BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

Letter of Transmittal

Yang Amat Berhormat Dato' Sri Mohd Najib bin Hj. Tun 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 2009 which are incorporated into this Financial Stability and Payment Systems Report 2009.

Respectfully submitted,

Zeti Akhtar Aziz
Governor

24 March 2010

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Governor's Statement

Despite the challenging conditions in 2009, financial stability has been maintained and the Malaysian financial sector has remained resilient throughout the year. With the deepening of the global financial crisis and the sharp deterioration in external conditions in 2008 and early 2009, the Malaysian economy experienced an economic contraction over three consecutive quarters before resuming growth in the fourth quarter of 2009. During this period, Malaysian financial institutions continued to have a high capitalisation level, sound asset quality and sustained profitability. Following a decade of financial reforms and the strengthening of the regulatory and supervisory framework and the building of the domestic financial infrastructure, the financial sector is well positioned to respond to the more challenging environment.

Financial institutions in Malaysia have built up strong capital and loan provisioning buffers, with significant improvements in underwriting and risk management practices. Prompt measures were taken as early as 2008 by banking institutions to shore up capital in anticipation of deteriorating economic conditions thus enhancing their institutional capacity. This served to avoid lending constrictions that would have severely impaired economic activity during this period. The financial intermediation process was not interrupted with the credit supply being sustained and providing the important support for economic recovery. Banking institutions have also responded to signs of distress by facilitating the restructuring of credit facilities extended to borrowers confronted with difficulties during this period.

The measures implemented by the Government and Bank Negara Malaysia (the Bank) have also contributed towards maintaining a high level of confidence in the financial system and ensured continued access to funding. The measures included the Government guarantee of deposits that was put in place in October 2008 and access to the Bank's liquidity facility for insurance companies and takaful operators. These measures served to avoid excessive risk averse actions by depositors, policyholders and market participants. None of these facilities have in fact been drawn upon. Other special funds, credit enhancement facilities and institutional arrangements for debt restructuring were also introduced.

During the year, the Bank's prudential framework, supervisory arrangements and processes, and the surveillance frameworks have been strengthened further. While these have performed well, continuous improvements were made to further enhance the existing framework and arrangements taking into consideration the issues that have surfaced during the global financial crisis. The focus has been to refine further the stress testing approaches, improve the supervisory cooperation across regulatory agencies and across borders, enhance risk and information capture in the prudential and surveillance frameworks, reinforce liquidity support and resolution arrangements, and further strengthen the financial safety net. These efforts are firmly underpinned by the significantly stronger foundation for financial stability that is now provided in our new Central Bank of Malaysia Act 2009 (CBA) that has come into force effective November 2009. The CBA provides greater clarity with respect to the Bank's mandate for financial stability and provides the necessary powers and arrangements for achieving the mandate.

In preparation for the coming into force of the CBA, the governance of the financial stability mandate in the Bank has also been strengthened. This involves the operationalisation of the transformation of the Division that is assigned with the dedicated financial stability function in the Bank. While the components in the Division includes surveillance, prudential regulation, supervision and financial sector development, it also draws on the work of the entire Bank that covers macro-economic management, oversight of the money and foreign exchange markets and the payment systems. The Financial Stability Policy Committee of the Bank is accountable for the assessment of risks to financial stability and the management of these risks. The Financial Stability Policy Committee is thus responsible for reviewing developments affecting risks to financial stability and deciding on policy actions, including macroprudential policy responses to address systemic risks.

Under circumstances where such systemic risk involves institutions beyond the regulatory reach of the Bank and where it involves public funds, it will be addressed by the Financial Stability Executive Committee which has been established under the CBA. These include resolution powers for financial institutions not in the regulatory capture of the Bank, but that would have systemic implications on the overall financial system. The Bank's accountability for financial stability is additionally supported by the publication of this financial stability report which provides the Bank's assessment of risks to financial stability, actions taken by the Bank to avert such risks as ongoing initiatives to strengthen the foundations for financial stability.

The stabilisation of the global environment has prompted a search by the international community for a more permanent solution that will put the international financial system on a more solid foundation. The enormous scale, scope and costs of the global financial crisis has led governments, and regulatory and supervisory authorities from around the world to mount one of the most aggressive agendas of reform to financial regulation. The potential impact that these reforms will have in re-defining the financial landscape in the future are significant, with significant implications for competition, innovation and ultimately, on the overall economic activity. It is hoped that indeed the regulatory reform will in fact deliver greater financial stability and that it will take into account the potential unintended consequences of the proposed reforms envisaged, in particular, on the behaviour of institutions, on innovation and on the potential increased cost of financial intermediation which would in turn affect overall economic activity.

The Bank will continue to maintain appropriate supervisory approaches that promote financial stability while remaining supportive of the wider objective of financial sector development. The Bank fully intends however, to implement changes that will achieve a regulatory framework that is more forward looking and responsive to risk, and that will further strengthen incentives for the adoption of sound and robust risk management practices by financial institutions. The Bank will also continue to develop and further refine its macroprudential approaches to regulation to complement the supervision of individual institutions to pre-emptively address the build up of system-wide risks. Also important is ensuring that the institutional arrangements for prompt and orderly resolution of problem institutions continue to remain effective.

Despite the global financial crisis and severe economic slowdown, Islamic finance has continued to progress on a path of sustained growth. As an increasingly important component of the global financial system, there has been greater recognition of the significant prospects for Islamic finance to contribute towards global growth and financial stability. During the year, the Bank continued to contribute towards the work of the Islamic Financial Services Board (IFSB) and the Islamic Development Bank through an active role in two taskforces - the Taskforce on Islamic Finance and Global Financial Stability and the High Level Taskforce on Liquidity Management. The IFSB is an international prudential standard-setting organisation and has an important role in promoting soundness and stability of the Islamic financial services industry by issuing global prudential standards. In Malaysia, the CBA has positioned the Shariah Advisory Council of the Bank as the final authority for deciding on Shariah matters relating to Islamic banking and finance. The legal foundation was further augmented by the issuance of the Shariah Parameters on *murabahah* which provides a common reference on Shariah for the development of Islamic financial products.

The Bank continued to advance the development of a sound, stable and progressive insurance and takaful industry to further enhance its performance and contribution to the Malaysian economy. Initiatives have focused on strengthening the market structure, better aligning incentive systems and further strengthening governance and risk management practices. A major initiative was launched in 2009 to review and improve the structure and practices in the motor insurance sector which accounts for 46% and 67% of general insurance premiums and claims respectively. The review aims to ensure the long-term viability of motor insurance business through the more efficient pricing and effective management of claims costs, while preserving an appropriate level of essential protection for policyholders at reasonable cost. It also aims to position the industry for the move towards a more deregulated pricing environment for motor insurance. The safety net for the protection of policyholders is also being strengthened with plans underway to put in place a more effective insurance compensation system that will also contribute towards financial stability.

Significant institutional building, financial infrastructure development and the progressive deregulation of the industry have enhanced the capacity of the domestic financial system to face the increased challenges from a more liberalised environment. Further liberalisation in the domestic financial system was announced in 2009 to accelerate further the deepening of the domestic financial system and promote greater integration with the global financial system. With the implementation of the ten-year Financial Sector Master Plan almost completed, a new blueprint is being developed to chart the transformation of the financial sector over the next decade beginning 2011. The new blueprint will articulate strategies to further evolve the Malaysian financial sector to support and drive the next phase of Malaysia's economic development. This will encompass strategies that will address the desired financial structure for Malaysia, the financing for new growth areas, the development of financial markets, talent development and the deepening of international linkages and regional financial integration.

With an improved economic outlook in 2010, efforts will be directed at facilitating mutually reinforcing developments that will contribute to macro-economic and financial stability to support the sustainability of this emerging trend. This includes having in place a financial system that is able to support a strong private sector, and that is able to facilitate the economic transformation to transition the Malaysian economy to its next phase of development. Continued vigilance will also be maintained to promptly identify and respond to potential risks in this post-crisis environment to ensure that financial stability will provide the foundations for achieving the ultimate goals for the economy.

Zeti Akhtar Aziz
Governor

24 March 2010

Executive Summary

Executive Summary

The environment underpinning the preparation of the Financial Stability and Payment Systems Report 2009 has been favourable as prospects for recovery in the global and domestic economy improved tremendously. The Report outlines the Bank's assessment of risks and challenges faced by the Malaysian financial system and the capacity of the system to sustain its role in providing critical services to the economy. This report also covers various aspects of prudential and developmental initiatives, including those relating to the payment systems, that were pursued towards strengthening the resilience and integrity of the financial and payment systems. This publication is intended to promote greater understanding on issues affecting financial stability and thus promote appropriate behavioural responses in reinforcing financial stability.

Risk assessment of the financial system

The Malaysian financial system's resilience was strengthened further despite the challenging operating conditions in 2009. The stability and soundness of the financial system were fundamental in ensuring that the financial intermediation process, payment and settlement, and the provision of protection against risk remained uninterrupted and delivered in an efficient and effective manner. Policy responses instituted at the early phase of the global crisis by the Government and the Bank had contributed to the swift recovery in the domestic economy.

The overall stability of the banking system was intact due to strong solvency position and high quality of loan portfolio. The risk-weighted capital ratio (RWCR) strengthened to 14.7% as at end-2009 (2008: 12.6%) with excess capital well above RM50 billion (2008: RM38.7 billion). The bulk of this capital was predominantly in the form of Tier-1 capital instruments that would provide strong buffers against financial losses. While overall earnings were stronger and registered broad-based improvements, revenue from lending activities softened on subdued demand for financing and higher funding expenses due to the larger deposit base. Profitability of the banking system was lower on account of a non-recurring investment impairment provision by an institution for its overseas operations. Adjusting for the one-off provisioning, profitability of the system registered a growth of 3.2% in 2009. The exposure of the banking sector to interest rate risk and foreign exchange risk remained manageable at 5.0% and 4.6% of total capital base respectively.

The banking system remained supportive of the financial needs of the domestic economy. Financing extended by the banking system expanded further at an annual rate of 7.8% to RM783.4 billion as at end-2009 whilst approval rates were kept steady at approximately 70%. The banks' financing portfolios remained concentrated in the retail-based segment with the households and small and medium enterprises (SMEs) accounting for 55.1% and 15.2% of outstanding financing respectively. Notwithstanding the difficult economic environment, loan quality of the banking system improved on continued recoveries and write-offs. The net non-perfoming loan (NPL) ratio improved further to 1.8%, the lowest level since the Asian financial crisis. On the sectoral front, the gross NPL ratios for the large business and SME sectors declined to 4.1% and 5.7% respectively as at end-2009 (2008: 5.4% and 6.8%). Similarly, the gross NPL ratio for the household sector improved to 3.1% (2008: 4.1%).

The insurance and takaful sector recorded a higher capital adequacy ratio of 230.0% (2008: 187.6%) with a comfortable capital buffer of RM18.6 billion or 11.4% of total assets. The stronger solvency enabled the insurance and takaful industry to remain as an effective provider of financial protection for businesses and individuals. Total net premiums for insurers and takaful operators grew by 8.2% during the year. Growth was driven mainly by the ordinary life segment for the life and family takaful industry, and a broad-based demand for the general sector. The revival of conditions in the financial markets contributed towards stronger income from investment portfolios and unrealised capital gains for the entire insurance industry. For the general business, improved performance was also achieved on account of lower motor claims ratio.

The domestic financial markets remained orderly and regained the upward momentum as the year progressed on signs that the slowdown in the domestic economy has bottomed out. This coincided with improvements in the earnings performance of businesses and the more favourable employment prospects, which bolstered the debt servicing capacity of banks' borrowers. The subsequent compression of credit spreads led a turnaround in the bond market, as manifested by the recovery in private debt securities (PDS) issuances, including those by foreign issuers. Ample ringgit liquidity in the system also supported the smooth functioning of ringgit money market and interbank market in 2009.

Both the business and household sectors exhibited high capacity and agility in confronting the challenges that surfaced during the year. Loans to households expanded by 9.4% to RM516.6 billion, with borrowings primarily for the purchase of residential properties. Strong financial buffer had accorded businesses with the flexibility to adjust to the conditions whilst ensuring the ability to service debt. Financing extended to large businesses grew 7.8% as at end-2009. Outstanding financing by the banking system and development financial institutions (DFIs) to SMEs registered a slight decline at the end of 2009. This was due partly to the upgrading of SME accounts to large enterprise accounts, the sale of NPLs to an asset management company by one banking group in November 2009 and bad debts written off.

While recovery of the economy has been established, its path is not without challenges. The greater international financial and economic integration will pose continuing risk of contagion that may affect domestic financial stability. Better economic prospects for the emerging economies, particularly in Asia, have drawn large inflows of capital into the region and have once again posed challenges in managing potential unsustainable build-up in asset prices and financial imbalances. Domestically, the improved economic outlook and market sentiment would create greater optimism among financial institutions following opportunities from the recovery. While this takes place, it is critical to ensure that this does not result in unchecked increase in risk appetite and compromise in risk management practices as financial institutions respond to the conditions. The macro- and micro-surveillance functions will remain heightened to ensure prompt identification of emerging risks. In this respect, pre-emptive policy measures will continue to be introduced to prevent the build-up of systemic risks that could pose threats to the overall financial stability.

Development of the financial sector

The focus of financial sector development policies for the year was to preserve the soundness and integrity of the sector and to ensure the continuous and well-functioning of the financial intermediation activities. This was complemented with the longer-term objectives of strengthening the capacity and growth potential of the sector. In 2009, the Bank also accomplished major strides in its liberalisation plan that serves to facilitate the progress of the sector as a key enabler, catalyst and driver of economic growth and enhance the inter-linkages of the Malaysian financial system with other economies.

Ensuring the continued access to financing for all segments of borrowers, in particular the SMEs, remained a high priority area. A number of measures were introduced towards achieving this objective. These include the establishment of the SME Assistance Guarantee Scheme (SME AGS), the Working Capital Guarantee Scheme (WCGS), the Industry Restructuring Guarantee Scheme and the consolidation of ERF Sdn. Bhd. into Credit Guarantee Corporation (CGC). Both the SME AGS and the WCGS were fully utilised. Meanwhile, as at end-2009, CGC has granted credit guarantees to 402,867 SMEs, which had outstanding financing of RM44.9 billion. During the year, an entity was established to facilitate viable businesses to raise financing from the bond market. Danajamin Nasional Berhad, a financial guarantee insurer was created with the objective of providing credit enhancements to investment grade issuers with viable businesses to raise funds from the bond market at reasonable cost.

In addition to ensuring the continued steady flows of credit to the economy, measures were also introduced to provide avenues for borrowers to manage debt obligations. The Corporate Debt Restructuring Committee (CDRC) recommenced its operations with an expanded mandate to facilitate pre-emptive restructuring of debts including bonds for businesses. The eligibility criteria for cases to be handled under the Small Debt Resolution Scheme were revised in 2009 to enable a wider reach of viable SMEs to seek assistance to restructure and reschedule the loans with multiple banks. These measures were also complemented by the restructuring and rescheduling of loans by the individual banks and the granting of temporary relief on housing loan repayments for borrowers who were affected by retrenchment or reduction in working hours.

The Bank's liberalisation plan announced in 2009 encompassed three broad strategies namely, the issuance of new licences, increase in foreign equity limits and the offering of greater operational flexibilities to incumbent foreign players. During the year, a new commercial bank licence was issued to the largest commercial bank in the People's Republic of China under a bilateral arrangement to promote strategic partnerships and to enhance collaboration and cooperation with regional economies. The Bank also entered into a Memorandum of Understanding (MoU) with China Banking Regulatory Commission to strengthen cooperation between the two regulatory authorities in the area of banking supervision.

Initiatives to deepen the financial markets focused on creating a conducive regulatory environment, enhancing the infrastructure and broadening the asset class. To further develop the financial markets, the Bank undertook initiatives to enhance the infrastructure with a slant towards promoting Malaysia as an international Islamic financial centre. The Principal Dealer framework was revised in 2009 to incentivise continued participation in the primary auctions and secondary market trading. This revision has also facilitated the introduction of the Islamic Principal Dealer System for the Islamic debt securities issued by the Government and the Bank. A major milestone was accomplished during the year with the launch of Bursa Suq Al-Sila (formerly known as the Commodity *Murabahah* House), the world's first Shariah-compliant trading platform for commodity *murabahah* transactions. This platform is expected to further enhance the trading of commodities for liquidity purposes between Islamic financial institutions in Malaysia and to facilitate cross-border liquidity transactions.

To promote clear understanding and consistent interpretation of Shariah contracts, the Bank undertook to develop a comprehensive codification of Shariah contracts known as Shariah Parameters. The first Shariah Parameter on *murabahah* contract was issued in 2009, whilst the Shariah Parameters for contracts on *ijarah, mudharabah, musharakah, istisna'* and *wadiah* are expected to be finalised by end-2010. The Bank has also entered into strategic bilateral and multilateral cooperation to promote global partnerships and cross-border business ventures in Islamic finance. Two MoUs were signed between the Bank and the United Kingdom Trade and Investment and the Hong Kong Monetary Authority to promote mutual cooperation in the area of Islamic finance, particularly in talent development and strengthening of business linkages and infrastructure support. A new long term brand *Shaping Islamic Finance Together* was introduced in 2009 to position Malaysia as the intellectual centre for Islamic financial activities. During the year, there was a landmark foreign currency issuance of sukuk by PETRONAS, which received an overwhelming response despite the highly challenging economic environment.

The Bank intensified its efforts to promote fair and equitable market practices and to raise the level of financial capability of consumers to foster continued consumer confidence in the financial services sector and to contribute towards a more efficient and competitive market. The surveillance over market practices was intensified during the year in response to the competitive market condition. This was complemented with the comprehensive disclosure framework for retail financial products that focuses on key product features, risks and benefits, and major terms and conditions of the contract.

Malaysia has continued to demonstrate strong commitment to observe international standards on transparency and exchange of information to curb illegal activities. Malaysia is categorised in the ``White List´´ issued by the Organisation for Economic Cooperation and Development. This achievement bodes well for sustaining the overall confidence, competitiveness and attractiveness of the Malaysian financial system.

Going forward, to realise the vision of attaining the developed economy status by 2020, a new blueprint for the financial sector is being drawn up. The objective is to elevate the role of the financial sector as an enabler, driver and catalyst of economic growth, with enhanced capacity to contribute effectively to the economic transformation process to a high value-added and high-income economy.

Prudential regulation and supervisory framework

Developments in the global regulatory reform arising from the crisis has sharpened the Bank's focus on delivering a prudential framework which is responsive to the changing environment, while maintaining an appropriate balance between regulatory prescriptions and supervisory assessment of the risk management quality of financial institutions. In addition, greater attention was also accorded to macro-regulation in complementing micro-surveillance of individual financial institution.

While the Bank generally supports the proposed international regulatory reforms, which are aimed to strengthen the foundations of financial stability, there is a need to carefully evaluate the potential implications of these proposals from the different dimensions, particularly to safeguard financial institutions' critical role to support sustainable growth of the economy as well as to ensure that such measures do not result in unintended implications on future structures and behaviours of the financial system. Specific consideration needs to be accorded to the regulatory framework that is already in place in the domestic financial system and the extent to which the current framework is adequately delivering the desired outcomes.

The implementation of Basel II Framework progressed further in 2009 with the issuance of the guidance on the adoption of the Internal Ratings-Based (IRB) Approach for credit risk in determining regulatory capital requirements. The supervisory review process (Pillar 2) and market discipline (Pillar 3) components of the capital adequacy framework were also taken forward during the year.

The insurance industry transitioned effectively to the Risk-Based Capital (RBC) Framework on 1 January 2009. The adoption of the RBC Framework has significantly improved insurers' focus on the risk drivers of the business through the risk-adjusted capital calculations and scenario testing elements embedded in the Framework. Significant progress was also achieved on the development of the RBC Framework for takaful operators, with industry consultations and impact assessments to commence in 2010.

Proposed enhancements to the Liquidity Framework have been finalised for implementation in 2010. Further revisions are being considered to take into account the recently released proposals by the Basel Committee on Banking Supervision (BCBS) on the minimum global quantitative standards on liquidity risk management.

The Bank continued to focus its resources in promoting sound corporate governance and risk management practices through the Financial Institutions Directors' Education (FIDE) initiative. Since the launch of the FIDE programme in 2008, 131 directors of financial institutions have completed the core programme which examines the application of good governance in the specific context of issues and challenges facing the different sectors in the financial industry. Additional specialised and supplementary programmes are being developed as part of the FIDE initiative, to further strengthen the support for boards in providing effective oversight of financial institutions.

Malaysia adopted the Financial Reporting Standard (FRS) 139 for all reporting entities, including financial institutions on 1 January 2010. However, given that international developments in provisioning standards remain fluid, transitional arrangements were provided for banking institutions to determine collective impairment assessments in order to reduce implementation costs associated with further changes needed to comply with the new standards currently being contemplated by the International Accounting Standards Board. The transitional provision will also facilitate the alignment of provision levels more closely to the forward-looking provisioning standards envisaged under the new impairment standard.

In the area of Islamic finance, efforts continued to be directed at strengthening Shariah governance, promoting sound business practices and operational efficiencies at the Islamic financial institutions. The Bank is revising the Rate of Return (ROR) Framework for Islamic banking institutions to promote improved management of profit-sharing policies, reduce information asymmetries between related parties and to provide a broader scope of Islamic banking business. The issuance of the Guidelines in Investment Management and the concept paper on Guidelines on Takaful Operational Framework both aimed to strengthen the governance and management of takaful funds. A Shariah Governance Framework will be issued in 2010 in line with efforts to further enhance Shariah governance of Islamic financial institutions.

An area of high priority in 2010 will be the comprehensive review of all the existing legislations governing financial institutions and payment systems under the Bank's purview to take into account the changing financial landscape and regulatory developments over the last two decades. The proposed legislative changes will further reinforce the strengthened financial stability framework in Malaysia following the enactment of the Central Bank of Malaysia Act 2009 that came into force on 25 November 2009.

Payment and settlement systems

Despite the challenging environment in 2009, the payment and settlement systems in Malaysia remained resilient and continued to operate smoothly throughout the year, contributing to the stability of the financial system.

The transfer of the payment and settlement systems to the Malaysian Electronic Clearing Corporation Sdn. Bhd. (MyClear), a wholly-owned subsidiary of the Bank, was completed without any disruption. This institutional arrangement strengthened the governance structure with the segregation of responsibility to operate Real-time Electronic Transfer of Funds and Securities System (RENTAS) and National Electronic Cheque Information Clearing System (eSPICK) being entrusted to MyClear, while the Bank is responsible for oversight of the payment systems. As part of its oversight role, the Bank has issued supervisory expectations to be observed by MyClear. These include requirements for risk management and compliance with best practices and international standards for payment system operations. During the year, the robustness and adequacy of the business continuity plans of RENTAS and eSPICK members were continuously tested to ensure minimal disruption to the functioning of these systems.

In managing public confidence and in improving the adoption of electronic payments (e-payments) initiatives, the Bank accorded great importance in ensuring the robustness and reliability of the major retail payment systems such as the Malaysian Electronic Payment System Sdn. Bhd. (MEPS) and Touch 'n Go Sdn. Bhd. (TnG). The Bank continues to collaborate with industry players and the relevant authorities to educate cardholders on the importance of safeguarding cards and card information, despite payment system fraud and attempted fraud rates being contained at negligible levels.

Continuous collaboration and engagement with the Government and private sectors were undertaken to promote the use of e-payments and to achieve the benefit of more efficient transfer of funds. In 2009, the Bank commissioned a study to identify the impediments and issues that are constraining the successful implementation of the e-payment agenda. Approximately 96% of Government payments are now via electronic funds transfer, whilst the use of credit transfer facility for payments to the Government grew substantially to RM41.3 million (2008: RM21.9 million). In the securities sector, collaborative efforts between the Bank, Securities Commission Malaysia, Bursa Malaysia, Association of Banks in Malaysia, Association of Stockbroking Companies Malaysia and MEPS were made to facilitate the adoption of e-payments for the sale and purchase of shares as well as for payment of dividends through e-Dividends.

Continuous emphasis on promoting awareness and enhancing cooperation of more economic sectors to drive the higher adoption of e-payments will be a priority for 2010. The Bank will also focus on establishing regional collaboration for more inter-connected payment systems in the region to deepen the financial integration between the ASEAN countries. Given the more inter-connected payment systems in the region, work has already progressed towards establishing cross-border collateral arrangements within the Executives' Meeting of East Asia-Pacific (EMEAP) region as part of enhancing liquidity crisis management.

Financial Stability Report

Risk Assessment of the Financial System

Risk Assessment of the Financial System

Overview

The Malaysian financial system demonstrated a high degree of resilience even as the global financial crisis affected the global economy, including Malaysia, which recorded an economic contraction of 1.7%. Threats to financial stability were identified at the early stages and were well-contained through pre-emptive and coordinated policy responses. Stability of the Malaysian financial system was therefore preserved despite the adverse economic conditions and heightened market volatility in the first half of 2009. The strength and capacity of the Malaysian financial system in weathering and responding to the challenging conditions were put to the test as the system braced for potential widespread delinquencies and further market instabilities. The state of readiness of the Malaysian financial institutions to manage these mounting pressures, reinforced by precautionary measures that were put in place by the Government and Bank Negara Malaysia, were instrumental in enabling the Malaysian financial system to emerge sound and stronger amidst these challenges. The domestic financial markets remained orderly despite experiencing heightened volatility and risk aversion during the initial periods. Against these fundamental strengths and given the ample liquidity, the financial system was able to continue in carrying out the financial intermediation process, payment and settlement, provision of protection against risks and other necessary financial services to the economy effectively and efficiently. The strong aggregate financial positions of the Malaysian households and businesses reinforced the capacity, flexibility and buffer to adjust to the more challenging business and employment conditions, while contributing towards greater overall financial stability in 2009.

The strengthened fundamentals of the Malaysian financial sector, underpinned by strong financial buffers and progressive enhancements to the risk management infrastructure and technical capabilities over the years, enabled financial institutions and the system as a whole to withstand the global financial and economic crisis and other risks. These include concerns on the rising and high public debt levels, build-up in asset prices and financial imbalances in certain parts of the world, and ample liquidity in the international financial system. Some economies have introduced macroprudential measures to manage the capital inflows, particularly those into the equity and property markets. In the domestic financial system, the level of capitalisation of the financial sector strengthened further as institutions pro-actively boosted the level and quality of capital buffers even prior to the deepening of the global financial and economic crisis.

Financial stability in Malaysia continued to be preserved amidst the more challenging operating environment. There was continued financial intermediation, payment and settlement, and protection against risks to the broader economy

The overall level of loan delinquencies continued to decline during the year, contrary to initial expectations and despite more significant strains on some borrower segments in the first half of the year. The Malaysian banks continued to supply the amount of credit needed by the economy at reasonable costs. This is extremely important as the orderly functioning of financial intermediation activities is a crucial element in supporting economic activity. With the benefits of lessons learnt from the Asian financial crisis more than a decade ago, dedicated resources were allocated by the banks to initiate more timely and pro-active engagements with their borrowers. Such responses have enabled appropriate responses to provide some relief to borrowers facing greater financial burdens during such a challenging environment. This in turn have paved the way for greater repayment flexibility which allowed the borrowers to focus on managing the challenging business operations instead of being overly concerned with the likelihood of banks cutting credit lines or demanding for prompt and full repayment of debts. These, together with prudent underwriting standards, more sophisticated risk management practices and responsible lending had also led towards preserving the quality of the loan portfolio of the banks.

The greater inter-linkages of the Malaysian economy and financial system with the region and the rest of the world will continue to exert challenges to the maintenance of financial stability on the domestic front. While global economic and financial conditions have improved tremendously towards the second half of 2009, uncertainties relating to the sustainability of this recovery remain. It is therefore vital to continue to enhance the state of readiness of the Malaysian financial system to have the capability to manage the risks moving forward.

Global macroeconomic and financial developments

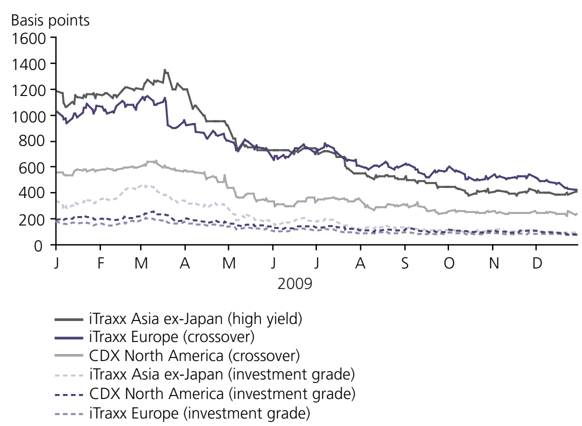
The international economic and financial conditions deteriorated significantly in the first quarter of 2009. A large number of economies experienced significant declines in real gross domestic product (GDP), prompting the sharpest contraction of the global economy since the Second World War. The global financial crisis led to a sharp decline of private sector demand in the advanced economies, as households reduced consumption and businesses cut back on production and investment activities. The ensuing contraction in demand from the advanced economies led to the collapse of global trade and adversely affected regional economies, through declines in exports and production.

In response to the severe recession, governments and central banks across the world implemented unprecedented monetary and fiscal measures to restore stability in the financial system and provide support to the real economy. As a result, both economic and financial conditions began to stabilise and in the second half of the year, countries gradually emerged from the recession. While the extraordinary policy responses had helped to stabilise the financial markets and arrest the sharp deterioration in real sector activities, economic recovery remained fragile and uneven. Growth experienced by most countries relied heavily on policy support. In the advanced economies, weak labour market conditions and fragile financial systems continued to weigh on domestic demand. In tandem with the gradual global recovery and a steady rise in commodity prices, deflationary pressures eased and consumer prices in most countries started to edge marginally higher. However, rising equity and property prices in several economies have given rise to concerns on potential asset price inflation.

Uncertainty about the depth and duration of the economic contraction led global equity markets to decline sharply. The Morgan Stanley Capital Index (MSCI) World and Asia (excluding Japan) Indices declined by 18.4% and 12.1% respectively in the first two months of 2009. In the credit markets, the rate for Credit Default Swap (CDS) rose sharply, particularly for non-investment grade papers on concerns of higher defaults (Chart 1.1). The spread between LIBOR and Overnight Index Swap (OIS) for US dollar narrowed by 23.8 basis points in the first quarter of 2009 as conditions in the interbank markets improved slightly supported by various liquidity support measures and government guarantees (Chart 1.2). Nonetheless, levels were still higher than those observed prior to the crisis, reflecting that risk premium on banks has yet to normalise.

In the second quarter of 2009, the turnaround in market sentiments following the series of announcements of better-than-expected macroeconomic indicators and corporate earnings, contributed to the bullish performance of equity markets. By the end of June 2009, losses from the first quarter of the year were fully reversed. Fears

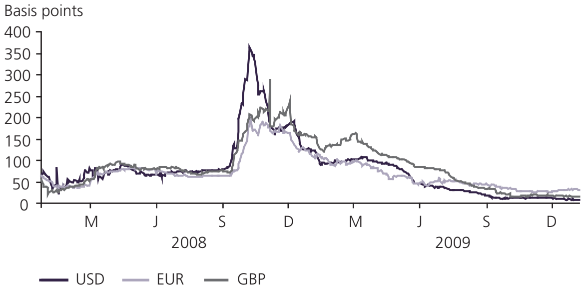
Chart 1.1
Credit Default Swap Indices[1]



[1] Index for 5-year tenure

Source: Reuters

Chart 1.2
3-month LIBOR Less 3-month Overnight Index Swap (OIS)



Source: Bloomberg

that the rally in the second quarter outpaced the prospects of economic recovery led to some moderation in the pace of increase in global equity markets in the third quarter. Stronger signs of economic recovery began to emerge in the fourth quarter of 2009, with some economies recorded positive growth. Markets, nonetheless, continued to remain uncertain about the potential unwinding of monetary, fiscal and other exceptional policy measures introduced during the global financial crisis. In the credit markets, cost of protection on bond default subsided as events of default were lower than initially anticipated. Meanwhile, conditions in the interbank markets continued to improve, with spread between LIBOR and OIS reverting to pre-crisis levels.

In the emerging markets, prospects of a stronger economic recovery have led to the surge of capital inflows into these economies, causing equity markets to increase sharply. The MSCI Emerging Market Index rose by 74.1% in 2009, significantly outpacing the performance in the developed markets. In efforts to contain build-up in asset price bubble, some emerging economies have introduced or announced readiness to deploy measures, if warranted, to manage the capital flows and reduce volatilities in the respective markets.

During the year, the increase in issuance of government papers to fund fiscal deficits following the announcement of sizeable economic stimulus and financial sector rescue packages exerted upward pressure on government bond yields, particularly the longer tenured papers. 10-year government bond yields in the US and Euro area rose by 162.5 basis points and 43.6 basis points respectively whilst yields in Asia (excluding Japan) broadly rose between 14 and 232.7 basis points in 2009. The negative rating outlook and downgrade of some sovereign bonds during the year on concerns about deterioration in fiscal positions also contributed to the upward pressure on government bond yields.

Domestic macroeconomic and financial developments

Experiencing the full impact of the global recession, the Malaysian economy declined by 6.2% in the first quarter of the year. Exports and industrial production recorded double-digit declines, significantly affected by the collapse in external demand. Against this sharp contraction, employment, income and overall business and consumer sentiments deteriorated, given the high degree of openness of the economy. The economy stabilised in the second quarter and subsequently improved further in the second half of the year, benefiting from the accelerated implementation of fiscal stimuli, lower interest rates and comprehensive measures to ensure continued access to financing.

Economic recovery in the second half of the year was further supported by the gradual improvement in the global economy, particularly the regional economies. As a result of the strengthened domestic and external demand, the Malaysian economy turned around to record a positive growth of 4.5% in the fourth quarter of the year. On the supply side, the significant decline in growth in the first quarter was largely attributable to the sharp contraction in the manufacturing sector, particularly the export-oriented industries. Other sectors with the exception of construction, also recorded negative growth in the first quarter of 2009. While the positive growth in the construction sector throughout the year was driven primarily by the implementation of construction-related projects under the Ninth Malaysia Plan (9MP) and the fiscal stimulus packages, the gradual improvement in the growth of the services sector since the second quarter of the year was driven by the improvement in domestic demand. In tandem with the recovery in external demand, the manufacturing sector turned around to register a positive growth in the fourth quarter.

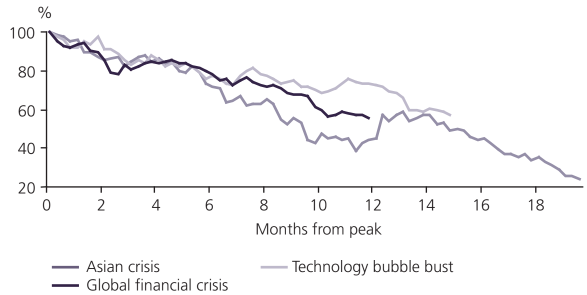
Headline inflation averaged 0.6% in 2009 (2008: 5.4%). Inflationary pressures in Malaysia moderated substantially, in line with the decline in global fuel and commodity prices and the lower inflation in Malaysia's major trading partners. The cumulative reductions in domestic retail petrol prices in the second half of 2008 contributed significantly to the moderating trend of domestic inflation in 2009. Malaysia's external position remained strong in 2009 despite the extremely weak external environment. The overall balance of payments recorded a surplus in 2009, supported by the surplus in current account, which more than offset the net outflows in the financial account.

Overall financial market conditions improved and exhibited resilience

Domestic financial markets continued to facilitate orderly financial intermediation in 2009, supported by ample liquidity and improvements in market confidence. Although heightened risk aversion in financial markets prevailed in the early part of 2009, trading liquidity in the equity and corporate bond markets improved markedly from the second quarter of 2009 onwards amid announcements of improved corporate earnings and signs that global economic conditions were deteriorating less rapidly than earlier expected. Enhanced prospects of recovery of the real sector resulted in improvements in risk appetite and greater optimism. This led to a significant increase in primary market activities in the second half of the year. As for the money market, the average interbank overnight rate continued to track closely the policy rates throughout 2009 as the domestic ringgit money market continued to function smoothly against the backdrop of ample market liquidity.

Equity prices remained volatile in the first quarter of 2009 due to sustained risk aversion and adverse external developments. The FTSE Bursa Malaysia KLCI (FBM KLCI) reached a trough at 838.4 in March 2009 from 876.8 at the beginning of 2009. The equity market proved to be more resilient compared to past declines reflecting a deeper and more liquid market (Chart 1.3). Investors' confidence returned in the second quarter of the year as the market began pricing in the RM67 billion stimulus packages and the measures undertaken to liberalise the financial services sector. This was also reinforced by improved regional economic outlook and the Government's pro-growth policies.

Chart 1.3
FBM KLCI During Crises

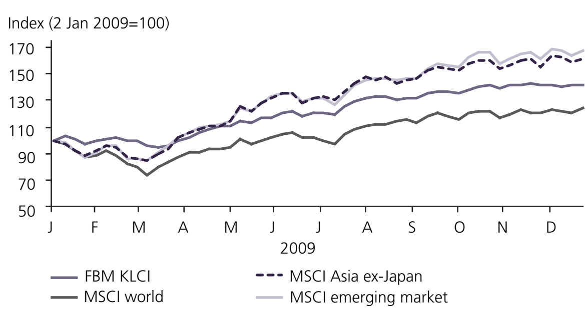


Cumulative decline from peak to market turnaround.
Previous peaks were: Asian financial crisis = 28 February 1997; Technology bubble bust = 31 March 2000; Global financial crisis = 11 January 2008

Source: Bloomberg and internal computation

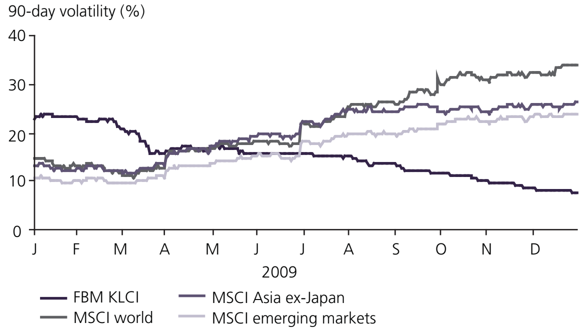
The upward trend in the FBM KLCI in the second half of 2009 was supported by recovery in several economic sectors, namely plantation, which was driven by higher crude oil and crude palm oil prices, as well as financial and property sectors. The sectoral indices for plantation, financial and property counters rose over 50% in 2009. Similarly, the recovery in the index for the construction sector exceeded 35% during the year. Against the backdrop of a broad upturn in equity market across all economic sectors, the FBM KLCI, although rising at a slower pace compared to other emerging markets, concluded 2009 at 1,272.8 points having risen 45.2% for the entire year (Chart 1.4). Accordingly, volatility reverted to pre-crisis level, ending the year at 7.3%, a level that was observed in December 2006 (Chart 1.5).

Chart 1.4
Performance of Global Equity Markets



Source: Bloomberg and internal computation

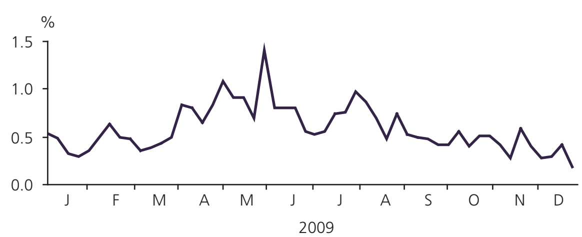
Chart 1.5
Volatilities of Global Equity Markets



Source: Bloomberg

Trading liquidity in the equity market was on average higher than in 2008. Bid-ask spreads narrowed, averaging 93 basis points in 2009 compared to 113 basis points in 2008 whilst the FBM KLCI average weekly turnover ratio was sustained at 0.6% of total market capitalisation (2008: 0.8%) (Chart 1.6). While the surge in buying-interest and strategic investment activities by institutional investors had spurred the domestic equity market, trading activities tapered off in the second half of 2009 as valuations rose, evidenced by the doubling of the price-earnings (PE) ratio of FBM KLCI (2009: 22.4; 2008: 12.2). Moving forward, performance in the domestic equity market is expected to improve further as institutional investors with long-term investment views and strategic foreign investors continue to provide support to the market. Similarly, the measures taken to encourage gradual liquidation of Government-linked institutional holdings would also bolster liquidity in the market.

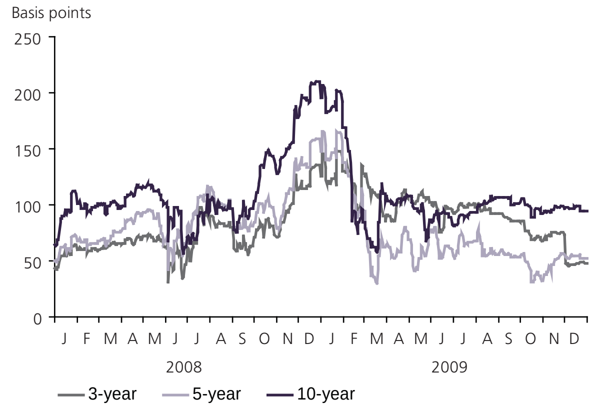
Chart 1.6
FBM KLCI Turnover Ratio[1]



[1] Turnover ratio: Ratio of turnover value to market capitalisation

Source: Bloomberg and internal computation

Chart 1.7
Spreads of AAA-rated PDS against MGS

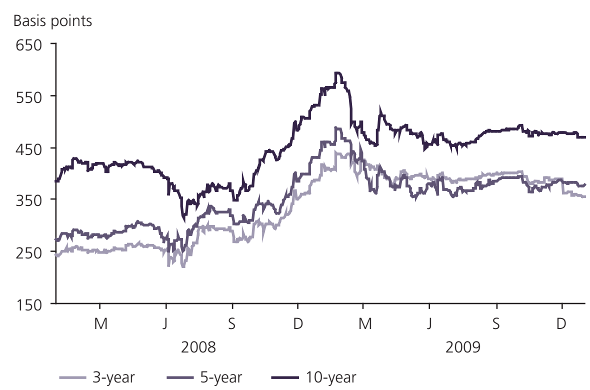


Source: Bloomberg and internal computation

Sentiment in the private debt securities (PDS) market remained subdued in early 2009 following the collapse of Lehman Brothers Inc. (Lehman) in 2008. Credit risk was a major concern early in the year as domestic corporations reported lower earnings. Negative ratings outpaced positive rating actions, with the downgrade-to-upgrade ratio of 18 times in the first half of 2009, well-surpassing the level observed during the Asian financial crisis. Credit spreads moderated since February 2009 but remained elevated across all rating segments (Chart 1.7 and Chart 1.8). Similarly, trading liquidity remained low on lackluster interest and heightened credit risk aversion.

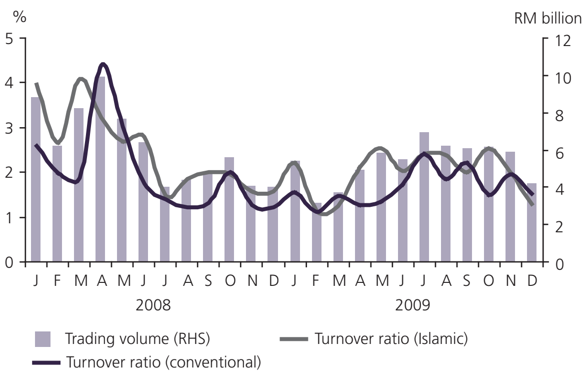
Activities in the PDS market turned around in the second half of 2009. While remaining below

Chart 1.8
Spreads of A-rated PDS against MGS



Source: Bloomberg and internal computation

Chart 1.9
Turnover Ratio[1] for PDS (by principle type)

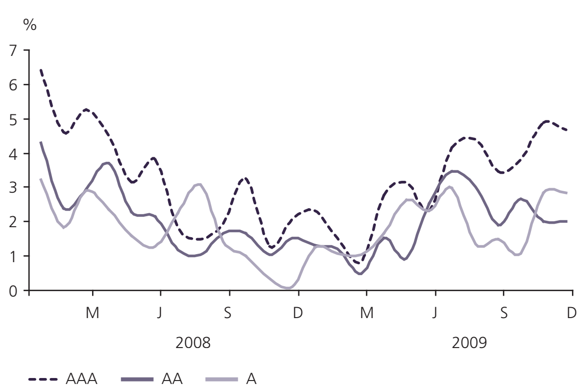


[1] Turnover ratio: Ratio of trading volume to total outstanding

Source: Bank Negara Malaysia and internal computation

the level observed in early 2008, trading liquidity improved across all rating categories and across both conventional and Islamic PDS amid decline in risk aversion (Chart 1.9 and Chart 1.10). Credit spreads eased from the historical high recorded in early 2009 particularly for high quality papers. Given the improving economic prospects and the favourable credit risk outlook, the downgrade-to-upgrade ratio declined significantly to 3.5 times (excludes revision in ratings for bank-guaranteed PDS) towards the end of 2009. Nonetheless, spreads for lower-rated PDS remained above the pre-Lehman failure due to continued credit risk concerns and reduced risk appetite for these credit segments. Meanwhile, a total of 12 issuers with outstanding PDS of RM1.1 billion defaulted in

Chart 1.10
Turnover Ratio for PDS (by credit profile)



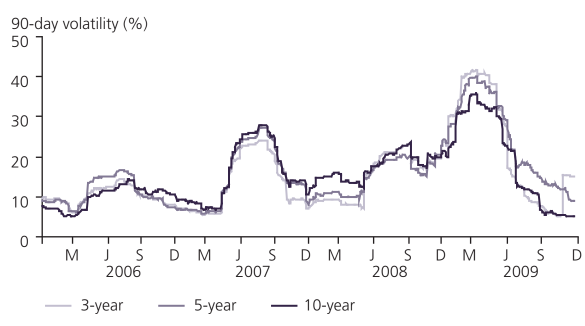
Source: Bond Pricing Agency Malaysia and internal computation

2009, accounting for only 0.5% of outstanding PDS in the market. Concerns on Dubai and Greece in late 2009, had very limited impact on the domestic bond market given the minimal exposures of Malaysian corporations and financial institutions to the two economies.

The government bond market remained generally resilient in spite of concerns over the increase in government borrowings and perceived broad-based increase in sovereign risk globally. Average volatility for Malaysian Government Securities (MGS) rose to 22.2% (2008: 15.6%) amid the sharp increase in issuance of government bonds to fund the fiscal support (Chart 1.11). Yields rose in the first quarter of 2009 despite a cumulative reduction of 125 basis points in the Overnight Policy Rate (OPR) during the same period. This resulted in the average spread between 3-year indicative MGS yields and OPR to widen to 75.3 basis points (2008: 15.1 basis points). The spread remained elevated and increased even further to 124 basis points in the last quarter of the year (Chart 1.12). The negative spread between interest rate swap (IRS) and MGS yields, which continued from 2008, turned positive and stabilised in the second half of 2009, reflecting expectations of no further OPR cuts and lower yield volatility (Chart 1.13).

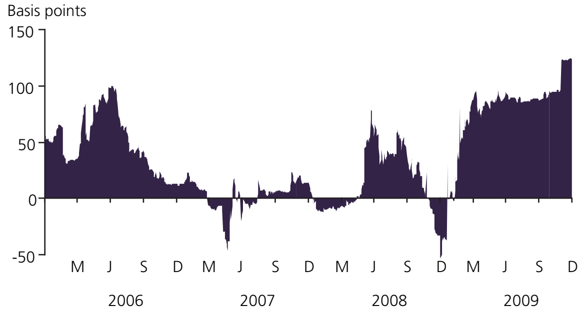
During the year, concerns over the deterioration in fiscal positions of global and regional economies to fund sizeable financial sector rescue and economic stimulus packages caused international rating agencies to revise downward the credit ratings of several sovereign bonds. The revision to Malaysia's long-term local currency issuer default rating to 'A' from 'A+' by an

Chart 1.11
Volatility in MGS Yields



Source: Bloomberg

Chart 1.12
Spread between 3-year MGS Yield and OPR



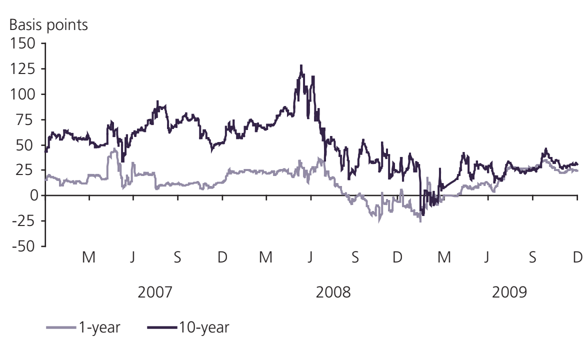
Source: Bloomberg and internal computation

international rating agency in June 2009 and heightened concerns over sovereign risks globally did not result in increased risk aversion in the MGS market. There was no significant tightening in trading liquidity, both in terms of price and volume. Average bid-ask spreads on benchmark MGS remained tight at an average of 12 basis points (2008: 10 basis points) whilst average monthly turnover ratio (computed as ratio of turnover value to outstanding bond) declined slightly to 10.1% (2008: 10.8%).

Intermediation in the capital markets remained intact

Domestic primary bond and equity markets continued to function smoothly to facilitate financial intermediation for corporations throughout the year. Initial public offering (IPO) activities recommenced in the second quarter after a subdued performance in the latter part of 2008. To a large extent, higher IPO activities were attributable to a number of listings by companies from the People's Republic of China and the largest IPO in the fourth quarter of 2009. Consequently, total value of funds raised through IPOs in 2009 rose to RM12 billion (2008: RM1.3 billion). Moving forward, the number of IPOs by non-resident corporations is expected to increase further given the increasing regional financial integration, as well as the conducive environment for fund raising arising from a series of measures introduced in 2009 to enhance the breadth and depth of the equity market.

Chart 1.13
Spread between Interest Rate Swap and MGS

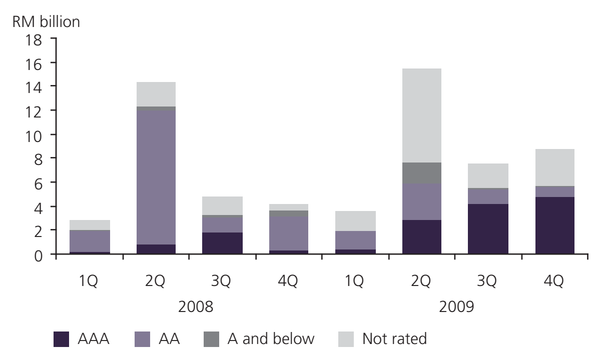


Source: Bloomberg and internal computation

Lower cost of funding and improvement in the domestic corporate sector outlook from the second quarter of 2009 onwards were fundamental in the recovery of primary activities in the PDS market. PDS issuances recovered from the lows observed in the second half of 2008 (Chart 1.14). Nonetheless, issuances remained skewed towards the higher-rated segment as credit spreads and cost of funding for lower-rated PDS remained elevated. Financial institutions had also tapped the PDS market to raise capital, while foreign issuers were observed returning to the market after months of being on the sideline due to uncertainty. With the sustained interest by non-residents to issue RM-denominated bonds, driven by competitive rates within the region and strengthening domestic demand, the cost of swapping ringgit to US dollar via cross currency swap market was sustained at relatively high levels throughout 2009 (Chart 1.15). In 2009, the amount of long-term PDS issued amounted to RM60.9 billion, slightly higher than the RM55.7 billion issued in 2008.

In the government debt securities market, issuances of MGS increased by 47.5% in 2009. Demand

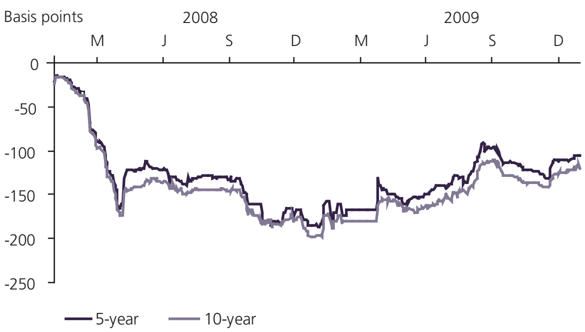
Chart 1.14
PDS Issuance by Credit Profile



Note: Data include only issuances by corporations

Source: Bank Negara Malaysia

Chart 1.15
Cross-Currency Swap



Source: Bloomberg

for MGS remained strong in spite of the supply concern. The bid-to-cover ratio for government bonds remained strong at 1.77 times (2008: 1.95 times). Total issuance of both government Islamic and conventional bonds amounted to RM88.5 billion (2008: RM60 billion) as investors, particularly domestic financial institutions, continued to seek risk-free assets as part of the portfolio rebalancing strategy.

Portfolio investment flows remained manageable throughout the year. Net portfolio outflows in the second half of 2008 continued in the earlier part of 2009 amidst global deleveraging. Nonetheless, inflows of portfolio investments from non-resident investors resumed in the second half of 2009 as prospects of a swifter-than-expected economic recovery in the region led to increased demand for emerging market assets, including those of Malaysia. For the year, portfolio investments registered a small net inflow of RM0.8 billion, compared to a net outflow of RM84.4 billion observed in 2008. While foreign investors continued to accord lower preference to the domestic equity market, non-residents' domestic bond holdings rose to 10.7% of bonds outstanding (2008: 8.1%).

Non-financial sectors

The capacity of households and businesses in managing financial stresses was put to test in 2009. The challenging domestic environment affected the income of some households albeit at varying degrees, due primarily to shorter working hours. Similarly, some businesses struggled to sustain revenue as sales volume declined.

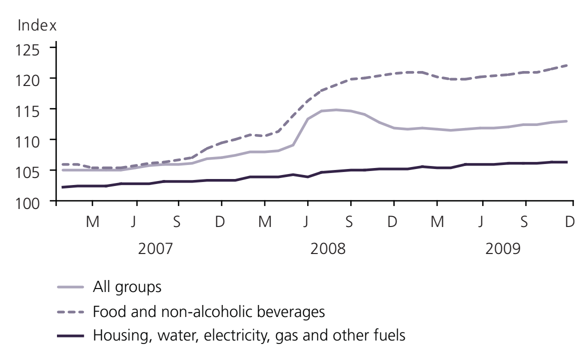
Years of building financial buffers and ensuring manageable level of indebtedness have placed households and businesses on a strong financial position to manage these challenges. Overall, resilience was well-preserved and many demonstrated agility to adjust to the more challenging operating environment. A small segment of the population and businesses was nonetheless faced with severe financial constraints and defaulted on debt obligations.

Households adjusted smoothly to challenges, facilitated by repayment flexibility by banks and supported by strong financial balance sheets and sustained debt servicing capacity

Strong household sector tolerance in bracing employment uncertainties

The household sector sailed through the year smoothly drawing on strong financial buffers that have been accumulated over several years. Households adopted a cautious attitude towards spending in the first half of 2009 on concerns surrounding the uncertainty as to the direction of the domestic economy and employment prospects (Chart 1.16). Consumer sentiments in early 2009 reached a low level before the sharp turnaround in the second half of the year in line with more visible signs of improvement in the macroeconomic environment and employment outlook (Chart 1.17).

Chart 1.16
Consumer Price Index

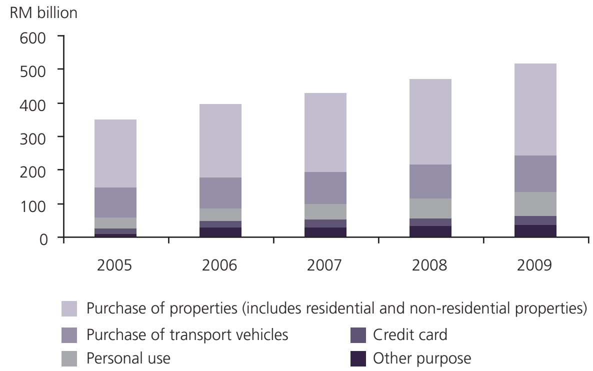


Source: Department of Statistics, Malaysia

Chart 1.17
Consumer Sentiment Index and Employment Index

Source: Malaysian Institute of Economic Research

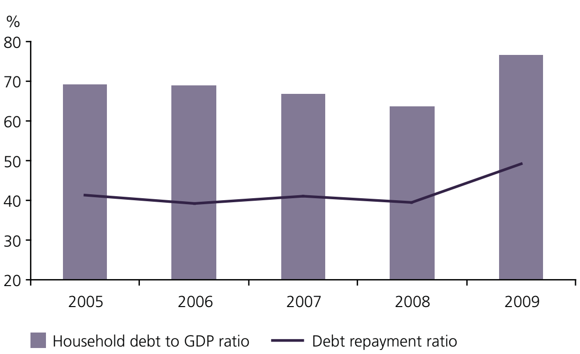
Chart 1.19
Composition of Household Debt by Purpose



Source: Treasury Housing Loans Division and Bank Negara Malaysia

With the economy gaining strength in the second half of the year and the reasonably low borrowing costs, demand for financing began to regain its momentum on the back of improved confidence. Total household debt expanded by 9.4% to reach RM516.6 billion or 76.6% of GDP (2008: RM472.1 billion or 63.9% of GDP) as at end-2009 (Chart 1.18 and Chart 1.19). Almost half of household debts were concentrated in long-term secured borrowings to fund house acquisitions (2009: 46.2%). This resulted in the gradual increase in total household debt-to-personal disposable income from 114.9% in January 2009 to 136% in December 2009 (Chart 1.20). The level of Malaysia's household debt-to-GDP ratio remained manageable given the composition of the debts and the high degree of financial inclusion in Malaysia (Chart 1.21).

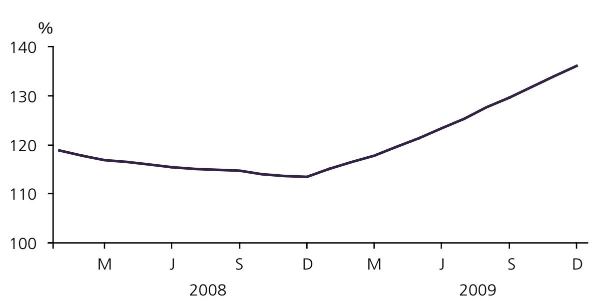
Chart 1.18
Household Indebtedness and Debt Repayment Ratio



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

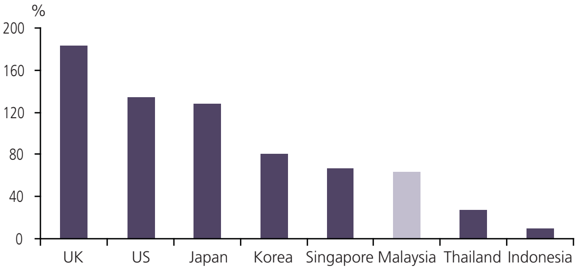
Unsecured financing also began to gain momentum. During the year, demand for equity related financing surged as households attempted to capture the rally in the equity market. The volume of personal financing and outstanding credit card balances also picked up in the second half, expanding at an annual rate of 17.6% to RM98.8 billion at the close of the year. In particular, personal financing expanded strongly at 22.9% in 2009 to now account for 14% (2008: 12.4%) of household debt. Credit card balances grew by 5.4% to RM26.7 billion mainly for consumption and retail purchases under the various flexible payment schemes offered by many card issuers. The volume of card-based purchases for the year rose 6.5%. Despite the continued increase in credit card transactions, the credit card exposures of households continued to be manageable. The amount of revolving balances as a percentage of outstanding balances remained

Chart 1.20
Total Household Debt to Personal Disposal Income Ratio



Source: Bank Negara Malaysia and internal computation

Chart 1.21
Household Debt to GDP Ratio (as at 2008)



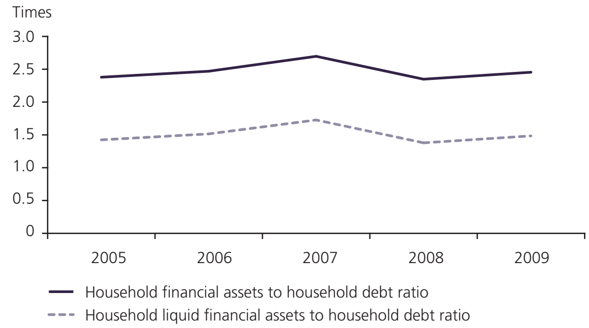
Source: CEIC data, reports on financial stability of respective countries, Department of Statistics, Malaysia and Bank Negara Malaysia

stable at 74.1%. Moreover, credit cards in circulation with revolving balances remained at 48.2% as at end-2009, demonstrating the sufficiency of households' capacity to make timely payments. Despite the income reduction facing some households, the usage of cash advances continued to be marginal, accounting for only 4.3% of total credit card transactions (2008: 4.5%).

Despite the continued growth in debt level, households continued to maintain strong capacity to tolerate adverse shocks. The level of financial assets expanded strongly on an aggregate basis by 19.3%, driven mainly by the higher investment valuation for equity and unit trust. The recovery in risk appetite and the strong FBM KLCI performance during the year tilted the composition of equity and unit trusts investments. As at end-2009, household financial assets were slightly higher at 2.5 times of total household debt (2008: 2.3 times), providing households with adequate flexibility to adjust to the demands of the challenging economic environment. Similarly, household liquid assets remained ample with the ratio of liquid assets-to-debts at a comfortable level of 148.6% (2008: 138.5%). Liquid assets accounted for 60.3% of household financial assets as at end-2009 (Chart 1.22 and Chart 1.23).

The impact of the economic slowdown was more felt by certain segments of the households which began to fall behind the monthly debt repayments. A total of RM13.2 billion of household debt with the banking system turned non-performing in 2009. The overall quality of household debts, however, continued to remain

Chart 1.22
Household Financial Assets to Household Debt Ratio

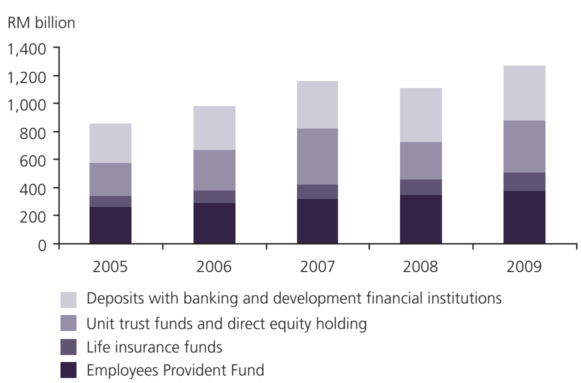


Source: Treasury Housing Loans Division, Employees Provident Fund, Securities Commission Malaysia and internal computation

high with low non-performing loans (NPL) ratio of 3.1% compared to 4.1% as at end-2008 (Chart 1.24). The ability to reschedule part of the debt repayments did help to provide some relief to the financial constraints facing the households.

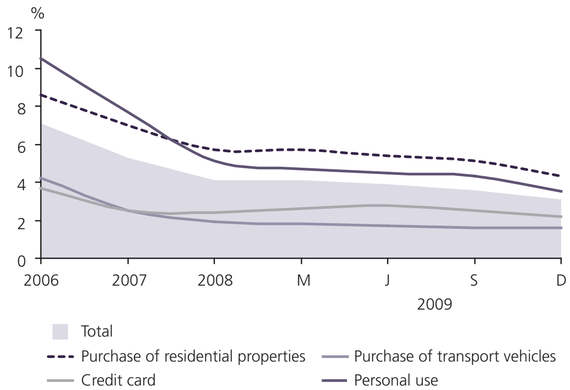
The debt servicing capacity of households is expected to remain favourable going forward. The strong financial buffer will continue to provide households with sufficient cushion to absorb future shocks to income. The prospects for further accumulation of the financial buffer remain positive with the recovery in the real sector. In strengthening the assessment of household sector vulnerability, emphasis will continue to be accorded to strengthen the availability of granular household information

Chart 1.23
Composition of Household Financial Assets



Source: Employees Provident Fund, Securities Commission Malaysia and internal computation

Chart 1.24
Banking System: NPL Ratio of Household Sector



Source: Bank Negara Malaysia

and the development of analytical tools through enhanced collaboration with various government agencies.

Business sector on steady recovery path, riding out the economic turbulence placidly with debt servicing capacity remaining robust on strong financial position

Operational flexibility supported the capacity of businesses in confronting the challenging year

Malaysian businesses, armed with financial buffers built over the years, confronted significant challenges in 2009 amidst slowing business environment and declining consumer confidence. Improvements in operational productivity and efficiency that had taken place in prior years have enabled businesses to brace against earnings erosion in the first half of 2009 and effectively preserved the strength of the balance sheets. Such measures, coupled with the economic recovery in the second half of the year, led to stronger financials that preserved the debt servicing capacity of businesses, as measured by the interest coverage ratio (ICR) (Table 1.1), throughout 2009.

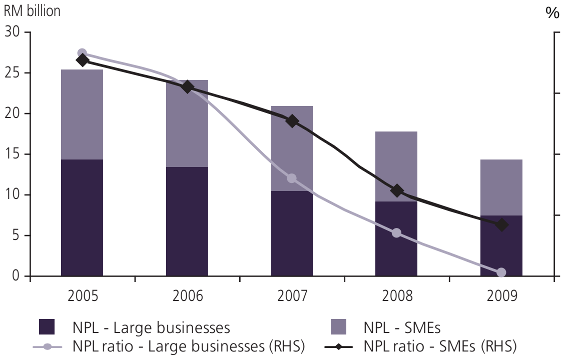
During the first half of 2009, the performance of the 170 companies tracked by Bank Negara Malaysia (representing 86.2% of Bursa Malaysia market capitalisation) remained subdued, particularly in the first quarter of 2009. Although the level of ICR for some industries moderated, strong balance sheets and accumulation of retained earnings cushioned the impact of the slowdown and underscored their sustained debt servicing capacity. This was further reinforced by the absence of a surge in bankruptcies and delinquencies. NPLs remained steady with NPL ratio of 4.7% as at year-end (Chart 1.25), the lowest level observed since the 1998 Asian financial crisis. The overall leverage position remained healthy with the median debt-to-equity ratio sustained at around 50% (Chart 1.26) in the first half of the year. Access to financing for large businesses and the small and medium enterprises (SMEs) via the banking

Table 1.1
Interest Coverage Ratio for Selected Industries

	2008		2009	
	1H	2H	1H	2H
	Times (Median)			
Diversified operations	5.5	2.5	2.5	2.7
Export-oriented industries				
Plantation & agriculture	12.3	7.1	7.4	12.9
Oil & gas-related	5.8	5.9	5.1	1.3
Electrical and electronics	4.6	3.3	0.9	22.0
Rubber gloves	5.3	6.0	6.6	10.0
Chemicals & chemical products	12.8	1.3	14.9	5.7
Other manufacturing	4.1	2.4	2.5	5.5
Domestic-oriented industries				
Utilities	4.1	3.5	3.7	3.7
Infrastructure	3.9	3.1	3.1	3.3
Transportation	3.7	2.2	1.3	2.0
Telecommunication	4.8	1.3	2.3	3.3
Construction-related industries				
Civil engineering	4.5	0.5	2.4	3.1
Property	3.7	2.8	4.4	6.9
Building & construction materials	9.6	1.1	1.2	9.1
Consumer-related industries				
Automotive	28.4	16.6	10.0	27.2
Food, beverages and tobacco	8.5	9.6	12.2	20.3
Retail	7.8	11.1	9.1	14.6
Hotels and restaurants	1.8	2.4	1.9	1.4

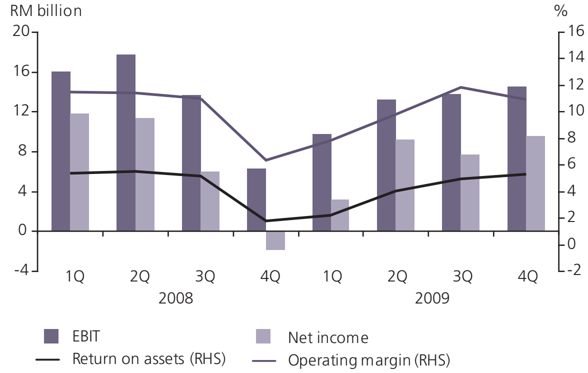
Source: Bloomberg and internal computation

Chart 1.25
Banking System: NPL for Large Businesses and SMEs



Source: Bank Negara Malaysia

Chart 1.27
Profitability for Selected Companies



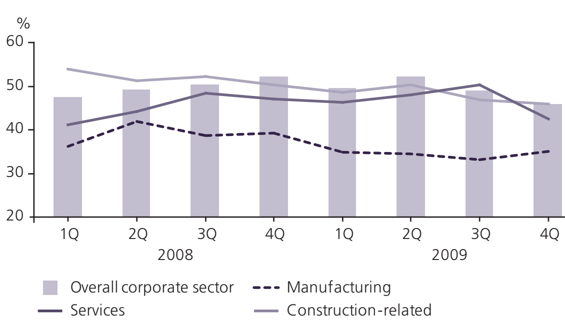
Source: Bloomberg and internal computation

system was favourable throughout the year totalling RM127.6 billion with stable rates of loan approvals. Earnings before interest and tax (EBIT) recorded steady improvement beginning the second quarter (Chart 1.27) as business activities revived due mainly to restocking activities and the aggressive measures taken in the early part of the year to protect the balance sheet.

The Malaysian corporations fared better in the second half of 2009 following the global economic recovery, particularly in Asia, reinforced further by the year-end festivities and effects of the Government fiscal stimuli. Improved consumer sentiment leading to relatively higher consumer spending and local demand bolstered the recovery of Malaysian business activities. Profitability and debt repayment capacity in the second half of the year strengthened. Financing approval-to-application ratio for large businesses moderated in the first half of the year but recovered to 64.7% in the second half of the year in tandem with the economic recovery. Consequently, loans disbursed by the banking system to large businesses increased by 5.3% in 2009 to RM249.4 billion (Chart 1.28 and Chart 1.29).

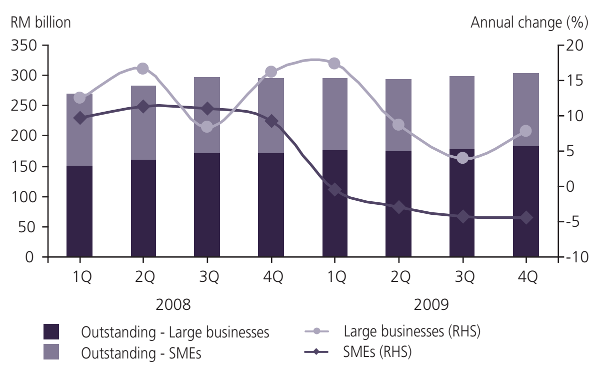
In search of higher yields amidst low global interest rate environment, international investors shifted towards the commodity market as an asset class. The world commodity price index (Chart 1.30) rebounded after experiencing a sharp price correction in the fourth quarter of 2008 and in the first quarter of 2009. While volatility remained low, commodity prices continued to rise throughout 2009 causing higher prices of raw materials and intermediate input.

Chart 1.26
Debt-to-Equity Ratio for Selected Industry



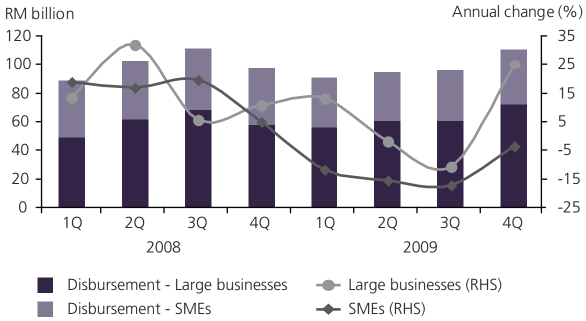
Source: Bloomberg and internal computation

Chart 1.28
Banking System: Outstanding Loans to Large Businesses and SMEs



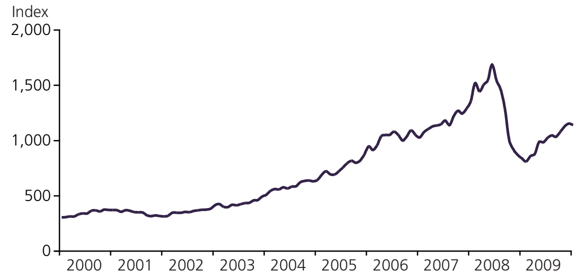
Source: Bank Negara Malaysia

Chart 1.29
Banking System: Loans Disbursed to Large Businesses and SMEs



Source: Bank Negara Malaysia

Chart 1.30
Commodity Price Index



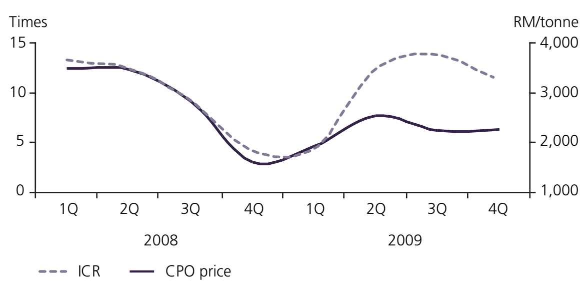
Source: Bloomberg

Export-oriented industries were adversely affected in the first half of the year due primarily to sluggish external demand. The performance of the crude palm oil (CPO) industry was impacted by the weak global demand for commodities, resulting in continued decline in CPO prices in the first half of 2009. In addition, the low production volume, attributable mainly to unfavourable weather conditions and biological tree stress, has further weakened the earnings of CPO producers. These developments did not, however, affect the debt servicing capacity of CPO producers (Chart 1.31). The ICR further improved in the second half of 2009, supported by the higher earnings from the stabilised CPO prices and improved yields on fresh fruit bunches against the backdrop of seasonal biological yield up-cycle.

Performance of the oil and gas (O&G) industry remained subdued in 2009 weighed down mainly by the weak business activities in the O&G-related services segment. In the first half of the year, O&G-related service providers faced weak demand as exploration and production (E&P) projects were still in the tender stages. This was further exacerbated by the low charter rates stemming from intense global competition. The subsequent gradual recovery in demand in the second half of the year was insufficient to offset the continued intense competition with oversupply of vessels. Although financial performance deteriorated, the segment was supported by strong financial reserves amassed in previous years. This supported the segment's steady solvency position and debt servicing capacity despite the lower ICR. The refiners and retailers segment improved in the first half of the year attributable to the normalisation of retail fuel consumption following the reduction in pump prices. Coupled with inventory gains against the backdrop of an upturn in crude oil prices and economic recovery, this segment continued its momentum in the second half of the year. Outlook for the overall industry is positive going forward, underpinned by the growth of the order book among O&G-related service providers and rising E&P activities, whilst sustained crude oil price will further support the refiners and retailers.

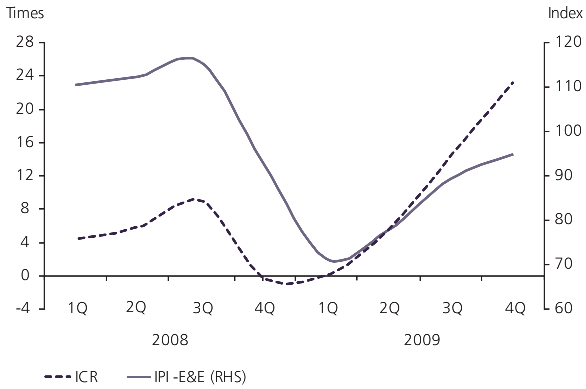
The manufacturing sector was also adversely affected in the first half of 2009, but rebounded subsequently. In particular, the electrical and electronics (E&E) industry experienced further deterioration in the first quarter of 2009 due mainly to rapid selling price attrition and weak external demand. The Industrial Production Index (IPI) for the industry plummeted to a low of 74.5 points in the first half of 2009 (2H 2008: 104.3 points; 1H 2008: 111.4 points). Although the

Chart 1.31
CPO Price and Interest Coverage Ratio of Plantation Industry



Source: Bloomberg, Malaysian Palm Oil Board and internal computation

Chart 1.32
Industrial Production Index and Interest Coverage Ratio for the E&E Industry

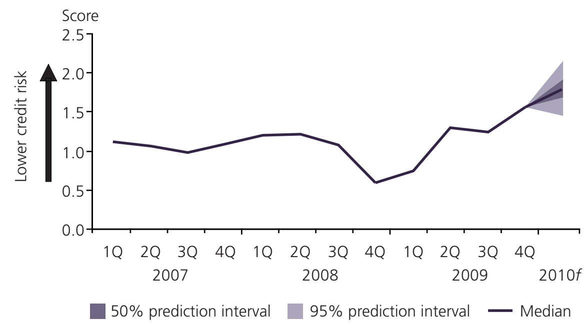


Source: Bloomberg, Department of Statistics, Malaysia and internal computation

industry's ICR was severely affected (Chart 1.32), majority of the players in this industry were financially resilient with low leverage level. The median debt-to-equity stood at 33.3% at the end of the first half of 2009 (2H 2008: 33.4%; 1H 2008: 25.1%). While industry players remained cautious of restocking activities, the demand for E&E products began to resurface in April 2009. External demand was further strengthened in the second half of 2009 as the effects of global stimulus packages began to materialise, spurring the growth in the consumer-related market, especially in the netbook and mobile phone segments, leading to the continued uptrend of global chips sales.

The positive performance in the E&E industry is likely to reduce the level of credit risk of the overall manufacturing sector moving forward. The credit risk level of the manufacturing sector, as measured by the Z-score (Chart 1.33), is expected to be low and likely to remain manageable even if downside risks, as reflected by the lower band of the fan funnel, were to materialise in 2010. This is further supported by the improving trend of the expected default frequency (EDF) for the sector (Chart 1.34). Similarly, the credit risk level in the E&E industry showed a matching trend (Chart 1.35 and Chart 1.36) underpinned by the steady recovery in the global economy and the expansion of the global semiconductor market. The gradual revival of the overall end-demand, led by sales of consumer products such as smartphones including *Nexus*, netbooks and tablets, as well

Chart 1.33
BNM Z-Score[1] for Manufacturing Sector



f Forecast

[1]Modified Z-score, computed internally

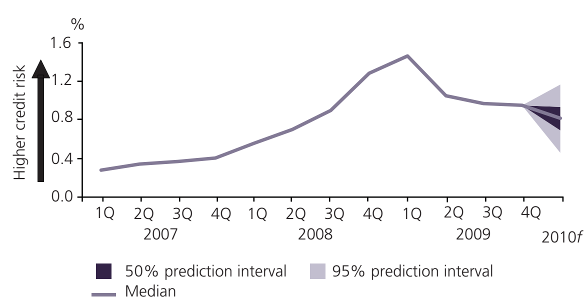
$$\text{BNM Z-score} = -1.4 + 1.2\,\frac{\text{Current Assets}}{\text{Total Assets}} + 1.1\,\frac{\text{Total Shareholders' Funds}}{\text{Total Liabilities}} + 0.1\ \text{Interest Coverage Ratio}$$

Source: Bloomberg and internal forecast

as restocking activities and increase in spending by businesses would continue to spur growth in the industry going forward.

The domestic-oriented industries were not entirely insulated from the external environment. Slowdown in overseas demand spilled over into the various industries albeit at varying paces. Property market in Malaysia remained calm for most parts of the year. While the property markets in some economies underwent price corrections due to sharp increases in prior periods, the local property market did not, with the exception of some choiced locations and

Chart 1.34
EDF[1] for Manufacturing Sector

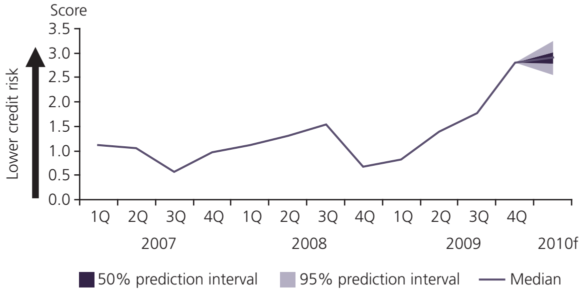


f Forecast

[1] EDF stands for Expected Default Frequency which measures the probability that a firm will default over specified period of time (typically one year). Default is defined as failure to make scheduled principal or interest payments.

Source: Moody's KMV Credit Edge™ and internal forecast

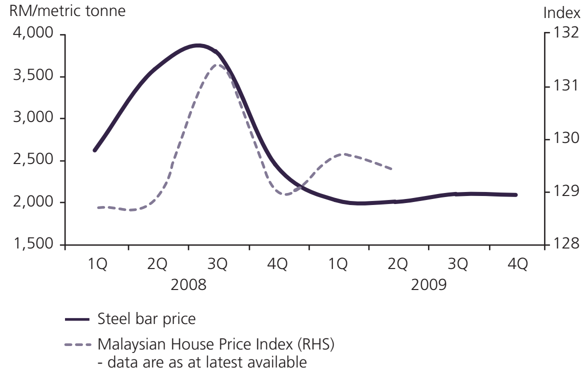
Chart 1.35
BNM Z-Score for E&E Industry



f Forecast

Source: Bloomberg and internal forecast

Chart 1.37
House Price Index and Steel Bar Prices



Source: Department of Statistics, Malaysia and National Property Information Centre (NAPIC)

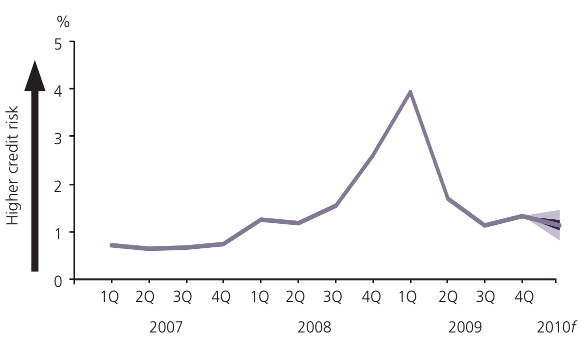
developments. Prior to the economic downturn, prices of a number of high-end condominiums in selected parts of the Kuala Lumpur area had already experienced some downward adjustments, thereby cushioning further price corrections. The reductions in the OPR in 2009 further bolstered the holding costs for house owners, thereby lending some support to the overall property market.

Profitability of property developers mainly in the residential segment, continued to be very weak in the first half of the year, pressured by the high input cost that was experienced since 2008 (Chart 1.37) and the continued subdued demand in the primary market. Developers responded by employing aggressive cost-cutting measures to moderate the impact on their financials, thereby preserving the ability to meet the monthly debt repayment obligations. In the second half of 2009, the leverage ratio declined quite substantially to 42.3% (1H 2009: 47.4%; 2H 2008: 48.2%) thus improving the debt servicing capacity.

The unfavourable economic conditions also posed similar pressures on the debt servicing capacity of the construction and civil engineering companies. Performance of the industry turned around since the second quarter of 2009 due to the implementation of the projects under the 9MP and the stimulus packages. While a small number of businesses were affected by the debt problems facing some Dubai corporations, the overall exposures of the construction industry were limited. The overall debt servicing capacity of the construction and civil engineering industry improved further in the second half of 2009.

Sluggish demand from the subdued performance in the property market, construction and civil engineering activities, impacted businesses involved in the building and construction-related materials (BCM) industry. This was further compounded by intense price competition among the BCM manufacturers (Chart 1.38). Demand for BCM, in particular the iron and steel segment, nonetheless improved starting from the second quarter of 2009 following the increase in construction activities locally, and pump-priming activities globally. This provided support to the debt servicing capacity of this sector.

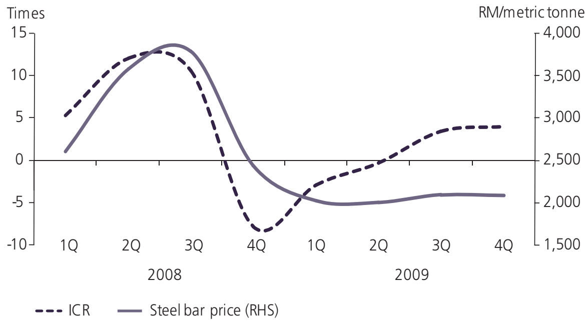
Chart 1.36
EDF for E&E Industry



f Forecast

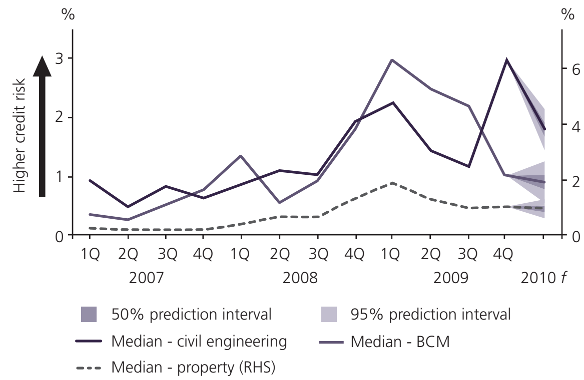
Source: Moody's KMV Credit Edge™ and internal forecast

Chart 1.38
Steel Bar Prices and Interest Coverage Ratio for BCM Industry



Source: Bloomberg, Department of Statistics, Malaysia and internal computation

Chart 1.40
EDF for Property, Civil Engineering and BCM Industry



f Forecast

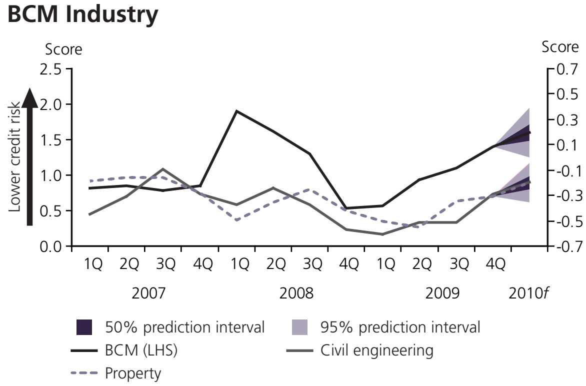
Source: Moody's KMV Credit Edge™ and internal forecast

Implementation of government projects associated with the 9MP and stimulus packages are expected to be on its full course in 2010 and will spur activities in the construction and construction-related sectors. The present size of the order book of the players is sufficient to secure cash flows of up to two years. Improving construction activities, both locally and globally, albeit some softening from the Middle East, are expected to increase the demand for the BCM industry. Steel prices are anticipated to experience an upward trend in year 2010 but are unlikely to be as volatile as in 2008. The positive outlook for credit risk in 2010 for the construction and construction-related sectors (Chart 1.39 and Chart 1.40) may somewhat be weighed down by the state of overhang properties in some pockets of location which will continue to pose some concerns on the outlook and strength of the property market. In the property market segment, activities have begun to regain momentum since the end of 2009. This period has also observed a rise in new launches with attractive packages.

The early months of 2009 saw continued decline in the usage of electricity (Chart 1.41), driven primarily by reduction in power consumption by industrial users. Being the main contributor to revenue, the lower electricity usage posed some earnings risk on the power producers. This was reversed in the second half of 2009, as economic conditions improved, thereby diminishing downward pressures on earnings. This was further supported by lower input costs following the decline in prices of coal. The debt servicing capacity (Chart 1.42) of the industry reverted to the levels in 2007, as revenue rebounded significantly in the second quarter and was sustained at this level in the remaining quarters of the year.

Performance of the automotive industry was less robust in the early part of the year before gradually improving. Total industry volume (TIV) sales of vehicles in the first half of 2009 contracted by 9.7% compared to the corresponding period of 2008, as consumers were cautious to make large purchases. Despite lower sales volume, the automotive industry remained steady given the strong solvency position, lower cost of steel as well as support

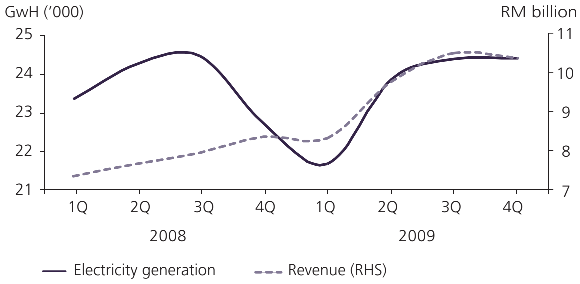
Chart 1.39
BNM Z-Score for Property, Civil Engineering and BCM Industry



f Forecast

Source: Bloomberg and internal forecast

Chart 1.41
Electricity Generation and Revenue for the Power Industry



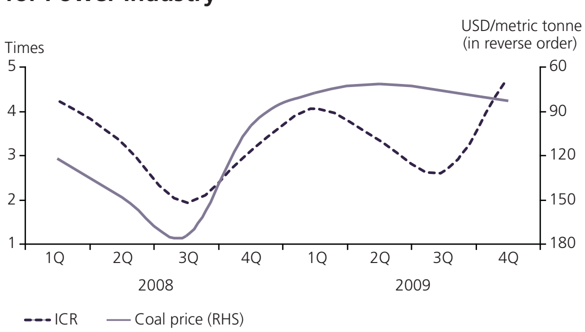
Source: Tenaga Nasional Berhad and Bloomberg

from the Scrapping Policy. Improvements in the second half of the year (TIV sales: 5.7% y-o-y) were led by the national car segment as consumers' preference switched to more economical and smaller capacity engine vehicles (Chart 1.43).

Telecommunications players, food and beverage, tobacco and liquor manufacturers, as well as toll road concessionaires showed robust debt repayment capacity as these industries are inherently recession-proof and not cyclical in nature.

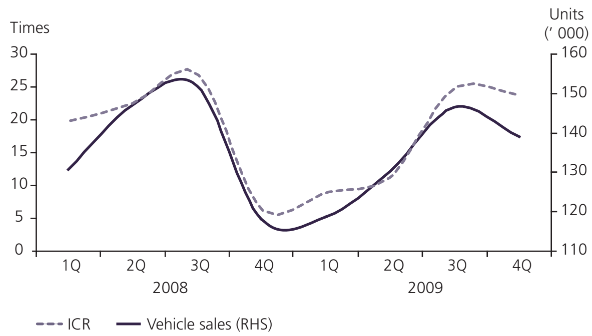
Being part of the business community, the challenging economic conditions have placed increased pressures on the continued growth and sustainability of Malaysian SMEs. Demand shrinkage, payment delays, and significantly higher prices of raw and input materials were some of the key challenges faced by the SMEs. Outstanding financing by the banking system and development financial institutions (DFIs)

Chart 1.42
Coal Prices and Interest Coverage Ratio for Power Industry



Source: Bloomberg, International Monetary Fund and internal computation

Chart 1.43
Vehicle Sales and Interest Coverage Ratio for Automotive Industry



Source: Bloomberg, Malaysian Automotive Association and internal computation

to SMEs contracted slightly in 2009. This was, however, due to the upgrading of SME accounts to large enterprise accounts, the sale of non-performing loans to an asset management company by one banking group in November 2009 and bad debts written-off. Continued demand for financing amidst stable approval rates by the banking institutions spurred the positive developments in the SME sector particularly towards the end of 2009. In the fourth quarter of the year, demand for SME financing surged by 37.1% (3Q 2009: -1.7% y-o-y) whilst approvals improved by 8.8% (3Q 2009: -8.1% y-o-y). NPLs of SMEs of the banking system and DFIs rose marginally to 7.6% of gross loans by September 2009 (end-2008: 7.1%) due to the weaker cash flows and subdued business activities. With the economic recovery in the second half of 2009, the gross NPL ratio of SMEs turned around and improved to 6.6%.

Financial Sector

Stability and functioning of the Malaysian financial sector was well-preserved despite uncertain economic and financial conditions on both the domestic and international fronts

The Financial Stability and Payment Systems Report 2008 highlighted a number of challenges, particularly in relation to earnings outlook and sustenance of financial buffers, as the global crises adversely impacted the domestic economy. In particular, pressures were anticipated to originate from reduced demand for financial services, lower profitability of overseas operations of the domestic banking groups and increased insurance claims and benefit payments. Lower corporate earnings and weaker employment conditions were expected to affect the debt repayment capacities of households and businesses, thus increasing the likelihood of rising loan delinquencies and the potential for cross-defaults by corporate borrowers. The competitive condition in the financing market and ample liquidity were expected to pose challenges to the maintenance of profit margins for banks' financing activities, whilst the more volatile financial market conditions were likely to pose challenges to the management of investment returns and asset-liability duration mismatch for insurance companies and takaful operators. Collectively, these downward pressures on revenue sustainability and therefore, preservation of financial buffers, could have perverse effects on the behaviours of financial institutions which could prompt more aggressive business strategies. In addition, financial institutions could potentially face increased market risks arising from the projected continued volatility and uncertainties in financial market conditions, and sustained tightness in US dollar liquidity.

The abovementioned risks to financial system stability did, to some extent, materialise in 2009 although not to the extent as earlier expected. This was due partly to the gradual stabilisation of global economic and financial conditions which limited the extent of adverse spillovers on the regional and domestic economies. More importantly, the build-up of strong financial buffers by domestic non-financial and financial sectors provided the entities with greater capacity and flexibility to withstand the shocks. Compared to the Asian financial crisis, the Malaysian financial institutions exhibited greater state of readiness, ability and pro-activeness, both in the stronger capitalisation and solvency positions in anticipation of potential shocks, and in responding to the financial needs of borrowers who were faced with financial difficulties as a result of the more challenging operating environment.

Credit continued to be chanelled to support the needs of the real sector needs thus supporting the early recovery of the domestic economy. The high degree of resilience of the financial sector was clearly evident. Capitalisation and solvency positions were sustained at strong levels, supported by strengthened institutional structures and financial infrastructure, and enhanced governance and risk management culture. In anticipation of a more challenging economic outlook and growing international consensus to emphasise on increased level and quality of capitalisation, Malaysian banks, since the fourth quarter of 2008, had embarked on measures to bolster capital levels. The higher capital levels would also allow the financial institutions to strategically take advantage of future domestic and overseas business opportunities once the global economy recovers from the crisis. Consequently, as at end-2009, the banking system's risk-weighted capital ratio (RWCR) and core capital ratio (CCR) improved to 14.7% and 13.1% respectively. The banks' leverage position improved to 13.1 times (2008: 14 times) while the equity to total risk-weighted assets ratio was at 11.7% (Table 1.2). The capital raising activities were largely concentrated in equity issuances, thus contributed further to the strengthening of capital quality. Approximately 70% of total

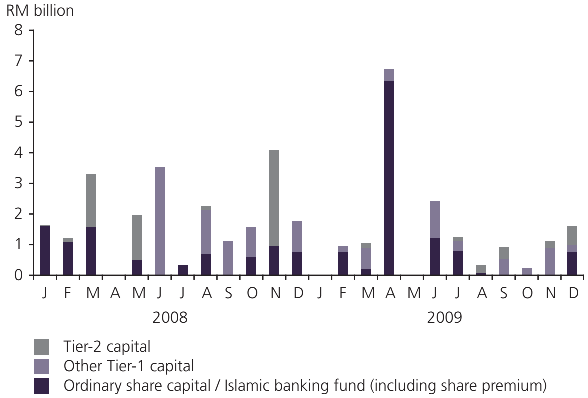
Table 1.2
Capital Adequacy Ratios as at end-2009

	Banking system	Commercial banks		Islamic banks	Investment banks
		Domestic	Foreign		
	%				
RWCR	14.7	13.8	15.4	14.7	34.4
Core capital ratio	13.1	12.7	12.8	12.2	32.7
Equity[1] to asset	7.6	7.7	7.2	7.0	11.6
Equity[1] to RWA	11.7	10.7	12.4	11.9	34.3

[1] Equity comprises ordinary shares, share premiums, statutory reserves, general reserves and retained earnings (net of unaudited losses) less goodwill

Source: Bank Negara Malaysia

Chart 1.44
Banking System: New Capital



Source: Bank Negara Malaysia

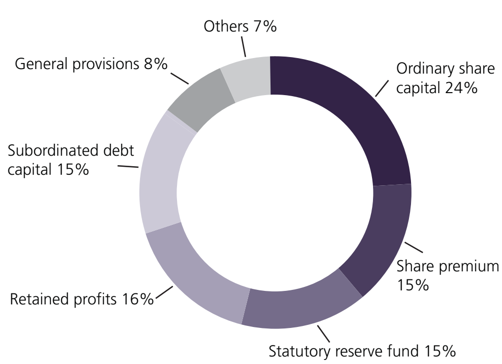
capital of the Malaysian banking industry comprised core Tier-1 capital (Chart 1.44 and Chart 1.45). Similarly, the insurance sector recorded a higher capital adequacy ratio of 230% (2008: 187.6%), where approximately 93% of total capital comprised Tier-1 capital which includes fully paid-up capital and retained profits (Chart 1.46). These contributed to the significant financial buffers for the banking sector and insurance industry of RM58.4 billion (4.1% of total assets) and RM18.6 billion (11.4% of total assets) respectively. The implementation of the Risk-Based Capital (RBC) Framework in January 2009 also had minimal implications on the capital adequacy ratio of insurers as the two years of parallel implementation had helped prepare the insurers better. Meanwhile, the six DFIs under the purview of the Bank also recorded a strong aggregate RWCR of 21.7% as at end-2009.

The Malaysian financial institutions are expected to remain resilient even under the worst case scenario. The banking system has high quality capital buffers in excess of RM50 billion, supported by high loan loss provisions of nearly 100%

Continued financial intermediation

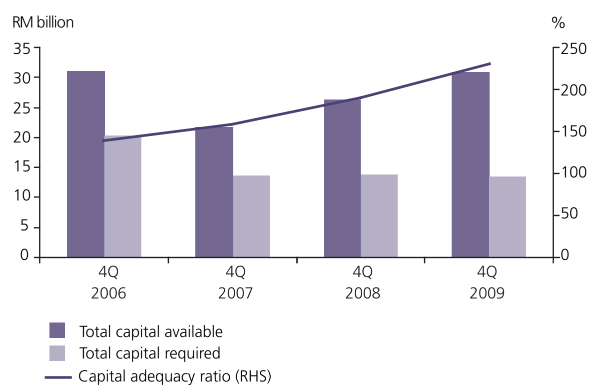
Many years of capacity and infrastructure building have strengthened the risk management and governance practices of banks. Banks today are better equipped to analyse and estimate the potential financial strains and delinquencies of different customer and portfolio segments, thereby enabling appropriate responses to be undertaken at an early stage. This has also led to less generalisation of borrowers' credit quality as banks are able to differentiate between borrowers who have sustainable debt repayment capacity but face temporary financial difficulties due to the macroeconomic environment, from those who are already highly leveraged and indebted. This ability enabled banks to

Chart 1.45
Banking System: Composition of Capital



Source: Bank Negara Malaysia

Chart 1.46
Capital Adequacy Ratio for Insurance Industry



Source: Bank Negara Malaysia

Table 1.3
Key Financial Soundness Indicators

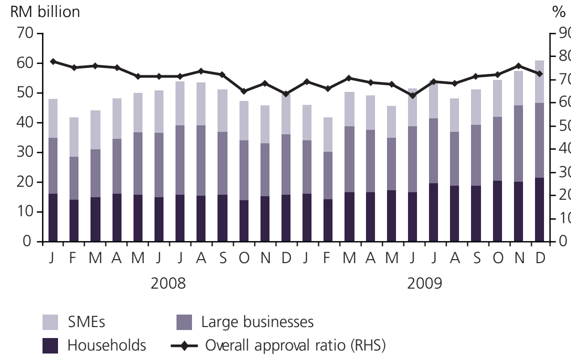
	As at end				
	2005	2006	2007	2008	2009*p*
	% (or otherwise stated)				
Banking System					
Risk-Weighted Capital Ratio	13.7	13.5	13.2	12.6	14.7
Core Capital Ratio	10.7	10.7	10.2	10.6	13.1
Return on Assets	1.4	1.3	1.5	1.5	1.2
Return on Equity	16.8	16.2	19.8	18.6	13.9
Liquid Assets to Total Assets	8.0	8.0	9.3	10.3	11.5
Liquid Assets to Short-term Liabilities	10.2	10.3	11.8	13.1	14.5
Net Non-performing Loans Ratio - 3-month	5.8	4.8	3.2	2.2	1.8
Duration Weighted Net Position to Capital Base	8.3	7.5	4.4	3.8	5.0
Net Open Positions in FX to Capital Base	1.1	4.7	5.1	5.2	4.6
Net Open Positions in Equities to Capital Base	2.1	2.5	2.5	0.9	1.0
Insurance Companies					
Capital Adequacy Ratio	n.a.	139.6	158.4	187.6	230.0
Life Insurance & Family Takaful (RM million)					
Excess of Income over Outgo	10,304.7	12,118.3	14,643.0	8,779.6	12,297.3
New Business Premiums / Contributions	7,582.0	8,596.2	9,267.0	9,429.8	9,942.2
Capital Adequacy Ratio (conventional only)	n.a.	119.8	176.9	200.0	256.5
General Insurance & General Takaful (RM million)					
Underwriting Profit	1,105.6	480.9	-75.3	194.2	822.9
Operating Profit	1,715.4	1,491.6	1,301.4	752.4	2,028.0
Gross Direct Premiums / Contributions	10,085.0	10,505.0	10,987.3	11,417.3	12,792.4
Claims Ratio	54.9	60.0	65.0	62.0	60.8
Capital Adequacy Ratio (conventional only)	n.a.	182.8	182.1	181.1	188.9
Household (HH) Sector					
HH Financial Assets to Total HH Debt Ratio	237.3	247.2	269.8	234.6	246.3
HH Debt to GDP Ratio	69.1	68.8	66.9	63.9	76.6
HH Liquid Financial Assets to Total HH Debt Ratio	142.8	151.5	172.3	138.5	148.6
Debt Service Ratio	41.3	39.1	41.2	39.6	49.2
Non-performing Loans Ratio of Household Sector	8.1	7.1	5.3	4.1	3.1
Corporate Sector					
Return on Assets	4.3	5.0	5.7	4.0	4.1
Return on Equity	8.2	9.3	10.9	7.4	7.6
Debt-to-Equity Ratio	49.9	54.0	48.0	52.2	46.0
Interest Coverage Ratio (times)	6.2	4.8	6.5	4.7	5.1
Operating Margin	10.9	11.7	12.0	9.3	10.2
Non-performing Loans Ratio of Business Sector	11.2	10.2	8.0	6.0	4.7
Development Financial Institution[1]					
Lending to Targeted Sectors (% change)	29.6	17.5	18.7	16.3	18.1
Deposits Mobilised (% change)	12.4	11.1	12.4	18.5	14.4
Non-performing Loans Ratio - 6-month	10.4	10.0	8.8	6.6	6.8
Return on Assets	3.0	1.5	1.9	2.9	2.3

p Preliminary
[1] Refers to development financial institutions under the Development Financial Institutions Act 2002
n.a. Not applicable
Note: Insurance figures are based on unaudited calendar year, unless indicated otherwise

Source: Bank Negara Malaysia, Bloomberg and internal computation implement appropriate remedial measures. The competitive environment, particularly in retail financing, has continued to encourage banks to undertake prudent and carefully considered innovations, and to provide customer-centric and customised solutions to cater to the evolving financial needs of the customers. Demand for financing slowed significantly in the first half of 2009 amidst weaker domestic conditions as households and businesses remained cautious and reprioritised expenditure plans in anticipation of the more challenging employment outlook and economic environment. Total applications for new financing only grew by 2.3% in the first half of 2009 (1H 2008: 17.7%). Households' demand for financing also recorded a more moderate growth of 7.6% compared to 38.4% for the corresponding period in 2008. In the second half of 2009, demand for financing rebounded strongly in tandem with the improved prospects for growth, offsetting the more modest position in the preceding period.

For the year, the overall growth in applications for financing was higher at 9.3% (2008: 3.8%). Correspondingly, banks remained supportive of the customers' financing needs with approval rates remaining stable at approximately 70% throughout the year, whilst drawdowns of existing credit lines grew by 2.4% to RM655.7 billion (Chart 1.47). Given the continued expansion of 9.3% in deposits mobilised by the banking sector to reach RM1,062.9 billion or 157.6% of GDP, the loan-to-deposit ratio remained manageable at 77.9% as at end-2009. Furthermore, borrowers also have ample access to funds that can be drawn down for future needs from the RM304.8 billion of undrawn financing (+13.1%). As at end-2009, outstanding financing by banks expanded by 7.8% to RM783.4 billion or 116.2% of GDP. In terms of composition, the financing portfolio continued to be concentrated in the retail segment. Financing extended to households and SMEs accounted for 55.1% and 15.2% of outstanding financing respectively. Improved sentiment and lower risk aversion in the domestic PDS market in the second half of 2009 supported the longer-term financing needs of large businesses. On aggregate, financing by the PDS market and banking system grew by 8.5% as at end-2009 to account for 157.5% of GDP.

Chart 1.47
Banking System: Disbursement of Financing



Source: Bank Negara Malaysia

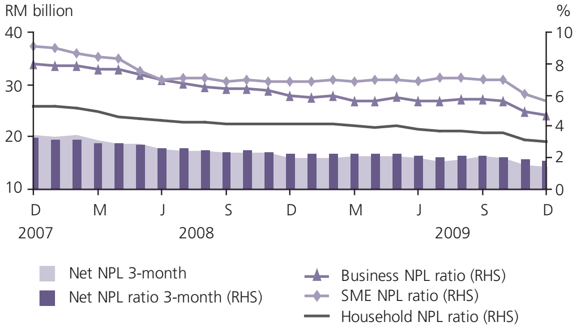
Stable quality of financing and investment assets coupled with high provisions enabled financial institutions to maintain sound capital buffers

As a key lesson learnt from the Asian financial crisis, Malaysian banks have placed strong emphasis on enhancing risk management infrastructure and practices as well as credit risk assessment processes over the years. The costs of such enhancements are far from negligible, but these investments have yielded strong returns especially in enabling the banks to manage unanticipated shocks to the operations. The earlier expectations of a potential increase in the level of delinquencies of households and businesses, given the slowdown in the domestic economy, did not materialise. In fact, the level of NPLs continued to improve, driven largely by recoveries and continued loan write-offs. It was also attributable to the recovery in economic conditions in the fourth quarter of 2009, coupled with stable and resilient residential property prices and strong accumulated financial buffers of borrowers, as well as strengthened underwriting practices and enhanced credit risk management infrastructure.

The approach by banks in engaging with such borrowers early and providing debt management solutions and advice, such as restructuring and rescheduling of financial obligations, helped to contain the level of new delinquencies that could have been higher in business cycle downturns. At the same time, supervisory assessments were also conducted on-site to ensure that banks continue to adopt robust and prudent restructuring and rescheduling policies instead of merely "evergreening" distressed loans. The response of the banks, contrary to the approach adopted during the Asian financial crisis, not only avoided premature failures of viable businesses but also ensured that these borrowers continued to have access to sufficient funds to keep the businesses in operation. Consequently, new loans classified as non-performing in 2009 only increased marginally by 5.5% or RM27.6 billion. Loans-in-arrears for one to less than three months only increased slightly by 5.5% to account for 4.8% of gross loans.

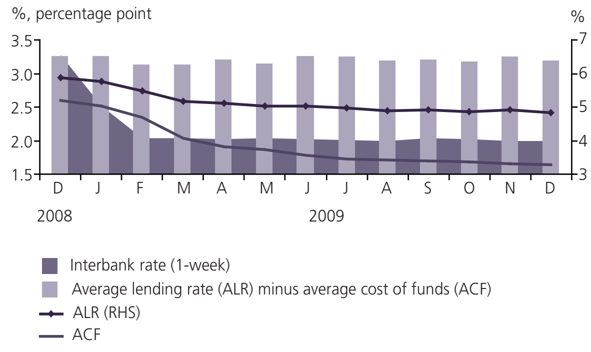
As a result, the downward trend in the level of NPLs was sustained through most of the year. The gross NPLs of the banking system declined by 18% to RM28.7 billion as at end-2009. Consequently, the gross NPL ratio improved to 3.7% (2008: 4.8%) with the ratios for large businesses, SMEs and households declining to 4.1%, 5.7% and 3.1% respectively. Years of strengthened financial capacity and profitability of banks have contributed to high levels of provisions, alongside active balance sheet management via disposal of NPLs to asset management companies and prudent write-offs of impaired loans during the year. The level of gross NPLs, inclusive of loan write-offs of RM8.8 billion, would still record a decline of 14.5% in 2009. The more stringent provisioning policies by banking institutions, particularly those for the legacy loans, contributed to a high level of loan loss coverage ratio of 95.3% as at end-2009. As a result, the level of net NPLs declined by 12.8% to RM13.9 billion, or 1.8% of total net loans (2008: 2.2%) (Chart 1.48).

Chart 1.48
Banking System: NPL Level and Ratio



Source: Bank Negara Malaysia

Chart 1.49
Movements in Interbank Rate, Average Lending Rate and Average Cost of Funds

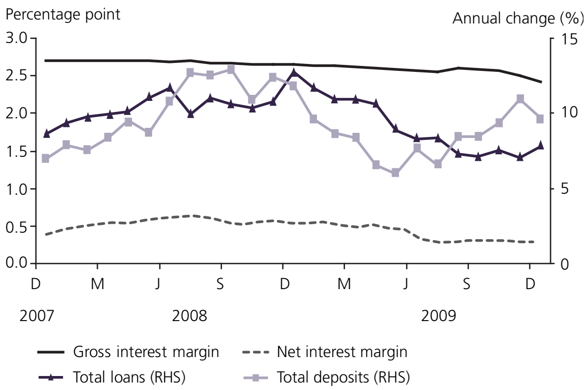


Source: Bank Negara Malaysia

Profitability mainly affected by slower pace in demand and increased competitive pressures

The conventional and Islamic banking systems faced significant downward pressures on profitability, particularly in the first half of 2009, as financial market sentiments were dampened and demand for financing and financial services, particularly from businesses, remained subdued during the period. The increased competition in the financing markets, particularly the retail-based segments continued to pose challenges to banks in sustaining revenue growth of the financing portfolios. While the impact of reduction in the OPR on financing income was partially offset by the adjustment in deposit rates, moderation in the volume of financing caused gross interest margin to narrow to 2.52 percentage points (2008: 2.64 percentage points) (Chart 1.49 and Chart 1.50). The lower volume of financing and higher interest expense also led to lower net interest income (-3.9%) for the commercial banks resulting in a decline in profit before tax (PBT) for the first time since 2001. The profit performance was also affected by a significant one-off impairment provision on valuation losses for the overseas investment of one bank. The unaudited PBT of the overall banking system declined by 11.3% to RM17 billion, with returns on average equity and assets of 13.9% and 1.2% respectively. Excluding this non-recurring item, the banking system unaudited PBT recorded an increase of 3.2% (Chart 1.51).

Chart 1.50
Banking System: Movement in Gross and Net Interest Margins



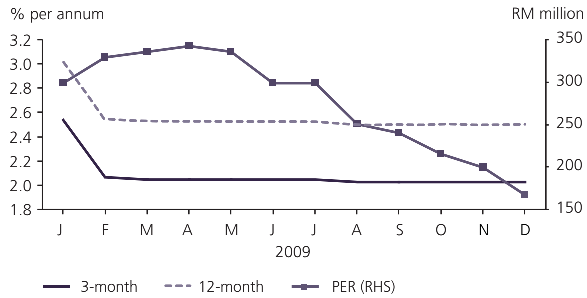
Source: Bank Negara Malaysia

The net financing income of the Islamic banks grew strongly by 43% during the year, partly benefiting from the larger fixed-rate financing portfolio. While the level of displaced commercial risk for Islamic banks moderated following the reductions in the OPR and rates offered on conventional deposits, the level of profit equalisation reserves (PER) continued to decline (Chart 1.52). The decline corresponded with the Islamic banks' strategy to preserve returns competitiveness offered to depositors by drawing down on the PER to partly cushion the effects of the lower revenue generated from trading portfolio and the higher financing loss provisions, especially for the more newly established Islamic banking subsidiaries. The more prudent provisioning practices on the back of softened economic

Chart 1.51
Banking System: Composition of Income

Source: Bank Negara Malaysia

Chart 1.52
Banking System: Movement in PER and Average Quoted FD Rates



Source: Bank Negara Malaysia

conditions, contributed to an increase of 17.2% in net loan loss provisions during the year. This contributed to the decline in the net financing margin of the banking system to 0.45 percentage points (2008: 0.47 percentage points).

The recovery in demand for financing in the second half of the year led to an increase in fee-based revenue from financing-related services, such as loan syndications and provision of commitment and guarantee lines. Although funding conditions in the corporate debt markets revived during the year, particularly for the higher-rated papers, revenue from underwriting and corporate advisory services remained subdued for most parts of the year before bouncing back in the fourth quarter of 2009. Revenue from portfolio management and brokerage activities also improved accordingly towards the latter part of the year. This resulted in a growth of 6.3% of total revenue from fee- and commission-based activities to amount to RM7.9 billion.

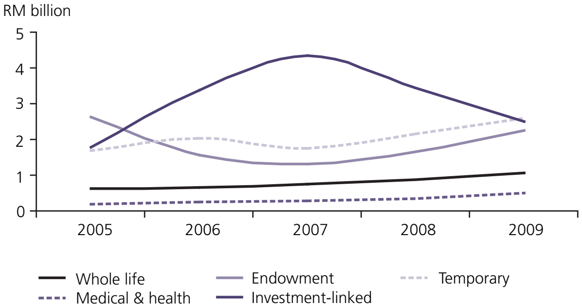
Consequently, the gross operating profit (net of provisions and excluding the one-off large impairment provision of overseas investment) of the banking system remained almost unchanged at RM12.3 billion. The sustained profitability of the banking system can be attributed to the enhanced operational capacities and business strategies, as the global financial crisis inflicted minimal impact on the domestic entities. While overhead expenses remained stable during the year, the growth in operating profits was moderated by the higher staff-related expenditures which grew by 5.3% as a result of intense competition to attract and retain a pool of talented and experienced employees in the financial industry. As a result, the cost-to-income ratio of the banking system increased to 48.4% (2008: 46.4%) and average staff cost per employee was higher at RM86,037 (2008: RM82,624) as at end-2009. Despite the higher costs, the productivity level of the banking system remained stable as measured by the PBT generated per employee of RM172,972.

The more challenging external conditions posed limited concerns on the performance of overseas investments of the Malaysian domestic banking groups. This was attributed mainly to the manageable impact of the global crisis on the regional economies, and the sooner-than-expected recovery in most Asian economies where the Malaysian banks operate. Overall, the overseas operations of the six domestic banking groups, with significant operations in regional economies such as Singapore, Indonesia, Hong Kong SAR and Cambodia, generated returns which contributed to approximately 16.7% of total group PBT.

The more volatile financial market conditions in the first half of the year also affected the insurance industry, particularly the life and family takaful businesses. Investment returns of the sector were affected by higher losses from disposal of assets and unrealised capital losses, particularly in the first half of 2009. As equity market rebounded in the latter half of the year, the insurance and takaful industry recorded improved profitability that offset the challenges faced from the lower returns on the fixed income portfolio. Please refer to the box article on "Life Insurers: Strategies in a Low Interest Rate Environment" for details on the responses of life insurers and takaful operators in managing the challenges associated with the low interest rate environment.

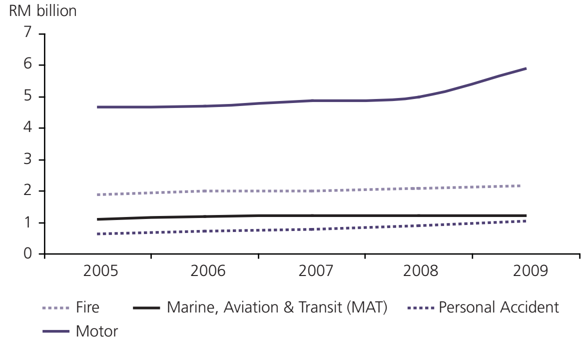
Total net premiums of the insurance industry grew by 8.2%. This was achieved following the more favourable growth of 12% in gross direct premiums under sustained operating costs. New business premiums for life and family takaful businesses recorded an increase of 5.4% to amount to RM9.9 billion (2008: RM9.4 billion) driven by the growth in ordinary life products of 23.9%. The strong increase in the traditional business segment mitigated the softer demand for investment-linked products (Chart 1.53). The revival of the FBM KLCI performance led to higher investment income and unrealised capital gains, which contributed to 25.2% of total income of the industry. This, in turn, translated into 40% improvement in the excess of income over outgo for life insurance and family takaful businesses to RM12.3 billion in 2009 (2008: RM8.8 billion). Driven by growth in fire and motor businesses, gross direct premium for the general business (including general takaful) rose by 12% to RM12.8 billion with broad-based increases in demand for general coverage, with the exception of the marine, aviation and transit business, contractors' all risks and engineering sectors which were affected by the business environment (Chart 1.54). Operating profit of the general segment for 2009 improved 169.5% to RM2.2 billion driven mainly by the exceptionally higher capital gains totalling RM470.9 million (2008: RM175.1 million) and lower claims ratio of 60.8% (2008: 62%) (Chart 1.55).

Chart 1.53
New Business Premiums/Contributions for Life Insurance and Family Takaful



Source: Bank Negara Malaysia

Chart 1.54
Gross Direct Premiums/Contributions for General Insurance and General Takaful Business



Source: Bank Negara Malaysia

Life Insurers: Strategies in a Low Interest Rate Environment

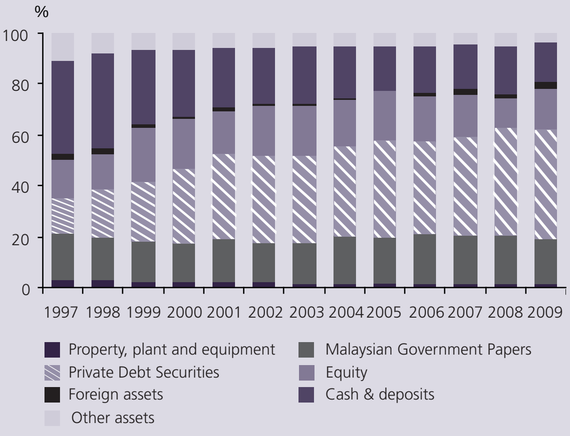
The long-term nature of the life insurance and family takaful business necessitates a long-term view on investment strategy. The apparent mismatch between the long-tailed insurance liabilities and obligations as opposed to the shorter tenures of the insurance fund assets presents an inherent challenge for players in the industry. Specifically, a long period of low interest rates in an environment of weak and bearish equity market will have medium-term implications on performance and capital accumulation of life insurers and family takaful operators (subsequent reference to life insurers include family takaful operators). Such an environment is challenging to life insurers in managing the assets and liabilities. These issues are exacerbated by policy holders' expectations on minimum returns on insurance and takaful policies. This article examines the responses of the life insurers in managing the challenges that surfaced during the low interest rate environment experienced in this recent decade, and in managing the expectations of the policy holders.

Sustaining returns through responsive investment strategy

An active portfolio rebalancing accords insurers with greater flexibility to restrategise and reallocate assets in response to changes in the market environment. The dynamics of this process enhance the value of the insurance fund assets and returns on the investment portfolio, hence benefiting the policy holders. While investment in debt securities has consistently dominated the asset portfolio given the nature of the insurance obligations, insurers have continuously re-balanced the composition of the fund assets over the recent 10 years in order to maintain the total returns on investments and thus the ability to meet the expectations of policy holders.

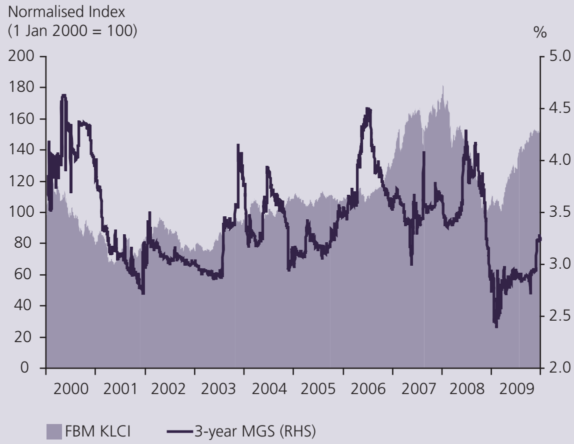
The Overnight Policy Rate was maintained at 3.5% since 1998 to support the recovery and subsequently sustaining the growth of the domestic economy. The rally in the equity market during this period nonetheless provided some cushion to the low returns from investment in bonds. In particular, improved investment conditions between the period of 2003 and 2007 resulted in the domestic equity market to rebound and bond yields to trend upwards. There were nonetheless a few exceptions, i.e. the period following the technology bubble bust earlier in the decade and in 2008 following the global financial crisis, which caused equity prices and bond yields to decline. Investment in equities during these periods were reduced, with higher allocation towards fixed income investments.

Chart 1
Life Insurers' Asset Allocation from 1997-2009



Source: Bank Negara Malaysia

Chart 2
Trends in FBM KLCI and MGS Yield



Source: Bloomberg

Managing duration mismatch through product and pricing strategy

The generally long-term nature of insurance liabilities vis-à-vis the available range of assets and investments raises the issue of negative duration mismatch. The effect of asset-liability duration mismatch is amplified when interest rates are low, as the value of liabilities increases more than the value of the fund assets. This affects life insurers in varying degrees and substantial impact will be experienced by those with larger duration gaps between assets and liabilities. Those with a higher composition of traditional life products, such as 20- to 30-year whole life products, are likely to experience greater pressures in managing the duration mismatch. As at end-2009, the amount of insurance liabilities of life insurers stood at RM120.3 billion. Of this amount, more than 70% of the insurance liabilities have maturities beyond 10 years. In terms of the asset portfolio, only 12% are in the form of debt securities with maturities exceeding 10 years. The large gap in the duration of assets and liabilities partly reflects the limited availability of long-term assets with reasonable returns which is further exacerbated by the intense competition for these assets from other institutional investors. The difficulty in obtaining assets with similar profiles that match the liability cash flows also exposes life insurers to reinvestment risk in an environment of declining interest rates and a bearish equity market. These challenges have heightened the criticality for a more responsive management of the duration gap by life insurers.

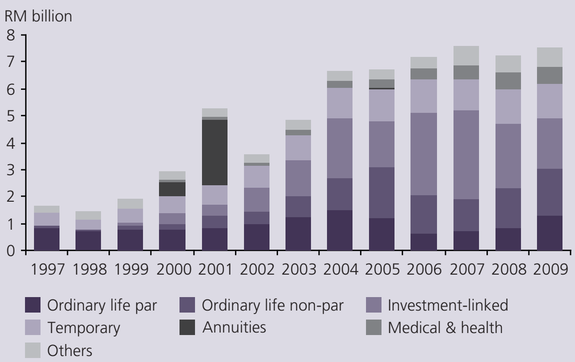
Chart 3
Example of Life Insurers' Asset & Liability Cash Flow Projection

Source: Eckler Partners Ltd.

Shifts in product strategy can alter the magnitude of the duration mismatch and facilitate better management of the duration gap. Growing demands for wealth management products with protection elements and increasing concerns over health issues by the general public have provided the natural transition towards product rebalancing strategy by insurers.

The recent decade has also witnessed the shift from participating life products (where surpluses are distributable to policy holders in the form of pre-specified bonus or dividend payments) to non-participating products. In addition, underwriting of shorter-term investment-linked products with a bank or a third party capital guarantee that capitalised on the strong equity performance during this period also gained momentum since 1999 and, in the more recent period, the growth in medical and health products. Nevertheless, life insurers need to strive to have a fair mix of traditional and investment-linked products in their portfolios in order to provide the flexibility to suit different macroeconomic conditions. From a survey conducted on a sample of life insurers, changes in the product composition have resulted in a more balanced product mix as the size of the duration gap for ordinary non-participating products is 6.6 years while the duration gap for ordinary participating product is 6.8 years.

Chart 4
Distribution of New Business Premiums for Direct Insurers



Source: Bank Negara Malaysia

At the same time, these developments have paved the way for new business opportunities for the life insurance industry. Changes in the product mix strategy were also complemented with revision to the pricing structure to better reflect expectations on the future risks and returns, taking into account the structural, financial and demographic changes going forward.

Managing policy holders' expectations

The lower returns on fund assets than that expected by the policy holders present another key challenge for the life insurance industry, particularly for participating products. While the bonus payments or dividend level is not guaranteed, managing the expectations of policy holders is imperative. A well-balanced and appropriately formulated communication strategy that aims to create a better understanding and awareness among the policy holders will avert unnecessary adverse perception on the credibility and resiliency of the insurance players. Managing these expectations is more demanding for participating products underwritten at times when financial market conditions were indeed very favourable and economic growth was strong. The lower total returns experienced during certain periods over the recent decade, and particularly in the recent years, have constrained the ability of a small number of life insurers to maintain the expected bonus rates to policy holders, resulting in the reduction of bonus payments. Mindful of the expectations, the Bank has put in place minimum requirements that must be observed before bonus cuts can be made. This includes a rigorous evaluation by the Appointed Actuary that a bonus cut is an appropriate strategy to preserve the stability of the institution. In addition, detailed assessment on the marketing literature and sales methods will be performed to ensure that the institution has a valid legal basis to undertake the bonus cut i.e. the projected cash bonuses contained in the sales illustration do not tantamount to a contractual obligation on the part of the institution. Reduction in bonuses will also be conducted over a period of time to avoid a sudden and substantial decline in returns to policy holders. Reduction in the bonus payments is also communicated early to the policy holders to provide lead time for the policy holders to make preparations or adjustments to the policies owned. Early notice will enable policy holders to understand the effect of premature termination of policies should they choose to do so and thus allow policy holders to make informed decisions.

Chart 5
Life Insurers: Investment Yield

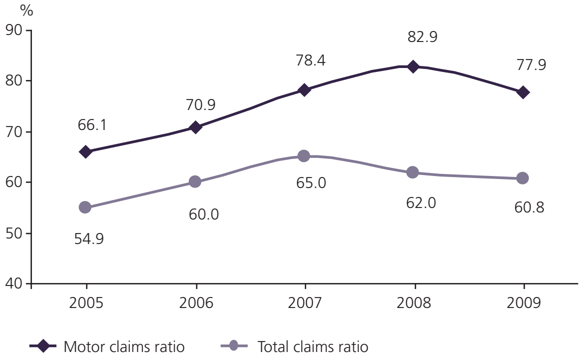
Source: Bank Negara Malaysia

Conclusion

Life insurers have performed considerably well in managing and responding to the challenges of the low interest rate environment. Progress in risk management infrastructure and capability has been fundamental in building the capacity in managing the structural challenges and vulnerabilities facing the industry. It is envisaged that efforts would continue to be devoted towards further strengthening the risk management and investment capability of the industry with specific emphasis on the management of assets and liabilities. The industry is expected to continuously evolve to remain adaptable and responsive to the business and operational challenges faced in different environments and business cycles. As the industry fulfills the needs of the general public, insurance products such as shorter-term endowment, investment and wealth management, as well as medical and health products, are likely to gain greater prominence without crowding out the traditional products, going forward. This direction has the twin benefits of narrowing the duration gap whilst increasing the level of insurance penetration in the country. The use of hedging solutions such as derivative instruments will also contribute towards the improved management of the duration gap either by lengthening the duration of the assets or shortening the duration of the liabilities.

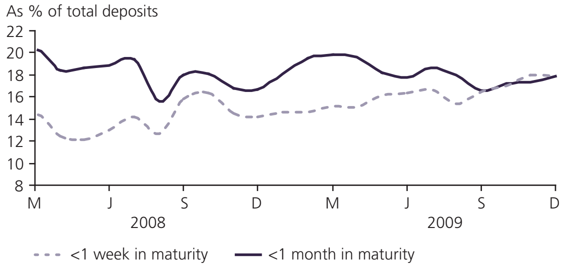
In addition to strengthening the risk management capability, greater expectations will continue to be accorded to the capacity of life insurers in managing financial shocks. These include prudent management of surpluses, accumulation of financial buffers and availability of liquidity to meet unexpected increase in obligations arising from policy surrenders and benefit payments.

Chart 1.55
General Insurance and General Takaful Businesses: Claims Ratios



Source: Bank Negara Malaysia

Chart 1.56
Banking System: Liquidity Buffer



Source: Bank Negara Malaysia

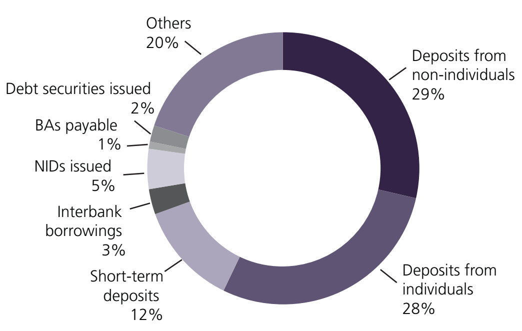
Domestic liquidity remained abundant

The Malaysian financial system remained largely unscathed by the global financial crisis and insulated from systemic liquidity and funding pressures. Ringgit liquidity in the financial system continued to remain ample throughout the global deleveraging process. As at end-2009, the Malaysian banking system maintained strong liquidity buffers of 17.9% of deposits for liquidity needs maturing in less than one month (Chart 1.56). This translated into projected surplus of RM162.5 billion (Table 1.4). The ample liquidity position continued to place the Malaysian banks in a net lender position in the domestic interbank markets, with excess liquidity of RM174.7 billion placed with the Bank. Two factors contributed to the continued strong liquidity position exhibited by the Malaysian banks: (i) robust liquidity risk management by banks, supported by rigorous supervision by the Bank; and (ii) sound funding structure which is predominantly deposit-based (Chart 1.57). The strength of the banking system's liquidity position is reinforced by its holdings of high quality liquid assets, where approximately 73% of the industry's liquefiable assets comprised MGS (Chart 1.58). Likewise, insurers have mainly invested in investment grade corporate bonds and MGS to reduce risk charges imposed in the RBC Framework, and to ensure the availability of adequate high quality liquidity buffers in the investment books (Chart 1.59). Further details of the banks' funding structure are discussed in the box article "Diversity and Stability of the Funding Structure of the Malaysian Banking System".

The effects of the global tightening of US dollar liquidity in 2008 led the Malaysian banks to adjust the US dollar-denominated exposures. This was aimed at narrowing the prevailing negative US dollar liquidity mismatch during the period, which comprised mainly direct lending and foreign currency swaps (Chart 1.60). The narrowing of the banking system's US dollar short position continued in 2009, resulting in a very small negative mismatch position by the end of the year. Concerns relating to US dollar liquidity mismatch remained limited, supported by the Bank's commitment and capacity to provide adequate US dollar liquidity, particularly to facilitate trade-related activities.

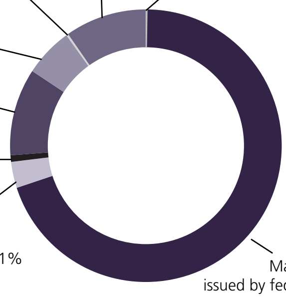
Assessment on the liquidity strength was reinforced by on-going scenario-based tests adopted as part of banks' liquidity risk management and the Bank's liquidity risk supervision. Generally, these tests took into

Chart 1.57
Banking System: Key Sources of Funding



Source: Bank Negara Malaysia

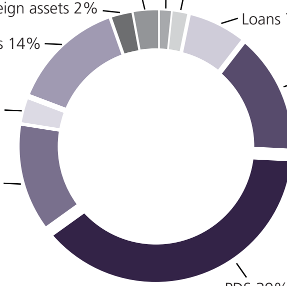
Chart 1.58
Key Components of Liquid Assets



[1] RM corporate bonds with > AAA/P1/MARC1 rating
[2] NIDs issued by > AA/P2/MARC2 rated institutions

Source: Bank Negara Malaysia

Chart 1.59
Composition of Insurance and Takaful Industry Assets



Source: Bank Negara Malaysia

account the potential strains on the liquidity position of the banks arising from market-wide and institution-specific events. The risks of potential heightened risk aversion and counterparty concerns, particularly among the interbank players, were limited given the improved market sentiments and the low reliance of the Malaysian banks on interbank funding. The two-year period of blanket guarantee on deposits by the Government has reinforced further the stability in deposit movements within the banking sector. In preparation for the expiry of the blanket guarantee on deposits, a Tripartite Working Group between Hong Kong Monetary Authority, Monetary Authority of Singapore and the Bank has been established during the year to map out a coordinated strategy for the exit. Given the close inter-linkages of the financial systems in Hong Kong SAR, Singapore and Malaysia, a coordinated approach is highly critical to ensure minimal impact on overall financial stability and depositors' interest post upliftment of the blanket guarantee.

More active management of market risk exposures by financial institutions

The Malaysian banks intensified efforts in managing market risk exposures given the volatile market conditions and heightened risk aversion in the first few months of 2009 (Chart 1.61). Net trading and investment gains posted an overall growth of 39.7% for the year to account for 13% of total income (2008: 9.6%). Extending its trend from 2008, the trading portfolio of the banking system downsized further by 23.7% for the first seven months of 2009 before recovering in the remaining months of the year

Table 1.4
Banking System: Liquidity Projection as at 31 December 2009

	Cumulative mismatch (RM billion)		Buffer as % of total deposits	
	≤1 week[1]	≤1 month	≤1 week[1]	≤1 month
Commercial banks	119.1	122.8	16.2	16.7
Islamic banks	33.9	30.9	22.2	20.2
Investment banks	9.4	8.8	45.9	43.1
Banking system	162.4	162.5	17.9	17.9

[1] ≤3 days bucket for investment banks
Note: Numbers may not necessarily add up due to rounding

Source: Bank Negara Malaysia

Diversity and Stability of the Funding Structure of the Malaysian Banking System

The significance of maintaining stable funding sources and strong balance sheet liquidity has long been recognised in Malaysia. This reflects the maturity transformation nature of banking business and its intermediation role in the economy as well as the experience of banking institutions during the Asian financial crisis. The risk of an over-reliance on wholesale funding was clearly demonstrated during the global financial turmoil. The liquidity management framework for banking institutions that has been progressively enhanced since 1998 has created greater recognition of the need for diversified funding structure, forward-looking assessment and robust management of short-to medium-term liquidity needs and availability. More than a decade after the financial crisis in the late 1990s, the Malaysian banking institutions are well-positioned to effectively mitigate inherent vulnerability to liquidity mismatches through robust liquidity management infrastructure and practices.

This article presents the state and key characteristics of the funding structure of Malaysian banking system that contribute to its overall resilience over the years.

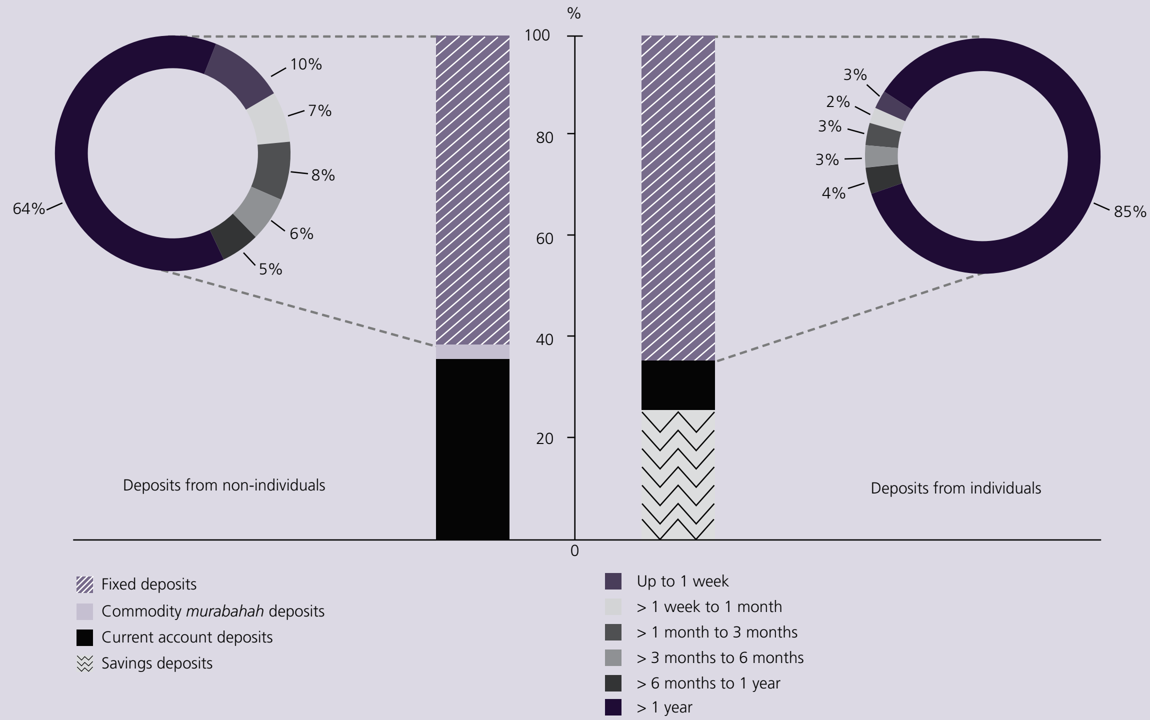
Stable deposit-based funding structure

Customer deposits represent the single largest source of funds for banking institutions, accounting for more than 65% of banking system liabilities and 73% of total funding. This reflects the savings culture of Malaysians (gross private and public savings accounted for 31.3% of Gross National Income) and the extensive outreach of financial services to the population. These deposits, which registered a compounded annual growth of 8.5% over the past decade, are mobilised to finance real sector activities and continued to support domestic loan growth (ratio of loans-to-deposits averaged around 87.6% since 1997). The deposit components are fairly distributed between retail and business (35.7% and 37.1% of total deposits respectively as at end-2009) thereby providing diversity and stability to depository funding across the different types of banking institutions. Moreover, fixed deposits constituted 62.4% of total deposits accepted from individuals and businesses, with 74% of these fixed deposits having more than 1 year maturity (Chart 1). Almost half of the deposits placed in Islamic banks comprised General Investment Accounts (GIA). These Islamic instruments are rather stable in nature with analogous characteristics to fixed deposits offered by conventional banks. Although GIA is a type of Islamic profit sharing investment product, the expectations on the recourse of claims on the losses of such investments tend to fall on the deposit-taking institution instead of the investment holders that have no influence on the investment strategy of the funds.

Unlike investment banks in advanced economies that are reliant on market-based and wholesale funding, investment banks in Malaysia have direct access to large corporate deposits with a minimum threshold of RM500,000 and are therefore subject to similar regulatory requirements as the commercial banks. Corporate deposits constituted 46.2% of total funding of investment banks as at December 2009. As these deposits have higher sensitivity to returns and corporate depositors are relatively more sophisticated in the assessment of counterparty risks, corporate placements are inherently more volatile compared to smaller retail deposits and transactional accounts. However, empirical data suggests that corporate deposits have historically been fairly stable and not as volatile as money market funds. In the more recent period, the temporary government deposit guarantee that was put in place in October 2008 has further moderated the volatility of such deposits, hence ensuring greater funding stability for banking institutions.

In addition, the presence of regulatory framework and internal policies for overseas investments by residents ensure that large shifts of wholesale deposits sourced from non-financial corporations, governments and public sector enterprises are unlikely to occur in a fully-synchronised manner. Although such regulatory requirements have been progressively liberalised over time, prudential or internal limits are still applied on the size of foreign currency assets held by institutional funds such as insurers. In addition, some of these institutional funds such as the Employees Provident Fund and Kumpulan Wang Persaraan (retirement fund for government employees) are used to mobilise large portions of household savings through mandatory

Chart 1
Composition of Banking System Deposits and the Behavioural Maturity Profile of Fixed Deposits



Note: Fixed deposits include General Investment Accounts and Specific Investment Accounts

Source: Bank Negara Malaysia

savings programmes, hence making such funds less volatile in nature. Meanwhile, businesses with limited international trading activity may choose to hold assets only in local currency in order to avoid bearing foreign exchange risk.

Limited risk of contagion due to low reliance on interbank funding and securitisation
Drawing from the lessons of the Asian financial crisis, banking institutions are now more cautious in over-relying on interbank and other market-based funding (includes securitisation, bankers' acceptances, negotiable instruments of deposits and debt securities issued). This form of funding constituted between 10-16% of total liabilities over the past decade. Partly due to the ample liquidity environment and strong growth in savings and deposits, banking institutions also have low reliance on securitisation as a funding source. The domestic securitisation market is mostly driven by Cagamas Berhad from housing loans purchased from financial institutions and the government (employees housing loans). The recent global turmoil also underscored the damaging effects of counterparty concerns on funding and liquidity risks positions. On the domestic front, there were no funding shocks that propagated through the interbank money market. Domestic conventional and Islamic money market rates remained fairly stable across all maturities during the recent crisis. This reflected the minimal interbank borrowings including repos which remained under 6% of total banking system liabilities over the past ten years. The decline of liquidity in the commercial paper market and briefly in the corporate bond market was well-contained with no spillover effects onto the rest of the financial system.

In addition, stress test on bilateral interbank linkages that incorporated simultaneous credit shocks (hypothetical defaults on interbank credit exposures) and funding shocks (inability to replace interbank funding from defaulted institution that subsequently triggers the fire sale of assets) demonstrated the limited scope for interbank contagion domestically. Potential domino effects via the credit and funding channels remained minimal and the interbank stress test results show that the RWCR of potentially affected banking institutions remained well above the minimum level under the most severe scenario.

Limited foreign currency liquidity and funding risks

The exposures of the Malaysian banking institutions to foreign currency assets and liabilities, of which approximately more than 70% were USD-denominated, had been on an increasing trend in the recent decade, albeit accounting for less than 15% of total assets (including off-balance sheet exposures in nominal terms). These low exposures minimise foreign currency funding liquidity risk and the potential direct impact of significant exchange rate fluctuations on balance sheet and profitability. Foreign currency liabilities are essentially managed via currency swaps, interbank market and foreign currency deposits. The dynamic management of liquidity was clearly demonstrated by the swift actions of banking institutions in narrowing the negative foreign currency liquidity mismatches during the period of global tightening of US dollar liquidity in late-2008. Moving forward, the funding needs of banks across various currencies are expected to grow in tandem with the regional expansion of domestic banks and the further deepening of domestic foreign exchange market. In anticipation of this direction, management of liquidity risk will be undertaken in accordance to specific currencies as part of the enhancements to the Liquidity Framework. This will contribute towards a more robust management of liquidity risk.

Strong balance sheet liquidity with sizeable holding of liquid assets

Domestic banking institutions maintained strong balance sheet liquidity whereby on aggregate, total liquid assets (comprised Class-1 and Class-2 liquefiable assets[1]) could cover more than 8% of total short-term liabilities at any given month. These unencumbered liquid assets (accounting for 11.5% of total assets as at end-2009) can be easily converted into cash at short notice with minimal transaction costs thus providing temporary relief from potential funding pressures. Investment banks naturally held larger proportion of marketable securities for capital market operations which accounted for 26.2% of short-term liabilities as at end-2009. Although Class-2 liquefiable assets and formal credit lines are recognised as a source of reserve liquidity, the core inventories of banks' liquidity reserves continue to largely consist of Class-1 liquefiable assets which accounted for 74% of total liquid assets as at end-2009. Banking institutions have maintained an average of RM128.8 billion of projected liquidity surplus (based on the behavioural profile of cash flows) since 2006 that was adequate to sustain unexpected withdrawals of 12% of total deposits up to a period of one month. Banking institutions also hold liquid assets denominated in foreign currency that commensurate with the modest foreign currency funding liabilities. This portfolio consists mainly of high-rated sovereign and corporate debt securities and accounted for 7.8% of total foreign currency deposits and interbank borrowings as at end-2009. Furthermore, banking institutions are able to convert the large stock of ringgit liquidity surpluses to meet foreign currency liquidity shortfalls during distressed periods.

In summary, the stable and diversified funding structure of the banking system has contributed to its resilience over the years. The ability of banking system to withstand potential liquidity shocks is also underpinned by regulatory and structural factors that have created strong incentives for banks to manage liquidity risk in a dynamic and effective manner. Moving forward, further enhancements to the regulatory requirements on liquidity risk management will take into account the proposals by the Basel Committee on Banking Supervision. The direct and indirect implications of such new requirements will be thoroughly analysed, with due consideration to the different dynamics and characteristics of domestic structure and markets, risk-taking behaviour and liquidity risk management practices of banking institutions as well as the potential balance sheet and structural adjustments arising from such reforms.

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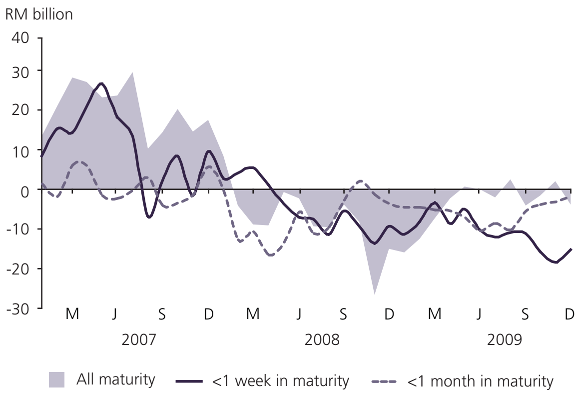
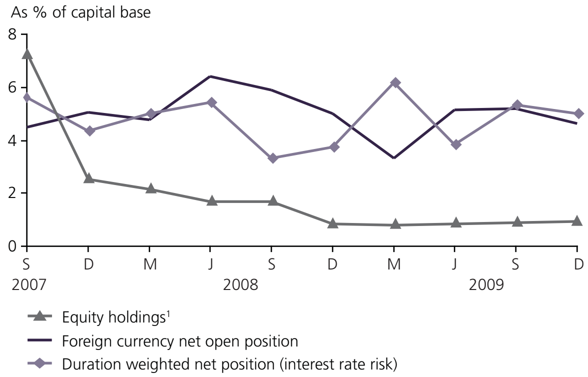
1 Class-1 liquefiable assets include RM marketable securities/papers issued or guaranteed by Federal Government or the Bank, Cagamas bonds (issued before 4 September 2004), RM-denominated bonds issued by Multilateral Development Banks or Multilateral Financial Institutions and ABF Malaysia Bond Index Fund. Class-2 liquefiable assets include highest-rated Bankers' Acceptances, NIDs, RM corporate bonds, residential mortgage-backed securities and undrawn portion of formally available credit lines.

Chart 1.60
Banking System: USD Liquidity Mismatch



Source: Bank Negara Malaysia

Chart 1.61
Banking System: Market Risk Exposures



[1] Amount of investment in quoted shares

Source: Bank Negara Malaysia

as risk aversion abated. The last five months of the year saw trading securities of the banks enlarged by 17.5% to account for 3.3% of banking system assets (2008: 3.9% of total assets). The composition of trading securities was rebalanced towards the higher-rated or 'safer' assets in response to the market conditions. Holdings of government and Bank Negara Malaysia papers accounted for 49.1% of total trading portfolio of the banking system, having expanded by 8.1% in the year. While equity holdings for proprietary trading doubled in the year, these holdings accounted for less than 1% of total capital base and remained well below the level prior to the global financial crisis. The investment portfolios also adjusted likewise, growing 21.9% on account of significant expansion of 58.9% in the overall holdings of MGS.

The level of aggregate net open position narrowed to account for 4.6% of capital base (2008: 5.2%) as banks trimmed the size of foreign currency-denominated exposures due to more active management of the level of US dollar-denominated exposures. The interest rate risk exposures of the banking system remained manageable at 5% of capital base, despite the continued volatility in the bond market in the earlier half of the year and the subsequent shift towards increased holdings of fixed income securities. This was also partly supported by the continued use of derivative instruments to hedge and manage interest rate risk, where the outstanding notional amount of these contracts amounted to RM658.1 billion as at end-2009. The basis risk of the banks levelled out towards the latter half of the year as yield movements between MGS and interest rate swaps stabilised.

Market risk is one of the most prominent risks that insurers and takaful operators face mainly through the investment activities of the fund assets. Similar to the banks, the level of market risk for insurance companies and takaful operators rose in the first half of 2009. A large number of the players experienced lower investment income and also higher investment losses. As market performance recovered in the later part of the year, the life insurers and family takaful operators chalked up unrealised gains totalling RM3.1 billion. The level of equity exposures surged as the FBM KLCI rallied. As insurers undertook portfolio rebalancing exercise, the composition of corporate bonds and equity rose to 38.9% and 13.1% of total assets respectively (2008: 37.3% and 9.5%). The extremely minimal exposures of the Malaysian insurers to structured credit products averted concerns on the liquidity position. The high proportion of high quality investment grade corporate bonds and MGS held lowered the risk charges under the RBC Framework while ensuring the adequacy of liquidity buffers.

Manageable risk of contagion particularly from external counterparties

Foreign counterparty exposures from on-balance sheet and notional amounts of off-balance sheet assets continued to remain limited, at less than 15% of total assets of the banking system. This partly contributed to the low risk of contagion from adverse developments in the external sector on the Malaysian banking system. Earlier concerns over counterparty risks of the locally incorporated foreign banks (LIFBs) subsided by beginning of the year, given the minimal exposures of the LIFBs to foreign counterparties. This was further reinforced by the regulatory framework requiring the operations in Malaysia to be locally incorporated with localised and dedicated shareholders' funds. The Malaysian operations of the foreign banks are also subjected to the same level of rigorous regulation and supervision.

As the concerns in Dubai and some parts of Europe unfolded in 2009, the threat to the domestic banking system remained subdued. Total direct exposures of the banking system (comprising loans and PDS) to the Middle Eastern countries were at less than 10% of capital base, with bulk of the exposures outside the Dubai area. The exposures to the other countries that are confronted with high fiscal deficit, including Portugal, Italy, Ireland, Greece and Spain, only accounted for less than 5% of capital base. The degree of foreign counterparty risk of the insurance and takaful sector was contained by a low level of direct exposures to foreign assets, constituting less than 2% of total assets. The consistently high net retention level of 72.3% for general and general takaful business enabled counterparty reinsurance risks to be kept at manageable level. Majority of the offshore and foreign reinsurers are reputable and strongly rated companies, which further reduced the extent of counterparty risk during this challenging financial climate. Exposures to reinsurance risk as measured by total premiums cessions expanded by 11.1% to RM4.2 billion, to represent 27.7% of total gross premiums. The size of counterparty exposures for reinsurance claims rose to 13% of shareholders' funds.

Outlook for financial stability and focus of surveillance in 2010

The domestic operating conditions are expected to improve as challenges in international economic and financial sectors subside. Nevertheless, downside risks to domestic financial stability stemming from the external environment remain, given the sustainability of the global recovery process which could adversely affect sentiments and create uncertainties. The commitments and strategies undertaken by other economies in managing domestic vulnerabilities have significant implications on maintaining the overall confidence level both globally and nationally. Nonetheless, the sustainability of the global economic recovery remains to be seen as pressures on international financial stability linger. Of significance is the removal of the unconventional support measures that were adopted at the height of the global crisis and withdrawal of fiscal support in many jurisdictions. These measures have been key in spurring the currently observed improvements in global economic and financial conditions. Hence timely, coordinated, transparent and appropriately communicated exit policies would be key in ensuring a smooth transition process that preserves confidence and minimises adverse spillovers that could derail the current path to recovery. In addition, effective and prompt solutions to the sovereign debt concerns are vital to preserve stability in the international financial system so as to avoid widespread indirect implications on confidence levels and the path to global economic strengthening, given the increased inter-linkages and globalisation and in the event such issues failed to be managed.

The signs of an earlier economic recovery in the Asian region have alleviated concerns relating to weaker credit quality and rising delinquencies within the banking system. Nonetheless, the ensuing expected large capital inflows into the region, in particular to the emerging economies amidst ample global liquidity and low interest rates in the advanced economies, will now pose new challenges in managing the potential translation into non-sustainable financial market rallies, as well as speculative build-up in asset prices and financial imbalances. Businesses in Malaysia have accumulated financial buffers and undergone progressive enhancements to operational efficiencies. Nonetheless, any increase in cost of inputs may exert some pressures on cost of production. Segments which have been more dependent on fiscal stimulus during the weakened economic activities period will need to reassess and re-strategise the capacity in order to remain competitive.

The progressive liberalisation of the Malaysian financial sector in tandem with the more sophisticated financing needs of the growing economy will contribute towards developing the industry further moving forward, while increasing our inter-linkages. While the domestic financial system has raised its capacity to absorb the increased competition, it would require a more robust and dynamic management of talent and expert resources by financial institutions. Issues such as attractive compensation packages will need to be balanced with the desired level of productivity. In the pursuit of new business strategies and capturing of new market segments, the institutions need to balance between the medium-term objectives to generate higher income and the longer-term goals to achieve greater sustainability and effectiveness in its financial intermediation role. Similarly, the continued financial innovation and marketing of financial products, such as investment-linked deposits and structured products, have elevated the need to intensify focus on the practices and behaviours of the financial institutions. This will require financial institutions to continue to maintain prudent and responsible market conduct practices and have a more active role in promoting greater financial management and knowledge, particularly on the risks and returns of such products. Financial institutions are also expected to adopt a more inclusive approach and enhanced communication in a rapidly changing environment.

Moving forward, the Malaysian financial system is expected to continue to have adequate buffers to withstand the above external risks and domestic challenges. The banking system capitalisation is expected to remain above 10% under the most challenging and extreme scenario in the stress tests conducted on credit and market risks. These scenarios are based on an unexpected and extreme reversal in regional and global economic growth, coupled with bearish sentiments in the financial markets and conditions that are comparable to the Asian financial crisis. Similar stress tests were also conducted on the insurance and takaful industry where smaller institutions exhibited some vulnerability under severe stress test parameters, particularly for the more fragmented general business sector.

The Bank will continue to ensure the readiness of its supervisory and surveillance capacity in detecting, monitoring and assessing emerging risks and threats to the stability of the Malaysian financial system to ensure timely and appropriate policy responses. With the greater evolution in the domestic financial landscape, the role of intermediation of funds is also increasingly being carried out by other non-bank players and entities that are not under the direct purview of the Bank. On the domestic front, the Bank has enhanced the capacity to extend the outreach of its financial stability surveillance and regulatory framework, where necessary, through enhanced powers in the Central Bank of Malaysia Act 2009. In addition, the Bank has continued to enhance the outreach of its surveillance activities through close engagements with other domestic regulatory authorities, as well as other central banks, monetary authorities and supervisory agencies on the international front.

The Bank continues to strengthen the effective management of the macroprudential, microprudential and monetary policy functions, taking into account the need to carefully assess potential tradeoffs, and will also intensify closer engagement and coordination with other domestic and international regulators, to ensure the highest level of state of readiness in preserving financial stability

The coordination with other regulatory agencies is focused on on-going financial stability surveillance and information sharing, supervisory cooperation, provision of liquidity assistance, as well as crisis management and resolution strategies. Of significance, the Bank also actively contributes and deliberates on issues relating to the global regulatory reforms and financial accounting framework. These include the proposed enhancements to the capital and liquidity requirements by the Basel Committee on Banking Supervision (BCBS) as part of the concerted efforts to strengthen the risk-bearing capacity of financial institutions worldwide. While the Bank recognises the intentions of these proposed enhancements, the Bank has also raised concerns on the potential implications of the proposed regulatory reforms on the behaviour of financial institutions and players, which could in turn result in a transfer of risks to other forms or other segments of the financial system.

The surveillance and supervisory framework in Malaysia will continue to focus on the following key areas in 2010:

- Further enhancements to the macroprudential approach for assessment of risk transmissions both within the financial system and the economy, including the spillovers of potential vulnerabilities of systemically important entities that are not directly regulated by the Bank, and the developments in the external sectors, particularly the Asian region, and global arena;
- More active and efficient use, and development of surveillance tools and methodologies, particularly in the use of scenario analyses and stress tests at the individual institution and system levels to support risk assessments and undertaking of supervisory actions, taking into account the degree of correlation, relationships and potential mitigation or amplification of risk factors between the financial industry players;
- Continued engagement with stakeholders, including regulatees, business and customer associations, the public and other regulatory authorities via effective communication strategies to facilitate early identification of emerging risks in various segments of the industry and the economy in order to enable timely and pre-emptive implementation of measures to manage and mitigate such risks;
- Ensuring continued enhancements to financial institutions' risk management practices are being undertaken to commensurate with changes in risk appetite;
- More active and closer regional and global cooperation and coordination through established multi-lateral platforms and bilateral arrangements, in areas of financial surveillance, information sharing, regulatory reforms and supervisory colleges, as well as a more formal framework for cross-border crisis management and resolution; and
- Understanding and assessing the impact of changes in the regulatory and accounting environment, including the recommendations of the BCBS, on both financial and non-financial institutions, and the regional economies, as well as ensuring that the relevant information and assessments are made known to the industry, domestic financial markets and the general public.

Macroprudential Approach to Financial Surveillance and Regulation in Malaysia

The use of macroprudential regulations is not new in Malaysia. Macroprudential policy instruments (MPIs) have in the past been deployed to manage excesses and imbalances in the financial system and in managing capital flows. The development of the macroprudential surveillance framework gained momentum after the Asian financial crisis which surfaced two fundamental issues: (i) the need for macro-level risk assessment to complement micro-level supervision; and (ii) the need for assessment on cross-institutional and cross-sector risk transmissions.

Considerations for the design and use of MPIs

In Malaysia, the use of MPIs is generally targeted towards achieving the objectives of ensuring financial system resilience and addressing procyclicality (leaning against the financial cycle). These MPIs were mainly directed towards enhancing financial institutions' resilience against business cyclical variations, through the promotion of enhancements to risk management capabilities and the accumulation of financial buffers during upturns (automatic stabilisers). Bank Negara Malaysia has used MPIs to manage destabilising capital flows, the level of credit growth and risk-taking activities, such as to prevent the build-up of asset price bubbles or other imbalances, or to stimulate financing of economic activities during downturns for particular sectors. In choosing between the different types of MPIs, the Bank ensures a balance between a direct and targeted approach vis-à-vis a more indirect approach to manage credit supply. For example, MPIs imposed on the assets side of banks' balance sheets, such as lending controls or loan-to-value ratios would directly interfere with lending strategies of banks, while MPIs such as capital charges on lending to different segments and counterparties would be an indirect approach in influencing credit supply.

The use of MPIs in Malaysia takes into account the balance between costs of prudence and efficiency, as well as to complement monetary and fiscal policies, in order to achieve an effective equilibrium in preserving financial and monetary stability, and preserving the potential for growth. The use of MPIs to address the "cross-sectional dimension" of macroprudential concerns thus far has been limited mainly to capital and liquidity requirements on individual financial institutions for purposes of maintaining institutional, and consequently, systemic resilience. An example is the minimum risk-weighted capital ratio requirement of 8% for all banks. Such an approach could have less equitable outcome as the requirements are not differentiated according to the systemic importance of the institution, and in fact, the costs associated with systemic risk may be socialised without the benefits. Nonetheless, Malaysia has reinforced the framework through the complementary use of measures to address the "time dimension" of macroprudential concerns. This is achieved mainly through the use of counter-cyclical MPIs to limit the costs of financial distress in the contraction phase and restrain the build-up of risks during the expansion phase of the financial cycle. In the recent two decades, while the introduction of MPIs tend to be "discretionary-based" in nature, as the Bank reacted to pre-empt or manage risks to financial system stability, some of these MPIs have been retained over time and modified from its initial form to become more permanent in nature to manage the accumulation of systemic risks, particularly in the segments that are more prone to the build-up of price bubbles and imbalances. The permanency of some of the MPIs is also in response to structural changes and evolution of the financial sector and the economy.

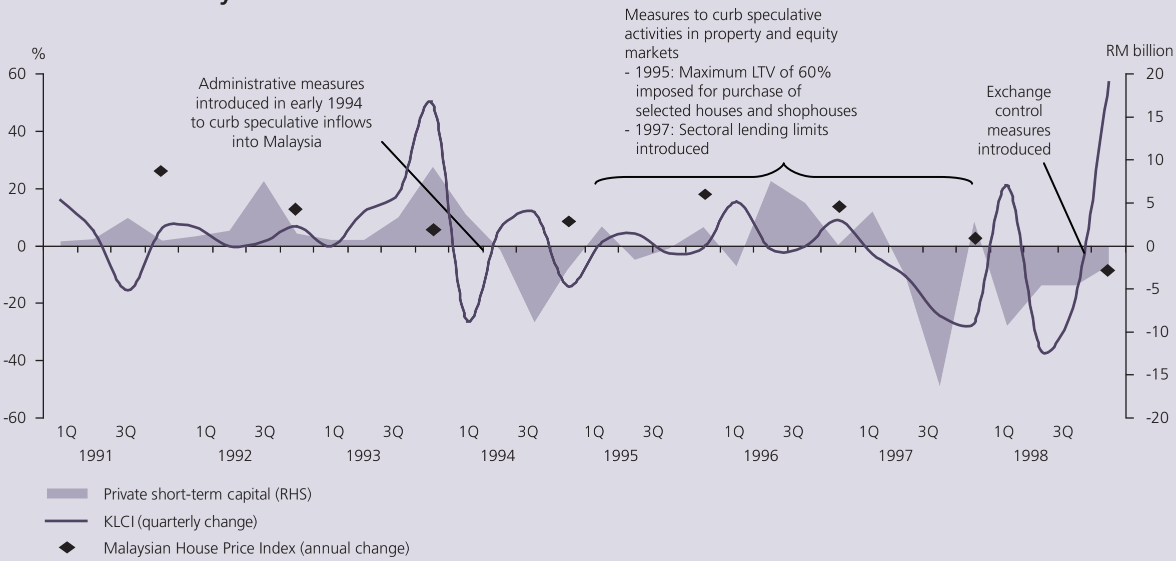
Malaysia's experiences in the deployment of MPIs

Strong economic growth and buoyant stock market activities in early 1990s had induced massive capital inflows into Malaysia. Such externally induced liquidity created upside pressures on prices of financial assets and real estate. To manage the destabilising effects of such short-term flows on the financial sector and economy, a series of macroprudential measures were implemented during the course of 1993. These measures, namely imposition of limits on non-trade related external liability position of banks, prohibition of forward transactions (on the bid side) and non-trade related swaps by commercial banks with foreign customers, restriction on sales of short-term monetary instruments to non-residents, and limitation on purchases of residential property exceeding RM250,000 by non-residents. These measures were all aimed at discouraging large scale inflows of short-term funds into the country and hence, provided some calmness in the financial market. These measures were discretionary and temporary and were removed when conditions returned to desired levels. In 1998, a range of selected exchange control measures were implemented to reduce the internationalisation of the ringgit caused by speculative activities where high interest rates of 20%-40% offered by offshore centres for the ringgit had resulted in outflows from the onshore market and had destabilising impacts on the domestic financial markets.

Between 1994-96, macroprudential measures such as loan-to-value ratio limit on the purchase of non-owner occupied residential properties and tighter conditions on lending extended for the purchase of shares were introduced to curb excessive credit expansion that had fed into asset prices. These measures complemented the use of monetary policy. Increasing interest rates too high during periods of formation of asset bubbles would dampen investments in the productive sectors of the economy. The macroprudential measures were implemented in stages to address the specific issues at hand and to avoid an adjustment in the financial markets.

Subsequently, more stringent requirements were introduced in April 1997 to limit bank lending to finance the purchase of shares, and to finance investments in broad property sector. This was in response to concerns of bank lending contributing to the potential formation of an equity and property price bubble[1], and at the same time the adverse impact of a steep correction in these markets on banking system stability[2]. For each of these areas, limits were imposed on different forms of credit exposures such as loans and financing, guarantees and holdings of corporate debt securities issued to finance activities in the broad property sector and equity market. As these limits were targeted at areas only where concerns of speculative activity existed, certain specific sub-sectors were excluded. These include the construction of low-cost residential properties, the development of infrastructure projects, public utilities and amenities, the purchase and construction of industrial buildings and factories, the purchase of owner-occupied

Chart 1
Use of MPIs in Malaysia



Source: Bloomberg, CEIC, Bank Negara Malaysia and internal computation

1 As at end 1996, the proportion of total outstanding loans allocated to the broad property sector and share markets amounted to 39%. House prices in 1996 rose by 12.9%, while share prices on the Main and Second Boards of the Kuala Lumpur Stock Exchange rose by 24.4% and 93% respectively.

2 In 1997, lending to the broad property sector and lending for the purchase of shares were characterised by high non-performing loan (NPL) ratios of 6.3% and 6.5% respectively. By 1998, these worsened to 14.2% and 23.2% respectively.

residential and commercial properties, and the purchase of land for agricultural and industrial activities. In 1995, limits were also introduced to limit the rapid growth on consumer credit, especially lending for purchase of passenger vehicles. The re-imposition of such limits was based on the success of the measures in moderating previous episodes of soaring hire purchase credits between 1990 and 1993. During this period, growth in credit for motor vehicles slowed down to 7.6% at the end of 1992 from a high of 81% in May 1990.

Following the implementation of the limits, the loans to the broad property sector and for the purchase of shares declined to 22% of total loans as at end-1997 from 39% of total loans as at end-1996. Financing for share financing only grew by RM2.3 billion in the second half of 1997, compared to RM12.2 billion in the preceding half year. Property prices plateaued and the annual growth in the Malaysian House Price Index moderated substantially to 1.9% by end-1997 (1996: 12.9%). This alleviated further build-up in property prices which could have had more damaging effects on the economy following the intensification of the Asian financial crisis in 1998. Subsequently, the crisis resulted in a sharp contraction in overall aggregate demand including speculative activities that led to further contraction in banks' lending and decline in financial asset prices. The limits were introduced as part of a broader package of pre-emptive prudential measures[3] which worked in concert.

The Bank exercises discretion by making appropriate adjustments to the limits where and when necessary, to ensure its continued relevance and effectiveness while minimising the potential adverse consequences on the financing of economically productive activities. For example, given that the property overhang situation remained substantial in certain sub-sectors, such as high-end properties and commercial real estate, the provision of credit for these sub-sectors was temporarily prohibited in 1999. The price threshold for residential properties exempted from the lending limits was increased to include properties valued up to RM250,000 (previously RM150,000) to meet growing demand for medium-cost properties in tandem with the higher income levels and house prices. Similarly, the continued pressure in the consumption credit segment led to upward adjustment in the limit in margin of financing for the purchase of passenger vehicles from 75% in 1995 to 70% in 1997.

Continued enhancement of the macroprudential framework in Malaysia

The macroprudential framework in Malaysia has evolved substantially over the years and the strategy adopted has been all-encompassing in terms of the framework and infrastructure development, capability enhancement, governance structure and communication. These changes are aimed at ensuring that the macroprudential framework remains dynamic and relevant in addressing the present and future challenges. More recently, as a by-product of the global financial crisis, international debates on the use of the macroprudential regime to dampen cyclical ``overshooting´´, as well as to assess, manage and mitigate contagion risks from unregulated entities and markets, have also provided new insights into the conduct of the macroprudential policy framework in Malaysia. In relation to this, the Bank places significant emphasis to ensure robust governance structures and processes in the conduct of the framework, including considerations of the relationship between macroprudential functions and monetary policy. The Bank is cognisant of the importance of effective coordination between the macroprudential, microprudential and monetary policy framework to facilitate holistic and comprehensive deliberation of the identified risks and issues, as well as formulation of appropriate policy responses.

In addition, the increasing regionalisation of the financial system also saw greater collaboration and knowledge sharing in efforts to manage macroprudential issues and risk of contagion at the regional level. The Monetary and Financial Stability Committee (MFSC) of the Executives' Meeting of East Asia-Pacific (EMEAP) Central Banks have raised the level of regional cooperation in information exchange and joint monitoring of the impact of the recent global crisis on regional economies. In addition,

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[3] For example, the issuance of guiding principles for banking institutions extending loans to the property sector.

Table 1
Types and use of macroprudential policy instruments in Malaysia

Asset side	Quantity	• **Sectoral lending limits**, or **ceiling on loan growth** to specific sectors (1997: to curb lending to the broad property sector and for the purchase of shares and unit trust funds)
		• **Loan growth targets** (1998-99: stimulate bank lending)
		• **Investment limits** (Islamic banks are subjected to a limit on exposures to property development projects and property investment activities of 25% of eligible capital base)
		• **Loan-to-value (LTV)** or **loan-to-income limits** o 1991: Maximum margin of financing of 75% for purchase of motor vehicles (lifted in 1993) o 1995: Maximum LTV of 60% for the purchase of houses above RM150,000 and shophouses above RM300,000 (not used for own dwelling or conduct of own business) to curb speculative activities o 1995: Maximum margin of financing of 75% for the purchase of passenger cars (1997: 70%)
		• **More stringent loan loss provisioning or collateral valuation rules** for specific types of loan or risk-profiles (e.g. legacy loans, high LTV, etc.)
	Price	• **Controls on lending/financing rates** o Floor rate: to dampen demand for credit or address underpricing under intense competition to capture and retain business market share o Ceiling rate: to influence the supply of credit by restricting lending to high risk customers
Liability side (capital and debt)	Quantity	• **Capital requirements** – e.g. higher capital charges for specific types of loans (by sectors, risk profile, etc.)
		• Under **Pillar 2 of Basel II**, higher capital requirements and other supervisory actions can be undertaken when banking institutions fail to address credit risk concentrations
		• **Funding requirements** (to limit the use of less stable sources of funding e.g. loan-to-deposit ratio limit)
		• **Liquidity requirements** (1998: to increase commercial banks' loanable funds)
	Price	• **Deposit ceiling rate** can be used to constrain financial institutions' ability to fund rapid credit expansion with high deposit rates to attract retail and institutional depositors

the Bank has also fostered closer regional cooperation in the formulation of exit strategies through the establishment of a Tripartite Working Group with the Hong Kong Monetary Authority and the Monetary Authority of Singapore to map out a coordinated strategy for the exit from the full deposit guarantee by the end of 2010.

The effectiveness of the Bank's macroprudential functions was augmented with comprehensive legislative powers with the coming into force of the Central Bank of Malaysia Act 2009 since November 2009. The Act enhances the Bank's capacity to undertake macroprudential surveillance and to act pre-emptively to avert risks to financial stability. Of importance, are the expanded powers to undertake surveillance and resolution on entities that are not regulated by the Bank but are likely to pose threats to financial stability, and powers to engage with and to collaborate with other domestic and international authorities to achieve greater coordination via a more macro approach towards maintaining financial system stability. The Act and other legislations relating to the regulation and supervision of financial institutions also provides the Bank with the powers and flexibilities to instil strong discipline through a robust governance framework to ensure a sufficiently systematic, transparent and accountable policy regime.

Conduct of macroprudential functions within the Bank

There is a dedicated division in the Bank that is accountable for financial stability mandate, with functions distributed across several departments. In 2006, a transformation exercise was undertaken to facilitate a more integrated, holistic and harmonised approach to regulation and supervision and thereby further strengthen the conduct of financial stability within the Bank. This transformation exercise has now yielded positive results. The macroprudential orientation and conduct of surveillance in the Bank was further enhanced with the setting up of the Financial Surveillance Department in late 2006. The department is entrusted to undertake comprehensive and integrated identification of vulnerabilities and the calibration of assessment methodologies via collaborative mechanisms within the Bank and with other domestic regulators to facilitate robust assessment of the risks emanating from domestic and international developments on the overall stability and functioning of the financial system. As part of its overall surveillance framework, the department also works closely with the supervisors to ensure that risk assessment incorporates and integrates both macroprudential and microprudential perspectives.

The reorganisation of the financial stability division of the Bank was also complemented with strengthened governance and processes. Depending on the sources and nature of the emerging threats or issues, macroprudential policy assessment and recommendations can be spearheaded by any of the 10 regulatory and supervisory departments under the financial stability arm of the Bank. These issues will first be deliberated among the departments at a technical level, prior to escalation to the Financial Stability Policy Committee (FSPC) for deliberations and approval where necessary. The FSPC is chaired by the Governor, with membership comprising the Deputy Governors and selected Assistant Governors involved in financial stability functions. With the coming into effect of the Central Bank of Malaysia Act 2009, the role and responsibilities of the FSPC has now been enhanced further in relation to the microprudential and macroprudential framework that is now in place. Specifically, the FSPC also serves as the forum to deliberate and decide on macroprudential policies to address risks to financial system stability, including on microsurveillance responses and on resolution measures. Another enhancement relates to the decision on the imposition of macroprudential measures on any person/institution not regulated by the Bank. The extended powers of the Bank in dealing with emerging risks from outside the Banks' regulatory perimeter, including the resolution powers, are overseen by the Financial Stability Executive Committee (FSEC). The FSEC consists of the Governor, one Deputy Governor and three to five other members appointed by the Minister of Finance upon the recommendation of the Bank's Board of Directors. The FSPC, being the highest level decision making forum in the Bank will also be entrusted with recommendations to the FSEC on matters relating to financial stability, including the provision of liquidity assistance to and resolution of institutions not regulated by the Bank.

The forward-looking approach to surveillance accords an important priority on the development of forward-looking quantitative tools to aid coherent and integrated analysis as part of the macroprudential surveillance framework. In 2007, the Vulnerability Indicator for the Banking Sector was developed to measure the intensity of the banking system distress at a particular point in time. This was followed by the development of Z-score and modified distance to default models in 2008 to assess and forecast the level of credit risk of corporations. On-going efforts are being undertaken to enhance the use of scenario analyses and macro stress testing to facilitate more robust forward-looking assessments. This includes enhancements in assessing the dynamics of interbank linkages, the potential contagion paths and the degree of liquidity spillovers within the banking system.

Focus is also accorded to ensure effective communication of financial stability issues to the various key stakeholders. The conclusions of the Bank's macroprudential analyses are communicated to its various stakeholders through various channels. Since 2007, the Bank has begun to publish an annual Financial Stability and Payment Systems Report that communicates the outcome of its macroprudential risk assessment and to highlight emerging sources of vulnerabilities. The publication seeks to promote greater awareness and understanding of issues relevant to the safeguarding of overall financial system stability, and where appropriate, to induce adjustments in behaviours of financial players and market participants to better manage the build-up of systemic risks. The Report also contains the implementation of risk mitigating measures by the Bank that aim to strengthen the resilience of the system against any threats to its stability.

Development of the Financial Sector

Development of the Financial Sector

Amidst the challenging economic environment, the focus of the Bank in 2009 was to preserve the soundness and integrity of the financial sector, ensure continued access to financing, while forging ahead with longer term initiatives to enhance the capacity and growth potential of the financial sector. New liberalisation measures were introduced in early 2009 to enhance the role of the financial sector as a key enabler, driver and catalyst of economic growth as well as to strengthen Malaysia's economic linkages with other economies.

Preserving financial stability and ensuring continued access to financing

Given the spill-over effects from the global financial crisis, the Bank accorded priority towards easing the strains faced by the corporate and household sectors and putting in place measures to ensure financial stability is preserved at all times.

The Bank took pre-emptive actions to preserve financial stability and ensure continued access to financing

The reduction of the Overnight Policy Rate and the Statutory Reserve Requirement in the early part of 2009 to the lowest levels was part of a series of measures taken by the Bank to lessen the cost of borrowing for consumers to assist them in weathering the challenging business and economic environment. Financial institutions were encouraged to restructure or reschedule loans to assist borrowers, and grant relief on housing loan repayments for borrowers who were affected by retrenchment or reduction in working hours. The Bank also actively facilitated dialogues between the financial institutions and business communities to discuss issues relating to the viability of the industries and address concerns on financing from the financial sector. This was complemented by efforts taken by the Credit Counselling and Debt Management Agency (AKPK) which enhanced its outreach nationwide to provide assistance to individuals with credit problems.

In managing the impact of the economic slowdown on small and medium enterprises (SMEs), the Bank reviewed the eligibility criteria for the Small Debt Resolution Scheme (SDRS) to enable more SMEs with viable businesses to seek assistance to restructure or reschedule their loans. As at end-2009, 684 applications with loans amounting to RM471 million or 78% of total applications received were approved by the SDRS for rescheduling and restructuring. In addition, the Bank established a RM2 billion SME Assistance Guarantee Scheme (SME AGS) in February 2009 to ensure that viable SMEs continue to have adequate access to financing and at lower cost. This scheme utilised an 80% guarantee cover provided by the Credit Guarantee Corporation (CGC), with funding of the loans provided by all commercial and Islamic banks and selected development financial institutions (DFIs). As at end-2009, the RM2 billion SME AGS was fully utilised and assisted 9,415 SMEs in obtaining financing. The role of CGC to assist SMEs was further enhanced by the consolidation of ERF Sdn. Bhd.'s operations into CGC. ERF Sdn. Bhd. was established in 1989 as a one-stop centre to provide financing and advisory services to Bumiputera SMEs. With the consolidation, CGC is now better placed to provide a whole range of financial and advisory services to SMEs. As at end-2009, CGC has granted credit guarantees to support 402,867 SMEs which had outstanding financing of RM44.9 billion.

Complementing the efforts taken by the Bank to provide assistance to SMEs, the Government also established a Working Capital Guarantee Scheme totaling RM7 billion to provide working capital lines to SMEs. An Industry Restructuring Guarantee Scheme totaling RM3 billion was also introduced in 2009 to incentivise companies to restructure their operations towards higher value-added activities and application of green technology. These initiatives reflect the commitment to provide assistance to private companies to weather difficult times, while emphasising on the long-term objective to enhance the efficiency of the private sector. As at end-2009, the Working Capital Guarantee Scheme was fully utilised, assisting 5,329 borrowers. The Industry Restructuring Guarantee Scheme is still available until 31 December 2010 and as at 4 March 2010, 190 borrowers have benefited from this scheme.

Malaysia's Microfinance Framework

Micro enterprises are critical for balanced and sustainable economic growth

Micro enterprises constitute 78.7% of all businesses in Malaysia and employ over 1.2 million employees[1]. More than four-fifths, 87.7%, of micro enterprises are in the services sector, with significant involvement in the retail, food and transportation sub-sectors. Even though these micro enterprises are small, they are agile and able to take advantage of niches that larger firms are not able to undertake effectively.

Financial empowerment through microfinance

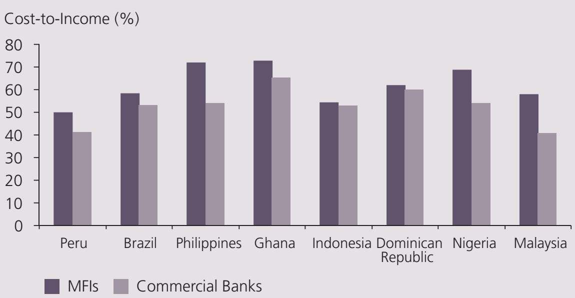
In accessing financing from the formal financial system, the credit history of micro enterprises will be recorded by a recognised credit information system. This enables micro enterprises to build credit histories and credit ratings that opens new opportunities for these enterprises. With good credit ratings, micro enterprises can access further financing for business expansions at better financing rates. Micro entrepreneurs are better served by the formal financial system through the provision of 24-hour electronic banking and payment services which can enhance productivity and efficiency[2], and provision of advisory services such as financial management. Such advisory services are commonly provided by micro financing institutions (MFIs) as part of the complement of financing solutions. Significant resources are allocated by MFIs to help micro enterprises develop business capabilities through training workshops, networking events and business advisory services. This broad range of developmental services have contributed towards enhancing the viability and growth potential of micro entrepreneurs.

Inclusion in the formal financial system also helps to enhance the financial literacy of borrowers. This allows micro entrepreneurs to make more informed financial decisions, thus promoting the more effective utilisation of a broad range of financial products in a safe and responsible manner. Micro businesses will also have access to new services such as micro insurance schemes which provide businesses with additional tools to better manage various risks inherent in the business.

Microfinance is a challenging endeavour

Global experiences show that the cost-to-income ratio of MFIs is higher than those of commercial banks. This is due to the inherent nature of micro financing where the financing amounts are small and customers are geographically dispersed, with many located in rural and underserved areas. Hence, MFIs are required to dedicate more resources to expand outreach to these customers. In order to serve customers well, MFIs need to put in place the procedures and processes that are necessary to accommodate the large volume of small applications and to monitor and facilitate release and repayments of micro financing accounts.

Chart 1
Cost-to-Income Ratio of MFIs and Commercial Banks of Selected Countries



Source: MIX Market Data, The Banker (July 2009), Annual Reports of Central Banks

Sustainable micro financing in Malaysia

Malaysia is recognised for its efforts to enhance access to financing. Among 183 countries, the World Bank has ranked Malaysia as number one in terms of ``Getting Credit´´[3]. As at end

[1] Department of Statistics Malaysia, (2007) ``Census of Establishments and Enterprises 2005"
[2] World Bank, (2005) ``Rural Finance Innovations´´
[3] World Bank, (2009) ``Doing Business 2010´´

2009, there were 449,703 micro finance borrowers in Malaysia with outstanding financing extended amounting to RM2.4 billion given through the formal financial system and government agencies.

Prior to 2006, the micro finance industry players comprised largely of government agencies serving the hardcore poor and the informal financing system. To enhance support for the growth of micro enterprises through improved access to the formal financial system, the National SME Development Council approved a sustainable micro finance framework named *Pembiayaan Mikro* in 2006. The framework identified three strategic initiatives: to define the parameters of an appropriate micro financing product, to raise awareness on micro financing, and to attract the participation of financial institutions in providing micro financing solutions.

With *Pembiayaan Mikro*, micro entrepreneurs now have access to financing which requires no collateral, and applies simple application procedures, minimal documentation and a quick approval and disbursement turnaround to meet the unique financing needs of micro enterprises. Under the *Pembiayaan Mikro* framework, the median approval time is four days and the median disbursement time is three days, significantly quicker than other business financing. To promote broader awareness of the availability and benefits of *Pembiayaan Mikro*, numerous initiatives were implemented including the creation and display of the *Pembiayaan Mikro* logos at premises that offer *Pembiayaan Mikro*, the direct distribution of flyers to more than 397,000 micro enterprises, feature articles in the newspapers and advertisements on television and radio.

Since its launch, the number of participating financial institutions in the *Pembiayaan Mikro* initiative has increased to nine, comprising six banking institutions and three development financial institutions. The active participation of these institutions have expanded access to micro financing through over 1,800 contact points nation wide. Recognising the diverse financial needs of micro enterprises, these financial institutions have adopted different business models and strategies that leverage on the institutional strengths and niches. A number of financial institutions have adopted a mass market model whereby the financial institution provides microfinance products through its existing branch network. Others, like Bank Rakyat, have adopted a cooperative model which provides microfinance to its members. Some have employed the distributor network model, which leverages on the distributive capabilities of strategic business partners. Another is the monoline model with a dedicated microfinance operation, formed with its own distinct branding and processes designed to uniquely appeal to micro enterprises.

Under *Pembiayaan Mikro*, outstanding micro financing of the nine participating financial institutions stood at RM616.5 million involving 57,403 customers as at end 2009. This represented an annual growth of 29.1% and 27.1% respectively. A survey conducted to gauge the performance of micro enterprises after receiving micro financing, showed an increased capacity of micro enterprises to serve new markets and customers. More specifically, the survey found that micro enterprises that received micro financing were able to invest and expand their business capabilities, thereby contributing to an average increase in revenue and employment of about 18.5% p.a. and 10% p.a.[4] respectively.

Moving forward, the microfinance industry is expected to develop further with increased investments in technology and improvements to existing processes which will support an expanded outreach and further efficiency gains. As the micro financing industry grows, both financial institutions and non-bank financial institutions will continue to broaden the range of financial services being offered to include micro-insurance, remittances, Ar-Rahnu pawn-brokering and micro-investment schemes. This, in turn, will contribute towards greater financial inclusion.

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[4] Based on a random survey conducted by participating financial institutions, measuring the increase in revenue and employment 3 years after the micro enterprise receive micro financing

Investor sentiment in the Malaysian bond market was affected as the economic outlook remained weak. Corporations with investment grade ratings were unable to tap the bond market for financing as investors became highly risk averse towards bonds and commercial papers with slightly lower credit ratings. This created difficulties for corporations given that corporates source more than 50% of total financing requirements from the bond market. To preserve confidence in the bond market and ensure that viable corporations continue to have access to financing through the bond market, Danajamin Nasional Berhad (Danajamin) was established as the national financial guarantee insurer in 2009. Danajamin's objective is to provide credit enhancements to corporations with viable businesses and investment grade ratings to raise funds from the bond market at a reasonable cost. Danajamin is governed by strict corporate governance and strong prudential standards to ensure its commercial sustainability over the medium and longer term. As at end-February 2010, Danajamin has approved the applications of three companies from the oil and gas, construction and property, and plantation sectors. Danajamin expects to guarantee RM700 million of bonds to be issued by these companies targeted within the first half of 2010.

As a measure to facilitate debt restructuring of corporations, the Corporate Debt Restructuring Committee (CDRC) recommenced operations in July 2009 with an expanded mandate. CDRC was first established during the Asian financial crisis and had successfully resolved 57 cases. Given the increased dependence of the corporate sector on the bond market for funding, the CDRC framework was expanded to include the restructuring of private debt securities issued by the corporates in the overall restructuring scheme. Since its re-establishment in July 2009 to end-February 2010, the CDRC has received five applications involving debts totalling RM941 million. To enable more companies to seek assistance from CDRC, the eligibility criteria was revised in February 2010. Under the revised criteria, companies with aggregate indebtedness of RM30 million or more with at least two financial creditors became eligible for CDRC assistance. Additionally, companies may be eligible for CDRC assistance if receivers have been appointed but only over certain specified assets and the directors remain in control over the company's operations. The CDRC will also assist listed companies that have been classified as PN17 or GN3 to undertake debt and financial restructuring.

Strengthening institutional capacity and enhancing operational efficiency and effectiveness

While the Malaysian financial sector as a whole is stronger, more efficient and more innovative, the unprecedented nature and scale of the global financial crisis has exerted challenges on the capacity of financial institutions to withstand extreme conditions. Many banking institutions took pre-emptive measures to strengthen capital positions through capital raising exercises and rationalisation of non-core businesses. In 2009, the banking sector as a whole raised approximately RM16.4 billion of capital, which boosted the risk-weighted capital ratio to 14.7% (2008: 12.6%) and the core capital ratio to 13.1% (2008: 10.6%). With stronger capital positions, banking institutions are on a more solid footing to seize opportunities that arise as the economy recovers and global markets stabilise.

In view of the enhanced capacity of the financial institutions, regional expansion was a key focus of selected banking groups that aspire to grow business beyond Malaysia and be regional players. In 2009, two domestic banking groups acquired strategic stakes in foreign financial institutions while two other banking groups ventured into two new countries through the opening of branches. Such ventures provide opportunities for domestic banking groups to penetrate new markets, broaden customer base and build regional franchise. As at end-2009, six domestic banking groups have presence in 19 countries worldwide. The profit contribution from overseas operations of the domestic banking groups accounted for 16.7% of total group profits.

The resilience of the insurance industry is testimony of the structured development of the insurance and takaful industries over the years, spurred by various capacity building initiatives taken by the Bank and the industry. There was significant growth in insurance fund assets and net premium income of both life and general sectors, which stood at RM150.4 billion and RM29.9 billion respectively, in 2009. Similarly, the takaful industry has achieved commendable progress with the takaful fund assets amounting to RM12.4 billion as at end-2009.

Recognising the need for boards of directors of financial institutions to continuously upgrade skills and competencies for the overall enhancement of institutional efficiency and performance, the Financial Institutions Directors' Education (FIDE) programme was established in 2008 to provide a structured programme of continuing education specifically tailored for directors of financial institutions. A total of 131 directors of banking institutions, insurers and takaful operators have completed the core programme. The FIDE programme which has been enhanced in response to evolutions in global management practices and input from participants, will contribute towards building a pool of qualified directors who are able to manage and drive the strategic direction of financial institutions in Malaysia.

Insurance penetration level in Malaysia remains moderate and hence, there are tremendous opportunities for growth for the insurance industry. To enhance the distribution channels of life insurance companies and promote greater insurance penetration, life insurance companies were allowed to freely branch and leverage on the widespread outreach of bank branches to distribute their products through bancassurance arrangements. Over the years, bancassurance has grown to be a key distribution channel for insurance companies, generating 38.2% of new premiums for the life insurance industry. With the flexibility to open new branches and have bancassurance tie-ups with multiple banking institutions, and as evidenced by the bancatakaful experience which was liberalised earlier, the potential for the insurance industry to enhance their revenue base and promote greater insurance penetration nationwide is significantly strengthened.

Enhancing Malaysia's inter-linkages with international economies

Malaysia's financial sector already has a sizeable presence of foreign players which accounts for approximately 20% of market share in the banking sector, and two-thirds market share in the insurance and takaful sector. This has contributed to Malaysia's inter-linkages with the international economies, facilitated the flow of trade and investment, creation of employment opportunities and the development of new financial products and services. To further strengthen the potential of the financial sector as an enabler, driver and catalyst of economic growth and to further enhance Malaysia's inter-linkages with the rest of the world, the Bank forged ahead with a comprehensive liberalisation plan to pursue opportunities that would bring net benefits and contribute to the development of the Malaysian financial sector and the economy as a whole. The liberalisation plan also aims to reinforce Malaysia's position as an international Islamic financial centre. The liberalisation plan announced in 2009 was multi-pronged, focusing on enhancing the role of the conventional and Islamic finance sectors through three broad strategies:

- Issuance of new licences to qualified foreign players that can bring significant value propositions to the financial sector to strengthen its ability to be a key enabler, driver and catalyst of economic growth;
- Increased foreign equity limits in domestic financial institutions to provide greater flexibility to form stronger strategic partnerships that will encourage transfer of expertise and technology, and enhance international linkages and business opportunities; and
- Accord greater operational flexibility to existing locally-incorporated financial institutions for enhancement of the potential to play a more effective intermediation role and widen outreach of products and services to all economic segments, thus promoting financial inclusion.

Malaysia forged ahead with a liberalisation plan aimed at enhancing Malaysia's competitiveness and inter-linkages with international economies

These measures were sequenced in line with the objective of ensuring maximum benefits to Malaysia. Capacity and institutional building efforts will continue to be pursued, complemented by enhancements to the regulatory, supervisory and surveillance framework to ensure financial stability is preserved.

In tandem with the broad liberalisation efforts, the Bank continues to be supportive of regional integration initiatives, promoting strategic partnerships and enhancing collaboration and cooperation efforts with regional economies. A new licence was issued to the largest commercial bank in the People's Republic of

China to establish operations in Malaysia, forging stronger partnerships and relations between both countries. This licence was issued as part of a very limited number of banking licences that Malaysia may consider issuing from time to time under bilateral arrangements. Additionally, the Bank and the People's Bank of China established a 3-year bilateral swap arrangement designed to promote bilateral trade and investment between the two countries. The Bank also entered into a memorandum of understanding (MoU) with the China Banking Regulatory Commission to strengthen cooperation between the two regulatory authorities on banking supervision and in the promotion of regional financial integration. On areas of financial supervision, the Bank is also involved in active negotiations to pursue MoUs with other countries. Such partnerships contribute towards enhancing Malaysia's collaboration and economic and financial inter-linkages within the region.

Enhancing infrastructure for financial market development

Initiatives on financial market development during the year focused on creating a facilitative regulatory environment, enhancing the infrastructure and introducing new products to support the development of deep and vibrant financial markets in Malaysia.

The Bursa Suq Al-Sila is the world's first Shariah-compliant commodity trading platform

The Bursa Suq Al-Sila (formerly known as Commodity *Murabahah* House) was launched in August 2009 as the world's first Shariah-compliant commodity trading platform to facilitate the sale and buy-back of commodities in commodity *murabahah* transactions. The web-based centralised exchange which uses crude palm oil (CPO) as its underlying commodity, serves as a fully Shariah-compliant alternative to other commodities offered through the London Metal Exchange and domestic commodity brokers and is the first internet-based platform in the world. The platform is expected to further enhance the trading of commodities for liquidity purposes between Islamic financial institutions in Malaysia and facilitate cross-border liquidity transactions through a more cost-efficient platform. To promote the development of commodity *murabahah*, selected foreign exchange administration rules were liberalised to facilitate payments between participants. Although Malaysia already has a well-functioning and efficient Islamic interbank market, this platform provides another viable alternative for liquidity management and further enhances global inter-linkages in the international Islamic financial system.

The Principal Dealer framework, first introduced in 1989 as part of the initiatives to develop the primary and secondary public debt securities markets, was reviewed in 2009 and changes were made to the entry requirements, obligations, incentives and assessment of Principal Dealers. In recognition of the increasing importance of Islamic finance and the prominent role played by Islamic banks in money market activities, the revision also paved the way for the introduction of the Islamic Principal Dealer (i-PD) System, thereby allowing Islamic banks to act as Principal Dealers for Islamic debt securities issued by the Government and the Bank. The primary aim of the new Principal Dealer framework is to ensure that banking institutions continued to be incentivised to participate in primary auctions and secondary market trading in order to promote a liquid and deep market.

Growing significance of Islamic finance and Malaysia as an international Islamic financial centre

Despite the challenging economic environment, the continued expansion of Islamic finance has demonstrated its viability and resilience. As at December 2009, the total assets of the Islamic banking sector, including DFIs increased to RM303.3 billion, accounting for 19.6% of the total assets in the banking system. Meanwhile, the takaful industry recorded an increase in market share from 7.7% to 7.9% of the overall insurance sector from 2008 to 2009. During the year, a new retakaful licence was awarded, while two banking institutions and three retakaful institutions were granted approvals to commence International Currency Business Unit operations.

In 2009, the Bank continued its efforts to promote a clear understanding and consistent interpretation of Shariah contracts in Islamic finance. The initiative to develop a comprehensive codification of Shariah contracts known as Shariah Parameters achieved a major milestone, with the first Shariah Parameter on *murabahah* contract issued in 2009. The Shariah Parameter on *murabahah* would serve as a main source of reference for the Islamic financial institutions in developing *murabahah* products and services. As at December 2009, 49.4% of Islamic contracts were structured in the form of *murabahah*, including *Murabahah* Purchase Orderer and *Al-Bai Bithamin Ajil*. The Bank is currently working on and aiming to finalise the Shariah Parameters for the remaining contracts on *ijarah, mudharabah, musharakah, istisna'* and *wadiah* by end-2010. Similar efforts were also made at the regional level with the proposed establishment of *Majma' Kewangan Islam Nusantara* or MAKIN, an association of Shariah scholars to promote mutual recognition on Shariah standards and principles for the ASEAN region.

The Association of Islamic Banking Institutions Malaysia also introduced four standardised agreements based on *wakalah* and *murabahah* for interbank and corporate placements. These agreements comprising standard principles governing such transactions help to eliminate uncertainties and facilitate bilateral negotiations between players. Several Islamic financial institutions from Brunei, Indonesia and the United Kingdom have agreed to adopt the documents for their transactions.

Development of human capital in Islamic finance remains a key priority in positioning Malaysia as a key hub for Islamic finance. The International Centre for Education in Islamic Finance (INCEIF) established by the Bank in March 2006 to enhance the supply of high calibre professionals to support the development of Islamic finance has produced its first batch of Chartered Islamic Finance Professional (CIFP) graduates comprising 32 students in 2009. With a current enrolment of 1,423 students from 64 countries undertaking various programmes ranging from the CIFP, Masters in Islamic Finance and PhD in Islamic Finance, INCEIF has made commendable progress in positioning itself as a key international centre of educational excellence in Islamic finance. As part of the initiatives to support the talent supply in Islamic finance, the Bank, under the Fund for Shariah Scholars in Islamic Finance awarded scholarships amounting to RM3.5 million to 68 students to undertake the CIFP programme on a full-time basis at INCEIF commencing June 2009.

The Bank also focused on strengthening strategic bilateral and multilateral cooperation to promote global partnerships and cross-border business ventures in Islamic finance. In 2009, two MoUs were signed between the Bank and the United Kingdom Trade and Investment (UKTI), as well as with the Hong Kong Monetary Authority (HKMA). The primary objectives of both MoUs are to promote mutual cooperation in the area of Islamic finance, particularly in the development of talent and expertise as well as fostering and strengthening business linkages and infrastructure support. Following the MoU between the Bank and UKTI, a Malaysia-United Kingdom (UK) Islamic Finance Forum was held in July 2009 aimed towards enhancing business interaction in Islamic finance and encouraging two-way investments between the UK and Malaysia. Two private sector-led MoUs building upon the strengthened relationship between Malaysia and the UK was further executed in the year to develop talent and expertise in Islamic finance, between INCEIF and Reading University, and between the Islamic Banking and Finance Centre UK (IBFC), Cardiff University Business School and the Islamic Banking and Finance Institute Malaysia Sdn. Bhd. (IBFIM). These MoUs provide a framework of collaboration in exchanging resources and developing new training programmes in Malaysia and the UK. Towards operationalising the MoU between the Bank and HKMA, the first working level meeting between the Bank and HKMA held in December 2009 focused on capacity building and human capital development in Islamic finance.

The Islamic capital market achieved significant milestones in 2009 with a landmark issuance and listing of USD-denominated sukuk

To further advance Malaysia as an international Islamic financial centre, Malaysia International Islamic Financial Centre (MIFC) promotion activities focused on increasing foreign participation in the Malaysian Islamic financial system including from established financial centres in Europe, Asia and the Middle East. A new long-term brand *Shaping Islamic Finance Together* was introduced to position Malaysia as the intellectual epicentre for Islamic financial activities. *Shaping Islamic Finance Together* is Malaysia's brand proposition to global talents, leading players, investors and issuers to shape the future of Islamic finance together through the MIFC initiative, leveraging on and benefiting from Malaysia's experience of more than 30 years in Islamic finance.

Despite the downturn in the global economy and heightened risk environment, the Islamic capital market achieved significant milestones in 2009 with the landmark issuance of the USD1.5 billion Emas Dollar Sukuk and USD3 billion Emas Dollar Bond by PETRONAS. The Emas Dollar Sukuk was listed concurrently on Bursa Malaysia, Labuan International Finance Exchange and the Luxembourg Stock Exchange. Due to overwhelming response and the growing confidence of investors in sukuk issuances, the papers were oversubscribed by 6.28 times. The listing of the GE Capital Sukuk amounting to USD500 million on Bursa Malaysia also elevated the status of Bursa Malaysia as the world's top exchange in terms of value of sukuk programme listings in 2009. These developments in the sukuk market reinforced Malaysia's position as the centre for sukuk origination and an international Islamic finance centre.

Promoting fair treatment of consumers and strengthening consumer activism

Consumers of financial services have an important role in exerting market discipline on financial institutions, contributing towards the development of an efficient and competitive financial sector. Hence, a key pillar of the Bank's developmental initiatives is to promote fair and equitable market practices by financial institutions and raise the level of financial capability of consumers through consumer education and awareness programmes.

During the year, the Bank enhanced its surveillance over market practices of licensed financial institutions. Thematic examinations focusing on the imposition of fees and charges, credit card promotions, selling of investment-linked and structured products were conducted. On-site visits and calls were undertaken to assess the sales and marketing practices of financial institutions, including the competency of frontline officers in promoting financial products, and to assess the effectiveness of banking institutions in facilitating access to the SME AGS. These activities provided important insights for the Bank to proactively address concerns on the marketing practices of financial institutions. Overall, the intensified market conduct supervision has resulted in improvements in the banking and insurance industries' operational procedures such as procedures in identifying and resolving cases of replacement of policies. Additionally, following the Bank's reviews on advertisements and promotional materials of financial institutions to ensure fair and transparent terms and conditions, 22 incidents of insufficient disclosures in advertisements and promotional materials have been identified and banking institutions were required to rectify these shortcomings or withdraw the advertisements.

On the area of fees and charges, the focus of the Bank's efforts is mainly to ensure that the fees and charges imposed by financial institutions are reasonable and fair to consumers. With improved financial literacy of consumers, there will be greater market discipline exerted on financial institutions to ensure that the fees and charges are commensurate with the product quality and cost of providing such service to consumers.

Towards enhancing consumer awareness and capacity to make informed financial decisions, the comparative tables on fees and charges were expanded to cover electronic funds transfers. Information booklets on how to lodge complaints were issued, as part of the series of information kits issued to provide step-by-step guidance on how to select a suitable financial product that best meets consumers' needs, the rights and responsibilities of consumers as well as the redress mechanisms available to them. The Bank also continued to expand its outreach efforts to a wider segment of the population, including a pilot programme on financial education for deaf children, and consumer education programmes organised during *Minggu Kesedaran Kewangan 2009* in collaboration with the Financial Mediation Bureau, AKPK and the Malaysian Deposit Insurance Corporation (PIDM). Approximately 30,000 consumers attended the programmes organised during the *Minggu Kesedaran Kewangan 2009* which signifies the increased interest by consumers in financial matters. The Bank also published selected *bankinginfo* material in Braille, and AKPK launched the *Celik Wang* book (the Bahasa Malaysia version of Money Sense) that provides guidance to consumers on how to manage money wisely.

Financial Products Transparency and Disclosure

The financial environment is marked by a more competitive financial services sector, increasing access to financial services, broader range of financial products and services, and more complex financial transactions. The proliferation of financial products and services ranging from basic banking services and risk protection products to more sophisticated and complex financial products, including for retirement and asset accumulation, has necessitated enhancements to market conduct practices, including on financial products transparency and disclosure to foster continued public confidence in the financial system.

Mitigating risk to consumers while promoting competition

As consumers grow more affluent and seek financial products and services to enhance and protect their financial well-being, it is important for consumers to have better access to pertinent information to facilitate more informed decision making consistent with consumers' needs, risk tolerance and financial circumstances. With limited financial skills and lack of access to relevant information to fully appreciate the complexities of some financial products, it is difficult for consumers to grasp the true costs and potential risks that are associated with these products. This would increase the risk of consumers selecting unsuitable products which are inconsistent with their needs and risk appetite. Furthermore, aggressive sales practices by intermediaries and staff of financial service providers may also lead to unsuitable purchase of such products which later results in disputes, and eventually undermine the integrity of financial service providers. Apart from providing relevant information to consumers to facilitate decision making, it is the responsibility of financial service providers to conduct customer suitability assessments to ensure that financial products sold are appropriate to the requirements of customers.

Adequate and effective product disclosure and transparency would therefore, facilitate consumers to be more active in safeguarding their own interests while exerting market discipline on the financial service providers. Over the medium-term, continuous activism by consumers will drive the market towards greater efficiency and innovation that satisfies consumer demands leading to healthy competition, thus pushing the financial service providers to offer better and cost-effective products and services to consumers. It is envisaged that the availability of more varied products offered at competitive prices will enable a wider segment of the population to participate, thus contributing towards greater financial inclusion to benefit the economy as a whole.

Enhanced disclosure standards

Recognising the importance of adequate and effective disclosure to consumers in particular, and financial service providers generally, the Bank has recently issued the Guidelines on Product Transparency and Disclosure (Guidelines). These Guidelines serve to raise the disclosure standards for retail financial products and aim to support informed decision making by consumers through meaningful and timely disclosures.

It is recognised that transparency and disclosure as a consumer protection tool will only serve its purpose if consumers are able to understand the information provided to assess product suitability and conduct comparative shopping. It is therefore, important that for information to be meaningful, there has to be a right balance between providing adequate and relevant information to consumers with ensuring the information provided is clear and easy to understand. Given that excessive information could be counter-productive, confusing to the consumer and may inhibit sound decision making, the disclosure must therefore, be focused on key and relevant information central to factors which will facilitate the consumer's decision making. Apart from the types of information to be disclosed, the manner of presentation of such information also has a role in facilitating consumer understanding. A well-designed presentation, which anticipates the consumer's thought process, will enable the consumer to navigate through the information and understand the significance of the information when utilising it in decision making.

Based on these considerations, the Guidelines provide both general and product-specific disclosure principles to be observed by financial service providers. To ensure disclosures are meaningful and facilitate decision making, the Guidelines require financial service providers to disclose important and relevant information, including key terms and conditions in a timely, clear and concise manner. Apart from these general disclosure principles, the Guidelines also specify product-specific disclosure requirements ranging from banking and Islamic banking products, insurance and takaful products, to payment instruments as well as remittance services.

In recognising that meaningful information disclosure also include the timely manner such information is disclosed, the Guidelines specify the relevant information to be disclosed at each of the three stages of entering into a financial contract, namely, the pre-contractual stage, at the point of entering into a contract stage and during the term of the contract stage. The staging of information disclosure ensures that manageable portions of information are given to avoid overloading the customers. Another key requirement of the Guidelines is the provision of a product disclosure sheet to prospective customers by financial service providers. To facilitate comparative shopping, the format and the type of information to be disclosed in the template for product disclosure has been standardised across the industry. Amongst the information to be disclosed in the product disclosure sheet are key features of the product, key terms and conditions, fees and charges, significant risks associated with the product and important notices or warning statements on the financial product.

The Guidelines also emphasise the use of plain and intelligible language in the contracts, agreements and policy documents so that information can be communicated in an easy and comprehensible manner for customers to better understand their contractual rights and responsibilities. For the more complex financial products and services, financial service providers must ensure that products are adequately explained in a manner which promotes product understanding by using appropriate examples, if necessary.

Customers seeking legal recourse

The expectations of consumers are also changing rapidly in tandem with the increased awareness levels, growing wealth and greater affluence. As a result, consumers are now demanding better product choices, greater transparency and disclosure, and more consumer-centric practices from financial service providers. With greater awareness of rights and responsibilities, consumers are increasingly more confident in asserting their rights to resolve disputes through the legal process as evidenced by the recent court case relating to the customer's liability limit for an unauthorised credit card transaction. This signals the need for financial service providers to appropriately identify, assess and mitigate risks associated with the way the financial products are designed and marketed to customers. It would include ensuring greater disclosure of products and services to avoid being exposed to reputational and legal risks.

Expectations on financial service providers

The increasing sense of empowerment amongst consumers have increased the expectations on financial service providers to embed good business conduct practices, including the disclosure standards into their business culture, supported by board and senior management oversight. Business models of financial service providers need to be underpinned by robust treat-customers-fairly framework and proactive response to the changing customer needs. Products must be designed with due regard to the needs and interests of the target market and reasonable care must be exercised over the distribution of the products and services, to mitigate the risk of misselling and reputational risk. Financial service providers should only introduce products to the market after the appropriate systems, monitoring and controls to support the product are in place, including proper training of the marketing staff.

The recent court judgements on the *Al-Bai Bithaman Ajil* cases also amplify the importance of proper legal documentation of the Islamic financial transactions to ensure the requirements of the underlying Shariah concepts applicable in the contracts are transparent to customers. Additionally, financial service providers must put in place proper internal controls to ensure strict adherence to the processes required under Shariah to mitigate the risks of being challenged in the court of law.

The responsibilities placed on financial service providers to achieve the expected disclosure standards will be rigorously enforced by the Bank through supervisory oversight. Financial service providers that fail to meet the disclosure standards will be subject to appropriate supervisory action by the Bank which include being subject to more rigorous requirements before offering new products to consumers and even product recall.

Conclusion

Effective transparency and disclosure standards that inspire good market conduct practices and consumer confidence is essential in promoting a resilient, efficient and sustainable financial services sector. Equally important is the need to raise the level of financial capability of Malaysian consumers to be empowered to take greater responsibility in personal financial management, which would establish a strong foundation for the effective exercise of consumer preferences and activism.

As consumers become more financially savvy and financial institutions offer more sophisticated products and services, it is important that sufficient disclosures of the risks and benefits of such products and services are made. To address the risk of mis-selling of financial products, the Bank developed a more consistent and comprehensive disclosure framework for retail financial products, emphasising on key product features, risks and benefits, and major terms and conditions of the contract. This disclosure framework sets out the general and product-specific disclosure requirements, aimed towards improving the basic parameters governing product disclosure.

Existing channels were also enhanced for consumers to seek advisory services and raise issues and complaints on financial matters. Financial service providers were required to comply with several mandatory requirements and to adopt best practices for effective handling of complaints under the new guidelines on complaints handling. Since its establishment in July 2008, the Integrated Contact Centre (ICC) at the Bank had experienced a significant increase of about 90% in the number of customers seeking its services. Of the 253,801 customers seeking its services, 244,882 were related to financial enquiries and advisory whilst 8,919 were complex cases on banking and insurance which required facilitation, assistance and resolution. ICC resolved 84% or 7,493 of these complex cases in 2009. The Bank also received a total of 531 cases from SMEs specifically relating to access to financing in 2009. Following the Bank's facilitation and monitoring, 92% or 490 cases were effectively resolved. This has supported SMEs to continue to obtain access to financing, even in the more challenging environment. The upward trend in the number of individuals and businesses seeking information and assistance is attributed to, among others, increased promotion and expanded channel of redress at the Bank. In 2009, the Bank expanded its walk-in public service centres BNMLINK (Bank Negara Malaysia Laman Informasi Nasihat dan Khidmat) at branches in Kota Kinabalu, Kuching and Kuala Terengganu to promote financial advisory to the members of the public and businesses, bringing the total of BNMLINK centres nationwide to six. To complement this, the Bank also introduced short message service (SMS) in 2009 as an additional channel for members of the public to contact the Bank to make enquiries, submit complaints, obtain mailing address and contact details of the Bank, and seek information on how to obtain credit reports. Since its inception in November 2009, the Bank has received and addressed 489 SMS from customers.

AKPK also opened two new branches in Alor Setar and Kota Bharu during the year, thereby bringing the total number of branches nationwide to 11. As at end-2009, AKPK had provided credit counselling services to 110,452 customers, of which 29,399 customers with debts amounting to RM2.88 billion had received assistance under its Debt Management Programme.

Continued development of human capital

In line with the Bank's priority to strengthen human capital development in the financial sector, the Bank continued with efforts to enhance the role and effectiveness of institutional platforms established for this objective. The Asian Institute of Finance (AIF) (formerly known as the Financial Services Education Centre) was fully operationalised in 2009, providing a platform for coordinated initiatives on human capital development in the financial sector. One of AIF's priorities is to elevate the capacity of the financial services industry training institutes, namely Institut Bank-Bank Malaysia, IBFIM, Malaysian Insurance Institute and the Securities Industry Development Corporation to meet the current development needs of the industry and to respond proactively to the rapidly changing financial landscape which will place greater demands on skill sets of financial professionals. Towards this end, the banking, insurance and Islamic financial services industries have agreed to commit significant financial resources to support efforts by the training institutions and this is complemented by a matching contribution from the Bank. AIF has also established a risk management centre and a research and publication centre which will offer cross-cutting programmes in risk management for the financial sector, and conduct applied financial research to enhance the quality of programmes provided by AIF and the training institutes, respectively.

Since the inception of the Financial Sector Talent Enrichment Programme (FSTEP) in 2007 to train and prepare high calibre graduates for employment in the financial services industry, a total of 785 participants have enrolled in the programme, with 604 participants successfully completing the programme, and 79 participants currently undergoing on-the-job training in various financial institutions. Almost all FSTEP graduates have been offered employment opportunities in the financial sector, indicating the success of the programme. To further enhance FSTEP, the "pre-selected scheme" approach was adopted in 2009 which enabled financial institutions to be proactively involved in the selection of FSTEP participants and expedite the recruitment process by financial institutions, thereafter. A Quality Assurance Committee was also established to enhance the overall quality of FSTEP's programme. The Quality Assurance Committee is in the midst of reviewing the syllabus and programme delivery to meet the current needs of the financial services industry.

Preserving the integrity of the financial system

In 2009, the anti-money laundering and counter financing of terrorism (AML/CFT) framework was further enhanced through three major initiatives of expanding the scope of offences that can be investigated under the Anti-Money Laundering and Anti-Terrorism Financing Act 2001 (AMLATFA), improving level of compliance among the reporting institutions, as well as strengthening joint efforts and collaboration with domestic law enforcement agencies and international counterparts. New predicate offences were included during the year that expanded the scope of offences that can be investigated under the AMLATFA to cover trafficking in person, illegal money changing, illegal foreign currency trading, and additional offences relating to corruption, extortion, criminal breach of trusts and forgery. The inclusion of these new predicate offences that brings the total predicate offences to 245, also enables reporting institutions to report suspicious transactions related to a wider scope of criminal activities. The enhancement to the legal framework was complemented by ongoing AML/CFT awareness among segments of reporting institutions as well as providing a number of targeted feedback sessions and conducting on-site examinations on selected reporting institutions. To effectively investigate syndicated crimes in breach of a number of provisions in different legislations, several joint operations with law enforcement agencies were conducted, particularly those involving illegal money lending, illegal money changing or illegal money remittances, illegal deposit taking, illegal investment scheme and drugs trafficking activity. This approach has enabled pooling of investigation resources among law enforcement agencies and reduction of overall investigation time.

Given the increasing trend of cross-border crimes, the efforts to expand our international network by forging closer collaboration with financial intelligence analysts at the international level has been intensified. The Bank has signed MoUs with its counterparts in eight countries in Asia and Europe on the exchange of financial intelligence, bringing the total number of MoUs signed to date by the Bank to 28.

Malaysia has continued to show strong commitment to comply with international standards on transparency and exchange of information to curb illegal activities. Malaysia supports this effort to comply with these standards by signing international trade agreements with treaty partners and amending domestic laws. Malaysia is in the "White List" issued by the Organisation for Economic Cooperation and Development. This achievement bodes well for sustaining the overall confidence, competitiveness and attractiveness of Malaysia.

Outlook

While the recovery of the global economy is progressing, the external environment is expected to remain uncertain in the coming year. The reforms put in place over the years and stabilisation measures implemented in 2009 however have enabled the financial sector to remain resilient and supportive of the needs of the economy. To realise the vision of the nation to become a high-income economy and achieve developed economy status by 2020, the financial sector has an important role towards supporting this transition. For this purpose, a new blueprint for the financial sector is being drawn up, with the objective of enhancing the role of the financial sector as an enabler, driver and catalyst of economic growth, with enhanced capacity to contribute effectively to the economic transformation process.

The blueprint is aimed at developing a strong and stable financial sector that best serves Malaysia, one that is competitive, dynamic and inclusive, and that provides comprehensive and quality services to all segments of society. This best positions Malaysia's financial sector to adapt to and leverage on the relevant forces of change, including the changing demography, characteristics and financial requirement of Malaysian households and businesses, regulatory landscape, greater economic and financial integration, and latest advancements in information and communication technology.

A new blueprint for the financial sector is being drawn up to realise the nation's vision to become a developed economy by 2020

Another key milestone in the coming year is the review currently undertaken on the existing legislations governing financial institutions and intermediaries. While the new Central Bank of Malaysia Act 2009 reinforces the Bank's mandates on preserving monetary and financial stability, the proposed enhanced legislation will provide further clarity to the Bank's powers, supporting a differentiated regulatory and supervisory regime that best achieves the mandates given to the Bank, including promoting a sound, progressive and inclusive financial sector. The review will also reinforce the emphasis placed on effective board oversight and strong governance structures and processes as greater flexibility is accorded to players that are well-managed. An important consideration in the review is to promote a market-based environment for players to thrive and innovate while maintaining sufficient safeguards with adequate legislative powers for the Bank to ensure that financial stability is preserved at all times.

The pension reform initiative is currently being undertaken by the Government. This initiative aims to enhance the pension system in Malaysia, protecting against the risk of poverty in old age and smoothing consumption from working life into retirement. There are opportunities for the financial sector to have an important role in the provision of retirement products and to facilitate the development of a robust pension system as a key financial safety net for Malaysians.

In the insurance sector, progressive deregulation of rates and commissions will be pursued to promote greater competition and innovation. A new scheme for basic motor insurance coverage for third party bodily injury and death is being formulated, acting as a catalyst to the ongoing reforms in the general insurance and takaful sector. The reforms which will have implications on the business strategies of insurers and their approaches to risk management, will be complemented with a holistic review of motor insurance practices and the supporting infrastructure to enhance underwriting practices and significantly improve claims management. Industry groups have been formed to study these issues and recommend appropriate transition towards a more efficient and effective operating environment, while improving practices across the entire value chain of the motor insurance sector. Efforts are also being taken to put in place a more effective insurance compensation system to enhance the existing financial protection for the policyholders of insurance companies and takaful operators. This system will contribute to financial stability through the promotion of sound risk management practices by insurers.

The pension reform and holistic review of the general insurance sector, particularly motor insurance business is currently underway

On the consumer front, ongoing efforts towards improving financial literacy will be reinforced with initiatives to strengthen avenues for consumer redress. The establishment of a financial ombudsman and improved product transparency, particularly in the area of pricing, commissions, fees and charges will be implemented.

As regional integration intensifies driven by larger trade and investment flows, Malaysia's financial sector is well positioned to benefit from opportunities that emerge from these developments. Malaysia's competitive advantage in Islamic finance will strengthen as Malaysia evolves into an international hub for Islamic finance. Moving forward, the potential of the financial sector to be a key enabler, driver and catalyst of economic growth will be reinforced, with commensurate enhancements to the regulatory and supervisory framework to support the orderly growth and development of the financial sector.

Safeguarding Financial Stability under the Central Bank of Malaysia Act 2009

The Central Bank of Malaysia Act 2009 (Act) provides greater clarity on the Bank's financial stability mandate and the corresponding primary functions. The financial stability provisions in the Act represent the cumulative experiences of the Bank in addressing many of the issues and challenges in preserving systemic stability taking into account current and anticipated future developments in the domestic and global environment.

Clearly defined financial stability mandate

The Act explicitly recognises the financial stability mandate of the Bank. In carrying out its financial stability mandate, the Bank is entrusted with the responsibility to regulate and supervise financial institutions under its purview, provide oversight over the money and foreign exchange markets, exercise oversight over the payment systems and promote a sound, progressive and inclusive financial system. As the elements contributing to or affecting systemic stability are very diverse, establishing a comprehensive definition of financial stability remains a challenging task. The financial stability mandate in the Act is defined in terms of the risks to financial stability, that is, risks that (i) disrupt, or are likely to disrupt, the financial intermediation process including the orderly functioning of the money and foreign exchange markets, or (ii) affect, or are likely to affect, public confidence in the financial system or the stability of the financial system. This approach accords the Bank with the flexibility to respond to unforeseen circumstances that may not be captured by a restrictive definition of financial stability. These parameters also provide definitive triggers for the Bank to exercise its powers under the Act consistently under different circumstances to ensure that such actions are only taken in the interest of preserving financial stability.

Strengthened scope of surveillance to facilitate pre-emptive risk mitigation policies

In order to avert or reduce risks to financial stability, it is vital for the Bank to be empowered to act pre-emptively and decisively, particularly in situations where a potentially destabilising build-up of systemic risks is foreseeable, but not necessarily originating from institutions or sectors that are directly under the Bank's regulatory purview. Non-regulated entities are increasingly more interconnected with financial institutions that are critical to the intermediation process and may have a more significant role in the financial system going forward. Access to relevant information in a timely manner therefore becomes highly critical. As such, the Act accords the Bank with the ability to collate, assess and monitor critical information through comprehensive provisions hence enabling the conduct of more effective and holistic surveillance, covering both regulated and non-regulated institutions and markets in the financial system. Should such a situation arise, the Bank will be able to take the necessary intervention and resolution measures to mitigate risks that stem from regulated and non-regulated entities based on a set of well-defined parameters.

Enhanced intervention and resolution powers to prevent, manage and resolve systemic crises

As the domestic financial system becomes more integrated with the regional and global financial markets, the Bank's ability to respond swiftly to manage and resolve crisis in an orderly manner is critical to prevent disruptions to the intermediation process and the broader economy. Past crises have demonstrated that effective and extensive powers in maintaining financial stability is an important determinant in ensuring orderly resolution of crisis or distressed institutions that could cause large negative externalities to systemic stability. Experience from previous crises has also shown that the speed and efficacy of crisis resolution measures would preserve financial intermediation function, reduce system-wide losses, protect public interest and promote confidence in the financial system. With a clear objective of minimising the ultimate costs to the financial system and economy, the Act institutionalises clear triggers and a more flexible set of crisis intervention and resolution policy instruments to deal with distressed institutions or markets, expeditiously and effectively. Rapid expansion of cross-sector and cross-border linkages implies greater scope for financial contagion and underscores the importance of coordinated policy response amongst different agencies. In this regard, the Act provides for coordination and cooperation arrangements with other supervisory authorities at both the national and international levels.

Power to avert or reduce systemic risks that emanate from non-viable institutions

The Act further strengthens the Bank's ability to take pre-emptive actions to mitigate risks to financial stability that originate from failure of a specific institution. In this regard, the Bank is empowered under the Act to issue an order in writing to relevant persons to take appropriate corrective measures that are necessary to preserve systemic stability. Where privately-initiated resolution strategies are ineffective in minimising system-wide distress or the overall costs to the financial system, the Bank is empowered to undertake capital support measures to strengthen the loss-absorbing capacity of the financial system, either via the direct purchase of shares or capital instruments or by providing the necessary financial support to another financial institution or a body corporate established by the Bank for such purpose. If a financial institution, which has ceased to be viable or is likely to be non-viable, has adverse systemic implications, the Bank is empowered to direct a transfer to and vesting of a part or the whole of the failing institution's business or shares in another financial institution or a body corporate established by the Bank. This provision is designed specifically to facilitate the establishment of a bridge institution or facilitate private sector resolutions. This would minimise the use of public funds, preserve the franchise value of non-viable institutions and more importantly, to conserve crucial financial services that are non-substitutable and which have a key role in supporting the intermediation process. These financial stability powers, exercisable only upon firm assessment of credible threats to systemic stability, may also be exercised over entities that are not regulated by the Bank and that are likely to have systemic risks to the financial system.

Power to stem institutional or market liquidity shocks from threatening solvency and overall stability

The strong interrelationship between funding liquidity, asset market liquidity, institutional solvency and their role in influencing financial conditions underscores the need for more extensive liquidity interventions by central banks. The Act enables the Bank to use a broad range of instruments to provide liquidity assistance in order to contain liquidity shocks to financial institutions more effectively and prevent material disruptions to the functioning of the financial system and its stability. Taking cognisance of continued expansion of cross-border operations and centralised liquidity management by financial institutions, the Act also empowers the Bank to provide liquidity assistance to subsidiaries or branches of a financial institution outside Malaysia via arrangements with other central banks, in particular when external liquidity and funding shocks may destabilise the domestic financial system. This enhanced flexibility for the Bank to provide liquidity assistance has been designed taking into consideration the present and future developments in asset and funding markets as well as the corresponding financial risks to the Bank.

Strengthened processes, governance and accountability

The enhanced oversight function and powers to address financial stability concerns are complemented by strengthened framework for governance, transparency and accountability. Under the circumstances where any of the financial stability powers are invoked on institutions that are beyond the regulatory reach of the Bank or where it involves public funds or impinges on personal rights, the Act provides that such decisions are taken by the Financial Stability Executive Committee (FSEC). In essence, the FSEC shall decide on proposals relating to the (i) issuance of orders to entities which are not regulated by the Bank to undertake measures to avert or reduce risks to financial stability, (ii) extension of liquidity assistance to entities that are not regulated by the Bank or to overseas subsidiaries or branches of Malaysian financial institutions, (iii) provision of capital support, and (iv) issuance of an order for compulsory transfers. The FSEC comprises the

Governor, one Deputy Governor and three to five other members to be appointed by the Minister on the recommendation of the Board of Directors. The composition of FSEC is designed to reinforce the element of independent external oversight and enhance the efficacy of decision making mechanism. The clear majority of non-executives in the composition is intended to ensure the robustness of discussion and the independence of decision making in extending financial support or imposing certain financial stability measures. The Act requires that the members must be persons of probity, competence and sound judgment. The Act also provides that the relevant supervisory authority shall be represented by its head or representative as a member at any meeting of the FSEC when considering proposed actions in relation to an institution under the supervision or oversight of the supervisory authority. In addition to this, the Secretary General to the Treasury will be invited to all meetings of the FSEC involving financial institutions which are not regulated by the Bank.

In relation to an order to take measures necessary to avert or reduce risk to financial stability, the Act requires the Bank to give the affected person an opportunity to make representations. Similarly, the Act also provides for the fair determination of transacted price arising from an order for compulsory transfers. The transacted price will be ascertained by an independent valuer to be appointed by the Bank, and mutually agreed by both the transferor and transferee. If there is an appeal on the transacted price, the Bank shall constitute an Assessor Committee comprising three members drawn from a panel that is appointed by the Minister to consider the appeal.

In summary, the Act captures the core elements of macroprudential stability, encompassing ex ante surveillance powers to allow for timely identification of material risks to financial stability, pre-emptive powers to avert and mitigate systemic risks as well as the ex post powers to reduce the impact and cost of instability to the financial system. The Bank is provided with adequate legal backing to effectively discharge its role and responsibilities in addressing current and future challenges in safeguarding financial stability for the overall development of the financial system so as to support sustainable economic development.

Repositioning the Insurance and Takaful Industry to Support the Changing Socio-economic Landscape

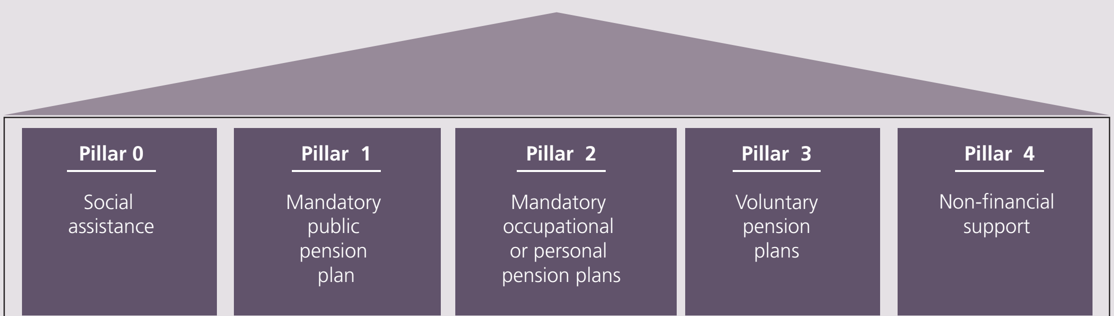
The insurance and takaful industry have made significant strides to become an important component of the financial system and a vital pillar to support the economic and social development of Malaysia. The evolution of the socio-economic landscape in Malaysia over the years has been instrumental in shaping the scope of business of insurers and takaful operators to provide traditional financial protection products to include a broad range of financial planning options such as wealth creation. Two significant areas are in the development of retirement financing and healthcare financing.

Enhanced focus on retirement financing

There has been significant global recognition of the importance of pension systems in the economic stability of countries and the security of an ageing population. Cognisant of the core objectives of pension systems, which are old-age poverty alleviation and smoothing consumption from work life into retirement, the World Bank has adopted a multi-pillar approach towards pension system design to address the needs of target population segments.

The World Bank multi-pillar pension framework provides a structured approach in efforts to evaluate the comprehensiveness and effectiveness of Malaysia's pension system design. A multi-pillar pension system would better address the differing needs of target population segments by diversifying the types and sources of retirement income across the pillars. By promoting the sharing of risks and responsibilities between the individual, the Government and the private sector in the provision of pension benefits, the pension system of any given country would be more sustainable in the pursuit of a more equitable form of pension structure that suits country-specific needs.

Chart 1
World Bank Multi-Pillar Pension Framework[1]



Pillar 0: Social assistance to provide a minimum level of protection

Pillar 1: Mandatory public pension plan, which may be partially funded

Pillar 2: Mandatory occupational or personal pension plans, which are fully funded

Pillar 3: Voluntary occupational or personal pension plans

Pillar 4: Access to informal support (including family), other formal social programmes (including healthcare) and other individual financial and non-financial assets (including homeownership)

[1] Adapted from Holzmann, Hinz and Dorfman (2008) "Pension Systems and Reform Conceptual Framework" *World Bank*

Malaysia's pension system is primarily underpinned by Pillar 2 which is the occupational retirement income schemes operated by the Employees Provident Fund, Public Service Department of Malaysia and Armed Forces Fund Board. These schemes are complemented by various welfare assistance programmes, including those operated by the Social Welfare Department of Malaysia, which serve to alleviate poverty. However, there is still much capacity and scope for the enhancement of Malaysia's pension system, in particular in the promotion of pension products provided by the private sector.

While Malaysia has a relatively comprehensive mandatory occupational pension scheme for employees of the public and private sectors, the present system which has been in existence for more than five decades might not be sustainable in the longer term to effectively support the ageing demographic structure of the Malaysian population. In 1980, the number of Malaysians aged 55 and more comprised 8% of the total population and this is expected to increase to 16% by 2020. With the improved quality of life, the life expectancy of Malaysians has increased from only 56 years in the 1950s to 76 years for females and 71 years for males currently. This is estimated to increase to 79 years and 75 years respectively in 2020. The longevity risk has posed great challenge to the adequacy of savings for retirement, further compounded by premature exhaustion of retirement savings in the early period of retirement, particularly in view of the prevailing practice of lump sum withdrawal at age 55.

Towards enhancing the Malaysian pension system, the Government has embarked on a pension reform initiative, guided by the World Bank's multi-pillar approach. For comprehensiveness, the reform necessitates an integration of the various pension pillars to bridge gaps in the provision of financial safety nets. The insurance and takaful industry in particular, would play a significant role in strengthening the development of a vibrant voluntary private pensions market of Pillar 3 to complement the social pension infrastructure made available by the Government. The offering of pension products such as annuity plans by insurers and takaful operators will enable retirees to benefit from a regular income stream, beyond retirement for a sustainable standard of living. It is key, therefore, to create greater awareness among Malaysians on the importance of retirement planning and making available product lines which accommodate the needs of the ageing population.

Growing significance of medical and health protection

With the changing socio-economic landscape, Medical and Health Insurance (MHI) and Medical and Health Takaful (MHT) are expected to continue to grow strongly. Total MHI gross direct premiums and MHT gross direct contributions increased 22.6% from RM0.9 billion in 2008 to RM1.1 billion in 2009 (Chart 2).

Chart 2
Total Gross Direct Premiums/Contributions of Medical & Health Insurance and Takaful

Source: Bank Negara Malaysia

This growth is in line with the trend of increasing private expenditure in healthcare (average 17% per annum over the period 2003 to 2008) that reached a total of RM18.9 billion in 2008. The trend is expected to continue as rising cost of healthcare becomes an impetus to seek cost-effective ways to provide for healthcare needs and protection from catastrophic healthcare spending. Furthermore, as Malaysia progresses towards a high-income economy, household expenditure on healthcare is expected to increase especially with a growing middle-class population. A highly-skilled workforce will also demand better healthcare benefits leading to higher healthcare spending by employers. Insurers and takaful operators are expected to respond to such developments by providing more cost-effective options to consumers. One recent innovation is the introduction of no-claims bonus for MHI plans where consumers with a good claims record will receive cash payments.

As income levels and public awareness of healthcare increases, there will be increasing demand for higher levels of cover and a more comprehensive suite of benefits. For example, some insurers have increased or removed lifetime limits on claims, while others are considering including traditional medicine to the benefits covered. Certain lines of critical illness products now allow consumers to make multiple claims, although for different illnesses each time, in response to an environment where better medical technology increases the likelihood of recovery from critical illnesses. With increased life expectancy, there is also a push towards longer term MHI and MHT, with some products now covering policyholders up to age 100.

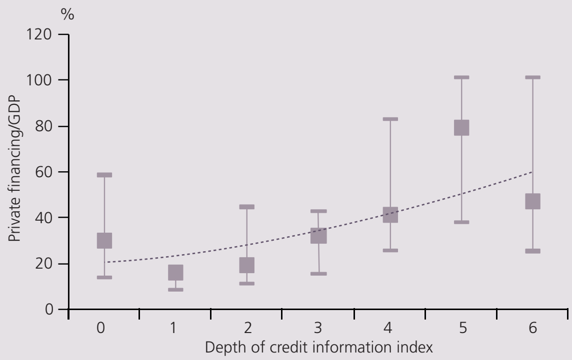
It is clear that as the MHI and MHT segment matures and as Malaysia moves towards a high-income economy, the range of products and services will grow to meet the diverse needs of the Malaysian population.

In facing the challenges of an ever-changing socio-economic landscape, the Bank will continue to review and refine the regulatory and supervisory approach for the insurance and takaful industry to ensure that the players remain resilient, responsive and progressive in serving the needs of Malaysians.

Regulatory Framework for Credit Reporting Agencies in Malaysia

Credit information sharing is an important element in the financial system and has important consequences on the functioning of the credit market, financial stability and economic development of a nation. The sharing of credit information reduces asymmetries of information and search costs, thereby enhancing access to financing to a broader spectrum of the population, through the formal system.

Chart 1
Private Financing/GDP versus Depth of Credit Information



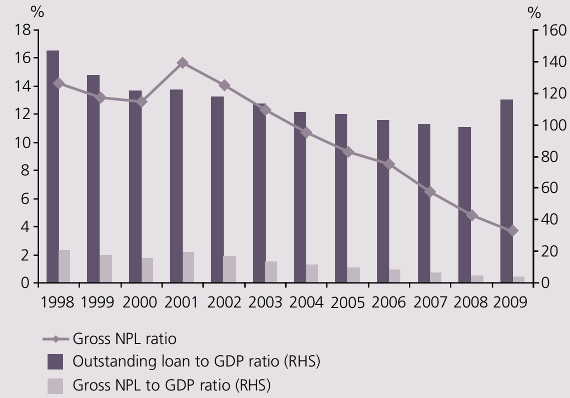
Source: Internal computation based on The World Bank dataset 2007

Such sharing of information also lowers the cost of financing for borrowers with good credit background and history. Advancements in risk and decision-making analysis, and the availability of a wide range of credit information on a real-time, anytime basis have significantly shortened loan processing time. In some instances, it has even facilitated instantaneous decision on application for credit. From a social perspective, the sharing of credit information contributes towards inculcating financial discipline and avoiding incidences of imprudent and excessive borrowings among borrowers. Borrowers demonstrating strong financial characters are able to leverage on such "reputational collateral" to obtain borrowings at favourable terms and rates.

For financial and credit institutions, credit information helps to strengthen the entire chain of credit evaluation and administration of credit risk management. This in turn contributes towards institutional safety and soundness, and stability of the overall system.

In Malaysia, the credit information services industry has been in existence for more than 10 years. At present, such services are being provided by both private and public entities. Consolidated credit information sharing has proven to be beneficial to both borrowers and lenders. Access to shared credit information has contributed towards reducing the duration in the processing of housing loans by banks, from an average of 3.3 days in 2004 to 2.4 days in 2009. The availability of such information has also supported the development and adoption of advanced credit and portfolio risk management tools such as credit scoring and portfolio analysis by financial institutions. These tools not only facilitate more effective credit decisions, but also more robust administration and management of credit risks. Collectively, these have paved the way for continued improvement in the quality of loan portfolio of financial institutions over the past decade, supported by prudent underwriting and credit risk management practices by financial institutions.

Chart 2
Ratios of Outstanding Loans and Gross NPLs to GDP and Gross NPL Ratio, 1998 - 2009



Source: Bank Negara Malaysia

Given the extensive usage of credit information and its implications for financial stability and potential impact on the general public, it is important for the appropriate safeguards and legislative framework to be in place for credit information to be shared in a responsible manner among the participants and players in the credit reporting industry. The absence of a regulatory framework governing the activities of private credit reporting agencies (CRAs) in Malaysia and inadequate legislative requirements have surfaced several fundamental gaps and weaknesses in the credit reporting industry. These became more evident in the recent years and constrained access to financing of certain borrower segments through the formal channel. Among the concerns that were raised and debated extensively by the public were inaccurate and outdated credit information, incomplete information leading to mistaken identities, excessively long retention period of adverse credit records, absence of consumer rights and redress mechanism – all converging towards the lack of accountability, integrity and standards for consumer care on the part of the private CRAs.

These developments have led to the tabling of the Credit Reporting Agencies Bill 2009 (CRA Bill), which is to be debated in the Parliament in 2010. The CRA Bill is an important legislation that can contribute towards the healthy development of a regulated and structured credit information sharing industry, that would pave the way for better credit culture, improved risk management and overall credit processing time within the country. The CRA Bill was finalised after consultations with the relevant government agencies to strike a balance between consumers' rights to privacy and protection, and lenders' rights to information for improvements in credit evaluation and risk management purposes. Among the salient features of the CRA Bill are as follows:

- **Coverage:** In providing protection to both individuals and non-individuals, the CRA Bill will cover credit information relating to both natural persons and other entities, such as corporations, partnerships, cooperatives and other organisations;
- **Regulation of CRAs:** A Registrar of Credit Reporting Agencies (Registrar) will be appointed by the Minister of Finance to regulate and supervise CRAs. CRAs are required to obtain a certificate of registration from the Registrar to undertake credit reporting businesses. The Registrar is also responsible for resolving complaints and disputes between consumers and CRAs;
- **Preserving privacy:** CRAs are required to notify consumers that information on them is being collected. CRAs are also required to obtain the consent of the consumers on disclosures to third parties;
- **Consumer rights:** Consumers are accorded the rights to access own information that is held by CRAs, and shall not be charged for correcting any information that is found to be inaccurate, incomplete or misleading;

- **Accuracy and security of information:** CRAs are required to take reasonable steps to ensure that information held are accurate, complete, not misleading and up-to-date. CRAs are also obligated to put in place the necessary safeguards (e.g. systems, procedures and processes) to ensure the security and safety of the information; and
- **Enforcement mechanism:** Violation of the CRA Bill shall invite penalties ranging between RM50,000 to RM1 million or a six-month to three-year imprisonment or both, depending on the severity of the offence.

The changing structure and dynamics of the financial system, growing consumer activism and deeper financial inclusion will expand the outreach of credit facilities and financial services. These developments will shape the environment surrounding the credit reporting industry that demands for improved transparency for consumers while not neglecting the value added services that are required to support the development of enhanced risk assessment methodologies and adoption of more sophisticated credit decisioning models. The Central Bank of Malaysia Act 2009 and the CRA Bill contain key elements that provide for a balanced platform for the efficient sharing of credit information among lenders and the effective protection of consumer data and privacy rights. Credit information in the Centralised Credit Reference Information System (CCRIS), where necessary, may be made accessible to qualified CRAs within a regulated environment to further enhance the risk management capabilities of lenders, thus promoting stability of the financial system. CRAs can complement the information contained in CCRIS with information from other non-bank sources such as utility companies and trade suppliers and develop specialised risk management models. This will provide more extensive content, coverage and quality of products and services. Collectively, the CRAs can have an important role in contributing to prudent credit expansion in the country, and a well-structured regulatory framework for such agencies will support this development.

Prudential Regulation and Supervisory Framework

Prudential Regulation and Supervisory Framework

Introduction

Despite challenging financial and economic conditions in 2009, a sound prudential framework and continued supervisory vigilance supported the resilience of financial institutions in Malaysia. Risk-taking activities by financial institutions remained well-managed in line with the risk management capacity of institutions, limiting any impact of adverse developments in credit quality which arose from the weaker economic performance during the year. The regulatory reforms and various initiatives to consolidate the financial sector undertaken since the Asian financial crisis in 1997 has placed financial institutions on strong foundation to manage the impact of the economic slowdown. In particular, strengthened risk management capabilities enabled financial institutions to quickly identify and pre-emptively respond to emerging risks as the perimeter of the global financial crisis spread to the global economy and consequently to the domestic economy. This, has preserved the strong capital position and balance sheets of financial institutions, allowing the intermediation activities to continue undisrupted and maintaining a high level of confidence in the financial system.

While the prudential framework has stood up well to the crisis, global regulatory reforms aimed at strengthening the foundations for financial stability will have an important bearing on ongoing enhancements to current regulatory and supervisory approaches. The Bank continued to focus on delivering a prudential framework which is responsive to the changing environment, while maintaining an appropriate balance between regulatory prescriptions and supervisory judgements that are informed by the quality of an institution's governance and risk management practices. In this respect, the Bank further refined its supervisory approach to ensure that supervisory attention and resources are appropriately distributed based on well-founded assessments of the risk profiles of financial institutions. Greater attention has also been directed at further strengthening the macroprudential orientation of regulation which overlays the Bank's microprudential oversight of individual financial institutions. This has contributed towards the development of a more complete understanding of systemic risk and its origins, and the institutionalisation of more effective inter-agency and cross-border cooperation in the areas of surveillance and supervision.

The Bank continued to focus on delivering a prudential framework which is responsive to the changing environment, while maintaining an appropriate balance between regulatory prescriptions and supervisory judgements

In 2009, supervisory engagements with the financial industry were sustained at a heightened level to monitor and respond to developing risk issues in the industry. This included increased interactions with the board of directors and senior management of financial institutions on stress test results, risk management concerns and capital management strategies. Such interactions were particularly important to ensure that institutions were operating with adequate financial buffers as considerable uncertainty throughout the year continued to cast a shadow over the pace and extent of global recovery.

International and domestic regulatory developments

In response to the global financial crisis, central banks and financial supervisory authorities have advanced an aggressive agenda to reform the system for global financial regulation. As part of this agenda, international standard setting bodies, including the Basel Committee on Banking Supervision (BCBS) and the International Association of Insurance Supervisors (IAIS), are working intensively to enhance existing international standards on regulation. The body of work addresses a broad range of issues that contributed to the market failures that were observed during the crisis. Proposed reforms include measures to: (i) raise the quality and level of capital held by banking institutions; (ii) strengthen liquidity risk requirements and management; (iii) implement forward-looking provisioning standards; (iv) align remuneration practices with risk outcomes; (v) improve transparency in the derivative markets; and (vi) strengthen supervisory frameworks and arrangements for dealing with cross-border financial groups.

Central banks and financial supervisory authorities have advanced an aggressive agenda to reform the system for global financial regulation

There is now also broad consensus globally that the macroprudential orientation of regulation must be strengthened. This was borne out in the crisis which demonstrated how the collective behaviours of banking institutions and other highly leveraged institutions can contribute to the material build-up of risks in the financial system, ultimately undermining financial stability. Macroprudential regulation concerns itself with the stability of the financial system as a whole and responds directly to the build-up of systemic risks. In contrast, microprudential regulation concerns itself with the safety and soundness of individual entities and does not usually account for the systemic importance of institutions, the potential for collective behaviours to amplify financial and economic cycles, or the inter-connectedness of participants in the financial system.

In the wake of the crisis, the existing framework of banking regulation was acknowledged to be inadequate to address systemic risks, leading to the recent consideration of policy options at the international level aimed at substantially strengthening the macroprudential elements of financial regulation. Early proposals to this effect have been put forward by the BCBS in December 2009. These include the proposals to promote counter-cyclical capital buffers that would help ensure that the banking sector serves as a shock absorber rather than a channel through which risk is transmitted and amplified. Non-risk-based leverage limits may also be imposed to contain the build-up of leverage in the banking sector. In addition, a capital and liquidity surcharge and refinements to the capital framework are under consideration to address risks created by systemically important institutions. These proposals are currently being evaluated by the BCBS in greater detail with more specific recommendations expected in the course of 2010.

The Bank has been an active participant in the international reform process through representations of the grouping of the Executives' Meeting of East Asia Pacific Central Banks (EMEAP) of which the Bank is a member, as well as its direct participation in the global consultation process and impact assessments. While the Bank broadly supports the proposed reforms to achieve a more risk-sensitive capital framework and more robust liquidity risk management and valuation practices, the more recent and broader package of proposals concerning the capital structure, minimum global liquidity standards, leverage and treatment of systemically important institutions will require closer scrutiny. Given the more complex nature of the issues involved, with significant repercussions for the financial system both in the short and longer term, the proposals will need to be carefully evaluated in order to fully understand the implications for financial institutions as well as financial markets in Malaysia, and ensure that the reforms do not disproportionately impair the ability of the banking sector to perform its critical role in the economy.

The Bank is currently undertaking an impact assessment to determine the cumulative impact of the proposed measures on the financial sector – including the potential impact on the financial intermediation process, institutional structures and behaviours of market participants – as input to inform the Bank's response to the proposals. Particular consideration will be given to the regulatory and supervisory framework that is already in place domestically and to what extent the current framework adequately delivers the outcomes intended by the proposed new measures. The direction for Malaysia's prudential framework will likely be between moving towards more stringent rules in some areas, while preserving flexibility under a more principle-based approach (with effective supervisory oversight) for institutions to meet clearly defined supervisory outcomes in others. In this regard, the Bank's agenda will continue to focus on promoting a competitive and efficient financial sector that supports economic growth and development, while always ensuring that this is achieved with financial stability.

With the significant exception of financial guarantee insurers, the impact of the financial crisis has been less pronounced in the global insurance industry. Notwithstanding this, the global reforms directed at the banking industry will inevitably have consequential implications for the insurance regulatory framework given the aim of avoiding regulatory arbitrage and maintaining effective oversight of systemic risk. The IAIS has already announced initiatives to converge insurer solvency frameworks internationally and develop a common framework for the supervision of internationally active insurance groups. These initiatives respond to findings of a study in 2009 by the Joint Forum (a committee comprising members of the BCBS, IAIS and International Organisation of Securities Commissions (IOSCO) to deal with cross-sectoral issues) that identified remaining key differences in the nature and scope of financial regulation among the banking, securities and insurance sectors. Specifically, the report noted that despite exposures to common risk factors and growing interactions and risk transfer across the three sectors, there are areas treated differently for purposes of prudential regulation of financial institutions under each sector's supervisory system. Differences were identified particularly in the areas of the regulation and supervision of financial groups, conceptual and technical differences in prudential regulations including capital frameworks, and the extent to which regulation deals with business conduct and consumer protection. These developments at the international level foreshadow greater convergence in the regulatory framework across the banking and insurance sectors, which in turn will have implications for the prudential framework for insurers in Malaysia.

The following sections present further details on key developments in the domestic prudential regulatory framework in 2009.

Capital adequacy

In December 2009, the Bank issued the final requirements and guidance on the adoption of the Internal Ratings-Based (IRB) Approach for credit risk under the Risk-Weighted Capital Adequacy Framework (RWCAF) for banking institutions and the Capital Adequacy Framework for Islamic Banks (CAFIB). Under this approach, banking institutions are allowed to use internal estimates of risk parameters (namely the probability of default, loss given default and exposure at default) to determine regulatory capital requirements. Banking institutions are required to obtain explicit approval from the Bank to adopt the IRB Approach. Approvals granted for banking institutions to use own risk estimates are based on supervisory assessments of a banking institution's risk management practices and risk management infrastructure to ensure that the risk estimates derived are reliable and appropriately reflect the institution's risk profile. The minimum requirements set out under the IRB Approach are largely based on guidance by the BCBS, appropriately adjusted to calibrate risk parameters more closely to the domestic operating environment and default experience.

Banking institutions or banking groups with Islamic operations are allowed to employ conventional IRB models for the Islamic banking assets if it can be demonstrated that the risk estimates derived from the conventional IRB models are reflective of the Islamic banking assets' risk profile. Islamic banking institutions leveraging on the group IRB infrastructure, processes and methodologies must further demonstrate through a clearly defined entity-level internal process that the adoption of the group common approach is appropriate for the Islamic banking institution.

The IRB framework also explicitly addresses the specificities of Islamic banking business, including an emphasis on the identification of credit risk during the different stages of financing under various Shariah contracts and adjustments of supervisory parameters to reflect the inherent loss sharing characteristics of exposures under *musharakah* and *mudharabah* contracts which bear similarities to the features of equities. The Bank expects to refine the risk parameters for Islamic banking assets over time as more data on the experience and effects of different Shariah contracts becomes available.

With the implementation of the IRB Approach, some of the larger banking institutions in Malaysia will adopt enhanced approaches to internal assessments of capital adequacy. During the year, the Bank completed supervisory reviews of 11 banking institutions, including three of Malaysia's largest banking institutions by asset size, which had been given approval in principle to adopt the IRB Approach for implementation in 2010. The supervisory review involved comprehensive assessments of the banking institutions' compliance with the quantitative and qualitative components of the IRB minimum requirements, including the robustness of the management information systems, data quality and governance processes supporting the IRB Approach. Based on the review, approval was granted to three banking institutions to migrate fully to the IRB Approach with effect from January 2010. The remaining eight banking institutions were required to implement specific actions in relation to the application of internal models and related processes, including: (i) actions to improve the stability and reliability of newly developed and recalibrated corporate models; (ii) verify the appropriateness of downturn conditions adopted in deriving risk estimates for certain retail portfolios; (iii) improve the predictive ability of the models; and (iv) expand the use of internal ratings and loss estimates in the banking institution's day-to-day business operations. The Bank expects these issues to be fully resolved by June 2010, after which the institutions will be permitted to migrate fully to the IRB Approach in the second half of 2010. The impact on the capital levels of banking institutions migrating to the IRB Approach vary considerably among the 11 banking institutions, reflecting inherent differences in asset quality and the composition of the balance sheet.

With the implementation of the IRB Approach, some of the larger banking institutions in Malaysia will adopt enhanced approaches to internal assessments of capital adequacy

Work on the supervisory review process (Pillar 2) of the capital adequacy framework for banking institutions was also taken forward during the year. Pillar 2 aims to promote a more rigorous process within banking institutions for assessing capital adequacy positions relative to risks, in addition to the regulatory minimum under Pillar 1. This is supported by the supervisory review process which considers the appropriateness of an institution's internal capital assessments and directs remedial actions (which may or may not entail additional capital to be maintained) where necessary. Under Pillar 2, banking institutions are expected to operate at capital levels above the regulatory minimum implied under Pillar 1 to capture risks not explicitly included under Pillar 1 and provide adequate buffers that are commensurate with the individual risk profiles and capital management strategies of the institution. Internal capital assessments under Pillar 2 should also adequately account for conditions of stress.

Following an industry consultation process, implementation issues surrounding the quantification of Pillar 2 risks and the relationship between internal capital assessments and the supervisory review process in setting internal capital targets were raised by banking institutions. During the year, the Bank carried out additional work to assess its risk-based approach to supervision against the principles of Pillar 2. The assessment concluded that the principles of Pillar 2 have largely been captured in the Bank's Risk-Based Supervisory Framework (RBSF). In particular, assessments of capital and earnings form part of the Bank's risk assessment of individual banking institutions to arrive at an overall risk rating of the institution. In practice, institutions assessed to be of high risk may be required to hold capital levels above the regulatory minimum, together with other risk mitigation measures required to improve the institution's position. System-wide, the risk-weighted capital adequacy ratio (RWCR) currently stands at 14.7% well above the regulatory minimum of 8%, owing both to prudent capital management strategies adopted by most institutions and specific supervisory interventions in higher risk institutions.

Specific enhancements to the RBSF are being considered to further converge the Pillar 2 process with the RBSF to support supervisory judgements on the appropriateness of internal capital targets established under Pillar 2. This includes expanded considerations for capital assessments under the RBSF to take into account, in addition to the quality and adequacy of capital, the ability of a banking institution to access capital at reasonable rates and the strength of the capital management processes. The Bank will also be seeking to effectively integrate additional information which will be available under Pillar 2 on a banking institution's own internal risk assessments with the RBSF to validate the Bank's supervisory risk assessments. Final guidance on Pillar 2 will be issued in 2010 with all banking institutions expected to fully comply with the requirements by end-2012.

Regulatory requirements on the third component (Pillar 3) of Basel II, that is disclosures supporting market discipline, were finalised during the year and issued in February 2010 for banking institutions adopting the Standardised Approach. This will be followed closely in 2010 with disclosure requirements for banking institutions adopting the IRB Approach. Pillar 3 complements the first two pillars and aims at facilitating assessments by market participants of the capital adequacy of banking institutions through disclosures of key qualitative and quantitative information on a banking institution's risk exposures, risk assessment processes and corresponding capital levels. This in turn, is intended to support the effective operation of market discipline mechanisms in regulating the risk-taking behaviours of banking institutions. As Pillar 3 disclosures are directed towards market participants, consultations on Pillar 3 included direct feedback from rating agencies which have been taken into account in finalising the Pillar 3 requirements.

For the purpose of compliance with Pillar 3 requirements, banking institutions are permitted to leverage on the Financial Reporting Standards (FRSs) disclosure requirements, thereby reducing unnecessary duplication. The disclosures under FRSs will be supplemented with additional information available to the market under Pillar 3. These include information on operational risk, capital structure, capital adequacy, the internal capital adequacy assessment process, securitisation exposures, controls around internal models, off-balance sheet exposures, back-testing and stress testing. Information on risk exposures under Pillar 3 will also be more granular and will include enhanced disclosures on securitisation exposures and off-balance sheet vehicles which are consistent with amendments by the BCBS in response to the global financial crisis. To encourage more meaningful disclosures, the Bank has elected to adopt a non-prescriptive approach for Pillar 3 which avoids mandating fully standardised disclosures. Instead, banking institutions are required to establish a formal internal policy and effective oversight processes for Pillar 3 disclosures. The Bank expects over time to evolve the quality and level of disclosures made by banking institutions under Pillar 3 as more experience is gained domestically with actual disclosure practices.

Developments in the international capital framework remain fluid with consultations still in progress on the capital proposals issued by the BCBS in December 2009 as part of its comprehensive package of reforms to strengthen the resilience of the banking sector. The proposals include: (i) a new compliance requirement at the common equity level which is defined as common shares and retained earnings; (ii) the recalibration of existing Tier-1 and total capital ratios; (iii) the need for Tier-1 capital to be predominantly in the form of common equity, which in effect will require a banking institution to reduce its reliance on hybrid securities and subordinated debt capital instruments; and (iv) capital deductions to be predominantly applied to the common equity level. While the impact of these proposals is likely to be significant for some institutions, the strong capital buffers currently maintained by the banking institutions in Malaysia will provide support for banking institutions to absorb any adjustments to the new capital requirements. The Tier-1 capital ratio and RWCR of banking institutions stood at 13.1% and 14.7% respectively, as at end-2009. Common equity and retained earnings constitute the predominant form of capital, while hybrid capital instruments contribute less than 14% of total Tier-1 capital.

The Malaysian insurance industry transitioned smoothly to the Risk-Based Capital (RBC) Framework on 1 January 2009 from the previous Margin of Solvency regime. The adoption of the RBC Framework has significantly sharpened insurers' focus on the risk drivers of the business through the risk-adjusted capital calculations and, stress and scenario testing elements embedded in the framework. This is evidenced by the more systematic consideration by insurers of key risk drivers in aligning product design, asset allocations and business strategies with an insurer's risk appetite and capital resources, thus facilitating the integration of risk and capital management activities.

The Malaysian insurance industry transitioned smoothly to the RBC Framework on 1 January 2009

As the RBC Framework is calibrated to the average industry experience, the framework expressly requires insurers to establish own internal capital targets that are higher than the benchmark minimum capital adequacy ratio of 130% set under the framework. For this purpose, an insurer must take into account its own specific risk profile, considering both risks that are covered in the calculation of regulatory capital under the RBC Framework and risks that are not captured, or not fully captured, in the regulatory capital calculations. As at end December 2009, the industry-wide capital adequacy ratio stood at 230%, well above the benchmark minimum. In the transition to the new framework, individual insurers were allowed some flexibility in terms of the timeframe to meet the internal capital target levels, based on capital management plans that were submitted to the Bank. Improving market conditions since the second quarter of 2009 have further stabilised the capital positions of insurers during the transition, allowing capital management strategies of insurers to proceed without material adjustments.

Earlier concerns that insurers might stay away from offering more capital intensive products following the implementation of the RBC Framework have not materialised. Notably, life insurers have continued to maintain a broad and diversified product range with more than 120 new life and medical insurance products introduced in 2009 which continued to meet the diverse needs of policyholders for protection. Pricing discipline for new products has also improved, putting insurers in a better position to meet policyholders' reasonable expectations under more volatile market conditions going forward.

Work on the RBC Framework for takaful operators (RBCT) progressed further in 2009 with the conceptual parameters of the capital model and development of the valuation components for family and general takaful business substantially completed. In the process, related considerations (e.g. concerning the use of *Qard* to rectify deficits in the Participants' Risk fund and establishment of provisions for liabilities in the takaful fund), were examined and resolved in consultation with the Shariah Advisory Council of Bank Negara Malaysia. Similar to the RBC Framework, RBCT will promote more holistic capital assessments that are aligned with the risk profiles of individual takaful operators, while specifically addressing the key inherent differences between the nature of risks assumed under conventional insurance and takaful contracts. The framework is also broadly consistent with the principles outlined in the exposure draft issued by the Islamic Financial Services Board (IFSB) in December 2009 on Solvency Requirements for Takaful Undertakings. Consultations with the industry on the detailed RBCT and impact assessments will commence in 2010 with a target timeline for implementation of the framework on a parallel run basis by 2011.

Liquidity risk management

Alongside the core workstreams on capital, the Bank initiated a review of the prudential framework for the management and supervision of liquidity risk during the year. In July 2009, the Bank issued a concept paper outlining proposed improvements to the existing Liquidity Framework which establishes minimum standards for the identification and measurement of liquidity needs by banking institutions and maintenance of adequate liquidity buffers to meet those needs on an ongoing basis. The enhancements made included expanded requirements for foreign currency liquidity risk exposures to be managed on an individual currency basis, more robust standards for the projection of cash flows, updated haircuts for liquefiable assets and, enhanced liquidity reporting requirements. In addition, greater flexibility was accorded for banking institutions with demonstrably more advanced and robust internal liquidity risk management systems to leverage on such systems for the purpose of compliance with the regulatory requirements. Industry feedback to the proposed enhancements has been received and are being analysed together with recently released proposals by the BCBS to introduce minimum global quantitative standards on liquidity. While the BCBS's proposed quantitative standards which include a 30-day liquidity coverage ratio are conceptually consistent with the Liquidity Framework adopted in Malaysia since 2000, some differences exist in the definition of liquid assets and the calibration of stress parameters for projecting cash flows. The BCBS proposals further contemplate an additional minimum long-term structural funding ratio that aims to address liquidity mismatches and incentivise banking institutions to fund activities with more stable sources of funding. Based on a preliminary assessment of the new BCBS proposals, the impact on banking institutions' liquidity positions will be significant if the proposals are wholly adopted in the current form. The Bank will perform further work in this area and is seeking additional inputs from the industry on the calibration of the global standards, including the impact of the proposed standards on the financial markets and intermediation function. This work will also be included in the Bank's feedback to the BCBS proposals through the EMEAP grouping.

The Bank concurrently surveyed industry liquidity risk management practices to gauge the extent to which current practices were consistent with the revised Principles for Sound Liquidity Risk Management and Supervision published by the BCBS in September 2008 which reflect lessons learnt from the current financial crisis and advancements in industry practices. The survey provided valuable insights to the current state of liquidity risk management practices in the industry and highlighted potential implementation challenges in meeting the enhanced global standards enumerated in BCBS's revised principles. Responses to the survey indicated that banking institutions largely adopt prudent liquidity risk management strategies although industry practices have yet to be fully developed in some areas. The degree to which this was observed varies considerably between institutions. For some institutions, approaches to liquidity management are still predominantly driven by compliance considerations, thus limiting improvements to internal liquidity risk measurement, monitoring and control systems needed to support approaches that more fully account for developments in an institution's business and funding strategies. Banking institutions also acknowledged improvements needed to internally establish explicit and well-defined liquidity risk tolerance levels as a basis for developing more granular operational limits for liquidity risk, including limits on funding by currency and exposures to related entities.

The ability to monitor liquidity risk exposures from both an institution-wide and group-wide perspective on an ongoing basis also continued to present significant operational challenges for many banking institutions. For example, upgrades to infrastructure and processes are needed to reduce manual interventions currently required for banking institutions to extract and aggregate data across different systems for the purpose of identifying end-of-day exposures. Banking institutions also identified rigidities in data and reporting systems as an important factor currently impeding the ability to perform more incisive analysis of liquidity risk exposures. Overcoming these limitations will be essential to support more effective liquidity risk monitoring and management practices, including the ability to perform more robust stress tests and allocate liquidity costs and risks to business activities. While this will necessarily entail significant investments by banking institutions, the transient nature of liquidity risk and its potential for triggering a loss of confidence by depositors and counterparties, particularly under conditions of stress, underscores the importance of accelerating efforts by banking institutions to further strengthen internal liquidity risk management capabilities.

From the survey and the Bank's own supervisory reviews, most banking institutions have embarked on programmes to conduct liquidity risk stress testing at regular intervals, but there remains scope for more meaningful involvement by senior management and business units in the process of identifying stress scenarios. For the most part, identified stress scenarios have been observed to be relatively mild, rarely considering more severe scenarios such as a loss of access to wholesale funding markets, lengthened horizons for stress scenarios or the closure of capital markets. While cross-functional groups (such as asset and liability management committees) are typically involved in stress testing exercises, greater scope exists for business judgement to interact with this process. The involvement of business units in the construction of stress scenarios is an example where business judgement can be applied to greater effect in the stress testing process through the consideration of a wider range of hypothetical scenarios. This will also allow for closer alignment between strategic business decisions and the liquidity risk profile of a banking institution. These issues were addressed in supervisory dialogues between the Bank and banking institutions during the year with a view to improving the rigour of liquidity stress testing practices in the industry.

Corporate governance

Initiatives to enhance corporate governance practices in financial institutions continued to be a key focus of the Bank in 2009. Recognising the pivotal role of the board in promoting sound governance and risk management practices, substantial resources continued to be directed at equipping boards to effectively perform this role through a structured programme of continuing education delivered under the Financial Institutions

Directors' Education (FIDE) initiative. Since the launch of the FIDE programme in November 2008, 131 directors of banking institutions, insurers and takaful operators have completed the core programme which examines the application of good governance in the specific context of issues and challenges facing the different sectors of the financial industry. The core FIDE programme continued to be very well received, with further enhancements made to the content during the year to respond to developments in the industry, global practices and specific suggestions for improvements received from participants. FIDE's positive effect in empowering boards led to two new supplementary programmes introduced in 2009 – an introductory banking programme for directors with limited banking experience and a programme focusing specifically on risk management in Islamic finance. Work has also commenced to develop more specialised programmes for specific board roles, with immediate priority to members of the board audit committee and risk management committee. As part of the FIDE complement, eight events were organised during the year at which prominent speakers were invited to share considerable insights on a broad range of issues surrounding governance, risk and strategy which were of direct relevance to the role and expectations of boards of financial institutions.

Since the launch of the FIDE programme in November 2008, 131 directors of banking institutions, insurers and takaful operators have completed the core programme

Beyond an educational objective, the FIDE initiative provided an important platform through which directors of financial institutions could interact with their peers and with the Bank on common issues facing boards in the performance of the oversight function. The Bank also leveraged on the opportunity to highlight its expectations of boards in ensuring the sound management of financial institutions. During the year, these engagements were particularly useful in focusing the attention of the Bank and financial institutions on developing issues and practice in the area of governance. These included issues surrounding the board's interface with management, the process employed by financial institutions for appointing members of the board and senior management, independence criteria for board members, the interaction between risk management and internal control functions, and the relationship between parent and subsidiary boards within financial groups. The Bank will be responding to these issues in its review of the corporate governance guidelines to be issued in 2010. Further details on corporate governance practices are elaborated in the box article ``Corporate Governance Developments in Financial Institutions´´.

Remuneration arrangements have become a focal point of global debate given the role that remuneration practices is believed to have had in encouraging excessive risk-taking by financial institutions that were most affected by the financial crisis. Executive remuneration arrangements among financial institutions in Malaysia have not raised concerns with respect to the creation of incentives for excessive risk-taking. This reflects a long-standing principle adopted in the guidelines on corporate governance and monitored for some time by the Bank that financial institutions should avoid remuneration practices that may create incentives for irresponsible behaviour. The Bank will continue to review developments in remuneration practices in the industry and consider developing additional guidances on sound remuneration practices should it be necessary, drawing on the Principles for Sound Compensation Practices issued by the Financial Stability Board in April 2009.

A more pressing issue on remuneration in Malaysia concerns the remuneration of non-executive directors. A recent survey of non-executive director remuneration levels among financial institutions suggests that remuneration levels generally do not adequately compensate non-executive directors for the significantly expanded responsibilities and time commitment assumed in what has become a far more onerous legal, regulatory and operating environment. Yet boards, and in particular non-executive directors, are instrumental to ensuring the proper stewardship of financial institutions and should be appropriately compensated for properly discharging the directors' oversight responsibilities. In support of efforts by financial institutions to attract and

Corporate Governance Developments in Financial Institutions

The global financial crisis has focused attention on the crucial importance of effective corporate governance and risk management in preventing loss and failure in the financial system. Ineffective boards and weak senior management oversight in some of the largest global financial institutions were key contributing factors to the significant financial losses that were incurred. In many cases, institutions failed to understand and monitor the implementation of business strategies and associated risks being assumed, and to respond quickly and appropriately to deteriorating market conditions. By the same measure, institutions that performed better during the crisis were consistently differentiated by more robust governance and risk management practices in these institutions.

In the recent period, reactions to the crisis have seen international standard setters, including the Financial Stability Board and regulators in several major economies, directing attention firmly to corporate governance as a key reform agenda. The reforms have focused in particular on:
(i) achieving an appropriate balance of skills, experience and independence in boards of financial institutions;
(ii) strengthening board practices with increased expectations on the role, commitment and performance of the chairman and board committees;
(iii) ensuring the effective functioning of the board on a continuing basis through a formal evaluation process and improved disclosures;
(iv) achieving more effective approaches to induction, training and continuing development of non-executive directors to ensure that the board is kept well-informed of new developments in the financial industry;
(v) strengthening board-level engagement in risk oversight through dedicated board risk committees that are supported by an independent chief risk officer; and
(vi) enhancing board-level oversight of remuneration practices so as to avoid incentives for excessive risk-taking.

These developments are consistent with the direction and emphasis of changes that have shaped corporate governance practices in Malaysia's financial sector for some time now. Following the Asian financial crisis in 1997, strengthening corporate governance has been a central focus of capacity building measures aimed at providing a strong foundation for a stable and more resilient financial system. A strong corporate governance framework, supported by sound governance practices, was also identified as a key imperative for the transition from a prescriptive, rule-based regulatory regime to a more principle-based regime with greater reliance placed on the internal oversight functions within financial institutions to manage and control risks.

The resulting prudential standards on corporate governance which have been adopted for financial institutions in Malaysia are built on the following key tenets:
(i) **clear separation of management and oversight functions** – this is enforced through the separation of the roles of chairman and chief executive officer, a strict limit on the number of executives on the board, a requirement for key board committees (namely the audit, risk, remuneration and nominating committees) to be wholly constituted of non-executive directors, and clearly delineated accountabilities between operating units and independent control functions;
(ii) **adequately competent and committed boards** – to ensure commitment to the affairs of the financial institution, board members are expected to minimise the number of outside board directorships held that would dilute attention to the financial institution. The board must also collectively possess the requisite experience and expertise to be able to constructively challenge and guide management, particularly on risk issues and strategy. Institutions must additionally meet specific expectations regarding the orientation and ongoing training of directors;

(iii) **presence of a strong independent element on the board** – at least a third of the board of directors of a financial institution must be independent of both management and significant shareholders;

(iv) **a clear, explicit and dedicated focus on the oversight responsibilities of the board for risk, internal controls, remuneration, and directors and management performance and succession** – since 2005, all financial institutions have been required to establish an audit committee, a risk management committee, a remuneration committee and a nominating committee to support the effective oversight of the board in these functional areas. In the case of Islamic finance, the establishment of a Shariah Committee mandated with specific responsibility for the overall oversight of Shariah compliance is also required;

(v) **rigorous fit and proper assessments for key functionaries** – board members, senior management and officers primarily responsible for control functions must comply with fit and proper requirements both on appointment and on a continuing basis, and financial institutions must ensure that a robust process is in place and operates effectively to ensure this;

(vi) **incentive structures that are aligned with long-term performance and the interests of depositors and policyholders, in addition to shareholders** – boards are required to institute and monitor effective internal controls and risk management systems that address risks on an enterprise-wide basis, and avoid remuneration practices that may create incentives for irresponsible behaviour;

(vii) **explicit responsibilities of the board for related party transactions** – boards are required to establish policies and procedures, including defined limits and appropriate approval and monitoring procedures, to ensure that risks from related party transactions are effectively managed. Boards must also ensure that policies are established to identify, prevent or appropriately manage and disclose potential conflicts of interests; and

(viii) **sufficient reporting and disclosures on corporate governance practices** – financial institutions must describe how prudential standards are complied with, or explain any material departures and alternative measures taken to meet the intended objective of the standards. Disclosures must include information on the composition, functions and conduct of the board and its committees, an institution's risk exposures and risk management systems and an assessment of the effectiveness of the key internal control (including risk control) functions.

Observance of these prudential standards forms an integral part of the Bank's supervisory assessments of the safety and soundness of financial institutions under its Risk-Based Supervisory Framework. Assessments of the quality and robustness of an institution's oversight and control functions are both the starting point for supervisory evaluations of how an institution is managing the risks inherent within each of its significant areas of activity, and the basis on which the Bank forms an overall view of an institution's resilience, particularly under stress conditions. Recognising that financial resources are limited and often constrained during periods of stress, the emphasis on governance practices represents a critical complement to the Bank's assessments of an institution's financial performance and capital position. Emphasis is directed at how an institution's policies, processes and internal controls support prudent risk-taking that is commensurate with the level of capital and capabilities of the institution. The Bank also reviews whether these policies, processes and control mechanisms are in fact operating effectively across the institution. The outcome of these reviews is the single most important consideration in determining the intensity of supervision applied to an institution and by extension, the degree of flexibility accorded to the institution in managing its business.

Today, there is increasing evidence of practices among financial institutions in Malaysia exceeding the minimum prudential requirements and which underscore a significantly strengthened risk and governance culture. In a recent survey conducted on financial institutions in Malaysia, non-executive directors indicated an increasing commitment of time (including preparation for, and attendance at board meetings) devoted to the affairs of the financial institution, ranging up to 60 days a year. In 60% of financial institutions, more than half of current board members have direct financial sector (including previous management) experience. This is further supported by a good mix of relevant qualifications and experience represented on the board as a whole. Independent directors form the majority on more than half of the boards of all banking institutions. More recent developments have seen a pronounced elevation of the status of the chief risk officer with strengthened authority for the management and oversight of risk at an enterprise-wide level. Several institutions have strengthened the full independence of the chief risk officer by formalising a functional reporting line directly *and only* to the board risk management committee. Improvements have also been observed in engagements between board and management on risk matters, with boards assuming greater control over the content, timing and presentation of risk information to the board. This, in turn, has supported a better appreciation of key risk developments by the board. Evidence of more engaged boards can also be observed from the retention of external expertise by some institutions to advise the board on specific issues where the board as a whole lacked the necessary knowledge and capability needed to reach informed decisions independently of management.

The introduction of the Financial Institutions Directors' Education (FIDE) programme in 2008 has played an important role in further strengthening the capacity of boards of financial institutions in Malaysia. In the 14 months since its launch, 131 directors have completed the FIDE programme. The Bank's interactions with directors who have completed the programme revealed a deeper appreciation among directors on the importance of individual contributions to the board function, a renewed confidence in engaging management on risk and strategic issues, and more effective leadership demonstrated by chairmen towards improving the functioning of the boards and board committees over which they preside. The FIDE programme has also been credited with encouraging more thoughtful approaches by boards to the selection and evaluation of board members and senior management, and a firmer hand in addressing issues of conflict and inappropriate interferences with the oversight function.

Recent global deliberations on international financial reforms have focused on the size of financial institutions with the prospect of reducing the social and economic costs of systemic failures by limiting the scale and complexity of financial institutions. In Malaysia, the financial sector is likely to expand and become more complex over time. While financial institutions in Malaysia have made significant advances in the area of corporate governance, governance practices will need to continue to evolve to take into account the changing environment. In the immediate to medium-term, pertinent developments include the greater use of and reliance on sophisticated risk management tools to identify, measure and manage risks with the implementation of the Internal Ratings-Based Approach under Basel II and the Risk-Based Capital Framework for Insurers. In addition, higher volatility and potential contagion exists as more financial institutions expand across borders and financial markets become more integrated while uncertainties remain in the pace and strength of global recovery. Other developments include the changing regulatory landscape which envisages more stringent capital requirements, more discretionary accounting practices and more explicit expectations of financial institutions to manage capital resources using through-the-cycle approaches. The development of Islamic finance will gain further momentum leading to an increasing array of new Islamic products and instruments, thus posing unique Shariah challenges. Intense competition in certain market segments have also returned the appetite for financial innovation, while competition for talent will similarly intensify.

It is the role of the board to understand how institutions are affected by these developments and consider how governance practices need to be adapted to maintain effective oversight and control. The issues for boards include:

- the design of processes and structures for effective oversight at the group level and on a cross-border basis;
- appropriate controls over the use of models and the exercise of management discretion and judgement;
- the effective integration of risk management and internal control functions and how these should interact to support the ongoing oversight of risk;
- continuing and sustained oversight of how incentive structures within the institution are responding to risk, competition and innovation;

- approaches for more effective engagements with stakeholders as part of efforts to manage expectations and preserve confidence particularly in times of stress;
- effective design of programmes for board members to be continuously kept abreast of the latest developments in the financial industry; and
- in Islamic finance, the need to account for the unique features of Shariah principles in risk management and governance.

Financial institutions in Malaysia are well placed to respond effectively to these issues, building on the institutional framework and arrangements that have been put in place over the decade following the Asian financial crisis. Enhancements to the regulatory framework on corporate governance and risk management are being pursued to respond to new developments, further promote good governance practices and reflect on lessons from the global financial crisis. The legislative framework will also be strengthened to codify the fiduciary duties and responsibilities of directors of financial institutions. With continued priority accorded to governance issues in both the supervisory and organisational frameworks, the ongoing evolution of sound governance and risk management practices will further reinforce the foundations for financial stability while enhancing the long-term competitiveness of the Malaysian financial sector.

retain high calibre non-executive directors, FIDE sponsored an independent study which will make recommendations on approaches to structure remuneration packages for non-executive directors based on best practices in comparable markets and an evaluation of the specific responsibilities, level of time commitment, and skill sets required of boards of financial institutions. The recommendations will also take into account the current and evolving financial and economic environment in which financial institutions operate and the issues that this raises for the performance of the oversight function of directors. The study is expected to be completed and released to the industry within the first half of 2010.

Measures were also taken during the year to strengthen the key role of the internal audit function as an important component of sound corporate governance. A strong internal audit function facilitates board oversight and the supervisory process by providing independent assurance that adequate internal control and risk management frameworks are in place and operating effectively within financial institutions. A concept paper on the Guidelines on Internal Audit Function was issued by the Bank in June 2009 with the aim of reinforcing a strong internal audit culture in financial institutions. The guidelines seek in particular to further emphasise the independence and professional competence of internal auditors, strengthen the risk-based focus of internal audits and provide further clarity on the relationship between the internal audit function, other control functions (such as the risk management and compliance functions), and business units where internal audit also performs an advisory role with respect to the setting up of internal controls within the business units. The final guidelines incorporating feedback received from the industry where appropriate will be issued in 2010.

Risk management

In 2009, the Bank continued to focus its resources on developing and consolidating a comprehensive set of standards on sound risk management practices, encompassing overarching principles on risk governance with more specific guidance on the management of market, credit, liquidity, operational and insurance risks. While groundwork on the overarching principles has been substantially completed, more targeted consultations with risk management practitioners in the banking and insurance industries were carried out to test the practical operation of the principles and guidance, and capture latest developments in best risk management practices. The Financial Industry Conference on risk management organised by the Bank in November 2009 allowed for further dialogue to take place on the key risk challenges facing banking institutions and insurers. Observations of risk management responses by financial institutions to the financial and economic developments that unfolded in 2009 provided additional inputs on areas to be further developed in the principles and guidance. The Bank's work was also informed by several significant follow-up reports on observations in risk management practices among global banking institutions that were published during the year, including that published by the Senior Supervisors Group (a forum composed of senior supervisors of major financial services firms from Canada, France, Germany, Japan, Switzerland, the United Kingdom and the United States) and the International Institute of Finance.

In practice, the organisation of risk management and oversight functions among banking institutions and insurers in Malaysia has improved considerably, with significant impetus from developments in the capital and supervisory frameworks that are more sharply focused on risk, the increased scrutiny of risk functions globally following the financial crisis and directors who are more informed about risk issues and risk management approaches. The level and quality of interactions between boards and senior management on key risk issues and developments has also improved. These improvements have contributed towards strengthening the risk culture within institutions, and ensuring that risks are promptly identified, assessed and effectively controlled in line with the board's risk appetite and strategies.

More significant progress towards the adoption of enterprise-wide (as opposed to silo) approaches to risk management, with an enhanced role for the Chief Risk Officer (CRO) serving as a catalyst, is a key outcome of the Bank's risk management focus. The Bank intends, through appropriate guidance and supervisory inputs, to promote improved processes by which the CRO's position and participation in risk management and oversight processes at the highest level, covering all risks and the interplays between different risks, will be firmly entrenched. Appropriate emphasis will also be given to accelerate required improvements to risk infrastructure in order to support the effective sharing of risk information implied by enterprise-wide risk management approaches.

More significant progress towards the adoption of enterprise-wide (as opposed to silo) approaches to risk management, with an enhanced role for the CRO serving as a catalyst, is a key outcome of the Bank's risk management focus

In June 2009, the prudential framework for development financial institutions (DFIs) was further strengthened with the issuance of Guidelines on Best Practices for the Management of Credit Risk for DFIs. The guidelines set out the key principles and sound practices to be adopted by DFIs for credit risk management, including effective board oversight over the credit risk management infrastructure and the implementation of proper checks and balances, supported by an effective internal audit function. The guidelines acknowledge the specific mandate of DFIs to develop and promote targeted strategic sectors of the economy, with enhancements aimed to better position DFIs to perform its mandated role on a sustainable basis. During the year, flexibility was also granted for DFIs to outsource non-core functions to third party resident service providers within a sound risk management framework consistent with that adopted for banking institutions and insurers.

Financial reporting standards

Under the commitment to converge with International Financial Reporting Standards by 2012, Malaysia adopted FRS 139 Financial Instruments: Recognition and Measurement for reporting entities in Malaysia from 1 January 2010. In anticipation of the adoption of FRS 139, the Bank had already incorporated key elements of FRS 139 relating to the classification and fair valuation of financial instruments in the prudential reporting framework for both banking institutions and insurers since 2005 and 2009 respectively. The remaining components of FRS 139 that had not been incorporated in the prudential framework were related to the use of the fair value option, and the classification and provisions for impaired loans/financing. These components which mainly affect banking institutions, were deferred to allow more time for banking institutions to make the necessary enhancements to internal systems, processes and capabilities in order to ensure the smooth implementation and integrity of financial statements reported under the FRSs. Expectations were for full alignment of the prudential reporting framework with FRS 139 by 1 January 2010. The Bank had accordingly intensified its monitoring of banking institutions' preparedness for full adoption of FRS 139 during the course of 2009 through periodic reports to the Bank and engagements with the Audit Committees, external auditors and financial reporting functions on the progress of individual institutions.

Developments took a turn in November 2009 when the International Accounting Standards Board (IASB) issued an exposure draft recommending a new approach to impairment assessments. This led the Malaysian Accounting Standards Board and the Bank to reconsider options for the full implementation of FRS 139 for banking institutions which were the most significantly impacted by the proposal. In January 2010, the Bank issued revised guidelines on Classification and Impairment Provisioning for Loans/Financing incorporating a transitional provision to be applied by banking institutions in the determination of collective impairment provisions. Under the transitional provision, banking institutions are required to provide for collective impairment provisions at a level no less than that computed based on a prescribed formula of 1.5% of total loans/financing net of individual impairment provisions. The transitional provision is intended to reduce significant duplicative costs to banking institutions associated with impending changes contemplated by the IASB, while aligning provision levels more closely to expected loss considerations. The guidelines further articulate expectations for banking institutions to implement sound internal valuation processes and methodologies for impairment assessments, with a timeline for full compliance by 2012 to coincide with the estimated timeline for adoption of the new impairment standard. Further details on IASB's new proposed impairment standard can be found in the box article ``Developments in Provisioning Standards and Implications to Banking Institutions´´.

Developments in Provisioning Standards and Implications to Banking Institutions

In November 2009, the International Accounting Standards Board (IASB) issued proposals for a fundamental review of International Accounting Standard (IAS) 39 in response to the call by the G20 leaders for both the accounting standard setters and supervisors to work urgently to implement forward-looking provisioning standards as one of the measures to address procyclicality. The proposals by the IASB are broadly in line with the high level principles issued by the Basel Committee on Banking Supervision (BCBS) in August 2009. These proposals reflect lessons learned from the financial crisis, particularly the need for earlier recognition of loan losses based on sound methodologies that capture expected credit losses, including changes in loss expectations as conditions affecting borrowers change.

This article explains the new proposals on impairment by the IASB and discusses its implications for banking institutions in Malaysia.

Problems with incurred loss impairment approach

Under the present incurred loss model applied in IAS 39, loans may be classified as impaired *only* when there is objective evidence that a loan or portfolio of loans will not be repaid in full. Such evidence (known as a trigger event) may be specific to an individual loan (e.g. bankruptcy) or an occurrence of an event that is likely to lead to defaults across a portfolio of loans (e.g. increase in unemployment and a downturn in the property market that may lead to an increase in mortgage defaults).

Expected future credit losses are not recognised until a trigger event has occurred. This approach received criticism during the global financial crisis for failing to account for loss expectations even though such losses are factored in (based on historical experience or judgments made by lenders about likely default experience) when loans are made and priced by banking institutions. As a result, the recognition of expected losses is delayed, while interest revenue is generally overstated before the trigger event occurs. The subsequent recognition of credit losses, in turn, causes abrupt adjustments to income levels of banking institutions when a trigger event occurs, thereby reinforcing the procyclical impact of a financial crisis or general economic downturn. Inconsistencies among banking institutions in defining and assessing trigger events have further reduced the comparability of impairment provisions for similar financial assets across institutions.

Proposals for expected loss impairment approach

The new proposals by the IASB which adopts the impairment method based on expected losses will require entities to:

(i) determine the expected credit losses on a financial asset when that asset is first obtained;
(ii) recognise contractual interest revenue, less the initial expected credit losses, over the life of the financial asset;
(iii) build up a provision over the life of the financial asset for the expected credit losses;
(iv) reassess the expected credit loss at each period; and
(v) recognise immediately the effects of any changes in credit loss expectations.

The proposals also include expanded disclosure requirements that compare the development of credit loss provisions and cumulative write-offs by year of origination for each class of financial assets. This will allow users of financial statements to track the development of losses over time and form an opinion on the accuracy of management's estimates.

A comparison[1] of the current incurred loss approach and the proposed expected loss approach is summarised below.

Incurred loss approach	Expected loss approach
• Interest revenue for financial assets is recognised on the basis of expected cash flows excluding expected credit losses.	• Interest revenue for financial assets is recognised on the basis of expected cash flows including expected credit losses.
• Impairment is recognised only when a loss event occurs (known as an impairment trigger).	• Expected credit losses are continuously re-estimated without reference to loss events or impairment triggers.
• Losses that are expected to arise from future events are not recognised.	• Impairment is recognised from an adverse change in credit loss expectations and can be reversed by subsequent favourable changes.
• Interest revenue can be viewed as `overstated´ in periods before a loss event occurs.	• Interest revenue reflects the total net return expected at inception.

The proposed expected loss impairment standard is expected to be finalised by the IASB in the second half of 2010 with an effective date for mandatory adoption not earlier than three years from the finalisation of the standard.

Implications for banking institutions in Malaysia

The move towards more forward-looking provisioning under the expected loss approach aims to better align loan loss reserves with risk management and supervisory approaches which are concerned with loss developments associated with plausible *future* events, as opposed to losses based on *known* events which underpin the current incurred loss model. The gradual build-up of reserves over time will also result in higher reserves held by banking institutions when entering periods of deteriorating credit quality. This in turn will reduce the pressure on bank earnings and capital as loan losses materialise, thus supporting the intermediation activities during periods of stress or economic downturn.

Provisioning based on the expected cash flow model as proposed by the IASB, however, presents several operational challenges for banking institutions. To determine expected losses, a banking institution must forecast expected credit losses and the timing of such losses over the life of financial assets (either on an individual or on a portfolio basis). Depending on the size and complexity of the institution's loan portfolio, this may be an operationally complex undertaking, requiring systems changes to be made and significant lead-time to implement. The incremental effort to implement the new provisioning standards will generally be more significant for banking institutions that are adopting the Standardised Approach for credit risk under Basel II. Such banking institutions will need to develop anew, or substantially recalibrate systems modelled on the incurred loss approach to compute estimates of future cash flows and credit losses.

In contrast, banking institutions, including six domestic banking institutions, that are adopting the Internal Ratings-Based (IRB) Approach for credit risk under Basel II are already required to take into account expected loss considerations in estimating probabilities of default for the purpose of determining regulatory capital. For these banking institutions, the same data collected for capital purposes would also support the estimation of expected loss for provisioning purposes. Common factors should also drive internal credit risk ratings for both capital and provisioning purposes. These

[1] Source: www.ey.com/IFRS

similarities enhance the prospects for IRB banks to leverage on existing infrastructure supporting regulatory capital requirements to meet the proposed provisioning standards. However, some key differences remain, including different assumed time horizons, point-in-time versus through-the-cycle conditions applied for capturing losses and different rates used for discounting cash flows. These differences will require material adjustments to be made to the calibration of IRB models for provisioning purposes.

Under an expected loss approach, changes in expectations of credit losses will have an immediate and direct impact on earnings, potentially resulting in a higher degree of earnings volatility from year to year. The extent of volatility will depend particularly on the time horizon over which estimations are made, economic developments and the effects of changes in portfolio compositions and underwriting practices over time. While longer time horizons will result in more stable parameters, data limitations would be a key constraint. Under these circumstances, it will become more important for banking institutions to integrate the outputs generated from applying an expected loss approach with considerations of business, capital and risk management strategies as well as current measures of performance. This is also important with the more extensive qualitative and quantitative disclosures required under the expected loss approach which will contribute towards greater market discipline as more information is made available about the quality of a banking institution’s loan book.

Practical solutions are being pursued at a global level to address these challenges. Specifically, the BCBS has been tasked to develop proposals that would allow banking institutions to draw on their risk management and capital adequacy systems to determine provisions based on expected losses for accounting purposes. Additional proposals are also expected to respond to the interest of ensuring that the provisioning approach is subject to appropriately rigorous and independent internal and external validations.

Additional implementation costs in Malaysia also arise from an earlier announcement made in 2008 by the Malaysian Accounting Standards Board to adopt Financial Reporting Standard (FRS) 139 (Malaysian equivalent of the current IAS 39) for all reporting entities in Malaysia with effect from 1 January 2010 in line with the policy of convergence with international financial reporting standards. The interim implementation of an incurred loss model and subsequent change within a relatively short period to an expected loss model would potentially add further costs to banking operations. Given this and the present fluid nature of international developments that will have important implications on the shape of the expected loss impairment standard, transitional arrangements have been allowed for banking institutions in Malaysia with respect to the implementation of FRS 139. This aims to reduce duplicative system costs and resources associated with implementation of FRS 139, while facilitating the direct migration of systems and processes to support the expected loss approach.

The transitional arrangement, which allows banks to maintain current approaches for establishing general provisions, is accorded to banking institutions for the assessment of collective impairment provisions under FRS 139. Loans that are individually assessed for impairment must comply fully with FRS 139, consistent with the move to incorporate a broader range of credit information, both quantitative and qualitative, in provisioning methodologies for individually significant loans (previously, provisions for such individual loans were established based only on months-in-arrears). Further details on the provisioning standards applicable to banking institutions are discussed in Chapter 3 under `Financial Reporting Standards´.

Outside the impairment standard, revised Guidelines on Financial Reporting were issued by the Bank in February 2010 to bring other aspects of financial reporting requirements under the prudential framework for banking institutions further in line with FRSs requirements (including the remaining components of FRS 139 which have not yet been adopted by the Bank). The guidelines retain restrictions on the application of certain options available under FRSs where considered necessary for prudential purposes, and requires additional disclosures to be made with respect to information on loans, impairment provisions and remuneration. Further guidance is also provided on expected controls over the application of the fair value option under FRS 139.

Islamic finance and takaful operators

In the area of Islamic finance, regulatory efforts in 2009 continued to be directed at strengthening Shariah governance, promoting sound business practices and enhancing operational efficiencies in Islamic financial institutions. During the year, proposed revisions to the Rate of Return (ROR) Framework for Islamic banking institutions were completed with the aim of augmenting the operational efficiency of Islamic banking institutions through the improved management of profit-sharing investment accounts (PSIAs). The underlying objectives of the proposed changes are to ensure that depositors receive a fair and equitable portion of the investment profits, reduce information asymmetries between the Islamic banking institutions and depositors through better disclosures, and provide for the enlarged and more diversified scope of Islamic banking business. The proposed revised ROR Framework has also taken into account relevant standards related to PSIA that have been issued by the IFSB. The concept paper on the revised Framework will be issued in the first half of 2010 as a basis for further consultations with the industry.

In April 2009, the Bank issued the Guidelines on Investment Management which is applicable to takaful and retakaful operators. The guidelines set out the minimum expectations on the effective governance and management of investment activities of takaful funds, which are in line with international standards prescribed by the IFSB and the IAIS. This was followed in December 2009 with the issuance of a concept paper on Guidelines on Takaful Operational Framework (TOF), which establishes principles governing the operational processes of takaful business to ensure that business activities and innovations are within the takaful operators' risk management capacity and do not compromise the long-term sustainability of the business. It also aims to strengthen safeguards to protect the interests of takaful participants. In addition, the TOF provides guidance on the operational processes involving takaful and shareholders' funds, including requirements on fund establishment, management of fees and operating costs of the takaful operators. It also covers the management of assets, liabilities and surplus, mechanisms to address any deficiency in the takaful funds, and broad requirements on disclosure and transparency.

In line with efforts to further enhance the Shariah governance of Islamic financial institutions, a new Shariah Governance Framework will be issued in 2010 to provide comprehensive guidance on the roles and responsibilities of the Shariah committee, and the board and management of Islamic financial institutions in ensuring that the operations of the Islamic financial institutions are in compliance with Shariah principles. This is further elaborated in the box article ``The New Shariah Governance Framework´´.

A Shariah Governance Framework will be issued in 2010 to provide comprehensive guidance on the roles and responsibilities of the Shariah committee, and the board and management of Islamic financial institutions in ensuring that the operations of the Islamic financial institutions are in compliance with Shariah principles

Legislative reforms

In November 2009, the Bank announced a broad undertaking to carry out a comprehensive review of all the existing legislation governing financial institutions and payment systems under the Bank's purview to take account of the changing financial landscape and regulatory developments that have

The New Shariah Governance Framework

The importance of Shariah governance

The principles of Islamic finance place great emphasis on strong corporate governance values and structure, transparency, disclosure of information and strict adherence to Shariah principles. The Shariah governance framework is a set of organisational arrangements through which Islamic financial institutions ensure effective oversight, responsibility and accountability of the board of directors, management and Shariah committee. The framework serves as a guide towards ensuring an operating environment that is compliant with Shariah principles at all times. Shariah principles provide the foundation for the practise of Islamic finance through the observance of the tenets, conditions and principles propagated by Islam. Comprehensive compliance with Shariah principles would bring confidence to the general public and the financial markets on the credibility of Islamic finance operations.

In Malaysia, the Bank has established the necessary mechanism for the Islamic financial system to operate in a manner consistent with Shariah *muamalah* principles, with a clearly defined institutional arrangement within Islamic financial institutions regulated by the Bank. A two-tiered Shariah governance structure has been established, comprising an apex Shariah advisory body at the Bank and a supervisory Shariah committee formed at the respective Islamic financial institutions.

Central Shariah advisory council

The Shariah Advisory Council of Bank Negara Malaysia (SAC) was established in 1997 as the ultimate authority to decide on all Shariah matters pertaining to the Islamic banking and takaful industry. It serves as the final arbiter in the interpretation of Shariah principles on Islamic banking and takaful matters and practices, and promotes the harmonisation of Shariah interpretations among the Shariah committees residing in the individual Islamic financial institutions. The mandates of the SAC as provided under section 52 of the Central Bank of Malaysia Act 2009 (the Act) are as follows:

- ascertain the Islamic law on any financial matter and issue a ruling upon reference made to it;
- advise the Bank on any Shariah issues relating to Islamic financial business, the activities or transactions of the Bank; and
- provide advice to any Islamic financial institution or any other person as may be provided under any written law.

To reflect the critical role of the SAC, its members are appointed by the Yang di-Pertuan Agong from amongst persons who are qualified in Shariah, or who have knowledge or experience in Shariah, banking, finance, law or other related disciplines.

An important development under the Act is the requirement for the court and arbitrator to take into account the published rulings of the SAC and to refer any Shariah issues to the SAC for its ruling. All SAC rulings in such cases are binding on the Islamic financial institutions, courts and arbitrators. This represents an important step forward as previously the rulings bind the arbitrator, but not the courts. This further enhances the consistency in application of Shariah rulings, thus securing certainty and finality on Shariah issues relating to Islamic finance applications and practices.

Establishment of individual Shariah committee at Islamic financial institutions

The Islamic Banking Act 1983 and Takaful Act 1984 require the establishment of an independent Shariah committee within each Islamic financial institution. In 2004, the Guidelines on the Governance of Shariah Committee for the Islamic Financial Institutions (the Guidelines) was issued outlining the role, duties and responsibilities of Shariah committee and its members and the relationship and working arrangement between the Shariah committee at individual institutions and the SAC at the national level. The Guidelines, among others, prohibit individuals from sitting in more than one committee within the same industry. While the underlying rationale for the prohibition is to avoid a conflict of interest, the rule served as a catalyst in expanding the pool of Shariah talent within the Islamic financial industry and, at the same time, increasing its diversity in terms of the experience and expertise of Shariah experts. Today, the total number of Shariah experts has increased to more than 100 individuals from a small number of scholars when the Guidelines was first issued in December 2004.

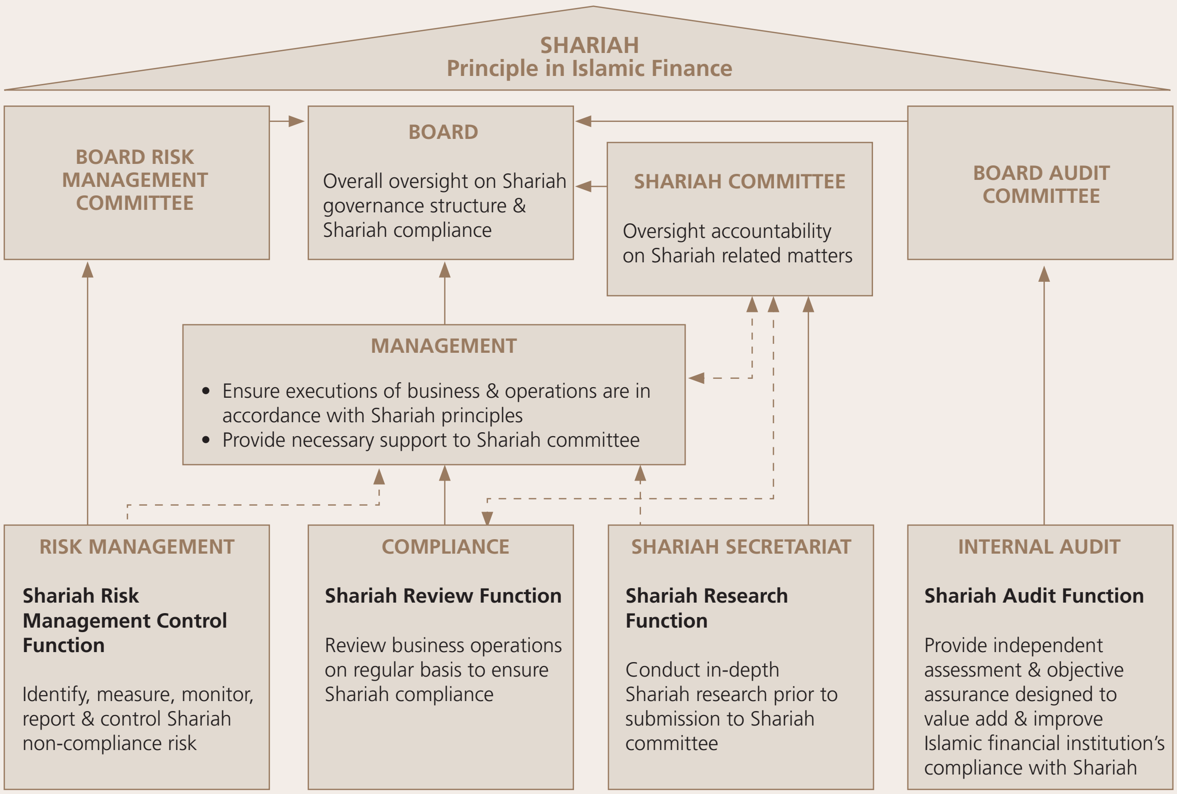
Although the current Shariah governance structure has increased the prominence of the role of the Shariah committee within the Islamic financial industry, the further enhancements to the Guidelines are needed to take into account the rapid developments in Islamic finance in this recent few years. These include, the enhancements relating to the governance arrangements of the board and management in respect to the Shariah compliance process, the independence and accountability of the Shariah committee in the decision making process, the strengthening of internal research capacity, compliance and the risk management processes.

A new Shariah framework

To further strengthen the Shariah governance structure, the Bank will be issuing a new Shariah governance framework for the Islamic financial institutions under the Bank's purview with the following objectives:

- to set out the expectations on an Islamic financial institution's Shariah governance structures, processes and arrangements with the goal of ensuring that all operations and business activities are consistent with Shariah principles at all times;
- to provide comprehensive guidance to the board, Shariah committee and management of Islamic financial institutions in discharging its duties on matters relating to Shariah; and
- to ensure proper functioning of Shariah compliance through effective Shariah review and Shariah audit functions.

Chart 1
Shariah Governance Framework Model for Islamic Financial Institutions



In developing the framework, the Bank has taken into account the Islamic Financial Services Board's (IFSB) Guiding Principles on Shariah Governance Systems for Institutions Offering Islamic Financial Services issued in December 2009 and also relevant practices observed in jurisdictions that have a substantial Islamic banking and finance sector.

The framework aims essentially to strengthen the Shariah governance process, decision making, accountability and independence. To reinforce the Shariah compliance functions, internal Shariah review and audit requirements will be introduced, supported by an appropriate risk management process and research capability. It is envisaged that the implementation of the framework will contribute towards evolving a more robust and sound Shariah governance framework within Islamic financial institutions which, in turn, will promote Shariah compliance throughout the organisation.

Under the framework, the board will be responsible for the overall Shariah oversight of Islamic financial institutions and the effective functioning of the Shariah governance structure, policies and processes. However, the board must recognise the independence of the Shariah committee and uphold the committee's decisions on Shariah aspects of the institution's business operations. While the framework does not specifically require an Islamic financial institution to appoint a Shariah expert among its board members, the board is encouraged to consider co-opting members on the board who have strong Shariah knowledge in order to serve as a 'bridge' between the board and the Shariah committee. The board shall also reasonably remunerate the Shariah committee members, to commensurate and reflect the accountability, duties and responsibilities of the Shariah committee.

The role and function of the Shariah committee has been expanded further from merely advisory in nature to assume a higher degree of accountability. The Shariah committee will now be accountable for the implementation of decisions and opinions throughout the Islamic financial institution. Consistent with its stature, the Shariah committee shall have direct access to the board. The Shariah committee shall also report directly to the Bank where the committee believes that non-compliances on Shariah matters in the Islamic financial institution have not been effectively and adequately addressed by the Islamic financial institution.

In supporting the board and the Shariah committee, the senior management of an Islamic financial institution is responsible to promote a strong culture of Shariah awareness and compliance within the organisation, including implementing best practices in Shariah governance in all aspects of the institution's operations. The senior management is also responsible for ensuring that all submissions to the Shariah committee are adequately researched and supported by a thorough study on the Shariah issues, product structuring and documentation. This would entail the development of internal Shariah research capabilities which are supported by adequate knowledge and resources to provide and undertake research effectively.

Islamic financial institutions are also expected to establish three functions that provide a system of checks and balances within the organisation, which include the following:

- a Shariah risk management control function that is able to identify all possible risk of Shariah non-compliance and, where appropriate, remedial measures to manage this risk;
- a Shariah review function that continuously assesses Shariah compliance of all activities and operations. Where instances of non-compliances are identified, the institution is expected to take prompt rectification measures and put in place the necessary mechanisms to avoid such recurrences; and
- a Shariah audit function that performs annual audits to provide an independent assessment of the adequacy and compliance of the Islamic financial institution with established policies and procedures, and the adequacy of the Shariah governance process.

Conclusion

With the rapid expansion of Islamic finance in Malaysia, the establishment of a comprehensive and holistic governance structures and processes is being continually enhanced to remain dynamic and relevant at all times. The Shariah governance framework in Malaysia has evolved with the changing market conditions, whereby the governance structure at both the overall Islamic financial system and the individual Islamic financial institutions have been enhanced and strengthened to ensure the observance of Shariah. The effective implementation of the new Shariah governance framework will further promote stakeholders' confidence and the integrity of the Islamic financial industry thereby reducing Shariah non-compliance risks and, over the medium term, contribute towards maintaining financial stability.

occurred over the last two decades. The affected pieces of legislation are the Payment Systems Act 2003, Insurance Act 1996, Banking and Financial Institutions Act 1989, Takaful Act 1984 and Islamic Banking Act 1983. The purpose of the review will be to: (i) ensure an effective and efficient legislative framework for the regulation and supervision of financial institutions and oversight of payment systems; (ii) align legislation with more principle-based and differentiated approaches to regulation and supervision based on risk; (iii) enhance the Bank's ability to take appropriate enforcement, remedial, intervention and resolution actions to promote institutional stability; (iv) achieve a more consistent legal framework across the different financial sectors in common areas; and (v) strengthen provisions to support more effective market conduct regulation and supervision. Detailed proposals on the legislative changes are expected to be finalised by the end of 2010.

The proposed legislative changes will further reinforce the strengthened financial stability framework in Malaysia following the enactment of the new Central Bank of Malaysia Act 2009 (CBA) that came into force on 25 November 2009. The new CBA clarifies the Bank's mandate for financial stability and provides expanded powers for the Bank to undertake surveillance and the prompt resolution of financial institutions, including non-regulated institutions that are systemically important. A further elaboration on the provisions under the CBA is provided in the box article ``Safeguarding Financial Stability under the Central Bank of Malaysia Act 2009´´.

Legislative changes will further reinforce the strengthened financial stability framework in Malaysia following the enactment of the new Central Bank of Malaysia Act 2009

Supervisory activities

The Bank's supervisory focus in 2009 continued to be directed towards ensuring the resilience of financial institutions to the risks arising from the global financial crisis and the economic slowdown that followed. System-wide vulnerabilities that originated from the inter-connectedness of the global financial system prompted closer examinations by the Bank of the inter-linkages between the domestic and overseas operations of financial institutions. More frequent engagements were pursued with management and boards of financial institutions to discuss the potential pressure points and risk drivers affecting individual institutions as highlighted from stress tests carried out by the financial institutions and the Bank. With more extensive cross-border operations of the major domestic financial conglomerates, the need for greater collaboration between the Bank and host regulators within the region was also prioritised to support the effective supervision of financial groups. To this end, the Bank is finalising the home-host supervisory framework to facilitate the timely sharing of information and improved cross-border collaboration between the Bank and other home and host supervisors.

With more extensive cross-border operations of the major domestic financial conglomerates, the need for greater collaboration between the Bank and host regulators within the region was also prioritised to support the effective supervision of financial groups

Liquidity risk management continued to be a central focus of supervisory visits throughout the year. The Bank conducted more rigorous liquidity stress tests in 2009 incorporating both funding and market liquidity risk factors. The results of the stress tests were used as a base for discussions with the management and boards of financial institutions on the robustness of the institutions' liquidity risk management practices and contingency funding plans. Financial institutions with cross-border operations were observed to have strengthened processes for the global management of liquidity, backed by improved infrastructure for global treasury operations and enhanced management information systems. The valuation of financial instruments and market liquidity also came under close scrutiny as foreign currency liquidity evaporated, triggered by heightened credit concerns and risk aversion. Given these continued constraints, supervisory attention was focused on ensuring that financial institutions incorporated the most current assumptions in the liquidity behavioural analysis, and testing contingency funding plans to ensure that these plans were operationally robust. Going forward, greater scope exists for liquidity stress testing to be integrated with other organisational stress testing initiatives, such as those impacting capital, earnings and asset quality.

Efforts to strengthen the Bank's supervisory practices and infrastructure remained an important priority for the Bank to ensure its continued effectiveness in discharging its mandate for financial stability. The Bank continued to expand its capabilities to support the timely identification and resolution of vulnerabilities facing licensed financial institutions. During the year, the Bank embarked on a project to develop a microsurveillance system to facilitate the continuous surveillance of financial institutions through the use of business intelligence tools and a centralised repository system. The system also supports the prompt identification of emerging risks and vulnerabilities in financial institutions which could have an impact on the stability of the financial system. Approaches to the supervision of financial conglomerates and the implementation of the risk-based supervisory approach were also further enhanced. In 2009, a Supervisory Practice Unit was established to support the consistent application of the risk-based supervisory approach across the different financial institutions and sectors supervised by the Bank. The unit is responsible for conducting research, reviewing and updating supervisory practices and methodologies, and ensuring the consistent interpretation and implementation of the risk-based supervisory framework by supervisors through the establishment of appropriate processes and systems to support sound supervisory assessments.

Payment Systems Report

Payment and Settlement Systems

Payment and Settlement Systems

The payment and settlement systems in Malaysia remained resilient and continued to operate smoothly throughout 2009, contributing to the stability of the financial system. Given its importance towards maintaining financial stability, oversight over the payment systems is explicitly stated as one of the primary objects of the Bank in the newly enacted Central Bank of Malaysia Act 2009.

In discharging its responsibilities, the focus of the Bank in 2009 was to ensure that the transfer of systems to its wholly-owned payment subsidiary, Malaysian Electronic Clearing Corporation Sdn. Bhd. (MyClear), was done seamlessly, without any disruptions. With the establishment of MyClear, the Bank undertook measures to strengthen governance arrangements to reinforce its oversight obligations over the payment systems. Migration to electronic payments (e-payments) remained a priority of the Bank. Consequently, preserving public confidence and trust in promoting the use of electronic modes of payment over paper-based was paramount. While notable progress has been achieved in the shift from paper-based payments to electronic form, cash and cheques remain popular. As part of its efforts to promote widespread adoption of e-payments, the Bank commissioned a study on payment preferences and usage to understand the payment habits of consumers and merchants, the issues and barriers faced in adopting e-payments, the level of awareness on e-payment products and their perception towards new payment technologies.

Reinforcing oversight

The Bank had established a payment subsidiary known as MyClear to reinforce its oversight responsibilities over two major payment systems, Real-time Electronic Transfer of Funds and Securities System (RENTAS) and National Electronic Cheque Information Clearing System (Sistem Penjelasan Informasi Cek Kebangsaan secara Elektronik, eSPICK). Both RENTAS and eSPICK being widely used and critical to financial stability and the smooth functioning of the economy, have been designated as designated payment systems under the Payment Systems Act 2003. Hence, the segregation of the oversight and operational function of RENTAS and eSPICK through the establishment of MyClear, paves the way for more effective surveillance, independent assessment and monitoring of risks in the major payment systems.

As RENTAS and eSPICK systems are designated payment systems, the Bank has issued supervisory expectations that should be met by MyClear in operating the systems. These expectations include ensuring that the risk management measures implemented are adequate to promote the safety and efficiency of the systems, compliance with best practices and international standards and timely submission of statistics and information required for the Bank to carry out its oversight function. In addition, the Bank has regular meetings with the senior management of MyClear to discuss developments, including market developments, issues of concern and obtain insights into initiatives undertaken by MyClear.

In response to these expectations, MyClear will be strengthening its enterprise-wide risk management framework and business continuity and contingency plan. MyClear also monitors the systems' operational performance on an ongoing basis, and ensures operational reliability through regular stress tests and live runs at the Bank's Disaster Recovery Centre (DRC).

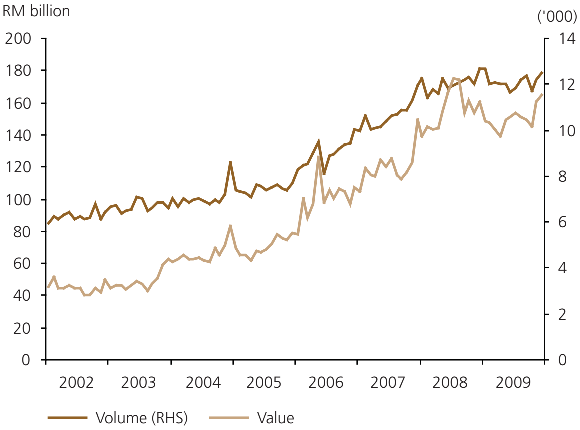
MyClear had conducted its first self-assessment on eSPICK and its operations against the Bank for International Settlements (BIS) Core Principles for Systemically Important Payment Systems (CPSIPS). The objective of the exercise was to assess the level of compliance with the relevant CPSIPS and identify the gaps and risks in the system and operations. The assessment concluded that eSPICK has broadly observed the relevant CPSIPS. For RENTAS, the last self-assessment was conducted in 2007 where RENTAS continued to exhibit a high level of robustness and came close to fully observing the CPSIPS. The Bank will continue to place emphasis towards achieving full compliance with the BIS core principles for the major payment systems.

Designated payment systems

RENTAS

In 2009, the RENTAS system settled three million transactions amounting to RM37.3 trillion, of

Chart 4.1
Daily Average of RENTAS Transactions by Value and Volume



Source: Bank Negara Malaysia

which the Interbank Funds Transfer System (IFTS) accounted for 2.9 million transactions with a value of RM35.7 trillion and Scripless Securities Transfer System (SSTS) accounted for 0.1 million transactions with a value of RM1.6 trillion. The total value of transactions settled through RENTAS recorded a slight decrease of 3.8% from the preceding year and represents 55.2 times Malaysia's GDP. On average, RENTAS processed approximately 12,100 transactions a day with an average daily value of RM150.2 billion. At its peak, RENTAS processed 17,099 transactions within a day with a total value of RM217.5 billion. Despite the global financial market turbulence and in times of market uncertainty, RENTAS remained resilient and continued to operate smoothly without any major disruption, achieving 99.9% system availability throughout 2009.

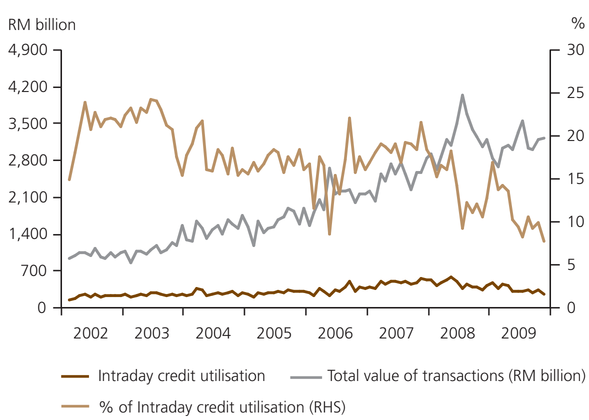
Despite the global financial market turbulence and in times of market uncertainty, RENTAS remained resilient and continued to operate smoothly

The value of foreign exchange (FX) settlements in 2009 fell by almost half of that in the previous year with a transaction amount of RM1.9 trillion. The transaction volume however recorded a marginal decline of 5% to 64,628 transactions in 2009 from 68,039 transactions in 2008. In 2009, a total of RM1.2 trillion of FX trades were settled through the Payment versus Payment (PvP) link established between RENTAS in Malaysia and USD Clearing House Automated Transfer System (USD CHATS) in Hong Kong in 2006 to mitigate ringgit and US dollar FX settlement risk. This accounts for 63.5% of the total FX trades, resulting in a significant reduction in FX settlement risk of ringgit-US dollar trades. On a daily basis, an average of RM4.8 billion was settled via the link in 2009.

The RENTAS system which caters for Delivery versus Payment (DvP) of USD securities settlement facilitated the issuance of a USD10 million redeemable convertible bond in November 2009. With the DvP infrastructure using the RENTAS-USD CHATS link, the delivery of Malaysian-issued US dollar securities deposited with RENTAS will be made simultaneously with its corresponding US dollar payment, thus eliminating the settlement risks associated with the trading of such securities in Malaysia. This signifies new opportunities for firms, both local and abroad, to raise FX funds in Malaysia as RENTAS is able to support the depository and settlement of USD denominated bonds.

By way of design, the RENTAS system aims to eliminate credit risk in the settlement process as it facilitates payments between participants on a real-time basis with finality. As the amount of liquidity required can be substantial given that each individual payment is made on a gross basis throughout the day, the availability of sources of liquidity and efficient liquidity management

Chart 4.2
Intraday Credit Usage



Source: Bank Negara Malaysia

in RENTAS are vital to minimise the incidence of payment gridlock and ensure the smooth flow of payments within the RENTAS system. In this regard, the Bank grants collateralised intraday credit facility to support the participants' liquidity needs, thus, minimising payment gridlock. The intraday credit utilised by RENTAS participants recorded a drop of 23.8%, from a total of RM5.3 trillion in 2008 to RM4 trillion in 2009. While the reduction is in tandem with the decrease in RENTAS transaction value, the intraday credit utilisation accounted for 10.7% of the total RENTAS transactions as compared to 13.6% in 2008. The decreasing trend in demand for intraday credit facility is due to the ample liquidity in the financial system and better liquidity management.

National Electronic Cheque Information Clearing System (eSPICK)

The eSPICK system, which replaced the previous cheque clearing system, National Cheque Imaging Clearing System (Sistem Penjelasan Imej Cek Kebangsaan, SPICK), has been successfully implemented nationwide in July 2009. On average, eSPICK processed 16.4 million transactions amounting to RM134.6 billion monthly and 0.8 million transactions worth RM6.5 billion daily. At its peak, eSPICK processed 1.5 million cheques in a day worth RM10.3 billion. eSPICK remained resilient and continued to operate smoothly without any major disruption, achieving 99.9% system availability throughout 2009.

Operational risk and business continuity

In its effort to mitigate operational risk to ensure minimal disruption in its operations, MyClear and its RENTAS and eSPICK members continued to undertake business continuity testing throughout the year taking into consideration the possibility of facing a wide range of contingencies. The regular testing of infrastructure and readiness using plausible scenarios seeks to ensure that the likelihood of operational risk events is low and to enable users to undertake the preparations necessary to address the likely impact should the event occur. MyClear had also successfully conducted an industry-wide Disaster Recovery (DR) live run in December 2009, on a coordinated basis, in which, all participants were required to operate from their respective DRCs and connect to RENTAS and eSPICK host system at the Bank's DR site. The exercise completed smoothly, without any problems pertaining to the readiness of MyClear and RENTAS and eSPICK participants' DR sites. RENTAS system live run was also successfully conducted for the PvP link in conjunction with the Hong Kong Interbank Clearing Limited's (HKICL) annual clearing contingency drill in October 2009. This exercise was to ensure the readiness of the connectivity between MYR Cross Currency Payment Matching Processor (CCPMP) client at the Bank's DR site and the MYR CCPMP server at HKICL's DR site.

In the light of the escalation of the Influenza A (H1N1) pandemic alert level by the World Health Organisation and the Ministry of Health Malaysia, the Bank set out the immediate precautionary and contingency measures that the financial industry should have in place to support critical business operations including the minimum essential services to be provided to the public. In addition, MyClear initiated split operations to enhance the preparedness of its critical operations staff in the event of a public health emergency.

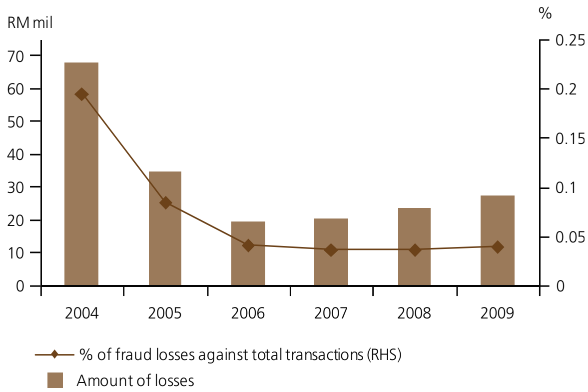
Public confidence in retail payment systems

In promoting safe and efficient payment systems, the Bank accords great importance in ensuring that the major retail payment systems process payments in a timely and secure manner. This is necessary in gaining and preserving public confidence and trust which is crucial to spur wider acceptance and adoption of e-payments in the retail area.

In promoting safe and efficient payment systems, the Bank accords great importance in ensuring that the major retail payment systems process payments in a timely and secure manner

The focus of the oversight activities were directed towards ensuring the robustness and reliability of the major retail payment systems operated by Malaysian Electronic Payment System (1997) Sdn. Bhd. (MEPS) and Touch 'n Go Sdn. Bhd. (TnG). Emphasis was placed on ensuring the availability of adequate internal controls and risk management practices as well as assessing contingency planning preparedness. No major disruptions on these retail payment systems were experienced during the year.

Chart 4.3
Credit Card Fraud



Source: Bank Negara Malaysia

Both MEPS and TnG had taken measures to improve the overall level of effectiveness of business continuity management to ensure the reliability and high availability of the core systems. MEPS had successfully conducted DR exercises for three of its core services, namely, the Shared ATM Network (SAN), the domestic PIN-based ATM card and the Interbank GIRO (IBG) system which included preparing for a broader range of potential disruption scenarios. Similarly, TnG had carried out periodic DR testing for its Central Clearing House System.

The Bank continues to collaborate with the industry players and relevant authorities to combat fraud in retail payment systems. In 2009, fraud losses in the country have been sustained at negligible levels, accounted for only 0.002% of total non-cash transactions.

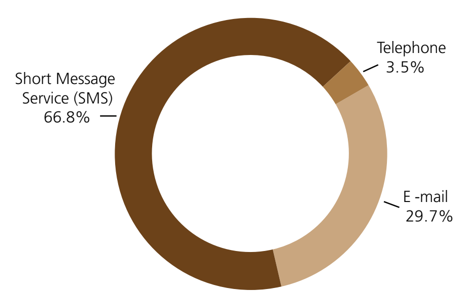
Payment card fraud also remained negligible during the year, accounting for only 0.04% of total payment card transactions as compared to 0.2% in 2004. Card-not-present (CNP) transactions and unauthorised transactions using lost and stolen credit cards remained the main source of fraud losses, which accounted for 57% and 20% of total credit card fraud losses, respectively. The fraud losses from counterfeiting activities continued to be insignificant as a result of the nationwide migration to the Europay-MasterCard-Visa (EMV) standard in 2005.

Similar fraud trends were observed across the globe, particularly within the Asia Pacific region. In this regard, collaborative efforts have been undertaken by the Bank and industry players to combat these types of fraud. The efforts taken include continuous awareness programmes by the respective card issuers to educate cardholders on the importance of safeguarding cards and card information, and merchant education programmes, spearheaded by the Malaysian Risk Management Task Force. The industry-wide merchant education programme is aimed at providing merchants with important procedures that should be adopted while processing card payments to mitigate unauthorised usage of payment cards at their outlets.

Losses from Internet banking fraud were also insignificant, accounting for only 0.0009% of the total value of Internet banking transactions in 2009. The Internet banking system infrastructure in Malaysia remained resilient and secure, as a result of comprehensive security measures and controls implemented by the financial institutions.

Phishing remained the main threat, accounting for more than 99% of total Internet banking fraud reported in 2009. Short message services (SMS) scam offering bogus cash prizes and spam e-mail messages containing security warning messages purportedly sent by the financial institutions are the two most common methods used by fraudsters to entice victims into divulging password and the second authentication factor such as personal identification number (PIN) and transaction authorisation code (TAC). These stolen login credentials will then be used to access unsuspecting victims' banking accounts and conduct unauthorised transfer of funds to a third party account.

Chart 4.4
Channels Used in Phishing Cases



Source: Bank Negara Malaysia

As phishing involves disclosure of login credentials by unsuspecting consumers to unauthorised parties, the industry took proactive measures to enhance consumer awareness on Internet banking safety measures. Essential information such as the prevailing types of Internet banking frauds and the importance of ensuring the confidentiality of customer information were communicated by the financial institutions providing Internet banking services via alert messages published via websites, ATMs and in the media. The Bank together with other regulatory authorities, CyberSecurity Malaysia and the Malaysian Communications and Multimedia Commission (MCMC) have also taken similar initiatives to alert and educate consumers through various media channels on Internet banking fraud and safety measures to prevent consumers from falling prey to such fraud tactics.

Oversight over remittance service providers

The liberalisation of the remittance industry in 2005, which saw the scope of service providers extended to non-banks, had successfully increased the access to formal remittance channels. This is in line with the Bank's objective to migrate remittance flows from the informal to formal channels. Following the liberalisation, the number of non-bank remittance service providers had increased to 40 as at end-2009 from three as at end-2005. Consequently, total outward remittance had grown significantly by 71.3% to RM10.5 billion in 2009 (2005:RM6.1 billion).

The liberalisation of the remittance industry in 2005 had successfully increased the access to formal remittance channels

The focus of the Bank's oversight over the remittance industry was directed towards ensuring the reliability and integrity of the remittance service providers and that these services are not used as a conduit for money laundering and terrorism financing. In this regard, the Bank conducts oversight and on-site examination to ensure compliance with the prudential requirements, which among others, include the governance structure, financial strength, remittance system reliability, daily transaction limit, disclosure of underlying information related to the services provided, management of customers' accounts and 'fit and proper' criteria for shareholders and directors.

Migration to electronic payments

The Bank has spent considerable effort in building and improving the payment system infrastructure to promote greater use of e-payments. It has also engaged the Government to champion the nation's migration to e-payments and sectors such as the insurance, securities and transit, which can play the role of catalyst for the uptake of e-payments in the economy. In 2009, the Bank commissioned a study to delve further into the impediments and issues that need to be addressed to drive the e-payment agenda at the national level.

Study on payment preferences and usage in Malaysia

The Bank commissioned a study on the payment preferences and usage of consumers and merchants in the Klang Valley and Penang in 2009 as part of its migration to e-payments agenda. The study focused on these two areas due to the higher availability of the supporting infrastructure for e-payments. With greater understanding of the payment habits of consumers and merchants, the issues and barriers faced in adopting e-payments, level of awareness on e-payment products and perception towards new payment technologies, the Bank together with MyClear, would work with the industry to spearhead the necessary action plans to drive the agenda. Some of the findings of the study from May to July 2009 involving 630 consumers and 422 merchants are as follows:

- Use of cash is prevalent among consumers and merchants, both in the Klang Valley and Penang. Consumers prefer to use cash for transaction value below RM30. Cash is perceived to be cheap, safe, convenient and fast;
- Over 70% of merchants use cheques to make payments to their suppliers while cash is the next preferred mode. For consumers, cheque is the most dominant payment method for transaction value above RM1,000 in Penang and RM2,000 in the Klang Valley;
- Internet banking is less popular in Penang as compared to the Klang Valley. The number of Internet banking subscribers in the Klang Valley is

double that in Penang;

- Consumers cited the lack of awareness on the availability of e-payment facilities, security concerns and preference for cash as reasons for not using e-payment. Merchants however cited the reluctance of suppliers and preference of suppliers for paper trail as reasons. The most common reasons cited by merchants for not accepting e-payment methods are the merchant fees to be paid, lack of awareness on the availability of e-payment facilities and lack of demand from customers. Both consumers and merchants found the broadcast and print media as the most effective and noticeable advertisement channel;
- Consumers between the age of 30 and 44 years old and those in the income range of RM1,501 to RM3,000 are more likely to use e-payment methods;
- Both consumers and merchants who are currently not using any e-payment methods are generally receptive towards using these payment methods in the future; and
- Over half of the consumers and merchants are keen to have payment applications pre-installed in their mobile phones.

Government sector

About 96% of Government payments are now conducted via electronic funds transfer. Continuing the Government's plans to enhance the effectiveness of the public delivery system, efforts are now centered on increasing Government online collections. By the end of 2009, the public were able to undertake 279 types of online payment services and performed online payments at 117 Government agencies compared to 148 online payment services at 89 agencies as at end-2008.

The Bank will continue to actively participate in the various working groups established by the Government to support its efforts towards having more Government agencies to offer e-payments. This includes facilitating the provision of online services and e-payment facility that offers higher value proposition to the public than undertaking transactions via the traditional paper-based way. In creating awareness and encouraging change of payment habits, the offering of online services and e-payments is complemented by awareness and promotional campaigns participated by the banking institutions under the "myBayar" banner. Based on the feedback received from the public, Internet banking is the preferred channel in making payments to the Government. The preference for Internet banking is understandable as it offers a secure, convenient, easy-to-use channel for banking and payment transactions. Thus, intensifying promotional activities for this channel would offer significant potential towards adoption of higher online payments to the Government sector. In addition, the public found television and radio advertisements more effective than the print media.

The use of the credit transfer facility for payments to the Government through the Financial Process Exchange (FPX) system has increased in popularity, having recorded 113,833 transactions valued at RM41.3 million in 2009, compared to 75,977 transactions valued at RM21.9 million in 2008. In terms of payment cards, 2.2 million transactions amounting to RM949 million were made in 2009 as compared to 644,736 transactions worth RM300 million during the last five months of 2008.

Securities sector

Efforts to facilitate a higher adoption of e-payments in the securities sector were intensified during the year. An e-Share Payment Working Group comprising the Bank, Securities Commission, Bursa Malaysia, Association of Banks in Malaysia, Association of Stockbroking Companies Malaysia and MEPS was formed in early 2009 to facilitate the adoption of e-payments for the sale and purchase of shares. While the stockbroking companies would benefit from the efficiency gains from automation, investors would gain from faster and more efficient receipt of funds over cheques. Proposals relating to e-Share Payment and crediting of dividend payments directly into the bank account of shareholders by public listed companies were deliberated and approved at the National Payments Advisory Council chaired by the Bank.

Recognising the enormous benefits for both stockbroking companies and investors and the operational efficiency gains for the capital market, the mandatory requirement for stockbroking companies to provide e-Share Payment options for clients to receive and make payments on share transactions and for all public listed companies to offer shareholders the facility to receive dividend payments directly into bank accounts (e-Dividend) was announced by the Prime Minister in the 2010 Budget. Both initiatives are expected to be implemented by the second and third quarter of 2010, respectively. An important task ahead for the working group is the formulation of a structured education plan to promote investors' awareness on the benefits of e-Share Payment and e-Dividend. Education and awareness are two critical success factors of the initiative. Equally important is the outreach to be pursued by the stockbroking firms and public listed companies to clients and shareholders to encourage subscription to these services.

Recognising the enormous benefits and the operational efficiency gains for the capital market, the stockbroking and public listed companies were mandated to provide e-Share Payment options and offer e-Dividend facility respectively

Transit sector

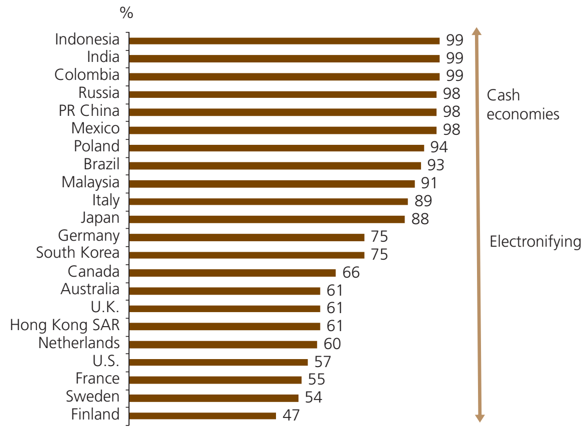
Apart from the Government sector and securities industry, the Bank also collaborated with the Department of Railways Malaysia, TnG and the railway operators to increase the efficiency of making payments at the rail transit sector. Measures taken to provide greater convenience to commuters to adopt the Touch 'n Go card in making rail transit payments include the deployment of more Touch 'n Go readers at the railway fare gates, installation of Automatic Reload Kiosks at four main central stations and the pilot implementation of the ``Park & Ride" saving plan in October 2009 by TnG, RapidKL and KL Monorail. Following these efforts, the number of e-money transactions in transit increased by 19.6% to 18.3 million transactions in 2009 from 15.3 million transactions in 2007.

Trends in retail payments

Cash and cheques

As highlighted in the payment preferences and usage study, cash is still widely preferred by both consumers and merchants. This is

Chart 4.5
Share of Cash Transactions



Source: McKinsey Global Payments Map 2009

supported by a 9.3% increase in the value of cash withdrawals compared with a growth of around 2% in consumption during the year. This is also substantiated by the increasing trend of cash in circulation (CIC) per capita since 2001 and the increase in CIC-to-GDP ratio from 5.5% in 2008 to 6.4% in 2009. Nonetheless, the average value of cash withdrawals at the ATM, which is one of the proxies used to indicate the role of cash, remained relatively constant in the range of RM459 to RM470 in the past four years. One of the factors behind the increase in CIC in 2009 could be the preference for cash payments over credit card to better manage finances and control on spending. As a result, a slower growth was recorded in credit card usage in 2009 as compared to previous years, as consumers avoid purchasing on credit. Cash also remains an important payment instrument in most countries, based on the McKinsey Global Payments Map 2009.

In contrast, the value of cheque payments declined by 4.9% to RM1.7 trillion from RM1.8 trillion in 2008, while the number of cheques cleared registered a slight decline of 1.2% over the year. On daily average, the value of cheques cleared was RM6.8 billion, down from RM7.1 billion in 2008, while the number of cheques cleared remained virtually unchanged.

In recent years, more countries have experienced sharper declines in cheque usage, in favour of

Mobile Payments in Malaysia

Mobile payment services are currently offered by eight non-banking institutions, independently or through the collaboration with banking institutions. It offers the subscribers the convenience of using mobile phones to make payments for purchases of goods and services such as purchases of prepaid airtime reloads, mobile content, movie tickets and utility bills payments by means of SMS. The service also enables subscribers to conduct local and foreign remittances. Payment transactions are initiated through mobile phones and payments are made either by direct debit to banking, credit card or e-money accounts. In April 2009, Maxis, Visa, Maybank, TnG and Nokia collaborated to provide mobile contactless payment via Near Field Communication (NFC). The service enables customers to enjoy the convenience of making payment by waving their mobile phone at designated contactless readers to pay for retail purchases at 1,485 Visa PayWave merchants and paying for toll, transit, parking and theme park charges at over 4,600 Touch 'n Go usage points. The payments are made by debiting customers' Touch 'n Go prepaid accounts or by charging via the Maybank Visa credit card.

more cost effective e-payment modes as more financial institutions and businesses acknowledge the significant inefficiencies related to the processing and acceptance of cheques. This includes countries such as Australia, Canada, Germany, the United Kingdom (UK) and the United States. The UK Payments Council has gone a step further in setting a target date of 31 October 2018 to close the central cheque clearing system.

Payment cards and e-money

Payment cards remained the most popular retail payment method for Malaysians, accounting for 72% of the total number of non-cash retail payments as at the end of 2009. However, due to slower economic activity, the growth in total number of card payments recorded a marginal increase of 4.5% in 2009 as compared to 11.7% in 2008. Efforts to deploy more card terminals to provide payment convenience and encourage the switch from cash to cards continued to be pursued, with an increase in the deployment of 16,998 terminals in the market during the year. The main use of both the credit card and domestic PIN-based ATM card is for fuel purchases while the international debit card scheme is mainly used at retail outlets. More promotional programmes for the use of debit cards were rolled out by the financial institutions to encourage its usage as debit cards offer a significant opportunity for financial institutions to reduce cash withdrawals at the ATM which would in turn bring down ATM transaction related cost.

E-money accounts for about 51% of non-cash transactions in the economy. 717.2 million e-money transactions amounting to RM2.2 billion were recorded in 2009. Its usage has begun to expand beyond the transportation sector as the uptake of mobile remittance via e-money accounts improved. Mobile remittance using e-money had increased from 448 transactions valued at RM0.1 million in 2008 to 19,622 transactions amounting to RM14.6 million in 2009.

E-channels and other electronic funds transfer systems

Internet banking continued to gain wider acceptance in 2009, with Internet banking subscribers to population ratio increasing from 21.8% as at end-2008 to 28.1% as at end-2009. Internet banking grew by 40.1% to 564.1 million transactions, valued at RM801.4 billion. The growth in terms of value was mainly attributed to funds transfers performed by individual subscribers.

Banking and payment transactions performed through the mobile phone channel remained low. Mobile banking subscribers increased marginally from 0.5 million to 0.6 million in 2009, accounting for only 2.1% of total mobile phone subscribers as at the end of 2009. Transactions conducted were mainly business-to-business payments by corporate subscribers, which amounted to RM78.2 million or 56% of the total mobile banking transaction value. In terms of payments using the mobile phone, 3.9 million transactions amounting to RM78.2 million were recorded in 2009. The penetration rate for mobile payment subscribers remained low at 1.6% of total mobile phone subscribers in 2009. Mobile contactless payments using the NFC technology was introduced in 2009, which allow users to make payments by waving the mobile phone on the contactless readers. While this is an attractive proposition, its usage is highly dependent on the availability of mobile phones with NFC capability. A working group to be chaired by the Bank and participated by MCMC, mobile network operators, MEPS and financial institutions would be established to develop a successful mobile ecosystem to provide the necessary impetus for mobile payments in Malaysia.

The use of ATM network for cross-border cash withdrawals facilitated by the links between MEPS ATM network with the SAN in Singapore, Thailand, Indonesia and the People's Republic of China have shown encouraging growth in 2009 with transactions in Malaysia increasing by 72.5% and 63.1% in terms of volume and value respectively. The significant growth was mainly attributed to Chinese tourists making withdrawals at participating Malaysian banks ATM network through the link established by MEPS with China Union Pay (CUP) in China, which has 209 participating banks in the CUP network.

Moving forward

The increasing demand for faster and cheaper methods of making payments and rising volume of cross border trades and investments are strong motivations for a stable, highly efficient and more integrated payment system with improved cross border payment linkages for both cash and securities settlements. The requirement for more inter-connected payment systems in the region is also important in deepening financial integration in the ASEAN region.Thus, collaboration with other central banks in the region to establish necessary linkages between national payment and settlement systems and promote closer integration of the central securities depositories in improving cross border payment, settlement and custody services would be one of the focus areas of the Bank in 2010 and the years ahead.

It is also timely that the central banks in the region work collectively in enhancing liquidity crisis management. Among the many lessons learned from the credit crisis in 2007 was the significant importance of having an effective liquidity management framework and the supporting role of the central bank to avoid liquidity crunches. Towards this end, the Bank, which is an active member of the Joint Task Force of the Executives' Meeting of East Asia-Pacific (EMEAP) Working Group on Financial Markets and the EMEAP Working Group on Payment and Settlement Systems, is in discussions with other member central banks on the possibility of establishing Cross-Border Collateral Arrangement (CBCA) within the EMEAP region. The CBCA seeks to address the liquidity requirements of market participants by establishing operational arrangements for central banks in accepting collateral denominated in foreign currencies or located in foreign jurisdictions, in an emergency, to support the provision of intraday, overnight or short-term credit.

Collaboration with other central banks to establish linkages between national payment and settlement systems, promote closer integration of the central securities depositories and enhance liquidity crisis management would be the focus areas of the Bank in 2010 and the years ahead

A comprehensive plan is currently being developed to further advance the payment systems to ensure that the developments undertaken would promote an effective financial system and meet the future payment needs of the economy. In this regard, strategies and recommendations for the payment systems would be included as part of the new blueprint for the financial sector. Efforts moving forward would include enlisting the cooperation of more economic sectors to drive the higher adoption of e-payments as well as addressing the issues highlighted by consumers and merchants in the payment preferences and usage study.

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Table A.1
Sources and Uses of Funds of the Financial System

	2005	2006	2007	2008	2009*p*
	RM million				
Sources of Funds					
Capital, reserves and profit	180,639.1	218,450.8	246,245.7	282,584.1	331,112.2
Currency	34,396.7	37,896.0	42,192.7	48,042.9	51,138.6
Demand deposits	135,944.1	165,166.1	166,128.4	174,928.3	203,410.3
Other deposits[1]	787,169.3	910,403.1	982,933.4	1,087,821.1	1,190,077.7
Banking and financial institutions	*227,173.6*	*319,550.6*	*312,240.1*	*341,894.6*	*382,406.9*
Public sector	*44,415.0*	*34,176.8*	*37,810.1*	*43,433.6*	*45,696.0*
Private sector	*501,873.3*	*544,589.0*	*616,863.7*	*681,576.7*	*734,822.3*
Foreign	*13,707.4*	*12,086.7*	*16,019.5*	*20,916.3*	*27,152.5*
Borrowings	55,955.8	96,094.2	82,022.8	94,408.4	89,426.8
Funds from other financial institutions	84,238.8	78,267.2	154,393.2	110,293.6	85,894.9
Domestic[2]	*43,150.4*	*45,784.2*	*100,138.1*	*59,063.5*	*49,096.9*
Foreign	*41,088.4*	*32,483.0*	*54,255.1*	*51,230.1*	*36,797.9*
Insurance, provident and pension funds	373,645.1	425,637.8	468,865.3	509,294.9	555,409.2
Other liabilities	260,673.7	226,362.6	333,615.8	265,940.6	269,916.4
Total Liabilities	**1,912,662.6**	**2,158,277.7**	**2,476,397.4**	**2,573,313.8**	**2,776,386.1**
Uses of Funds					
Currency	6,057.3	8,626.4	9,235.3	10,298.0	10,937.0
Deposits with other financial institutions	259,429.4	345,239.3	468,521.1	366,437.2	382,731.2
Domestic	*232,385.7*	*296,921.1*	*379,611.1*	*322,234.7*	*334,706.4*
Foreign	*27,043.7*	*48,318.2*	*88,910.0*	*44,202.5*	*48,024.8*
Loans and advances	721,642.2	784,425.9	864,470.9	960,362.3	1,038,317.5
Banking and financial institutions	*5,446.5*	*12,054.8*	*11,993.1*	*51,382.0*	*42,694.1*
Public sector	*22,449.5*	*55,863.5*	*61,539.2*	*61,712.9*	*100,406.7*
Private sector	*691,258.2*	*713,451.4*	*784,486.6*	*835,232.9*	*880,629.0*
Foreign	*2,488.1*	*3,056.3*	*6,452.0*	*12,034.5*	*14,587.7*
Securities	472,883.7	605,892.0	670,171.4	754,372.6	846,696.3
Treasury bills	*1,698.4*	*1,687.1*	*1,969.8*	*1,524.5*	*1,940.5*
Commercial bills	*7,078.7*	*6,250.2*	*10,912.4*	*13,224.0*	*12,508.0*
Malaysian Government Securities (MGS)	*153,654.3*	*174,424.5*	*202,055.1*	*234,493.3*	*274,628.1*
Corporate	*291,606.4*	*303,684.7*	*364,897.6*	*411,136.8*	*460,547.6*
Private Debt Securities (PDS)	*140,405.4*	*135,384.5*	*175,295.8*	*191,676.8*	*200,249.6*
Equities	*151,201.0*	*168,299.5*	*189,601.7*	*219,459.9*	*260,298.0*
Foreign	*6,677.9*	*7,399.2*	*5,221.3*	*6,141.2*	*6,425.0*
Others	*12,168.0*	*112,446.3*	*85,115.2*	*87,852.9*	*90,647.2*
Gold and forex reserves	263,235.6	288,921.8	334,410.9	315,746.1	322,922.3
Other assets[3]	189,414.3	129,823.7	129,587.7	166,097.5	174,781.8
Total Assets	**1,912,662.6**	**2,158,277.7**	**2,476,397.4**	**2,573,313.8**	**2,776,386.1**

[1] Includes savings, fixed, NIDs, repos and others deposits
[2] Includes statutory reserves of banking institutions
[3] Effective 2006, portions of `Other assets´ have been re-classified
p Preliminary
Note: Numbers may not necessarily add up due to rounding

Table A.2
Banking System[1]: Income and Expenditure

	For the calendar year				
	2005	2006	2007	2008	2009*p*
	RM million				
Interest income	43,659.6	52,134.5	59,789.9	63,146.9	56,364.0
Less: Interest expense	22,034.8	27,809.1	32,847.4	34,058.1	26,557.8
Net interest income	21,624.8	24,325.4	26,942.6	29,088.8	29,806.3
Add: Fee-based income	4,721.2	5,167.9	6,896.4	7,385.8	7,854.3
Less: Staff cost	6,280.0	7,509.5	8,557.4	9,342.5	9,838.8
Overheads	7,057.8	8,211.3	9,522.0	10,826.0	10,667.0
Gross operating profit	13,008.2	13,772.5	15,759.6	16,306.1	17,154.8
Less: Loan loss and other provisions	5,558.7	6,538.3	5,370.1	4,170.1	4,886.1
Gross operating profit after provision	7,449.6	7,234.2	10,389.4	12,136.0	12,268.7
Add: Other income	4,932.2	5,715.0	7,312.4	7,033.8	4,738.7[2]
Pre-tax profit	**12,381.8**	**12,949.2**	**17,701.9**	**19,169.7**	**17,007.4**
Pre-tax profit / Average assets (%)	1.4	1.3	1.5	1.5	1.2
Pre-tax profit / Average shareholders' funds (%)	16.8	16.2	19.7	18.6	13.9
Pre-tax profit / Average employee (RM'000)	130.3	131.8	165.0	169.5	148.7
Cost incurred per ringgit of revenue earned (sen)	42.6	44.7	43.9	46.4	48.4
Cost incurred per ringgit of net interest income (sen)	61.7	64.6	67.1	69.3	68.8
Overheads to staff cost (%)	112.4	109.3	111.3	115.9	108.4
Staff cost per employee (RM'000)	65.3	74.8	79.8	82.6	86.0

[1] Includes Islamic banks
[2] Includes a significant non-recurring impairment on overseas investment by a commercial bank
p Preliminary
Note: Numbers may not necessarily add up due to rounding

Table A.3
Commercial Banks[1]: Income and Expenditure

	For the calendar year				
	2005	2006	2007	2008	2009*p*
	RM million				
Interest income	41,960.9	50,396.0	56,890.9	60,568.2	54,417.7
Less: Interest expense	20,768.9	26,486.7	30,619.2	32,180.0	25,402.6
Net interest income	21,192.0	23,909.3	26,271.7	28,388.2	29,015.1
Add: Fee-based income	4,367.0	4,885.7	5,596.7	5,967.2	6,286.8
Less: Staff cost	5,932.4	7,088.5	7,753.0	8,515.3	9,136.3
Overheads	6,876.9	7,926.3	8,590.1	9,949.8	9,891.7
Gross operating profit	12,749.8	13,780.2	15,525.4	15,890.3	16,273.8
Less: Loan loss and other provisions	5,444.7	6,339.3	5,517.7	4,128.3	4,995.5
Gross operating profit after provision	7,305.0	7,440.9	10,007.7	11,762.0	11,278.3
Add: Other income	3,790.3	4,642.2	5,647.8	6,726.6	4,495.7[2]
Pre-tax profit	**11,095.3**	**12,083.1**	**15,655.4**	**18,488.6**	**15,773.9**
Pre-tax profit / Average assets (%)	1.3	1.2	1.4	1.5	1.2
Pre-tax profit / Average shareholders' funds (%)	16.2	16.4	19.2	19.6	14.3
Pre-tax profit / Average employee (RM'000)	120.1	126.9	153.6	176.2	148.6
Cost incurred per ringgit of revenue earned (sen)	43.6	44.9	43.6	44.9	47.8
Cost incurred per ringgit of net interest income (sen)	60.4	62.8	62.2	65.0	65.6
Overheads to staff cost (%)	115.9	111.8	110.8	116.8	108.3
Staff cost per employee (RM'000)	63.5	73.2	76.1	81.2	86.1

[1] Includes finance companies and Islamic banks
[2] Includes a significant non-recurring impairment on overseas investment by a commercial bank
p Preliminary
Note: Numbers may not necessarily add up due to rounding

Table A.4
Investment Banks: Income and Expenditure

	For the calendar year				
	2005	2006	2007	2008	2009*p*
	RM million				
Interest income	1,698.7	1,738.5	2,899.0	2,578.6	1,946.4
Less: Interest expense	1,265.9	1,322.4	2,228.2	1,878.0	1,155.2
Net interest income	432.8	416.0	670.9	700.6	791.2
Add: Fee-based income	354.2	282.2	1,299.7	1,418.5	1,567.5
Less: Staff cost	347.6	421.0	804.4	827.2	702.5
Overheads	180.9	285.0	932.0	876.1	775.2
Gross operating profit	258.5	-7.7	234.2	415.8	881.0
Less: Loan loss and other provisions	113.9	199.0	-147.5	41.8	-109.4
Gross operating profit after provision	144.5	-206.7	381.8	373.9	990.4
Add: Other income	1,141.9	1,072.8	1,664.7	307.1	243.0
Pre-tax profit	**1,286.5**	**866.2**	**2,046.4**	**681.1**	**1,233.4**
Pre-tax profit / Average assets (%)	2.9	1.5	2.9	1.0	1.1
Pre-tax profit / Average shareholders' funds (%)	23.2	13.8	26.4	7.5	8.0
Pre-tax profit / Average employee (RM'000)	484.1	281.8	276.9	83.6	150.7
Cost incurred per ringgit of revenue earned (sen)	27.4	39.9	47.8	70.2	56.8
Cost incurred per ringgit of net interest income (sen)	122.1	169.7	258.8	243.1	186.6
Overheads to staff cost (%)	52.0	67.7	115.9	105.9	110.4
Staff cost per employee (RM'000)	132.4	119.5	108.8	101.6	85.9

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

Table A.5
Islamic Banking System: Income and Expenditure

	For the calendar year				
	2005[1]	2006[1]	2007	2008	2009*p*
	RM million				
Income	4,183.1	5,271.2	7,688.8	9,123.7	9,707.7
Less: Expense	1,639.8	2,418.9	3,528.8	4,161.6	3,611.3
Net income	2,543.3	2,852.3	4,159.9	4,962.2	6,096.4
Add: Fee-based income	232.7	297.7	461.4	489.0	595.2
Less: Staff cost	282.7	346.8	800.0	886.2	932.8
Overheads	468.5	812.7	1,454.6	1,873.0	2,098.3
Gross operating profit	2,024.8	1,990.5	2,366.7	2,692.0	3,660.6
Less: Financing loss and other provisions	652.5	575.3	917.9	1,200.6	1,386.4
Gross operating profit after provision	1,372.3	1,415.2	1,448.8	1,491.4	2,274.2
Add: Other income	170.3	197.2	445.3	319.3	368.9
Pre-tax profit	**1,542.6**	**1,612.4**	**1,894.1**	**1,810.7**	**2,643.1**
Pre-tax profit / Average assets (%)	1.9	1.6	1.3	1.0	1.3
Pre-tax profit / Average shareholders' funds (%)	24.0	18.7	15.6	12.4	13.9
Pre-tax profit / Average employee (RM'000)[2]	195.0	198.8	130.4	107.7	138.5
Cost incurred per ringgit of revenue earned (sen)	18.0	22.0	26.2	27.8	28.4
Cost incurred per ringgit of net income (sen)	29.5	40.7	54.2	55.6	49.7
Overheads to staff cost (%)	165.7	234.3	181.8	211.4	224.9
Staff cost per-employee (RM'000)[2]	32.9	45.5	55.1	52.7	48.9

[1] Excludes one Islamic bank that made exceptional loss
[2] Number of employees is estimated based on the percentage of institution's Islamic assets
p Preliminary
Note: Numbers may not necessarily add up due to rounding

Table A.6
Banking System: Key Data

	As at end				
	2005	2006	2007	2008	2009
Number of institutions	43	42	47	54	54
Commercial banks[1]	*27*	*22*	*22*	*22*	*22*
Investment banks	*10*	*10*	*14*	*15*	*15*
Islamic banks	*6*	*10*	*11*	*17*	*17*
Office network	2,244	2,139	2,245	2,271	2,298
Commercial banks[1]	*2,072*	*1,952*	*1,968*	*1,979*	*1,999*
Investment banks	*19*	*19*	*120*	*131*	*131*
Islamic banks[2]	*766*	*1,167*	*1,272*	*2,039*	*2,087*
Number of banks with internet services	14	16	18	21	24
Number of employees	96,106	100,414	109,641	114,856	114,804
Commercial banks[1]	*89,047*	*91,741*	*96,146*	*99,593*	*98,846*
Investment banks	*2,625*	*3,522*	*7,721*	*8,561*	*8,129*
Islamic banks	*4,434*	*5,151*	*5,774*	*6,702*	*7,829*

[1] Includes finance companies
[2] Includes Islamic bank branches that are shared with conventional bank branches

Table A.7
Commercial Banks[1]: Commitments and Contingencies

	As at end				
	2005	2006	2007	2008	2009*p*
	RM million				
Assets sold with recourse and commitments with drawdown	21,693.4	21,052.0	19,574.6	12,744.2	5,871.4
Credit extension commitments	228,723.2	258,026.1	303,862.7	348,118.2	377,446.3
Direct credit substitutes	16,026.4	16,404.2	19,424.7	21,179.7	19,922.4
Foreign exchange related contracts	161,030.2	212,377.6	368,769.5	364,511.3	341,651.1
Interest rate related contracts	252,488.9	552,340.1	642,812.1	752,070.1	648,129.3
Trade-related contingencies	21,049.1	20,767.3	17,756.9	13,608.4	12,553.5
Transaction-related contingencies	23,529.3	26,245.3	29,031.1	34,035.8	35,873.1
Underwriting obligations	1,605.7	1,310.4	2,282.7	1,383.5	1,532.2
Others	19,211.5	34,360.7	44,026.3	52,838.9	61,151.1
Total	**745,357.7**	**1,142,883.7**	**1,447,540.5**	**1,600,490.1**	**1,504,130.5**

[1] Includes finance companies & Islamic banks
p Preliminary
Note: Numbers may not necessarily add up due to rounding

Table A.8
Investment Banks: Commitments and Contingencies

	As at end				
	2005	2006	2007	2008	2009*p*
	RM million				
Assets sold with recourse and commitments with drawdown	2,418.3	2,968.0	2,049.9	79.1	5.4
Credit extension commitments	2,847.3	1,681.3	4,140.4	2,328.8	2,640.4
Direct credit substitutes	1,312.4	855.5	1,165.9	729.4	484.3
Foreign exchange related contracts	4,976.9	5,669.7	2,812.3	464.4	801.5
Interest rate related contracts	112,409.4	38,010.1	44,180.0	14,154.2	10,018.0
Trade-related contingencies	0.0	0.0	1.1	0.0	0.0
Transaction-related contingencies	1,794.5	1,304.5	806.7	151.4	10.5
Underwriting obligations	2,106.5	4,599.8	3,486.7	2,551.8	987.6
Others	506.2	7,950.4	26,943.7	8,988.4	19,426.0
Total	**128,371.5**	**63,039.2**	**85,586.6**	**29,447.6**	**34,373.7**

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

Table A.9
Life Insurance[1]: Income and Outgo

Item	For the calendar year				
	2005	2006	2007	2008	2009
	RM million				
Income					
Premium income	16,020.6	17,148.0	18,342.6	18,772.4	19,855.1
Net investment income	3,661.2	3,994.7	4,568.3	4,912.5	4,925.8
Profit on sale of assets and miscellaneous income	1,281.7	2,630.0	5,012.7	3,211.9	4,973.1
Total	20,963.5	23,772.7	27,923.6	26,896.9	29,754.0
Outgo					
Net policy benefits	6,274.1	7,320.2	9,081.8	10,025.4	11,850.5
Agency remuneration	2,509.7	2,462.4	2,582.9	2,718.7	2,945.6
Management expenses[2]	1,073.4	1,252.1	1,387.6	1,557.1	1,639.2
Loss on disposal of assets and other outgo	1,457.2	1,419.0	1,600.3	5,323.3	2,682.8
Total	11,314.3	12,453.8	14,652.6	19,624.5	19,118.0
Excess of income over outgo	9,649.2	11,319.0	13,271.0	7,272.4	10,635.9

[1] Figures have been adjusted to reflect the global business of life insurance
[2] Inclusive of net bad and doubtful debts
Note: Numbers may not necessarily add up due to rounding

Table A.10
General Insurance[1]: Underwriting and Operating Results

Item	For the calendar year				
	2005	2006	2007	2008	2009
	RM million				
Underwriting profit	998.1	490.3	16.0	111.6	675.1
Investment income	663.3	730.0	796.6	789.9	772.3
Capital gains	161.2	334.1	635.4	149.9	441.2
Other income	60.0	119.6	60.2	108.8	128.1
Capital losses	272.0	166.0	107.1	508.1	133.8
Other outgo	22.5	47.5	62.0	40.8	81.8
Operating profit	1,588.2	1,460.5	1,339.0	611.4	1,801.0

[1] Figures have been adjusted to reflect the global business of general insurance
Note: Numbers may not necessarily add up due to rounding

Table A.11
Family Takaful[1]: Income and Outgo

Item	For the calendar year				
	2005	2006	2007	2008	2009
	RM million				
Income					
Net contributions	977.1	1,241.5	1,990.5	2,374.7	2,697.5
Net investment income	192.3	232.0	282.2	298.8	358.9
Profit on sale of assets and miscellaneous income	57.3	120.5	103.1	165.1	305.2
Total	1,226.6	1,594.0	2,375.8	2,838.6	3,361.7
Outgo					
Net certificate benefits	347.2	400.8	535.5	633.4	903.9
Net commissions	92.5	118.5	178.0	297.1	432.9
Management expenses[2]	83.0	171.5	248.6	246.5	317.9
Loss on disposal of assets and other outgo	60.3	100.7	50.3	201.6	45.2
Total	583.1	791.6	1,012.5	1,378.5	1,699.9
Excess of income over outgo	643.6	802.4	1,363.3	1,460.1	1,661.7

[1] Figures have been adjusted to reflect the global business and actual expenses borne by family takaful funds
[2] Inclusive of net bad and doubtful debts
Note: Numbers may not necessarily add up due to rounding

Table A.12
General Takaful[1]: Underwriting and Operating Results

Item	For the calendar year				
	2005	2006	2007	2008	2009
	RM million				
Underwriting profit	107.5	-9.5	-91.3	82.5	147.8
Investment income	19.6	32.3	44.6	50.6	57.7
Capital gains	8.7	19.0	15.9	25.1	29.7
Other income	0.3	3.9	5.2	26.5	3.8
Capital losses	7.7	11.0	5.0	36.7	2.3
Other outgo	1.3	3.6	7.0	7.1	9.7
Operating profit	127.2	31.1	-37.6	141.0	227.0

[1] Figures have been adjusted to reflect the global business and actual expenses borne by general takaful funds
Note: Numbers may not necessarily add up due to rounding

Table A.13
Development Financial Institutions[1] : Sources and Uses of Funds

	As at end				
	2005	2006	2007	2008	2009
	RM million				
Sources:					
Shareholders' funds	12,744.0	15,091.1	17,767.8	23,057.2	24,029.1
Paid-up capital	*8,563.4*	*10,296.7*	*10,341.8*	*12,526.8*	*12,771.9*
Reserves	*2,221.5*	*3,006.0*	*3,390.7*	*5,004.2*	*4,619.3*
Retained earnings	*1,959.1*	*1,788.4*	*4,035.3*	*5,526.2*	*6,637.9*
Deposits accepted	54,084.7	60,402.0	67,067.9	79,542.8	95,581.6
Borrowings	20,672.5	23,239.1	24,771.4	21,501.0	22,332.3
Government	*13,386.2*	*14,823.7*	*17,188.6*	*13,599.1*	*14,030.0*
Multilateral/International agencies	*4,103.2*	*4,050.7*	*2,784.0*	*2,420.4*	*2,014.4*
Others	*3,183.1*	*4,364.7*	*4,798.8*	*5,481.5*	*6,287.9*
Others	12,366.7	14,829.9	19,163.3	20,328.2	22,766.2
Total	**99,867.9**	**113,562.1**	**128,770.4**	**144,429.2**	**164,709.2**
Uses:					
Deposits placed	13,964.4	18,831.3	20,519.5	20,118.8	25,167.3
Investments	28,034.6	28,819.7	32,762.5	36,535.1	38,591.5
of which:					
Government securities	*4,489.2*	*4,617.7*	*4,758.7*	*6,300.9*	*7,520.6*
Shares	*8,370.5*	*8,005.6*	*6,753.1*	*8,707.5*	*9,346.2*
Quoted	*7,030.1*	*7,561.4*	*6,434.7*	*8,422.7*	*8,408.8*
Unquoted	*1,340.4*	*444.2*	*318.4*	*284.8*	*937.4*
Loans and advances	47,495.9	55,527.8	65,279.2	75,376.7	88,227.3
Fixed assets	4,205.3	4,449.7	4,614.9	5,398.9	5,885.0
Others	6,167.7	5,933.6	5,594.3	6,999.7	6,838.1
Total	**99,867.9**	**113,562.1**	**128,770.4**	**144,429.2**	**164,709.2**
Contingencies:					
Guarantee	3,882.1	5,482.6	5,113.9	4,780.5	4,364.7
Export credit insurance	743.2	661.7	1,057.9	1,068.8	835.8
Total	**4,625.3**	**6,144.3**	**6,171.8**	**5,849.3**	**5,200.5**

[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), 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.14
Development Financial Institutions[1] under DFIA[2] : Sources and Uses of Funds

	As at end				
	2005	2006	2007	2008	2009
	RM million				
Sources:					
Shareholders' funds	8,398.1	10,484.2	11,498.3	16,814.5	18,342.6
Paid-up capital	*5,503.6*	*7,171.5*	*7,194.9*	*9,374.9*	*10,132.4*
Reserves	*1,479.9*	*2,207.7*	*2,533.7*	*4,092.8*	*3,707.8*
Retained earnings	*1,414.6*	*1,105.0*	*1,769.7*	*3,346.8*	*4,502.4*
Deposits accepted	40,225.5	45,098.7	50,450.3	59,210.4	71,251.1
Borrowings	16,437.2	18,729.1	19,877.1	15,913.3	15,505.7
Government	*12,201.1*	*13,758.7*	*15,917.4*	*12,162.6*	*12,268.5*
Multilateral/International agencies	*3,927.4*	*3,869.8*	*2,574.5*	*2,257.0*	*1,687.6*
Others	*308.7*	*1,100.6*	*1,385.2*	*1,493.7*	*1,549.6*
Others	9,550.1	11,343.1	15,269.5	16,238.8	18,853.5
Total	**74,610.9**	**85,655.1**	**97,095.2**	**108,177.0**	**123,952.9**
Uses:					
Deposits placed	8,204.7	12,713.4	11,171.7	11,673.7	14,325.4
Investments	18,634.9	17,500.6	20,873.3	19,597.9	19,804.2
of which:					
Government securities	*4,446.2*	*4,560.1*	*4,726.1*	*6,300.9*	*7,520.6*
Shares	*1,742.3*	*1,429.5*	*646.5*	*464.2*	*875.3*
Quoted	*1,625.7*	*1,325.5*	*571.4*	*421.1*	*469.2*
Unquoted	*116.6*	*104.1*	*75.1*	*43.1*	*406.1*
Loans and advances	43,374.9	50,961.4	60,473.0	70,338.4	83,068.6
Fixed assets	1,843.0	1,994.9	2,057.4	2,319.7	2,548.9
Others	2,553.4	2,484.8	2,519.8	4,247.3	4,205.8
Total	**74,610.9**	**85,655.1**	**97,095.2**	**108,177.0**	**123,952.9**
Contingencies:					
Guarantee	154.6	641.6	1,014.7	1,086.1	525.1
Export credit insurance	743.2	661.7	1,057.9	1,068.8	835.8
Total	**897.8**	**1,303.3**	**2,072.6**	**2,154.9**	**1,360.9**

[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.15
Development Financial Institutions[1]: Direction of Lending

	As at end				
	2005	2006	2007	2008	2009
	RM million				
Agriculture, forestry and fishery	3,359.1	3,575.7	3,968.3	4,976.9	6,341.0
Mining and quarrying	56.6	41.6	20.3	26.5	114.4
Manufacturing	4,474.3	4,655.7	5,687.8	5,852.2	5,572.8
Electricity, gas and water supply	2,253.0	2,920.9	3,497.5	3,763.1	3,592.1
Import and export, wholesale and retail trade, restaurants and hotels	643.3	761.2	1,030.8	1,493.2	1,988.2
Broad property sector	11,789.4	15,192.4	16,382.3	16,984.9	20,901.7
Construction	*5,246.6*	*7,057.1*	*7,542.1*	*8,637.2*	*12,361.7*
Purchase of residential property	*5,475.5*	*6,868.0*	*7,396.7*	*7,021.2*	*6,906.0*
Purchase of non-residential property	*429.6*	*545.8*	*614.1*	*296.3*	*320.2*
Real estate	*637.7*	*721.5*	*829.4*	*1,030.2*	*1,313.8*
Transport, storage and communication	5,837.1	6,281.1	5,610.0	5,705.5	5,531.8
Maritime	681.5	799.0	1,834.5	1,916.7	1,750.4
Finance, insurance and business services	766.1	877.4	1,056.6	785.5	1,031.4
Consumption credit	14,074.3	17,435.8	23,159.8	31,356.6	38,660.6
of which:					
Purchase of motor vehicles	*1,508.2*	*2,168.8*	*2,376.4*	*2,513.3*	*2,370.3*
Credit card	*32.6*	*50.4*	*86.7*	*174.8*	*320.7*
Purchase of securities	214.1	189.9	66.0	218.9	45.8
Others	3,347.1	2,797.1	2,965.3	2,296.7	2,697.1
Total	**47,495.9**	**55,527.8**	**65,279.2**	**75,376.7**	**88,227.3**

[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.16
Development Financial Institutions[1] under DFIA[2]: Direction of Lending

	As at end				
	2005	2006	2007	2008	2009
	RM million				
Agriculture, forestry and fishery	3,239.5	3,513.7	3,864.8	4,862.9	6,234.4
Mining and quarrying	35.5	19.9	14.2	22.8	112.3
Manufacturing	3,254.5	3,422.1	4,475.3	4,646.7	4,299.7
Electricity, gas and water supply	2,251.6	2,919.7	3,496.5	3,762.2	3,591.4
Import and export, wholesale and retail trade, restaurants and hotels	356.8	502.2	779.8	1,276.2	1,774.3
Broad property sector	10,580.9	13,709.2	14,794.9	15,301.7	19,136.1
Construction	*4,908.8*	*6,566.4*	*7,030.1*	*8,072.6*	*11,899.1*
Purchase of residential property	*5,195.4*	*6,582.3*	*7,119.8*	*6,747.8*	*6,660.6*
Purchase of non-residential property	*429.1*	*480.8*	*561.4*	*237.4*	*256.1*
Real estate	*47.6*	*79.7*	*83.6*	*243.9*	*320.3*
Transport, storage and communication	5,778.3	6,200.0	5,534.6	5,640.8	5,479.3
Maritime	681.5	799.0	1,834.5	1,916.7	1,750.4
Finance, insurance and business services	657.0	763.1	939.7	750.7	998.5
Consumption credit	13,679.5	16,926.8	22,433.5	30,417.6	37,732.6
of which:					
Purchase of motor vehicles	*1,508.2*	*2,095.4*	*2,315.6*	*2,512.8*	*2,348.7*
Credit card	*32.6*	*50.4*	*86.7*	*174.8*	*320.5*
Purchase of securities	88.2	64.9	66.0	218.9	45.8
Others	2,771.6	2,120.8	2,239.2	1,521.2	1,913.8
Total	**43,374.9**	**50,961.4**	**60,473.0**	**70,338.4**	**83,068.6**

[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) and Bank Perusahaan Kecil & Sederhana Malaysia Berhad (SME Bank)
[2] Development Financial Institutions Act 2002

Table A.17
Development Financial Institutions[1] under DFIA[2]: Non-performing Loans and Loan Loss Provisions

	As at end	
	2008	2009
	RM million	
General provisions	1,410.1	1,607.0
Interest-in-suspense	671.9	755.9
Specific provisions	2,595.7	2,761.0
Non-performing loans	4,542.6	5,637.4
	(%)	
Gross NPL ratio	6.6	6.8
Net NPL ratio	2.0	2.7
Total provisions/NPL	103.0	90.9

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

Table A.18
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	
	2008	2009	2008	2009	2008	2009
	RM million					
Infrastructure	15,024.2	17,846.0	2,007.9	7,758.1	1,188.3	4,910.1
Government programmes	*11,970.0*	*15,436.7*	*1,992.5*	*7,419.2*	*653.7*	*4,560.6*
Private programmes	*3,054.2*	*2,409.3*	*15.4*	*338.9*	*534.6*	*349.5*
Maritime	1,916.7	1,750.4	490.1	1,655.1	476.3	362.8
Shipping industry	*1,011.8*	*1,210.4*	*430.1*	*930.1*	*369.0*	*287.8*
Shipyard industry	*756.1*	*395.6*	*60.0*	*725.0*	*107.3*	*75.0*
Marine-related services	*148.8*	*144.4*	*0.0*	*0.0*	*0.0*	*0.0*
Manufacturing: High technology	995.4	1,210.3	82.0	248.6	321.5	213.6
Others	19.5	18.1	1.4	0.9	1.9	1.2
Total	**17,955.8**	**20,824.8**	**2,581.4**	**9,662.7**	**1,988.0**	**5,487.7**

Source: Bank Pembangunan Malaysia Berhad

Table A.19
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	
	2008	2009	2008	2009	2008	2009
	RM million					
SMEs	2,829.1	3,503.2	2,201.0	1,898.1	1,881.7	1,763.5
Micro	*276.5*	*388.6*	*220.0*	*213.7*	*174.1*	*265.5*
Small	*1,213.9*	*1,322.0*	*549.5*	*643.3*	*667.9*	*571.7*
Medium	*1,338.7*	*1,792.6*	*1,431.5*	*1,041.1*	*1,039.7*	*926.3*
Others	417.0	380.6	0.0	138.8	102.7	56.4
Total	**3,246.1**	**3,883.8**	**2,201.0**	**2,036.9**	**1,984.4**	**1,819.9**

Source: Bank Perusahaan Kecil & Sederhana Malaysia Berhad

Table A.20
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, as well as 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-2008	As at end-2009	2008	2009	2008	2009
Buyer credit facility	795.8	843.9	140.0	893.9	329.0	272.1
Overseas project financing	708.2	807.3	0.0	909.8	215.7	126.3
Overseas contract financing	150.7	449.2	0.0	156.7	158.1	224.2
Supplier credit facility	277.6	275.8	251.0	193.5	995.6	641.1
Malaysia Kitchen financing facility	5.2	13.1	3.9	3.0	4.1	8.5
Export credit refinancing	1,860.9	757.9	9,514.8	4,339.2	9,514.8	4,339.2
Others	0.0	0.0	0.0	2.2	0.0	0.0
Total	**3,798.4**	**3,147.2**	**9,909.7**	**6,498.3**	**11,217.3**	**5,611.4**

Guarantee and Insurance Policy	**Contingent Liabilities (RM million)**		**Commitment Approved (RM million)**	
	As at end-2008	As at end-2009	2008	2009
Guarantee	1,086.1	525.1	189.5	766.7
Insurance	1,068.8	835.8	2,687.1	1,834.0
Total	**2,154.9**	**1,360.9**	**2,876.6**	**2,600.7**

Source: Export-Import Bank of Malaysia Berhad

Table A.21
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-2008			As at end-2009		
	Members	Non-members	Total	Members	Non-members	Total
	11,872.8	20,773.6	32,646.4	14,008.8	24,454.5	38,463.3
Direction of Financing	Financing Outstanding (RM million)					
	As at end-2008			As at end-2009		
Sector	Members	Non-members	Total	Members	Non-members	Total
Agriculture	15.5	156.6	172.1	27.5	469.2	496.7
Purchase of residential property	2,748.0	1,113.8	3,861.8	2,620.3	1,006.1	3,626.4
Purchase of non-residential property	107.6	58.0	165.6	126.6	53.5	180.1
General commerce	0.1	133.8	133.9	18.8	282.4	301.2
Purchase of securities	114.9	98.5	213.4	26.9	14.9	41.8
Consumption credit	15,125.7	10,081.1	25,206.8	17,112.6	14,144.5	31,257.1
of which:						
Purchase of motor vehicles	*572.3*	*1.685.9*	*2,258.2*	*1,456.8*	*658.1*	*2,114.9*
Manufacturing	0.1	465.2	465.3	3.7	751.2	754.9
Others	169.3	1,737.8	1,907.1	816.9	2,251.6	3,068.5
Total	**18,281.2**	**13,844.8**	**32,126.0**	**20,753.3**	**18,973.4**	**39,726.7**

Source: Bank Kerjasama Rakyat Malaysia Berhad

Table A.22
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-2008	As at end-2009
Fixed deposits	6,540.0	7,397.8
GIRO deposits	4,992.2	5,092.3
Islamic deposits	2,776.2	3,061.1
Premium savings certificates	987.5	1,289.7
Others	122.1	132.5
Total	**15,418.0**	**16,973.4**
Investments	RM million	
	As at end-2008	As at end-2009
Quoted shares	191.3	191.2
Government securities	5,681.4	6,367.2
of which:		
Malaysian Government Securities	*4,426.4*	*5,264.7*
Private debt securities	864.9	699.7
Subsidiary companies	34.5	34.5
Associate companies	231.8	231.8
Others	390.7	296.4
Total	**7,394.6**	**7,820.8**
Direction of Lending	RM million	
	As at end-2008	As at end-2009
Purchase of securities	5.5	4.0
Purchase of residential property	2,886.0	3,034.2
Purchase of non-residential property	71.7	76.0
Consumption credit	5,210.7	6,455.4
Others	400.5	280.5
Total	**8,574.4**	**9,850.1**

Source: Bank Simpanan Nasional

Table A.23
Bank Pertanian Malaysia Berhad (Agrobank)

Year of establishment	1969					
Objectives	To promote sound agricultural development in the country, through the provision of loans and advances. The main function of the bank is to co-ordinate and supervise the granting of credit facilities for agricultural purposes and mobilse savings, particularly from the agriculture sector and community.					
Agriculture, Forestry & Fishery	Loans Outstanding (RM million)		Loans Approved (RM million)		Loans Disbursed (RM million)	
	As at end		During the year		During the year	
	2008	2009	2008	2009	2008	2009
Sub-sector						
Oil palm	*953.7*	*1,033.3*	*460.2*	*880.1*	*222.4*	*203.7*
Food crops	*417.8*	*442.9*	*171.1*	*165.9*	*193.5*	*140.2*
Livestock	*576.7*	*595.6*	*310.9*	*116.2*	*239.8*	*123.9*
Fishery	*320.6*	*338.7*	*240.7*	*118.2*	*95.9*	*76.8*
Forestry	*120.3*	*110.3*	*49.2*	*3.5*	*45.7*	*0.8*
Tobacco	*1.1*	*1.3*	*0.5*	*0.6*	*2.3*	*6.0*
Rubber	*62.6*	*63.7*	*27.9*	*11.8*	*17.3*	*15.9*
Others	*2,185.2*	*3,050.1*	*1,904.7*	*903.2*	*2,280.5*	*1,926.9*
Total	**4,638.0**	**5,635.9**	**3,165.2**	**2,199.5**	**3,097.4**	**2,494.2**

Source: Bank Pertanian Malaysia Berhad

Table A.24
Development Financial Institutions: Selected Data

	As at end					
	2008			2009		
DFIs under DFIA[1]:	Branch	ATM	Staff	Branch	ATM	Staff
Bank Pembangunan Malaysia Berhad	-	-	381	-	-	380
Bank Kerjasama Rakyat Malaysia Berhad	117	234	3,618	122	310	3,857
Bank Simpanan Nasional	374	667	5,278	375	736	5,471
Export-Import Bank of Malaysia Berhad	-	-	213	-	-	231
Bank Pertanian Malaysia Berhad	172	164	2,916	167	180	3,026
Bank Perusahaan Kecil & Sederhana Malaysia Berhad	19	-	984	19	-	1,025
Sub-total	682	1,065	13,390	683	1,226	13,990
Other DFIs:						
Malaysian Industrial Development Finance Berhad	6	-	365	5	-	335
Sabah Development Bank Berhad	-	-	88	-	-	88
Borneo Development Corporation (Sabah) Sendirian Berhad	-	-	12	-	-	12
Borneo Development Corporation (Sarawak) Sendirian Berhad	-	-	31	-	-	33
Credit Guarantee Corporation Malaysia Berhad	16	-	467	16	-	453
Sabah Credit Corporation	11	-	200	11	-	199
Lembaga Tabung Haji	123	-	1,963	123	-	2,022
Sub-total	156	-	3,126	155	-	3,142
Total	**838**	**1,065**	**16,516**	**838**	**1,226**	**17,132**

[1] Development Financial Institutions Act 2002

Table A.25
Household Sector: Selected Indicators

	2005	2006	2007	2008	2009
	RM million				
Household debt[1]	361,029.1	395,466.1	429,482.6	472,088.0	516,559.1
Household financial assets[2]	856,849.9	977,616.7	1,158,805.3	1,107,591.5	1,272,380.2
	%				
Household debt to GDP ratio	69.1	68.8	67.1	63.9	76.6
Household financial assets to household debt ratio	237.3	247.2	269.8	234.6	246.3
Household banking system NPL ratio	8.1	7.1	5.3	4.1	3.1

[1] Comprises household loans outstanding in banking system, Bank Simpanan Nasional, Bank Kerjasama Rakyat Malaysia Berhad, insurance companies and Treasury Housing Loans Division

[2] Comprises household deposits held in banking system, Bank Simpanan Nasional, Bank Kerjasama Rakyat Malaysia Berhad, total assets of life insurance funds, household direct holdings of equity, Employees Provident Fund contributions and net asset value of unit trust funds

Source: Treasury Housing Loans Division, Securities Commission Malaysia, Employees Provident Fund and internal computation

Table A.26
Basic Payments Indicator

	2005	2006	2007	2008	2009
Population (million)	26.1	26.6	27.2	27.7	28.3
GDP (RM million)	522,445	574,441	639,776	738,677	674,434
Cash in circulation (CIC) (RM million)	30,177.6	33,519.4	36,247.1	40,424.6	43,439.2
Volume of transactions (unit)					
Per capita:					
Cheque	7.7	7.6	7.8	7.5	7.2
E-payments:	22.6	29.5	35.6	39.6	41.3
Credit card	7.1	7.8	8.7	9.4	9.8
Charge card	0.2	0.2	0.2	0.2	0.2
Debit card	0.1	0.2	0.3	0.4	0.4
E-money	14.0	19.4	22.6	24.8	25.3
Interbank GIRO	0.4	0.7	1.0	1.3	1.5
Financial Process Exchange (FPX)	…	…	…	…	…
ATM[1]	0.1	0.1	0.8	0.8	0.8
Internet banking[2]	0.7	1.1	1.9	2.6	3.1
Mobile banking[2]	…	…	0.1	0.1	0.1
RENTAS - Third party transactions[3]	n.a.	…	0.1	0.1	0.1
Value of transactions (RM)					
Per capita:					
CIC	1,155.0	1,258.2	1,333.9	1,457.9	1,534.4
Cheque	51,964.1	54,127.6	63,078.3	63,528.8	59,188.6
E-payments:	12,657.3	33,568.5	233,312.6	304,130.5	292,431.9
Credit card	1,565.3	1,785.1	2,068.6	2,354.6	2,448.6
Charge card	82.8	87.8	89.0	110.4	146.4
Debit card	10.0	24.4	41.5	70.6	97.9
E-money	37.7	47.8	60.3	74.5	77.6
Interbank GIRO	1,006.9	1,717.4	2,464.0	3,232.0	3,844.8
FPX	0.5	0.9	16.7	37.2	70.9
ATM[1]	146.5	80.6	858.0	692.0	694.7
Internet banking[2]	9,807.4	12,394.5	12,212.9	21,315.4	22,500.4
Mobile banking[2]	0.2	0.4	0.8	2.6	5.0
RENTAS - Third party transactions[3]	n.a.	17,429.5	215,500.8	276,241.2	262,545.6
Percentage of GDP (%):					
CIC	5.8	5.8	5.7	5.5	6.4
Cheque	259.9	251.0	267.9	238.5	248.4
E-payments:	63.3	155.7	991.0	1,141.7	1,227.5
Credit card	7.8	8.3	8.8	8.8	10.3
Charge card	0.4	0.4	0.4	0.4	0.6
Debit card	…	0.1	0.2	0.3	0.4
E-money	0.2	0.2	0.3	0.3	0.3
Interbank GIRO	5.0	8.0	10.5	12.1	16.1
FPX	…	…	0.1	0.1	0.3
ATM[1]	0.7	0.4	3.6	2.6	2.9
Internet banking[2]	49.0	57.5	51.9	80.0	94.4
Mobile banking[2]	…	…	…	…	…
RENTAS - Third party transactions[3] (times)	n.a.	0.8	9.2	10.4	11.0

[1] Comprise bill payments, payments for electronic share application, funds transfer, reloading of MEPS Cash, Touch 'n Go and mobile prepaid value. Data on own account and intrabank funds transfer available from 2007

[2] Exclude non-financial transactions, credit card and IBG transactions performed online

[3] Data available from November 2006. RENTAS third party transactions include Government, custom duty and third party payments. Third party payment refers to Interbank Funds Transfer System (IFTS) transaction with a minimum amount of RM10,000, where the beneficiary or ordering party is a non-RENTAS member

n.a. Not available

… Negligible

Note: Numbers may not necessarily add up due to rounding

Table A.27
Usage of Various Cashless Payment Instruments

	2005	2006	2007	2008	2009	2008	2009
	Million/RM billion					% Annual change	
Cheque							
Number of transactions	199.9	201.2	211.7	207.3	204.8	-2.0	-1.2
Value of transactions	1,357.7	1,442.0	1,714.1	1,761.6	1,675.6	2.8	-4.9
Credit card							
Number of transactions	184.6	208.8	237.7	261.4	276.1	10.0	5.6
Value of transactions	40.9	47.6	56.2	65.3	69.3	16.2	6.2
Charge card							
Number of transactions	6.3	6.0	5.6	5.6	5.2	-0.3	-6.9
Value of transactions	2.2	2.3	2.4	3.1	4.1	26.5	35.4
Debit card							
Number of transactions	2.1	4.2	9.1	10.7	11.3	18.7	5.0
Value of transactions	0.3	0.6	1.1	2.0	2.8	73.5	41.5
E-money							
Number of transactions	365.6	517.0	613.1	688.6	717.2	12.3	4.1
Value of transactions	1.0	1.3	1.6	2.1	2.2	26.1	6.3

Table A.28
Usage of Various Payment Channels

	2005	2006	2007	2008	2009	2008	2009
	Million/RM billion					% Annual change	
Internet banking[1]							
Number of transactions	21.6	33.5	62.6	84.9	110.2	35.7	29.8
of which: Individual	*18.6*	*27.7*	*40.3*	*57.0*	*79.7*	*41.5*	*39.7*
Value of transactions	259.1	334.8	417.8	624.4	801.4	49.4	28.4
of which: Individual	*18.6*	*28.5*	*48.5*	*53.0*	*87.7*	*9.3*	*65.6*
Mobile banking							
Number of transactions	0.4	0.9	1.4	1.6	2.5	12.0	57.7
Value of transactions	…	…	…	0.1	0.1	237.1	96.9
ATM[2]							
Number of transactions	3.6	1.8	20.6	21.5	23.0	4.2	7.1
Value of transactions	3.8	2.1	23.3	19.2	19.7	-17.7	2.5

[1] Exclude non-financial transactions
[2] Comprise bill payments, payments for electronic share application, funds transfer, reloading of MEPS Cash, Touch 'n Go and mobile prepaid value
Data on own and intrabank funds transfer available from 2007
… Negligible

Table A.29
Usage of Various Payment Systems

	2005	2006	2007	2008	2009	2008	2009
	Million/RM billion					% Annual change	
RENTAS							
Number of transactions	2.0	2.2	2.7	3.0	3.0	12.2	0.6
Value of transactions	19,314.6	24,974.6	29,880.6	38,744.2	37,258.9	29.7	-3.8
Interbank GIRO							
Number of transactions	10.4	18.7	26.6	36.2	43.8	35.9	20.9
Value of transactions	26.3	45.8	67.0	89.6	108.8	33.8	21.5
FPX							
Number of transactions	…	…	0.1	0.3	0.6	357.9	69.3
Value of transactions	…	…	0.5	1.0	2.0	127.1	94.4

… Negligible

Table A.30
Purchase Transactions Using Credit Card and Debit Card by Business Activities in 2009

	Volume	Value
	% share of total transactions	
Credit card		
Fuel/petrol	32.0	8.2
Retail[1]	26.3	31.4
Professional and commercial services[2]	9.4	20.0
Mail and telephone order[3]	6.9	8.4
Utilities	5.3	5.2
Others	20.1	26.8
Debit card		
Fuel/petrol	39.2	5.9
Retail[1]	34.7	28.1
Accommodation and hotel	9.8	39.0
Professional and commercial services[2]	3.7	6.3
Food & restaurant	3.0	1.5
Others	9.6	19.2

[1] Purchases made at wholesalers, hypermarkets, clothing stores and any other miscellaneous stores/retailers not included in other categories
[2] Include medical and insurance services, accounting, auditing, advertising services and other business services
[3] Mail or phone order goods and services e.g. telemarketing, direct marketing and catalog merchants

Table A.31
Payment and Securities Transfer Instructions Handled by RENTAS

Volume of Transactions	2005	2006	2007	2008	2009	2008	2009
	'000					% Annual change	
Total	**2,039.4**	**2,226.2**	**2,659.7**	**2,984.9**	**3,001.7**	**12.2**	**0.6**
IFTS[1]	**1,881.3**	**2,065.8**	**2,548.4**	**2,890.9**	**2,924.2**	**13.4**	**1.1**
Money market operations	93.1	103.2	108.3	111.5	96.7	3.0	-13.3
Foreign exchange settlement	20.2	32.9	47.7	68.0	64.6	42.6	-5.0
of which: USD CHATS[2]	*n.a.*	*1.7*	*22.5*	*39.5*	*35.8*	*75.5*	*-9.5*
Third party transactions	n.a.	168.7	1,567.0	1,905.1	1,965.7	21.6	3.2
Others	1,685.2	1,761.0	825.5	806.3	797.1	-2.3	-1.1
SSTS[3]	**158.0**	**160.4**	**111.3**	**94.0**	**77.5**	**-15.5**	**-17.6**
Value of Transactions	RM billion					% Annual change	
Total	**19,314.6**	**24,974.6**	**29,880.6**	**38,744.2**	**37,258.9**	**29.7**	**-3.8**
IFTS[1]	**17,606.2**	**22,804.6**	**27,909.7**	**37,256.3**	**35,653.1**	**33.5**	**-4.3**
Money market operations	7,354.4	10,576.4	12,261.8	17,627.0	18,754.0	43.8	6.4
Foreign exchange settlement	1,262.4	1,531.4	2,179.0	3,310.8	1,874.1	51.9	-43.4
of which: USD CHATS[2]	*n.a.*	*79.9*	*1,302.1*	*2,055.3*	*1,189.9*	*57.8*	*-42.1*
Third party transactions	n.a.	464.3	5,855.9	7,659.8	7,432.7	30.8	-3.0
Others	8,986.8	10,232.5	7,613.0	8,658.7	7,592.3	13.7	-12.3
SSTS[3]	**1,708.5**	**2,169.9**	**1,970.9**	**1,487.8**	**1,605.8**	**-24.5**	**7.9**
Turnover to GDP (times)	**37.0**	**43.5**	**46.7**	**52.5**	**55.2**		
Daily average:							
Volume of transactions ('000)	7.4	9.0	10.6	12.0	12.1		
Value of transactions (RM billion)	70.5	100.7	119.5	156.2	150.2		

[1] Interbank Funds Transfer System
[2] Payment versus Payment infrastructure for the settlement of interbank ringgit/US dollar foreign exchange trades through RENTAS-USD CHATS, which was established in November 2006
[3] Scripless Securities Transfer System, for Malaysian Government Securities, Treasury bills and scripless public debt securities
n.a. Not available
Note: Numbers may not necessarily add up due to rounding

Table A.32
Number of Electronic Fund Transfer at Point-of-Sale (EFTPOS) Terminals

	2005	2006	2007	2008	2009
	Unit				
International brand payment cards[1]	83,100	93,368	119,490	144,897	160,585
ATM card	20,052	21,592	34,754	67,581	88,808
E-money	18,198	28,115	28,771	29,236	30,198

[1] MasterCard, Visa, American Express and Diners Club

Table A.33
Number of Cards and Users of Payment Instruments and Channels

	2005	2006	2007	2008	2009
	'000				
Number of cards/accounts:					
Credit card	7,816	8,833	9,901	10,812	10,818
Charge card	244	272	246	286	285
Debit card	15,677	18,861	21,887	24,437	30,337
of which: ATM card	*12,068*	*14,582*	*17,352*	*19,480*	*23,221*
E-money	44,035	46,875	53,150	61,534	68,462
Number of subscribers:					
Internet banking	2,584	3,208	4,599	6,191	8,119
of which: Individual	*2,522*	*3,162*	*4,523*	*6,057*	*7,958*
Mobile banking	128	247	346	530	629
Population penetration rate (%):					
Internet banking	9.7	11.9	16.6	21.8	28.1
Mobile banking	0.5	0.9	1.3	1.9	2.2

Table A.34
Total Outward and Inward Remittances

	2005	2006	2007	2008	2009
	RM million				
Total outward[1]	**6,140.0**	**7,082.7**	**7,958.1**	**8,573.1**	**10,519.1**
Remitted via:					
Banks	5,740.4	6,370.3	7,093.0	6,561.7	6,575.4
Non-banks	399.6	712.4	865.1	2,011.4	3,943.8
Total inward[2]	**4,314.5**	**5,165.1**	**5,773.6**	**4,779.7**	**4,627.4**
Remitted via:					
Banks	4,302.5	5,148.2	5,721.1	4,696.4	4,361.6
Non-banks	12.1	16.9	52.5	83.3	265.7
No. of remittance service providers	**37**	**36**	**46**	**67**	**81**
Commercial banks	33	32	33	38	39
DFIs	1	1	1	2	2
Non-banks	3	3	12	27	40

[1] Refer to total funds remitted from Malaysia to other countries
[2] Refer to total funds remitted from other countries to Malaysia

Table A.35
Number of Participants and Instrument Issuers

	2005	2006	2007	2008	2009
	Unit				
RENTAS	**55**	**53**	**54**	**60**	**62**
BNM	*1*	*1*	*1*	*1*	*1*
Banks	*49*	*47*	*48*	*54*	*54*
DFIs	*2*	*2*	*2*	*2*	*4*
Non-banks	*3*	*3*	*3*	*3*	*3*
SPICK/e-SPICK	**35**	**36**	**37**	**43**	**44**
Credit card	**19**	**18**	**18**	**23**	**24**
Banks	*17*	*16*	*16*	*21*	*21*
Non-banks	*2*	*2*	*2*	*2*	*3*
Debit card[1]	**14**	**15**	**14**	**20**	**23**
International debit card	*5*	*7*	*6*	*15*	*16*
ATM card	*10*	*10*	*10*	*11*	*13*
Charge card	**7**	**8**	**8**	**8**	**8**
Banks	*3*	*5*	*5*	*5*	*5*
Non-banks	*4*	*3*	*3*	*3*	*3*
E-money[2]	**8**	**13**	**15**	**19**	**20**
Banks	*1*	*2*	*4*	*4*	*4*
Non-banks	*7*	*11*	*11*	*15*	*16*
Internet banking	**15**	**17**	**19**	**23**	**24**
Mobile banking	**5**	**6**	**7**	**10**	**10**
FPX	**5**	**11**	**11**	**11**	**11**
Interbank GIRO	**16**	**16**	**19**	**21**	**21**

[1] Six banks issuing both international debit and ATM cards
[2] Include international brand prepaid card