	164.0	186.0	220.2
Debit card	71.0	98.8	165.9	218.0	295.9
E-money	75.0	78.4	94.7	131.6	159.3
Other cashless instruments[2]	…	…	…	1.0	2.7
Interbank GIRO	3,250.9	3,876.1	4,437.8	5,736.1	7,214.8
Direct Debit	35.8	67.6	132.0	166.8	281.2
ATM[3]	696.1	704.1	1,094.3	1,287.2	1,395.9
Internet banking[4]	21,173.1	23,264.5	36,085.6	57,469.1	60,239.7
Mobile banking[4]	2.5	4.7	4.2	24.5	124.9
RENTAS - Third party transactions[5]	277,851.5	264,677.3	284,016.5	373,145.0	439,477.8
Turnover to GDP:					
CIC (%)	5.3	6.1	6.0	6.1	6.1
Cheque[1] (times)	2.3	2.4	2.3	2.2	2.2
E-payments (times):	10.9	11.6	11.8	14.5	16.0
% of GDP:					
Credit card	8.5	9.7	10.0	10.1	10.0
Charge card	0.4	0.5	0.6	0.6	0.7
Debit card	0.3	0.4	0.6	0.7	0.9
E-money	0.3	0.3	0.3	0.4	0.5
Other cashless instruments[2]	…	…	…	…	…
Interbank GIRO	11.6	15.3	16.0	18.9	22.6
Direct Debit	0.1	0.3	0.5	0.5	0.9
ATM[3]	2.5	2.8	3.9	4.2	4.4
Internet banking[4]	75.8	91.6	129.8	188.9	188.5
Mobile banking[4]	…	…	…	0.1	0.4
RENTAS - Third party transactions[5] (times)	9.9	10.4	10.2	12.3	13.8

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
… Negligible
Note: Numbers may not necessarily add up due to rounding

Table A.28

Share of Non-cash Payments by Volume

	2008	2009	2010	2011	2012
	Transaction Volume, % share of total				
Cheque	**15.9**	**14.9**	**14.4**	**12.5**	**11.1**
Payment Instruments	**74.1**	**73.5**	**70.8**	**70.9**	**71.8**
Credit card	20.0	20.1	20.5	19.4	17.7
Charge card	0.4	0.4	0.3	0.2	0.2
Debit card	0.8	0.8	1.3	1.5	2.0
E-money	52.8	52.2	48.7	49.7	51.9
Payment Systems	**3.0**	**3.4**	**3.7**	**3.9**	**4.1**
RENTAS[1]	0.2	0.2	0.2	0.2	0.2
IBG	2.8	3.2	3.5	3.7	3.8
Direct Debit	…	…	…	…	…
Payment Channels	**7.0**	**8.2**	**11.1**	**12.7**	**13.1**
Internet banking	5.3	6.3	8.4	10.0	10.2
Mobile banking	…	…	…	0.1	0.4
ATM	1.6	1.8	2.7	2.6	2.5

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

… Negligible

Note: Numbers may not necessarily add up due to rounding

Table A.29

Cashless Payment Instruments: Transaction Volume

	2008	2009	2010	2011	2012	2011	2012
	Million					% Annual change	
Cheque[1]	207.3	204.8	206.7	204.9	203.8	-0.9	-0.5
Credit card	261.4	276.1	294.9	316.9	324.6	7.5	2.4
Charge card	5.6	5.0	4.7	3.9	4.1	-17.1	6.4
Debit card	10.7	11.3	18.4	25.3	36.2	37.1	43.3
International debit	*5.4*	*6.3*	*13.3*	*19.8*	*29.8*	*48.3*	*50.5*
e-Debit[2]	*5.3*	*5.0*	*5.1*	*5.5*	*6.4*	*7.9*	*17.0*
E-money	688.6	717.2	699.3	806.5	925.3	15.3	14.7
Card-based	*674.4*	*707.4*	*692.2*	*797.4*	*914.6*	*15.2*	*14.7*
Network-based	*14.2*	*9.8*	*7.1*	*9.0*	*10.7*	*27.6*	*18.8*

[1] Cheques cleared via eSPICK

[2] Domestic PIN-based ATM card

Table A.30

Cashless Payment Instruments: Transaction Value

	2008	2009	2010	2011	2012	2011	2012
	RM million					% Annual change	
Cheque[1]	**1,761,571**	**1,675,630**	**1,842,189**	**1,979,858**	**2,033,221**	**7.5**	**2.7**
Credit card	**65,289**	**69,321**	**79,810**	**88,797**	**94,085**	**11.3**	**6.0**
Purchases	*62,052*	*66,092*	*76,285*	*85,364*	*91,270*	*11.9*	*6.9*
Cash advances	*3,237*	*3,229*	*3,525*	*3,432*	*2,815*	*-2.6*	*-18.0*
Charge card	**3,060**	**3,816**	**4,689**	**5,388**	**6,459**	**14.9**	**19.9**
Purchases	*3,028*	*3,785*	*4,651*	*5,359*	*6,435*	*15.2*	*20.1*
Cash advances	*32*	*30*	*37*	*28*	*24*	*-24.4*	*-15.6*
Debit card	**1,958**	**2,774**	**4,741**	**6,313**	**8,681**	**33.1**	**37.5**
International debit	*748*	*1,198*	*2,208*	*3,259*	*4,980*	*47.6*	*52.8*
e-Debit[2]	*1,210*	*1,576*	*2,534*	*3,054*	*3,701*	*20.6*	*21.2*
E-money	**2,067**	**2,201**	**2,708**	**3,811**	**4,673**	**40.7**	**22.6**
Card-based	*1,903*	*2,020*	*2,113*	*2,424*	*2,983*	*14.7*	*23.1*
Network-based	*164*	*181*	*595*	*1,387*	*1,690*	*133.2*	*21.8*

[1] Cheques cleared via eSPICK
[2] Domestic PIN-based ATM card

Table A.31

Credit Card and International Debit Card Purchase Transactions: Five Largest Business Activities

	2011		2012	
	Volume	Value	Volume	Value
	% share of total			
Credit card				
- *Transactions via Internet/e-commerce*	*2.9*	*4.6*	*3.1*	*4.6*
Fuel/petrol	29.6	7.2	29.0	6.8
Retail[1]	26.7	30.2	27.2	31.0
Professional and commercial services[2]	11.0	21.2	10.9	20.1
Mail and telephone order	7.6	8.7	7.6	8.4
Food and restaurant	5.1	3.7	6.3	4.4
Debit card				
- *Transactions via Internet/e-commerce*	*8.9*	*7.1*	*9.2*	*7.4*
Retail[1]	48.7	39.8	50.7	46.5
Fuel/petrol	18.6	4.8	16.2	4.6
Professional and commercial services[2]	9.7	12.4	9.5	12.8
Food and restaurant	5.8	3.3	7.0	4.1
Utilities	5.9	4.0	5.6	4.1

[1] Purchases made at wholesalers, hypermarkets, clothing stores and any other miscellaneous stores/retailers not included in other categories
[2] Include medical, insurance, accounting, auditing, advertising services and other business services

Table A.32

Payment Systems: Transaction Volume and Value

	2008	2009	2010	2011	2012	2011	2012
	Million/RM billion					% Annual change	
RENTAS[1]							
Transaction volume	3.0	3.0	3.2	3.4	3.6	8.6	4.8
Transaction value	38,744.2	37,258.9	39,434.6	47,175.6	46,169.4	19.6	-2.1
Interbank GIRO							
Transaction volume	36.2	43.8	49.8	60.4	70.1	21.3	16.1
Transaction value	89.6	108.8	126.9	166.1	211.7	31.0	27.4
	'000/RM million						
FPX							
Transaction volume	152.9	264.1	488.9	878.4	1,440.9	79.7	64.0
Transaction value	45.8	107.1	309.9	618.9	821.6	99.7	32.7
Direct Debit							
Transaction volume	173.3	288.2	438.6	575.7	708.8	31.3	23.1
Transaction value	986.3	1,899.1	3,774.0	4,832.0	8,248.2	28.0	70.7

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

Table A.33

Payment and Securities Transactions Handled by RENTAS

Transaction Volume	2008	2009	2010	2011	2012	2011	2012
	'000					% Annual change	
Total	**2,984.9**	**3,001.7**	**3,152.7**	**3,425.0**	**3,588.7**	**8.6**	**4.8**
IFTS[1]	**2,890.9**	**2,924.2**	**3,059.1**	**3,310.3**	**3,467.5**	**8.2**	**4.8**
Money market operations	111.5	96.7	98.2	95.9	90.8	-2.2	-5.4
Foreign exchange settlement	68.0	64.6	74.0	85.9	91.8	16.0	6.9
of which: USD CHATS[2]	*39.5*	*35.8*	*42.0*	*44.4*	*41.2*	*5.5*	*-7.1*
Third party transactions	1,905.1	1,965.7	2,086.1	2,449.4	2,701.5	17.4	10.3
Others	806.3	797.1	800.8	679.0	583.4	-15.2	-14.1
SSDS[3]	**94.0**	**77.5**	**93.6**	**114.7**	**121.2**	**22.5**	**5.7**
Transaction Value	RM billion						
Total	**38,744.2**	**37,258.9**	**39,434.6**	**47,175.6**	**46,169.4**	**19.6**	**-2.1**
IFTS[1]	**37,256.3**	**35,653.1**	**37,437.6**	**44,227.9**	**43,153.2**	**18.1**	**-2.4**
Money market operations	17,627.0	18,754.0	18,354.9	21,473.2	17,520.1	17.0	-18.4
Foreign exchange settlement	3,310.8	1,874.1	2,618.9	3,831.6	3,955.7	46.3	3.2
of which: USD CHATS[2]	*2,055.3*	*1,189.9*	*1,681.6*	*2,414.3*	*2,401.6*	*43.6*	*-0.5*
Third party transactions	7,659.8	7,432.7	8,119.6	10,807.9	12,892.9	33.1	19.3
Others	8,658.7	7,592.3	8,344.1	8,115.2	8,784.4	-2.7	8.2
SSDS[3]	**1,487.8**	**1,605.8**	**1,997.0**	**2,947.7**	**3,016.3**	**47.6**	**2.3**
Turnover to GDP (times)	**50.3**	**52.3**	**49.6**	**53.5**	**49.2**		
Daily average:							
Transaction volume ('000)	12.0	12.1	12.7	14.0	14.6	10.0	4.8
Transaction value (RM billion)	156.2	150.2	159.0	192.6	188.4	21.1	-2.1

[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.34

Payment Channels: Transaction Volume and Value

Transaction Volume	2008	2009	2010	2011	2012	2011	2012
	Million					% Annual change	
Internet banking[1]	84.9	110.2	150.5	194.7	226.5	29.4	16.3
Individual	*57.0*	*79.7*	*104.7*	*141.3*	*161.7*	*35.0*	*14.5*
Corporate	*27.9*	*30.6*	*45.8*	*53.4*	*64.8*	*16.6*	*21.3*
Mobile banking[1]	0.3	0.6	0.7	2.2	7.1	200.5	231.8
ATM[2]	21.5	24.7	38.8	42.1	46.4	8.4	10.3
Transaction Value	RM million						
Internet banking	624,362	702,045	1,089,063	1,550,618	2,847,809	42.4	83.7
Individual	*52,951*	*87,680*	*115,575*	*153,648*	*171,825*	*32.9*	*11.8*
Corporate	*571,412*	*614,365*	*973,487*	*1,396,970*	*2,675,984*	*43.5*	*91.6*
Mobile banking	72	141	138	852	4,237	518.1	397.2
ATM[2]	19,190	19,774	31,286	37,283	40,950	19.2	9.8

[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.35

Payment Transactions via Various Channels

Transaction Volume	2011			2012		
	Internet banking	Mobile banking	ATM	Internet banking	Mobile banking	ATM
	Million					
Funds transfer	70.7	0.6	23.7	88.1	2.8	28.5
Of which: Interbank	*21.4*	*0.1*	*5.8*	*28.7*	*0.5*	*9.5*
Bill payment[1]	46.6	0.5	4.7	47.0	1.6	4.7
Investment in share and unit trust	4.7	…	0.2	4.2	…	0.1
Re-load	15.2	1.0	4.3	19.1	2.2	4.1
Card & loan repayment	14.4	0.1	9.2	16.4	0.6	9.1
Transaction Value	RM million					
Funds transfer	1,056,282	576	23,014	2,016,392	3,242	27,576
Of which: Interbank	*37,704*	*140*	*5,008*	*1,097,055*	*567*	*8,305*
Bill payment[1]	9,376	139	3,687	10,709	350	4,144
Investment in share and unit trust	42,428	…	3,897	38,168	…	2,347
Re-load	279	14	400	332	36	214
Card & loan repayment	16,965	93	6,183	20,305	565	6,571

[1] Include insurance payments
… Negligible

Table A.36

Loan and Card Repayments via Various Channels (% share of total)

	2011		2012	
	Transaction Volume	Transaction Value	Transaction Volume	Transaction Value
Cash	18.1	17.3	17.1	15.8
Cheque	7.8	19.5	8.0	20.4
Cash and Cheque Deposit Machine	41.0	27.6	41.4	26.7
Electronic Funds Transfer	33.2	35.6	33.5	37.1

Table A.37

ATM Cash Withdrawals in Malaysia

Transaction Volume	2008	2009	2010	2011	2012	2011	2012
	Million					% Annual change	
Total cash withdrawals	**470.9**	**502.3**	**518.8**	**556.8**	**565.7**	**7.3**	**1.6**
of which via:							
MEPS Shared ATM Network	158.3	176.0	191.8	209.3	244.6	9.1	16.9
HOUSe network[1]	0.2	0.2	0.3	0.3	0.3	2.9	3.2
Transaction Value	RM million						
Total cash withdrawals	**216,191.6**	**236,211.7**	**255,308.7**	**279,484.7**	**294,149.1**	**9.5**	**5.2**
of which via:							
MEPS Shared ATM Network	43,546.1	49,000.8	57,365.1	64,708.6	83,655.9	12.8	29.3
HOUSe network[1]	96.0	121.0	170.1	177.6	189.3	4.4	6.6
Average value per transaction (RM)	**459.1**	**470.2**	**492.1**	**501.9**	**520.0**	**2.0**	**3.6**

[1] ATM network launched in 2006 for locally-incorporated foreign banks

Table A.38

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

As at end of period	2008	2009	2010	2011	2012
	Unit				
International brand payment cards[1]	146,473	160,443	180,589	207,657	220,639
e-Debit[2]	67,581	91,328	118,467	141,076	156,592
E-money	29,236	30,641	30,803	31,236	31,238
Terminals per 1,000 inhabitant[3]	6.7	7.3	7.9	8.9	9.4

[1] MasterCard, Visa, American Express and Diners Club
[2] Domestic PIN-based ATM card
[3] International brand payment card, proprietary ATM card and e-money terminals

Table A.39

Number of Cards and Users of Payment Instruments and Channels

As at end of period	2008	2009	2010	2011	2012	2011	2012
	'000					% Annual change	
Number of cards/accounts:							
Credit card	10,812	10,818	8,547	8,211	8,071	-3.9	-1.7
Charge card	286	285	181	154	138	-14.9	-10.4
Debit card	24,437	27,296	29,941	34,993	39,195	16.9	12.0
of which: e-Debit[1]	*19,480*	*20,426*	*20,992*	*22,426*	*21,881*	*6.8*	*-2.4*
E-money	61,534	68,462	74,701	84,178	91,008	12.7	8.1
Number of subscribers:							
Internet banking	6,191	8,123	9,848	11,873	13,657	20.6	15.0
Individual	*6,057*	*7,958*	*9,638*	*11,637*	*13,430*	*20.7*	*15.4*
Corporate	*135*	*165*	*209*	*236*	*227*	*12.9*	*-3.9*
Penetration rate (%) to population	*22.5*	*28.9*	*34.4*	*41.0*	*46.6*		
Mobile banking	575	675	898	1,560	2,446	73.7	56.8
Penetration rate (%):							
to population	*2.1*	*2.4*	*3.1*	*5.4*	*8.3*		
to mobile phone subscribers	*2.1*	*2.2*	*2.6*	*4.3*	*6.0*		

[1] Domestic PIN-based ATM card

Table A.40

Number of Participants and Instrument Issuers

As at end of period	2008	2009	2010	2011	2012
	Unit				
RENTAS	**59**	**61**	**64**	**68**	**68**
Bank Negara Malaysia	*1*	*1*	*1*	*1*	*1*
Banks	*54*	*54*	*55*	*56*	*56*
DFIs	*2*	*4*	*5*	*6*	*6*
Non-banks	*2*	*2*	*3*	*5*	*5*
SPICK/eSPICK	**43**	**44**	**45**	**46**	**48**
Credit card	**23**	**24**	**26**	**25**	**26**
Banks	*21*	*21*	*22*	*21*	*22*
Non-banks	*2*	*3*	*4*	*4*	*4*
Debit card[1]	**19**	**23**	**23**	**22**	**21**
International debit card	*8*	*8*	*8*	*11*	*11*
e-Debit[2]	*11*	*14*	*14*	*13*	*13*
Others[3]	*6*	*8*	*9*	*9*	*8*
Charge card	**8**	**8**	**6**	**6**	**6**
Banks	*5*	*5*	*4*	*4*	*4*
Non-banks	*3*	*3*	*2*	*2*	*2*
E-money[4]	**20**	**21**	**21**	**21**	**25**
Banks	*5*	*5*	*6*	*6*	*7*
Non-banks	*15*	*16*	*15*	*15*	*18*
Internet banking	**24**	**26**	**28**	**28**	**31**
Mobile banking	**11**	**11**	**11**	**13**	**13**
FPX and Direct Debit	**16**	**16**	**17**	**18**	**21**
Interbank GIRO	**33**	**33**	**36**	**37**	**39**

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