



**BANK NEGARA MALAYSIA**  
CENTRAL BANK OF MALAYSIA

## LETTER OF TRANSMITTAL

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

YAB Dato' Sri,

In accordance with section 56 of the Takaful Act 1984 and section 192 of the Insurance Act 1996, I have the honour to submit for presentation to Parliament, reports on the administration of the Takaful Act 1984 and Insurance Act 1996, and other related matters for the year ended 31 December 2011 which are incorporated into this Financial Stability and Payment Systems Report 2011.

Respectfully submitted,

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

Zeti Akhtar Aziz  
Governor  
21 March 2012





## PREFACE

The Financial Stability and Payment Systems Report 2011 outlines Bank Negara Malaysia's assessment of risks and challenges faced by the Malaysian financial system and the capacity of the system to sustain its financial intermediation role in the economy. It also reports the developmental initiatives pursued by the Bank to reinforce the roles of the financial services sector in supporting and contributing to economic growth and the economic transformation process, as well as the regulatory and supervisory measures undertaken by the Bank to ensure continued safety and soundness of financial institutions and promote overall financial and payment systems stability.

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

The Financial Stability and Payment Systems Report is available in PDF format at [www.bnm.gov.my](http://www.bnm.gov.my)



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## GOVERNOR'S STATEMENT

Despite the deterioration in the global economic and financial conditions in 2011, domestic financial stability in Malaysia was preserved. The year saw renewed turbulence in financial markets following the heightened market concerns over the sovereign debt crisis in Europe. In addition, funding pressures and the weakening pace of economic recovery continue to affect the financial sector in the advanced economies. While recent measures taken by European policymakers have improved market conditions, considerable challenges remain ahead to restore and strengthen global financial stability.

While not insulated, the Malaysian financial sector has held up well against these developments. The financial sector is expected to continue to remain resilient going forward and is well positioned to continue the intermediation process without disruption. This is not only due to the limited exposures to sovereigns and institutions in the affected euro area economies, but also due to the strong governance and risk management practices. This has resulted in strong balance sheets, continued profitability, strong asset quality and healthy liquidity positions. While there has been some tightening of wholesale funding conditions, particularly in foreign currency, this has had a modest impact on domestic banks given the stable funding structures and continued ample domestic liquidity. The deeper and more diversified domestic financial markets have also supported orderly conditions despite the stronger two-way capital flows experienced during the year.

Following wide-ranging measures introduced during the year, Malaysia's household debt level relative to GDP has stabilised during the second half of 2011. These measures, including the normalisation of interest rates, the raising of the statutory reserve requirement, and the macroprudential measures and the close supervision by the Bank, have aimed at ensuring that household debt will remain sustainable going forward. These measures have started to take effect, most notably in the moderation of property prices which represents the largest component of household debt. New credit card debt has also moderated and there has been improved discipline among banks in assessing affordability. At the aggregate level, the expansion of household debt continues to be supported by positive underlying conditions which include the favourable labour market conditions, rising incomes, and growth in household financial assets. In addition, a larger proportion of the debt is attributed to households that have the capacity to repay. There are however, early signs emerging that there are pockets of households in the lower-income segments, notably those living in urban areas, that are accumulating debt above levels considered prudent, rendering them more vulnerable to income shocks. To address this, in addition to the macroprudential measures, arrangements for debt restructuring and resolution have been introduced by the Bank for addressing stressed conditions, in particular, for this target group. This is reinforced by financial education programmes for the household.

Although the Malaysian financial sector is in a position of strength with capital and liquidity buffers at their highest levels since the Asian Financial Crisis and underpinned by strengthened risk management capacity and oversight, the Bank will maintain a heightened level of intensity in its risk monitoring, supervision and regulation in the period ahead. An anticipatory approach in managing risks to financial stability aims to pre-empt potential risks to financial stability while at the same time reduce the potential costs to the financial system and the economy. Going forward, three important developments are expected to have bearing on domestic financial stability: (i) the prevailing uncertainty in global economic and financial conditions; (ii) an increased pace of financial innovation by domestic financial institutions; and (iii) the more pronounced regional and international complexion of the Malaysian financial sector.

To a large extent, the important preconditions and supporting framework for financial stability are already for the most part in place in Malaysia, both for the conventional and Islamic financial systems. These include an effective legal and regulatory framework, a strong supervisory system, and comprehensive institutional arrangements to support orderly debt resolutions in the event of an increase in the number of defaults. Also in place is an effective financial safety net which reinforces strong incentives for sound risk management through differential deposit insurance premiums. Financial reporting and disclosure standards which promote market confidence and transparency have also been further strengthened by Malaysia's full convergence with the International Financial Reporting Standards from 2012. These factors cumulatively contribute towards reducing the probability and impact of market and institutional failures.

The highly dynamic domestic, regional and international environment however does not provide any room for complacency. The Bank's efforts going forward remain focused on preserving and strengthening the foundations for financial stability. During this year, substantial work was advanced to further strengthen the core elements of the legal and prudential framework for the financial sector. In 2012, we will be bringing new legislation for the financial sector to Parliament that is more aligned with current regulatory and supervisory approaches, and that supports the supervision of more complex financial undertakings. The Bank has also announced the plans to implement Basel III in Malaysia. Efforts to strengthen regional arrangements for financial stability have also seen significant progress with active engagements through supervisory colleges, initiatives to promote greater harmonisation of regulatory standards and the development of enhanced arrangements for cross-border crisis management and resolution. The Bank also concluded two cross-border collateral arrangements with its counterparts in the region to support more efficient liquidity management by financial institutions with cross-border operations, both during normal and crisis periods. The Bank will this year undergo the Financial Stability Assessment Programme by the International Monetary Fund and the World Bank.

The internationalisation of Islamic finance has intensified during the year despite increased uncertainties in global financial markets. As an international Islamic financial centre, Malaysia has worked to ensure that the growth is firmly supported by a sound prudential framework, and developed financial infrastructure and instruments for managing risk. The Bank will also continue to contribute to the global development of Islamic finance, including strengthening the global financial architecture through its active participation in the Islamic Financial Services Board and the International Islamic Liquidity Management Corporation, for ensuring financial stability in the Islamic financial system and hence its sustainability.

The stability of Malaysia's payment systems has continued to be preserved with no disruptions in the operations of the major payment and settlement systems during the year. The payment systems were further strengthened during the year with enhancements to key payment infrastructure and contingency arrangements, as well as the adoption of new measures to increase payment security by financial institutions. Work also significantly progressed during the year to support cross-border payments and settlements and this will further accelerate the pace of regional financial integration. Moving forward, increasing payment efficiency represents a key priority of the Bank and will entail pricing reforms to encourage the migration to electronic payments along with continuing enhancements to domestic and regional payment infrastructures.

The implementation of recommendations under the Financial Sector Blueprint released by the Bank in December 2011 also aims to further contribute to financial stability in Malaysia. Priority will be accorded to promoting effective financial intermediation in a changing economy, and the development of orderly foreign exchange and money markets - two key dimensions of financial stability for which the Bank is responsible under the Central Bank of Malaysia Act 2009. An important part of these efforts is that the development of the financial sector is accompanied by the development and supply of talent for the sector, and a careful consideration of how regulatory safeguards would need to evolve to ensure that changes in banking and financial landscapes, practices and business models do not increase overall risks to financial stability.



Zeti Akhtar Aziz  
Governor  
21 March 2012



# 2011

EXECUTIVE SUMMARY





### **Risk developments and assessment of financial stability in 2011**

Financial stability continued to be sustained throughout 2011, providing an environment conducive to economic growth in Malaysia despite the uncertain global growth prospects and heightened risks emanating from the advanced economies. While global financial conditions have come under renewed stress particularly in the last quarter of 2011, the Malaysian financial sector remains strong, and the impact of unfolding developments in the external environment on financial institutions in Malaysia has been modest owing to the significantly strengthened financials and capacity to manage risks. This has enabled financial intermediation to continue functioning effectively. Domestic financial market conditions have also remained orderly.

After a continued upward trend since 2009, household debt grew at a more moderate pace as the range of measures introduced earlier by the Bank began to take effect. Malaysian households in general remain financially sound, with strong financial buffers to service debt obligations and cushion against income shocks. The debt servicing capacity of households continue to be supported by favourable employment conditions and rising incomes, with loans in arrears continuing to trend downwards and the impaired loan ratio at its lowest since 2000. While lower-income borrowers residing in urban centres are facing difficulties in managing their financial obligations, with higher leverage positions and a limited capacity to save, this segment of borrowers continue to account for a relatively small share of banking system loans. The continued observance of sound underwriting practices by banks, reinforced by the pre-emptive measures undertaken by the Government and the Bank to address emerging strains among the more vulnerable segments of the household sector, further contain the build-up of excessive risks in the household sector. This is also addressed by the Bank's close supervision of the lending practices of individual banking institutions, and the availability of debt resolution mechanisms that are already in place to provide assistance to borrowers in financial difficulty.

Renewed turbulence in global financial markets driven by events in the euro area and in the US led to a surge in short-term portfolio flows during the year, although these flows were effectively and efficiently intermediated. Orderly conditions were preserved in Malaysia without disruptive effects on the domestic financial markets, with market volatility levels significantly lower than those observed at the height of the global financial crisis in 2008, and in other regional markets. Malaysian banking institutions were also less affected by the volatile conditions in offshore wholesale markets, given local institutions' stable funding structures which are supported mainly by domestic savings and deposits. Banks have also not taken on excessive risks, with risk-taking behaviour observed among banks continuing to remain within prudent levels despite the ample liquidity conditions and divergence in market prices between emerging and advanced economies.

With limited exposures to counterparties in affected euro economies, the impact of any further escalation of the sovereign debt and banking crisis in the euro area on Malaysian financial institutions is well contained. The transmission of risks through the Malaysian operations of European banks also remains controlled as these are carried out by separately-capitalised subsidiaries which are supervised by the Bank. The contagion risks from the cross-border operations of Malaysian banking groups are also low as these operations are backed by sound capital and funding positions, with manageable credit exposures.

For the year as a whole, the banking sector continued to sustain healthy capitalisation levels and profitability on account of higher interest/financing income, lower impairment charges and higher fee-based income. The aggregate risk-weighted capital ratio and core capital ratio for the banking system stood at 15.1% and 13.2% respectively, well above the current regulatory minimum as well as the more stringent standards under Basel III. The insurance and takaful sectors experienced lower profitability due to lower investment returns as a result of the volatile market conditions, and higher claims and benefits paid. The impact on the capitalisation level of the industry was, however, not material with the capital adequacy ratio declining only

marginally and sustained at a strong level of 222.5%. Stress tests conducted by the Bank, which assume adverse scenarios of domestic economic contraction, further affirm the resilience of Malaysian financial institutions.

Risks to domestic financial stability in 2012 are expected to continue to be driven mainly by external developments, particularly in the euro area, with key risks remaining largely unchanged. Risk aversion and volatility in the global financial markets are likely to remain elevated given the uncertainty surrounding the recovery of the global economy and progress towards strengthening the global financial system. Domestically, developments in the level and profile of household debt will continue to be closely monitored, while measures already taken should continue to improve the resilience of the household sector.

### **Development of the financial sector**

With strong fundamentals of the financial sector well entrenched, priorities in the financial sector development in 2011 were focused on reinforcing Malaysia's long-term growth potential by strengthening the capacity of the sector in intermediating funds for new growth areas and enhancing Malaysia's regional and international financial linkages, with appropriate safeguards to preserve financial stability. The strategies to achieve this have been set out under the Financial Sector Blueprint (the Blueprint) which was released by the Bank in December 2011. The Blueprint charts the future direction of the Malaysian financial system in the next 10 years and builds on the achievements of the first Financial Sector Masterplan to position the financial sector to assume an enhanced role in supporting Malaysia's transformation towards becoming a high value-added, high-income economy.

The market structure of the financial industry continued to strengthen during the year with the emergence of stronger and more competitive banking groups and insurers as a result of mergers and acquisitions. The Competition Act 2010, which came into effect on 1 January 2012, further reinforces the competitive environment in the financial sector and complements the Bank's efforts to enhance consumer protection in Malaysia. In the insurance sector, a comprehensive solution to the long-standing challenges affecting the ability of insurers to provide compulsory motor liability insurance protection on a sustainable basis was achieved with the introduction of a

new motor cover framework that will address pricing distortions and inefficiencies in the claims settlement process. Gradual adjustments to the premium levels commenced in January 2012 and will be phased in over a four-year period.

Throughout the year, the financial system continued to perform its intermediation function efficiently to support the diverse needs of the economy, as evidenced by the positive loan growth in the business and household sectors. Significant strides were also made to streamline the loan application processes for small and medium enterprises (SMEs) and enhance credit assessment procedures for the green technology industry, to improve the prospect of obtaining financing in these sectors. Focus was thus placed on enhancing the supporting infrastructure and institutional arrangements to meet the needs of SMEs, increasing capacity to support new growth areas and innovative industries, and developing a robust pension framework.

Continued efforts were made to deepen and broaden the financial markets. The debt securities market continues to assume an increasingly important role in meeting the financing needs of Malaysian businesses, with stronger demand observed for more innovative Islamic financial products and services. Danajamin as a financial guarantee insurer continues to provide vital support for Malaysian corporations to access the bond market, particularly for longer-term financing. To promote the legal certainty of financial market contracts, specifically derivatives and repurchase agreements, the Bank will be proposing legislative amendments to provisions in the Central Bank of Malaysia Act 2009 this year to provide further certainty with respect to the operations of financial market contracts and to allow financial institutions to determine exposures to counterparties in Malaysia under such contracts on a fully net basis.

Financial inclusion remains a key priority of the Bank. Financing to micro-entrepreneurs continued to increase both by value and number of accounts. All 144 districts in Malaysia now have access to essential financial services provided through physical branches, mobile banking units of banks and development financial institutions (DFIs), or under shared banking services arrangements with Pos Malaysia Berhad. A comprehensive agent banking framework will be developed to further widen access to financial services at the

sub-district level. While Malaysia already has one of the highest levels of financial inclusion, efforts have also been focused on promoting the more effective use of financial services. This can be achieved through the better understanding of the financial requirements and behaviour of different target groups, including the underserved, with the provision of more targeted education programmes, and by addressing the specific challenges faced by low- to middle-income households in urban centres. The launch of the Bank's MobileLINK unit during the year will also enable the Bank to further expand its information and consumer support services to consumers in semi-urban and non-urban areas.

Malaysia's financial integration within the region and with other parts of the world gained considerable momentum, with the progressive liberalisation of the domestic financial system and the continued growth in the overseas operations of Malaysian financial institutions. Efforts to strengthen Malaysia's interlinkages are pursued in a mutually advantageous manner with the broader aim of enhancing the growth potential of the region and promoting regional financial stability. Arising from the 2009 liberalisation measures, three new locally-incorporated foreign banks, one new International Islamic Bank and two new joint-venture family takaful operators commenced operations in 2011.

Efforts to promote deeper financial integration within the Asian region resulted in several advancements which include: (i) the establishment of the ASEAN Infrastructure Fund where nine ASEAN countries, including Malaysia, have pooled resources for infrastructure development in the ASEAN region; (ii) the endorsement of a high-level framework by the central banks of ASEAN countries to reinforce cross-border coordination and cooperation in the financial sector; and (iii) the establishment of reciprocal bilateral arrangements among central banks in the region to promote more efficient cross-border liquidity management and the provision of liquidity support in periods of stress.

Malaysia continued to evolve as an international Islamic financial centre, with robust growth recorded in Islamic banking assets, takaful contributions and the volume of foreign currency business. Malaysia retained its leading position in the global sukuk market, with an increasing amount of outstanding USD-denominated sukuk. The year also saw some landmark innovations in

Islamic financial market instruments, including the issuance of the well-received Wakala Global Sukuk, the first 10-year sovereign USD sukuk in the world, and the world's first renminbi sukuk issued out of Malaysia. These achievements were accompanied by infrastructural developments that will further enhance the transparency, liquidity and pricing efficiency of Islamic financial products. The planned issuance of the first short-term sukuk by the International Islamic Liquidity Management Corporation (IILM) by mid-2012 will also contribute towards the more efficient intermediation of cross-border flows and supporting global liquidity needs. The development of talent in Islamic finance was also further advanced with the increased numbers of qualified Chartered Islamic Finance Professionals and the introduction of a comprehensive training roadmap by the Islamic Banking and Finance Institute Malaysia (IBFIM).

Malaysian financial consumers have also become more engaged in financial matters, supported by sustained awareness and education programmes, and improved disclosures on financial products and services. More consumers are using various channels provided by the Bank and the industry to seek financial information, advice and redress. A study by the Organisation of Economic Co-operation and Development (OECD) showed that financial literacy levels in Malaysia are comparable to those in developed economies. During the year, substantial progress was made in efforts to build a strong foundation for financial capability at an early age. This was done in close collaboration with the Ministry of Education to embed financial education within the revised school curriculum which will be introduced from 2014.

Significant efforts also continued to be directed towards supporting the development of high quality talent for the financial sector, across all levels of an institution, from entry to leadership positions. Institutions established by the Bank to spearhead these efforts, including the Financial Sector Talent Enrichment Programme (FSTEP), the Asian Institute of Finance (AIF) and the Iclif Leadership and Governance Centre, continued actively during the year to enhance and expand their programme offerings to meet the new requirements of the rapidly-changing financial sector. These institutions have also significantly strengthened their internal capabilities, including in research and through the addition of new faculty, in order to better deliver their training mandates.

## Regulatory and supervisory framework

In 2011, the Bank continued to reinforce and advance further the core tenets of regulation and supervision, building on earlier work undertaken to strengthen the legislative framework and improve risk management, governance and business conduct practices.

The implementation of global regulatory reforms was a key priority of the regulatory and supervisory framework during the year. In December 2011, the Bank released details of the implementation of Basel III in Malaysia which is aimed at further strengthening capital and liquidity standards for banking institutions. The reform package will be implemented in phases, beginning 2013 until 2019, in line with the globally-agreed levels and implementation timelines. This will allow banking institutions to gradually adjust to the new requirements, thus mitigating any adverse impact on credit intermediation. For the insurance industry, changes were made to the Bank's Risk-Based Capital Framework (the RBC framework) to converge the valuation rules underpinning the determination of regulatory capital with the Financial Reporting Standards. The Bank will continue to review the RBC framework to further improve the alignment of capital with risk and support a more consistent approach to capital standards for financial groups in line with international standards. A new risk-based capital framework for takaful operators was introduced for consultation and is now being finalised, taking into account feedback received from the industry. The proposed new capital framework will take into account the objectives of prudential and Shariah principles.

A focus on promoting sound risk management practices remained central to the Bank's regulatory and supervisory priorities with enhancements of prudential standards in a number of aspects on risk management. This included proposals issued to strengthen standards on risk governance which address requirements for financial institutions to observe sound practices in defining the risk appetite for the institution, and implementing effective controls (including appropriate incentive systems) over risk-taking activities. The control of counterparty risks was also strengthened with proposed enhancements to existing regulatory limits on exposures to single counterparties. With competition in the retail lending space remaining intense and signs of continued pressure on loan pricing, new guidelines on sound pricing practices

for retail loans/financing were also issued as a pre-emptive measure to ensure that banks' pricing practices are appropriately supervised by their board and management, and broadly aligned with their risk and capital management strategies. During the year, corporate governance standards for DFIs were strengthened to promote more robust assessments of the fitness and propriety of appointments to the board and management, consistent with standards already adopted for other financial institutions.

The Bank continued to strengthen the consumer protection framework and market conduct practices of financial institutions by promoting more responsible financing practices, enhancing the transparency and disclosure of financial products and elevating the quality and efficiency of financial services. The Guidelines on Responsible Financing was issued to promote more consistent practices across the industry in the assessments of customers' creditworthiness and their ability to service debt obligations. In the Islamic banking sector, the Guidelines on Late Payment Charges was issued to promote more prudent financial discipline among borrowers, with clearly-established parameters for the imposition of penalties (*gharamah*) and compensation charges (*ta'widh*) on delinquent customers. The Bank also devoted significant attention to addressing mis-selling practices by financial institutions. Financial institutions that were found to have been involved in such practices were compounded, ordered to provide restitution to affected customers and required to strengthen internal oversight arrangements over the product origination, approval, sales and complaints handling process.

To reduce the scope for the regulated financial sector to be used for illegal purposes and to maintain the integrity of, and public confidence in the financial system, efforts were intensified to ensure an effective legal framework and adequate systems and processes within financial institutions to promptly detect and prevent illegal activities. The enactment of the Money Services Business Act 2011 which came into force on 1 December 2011 provides for the strengthened regulatory and supervisory oversight of money changing and remittance services business. The Bank also actively supported closer international cooperation with relevant authorities to facilitate information sharing and cross-border financial crime investigations. With the growing

expansion of domestic financial institutions across borders and increased presence of foreign financial institutions operating in Malaysia, more structured approaches to supervisory cooperation with other supervisory authorities have been put in place. This includes supervisory colleges for regionally-active Malaysian financial groups and foreign institutions operating in Malaysia, which provide a platform for sharing supervisory assessments and the coordination of supervisory activities. On the domestic front, the Bank also continued to coordinate its supervisory and surveillance activities with the Securities Commission and the Malaysia Deposit Insurance Corporation (Perbadanan Insurans Deposit Malaysia, PIDM) and has started a process to further enhance the existing cooperation arrangements with these agencies.

#### **Payment and settlement systems**

The payment and settlement systems in Malaysia remained resilient and supportive of the growth of the financial system and the economy. The Bank's oversight activities were directed at ensuring the continued reliability of the major interbank clearing and settlement systems, and improving the security of widely-used payment instruments, thus maintaining public confidence in these systems. The Real-time Electronic Transfer of Funds and Securities System (RENTAS) achieved 100% systems availability, with improvements noted in market efficiency and liquidity management by RENTAS participants. The Bank also continued to collaborate with the industry and enforcement agencies to avert potential incidents of fraud, promote enhanced business practices to better protect consumers against new methods of perpetrating fraud, and educate the public on fraud prevention. Losses due to fraud in retail payments remained negligible in 2011.

The Bank continued to take steps to promote compliance by RENTAS with the relevant principles and recommendations issued by the Bank for International Settlements and the International Organisation of Securities, while also elevating its capability to support cross-border payments and settlements with the provision of an onshore multi-currency funds and securities settlement facility and custodian services for foreign securities denominated in any currency.

In promoting the migration to electronic payments (e-payments), the Bank's efforts were focused on improving the accessibility, speed, certainty and convenience of payment services. A key milestone was the completion of a multi-bank and mobile network neutral infrastructure that would enable access to mobile banking and payment services from any location at any time, under the brand label 'MyMobile'. The Bank's wholly-owned subsidiary, Malaysian Electronic Clearing Corporation Sdn. Bhd. (MyClear), also acquired the major retail payment systems from MEPS in September 2011 to rationalise overlapping e-payment infrastructures and introduce a pricing structure that would further encourage the adoption of e-payments. There was also encouraging progress in the adoption of e-payments by priority sectors such as the Government and financial institutions, with firm commitments to and achievements noted in the migration of internal payments to electronic channels. In the capital market, plans have been formulated to further extend the adoption of e-payments to include initial public offering refunds, subscriptions and redemptions of unit trusts, and subscriptions of rights issues beginning in 2012. Moving forward, the Bank will continue to focus on promoting e-payments as the preferred medium for economic transactions in Malaysia, through the initiatives outlined in the Blueprint.



2011

## RISK DEVELOPMENTS AND ASSESSMENT OF FINANCIAL STABILITY IN 2011

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### OVERVIEW

Domestic financial stability was preserved throughout 2011, providing an environment conducive to economic growth in Malaysia even as risks associated with the sovereign debt crisis in Europe and weaker growth in advanced economies increased sharply in the second half of the year. Underpinned by strong fundamentals, the Malaysian financial system continued to demonstrate a high degree of resilience to unfolding developments in the external environment. Financial soundness indicators were sustained at strong levels, including under the assumptions of stressed scenarios, affirming the capacity of Malaysia's financial sector, both at the system and institution levels, to withstand shocks. The continued vigilance over areas of potential risk on the domestic front maintained throughout the year has allowed for the early implementation of wide-ranging measures, including supervisory measures, to be taken by the Bank to address emerging risks. These measures ensured that financial intermediation continued to function efficiently, as reflected by the steady broad-based expansion in financing activities. Domestic financial market conditions have also remained orderly despite the higher degree of volatility, and confidence in the financial system remained firmly intact.

Household debts grew at a more moderate pace as the range of measures introduced earlier by the Bank began to take effect. Overall, the financial position of Malaysian households remained sound. Strong aggregate financial buffers continued to support the ability of households to service debt obligations and provided a cushion against potential shocks. This is further reinforced by steady income growth, favourable employment conditions and a high level of savings. Borrowers in the lower-income categories and residing in urban centres, however, face more challenges in managing their financial obligations. While these groups of borrowers account for a relatively small share of the banking system's total credit exposures, the series of measures undertaken by the Bank, together with the debt resolution mechanisms already in place, will contribute towards alleviating the financial stress faced by these borrowers, thus containing the build-up of risks in the household sector.

External contagion from events in the euro area and in the US saw higher volumes and speed in movements in portfolio flows during the year. These flows were effectively intermediated with domestic financial markets remaining orderly despite the higher observed volatility. Funding conditions for Malaysian financial institutions have remained broadly favourable with limited impact observed from the tightening in global wholesale funding markets given the stable funding structures. Malaysian banks also had limited direct and indirect credit exposures to counterparties in the affected Euro economies, while for insurers, these exposures were with counterparties that had maintained strong financial positions.

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The Malaysian financial system demonstrated continuing high degree of resilience to unfolding external developments. The continued vigilance over areas of potential risk on the domestic front has allowed for the early implementation of wide-ranging measures, including supervisory measures, to be taken by the Bank to address emerging risks

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The financial sector continued to sustain healthy capitalisation levels and profitability, although the insurance and takaful industry was more challenged by the volatile market conditions. Financial institutions have thus been able to demonstrate considerable agility in responding to the more challenging financial and operating conditions, particularly in managing the market risk exposures. Malaysian banks are also well placed to meet the more stringent capital requirements under Basel III.

Risks to domestic financial stability in 2012 are expected to continue to be mainly externally driven, with developments in the euro area

taking prominence. The key risks stem from the continued uncertainties clouding the prospects for a more entrenched recovery and strengthening of the financial systems in the advanced economies. Given the continued fragility in market sentiment, risk aversion and volatility in the global financial markets are likely to remain elevated. In the domestic environment, the accumulation of household debts will continue to be closely monitored although measures already taken are expected to take a firmer hold, thus ensuring that the overall household finances remain sound.

## MANAGING RISKS ARISING FROM HOUSEHOLD INDEBTEDNESS

The credit exposures to the household sector continue to be manageable with some emerging signs of moderation in household borrowing, particularly in the second half of 2011. The financial position and debt servicing capacity of households remain sound at the aggregate level, supported by higher income and favourable employment conditions. Within the household sector though, considerably higher levels of leverage with relatively limited buffers against potential income shocks have been observed for borrowers with a monthly income of RM3,000 and below and living in urban centres. The risk of a more generalised deterioration in the credit quality of loans in the banking system and broader implications for overall financial stability is, however, assessed to be manageable. The concentration of bank exposure to borrowers in this group is relatively low representing less than 13% of total banking system loans. Based on historical experience on the level of impairment and provisioning, any impairment losses to banks are not likely to exceed RM2 billion or less than 8% of pre-tax profits of commercial and Islamic banks. Bank lending to individuals earning more than RM3,000 per month account for about 80% of total loans to households by the banking system. Banks have also continued to maintain prudent underwriting standards, resulting in continued improvements in the quality of household loans. In the event of a temporary income shock affecting the lower-income households, the strong financial position of banks allow for considerable room to facilitate adjustments by the affected borrowers through debt restructuring measures, thus limiting the potential for widespread defaults. This is further supported by the existence of established and well-functioning debt management mechanisms

in individual banks and through the Credit Counselling and Debt Management Agency (AKPK). This is reinforced by measures that have been taken to restrain excessive accumulation of debt by the more vulnerable borrowers.

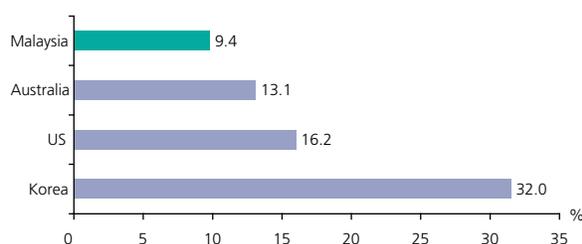
## Financial stability implications of household indebtedness in Malaysia remain manageable given the generally sustained strong fundamentals of the majority of households and sound risk management practices of the banking institutions

From a broader macroeconomic perspective, a study by the Bank also revealed that more than half of the variation in consumption is attributed to income (as measured by disposable income), while less than 10% is attributed to credit-related variables. This is further reflected in the proportion of loans for consumption credit as a share of private consumption, which is lower relative to other countries (Chart 1.1). In addition, changes in borrowing costs have had minimal impact on households, as the majority of households is not over-leveraged.

In 2011, household debts increased further, supported by continued income growth. The growth was, however, slower with outstanding household debts expanding by 12.5% for the year (2010: 13.7%) with signs of stabilisation in the

Chart 1.1

### Household Sector: Consumption Credit to Private Consumption Ratio by Countries



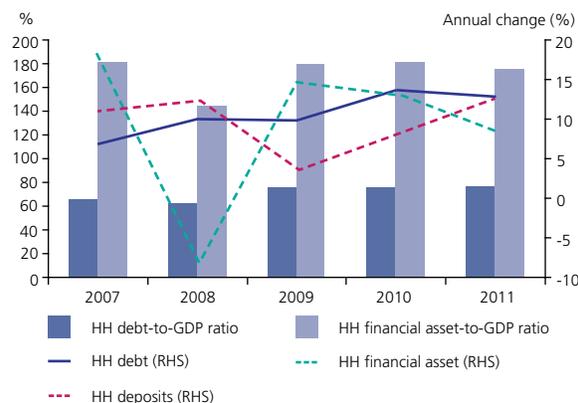
Source: HAVER, National Authorities and internal computation

accumulation of household debts relative to gross domestic product (GDP) since the second half of 2011. After a continued upward quarterly trend observed since 2009, the level of household debts as a proportion of GDP has plateaued since June, ending the year at 76.6% (2010: 75.8%) (Chart 1.2).

Household balance sheets generally continue to show strong financial buffers against adverse changes in asset values, interest rates and income levels. The growth in household debts has generally been accompanied by a corresponding expansion in household financial assets. While declines in equity valuations in 2011 had a negative impact on household financial assets which increased at a slower pace of 8.4%

Chart 1.2

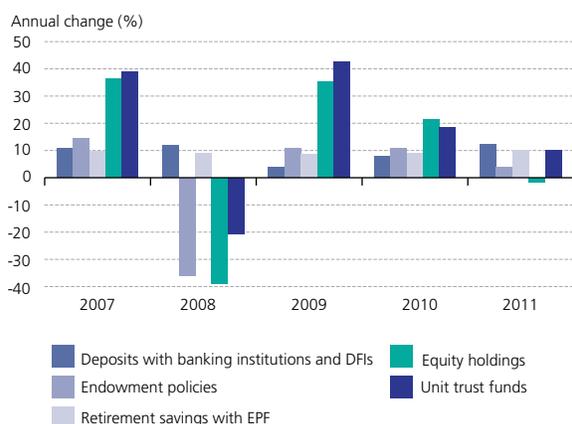
## Household Sector: Debts and Financial Assets



Source: Bank Negara Malaysia

Chart 1.3

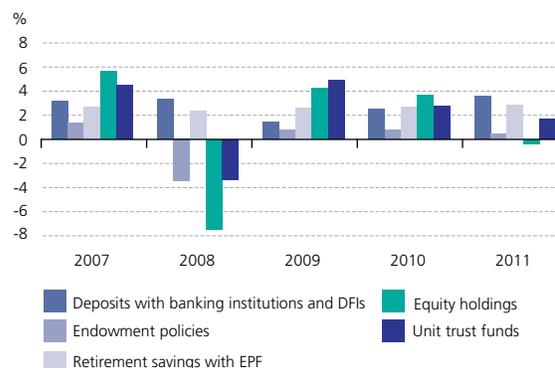
## Household Sector: Growth in Financial Assets by Components



Source: Bank Negara Malaysia

Chart 1.4

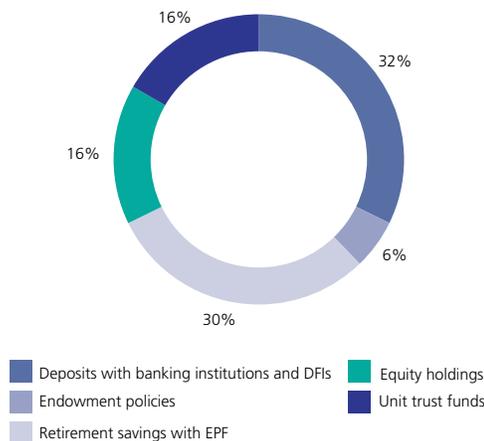
## Household Sector: Contribution to Growth of Financial Assets



Source: Bank Negara Malaysia

Chart 1.5

## Household Sector: Financial Assets by Composition



Source: Bank Negara Malaysia

(2010: 12.8%), this was offset by the sustained and stronger growth in household deposits which expanded by 12.2% (2010: 7.9%). This has maintained aggregate household financial buffers at comfortable levels with household financial assets remaining above two times (2011: 2.3 times) of household debts at the end of the year (Chart 1.3, 1.4 and 1.5). Also contributing to the strong financial buffers was the high proportion of liquid and near-liquid assets, including bank deposits, which are available to meet short-term liquidity needs. More than 60% of household financial assets are held in liquid assets, resulting in a liquid asset-to-debt ratio of 1.48 times. About half

of these are in deposits placed with banking institutions and development financial institutions.

There are a number of interlinked factors that influence the distribution and level of household debts in Malaysia – the key factors being income level, location and cost of living. By income distribution, a significant proportion (46.5%) of outstanding household debts is attributed to borrowers with a monthly income of above RM5,000 who have comfortable financial buffers and can reasonably afford to meet debt repayments without substantial financial hardship. In contrast, individuals with monthly income of below RM3,000 who reside in major employment centres where the cost of living is significantly higher, spend a larger proportion of their income on basic expenditures such as food, transportation and clothing (Chart 1.6). Given the high dependence on income to sustain consumption, lower-income households, in general, are more susceptible to income shocks and to some extent, price shocks. Outstanding borrowings of individuals in this income group accounted for about 23% of banks' exposures to households or 12.7% of banking system loans, with the majority of borrowers' loan facilities concentrated in vehicle and personal financing. The leverage positions (derived by dividing average outstanding debt by the median annual income for each income group) of borrowers in this group were 4.4-9.6 times of the annual income as compared to 2.3-3.3 times for those in the upper-middle and high-income groups. With lower savings capacity and higher leverage positions, this particular income group is sensitive to income shocks and

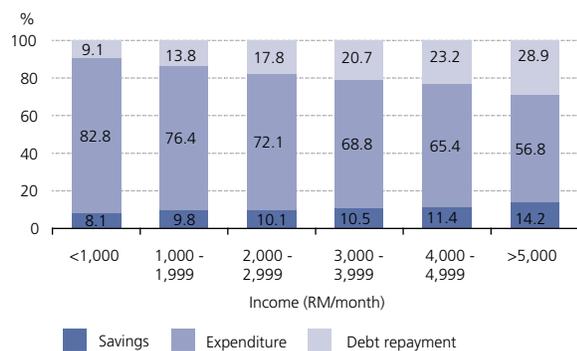
interest rate adjustments. Internal estimates by the Bank suggest that in the event of a total loss of income, the accumulated savings of individuals earning below RM3,000 per month would only be sufficient to sustain spending on necessities and debt repayments for a period of up to three months in the absence of any financial assistance. Malaysia's current unemployment rate of 3.1%, which is relatively low compared to 4.5% recorded after the Asian Financial Crisis, reduces the likelihood of this occurring for most households.

Household borrowings continue to be primarily concentrated in financing for the purchase of residential properties and motor vehicles which accounted for 64% of outstanding household debts. As in previous years, borrowings to finance residential properties have remained the main driver of growth in household debts, increasing at an annual rate of 11% over the recent three years as more individuals became financially qualified to borrow, especially to purchase homes. In 2011, borrowings for the purchase of residential properties slowed only slightly, increasing by 12.7% compared to 12.8% in the previous year. House prices have continued to increase at an annual average of 5.9% on a quarterly basis in the recent three years, compared to the long-run average of 3.9% for the period 2001- 3Q 2011. The bulk of the loans extended for the purchase of residential properties was for those priced above RM250,000.

In 2010, the Bank implemented several measures to mitigate excessive investment and speculative activity in the property market and to contain substantial increases in property prices which resulted in houses becoming less affordable for genuine house buyers. A 70% loan-to-value (LTV) ratio was applied to individual borrowers with more than two housing loans, while capital charges on banks were increased for residential property loans with LTVs exceeding 90%. In December 2011, residential property loans taken by non-individual borrowers were also subjected to an LTV ratio of 60% to make it consistent with the 2010 measure applied to individuals. These measures have started to take effect as the number of borrowers with more than two outstanding housing loan accounts moderated and registered a much lower growth of 2.9% (2010: 14.9%). House price increases as measured by changes in the Malaysian House Price Index slowed to 6.6% in 3Q 2011 (2Q 2011: 10.6%; 2010: 6.7%) (Chart 1.7). In addition, house

Chart 1.6

#### Household Sector: Savings and Expenditure by Income Group



Source: Department of Statistics, Malaysia and internal computation

prices in Kuala Lumpur, Selangor, Johor and Penang have also begun to soften (Chart 1.8). The Malaysian Institute of Economic Research (MIER) Residential Property Index moderated to 120.1 points in 4Q 2011 (2Q 2011: 127.8 points; 1Q 2011: 130 points), reflecting market expectations that residential property prices are returning to more sustainable levels.

Low borrowing costs amid intense competition among lenders have contributed towards reducing the cost of house financing. Financing rates for house purchases have continued to trend downwards with the spreads between average lending rates and average funding costs narrowing from 306 basis points in 2009 to 273 basis points in 2011. This trend raised some concerns over the rigour of banks' pricing methodologies and practices which were borne out by a thematic supervisory review of pricing practices carried out by the Bank during the year.

The review, which covered house, automobile and personal financing revealed some prevalent weaknesses. These include less-than-robust assumptions used in the estimation of potential credit losses for pricing purposes. Some banks also relied only on recent low delinquency and loss data that may not sufficiently capture the underlying inherent risks over a complete credit and economic cycle. Another observation was the underestimation of funding costs by a number of banks which assumed a high rate of prepayments and thus, shorter average durations. While repricing risk is currently low given the outlook for growth, these assumptions may not hold over the medium- and long-term. The liquidity premium factored in the pricing methodologies by some banks also assumed that the ample liquidity conditions would continue over an extended period of time.

To a large extent, the observance of sound underwriting practices by banks and strong capital and liquidity buffers have mitigated these risks. Supervisory reviews of banks' lending practices suggest that the most aggressive lending rates are applied only selectively for customers with low risk profiles. Valuations were also more rigorous for loans extended for the purchase of high-end properties in choice locations. Banks generally have put in place robust policies and processes to ensure that independent valuations obtained for such properties are reasonable and sufficiently conservative. These include ensuring that valuations are performed by credible and qualified valuers and periodically cross-checking valuations against recently transacted market prices and internal market analyses. For properties located in choice locations where prices have demonstrated sharp and significant increases, a lower margin of financing not exceeding 80% has been observed among banks to manage any potential price adjustments.

The vintage analysis of the housing loan portfolio for selected large banks affirms the sustained prudence in banks' underwriting practices, with default rates declining steadily since 2004 (Chart 1.9). The amount of impairment for loans extended for the purchase of residential properties correspondingly declined for the fourth consecutive year by 17.9% to account for 2.3% of total residential property loans. Improvements were observed across the board for all property value groups. Loans that are in arrears (more than one to less than three months)

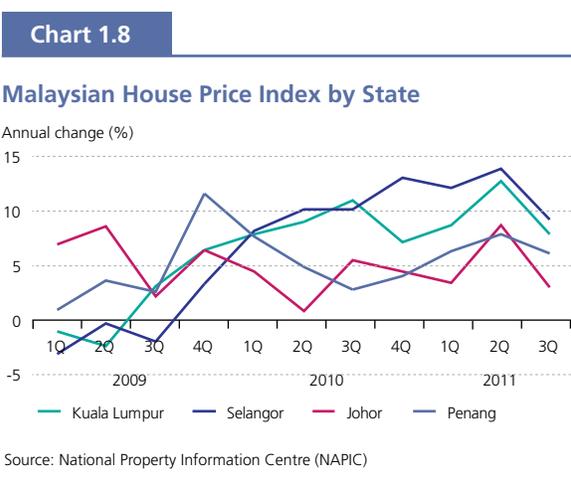
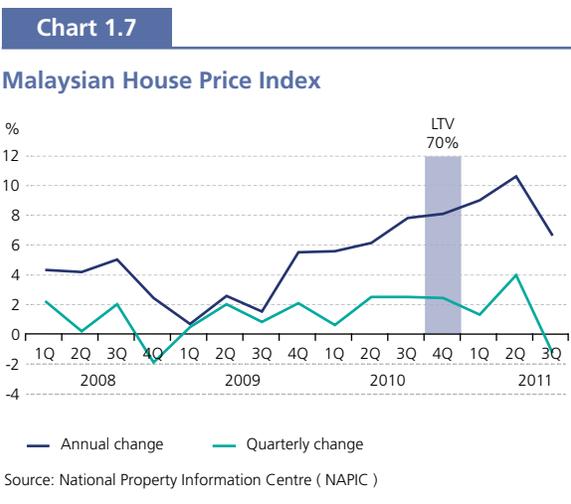
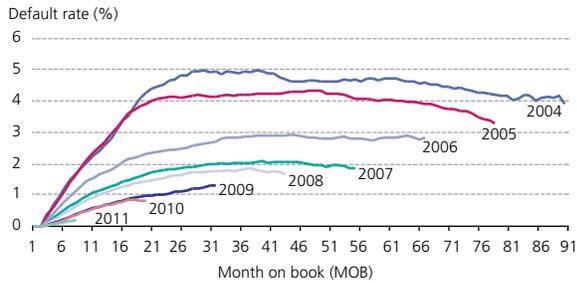


Chart 1.9

## Household Sector: Vintage Analysis for Housing Loans



Source: Bank Negara Malaysia

Table 1.1

## Household Sector: Loans-in-Arrears for Residential Property Loans by Price (%)

	2008	2009	2010	2011
Up to RM25,000	3.5	4.1	3.4	1.8
Between RM25,000 to RM60,000	4.6	4.7	5.4	4.7
Between RM60,000 to RM100,000	4.0	4.2	4.9	4.3
Between RM100,000 to RM150,000	3.4	3.2	3.8	3.6
Between RM150,000 to RM250,000	2.6	2.4	2.8	2.7
Above RM250,000	1.6	1.3	1.4	1.3
Overall total	2.6	2.3	2.6	2.3

Note: Loans-in-arrears of >1 month to <3 months  
Source: Bank Negara Malaysia

Table 1.2

## Household Sector: Impaired Loans for Purchase of Residential Properties by Price (%)

	2008	2009	2010	2011
Up to RM25,000	14.3	12.4	5.8	3.5
Between RM25,000 to RM60,000	10.6	8.9	7.7	6.8
Between RM60,000 to RM100,000	9.9	8.2	6.8	5.8
Between RM100,000 to RM150,000	8.3	6.3	5.1	4.1
Between RM150,000 to RM250,000	5.5	4.2	3.3	2.5
Above RM250,000	2.8	2.1	1.5	1.1
Overall total	5.7	4.3	3.2	2.3

Source: Bank Negara Malaysia

Table 1.3

## Household Sector: Average Loss Given Default (LGD)

	2010	2011
	%	
Purchase of residential properties	20	19
Purchase of vehicles	49	48
Credit cards	71	65

Source: Bank Negara Malaysia

Table 1.4

## Household Sector: Average Probability of Default (PD)

	2010	2011
	(%)	
Purchase of residential properties	3.1	3.1
Purchase of vehicles	3.7	3.2
Credit cards	4.1	3.5

Source: Bank Negara Malaysia

remained low, accounting for only 2.3% of loans for the purchase of residential properties (Table 1.1 and 1.2). The average loss given default (LGD) observed for housing loans was also lower as at end-2011 (Table 1.3), while the average probability of default (PD) remained unchanged (Table 1.4).

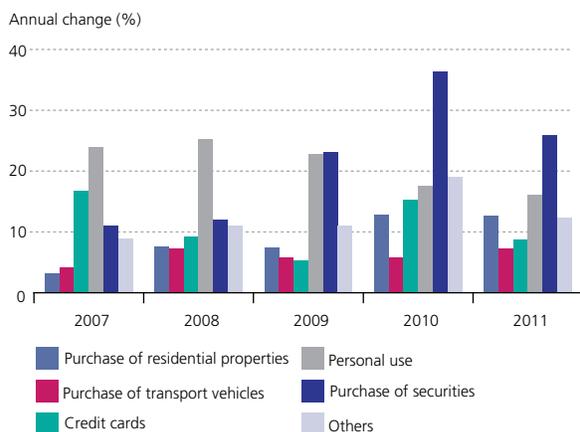
Nevertheless, given the significance of housing debt, which is the single largest credit exposure for both banks (25.5% of total credit extended by the banking system) and households (45.3% of total household debts), it is important to ensure that banks continue to maintain sound pricing and underwriting discipline in lending practices, supported by appropriate risk management and capital allocation strategies to prevent imprudent build-up of risks going forward. The Bank has clearly set out its expectations on practices to be observed by banks for the valuation of properties, followed closely by the issuance of the Concept Paper on Guidelines on Risk-Informed Pricing for Retail Loans/Financing in December 2011 for industry consultation (see Chapter 3). These prudential guidelines issued by the Bank serve to ensure that the expansion of credit does not exacerbate the level of household indebtedness in the country. Moreover, this will continue to be complemented by ongoing supervisory reviews of bank lending to households.

Within other categories of household debts, hire purchase increased at a slower rate of 6% in 2011 (2010: 7.3%) due partly to supply disruptions experienced by car manufacturers and dealers following the natural disasters in Thailand and Japan. New loan applications for the purchase of passenger cars continued to expand at a rate of 6.6%. By income group, the average vehicle loan size typically ranges between 1 to 2.2 times the annual income of those earning up to RM36,000 a year. The government's initiatives to improve the public transportation infrastructure, notably in the Klang Valley, will have a positive impact on the debt burden of the lower-income groups given the fact that vehicle loans account for a sizeable share of their borrowings. Based on the existing debt levels of this group, the leverage position could improve from 4.4-9.6 times of annual income to 3.3-7.4 times if vehicle financing is excluded, without taking into account future increases in income.

The share of unsecured borrowings in the form of personal loans and credit card financing to total household debts has remained stable at 20.2% of outstanding borrowings by households (Chart 1.10, 1.11, 1.12 and 1.13). Growth in personal financing continued to expand at a particularly strong pace, although its share of bank lending to households remains relatively stable at below 10% (2011: 9.1%). The growth was more pronounced among non-bank lenders which registered an increase of 24% in personal financing in 2011. In comparison, personal financing extended by banks increased

Chart 1.10

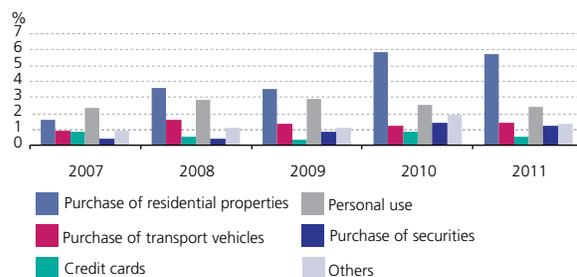
## Household Sector: Growth in Debts by Components



Source: Bank Negara Malaysia

Chart 1.11

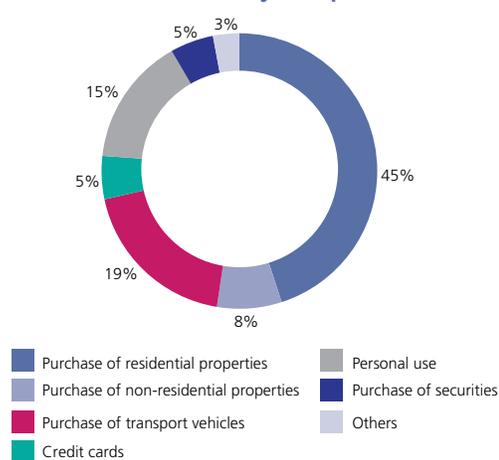
## Household Sector: Contribution to Growth of Debts



Source: Bank Negara Malaysia

Chart 1.12

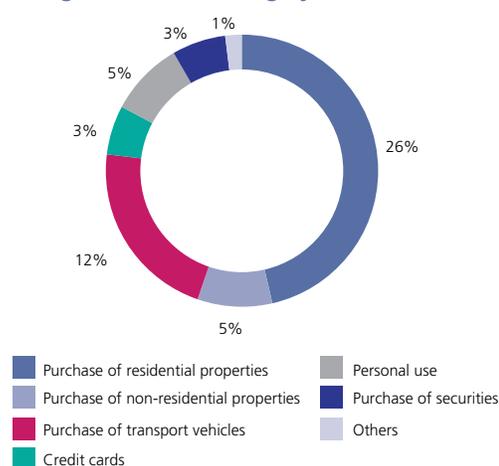
## Household Sector: Debts by Composition



Source: Bank Negara Malaysia

Chart 1.13

## Banking System: Financing to Households as Percentage of Total Banking System Loans



Source: Bank Negara Malaysia

by 20.6%. Including outstanding credit card balances, banks' unsecured lending to households grew by 15.4% in 2011 to reach RM82.7 billion as at end-2011. This accounted for 8.2% of total banking system loans (2010: 8.1%).

Key providers of personal financing continued to be the non-bank financial institutions such as credit co-operatives, development financial institutions and a building society, which collectively account for about 60% of outstanding personal financing to households. These lenders mainly provide financing to households in the lower- to middle-income categories under automatic salary deduction schemes where repayments are deducted at source. A maximum deduction of 60% of salary (net of taxes, contributions to the Employees Provident Fund and other direct deductions from salary) is applied under these schemes. This has, to a certain degree, helped ensure the affordability of household debts accumulated outside the banking system.

Borrowings for the purchase of securities remained high, a trend observed since 2009. For the recent three years, growth has averaged at 26.7% (2004-2008: 11.1%). This trend has been largely driven by the search for yield combined with the relative strength of the equity market despite increased volatility from higher volumes in capital flows. Financing for the purchase of securities is generally well-collateralised by the underlying securities. Moreover, 83% of such financing were for investments in fixed-priced unit trust funds managed by Amanah Saham Nasional Berhad. Risks from such financing are contained, given the small share of such financing for the purchase of securities in both the total household debts and the banking system's overall exposure to households.

At the aggregate level, households continue to have the ability to meet their debt obligations. Overall debt servicing capacity of households continues to be supported by favourable income and employment conditions. The unemployment rate improved further to 3.1% in 2011 (2010: 3.3%), while a survey by the Bank showed that the average salaries in the private sector continued to grow by 4% in 2011 (2010: 4.5%). Repayment trends for borrowings from the banking system remained positive, with the increase in loan repayments of 12% in 2011 surpassing the rate of loan disbursements of 10.9%. The overall impaired loan ratio for the household sector improved further in

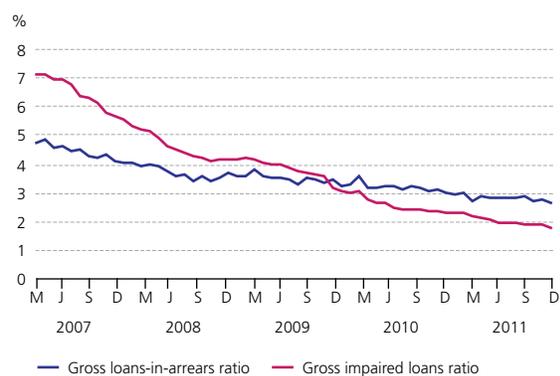
2011 to 1.8% (2010: 2.3%) and is well supported by positive indications of healthy debt servicing ability. The amount of impaired loans declined by 12.6% with decreases across almost all categories of household lending, notably in the financing for the purchase of securities and residential properties, which declined by 25.9% and 17.9% respectively. Loans-in-arrears of more than 1 month to below 3 months were also lower in 2011, moderating further to 2.6% as a proportion of household loans (2010: 3%) (Chart 1.14).

Credit cards were an exception where the amount of impaired loans (net of write-offs) rose in the second half of the year, after declining in the first half (2H 2011: +10.9%, 1H 2011: -5.9%). In addition, balances written off for credit cards increased sharply by 28.5% as compared to 5.1% in 2010. Adjusting for these write-offs, the impairment ratio for credit cards, however, remained unchanged from the previous year at 2.6%, on account of the larger base. The number of credit card holders (excluding defaulters) with revolving balances, that is, those who do not settle the outstanding balances in full, also held steady at 46.4% of total credit card holders (2010: 47.9%). Cash advances remained small at 3.6% of total credit card activities (2010: 4.1%).

While risks to financial stability are limited, as a pre-emptive measure to avert strains arising from credit card debt, the Bank tightened the requirements for credit cards in March 2011 for individuals earning a monthly gross income of RM3,000 and below. Limits were imposed on the number of credit cards and credit limits extended to these individuals so as to commensurate with

Chart 1.14

#### Household Sector: Delinquencies



Source: Bank Negara Malaysia

their ability to repay debt. Following the measure, the expansion in credit card revolving balances moderated sharply to 11.9% between April to December 2011 (March 2011: 20.3%). Although new applications for credit cards increased to 2.5 million (2010: 2.4 million), the number of cards approved has declined to 1.2 million (2010: 1.3 million), resulting in a lower approval-to-application ratio of 49.1% (2010: 55.1%). While outstanding balances for credit cards have increased further in 2011 (8.7%), part of this was due to the larger volume of retail credit card transactions as more Malaysians use credit cards as a payment instrument. In terms of repayment behaviour, on average, about 30% of credit card holders settle their balances in full, while almost 50% settle at least the minimum payment of 5% of total outstanding balance promptly each month. In terms of amount, about 60% of the total amount spent every month was settled in full in the following month.

For the lower-income household groups which are more vulnerable to potential financial difficulties, institutional arrangements are in place and operating effectively to provide early engagement during periods of financial stress, including through debt counselling, restructuring and consolidation which have helped to contain the probability of default and the extent of the ensuing losses. These arrangements were put in place following the Asian Financial Crisis and include early rehabilitative policies implemented by the banking institutions and AKPK. In 2011, 12,633 borrowers with outstanding borrowings totalling RM1.07 billion were enrolled in AKPK's Debt Management Programme. Since its establishment, AKPK has helped more than 50,000 borrowers with outstanding loans totalling RM4.9 billion to bring their debt under control, thus avoiding financial distress. Compared to the Asian Financial Crisis, banks have also continued to demonstrate a far more proactive role in engaging borrowers who were experiencing financial difficulties, which has contributed to averting wider incidences of defaults.

Bankruptcy cases have also shown a moderating trend in the recent three years, particularly in 2011 where the number of cases increased by 5.8% (19,167 new cases) compared with 11.7% (18,119 new cases) in the preceding year. These new cases account for only 0.3% of the number of bank borrowers.

The government has recognised the significant challenges faced by certain segments of households in an environment of rising costs of living,

prompting a series of measures implemented by the government during the year to support lower-income households in coping with these challenges (Table 1.5 and 1.6). Additional measures by the Bank (Table 1.7) include the POWER! Programme and the implementation of the Guidelines on Responsible Financing with the aim of promoting responsible borrowing and financing practices (see Chapter 3). Collectively, these measures serve to ensure that this particular group of lower-income households, and the household sector in general, do not become a source of vulnerability to the financial system and economy in the future.

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### Efforts to contain excessive indebtedness of households and hence preserve sustainability and fundamentals of the household sector are undertaken in a holistic and collaborative manner by all key stakeholders

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While the banking system remains the primary lender to households, accounting for 85% of household borrowings, the increased level of activity by non-bank lenders in recent periods calls for a coordinated response to developments in the household sector. The Bank has accordingly intensified its engagements with Suruhanjaya Koperasi Malaysia and relevant government agencies and divisions as well as directly with other large non-bank lenders to the households. This continued in 2011, with agreement reached on the coordinated adoption of key aspects of affordability assessments under the Bank's Guidelines on Responsible Financing by co-operatives and a building society. In addition, efforts are progressing towards the development of an integrated household database, combining nationwide income and debt data that will support more robust and granular assessments of risks and vulnerabilities in the household sector.

### MANAGING CONTAGION FROM EXTERNAL DEVELOPMENTS

External developments which had an impact on the Malaysian financial system mainly stemmed from the renewed turbulence in global financial markets during the year as a result of heightened

Table 1.5

## Measures Introduced by the Government

Objectives	Measures								
To ensure sustainability of affordable housing	Revamping the Real Property Gains Tax (RPGT) structure to stem speculative activities: <table border="1" data-bbox="418 382 1003 533"> <thead> <tr> <th>Residential properties sold</th> <th>RPGT rate</th> </tr> </thead> <tbody> <tr> <td>0 up to 2 years</td> <td>10%</td> </tr> <tr> <td>More than 2 up to 5 years</td> <td>5%</td> </tr> <tr> <td>More than 5 years</td> <td>0%</td> </tr> </tbody> </table>	Residential properties sold	RPGT rate	0 up to 2 years	10%	More than 2 up to 5 years	5%	More than 5 years	0%
	Residential properties sold	RPGT rate							
0 up to 2 years	10%								
More than 2 up to 5 years	5%								
More than 5 years	0%								
	Introducing My First Home Scheme and 1Malaysia People's Housing Scheme (PR1MA)								
To improve public transportation system	Improving reliability and frequency of public buses								
	Integrating public transportation within the city centre								
	Enhancing urban public rail transportation over the long-term including: <ul style="list-style-type: none"> <li>• Launching of Sungai Buloh-Kajang MRT line</li> <li>• Extending the current Kelana Jaya and Ampang LRT lines</li> </ul>								
To provide financial assistance to targeted household sub-segments	Introducing the SARA 1Malaysia scheme targeted at households earning <RM3,000 per month								
	Improving remuneration structure for civil servants and restructuring of annual pension scheme for retired civil servants								
	One-off financial assistance e.g. RM500 cash assistance to households with monthly income of less than RM3,000								
	School assistance of RM100 for primary and secondary students								
	Book vouchers worth RM200 for tertiary students								

Table 1.6

## Home Ownership Programmes by the Government

The My First Home Scheme and 1Malaysia People's Housing Scheme (PR1MA) introduced by the government aim to encourage home ownership for the lower- to middle-income groups at affordable prices. To ensure that such schemes do not add excessive debt burdens on these individuals and that the repayment obligation is within the affordable capacity of the individuals, applications for such borrowings will be subjected to the same underwriting standards and credit worthiness assessments as other prospective borrowers of the banks. This is an important consideration to ensure that the household sector, particularly this target group, does not become a source of instability going forward.

My First Home Scheme is targeted at young adults earning less than RM3,000 a month to purchase their first residential property within the price range of RM100,000 to RM220,000 (raised to RM400,000 since January 2012 to facilitate joint borrowings by husband and wife with a combined monthly income of less than RM 6,000). Under this scheme, Cagamas Berhad will provide insurance over the 10% down payment.

1Malaysia Housing Programme Corporation is the sole agency to plan and coordinate PR1MA projects specifically targeted for the middle income group. The agency is responsible to oversee the construction and distribution of houses under the scheme to first-time home buyers earning RM6,000 and below per month. Eligible borrowers will benefit from stamp duty exemption on the loan instruments for the purchase of houses.

Table 1.7

## Measures Introduced by the Bank

Objectives	Measures
Macroprudential measures to ensure prudent expansion of credit	Higher risk-weights for personal loans with tenure of >5 years, housing loans with LTV>90%, to heighten banks' resilience over risky portfolios Concept Paper on Guidelines on Risk-Informed Pricing for Retail Loans/Financing to ensure pricing of financing products commensurates with risks assumed
To promote responsible behaviour of individuals and financial institutions	POWER! Programme targeted at young working individuals Guidelines on Responsible Financing targeted to promote stricter underwriting standards for banks. Similar requirements have been extended to co-operatives and a building society Stricter credit card requirements to promote responsible behaviour in the usage of credit cards
To promote sustainable property market and contain speculative behaviours	Maximum LTV ratio for third housing loan and above at 70%, to curb speculative activities in the residential property market Imposed LTV of 60% for housing loans by non-individuals to streamline the requirement across all borrowers

concerns over the uncertainties relating to the resolution of the sovereign debt in Europe, and to a lesser degree, the US. This led to dislocations in the funding markets in the form of higher funding costs and a general contraction in market liquidity. These conditions further compounded strains on global banks with significant exposures to the European periphery countries and funding structures that remained extensively reliant on short-term wholesale funding. The capital positions of European banks also came under considerable stress as a result of mounting credit and market losses amid weak economic conditions and elevated volatility in the financial markets, as well as stricter regulatory requirements under Basel III. This in turn raised concerns that deleveraging by European banks would further restrain credit availability and reignite negative feedback loops with the real economy.

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The Malaysian financial system weathered the externally-generated volatility and challenges well. This was mainly attributed to the limited exposures to counterparties in Europe and low reliance by Malaysian banks on offshore wholesale funding. The deleveraging activities by European based financial institutions are not expected to have material adverse consequences on domestic financial intermediation and overall stability

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Although not immune to these developments, the impact on the Malaysian financial system has been well contained. This was supported by: (i) the orderly intermediation of short-term portfolio flows; (ii) low reliance by Malaysian banks on external funding from offshore wholesale markets; (iii) limited credit exposures of Malaysian financial institutions to counterparties in Europe, including business corporations; (iv) limited impact from deleveraging activities by European banks; and (v) sound capital and funding positions supporting the offshore operations of Malaysian banks.

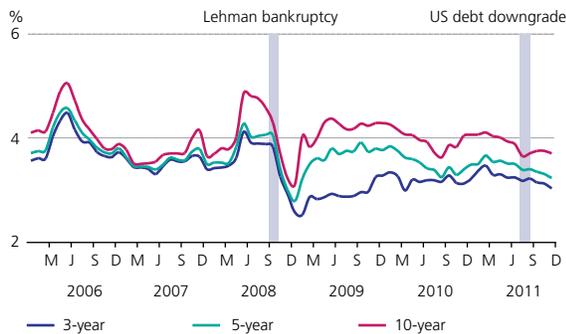
### ***Orderly intermediation of short-term portfolio flows***

The search for yield in a global low interest rate environment and heightened risk aversion in the major advanced economies led to a surge in portfolio investment flows into Malaysia during the first half of the year. As a result, portfolio investment registered net inflows of RM56.4 billion, more than double the amount recorded during the corresponding period of the previous year. Intensified uncertainty, particularly in Europe, caused inflows to reverse in the second half of the year. This resulted in net inflows of RM30.3 billion for the year as a whole, mainly concentrated in the public debt securities market. Non-resident holdings of public debt securities correspondingly rose to 29.9% of outstanding public debt securities as at end-2011 (end-2010: 24%), mostly held in the Bank Negara Monetary Notes (BNMN) and Malaysian Government Securities (MGS). Non-resident holdings of equity securities, measured as the proportion of number of shares outstanding, remained relatively stable (end-2011: 17.6%; end-2010: 17.1%). While strong demand for MGS led to some price appreciation, with yields declining at the shorter-end of the maturity spectrum, the deeper and more diversified domestic financial markets supported the smooth intermediation of these short-term capital flows without disruptive effects on the domestic financial markets (Chart 1.15, 1.16 and 1.17). Volatility in the domestic equity market increased to average at 11.6% in the second half of the year (1H 2011: 9%) but remained significantly lower than the levels observed during the height of the Global Financial Crisis in 2008 (20.9%). In comparison to regional peers, the volatility of the FBM KLCI was also considerably lower at about half the volatility level observed regionally (Chart 1.18). While bouts of volatility saw some large domestic institutional investors paring down holdings of equities during the year, this had limited impact on market conditions. As at end-2011, the portfolio investments of pension and provident funds (Chart 1.19) accounted for 11.1% of Bursa Malaysia's market capitalisation and 25.1% of outstanding debt securities (2010: 10.5% and 25.9% respectively).

Malaysian banks have remained prudent with no evidence to suggest significant shifts in risk-taking behaviour or an increased appetite for large

Chart 1.15

Financial Market: MGS Yields



Source: Bloomberg

Chart 1.16

Financial Market: Average Bid-ask Spreads of Equity and MGS

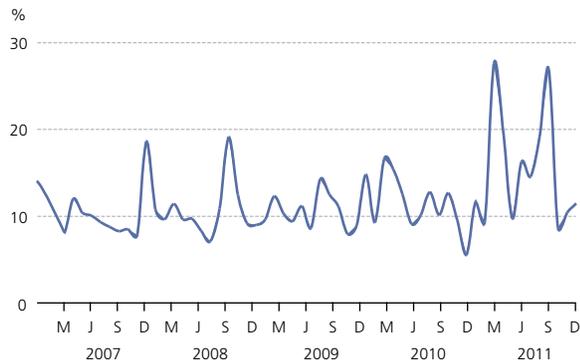


Source: Bloomberg and Reuters

unhedged market risk exposures. Notwithstanding ample liquidity conditions in the domestic market and persistent wide interest rate differentials between emerging and advanced economies,

Chart 1.17

Financial Market: MGS Monthly Turnover Ratio

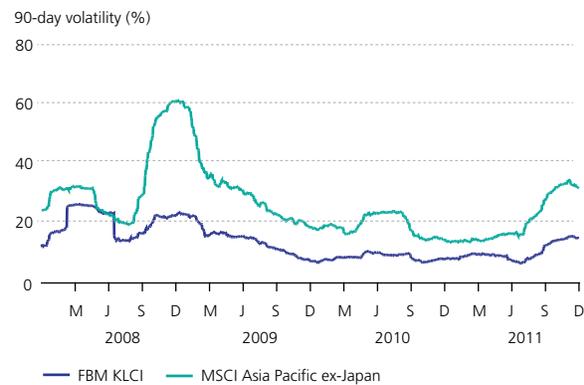


Source: Bank Negara Malaysia and internal computation

banks have not taken on excessive risks. This was reflected in the relatively stable aggregate interest rate exposure of the banking system during the year. Banks remained active in using derivative instruments to hedge and manage interest rate risk, resulting in a higher outstanding notional amount of interest rate derivative contracts, which expanded by 7.4% to RM706.6 billion as at end-2011. The size of basis risk remained manageable as the spreads between MGS and interest rate swap rates progressively converged across all maturities towards the end of 2011. Despite higher volatility in the bond market, the duration-weighted interest rate risk position of banks was unchanged to account for 4.9% of capital base as at end-2011.

Chart 1.18

Financial Market: Domestic Equity Volatility against Regional Benchmark



\*The MSCI Asia Pacific excluding Japan index is a capitalisation-weighted index that monitors the performance of stocks from the Asia Pacific region excluding Japan

Source: Bloomberg

Chart 1.19

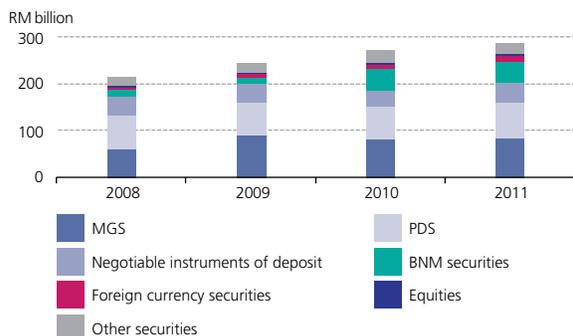
Composition of Assets for Provident and Pension Funds Industry



Source: Bank Negara Malaysia survey

Chart 1.20

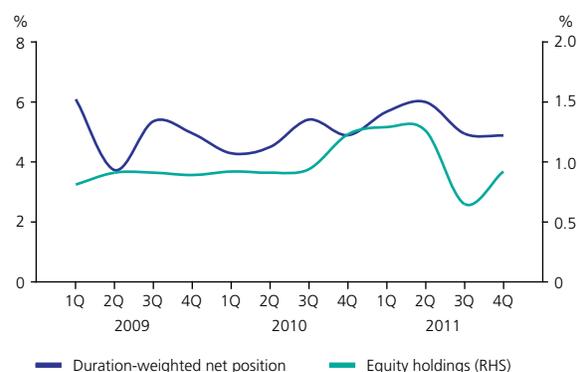
## Banking System: Composition of Securities Portfolio



Source: Bank Negara Malaysia

Chart 1.21

## Banking System: Equity and Interest Rate Risk (as % of Capital Base)



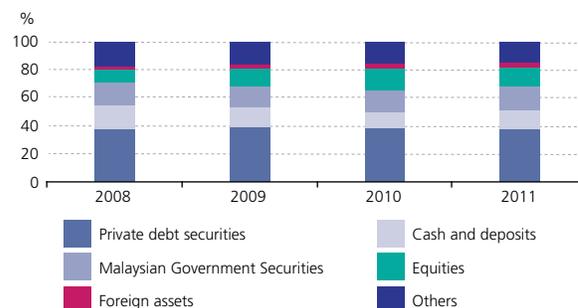
Source: Bank Negara Malaysia

While the trading portfolio of banks grew by 14.4% during the year, on account of higher holdings of assets such as Negotiable Instruments of Deposits (NIDs) and BNM papers, the structural composition of banks' treasury assets in both local and foreign currency denominations remained largely unchanged. Holdings of government and BNM papers continued to dominate the trading book of banks, expanding by 2.3% to account for 53.1% of the banking system securities portfolio (Chart 1.20). Banks' equity holdings declined during the year to account for 0.9% of total capital base as at end-2011 (2010: 1.2% of capital base) (Chart 1.21). The active management of market risk positions enabled banks to post continued net gains from trading activities and investment portfolios which expanded by 30.1% and 44.3% respectively during the year.

In the insurance industry, the composition of insurance fund assets (including takaful business) remained similarly stable with private debt securities (PDS) continuing to form the majority of assets held (end-2011: 37.3%; end-2010: 38.6% of total assets). Market and credit risk exposures arising from holdings of PDS remained manageable with the bulk of PDS (88.1%) held in high-grade papers (rated 'A' and above). Insurers reduced holdings in equities during the year to RM29 billion or 14.7% of assets as at end-2011 (2010: RM30.1 billion or 16.5% of industry assets), in favour of less risky assets such as MGS and fixed deposits which accounted for 17% and 13.6% of the industry's total assets respectively (2010: 15.5% and 11.2% respectively). The rebalancing of investments maintained the market risk exposures of insurers at 12.6% of capital available (2010: 12.5%), with interest rate risk from higher investments in MGS partly offset by lower equity risk exposures. Collectively, equity and interest rate risks formed 84.6% of insurers' total market risk exposures (Chart 1.22 and 1.23).

Chart 1.22

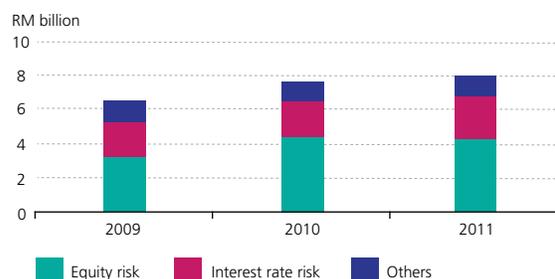
## Insurance Sector: Composition of Assets



Source: Bank Negara Malaysia

Chart 1.23

## Insurance Sector: Components of Market Risk Exposure

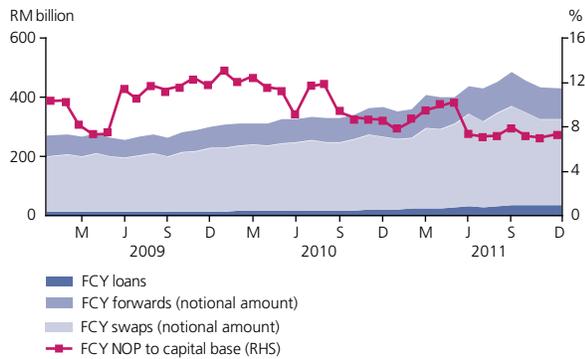


Source: Bank Negara Malaysia

The overall foreign currency net open position (NOP) of the banking system remained manageable at 7.2% of capital base as at end-2011 (end-2010: 8.9%) (Chart 1.24). The open position was primarily attributed to currency swap and forward contracts arising from continued demand by businesses to better manage exchange rate-related risks, interbank transactions, as well as lending in foreign currency (Chart 1.25). Banks were proactive in managing these exposures, particularly given the tighter global US dollar liquidity conditions, resulting in a manageable net US dollar open position of 1.2% of capital base as at end-2011 (2010: 1.7%). Net positions in other major currencies such as the euro, Hong Kong dollar, Singapore dollar and

Chart 1.24

### Banking System: Foreign Currency Net Open Position (FCY NOP)

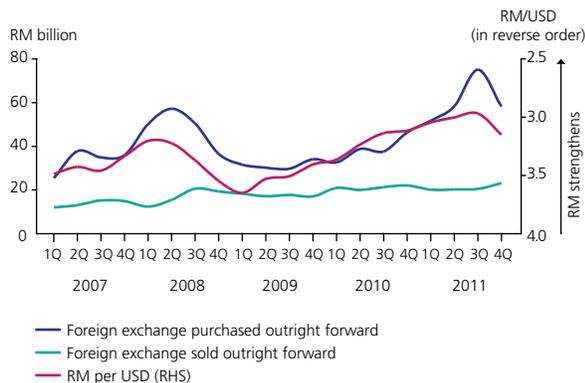


Note: The computation of FCY NOP to capital base is based on Basel II Standardised Approach for Market Risk for foreign exchange risk

Source: Bank Negara Malaysia

Chart 1.25

### Banking System: Hedging Activities by Domestic Non-bank Entities



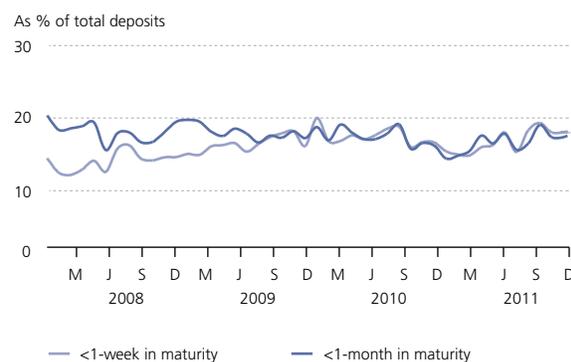
Source: Bank Negara Malaysia

Indonesian rupiah were less than 1% of capital base respectively. A small number of banks that exhibited wider NOP have pared down the foreign currency exposures in the second half of the year in anticipation of more volatile currency movements. Overall liquidity mismatches of the banking system remained manageable, supported by strong liquidity buffers at 18.3% of total customer deposits for maturities of less than one week (Chart 1.26). Banking system liquidity gaps in foreign currency widened temporarily in the fourth quarter, following the reversals of portfolio flows but remained below the peak recorded in 2008. The foreign currency liquidity negative gap for the less-than-one-month maturity bucket continued to narrow to RM8.9 billion as at end-2011 (end-2010: RM13.9 billion) (Chart 1.27). Exposures of the insurance sector to foreign assets remained small at 8.5% of capital base. Foreign investments of insurance funds (excluding funds supporting businesses outside Malaysia) are subject to a prudential limit of 10% of total assets for each individual fund.

The increased volatility in the financial markets has had limited impact on the financial positions of Malaysian businesses. Malaysian corporations with large foreign borrowings benefited from the strengthening of the ringgit in the first seven months of the year through lower debt servicing amounts in ringgit equivalent. Export-led firms, however, were affected by lower ringgit receipts on the weakening of the US dollar, although sustained external demand and firm commodity prices during the year provided support to the businesses in maintaining overall profitability. While external

Chart 1.26

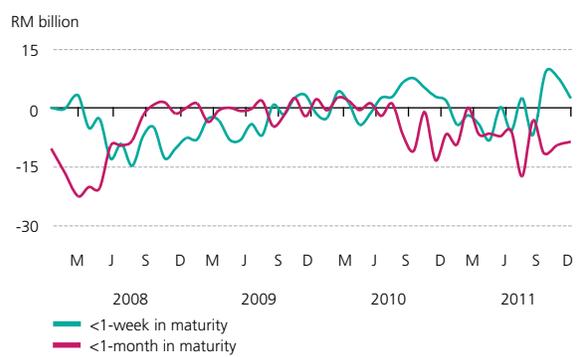
### Banking System: Liquidity Buffer



Source: Bank Negara Malaysia

Chart 1.27

**Banking System: Foreign Currency Liquidity Mismatch**

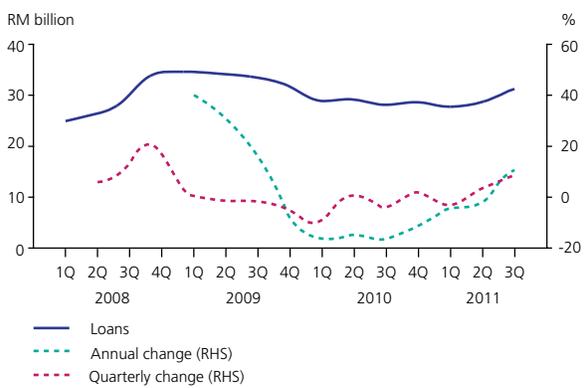


Source: Bank Negara Malaysia

loans of Malaysian corporations increased by 8%, mostly in US dollar borrowings, this did not imply a generalised increase in reliance on borrowings from abroad. The overall external debt position (loans and debt securities) of Malaysian corporations was in fact lower, compared to 2008-2009 (Chart 1.28 and 1.29). Overseas expansion by larger corporations continued to be funded internally through inter-company borrowings or through borrowings from the domestic banking system or the capital market. The exposures of businesses to foreign exchange movements, particularly in the export-oriented industries such as the electronics & electrical (E&E) and palm oil sectors, are also largely hedged. Residual credit exposures of the banking system to export-oriented resource-based industries with unhedged positions remained limited at less than 5% of outstanding business loans.

Chart 1.28

**Business Sector: External Loans in USD**



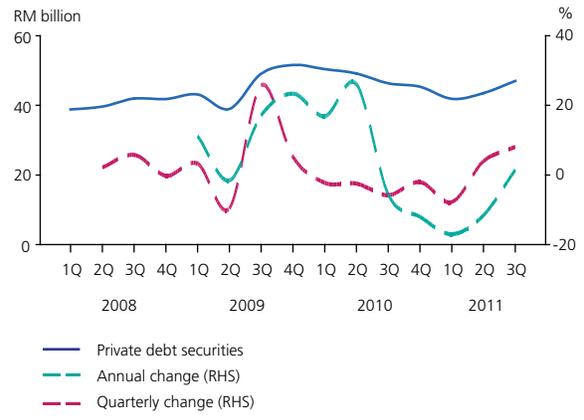
Source: Bank Negara Malaysia

**Limited impact from tighter global US dollar liquidity conditions**

While the liquidity strains in the euro zone money markets, to a large extent, affected US dollar funding conditions in most Asian markets (Chart 1.30 and 1.31), the Malaysian banking sector was not significantly impacted. Malaysian banks are less reliant on external funding, including funding from offshore wholesale markets, which accounted for less than 9% of total funding and hence were less exposed to adverse developments in international funding markets (Chart 1.32). The prevalent ringgit deposit-based funding structure among Malaysian banks has been well supported by the continued strong growth in savings and deposits, and ample domestic liquidity. This limits the

Chart 1.29

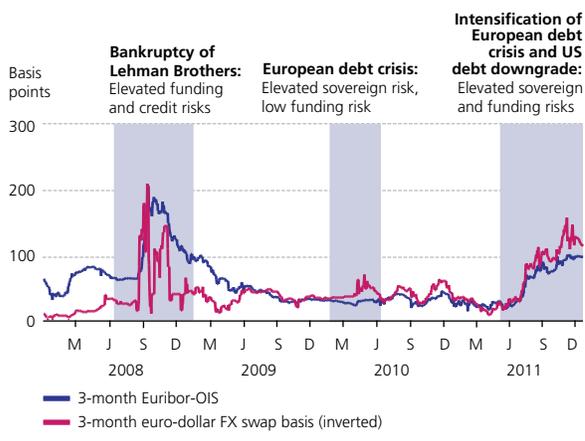
**Business Sector: External Debt Securities in US Dollar**



Source: Bank Negara Malaysia

Chart 1.30

**Euro Area Funding and Dollar Liquidity Risks**



Source: Bloomberg

Chart 1.31

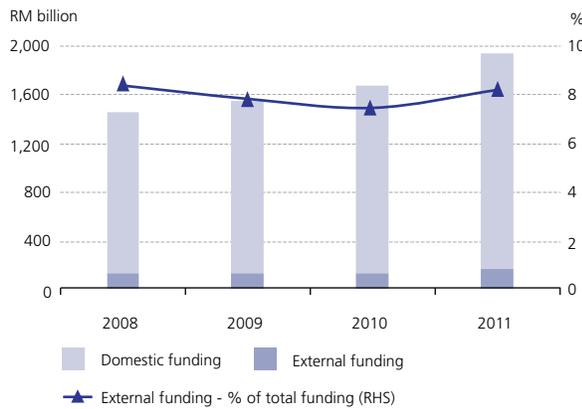
Cross-currency Basis Swap Spread of Selected Asian Countries



Source: Bloomberg

Chart 1.32

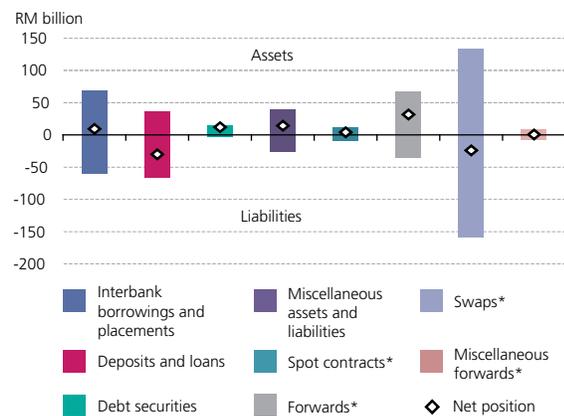
Banking System: External Funding to Total Funding



Source: Bank Negara Malaysia

Chart 1.33

Banking System: Foreign Currency Denominated Assets and Liabilities

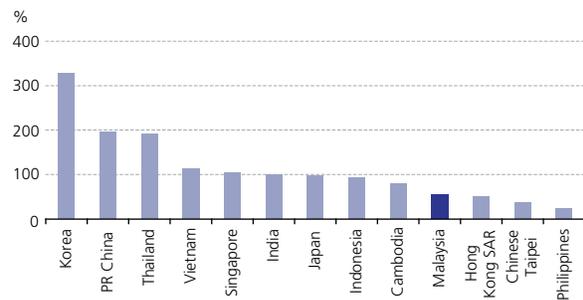


\* In notional amount

Source: Bank Negara Malaysia

Chart 1.34

Country Comparison of Banks' Foreign Currency Loan-to-Deposit Ratios



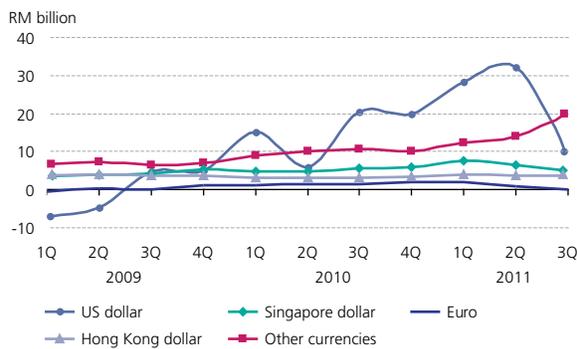
Source: Moody's Investors Service and Bank Negara Malaysia

need for cross-currency funding (borrowing in one currency to fund assets in another currency) from offshore wholesale markets to support credit growth. As a result, the banking system's foreign currency funding gap remained stable and small at RM5.8 billion or 3.5% of capital base (Chart 1.33). In addition, Malaysian banks have not built up excessive cross-border currency or maturity mismatches from its external exposures to non-resident counterparties. While there was increased demand for foreign currency loans by foreign banks and non-bank entities in 2011 (+57.7%), Malaysian banks' non-ringgit loans remained small at 2% of total assets and were well supported by the robust growth (+24%) in foreign currency deposits during the year (Chart 1.34). Furthermore, the foreign claims of the banking system continued to exceed foreign liabilities, reflecting the relatively stable and balanced net external asset positions for exposures denominated in US dollar, Singapore dollar, euro and other foreign currencies (Chart 1.35). Given the limited accumulation of US dollar-denominated investments that were funded by short-term unsecured borrowings, Malaysian banks are less vulnerable to heightened roll-over risks that could arise from further disruptions in the US dollar wholesale funding markets.

Despite this, moderate spillover effects from the tightened US dollar conditions in the euro area were felt in the domestic markets. The general increase in risk aversion and the consequent outflows of foreign funds led to a more cautious attitude among Malaysian banks in the second half of the year to preserve foreign currency funds for their own needs. The resultant tighter onshore US dollar liquidity conditions caused the 5-year USD/RM cross-currency swap rate

Chart 1.35

**Banking System: Net External Position by Major Foreign Currency**



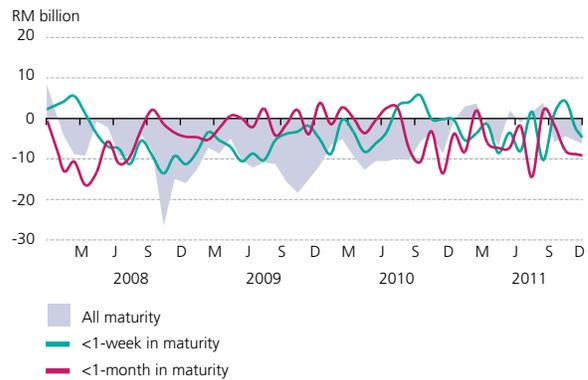
Source: Bank Negara Malaysia

to widen to 240 basis points below KLIBOR, the widest level since 2008 (200 basis points). In response to these developments, banks were more proactive in managing US dollar exposures, including through the centralised liquidity management of US dollar funds within the banking group, the closer monitoring of US dollar maturity mismatches and limiting the accumulation of new longer-term foreign currency assets. Banks with larger exposures also increased their medium-term funding to ensure a more balanced composition of foreign currency funds by maturity. The pre-emptive responses by banks have ensured that the overall US dollar liquidity mismatches in the banking system remained low in comparison with the period prior to the height of the Global Financial Crisis in 2008 (Chart 1.36). The extensive use of the European Central Bank's deposit facility by euro area banks underscored the return of heightened interbank counterparty concerns, pushing the Euribor-OIS spread to its widest level since April 2009. While most European banks operating as branches across the euro area faced more funding pressures due to withdrawals of intra-group financing at the parent level, the locally-incorporated subsidiaries of European banks (LIEBs) operating in Malaysia, which fund their domestic operations primarily through ringgit deposits, continued to operate under ample liquidity conditions. The ringgit interbank rates continued to remain stable across all maturities throughout the year, with little sign of market segmentation or heightened counterparty risk aversion in relation to the LIEBs operating in Malaysia (Chart 1.37).

Enhancements to financial safety nets, both at the domestic and regional levels, have reinforced the

Chart 1.36

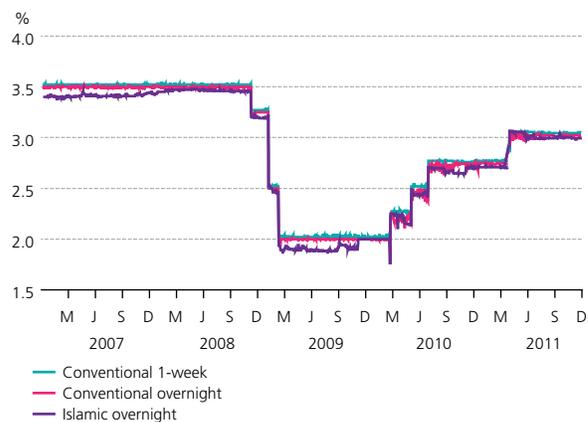
**Banking System: US Dollar Liquidity Mismatch**



Source: Bank Negara Malaysia

Chart 1.37

**Banking System: Conventional and Islamic Interbank Rates**



Source: Bank Negara Malaysia

banking system's resilience to a potential further deterioration in funding conditions. In addition to the Chiang Mai Initiative Multilateralisation, which is a multilateral currency swap arrangement among ASEAN plus three countries, the establishment of reciprocal cross-border collateral arrangements between the Bank and a number of central banks in the region further expanded avenues for regionally active financial institutions to manage their liquidity needs with greater efficiency across markets. It also serves to alleviate funding shocks that may be propagated from any global scale shortage of foreign currency liquidity. The Bank has also expanded the list of eligible collateral that financial institutions can pledge to obtain ringgit liquidity from the Bank, previously restricted to ringgit-denominated securities only, to include

local and foreign currency-denominated securities issued by governments and central banks of the Executives' Meeting of East Asia Pacific Central Banks (EMEAP) member countries, and securities issued by multilateral development banks denominated in US dollar, euro, yen and sterling pound.

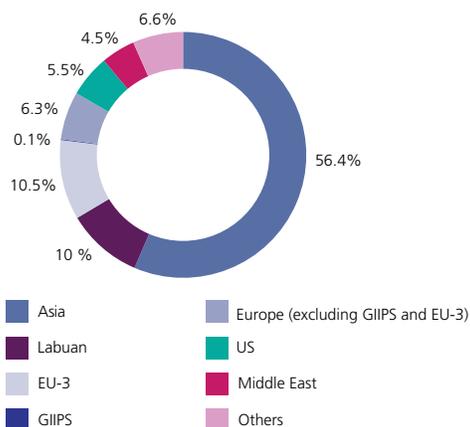
**Limited credit risks from external claims of financial institutions and exposures to domestic export-oriented industries with trade relations with European countries**

External claims by Malaysian banks on all counterparties domiciled in Greece, Ireland, Italy, Portugal and Spain (GIIPS) remained limited at RM0.2 billion or 0.1% of total external asset exposures (Chart 1.38). Approximately 87% of these claims were in the form of long-term loans to non-bank private entities, while the remainder comprised interbank deposits and nostro account balances with correspondent banks to facilitate currency settlements (Chart 1.39). Assuming a 100% loss given default for all asset exposures to GIIPS, the potential credit loss to Malaysian banks would only amount to 0.1% of capital base. The simulated impact at the individual bank level is similarly small ranging between 0.01% and 1.3% of capital base. Claims on GIIPS originated from offshore banks in Labuan amounted to only RM4 million.

While the escalation of sovereign debt and banking sector concerns has broadened beyond vulnerable peripheral economies, external asset

Chart 1.38

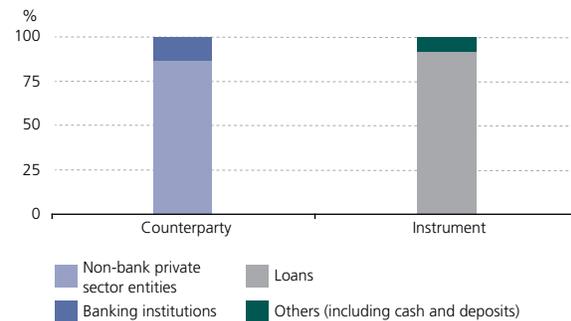
**Banking System: Composition of External Claims by Region or Country**



Source: Bank Negara Malaysia

Chart 1.39

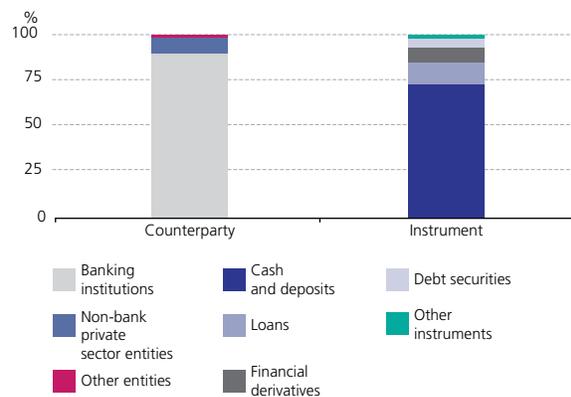
**Banking System: Composition of Claims on GIIPS by Counterparty and Instrument**



Source: Bank Negara Malaysia

Chart 1.40

**Banking System: Composition of External Claims on Europe (excluding GIIPS) by Counterparty and Instrument**



Source: Bank Negara Malaysia

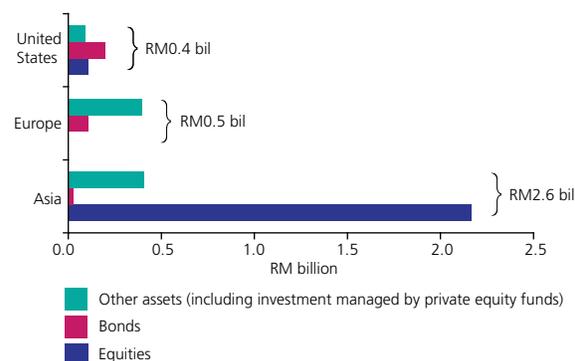
exposures of the Malaysian financial system to other European counterparties were also well contained. Malaysian banking institutions' external claims on the rest of Europe (ex-GIIPS) of RM23 billion accounted for 1.3% of total assets or 16.8% of the banking system's total external assets. Including claims from Labuan banks which amounted to RM4.8 billion, the external asset exposures to Europe (ex-GIIPS) accounted for 15.5% of the combined external assets of onshore and offshore banks. Approximately 63% of such claims were claims on counterparties in Germany, France and the United Kingdom (EU-3) and comprised mainly interbank deposits placements and nostro account balances held by domestic banks and LIEBs (Chart 1.40). The rating downgrades and declines in the market

capitalisation of euro area banks during the year had no material impact on Malaysian banks' capital positions as the international ratings of their European counterparties were generally maintained. Other claims arising from derivatives transactions, holdings of money market instruments, debt and equity securities issued by European counterparties (ex-GIIPS) were also largely concentrated with EU-3 banks and remained very small at less than 0.2% of total assets or 2.1% of capital base. In the event of heightened market volatility, the potential trading and valuation losses incurred by Malaysian banks from such exposures would be limited. In addition, credit risk exposures from term loans provided to non-bank private corporations in the euro area (ex-GIIPS) which could be affected by weaker growth prospects for the region amounted to only 1.8% of capital base. Malaysian banks are also less exposed to valuation losses arising from volatile euro currency movements as external claims denominated in the euro continued to decline during the year to account for 1.7% of capital base (end-2010: 3.3% of capital base).

External investments by the Malaysian insurance sector (including takaful business) remained small at RM5.4 billion or 2.6% of total assets or 8.5% of available capital. Almost half of the foreign assets were invested in Asia. Of this amount, external investment exposures to Europe in 2011 amounted to only RM0.5 billion (2010: RM1.2 billion) representing 0.3% of total assets or 0.8% of total capital available (Chart 1.41). These assets were invested mainly in corporate bonds and private equity funds, as insurers pared

Chart 1.41

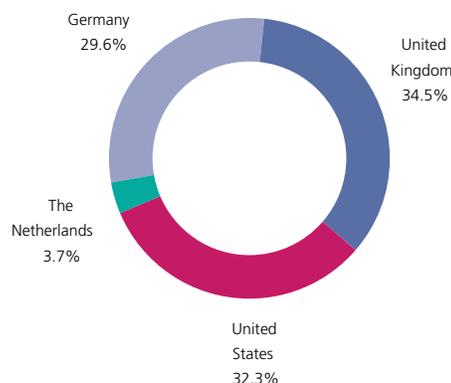
#### Insurance Sector: External Exposures by Type of Investments



Source: Bank Negara Malaysia

Chart 1.42

#### Insurance Sector: Investment Exposure to Europe and United States



Source: Bank Negara Malaysia

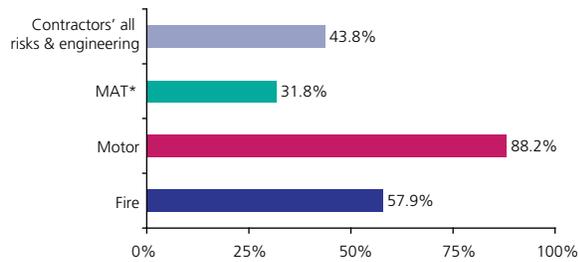
down direct investments in equity markets due to the heightened market volatility during the year. None of these investments was in entities in GIIPS, with RM0.4 billion invested in Germany and the UK (Chart 1.42).

Malaysian insurers reinsure a substantial part of risks underwritten in the global reinsurance market, either directly or through reinsurance placements with Malaysian branches of foreign reinsurers. This is more pronounced for large and specialised risks in the aviation, oil & gas and engineering classes of business, where reinsurance premium ceded amounted to 93.6%, 93.4% and 56.2% of total premiums respectively. In addition to the more challenging investment and operating conditions, global reinsurers, including those in Europe, were impacted by unprecedented losses (estimated at USD107 billion) from more than 250 catastrophic events globally in 2011. The stronger capitalisation of (re)insurers going into 2011 has helped to absorb these losses and maintain support for reinsurance needs globally, although higher reinsurance costs are likely to be experienced going forward (Chart 1.43, 1.44 and 1.45).

Total reinsurance exposures of the general insurance sector to European (re)insurers headquartered outside Malaysia stood at RM945.9 million in 2011 (2010: RM431.5 million), representing about 11.6% of total capital available. The higher exposures were attributed to higher claims incurred for large and specialised business classes. Most of these (re)insurers hail from Germany, France and Switzerland and have continued to maintain sound financial positions

Chart 1.43

## Insurance Sector: Retention Ratio by Major Business Classes

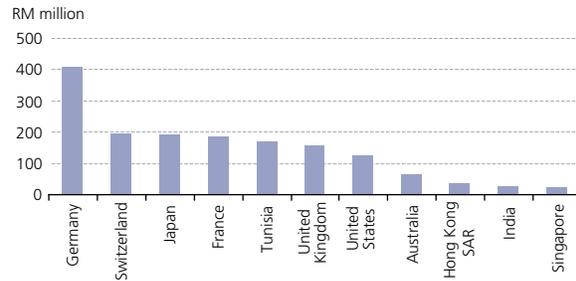


\*Marine, aviation &amp; transit

Source: Bank Negara Malaysia

Chart 1.46

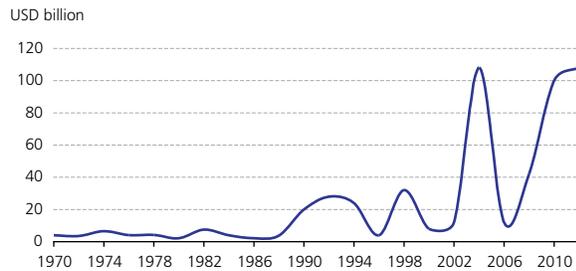
## Insurance Sector: Foreign Reinsurance Exposure by Claims Outstanding



Source: Bank Negara Malaysia

Chart 1.44

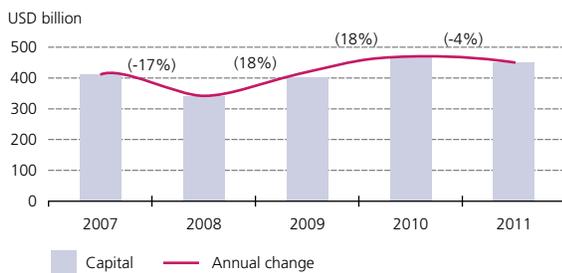
## Global Catastrophe Insured Losses



Source: Guy Carpenter

Chart 1.45

## Global Reinsurers Capital



Source: Aon Benfield

and stable ratings. Of this, total exposures to the three European reinsurance branches in Malaysia remained manageable at RM257.2 million in 2011. This accounted for 9.2% of total reinsurance claims outstanding or 2.9% of general insurers' total capital available. Branches of all foreign reinsurers operating in Malaysia which are supervised by the Bank are required to set aside dedicated capital earmarked for the Malaysian operations. These

branches are well supported by capital buffers, with a combined capital adequacy ratio of more than 277% against risks of the Malaysian branch operations (Chart 1.46).

Increased credit risks of banks and insurers to Malaysian export-oriented industries arising from weaker global economic growth prospects are expected to be mitigated by the continued growth in intra-regional trade and Malaysia's diversified export market base. While Malaysia's exports to the euro area currently account for approximately 10% of Malaysia's gross exports, exposures of financial institutions via loans and PDS holdings to businesses that have trade relations with the European countries accounted for only 1.6% of total outstanding loans and PDS holdings of all financial institutions.

### **Impact from deleveraging or scaling back of operations by European financial institutions is manageable**

Escalating funding strains and capital conservation measures by a number of the major European banks have raised concerns that further deleveraging may adversely affect domestic intermediation activity and economic growth in the region. This could arise from divestments by European banks of US dollar assets in emerging economies, reduced participation in US dollar syndicated financing and withdrawal of US dollar trade financing lines to multinational companies. Since September 2011, a number of major European banks have announced plans to accelerate the disposal of non-core assets and maturing assets as well as scale back low-profitability activities globally (Chart 1.47). In the Bank's assessment, any impact from these developments on domestic financial intermediation will be manageable.

As at the third quarter of 2011, European banks' claims on Malaysia (including Labuan entities) accounted for USD54.3 billion or 19.3% of GDP based on the latest BIS Consolidated Banking Statistics. More than 60% of these consolidated claims, which amounted to USD34 billion or 12.1% of GDP, were in ringgit-denominated claims on Malaysia by European banks' affiliates located outside the home country of incorporation. Such claims reflect the operations in Malaysia which largely comprise: (i) loans to Malaysian entities; (ii) holdings of securities issued by Malaysian entities; (iii) deposits placed with Malaysian financial institutions; (iv) equity/capital investments of foreign banks in Malaysia; and (v) financial contracts e.g. derivatives, guarantees and credit commitments with all Malaysian counterparts (Chart 1.48 and Table 1.8). Excluding UK-based banks, total foreign claims by European banks on Malaysia as reported in the BIS statistics accounted for only USD13.4 billion or 5% of GDP, comparable to most regional peers (Chart 1.49).

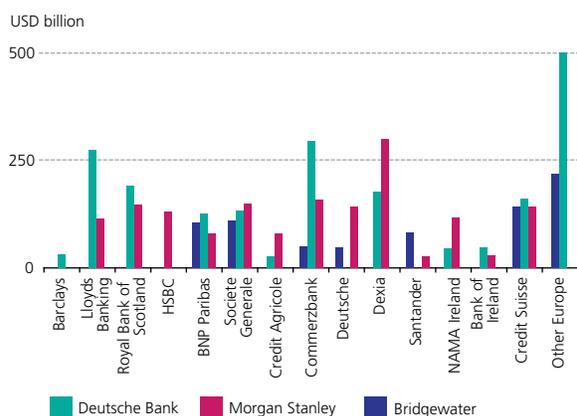
The potential impact on Malaysia from deleveraging activities by European banks is significantly lower than implied by the BIS data. This is because the reported European banks' foreign claims on Malaysia include claims of LIEBs operating in Malaysia on all domestic financial institutions, corporations, individuals and public sector entities, which are mostly funded from ringgit-denominated liabilities. Malaysia, like many other jurisdictions in Asia, has a long history of foreign bank presence in the domestic financial system. All foreign banks in Malaysia are locally

incorporated subsidiaries with dedicated capital committed to the Malaysian operations as required under the Malaysian banking legislation. There are currently seven LIEBs from the EU-3 countries with a market share of 8.9% of the banking system's total assets as at end-2011. Of these, five are from the UK with a market share of 8.2% of total banking system assets. On aggregate, the claims of LIEBs on Malaysian entities denominated in both ringgit and foreign currencies accounted for approximately USD42 billion or 14.9% of GDP.

The Malaysian operations of LIEBs are funded domestically, with over 80% in the form of local currency deposits, of which 46.9% were in the form of retail deposits. These subsidiaries are well capitalised and are subject to rigorous supervision and regulation by the Bank similar to other domestic-owned banks and other foreign banks. As part of the licensing requirement,

Chart 1.47

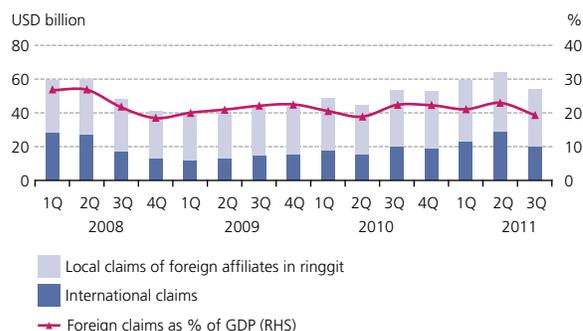
Estimates of Deleveraging Plans by Selected European Banks



Source: Deutsche Bank, Morgan Stanley, Bridgewater and internal computation

Chart 1.48

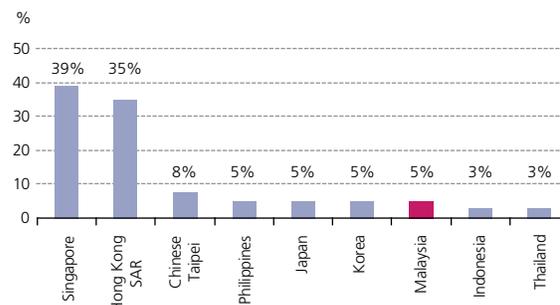
European Banks' Foreign Claims on Malaysia



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

Chart 1.49

Euro Area (excluding UK) Banks' Foreign Claims over GDP



Note: Euro area banks' foreign claims as at third quarter 2011  
2011 GDP estimates by International Monetary Fund (except Malaysia)

Source: Moody's Investors Service and Bank for International Settlements

Table 1.8

European Banks' Claims on Malaysia<sup>1</sup>

	As % of Malaysia GDP	(A) Cross-border claims <sup>2</sup> of European banks on Malaysia	(B) Local claims <sup>3</sup> of foreign affiliates <sup>4</sup> of European banks in foreign currency		(C) Local claims of foreign affiliates of European banks in ringgit	
			Locally-incorporated European banks in Malaysia	Other foreign affiliates	Locally-incorporated European banks in Malaysia	Other foreign affiliates
(i) Foreign claims (A + B + C)	19.3 <sup>5</sup>					
(ii) International claims (A + B)	7.2					
(iii) Local claims of foreign affiliates in ringgit (C)	12.1					
(iv) Claims of seven LIEBs	14.9					

Note: <sup>1</sup> Each claim in row (i) to (iv) refers to the sum of corresponding shaded columns. Claims in row (i) to (iii) are based on BIS Consolidated Banking Statistics. Claims in row (iv) are estimated from the ringgit and foreign currency denominated total outstanding loans, net interbank placement with Bank Negara Malaysia, securities held and capital base of the seven LIEBs

<sup>2</sup> Claims that are granted or extended to non-residents

<sup>3</sup> Claims of reporting banks' foreign affiliates (branches and subsidiaries) on the residents of the host country (country of residence of affiliates)

<sup>4</sup> Foreign affiliates refer to foreign subsidiaries and branches of reporting banks

<sup>5</sup> UK banks' foreign claims on Malaysia based on BIS Statistics accounted for 14.3% of GDP

<sup>6</sup> Consolidated claims of domestic banking groups, i.e. domestic banks with head offices in a given country and their foreign offices (branches and subsidiaries)

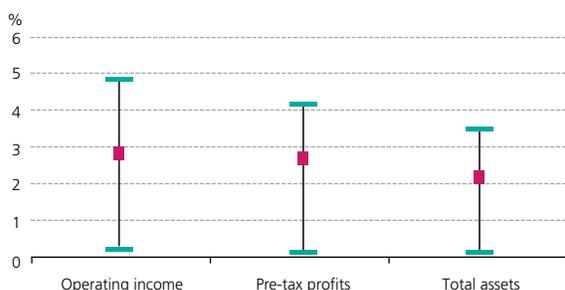
Source: BIS Consolidated Banking Statistics<sup>6</sup> (immediate risk basis) and internal computation

all foreign banks are required under the law to hold minimum capital funds of RM300 million for the Malaysian operations. Years of profitable operations in Malaysia have seen these banks build strong capital positions to support the local operations. As at end-2011, the LIEBs have a combined capital base amounting to RM11.5 billion and a risk-weighted capital ratio (RWCR) of 12.9%. Excess capital stood at RM4 billion above the minimum regulatory requirement. Given the strong and consistent financial performance and sustainable returns of the Malaysian operations of the LIEBs, a material scale back of Malaysian operations as a result of deleveraging by European banks is not expected (Chart 1.50 and 1.51). This is supported by data showing that throughout 2011 and to date, the domestic market share of these LIEBs by assets (8.9% of banking system assets), financing (7.2% of total financing by banking system) and deposits accepted (8.7% of total conventional and Islamic

banking system deposits) have remained stable. There was also no observed surge in special dividend payments to the parent bank during this period. The requirement for the Bank's prior approval of any repatriation of capital reserves further mitigates future implications from capital conservation measures taken at the parent level. Even in an unlikely event of a wide-scale retreat of European banks from the Malaysian market, domestic intermediation activity would continue to be well supported by other domestic-owned and non-European banks in Malaysia that are well capitalised and have strong liquidity positions to ensure continued access to financing. These banks have a combined excess capital of about RM70 billion and RM132 billion in excess funds placed with the Bank via the interbank market, thus providing ample liquidity in the Malaysian banking system to meet the financing and funding requirements of domestic borrowers.

Chart 1.50

## Range of Revenue and Asset Contribution of Five LIEBs to Parent Group



Source: Bank Negara Malaysia

In the insurance sector (including takaful business), European-based insurers accounted for 16% of total assets or 27.6% of total premium of the sector. Thus far, there has been similarly no sign of scaling back of the Malaysian operations by the European-based insurers, also due partly to the subsidiation of these entities in Malaysia, as well as the continued strong credit standings of the parent entities, which are mainly headquartered in Switzerland, United Kingdom, the Netherlands and Germany. The domestic-owned insurers and other non-European insurers operating in Malaysia also have strong capital positions with excess capital buffers of RM6.8 billion and the capacity to provide support for domestic risks if a pullback by European insurers were to occur.

Given the low reliance on external borrowings by Malaysian corporations to fund their activities, any withdrawal of cross-border financing by the European banks is not expected to have

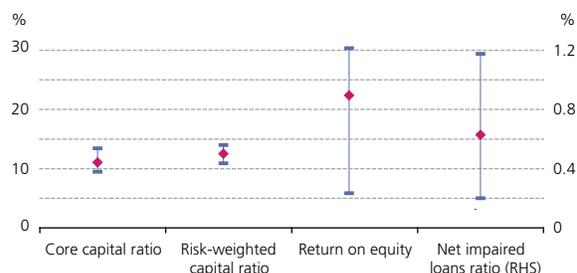
a significant impact on the funding needs of resident companies. While some companies borrowed from abroad to fund the overseas operations or to leverage on competitive financing rates, external borrowings by Malaysian corporations from banks domiciled in Europe amounted to only RM1.7 billion, the bulk of which were by European-based manufacturing and aviation companies.

**Limited spillovers from cross-border operations**

The transmission of risks from the expanded cross-border operations of Malaysian banks is limited on account of several factors. Traditional lending activities continued to be the main contributor to the growth of foreign branches and subsidiaries of domestic banking groups, accounting for 75% of total assets of overseas operations. The bulk of this lending is extended to the corporate and commercial sectors for working capital purposes and through bank guarantees and letters of credit to facilitate international trading activities (Chart 1.52 and 1.53). Retail loans extended are largely secured, mostly for the purchase of residential properties, while unsecured financing accounted for only 16% of the total outstanding loans of overseas operations. The operations of overseas subsidiaries of the Malaysian banks are also largely funded by stable sources of local funding in the relevant markets, including deposits which accounted for more than half of total funding (Chart 1.54). The relatively stable loan-to-deposit ratios combined with improved group-wide risk management systems and practices contribute towards mitigating any

Chart 1.51

## Banking System: Range of Key Financial Soundness Indicators of LIEBs

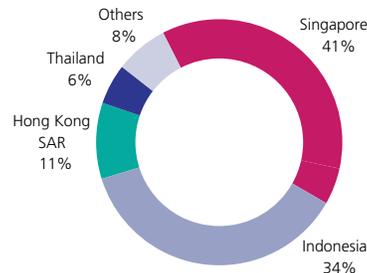


Note: Excludes one newly established LIEB

Source: Bank Negara Malaysia

Chart 1.52

## Banking System: Asset Composition of Overseas Operations



Source: Bank Negara Malaysia

Chart 1.53

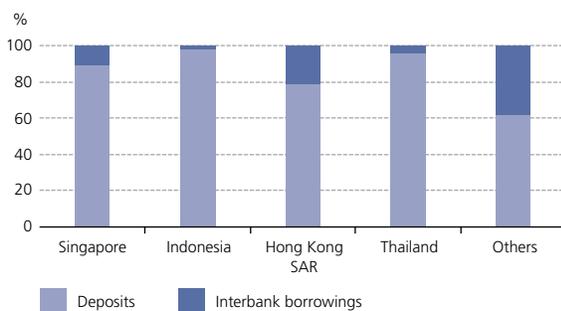
### Banking System: Loan Composition of Overseas Operations by Type and Country



Source: Bank Negara Malaysia

Chart 1.54

### Banking System: Funding Structure of Overseas Operations



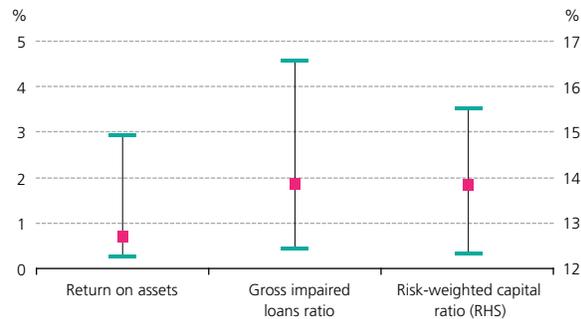
Source: Bank Negara Malaysia

risk of potential funding pressures in the overseas operations of Malaysian banks from propagating across borders to the domestic operations.

The financial position of major overseas establishments of domestic banking groups remained strong with sustained profitability (Chart 1.55). The contribution of all overseas operations to domestic banking groups' profitability ranged between 2% and 35% for individual banking groups. Capitalisation levels of foreign subsidiaries also remained sound, supported by the independent generation of capital from strong earnings. The RWCR of these overseas subsidiaries, computed based on Basel II requirements, ranged between 12.3% and 30.1% as at end-2011. The high level of capitalisation provides adequate buffers against potential credit and market losses in the more challenging external

Chart 1.55

### Banking System: Range of Key Financial Soundness Indicators for Major Overseas Operations



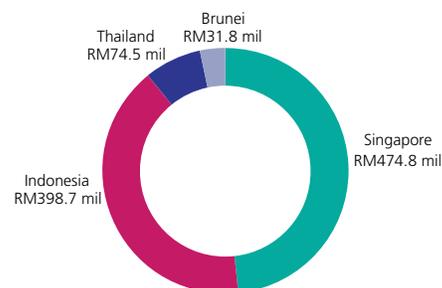
Source: Bank Negara Malaysia

environment. With robust risk management practices and high asset quality both at the foreign entity and group-wide levels, the overall credit risk emanating from the overseas operations of domestic banking groups remained manageable. The asset quality of foreign operations of domestic banking groups remained stable, with sustained declines in the levels of impaired loans. The median gross impaired loans ratio for all foreign subsidiaries of domestic banking groups stood at 2.4% of total outstanding loans from overseas operations. The cross-border operations of domestic insurers remained small with total assets of RM979.8 million (amounting to only 0.5% of total insurance industry assets) spanning four countries in 2011 (2010: RM970.6 million) (Chart 1.56).

The Bank adopts a consolidated approach for the supervision of domestic financial institutions. This includes assessing risks that could emanate

Chart 1.56

### Insurance Sector: Asset Size of Overseas Operations



Source: Bank Negara Malaysia

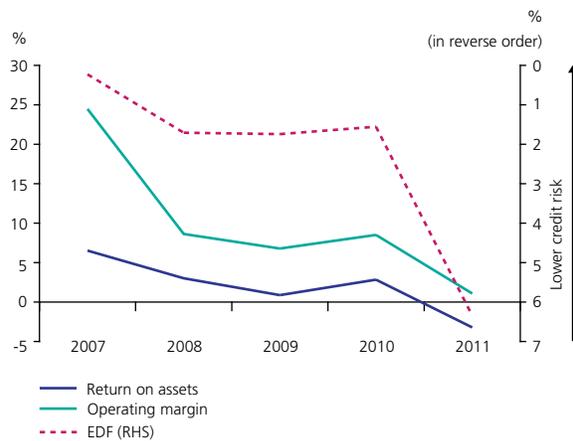
from overseas operations of domestic financial institutions. This is also supported by the ongoing exchange of information between home and host supervisors on developments in local economic and financial conditions, and on supervisory concerns and actions. In 2011 and early 2012, the Bank hosted supervisory colleges for two domestic banking groups with significant cross-border operations. These home-host engagements support the early identification of entity and group-wide vulnerabilities and timely supervisory responses. The ongoing engagements and supervisory assessments to date reaffirm the resilience of the domestic financial institutions to external shocks, both at the entity and group levels.

## OTHER DEVELOPMENTS AND RISK AREAS

Domestic business conditions were supported by strong domestic demand and the continued expansion of intra-regional trade. This was, however, moderated to varying degrees, by operating costs which remained elevated amid high prices of raw materials and revised tariffs for electricity and natural gas, and weaker external demand from advanced economies. As a result, credit risk, as measured by the Expected Default Frequency (EDF), trended slightly higher during the year, with more pronounced increases observed in particular in the shipping and building- and construction-related materials (BCM) industries, and to a lesser extent, E&E industry (Chart 1.57, 1.58 and 1.59).

Chart 1.57

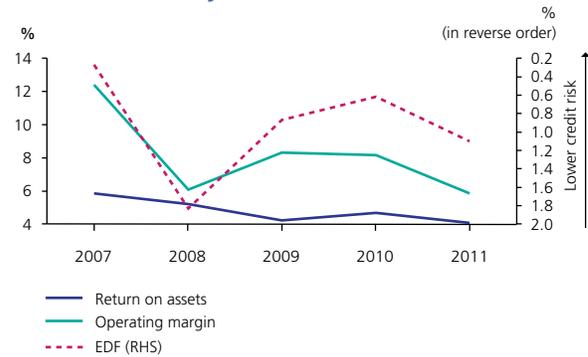
### Business Sector: Profitability and EDF for Shipping Industry



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

Chart 1.58

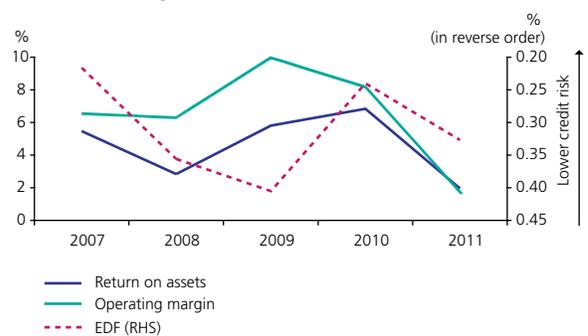
### Business Sector: Profitability and EDF for BCM Industry



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

Chart 1.59

### Business Sector: Profitability and EDF for E&E Industry

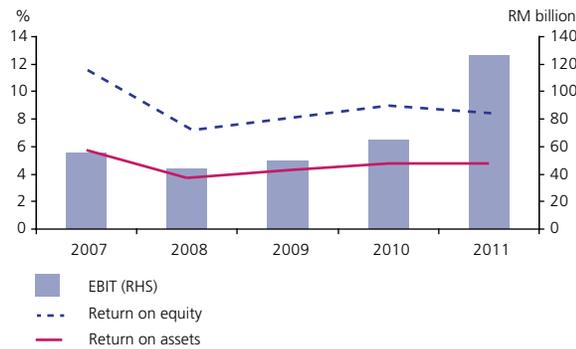


Source: Moody's KMV Credit Edge™, Bloomberg and internal computation

Overall, businesses remained in a relatively strong position, financially and operationally, to cope with these developments. The accumulation of financial buffers over the years and continued improvements in operational efficiency have provided domestic businesses with the enhanced capacity and flexibility to adjust to adverse changes in operating conditions (Chart 1.60). In 2011, aggregate cash balances of businesses increased by 5.6% while operating margins continued to improve to 11.4% (2010: 10.7%). In addition, businesses have continued to maintain relatively low and stable leverage positions since the Asian Financial Crisis, with an aggregate debt-to-equity ratio of 44.8% as at end-2011 (Chart 1.61) and a healthy interest coverage ratio of 6.3 times (2010: 7.5 times) which remains supportive of businesses' continued debt servicing capacity. These factors continue to provide firm support for the quality of banks' overall credit exposures to domestic businesses

Chart 1.60

## Business Sector: Profitability Indicators



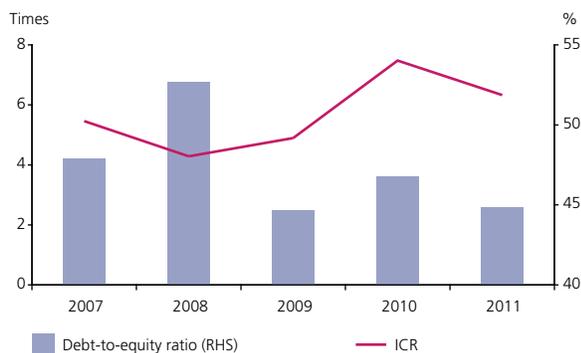
Source: Bloomberg and internal computation

with the credit risk for the business sector as a whole, as measured by the EDF, remaining low at 0.68% (2010: 0.61%).

In 2011, growth in total financing by the banking system to businesses remained strong, increasing at a faster pace of 13.5% (2010: 9.4%). Businesses also continued to meet funding needs through the bond and sukuk markets which drew firm support from a diversified institutional investor base, despite the more challenging market conditions during the year. For the year, a total of RM50.9 billion (2010: RM30.8 billion) in new PDS and sukuk issuances (excluding those issued by financial institutions) was raised. Reflecting the generally sound financial positions of businesses, the gross impaired financing for large businesses and SMEs declined to RM9.3 billion and RM6 billion respectively, with the gross impairment ratios correspondingly

Chart 1.61

## Business Sector: Interest Coverage Ratio (ICR) and Debt-to-Equity Ratio



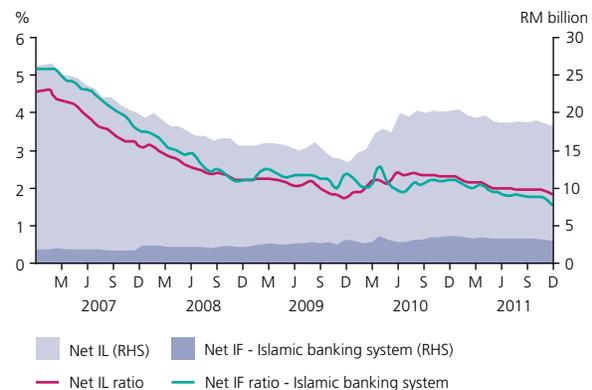
Source: Bloomberg and internal computation

improving to 4.1% (2010: 5.3%) and 3.9% (2010: 5%) respectively (Chart 1.62 and 1.63).

Banking system loans for non-residential property acquisitions and development rose to RM110 billion (2010: RM90.7 billion), representing 11% of total banking system loans in 2011 (2010: 10.3%). While the supply of shop houses and retail space has grown broadly in tandem with demand, ongoing and planned constructions of new office space are pointing to emerging signs of oversupply, especially in the Klang Valley area with the coming on stream of a number of large-scale office buildings. Occupancy rates for office space have gradually declined in recent years to 82.3% at the national level (4Q 2010: 84.2%; 4Q 2009: 85.2%) and

Chart 1.62

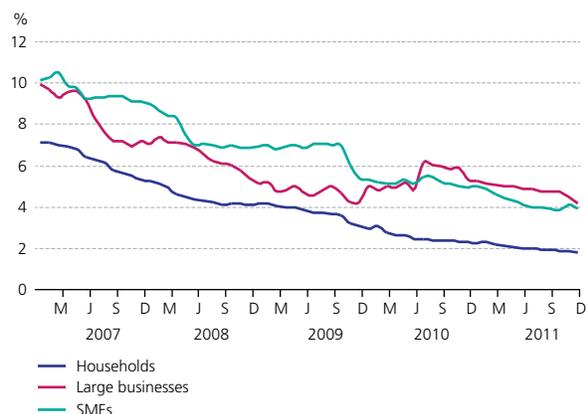
## Banking System: Impaired Loans (IL)/ Impaired Financing (IF) Level and Ratio



Source: Bank Negara Malaysia

Chart 1.63

## Banking System: Gross Impaired Loans Ratio by Borrowers



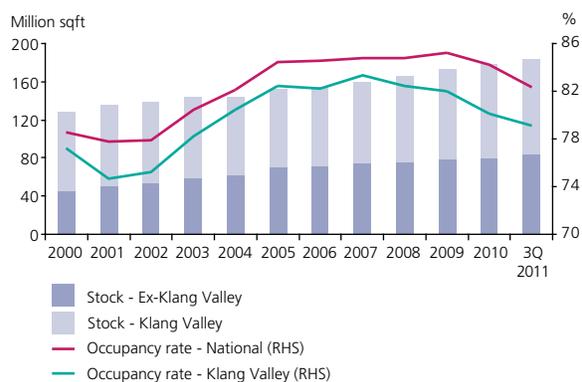
Source: Bank Negara Malaysia

79.1% in the Klang Valley (4Q 2010: 80.2%; 4Q 2009: 82%) (Chart 1.64). Rental rates in the Klang Valley have also stagnated at RM5.56 and RM4.02 per square foot per month for the Golden Triangle and Central Business District areas respectively (Chart 1.65). Further supply expected under the various development projects planned over the next few years could add further pressure on office occupancy and rental rates. Banks have taken a more cautious approach in lending to this segment, with the amount disbursed declining by about 21%, after expanding by 55% in the year before. As at end-2011, the exposure of the banking system to loans for the development of office space remained well contained at RM10.8 billion or 1.1% of total banking system loans. The overall gross impairment ratio for banking system exposures in the non-residential property segment (including shop houses, retail and office space) also remained low at 1.3%.

Profitability of the banking sector (including the Islamic banking system) improved to register returns on assets and equity of 1.6% and 17.4% respectively (2010: 1.5% and 16.6% respectively) as pre-tax profits increased by 14.2% to RM26.2 billion. The Islamic banking system recorded pre-tax profits of RM3.1 billion, with average returns on assets and equity of 1% and 13.7% respectively (including the impact from a large one-off provision by one Islamic bank that undertook a balance sheet strengthening exercise during the year). The strong overall performance was partly attributed to higher interest/financing income (+12.2%), which more than offset higher funding costs on the expanded deposit base. The net interest/financing margin nonetheless narrowed slightly to 0.57 percentage points during

Chart 1.64

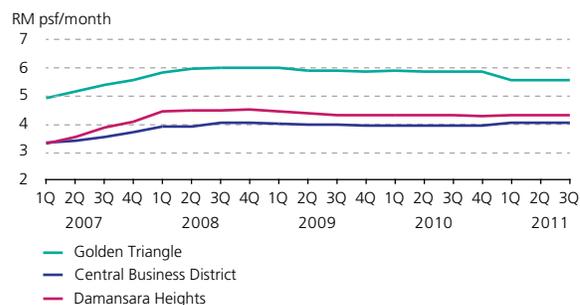
### Stock of Offices and Occupancy Rate



Source: National Property Information Centre and internal computation

Chart 1.65

### Rental Rates for Office Space in Klang Valley



Source: The Edge

the year (2010: 0.62 percentage points) due to strong competition in the house financing and retail lending segments. Impairment charges (net of recoveries) declined for a second consecutive year, reducing by 35.9% in 2011 due to lower newly impaired financing and improved bad debt recoveries. Also contributing to profits were higher fee-based activities (including fees associated with credit facilities, bancassurance and wealth management offerings), net trading and net investment income which grew by 4.5%, 30.1% and 44.3% respectively. Profits have also come under some pressure from higher staff costs which grew by 12% in 2011, higher than the average annual growth of 10.2% in the previous three years. Staff costs continued to increase under an intensely competitive talent market in the financial sector, driven by vacancies in specialist, technical and management positions.

Banks continued to report stable and sound funding positions, with more than sufficient ringgit liquidity to meet demand for credit from households and businesses as well as to weather any unexpected large deposit withdrawals. Banks' liquidity buffers in excess of the minimum regulatory requirement under the Bank's liquidity framework increased to 18.3% and 18.1% of deposits for liquidity needs maturing in less than one week and one month respectively. As in previous years, the banking system remained a net lender in the domestic interbank market, with excess liquidity of RM153.3 billion placed with the Bank as at end-2011. During the year, banks were more aggressive in attracting retail deposits, which expanded by 12.2% in anticipation of more stringent liquidity requirements under Basel III. This contributed to a slight decline in the loan-to-deposit ratio to 80.9% (2010: 81.3%). Banks have also

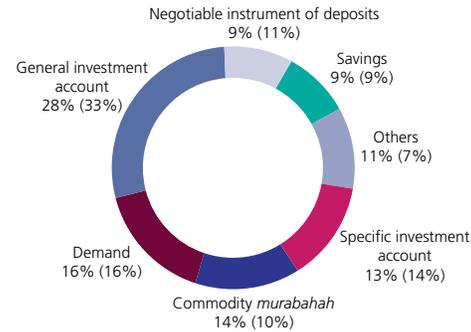
continued to maintain large holdings of high-quality liquid assets, the bulk (68%) of which comprise MGS and Government Investment Issues. The active management by banks of foreign currency liquidity positions have also ensured that overall foreign currency liquidity mismatches in the banking system, particularly in the US dollar, remained low in comparison with the period prior to the height of the Global Financial Crisis in 2008.

Within the Islamic banking system, the rate of return risk is expected to remain manageable, given the positive outlook for financing and stable cost of funding. Islamic profit-sharing investment products based on the *mudharabah* contract (Chart 1.66) formed 41.4% of total deposits. Of this amount, 68.5% was in the form of General Investment Accounts, where depositors typically have an expectation of the protection of the principal investments and certainty in returns. The challenges associated with managing these expectations (or managing displaced commercial risks, DCR) eased during the year given the stable interest rate environment and returns on conventional deposits. The more active management of underlying assets by Islamic banks also supported returns to meet depositors' expectations while observing the Shariah tenets of *mudharabah* contracts (Chart 1.67). While a few Islamic banks drew down on the profit equalisation reserves to meet depositors' expectations on returns, there was also a wider use of other instruments by Islamic banks to manage DCR, including refinements to the profit-sharing ratio to allow flexibility for banks to waive their share of profits, and reducing the concentration on long-term fixed return financing. Collectively, these developments led to a decline in the level of profit equalisation reserves of Islamic banks to RM82.6 million (Chart 1.68).

In addition, some Islamic banks moved to lengthen the maturity structure of the funding base through issuances of medium-term sukuk and negotiable instruments of deposit as a means to achieve greater stability and diversification in the funding structure, thus minimising the risk of funding mismatches. The remaining 31.5% of *mudharabah* deposits were in the form of Special Investment Account deposits where credit and market risks are borne by the fund providers based on the investment mandate dictated by the fund providers. For such deposits, Islamic banks are obliged to provide timely disclosures of the risks and performance of the investments to the fund providers. As in previous years,

Chart 1.66

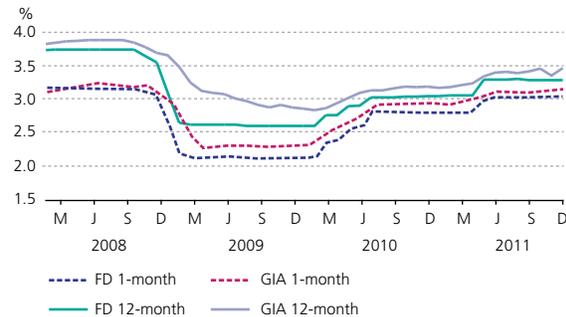
## Banking System: Composition of Islamic Deposits



(%): Dec-2010 market share  
Source: Bank Negara Malaysia

Chart 1.67

## General Investment Account (GIA) Rates and Quoted Fixed Deposits (FD) Rates



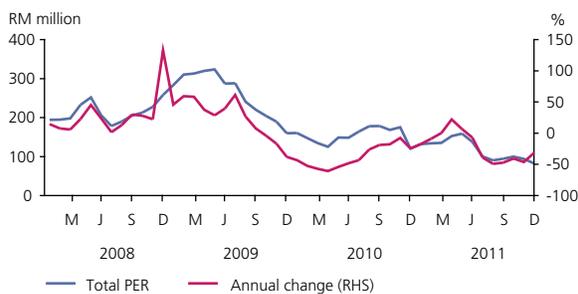
Source: Bank Negara Malaysia

Islamic banks continued to steadily expand the portfolio of floating rate assets as a measure to reduce the repricing gap risk (risk arising from the mismatch between returns earned on fixed-rate assets and repricing of liabilities). During the year, floating rate assets of Islamic banks, mainly in the form of *musharakah mutanaqisah* (diminishing partnership) and *ijarah* (leasing) contracts, grew by 11.6%, resulting in a further reduction of fixed-rate financing assets as a proportion of total financing to 59.2% (2010: 63.7%) (Chart 1.69). Islamic banks were also more focused on offering fixed returns commodity *murabahah* deposits which recorded a significant growth of 74.7% in 2011 to reach RM36.9 billion or 13.8% of total deposits (2010: 9.7%).

The banking system as a whole continues to be well capitalised with strong financial buffers to withstand potential losses (Chart 1.70). More than 70% of total capital remained in the form

Chart 1.68

## Profit Equalisation Reserve (PER)



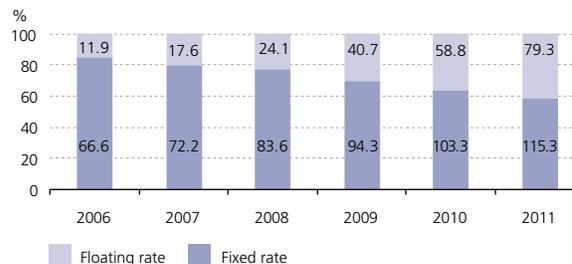
Source: Bank Negara Malaysia

of high-quality instruments, comprising common equity and reserves. The aggregate RWCR and core capital ratio (CCR) improved further to 15.1% and 13.2% respectively (2010: 14.8% and 13% respectively), well above current regulatory minimum levels and the higher requirements under Basel III. Consequently, total capital in excess of the minimum RWCR requirement of 8% was above RM70 billion as at end-2011.

The insurance and takaful industry operated under more challenging conditions in 2011 as volatile financial markets and persistent low yields were a drag on profitability amid the continued search for reasonable investment returns. The life and family takaful sector reported lower excess of income over outgo which declined by 9.9% to RM12.7 billion (2010: RM14.1 billion). This result was mainly driven by investment losses which substantially reduced the net capital gains (realised and unrealised) recorded by the industry to only RM0.4 billion, from RM2.6 billion in the previous year. Investment losses peaked at RM1 billion in the third quarter of 2011 at the height of financial market volatility, but subsequently recovered as insurers shed equity holdings as part of portfolio rebalancing activities. The lower profitability was also attributed to higher net benefit payments totalling RM15.6 billion (2010: RM14.6 billion), mainly attributed to medical claims and bonuses paid. The general (re)insurance and takaful sector similarly recorded lower operating profits of RM1.8 billion in 2011 (-14.3%) on account of higher claims. Reinsurers recorded operating losses of RM0.2 billion during the year (2010: operating profits of RM0.3 billion) as claims from business interruption losses surged due to the floods in Thailand. This sharply increased the overall claims ratio for fire business (including cover for business interruptions) to 69.5% (2010: 36.3%).

Chart 1.69

## Fixed Rate and Floating Rate Islamic Financing

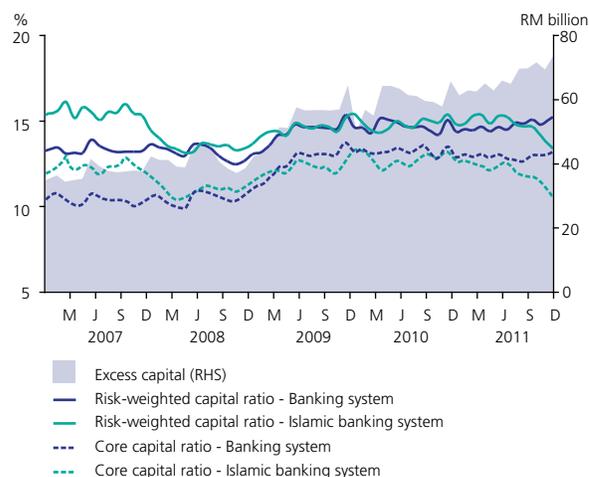


Note: All figures are in RM billion

Source: Bank Negara Malaysia

Chart 1.70

## Banking System: Capital Adequacy Ratios and Excess Capital



Source: Bank Negara Malaysia

Underwriting losses for motor third-party bodily injury (or motor 'Act') insurance continued to pose downward pressure on profitability with the claims ratio rising to a record high of 300% (2010: 278.7%). The overall motor claims ratio (including 'comprehensive' business), however, improved to 76.8% (2010: 79.5%). Despite weaker profits, the combined capitalisation level of the general and life insurance industry remained strong with the aggregate capital adequacy ratio (CAR) at 222.5% (2010: 224.6%), well above the supervisory capital requirement of 130% (Chart 1.71).

During the year, sustained domestic demand for investment and protection products continued to support business growth. Gross premiums for general insurers and takaful operators grew by 9% to RM15.4 billion, mainly from marine, aviation

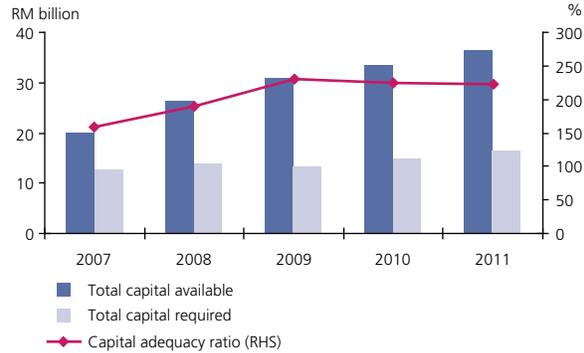
and transit, fire and motor comprehensive businesses. New business premiums for life insurers and family takaful operators declined by 3.1% to RM10.9 billion, with fewer launches of new endowment products. Premiums from investment-linked and medical and health insurance products, however, continued to expand, growing by 5.5% and 23.6% respectively (Chart 1.72).

Stress tests carried out at the system-wide and entity levels affirmed the resilience of the financial system. Even under assumptions of severe economic contraction and extreme market volatility, overall capitalisation remained satisfactory, meeting the regulatory minimum levels

Stress tests carried out on the banking and insurance sectors at the system-wide and institution levels affirmed the resilience of the domestic financial system to extreme macroeconomic and financial shocks. The scenario-based stress tests adopt both 'top-down' and 'bottom-up' approaches, covering credit and market risk exposures, and are designed to assess the impact of additional provisioning and valuation losses on the capital and profits of the banking system as a result of major downside risks and extreme shocks. In addition, the vulnerability of banks' liquidity buffers to extreme market-wide disruptions and, funding and liquidity constraints for individual institutions is also assessed. The stress test assumptions and shock parameters under baseline, adverse and extreme scenarios are calibrated taking into account the historical worst-case experience for Malaysia. Under the 'bottom-up' approach, the stress parameters applied are overlaid with institution-specific risk profiles based on supervisory assessments of key risk drivers, default history and loss rates, quality of assets and the risk-absorbing capacity of capital, as well as the strength of risk management and governance controls. Given the structure of Malaysian banks, the most significant losses are likely to emanate from credit exposures.

Chart 1.71

## Insurance Sector: Capital Adequacy Ratio

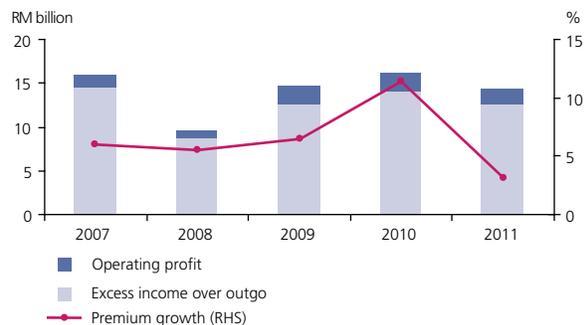


Source: Bank Negara Malaysia

To ensure that the stress tests are sufficiently severe and take into account more recent downside risks, the credit and market risk shock parameters were recalibrated during the year to include potential contagion effects arising from an intensification of the sovereign debt and fiscal problems in Europe and US via the financial and trade channels (Table 1.9). The Bank continues to adopt conservative loan loss provisioning rates in its stress tests, reflective of the significance of the financing portfolio to banks' balance sheets. Under the adverse macroeconomic stress scenario, the RWCR and CCR of the banking system remained above 13% and 11% respectively. Applying more extreme assumptions of economic contraction and financial market volatility under the worst-case macroeconomic scenario, the RWCR and CCR of the banking system would be close to 8% and 6% respectively, still above current regulatory minimum levels. Stress tests

Chart 1.72

## Insurance Sector: Profitability and Premium Growth



Source: Bank Negara Malaysia

Table 1.9

## Range of Scenario-based Stress Test Assumptions and Shock Parameters

Macroeconomic and financial shocks	Key assumptions and range of shock parameters
<b>Malaysia GDP shock</b>	<ul style="list-style-type: none"> <li>• More severe than economic contraction in 2009</li> </ul>
<b>Revenue shock</b>	<ul style="list-style-type: none"> <li>• More than 40% decline across different revenue segments</li> </ul>
<b>Credit risk shock</b> <i>[PD = Probability of default;</i> <i>LGD = Loss given default]</i>	<ul style="list-style-type: none"> <li>• More severe PD and LGD for different loan portfolios <ul style="list-style-type: none"> <li>– At least doubling of current PD</li> <li>– Higher downturn LGD than historical experience</li> </ul> </li> <li>• More severe rating migration and default rates for private debt securities/sukuk than historical worst experience (1998 and 2001) <ul style="list-style-type: none"> <li>– LGD up to 100%</li> </ul> </li> <li>• Acceleration in the utilisation of committed and contingent facilities of up to 100%</li> </ul>
<b>Market risk shock</b>	<ul style="list-style-type: none"> <li>• Extreme decline in FBM KLCI</li> <li>• Sharp appreciation or depreciation in 8 major currencies against the ringgit</li> <li>• Interest rate risk shocks (up to 250 basis points) across different tenures, taking into account: <ul style="list-style-type: none"> <li>– steepening of the MGS yield curve</li> <li>– widening of credit spreads between MGS and PDS</li> <li>– basis risk</li> </ul> </li> </ul>

conducted on the insurance industry similarly affirmed the resilience of insurers under the same adverse and worst-case scenarios for market, credit and insurance risk (i.e. risk of under-estimation of insurance liabilities and adverse claims experience) exposures. The post-stress aggregate CAR of the industry remained well above 130%, although some general insurers would be more significantly impacted.

## OUTLOOK FOR DOMESTIC FINANCIAL STABILITY AND FOCUS OF SURVEILLANCE IN 2012

Risks to domestic financial stability in 2012 are expected to continue to be mainly externally driven. Lingering uncertainties over the resolution of the European sovereign debt issues and to a lesser extent, concerns over the fiscal position in the US will continue to weigh on global market sentiment and economic growth. This in turn will continue to adversely affect the balance sheets and funding of global banks, hampering efforts to strengthen the financial systems in the advanced economies. Spillovers to domestic financial markets will see market volatility remaining at elevated levels, and continued challenges in foreign currency funding. Weaker economic

conditions in the advanced economies could also affect businesses in Malaysia through the trade channel, potentially increasing credit risks for Malaysian financial institutions.

The financial sector is on firm footing and well placed to cope with these developments. The credit risk outlook for the Malaysian financial institutions arising from exposures to businesses and households is anticipated to remain manageable in 2012, under expectations of stable income and employment prospects supported by sustained domestic demand. Measures taken to promote the continued resilience of households should also take firmer hold, in particular through the observance of requirements for banks to properly assess the ability of borrowers to afford to assume new debt. The Bank will continue to actively monitor the financial position of households, coordinating closely with other relevant authorities in implementing appropriate measures to ensure that the resilience of the household sector is preserved.

The Bank's surveillance and supervisory priorities in 2012 to maintain and promote domestic financial stability will focus on:

- Strengthening the Bank's capabilities to

identify and measure second-order contagion risks that can affect the financial sector, mainly through a better understanding and improved data capture of the extended inter-linkages within and to the financial system;

- Reinforcing through close supervision and strengthened regulation, where appropriate, prudent and responsible risk-taking by financial institutions which is supported by sound underwriting practices, responsible conduct towards consumers and appropriate risk pricing. Aside from maintaining a heightened vigilance over banks' exposures to households, the Bank will also increase its scrutiny on the quality of banks' business credit exposures and financing to the commercial property sector;
- Promoting effective regional cooperation and coordination in financial regulation and supervision, and crisis management through the Bank's active participation in established multi-lateral platforms, such as the EMEAP. This includes leveraging on supervisory colleges and bilateral arrangements to enhance consolidated supervision on domestic institutions with

significant cross-border operations;

- Further enhancing, in close coordination with other regulatory authorities, the Bank's surveillance of the shadow banking and systemic non-bank entities to support the early detection of, and prompt responses to, any build-up of risks and vulnerabilities in the broader financial system; and
- Further strengthening the financial market infrastructure, in particular the payments and settlements systems to support increasing volumes of cross-border and multi-currency transactions, and collaborating with other authorities to improve access to, and the transparency of, information on over-the-counter derivatives exposures.

In 2012, Malaysia will undergo the Financial Sector Assessment Programme by the International Monetary Fund and The World Bank. While the foundations for financial stability is well entrenched, Malaysia will strive to improve further in safeguarding financial stability in a highly dynamic domestic and external environment.

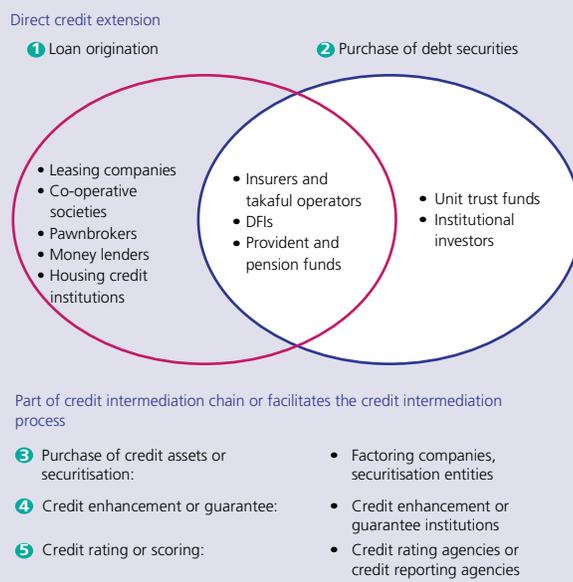
## Non-bank Intermediaries in Malaysia

Following the global financial crisis, greater attention has been focused on the role and scope of institutions operating within the shadow banking system in transmitting risks to the financial system. The failure of a number of such institutions during the crisis resulted in significant risks that were transmitted more widely through the financial system which ultimately had a disruptive impact on the intermediation of funds in a number of economies. As a result, there has been a high degree of global attention accorded to the activities of those operating outside the regulated banking system. In facilitating authorities across jurisdictions to become more aware of, and better understand these entities and their activities, the Financial Stability Board had issued some guidance which describes the shadow banking system as credit intermediation undertaken by entities and involving activities outside the regular banking system. Systemic risks from such entities and activities can arise either directly as a result of the prominence of the shadow banking system in supplying credit or liquidity to the economy, or indirectly through its interconnectedness with the banking system. This article provides an overview of the characteristics and size of credit intermediation activities undertaken by non-bank entities within the financial system in Malaysia.

In Malaysia, non-bank credit intermediaries have a complementary role to banks in providing financial services to specific market segments. The nature and scale of their activities are, however, considerably less complex and account for a much smaller share of total credit intermediated by the banking system compared with that observed in some advanced economies during the global financial crisis<sup>1</sup>. Banks represent the mainstay of the financial system, accounting for 61% of total credit intermediated in Malaysia<sup>2</sup> or 142% of gross domestic product (GDP). Including insurers, takaful operators and six development financial institutions (DFIs), about 73% of total credit intermediated or 170% of GDP is attributed to institutions that are prudentially supervised by the Bank.

Chart 1

### Non-bank Credit Intermediation Activities and Entities in Malaysia



<sup>1</sup> According to a Federal Reserve Bank of New York staff report, the volume of credit intermediated by the shadow banking system in the US was nearly twice (about 1.8 times) as large as the volume of credit intermediated by the traditional banking system prior to the global financial crisis. See Pozsar, Z, Adrian, T, Ashcraft, A and Boesky, H (2010), 'Shadow Banking', Federal Reserve Bank of New York, *Staff Report*, no. 458, July.

<sup>2</sup> Includes loans, holdings of debt securities, securitisation and credit guarantees or enhancements.

Several factors explain the lower propensity of non-bank credit intermediation activities in Malaysia to transmit shocks to the banking system.

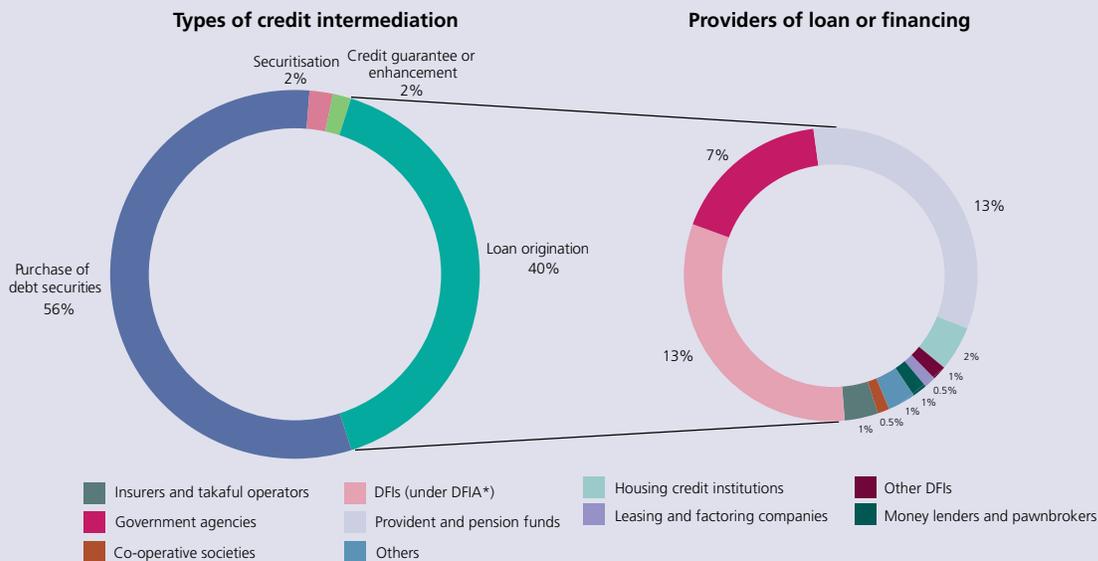
**(i) Low complexity of activities and entities**

Non-bank credit intermediation activities are predominantly concentrated on the purchase of plain vanilla debt securities and traditional lending activities. Securitisation and credit enhancement activities account for only about 3.7% of credit intermediation by non-bank entities (Chart 2). Structured investment vehicles (SIVs), asset-backed commercial paper conduits and complex securitisation structures are also not common.

A well-capitalised banking system and the continued availability of ample liquidity in the domestic financial system have reduced banks' reliance on securitisation as a source of funding or for capital management, with the loan-to-deposit ratio of the banking system remaining below 85% since 2004. Asset-backed securitisation activities have continued to decline as a share of total debt securities outstanding (2011: RM15.7 billion or 1.8% of total debt securities outstanding; 2010: RM16.2 billion or 2.1% of total debt securities outstanding). Cagamas MBS Berhad, a subsidiary of the national mortgage corporation<sup>3</sup>, is the primary issuer of asset-backed securities (ABS) in the Malaysian financial system to account for close to half (45.8%) of ABS outstanding. At present, the ABS issued by Cagamas MBS Berhad is backed entirely by the Government's staff housing loans as the underlying assets. The securitisation of assets originated by a number of banks and non-bank entities account for 18% and 36.1% respectively, with volume remaining very modest in the recent years. Meanwhile, overall risks arising from credit guarantee activities remain low given the small size of outstanding guarantees of RM13.6 billion, including those provided by the Credit Guarantee Corporation to small and medium enterprises (SMEs). The strengthened risk management practices and infrastructure of banks have also contributed towards improved asset quality as evidenced by low impaired loan losses. The use of securitisation or credit enhancement instruments to construct highly-leveraged speculative positions in the domestic financial system is thus well contained.

Chart 2

**Composition of Credit Intermediation Activities Undertaken by Non-bank Entities**



\*DFIA refers to the Development Financial Institutions Act 2002

Source: Bank Negara Malaysia survey, Ministry of Housing and Local Government, various financial statements and internal estimates

<sup>3</sup> The national mortgage corporation, Cagamas Berhad, is majority owned by the banking institutions.

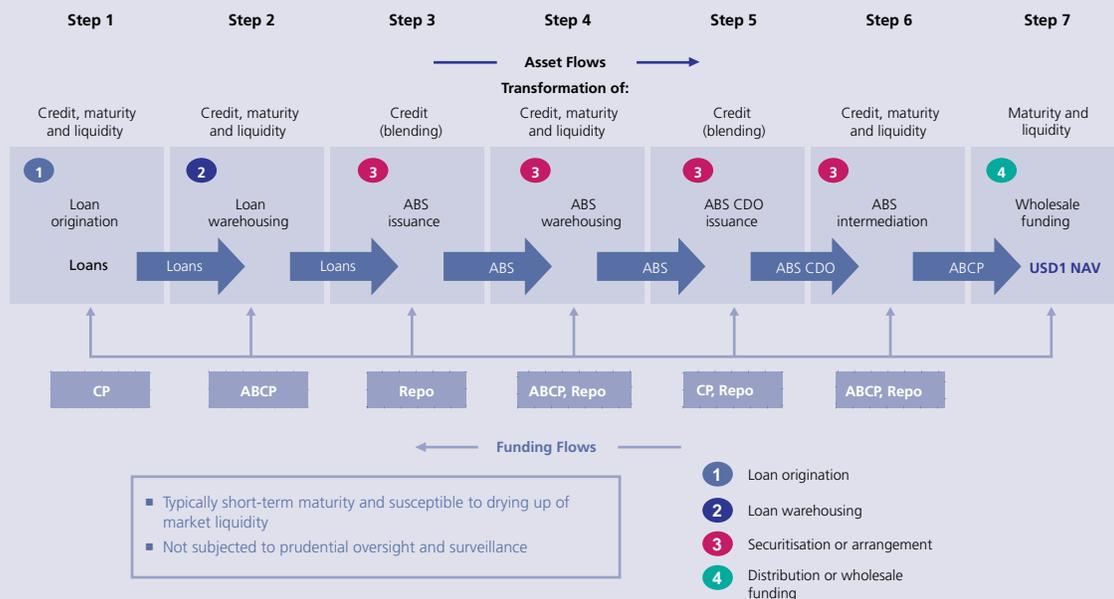
**(ii) Low maturity and liquidity mismatch risk**

Non-bank credit intermediaries in Malaysia are generally not reliant on complex market-based funding to undertake maturity or liquidity transformation. This reduces the susceptibility of non-bank credit intermediaries in Malaysia to a sudden market liquidity shock or liquidity dislocations. The small share of debt securities issued by non-bank credit intermediaries as a proportion of total outstanding debt securities further limits any impact of stress faced by these intermediaries on overall market liquidity.

**Chart 3**

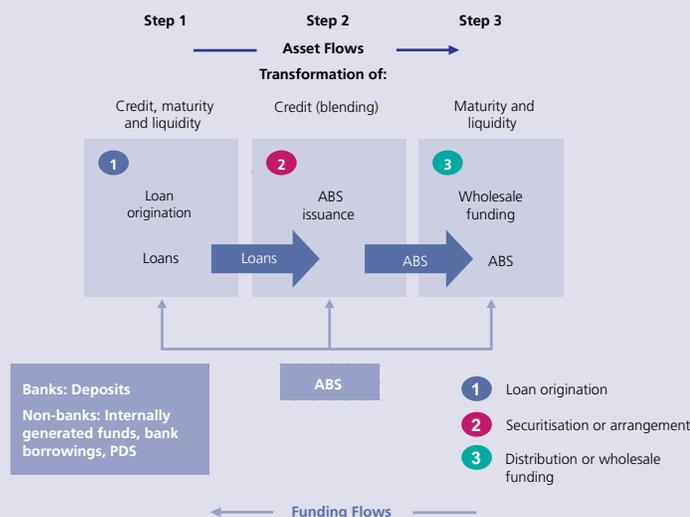
**Stylised Representation of Credit, Liquidity and Maturity Transformation Using Market-based Funding**

**Credit intermediation chain in advanced economies**



Source: Federal Reserve Bank of New York Staff Report no. 458

**Credit intermediation chain in Malaysia**



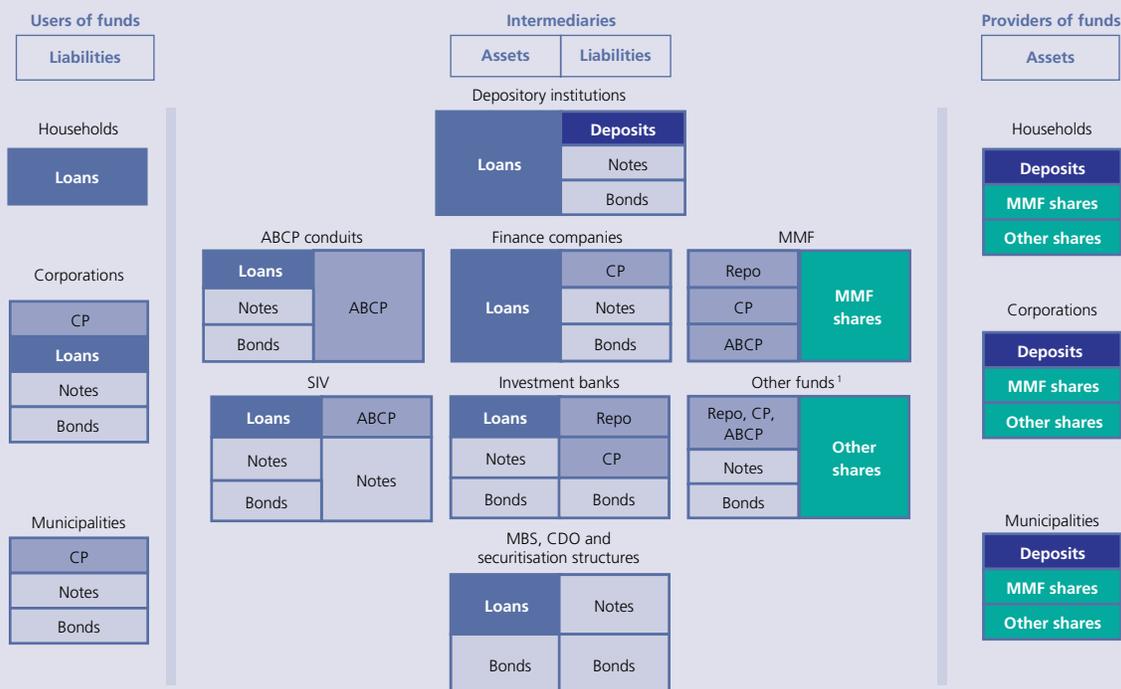
Note: ABS: Asset-Backed Securities, ABS CDO: Asset-Backed Securities Collateralised Debt Obligations, ABCP: Asset-Backed Commercial Paper, CP: Commercial Paper, Repo: repurchase agreements, NAV: Net Asset Value and PDS: Private Debt Securities

Source: Bank Negara Malaysia

While the Malaysian bond market has grown in size and depth over the years, reliance on debt securities by non-bank credit intermediaries to fund credit activities remains relatively low. For the larger non-bank credit intermediaries, the majority of the credit activities are funded from member contributions whilst for the remaining, the main source of funding is internally-generated funds. The private debt securities issued by non-bank credit intermediaries amounted to RM29.6 billion or 3.5% of outstanding debt securities as at end-2011. Of the debt securities issued by the non-bank credit intermediaries, commercial paper accounted for 2.2%, amounting to RM651 million or 11.2% of total commercial paper outstanding. While a small number of non-bank entities have relied on commercial paper, any potential impact on credit intermediation to financial stability arising from any decline in market liquidity is limited, given the small scale of their activities as well as size of standing facilities and credit lines from banks. The exposure of non-bank credit intermediaries to maturity mismatches is also limited, with an average maturity tenure of private debt securities issued of 8.2 years, whilst the financing granted by these entities, which formed the majority of assets, is largely for the medium-term not exceeding nine years.

Chart 4

Complex Financial Interlinkages between Various Components of Financial System in the US



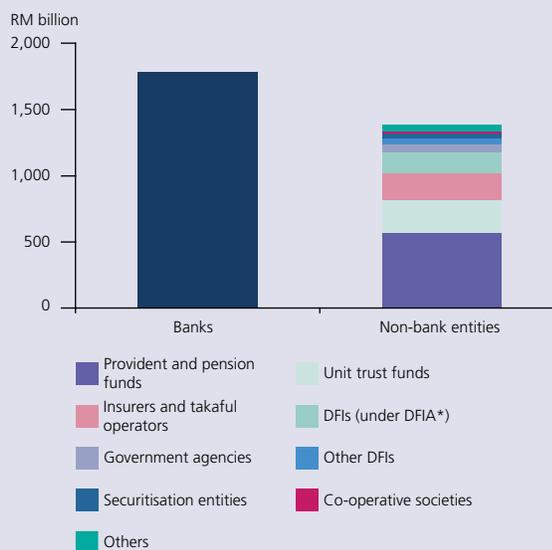
<sup>1</sup> Includes securities lending cash reinvestment pools, hedge funds, mutual funds and other asset managers  
 Note: CDO: Collateralised Debt Obligations, MBS: Mortgage-Backed Securities, MMF: Money Market Fund, SIV: Structured Investment Vehicle and Repo: repurchase agreement  
 Source: Financial Crisis Inquiry Commission Preliminary Staff Report, "Shadow Banking and the Financial Crisis", May 2010

**(iii) The interlinkages with the financial system are well contained**

Direct financial interlinkages between non-bank credit intermediaries and the banking system primarily take the form of deposit placements with banks and counterparty risk exposures. Such counterparty risk exposures arise from banks' lending to, or holdings of debt securities issued by, the non-bank credit intermediaries. On an aggregate basis, deposit placements by non-bank credit intermediaries accounted for approximately 10% of total banking system deposits as at end-2011. Provident and pension funds, insurers and takaful operators, and a few large unit trust funds account for the bulk of these deposits (69.7%), with the balance dispersed among other small non-bank financial entities. The placement of deposits by the provident and pension funds, insurers and takaful operators, and unit trust funds are spread out across a number of banking institutions, hence, minimising the risk of funding concentration at the individual bank level. While lending to and holdings of debt securities issued by non-bank credit intermediaries by the banking institutions have expanded over the years, such credit risk exposures remain small, accounting for only 2.9% of total outstanding loans and debt securities held by the banking system or 21% of the capital base of the banking system. Given the relatively small size of non-bank credit intermediation in the financial system, interlinkages among these intermediaries are also limited.

**(iv) The bulk of the activities and entities are subject to oversight**

Insurers, takaful operators and DFIs that are under the prudential oversight of the Bank account for 26% of assets held by non-bank credit intermediaries. Unit trust funds, which account for 18% of assets held by non-bank credit intermediaries, are under the purview of the Securities Commission Malaysia (Chart 5). The five-fold growth of the unit trust industry over the recent decade was driven primarily by the financialisation of the high savings level of households. Another part of the assets (41%) are held by statutory provident and pension funds managed by the Employees Provident Fund and the Retirement Fund (Incorporated) whose establishment, management and operations are governed under specific legislation. As the medium- and long-term and strategic investments by provident and pension funds generally match the long-term nature of their liabilities, these entities have minimal maturity or liquidity transformation risk. In Malaysia, credit rating agencies, which facilitate the credit intermediation process, are also subject to oversight by the Securities Commission Malaysia while the Registrar of Credit Reporting Agencies established under the Credit Reporting Agencies Act 2010, which is expected to commence operations in 2012, will govern the operations of private credit bureaus.

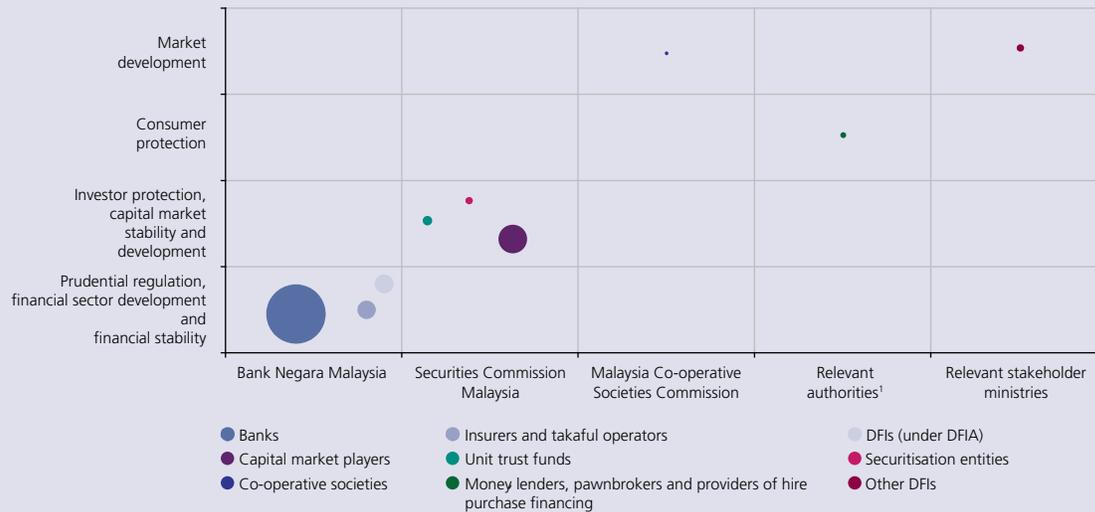
**Chart 5****Size of Various Credit Intermediation Entities and Activities and Oversight Structure****Asset size of credit intermediaries**

\* DFIA refers to the Development Financial Institutions Act 2002

Source: Bank Negara Malaysia survey, Securities Commission Malaysia, various financial statements and internal estimates

Chart 5 (continued)

## Size of credit intermediation activities and oversight structure



\* DFIA refers to the Development Financial Institutions Act 2002

<sup>1</sup> Money lenders and pawnbrokers are licensed by the Ministry of Housing and Local Government while hire purchase activities are governed by the Hire Purchase Act 1967 which is administered by the Ministry of Domestic Trade, Co-operatives and Consumerism

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

In the more recent period, the activities and size of assets of non-bank lenders, which are not under the prudential oversight of the Bank, have expanded. The growth in financing extended has been mainly focused on the household sector but continues to represent a small share (5.9%) of total financing to households. To ensure these developments do not, over time, contribute towards the imprudent build-up of leverage in the household sector, the Bank's surveillance of developments in lending activities by the non-bank lenders has been strengthened in close cooperation with the relevant supervisory authorities. Specific measures have also been implemented to ensure that credit co-operative societies and large building societies observe responsible financing practices that are consistent with regulations applied to the financial institutions under the Bank's purview.

The ongoing surveillance and oversight of the shadow banking system is supported by the Central Bank of Malaysia Act 2009. The Act accords the Bank the ability to collect data and information on non-bank entities which are not regulated by the Bank for the purpose of monitoring emerging risks in the financial system, and where appropriate, take necessary risk mitigation measures to ensure that the risks are contained. The Bank's monitoring framework has consequently been enhanced to better capture developments in the sector and to monitor the sector's interlinkages with the banking system. Efforts are also underway to establish new, and strengthen existing, inter-agency cooperation arrangements that will provide for the effective exchange of information and improve policy coordination and implementation. This includes continued enhancements to the Bank's Memorandum of Understanding (MoU) with the Securities Commission Malaysia and the formulation of an MoU that is underway with the Malaysia Co-operative Societies Commission. Notwithstanding these efforts, the Bank also remains cognisant of the global issues surrounding the regulation of and proposed safeguards on the shadow banking system, including those under the initiatives of the Financial Stability Board. Where necessary, an assessment will be made for the need for regulatory measures on non-bank credit intermediaries in Malaysia to ensure that the activities of these entities do not contribute towards significant build-up of risks in the financial system.

# 2011

## DEVELOPMENT OF THE FINANCIAL SECTOR

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## DEVELOPMENT OF THE FINANCIAL SECTOR

Financial restructuring and reforms coupled with the deepening of the financial markets post the Asian Financial Crisis have provided a strong foundation that has supported the continued solid performance and resilience of the financial sector in 2011 despite the difficult external environment. This allowed the financial sector's development priorities to focus on reinforcing Malaysia's long-term growth potential by strengthening the capacity of the financial sector in intermediating funds for new growth areas and promoting regional and international financial linkages. In these efforts, stability considerations remain paramount with importance attached to ensuring that the economy's demands for new financial services can be met without undermining the overall stability of and confidence in the financial system. On many levels, Malaysia has the preconditions that will allow the financial sector to respond positively to the demands on the sector. This includes the strong risk-absorbing capacity of Malaysian financial institutions, improved governance and risk management practices, and the effective safety net that includes deposit insurance and a sound regulatory and supervisory system. The Bank continues to strengthen these preconditions as appropriate to reflect the changing environment, and in some areas, such as building consumer capabilities to make informed financial decisions and expanding the supply of high-quality talent, more work lies ahead in the collaboration with other stakeholders to close the prevailing gaps.

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The Financial Sector Blueprint aims to position the financial sector to assume an enhanced role in supporting Malaysia's transformation towards becoming a high value-added, high-income economy

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The Financial Sector Blueprint, a comprehensive strategic plan that charts the future direction of

the Malaysian financial system in the next 10 years, was completed and published in December 2011. The Blueprint aims to position the financial sector to assume an enhanced role in supporting Malaysia's transformation towards becoming a high value-added, high-income economy. The Blueprint builds on the achievements of the first Financial Sector Masterplan and encapsulates four broad areas, namely: (i) evolving a financial sector that best serves the Malaysian economy; (ii) enhancing regional and international financial linkages; (iii) safeguarding the stability of the financial system; and (iv) enhancing key enablers that support the development of the financial system. Further details of the Blueprint can be found in the white box 'The Financial Sector Blueprint'.

### ENHANCING MARKET STRUCTURE

Banking institutions continue to play a central role in the Malaysian financial system, accounting for approximately 55% of total financial system assets in 2011, relatively unchanged from a year ago. During the year, a merger between two domestic banking groups was completed to form the fourth largest banking group in Malaysia. Malaysia now has eight domestic banking groups that account for 73% of banking system assets, while 23 foreign-owned banks operating as locally-incorporated subsidiaries account for the balance. Banking institutions in Malaysia compete effectively in the market, with the top five banking groups sharing 61.5% of total banking system assets, which is not a significant concentration by international comparisons. A broad product range is offered in the banking sector, and a high level of competition continued to be observed during the year in terms of pricing and distinctive product offerings, particularly in the retail segment. Competition in the banking sector is also reinforced by the requirement for banks to provide clear information regarding financial products that is comparable across institutions, more flexible branching policies, and the entry of new institutions into the market in recent years.

The Competition Act 2010, which came into effect on 1 January 2012 and governs firms

in all industries including the financial sector, will reinforce an appropriately competitive environment in the financial sector. The Act complements the Bank's efforts to enhance the overall consumer protection framework in Malaysia by promoting and safeguarding the process of competition. Working closely with the Malaysian Competition Commission, the aim is to ensure the smooth implementation of the Act in the financial sector, and in particular, to ensure that its implications for existing practices lower risks to the industry and ultimately improve outcomes for consumers through lower costs or improved benefits. Of importance is that these objectives are well-understood and aligned with the intended objectives of the Act.

In the insurance industry, the requirement to comply with higher capital standards under the Risk-based Capital Framework has strengthened incentives for consolidation among insurers, particularly within the general insurance sector. The year saw four more merger and acquisition schemes completed, while negotiations involving three other insurance companies are currently ongoing. As a result, the general insurance industry has become less fragmented, contributing to more effective competition and enhanced viability prospects for the smallest insurers in the industry. The 20 smallest general insurers now collectively account for 47.2% of total gross premiums in the general insurance industry, up from 38% in 2010.

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### The capacity of the general insurance industry to continue supporting demand for compulsory motor liability insurance protection over the long-term was also boosted with the approval of the new motor cover framework

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The capacity of the general insurance industry to continue supporting demand for compulsory motor liability insurance protection over the long-term was also boosted with the approval of the new motor cover framework during the year to provide a holistic approach to long-standing

issues concerning pricing distortions and related inefficiencies in the claims settlement process. The new framework, developed in consultation with relevant stakeholders, encompasses 11 initiatives aimed at: (i) enhancing the claims settlement process which, over time, is expected to contribute towards better management of claims cost; and (ii) allowing gradual adjustments to the premium levels over a four-year period beginning January 2012. To ensure continued access by the public to motor insurance while supporting the ability of insurers to continue providing cover at agreed market premium rates during the transition to the new framework, the Malaysian Motor Insurance Pool (MMIP) was extended to provide a mechanism for the industry to pool the increasing number of private car and motorcycle risks that were being declined by individual insurers due to inadequate premiums, in addition to its present function as the insurer of last resort for 'high motor risks'. Through the MMIP, the industry will continue to support cover for non-high risk vehicles at market premium rates and these risks would not attract higher premiums normally imposed by MMIP as the insurer of last resort. Also a part of the new framework is the imminent establishment of a 24-hour nationwide call centre to expedite the claims settlement process for accident victims, alongside the ongoing efforts by the General Insurance Association of Malaysia to implement an electronic system for the notification, confirmation and reimbursement of third party property damage claims. Collectively, these efforts will address the necessary conditions for the sustainable provision of motor insurance over the longer term.

### PROMOTING EFFECTIVE AND EFFICIENT INTERMEDIATION OF FUNDS TO SUPPORT ECONOMIC GROWTH

In 2011, the financial sector continued to perform its intermediation function smoothly to meet the diverse needs of the economy. Total outstanding banking sector financing increased by 13.6% to RM1,003.5 billion as at end-2011. In particular, funds continued to be directed to support the small and medium enterprise (SME) sector as an important driver of economic growth, with SME financing growing by 17.1% to RM165.4 billion as at end-2011. More importantly, financial sector support for

## The Financial Sector Blueprint

The Financial Sector Blueprint (the Blueprint), which was launched on 21 December 2011, charts the direction of the financial sector as the country transitions into a high value-added, high-income economy by 2020. In line with the Bank's mandate under the Central Bank of Malaysia Act 2009 to promote a sound, progressive and inclusive financial system, the Blueprint provides a vision for the financial sector towards fulfilling the roles of enabler, catalyst and driver of economic growth.

### The Blueprint as a Catalyst for Financial Sector Transformation

Preceding the Blueprint, the Financial Sector Masterplan (FSMP), which was launched in 2001, outlined the path for the orderly development of the financial sector: beginning with institutional and infrastructure development, followed by the introduction of increased competition through deregulation with strengthened supervision, and culminating in greater liberalisation and international integration. The FSMP also afforded a high degree of regulatory certainty which provided a conducive environment for financial institutions to commit to long-term investments in capacity building and strategic undertakings. This has resulted in a more dynamic and resilient financial sector today, with improved corporate governance, risk management practices, and enhanced competitiveness and efficiency.

Building on the achievements of the FSMP, the Blueprint moves beyond the sector-based approach adopted in the FSMP to one that reflects a more integrated financial sector with increased cross-sectoral and cross-border interlinkages. The recommendations in the Blueprint converge around key strategic imperatives for Malaysia's transformation towards becoming a high value-added, high-income economy. This approach looks past traditional structural segmentations, and promotes complementarities between different components of the financial system, with appropriate safeguards, to foster a conducive ecosystem for a vibrant financial sector. Under the Blueprint, it is envisaged that participants in the financial system will play a much more significant role in realising the vision of a more competitive, dynamic, inclusive, diversified and integrated financial sector. In adopting these new approaches, the Blueprint maintains continuity of purpose in providing clear direction to spur the transformation of our financial landscape over the next decade.

### Focus Areas under the Blueprint

The nine strategic outcomes envisioned under the Blueprint which provide a framework for the specific recommendations are:

- Supporting Malaysia's transformation into a high value-added, high-income economy through the **effective and efficient intermediation** of funds towards meeting new and more diverse needs of business and households;
- **Developing Malaysian financial markets** to meet the funding, investment and risk management needs of a more developed and internationally-integrated economy;
- Ensuring all members of society, including the underserved, have **access to, and usage of, quality and affordable essential financial services** towards greater shared prosperity;
- **Strengthening regional and international financial integration** through a more open, competitive and diversified financial sector with greater connectivity within the region;
- **Enhancing the Islamic financial ecosystem** to support increasing volumes of international Islamic financial flows;
- Preserving an **effective regulatory and supervisory regime** that safeguards financial stability and promotes the resilience of financial institutions within a more dynamic and internationally-integrated landscape;
- **Accelerating the migration to electronic payments** as the preferred medium for financial transactions in Malaysia;
- **Empowering financial consumers** through effective financial education and strengthened consumer protection frameworks; and
- **Ensuring an adequate supply of skilled talent** for a dynamic and innovative financial sector.

The Blueprint sets out 69 recommendations and more than 200 initiatives that support these strategic outcomes. Initiatives which take precedence will be the ones that address the necessary preconditions, safeguards, or enabling environment for other recommendations under the Blueprint to succeed. In 2012, priority will be accorded to the following initiatives:

- A comprehensive review of the legislative framework to ensure that regulatory laws remain current in the emerging landscape. This will include adequate safeguards to support greater financial sector liberalisation and financial integration;
- Further strengthening the financial infrastructure to support effective intermediation, including enhancements to the credit information framework and establishment of platforms to improve information flows;
- Enhancing the role of financial institutions and the capital market in providing risk capital financing to support new growth areas in collaboration with relevant agencies;
- Widening product range and participation in the foreign exchange and money markets through the introduction of new instruments, facilitative foreign exchange measures and expanded trading platforms;
- Supporting initiatives to promote regional financial integration, including developing a comprehensive framework for the orderly expansion of ASEAN financial institutions within the region;
- Accelerating the development of innovative channels such as agent banking and mobile banking to ensure a wide outreach of financial services;
- Strengthening of payment systems infrastructure and pursuing pricing reforms to strengthen incentives for migration to electronic payments;
- Establishment of a committee of relevant authorities to formulate and operationalise a new consumer credit law; and
- Establishment of a Financial Services Talent Council for greater focus and coordination in talent development to support the development of the financial sector.

Building on the consultations held during the development of the Blueprint, the Bank will continue to intensify its engagements with relevant parties, both through formal and informal means, in the implementation of the Blueprint. Indeed, on many fronts, the close collaboration with and support of the industry, government agencies and other stakeholder groups including consumers, will be critical towards ensuring the success of the Blueprint.

Chart 2.1

## Outstanding Banking System Financing



Source: Bank Negara Malaysia

SMEs has had a significant impact on improving the prospects for success among SMEs. In 2011 alone, more than 700 SME accounts with a combined financing value of RM4.5 billion were upgraded to become large enterprise accounts. Firms in new growth areas and innovative industries also continued to draw support from the financial sector to meet their financing needs.

Comprehensive strategies have been taken to strengthen the resilience of financial institutions, develop the bond market as an important source of funding for the corporate sector, and improve the infrastructure to support financial intermediation. Building on these foundations, initiatives in 2011 focused on developing the capacity and enabling environment for the financial sector to provide financial solutions that will meet the economic and demographic imperatives of the new economy. The key priorities were:

- (i) Enhancing the supporting infrastructure and institutional arrangements to meet the financing and developmental needs of SMEs;
- (ii) Developing the capacity of the financial sector to support new growth areas and innovative industries; and
- (iii) Developing a robust pension framework to enable households to manage their retirement financial needs.

**(i) Enhancing the supporting infrastructure and institutional arrangements to meet the financing and developmental needs of SMEs**

The Credit Bureau Malaysia Sdn. Bhd. (formerly known as SME Credit Bureau Sdn. Bhd.) provides access to information

and ratings on SMEs for credit evaluation purposes. It has had an important role in addressing information asymmetries that are relevant to establishing the repayment ability of businesses, a factor that had previously constrained access to financing for SMEs. The Bureau, which was initiated by the Bank and Credit Guarantee Corporation Malaysia Berhad (CGC), is accessible to financiers, credit guarantors and SME trade partners. Since beginning operations in 2008, 41 financial institutions and 28,249 non-financial institutions have registered to become members of the Bureau. More than 370,000 reports have been generated by the Bureau to facilitate more effective credit assessments and significantly reduced turnaround times (by up to 75%) on loan and guarantee approvals. In October 2011, the Bureau also launched the Self Credit Monitoring system to enable the self-monitoring of credit performance by SMEs, thus encouraging a sound credit culture and good repayment behaviour among SMEs which in turn improves the prospects for obtaining financing to support current and future business requirements.

Access to financing for SMEs has also been made significantly more efficient with efforts taken by eight banks to simplify processes and procedures for SME loan applications under the PARTNER initiative which was launched by the Association of Banks in Malaysia (ABM) in November 2010. A key improvement under the initiative has been the standardisation of loan application documents to facilitate a more efficient SME loan application process. This also expedites the credit evaluation of loan applications from SMEs. Additional support has also been made available to SMEs through the SME Financing Help Desks established at business chambers and SME associations nationwide. During the year, 122 trainers from 19 SME associations and business chambers nationwide were trained under the 'Train-the-Trainers' programme as part of ongoing efforts to equip the Help Desks to better dispense advice to SMEs on the availability of financing avenues, important credit factors that banks consider before granting a loan, and ways in which SMEs can improve their credit standing.

**(ii) *Developing the capacity of the financial sector to support new growth areas and innovative industries***

The development of expertise within the financial sector to support new growth areas, such as green technology, is a critical imperative for Malaysia's transformation into a high value-added, high-income economy. At the same time, such ventures have to be supported by the sound assessment of project risks and viability, and appropriate risk-sharing arrangements that will protect depositors from excessive risk-taking by banking institutions. The Bank spearheaded the establishment of a Joint Action Committee (whose members include financial institutions, industry practitioners and government agencies) to support the optimal utilisation of the RM1.5 billion Green Technology Financing Scheme introduced by the Government in 2010. In 2011, the Committee resolved a number of operational issues related to the Scheme and introduced enhanced processes, including business review presentations on applications for financing under the Scheme to provide a platform for borrowers and participating financial institutions to form more comprehensive assessments of the viability of green technology projects. These initiatives improved the prospects of obtaining financing for projects under the Scheme, as evidenced by a marked improvement in the quality of applications and a higher approval rate of 56% in the fourth quarter of 2011, compared to 41% in the previous quarter. Two out of the five new foreign commercial banks that were awarded licences to operate in Malaysia in 2010 would also provide added support and capacity for green financing ventures, in addition to assisting the Government in the implementation of environmentally-sustainable projects in Malaysia. This includes an initiative already in progress to develop environmentally-sustainable townships in Malaysia.

**(iii) *Developing a robust pension framework to enable households to manage their retirement financial needs***

Given Malaysia's changing demographic profile with a more mature population moving forward, the need to enhance Malaysians' financial preparedness for old age and retirement has become increasingly

important. Efforts at the national level to develop a robust pension framework in Malaysia envisage an important role for the financial sector, specifically insurance companies, takaful operators and banking institutions, in intermediating funds for retirement. This is more so with the announcement this year by the Government of a RM3,000 annual tax relief on contributions to insurance and takaful annuities for a period of 10 years beginning 2012. The development of a robust and vibrant pension industry will also promote better-matched funding sources to meet the longer-term financing needs of the economy. The Bank will continue to facilitate the development of sound financial solutions, supported by strong underwriting and risk-bearing capacity of financial institutions, that will genuinely fulfil the old age and retirement financial requirements.

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Efforts at the national level to develop a robust pension framework in Malaysia envisage an important role for financial institutions in intermediating funds for retirement

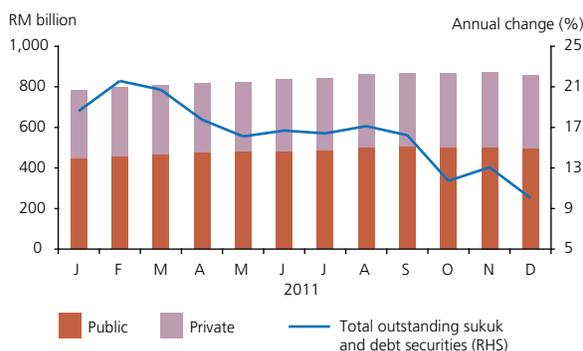
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**DEVELOPING DEEP AND VIBRANT FINANCIAL MARKETS**

The Malaysian financial markets continued to support the effective and efficient intermediation of funds for economic activity, while further diversifying domestic funding sources which contributes to financial stability. In 2011, the outstanding value of the debt securities market (public and private) expanded further to RM860.9 billion (2010: RM782.4 billion), or 103.8% of GDP. Financing through the corporate debt securities and sukuk markets increased significantly to account for 58.3% of total outstanding corporate financing as at end-2011 (2010: 46.4%) as more Malaysian businesses tapped the debt securities market for financing. Sukuk issuances accounted for a higher proportion (2011: 36%; 2010: 32.7%) of total

Chart 2.2

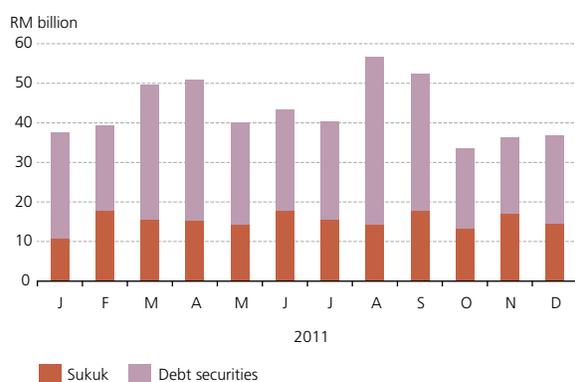
## Outstanding Sukuk and Debt Securities



Source: Bank Negara Malaysia

Chart 2.3

## Sukuk and Debt Securities Issuance (Public and Private)



Source: Bank Negara Malaysia

issuance of debt securities driven by stronger demand for more innovative Islamic financial products and services.

During the year, Danajamin Nasional Berhad, which was established as Malaysia's first financial guarantee insurer to support access by corporations to the bond market, approved RM7.4 billion in guarantees to 25 corporations across a broad range of economic sectors. Of these approved guarantees, RM2.9 billion worth of bonds and sukuk has been issued. Danajamin has also introduced co-guarantee and syndicated guarantee arrangements with commercial banks under which commercial banks guaranteed the shorter-maturity tranche, while Danajamin guaranteed the longer-maturity tranche. This has enabled commercial banks to participate in the

larger bond issuances with longer-dated maturity structures to meet the needs of the issuers. Four out of the 12 guarantee programmes supported during the year involved such structures. This has contributed to the lengthening of the maturity profile of bonds to a maximum of 20 years, compared to 10 years previously.

The foreign exchange market experienced robust growth during the year. The average daily turnover of the foreign exchange market grew by 44.2% to USD12.3 billion (2010: USD8.5 billion), reflecting a long-term growth trend driven by higher cross-border direct investment and portfolio capital flows. In March 2011, The Financial Markets Association (Persatuan Pasaran Kewangan Malaysia, PPKM) implemented continuous trading hours from 8:30 a.m. to 5:00 p.m. for direct dealing of all products. As a result, the monthly average USD/MYR spot trading volume increased by 42.3% to USD27.1 billion in 2011 (2010: USD19 billion). In addition, in the Islamic financial market, a number of new financial instruments were issued by the Bank during the year, further contributing to a more vibrant foreign exchange market (Refer to section on "Malaysia as an International Islamic Financial Centre").

To promote the legal certainty of financial market contracts (specifically relating to over-the-counter derivatives and repurchase agreement transactions) which is essential for the efficient functioning of financial markets, the Bank actively engaged the International Swaps and Derivatives Association on the intended application of provisions in the Central Bank of Malaysia Act 2009 with respect to powers provided thereunder for the Bank to undertake orderly resolutions of systemically important financial institutions. The Bank will be proposing legislative changes in 2012 that will preserve the contractual rights and obligations of counterparties under netting and collateral arrangements, subject to a temporary stay on early termination rights. This is in line with the attributes of effective resolution regimes for systemically important financial institutions promoted by the Financial Stability Board which call for legal frameworks governing netting and collateralisation that are clear, transparent and enforceable during a crisis or resolution of financial institutions, and at the same time, should not hamper the effective implementation of resolution measures. The clarification of current provisions and imminent legislative changes is expected to substantially remove any remaining uncertainties with respect to

the operation of financial market contracts and to allow financial institutions to determine exposures to counterparties in Malaysia under such contracts on a fully net basis.

## PROMOTING AN INCLUSIVE FINANCIAL SYSTEM

Financial inclusion initiatives in Malaysia continue to be pursued during the year with several notable achievements:

- Financing outstanding to micro-entrepreneurs via the *Pembiayaan Mikro* framework increased by 14.3% to RM887.6 million, while the number of microfinance accounts grew by 7.1% to 71,535.
- All 144 districts in Malaysia now have access to essential financial services provided through physical branches, mobile banking units of banks and development financial institutions (DFIs), or under shared banking services arrangements with Pos Malaysia Berhad.
- The Bank launched MobileLINK, further expanding the financial outreach to consumers in semi-urban and non-urban areas.
- Under the My First Home Scheme (Skim Rumah Pertamaku), loans were granted to

### Key Highlights of Financial Inclusion Indicators in 2011

- 1.7 access points per 10,000 adults at the national level
- 30,355 deposit accounts per 10,000 adults
- 8,949 loan accounts per 10,000 adults

\*based on Core Set of Financial Inclusion Indicators of the Alliance for Financial Inclusion (AFI)

384 middle-income households in urban areas to provide assistance to purchase homes.

While Malaysia has among the highest financial inclusion levels in the world, it is the aim of the Bank to not only ensure all Malaysians have access to financial services, but also equip them to use financial services effectively and wisely. In particular, the Bank seeks to ensure that households are adequately supported through affordable and suitable financial products, financial education, and advisory and counselling services which are

### Launch of MobileLINK to Expand Financial Outreach to Consumers

MobileLINK was introduced by the Bank in December 2011 to provide an innovative channel for consumers in semi-urban and non-urban areas to interface with the Bank. MobileLINK serves consumers through the deployment of a custom-made coach equipped with facilities and technologies to allow users access to information on basic banking services in collaboration with financial institutions. The public can also obtain information on personal credit through the Central Credit Reference Information System, information on Bank Negara Malaysia through

a self-service web-based terminal, and advisory services on other finance-related matters including insurance and SMEs' financing-related matters. MobileLINK also provides an avenue for the Bank to engage directly with consumers and to gather feedback on the Bank's policies and issues they may face in relation to access to financial services. MobileLINK began its outreach with an inaugural visit to the district of Mersing, Johor and will cover about 50% of the identified semi-urban areas nationwide between 2012 and 2014. The first phase of its journey will cover 14 destinations by December 2012.



Diagram 2.1 MobileLINK Route Map

important to protect households from becoming over-indebted. Initiatives in 2011 therefore were focused on developing deeper insights into the financial requirements and behaviour of the underserved as a basis for the formulation of policies, the roll-out of targeted education programmes, and in addressing the specific challenges facing low- to middle-income households in urban centres that have had to cope with rising costs of living. Efforts also continued to further widen access to financial services at the sub-district levels.

Survey findings to examine consumer attitudes towards financial services have also provided important input for the formulation of financial inclusion strategies. Coupled with the completion of an exercise to map the existing access points to financial services covering all sub-districts nationwide, the Bank was able to direct more targeted efforts to identified areas that lacked adequate access to essential financial services.

Moving forward, a comprehensive agent banking framework is being developed to broaden the outreach of financial services to the sub-district levels. Consumer protection considerations will be key to delivering sustainable agent banking solutions for the underserved. The framework

will therefore specify minimum requirements for qualifying agents, the types of permitted services, and obligations of banks and agents to ensure adequate protection for consumers against fraud. This will be accompanied by awareness programmes to educate consumers on taking appropriate precautions to avoid dealing with unauthorised agents. A national agent banking logo and a central repository for authorised banking agents are also being developed to aid public recognition of these agents.

To support the ability of middle-income households living in urban centres to afford homes, the Government launched the My First Home Scheme in March 2011. The Scheme, developed in consultation with the Bank and the financial industry, allows young adults earning RM3,000 and below to finance 100% of the value of homes costing RM220,000 or less through a guarantee provided by the Government (via Cagamas Berhad) on the down payment of the house. Eligible borrowers must also meet the banks' credit assessments of the ability to afford the loans. Subsequent enhancements to the Scheme during the year allowed for purchases of larger value houses of up to RM400,000 by households with a combined monthly income of RM6,000 or less.

### Key Findings of the Financial Inclusion Demand-Side Survey

**Profile of Survey Respondents:** 2,000 Malaysian adults aged between 16 to 64 years old, approximately 54% male and 46% female, 28% in rural and 72% in urban areas, with 79% of the respondents earning a monthly income of RM1,500 and below.

#### Convenience

- 80% of the respondents indicated that access to financial services is convenient.
- 80% of the respondents indicated that either petrol stations, Automated Teller Machines (ATMs) or post offices are located within a 5km radius of their residential area. The post office is also the most prevalent avenue for making bill payments.
- 84% of the respondents were unaware of agent banking services.

#### Preference and Behaviour

- 92% of the survey respondents have deposit accounts, but only 68% of the respondents save. On the average, deposits are made once a month while withdrawals are made twice a month.
- 89% of those who saved did so for emergency expenses.
- 60% of the respondents indicated that financial institutions are the most preferred source of borrowing.
- ATMs and bank branches are the most popular methods of transferring money.
- 95.3% of the respondents do not conduct mobile or Internet banking.
- On the average, survey respondents rated their satisfaction with financial services at 7.7 out of 10, primarily due to simplicity of procedures and ease of access.

## ENHANCING MALAYSIA'S INTERLINKAGES WITH REGIONAL AND INTERNATIONAL ECONOMIES

In recent years, Malaysia's financial integration within the region and through Islamic finance, with other parts of the world, has gained considerable momentum. As at end-2011, six out of eight Malaysian banking groups have overseas operations in 19 countries worldwide, a majority of which are centred in Asia (see Chart 1.52 in Chapter 1). The total overseas assets of these groups have increased to RM264.7 billion as at end-2011, accounting for 19% of total assets, while operating income derived from overseas accounted for 30% of total operating income. The enhanced presence of Malaysian banking groups in these countries performs an important role in contributing to the development of financial systems in the countries, aside from also strengthening support for Malaysian businesses expanding abroad.

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Efforts to strengthen Malaysia's interlinkages with the regional and international economies are pursued in a mutually advantageous manner for the parties involved, with the broader aim of enhancing the overall growth potential of the region and promoting regional financial stability. Indeed, the Malaysian financial system has also benefited from the increased presence of foreign financial institutions. Arising from the 2009 liberalisation measures, three new locally-incorporated foreign banks (LIFBs), one new International Islamic Bank (IIB) and two new joint-venture family takaful operators commenced operations in Malaysia in 2011. Given the strong global network of these financial institutions, their presence is expected to harness the large untapped potential of new

growth areas such as the takaful industry, further strengthen Malaysia's linkages with international economies and increase the diversity of Malaysia's financial sector. These newly-established financial institutions are also further expected to generate important spin-off benefits for the country through the reconfiguration of their regional activities to leverage on Malaysia's comparative advantage in areas such as training, and shared services and outsourcing.

To facilitate more meaningful participation of the LIFBs operating in the domestic financial sector, greater operational flexibility has been accorded to enable LIFBs to establish new physical branches. For LIFBs which have yet to attain a sizeable scale of operations in Malaysia, flexibility has been accorded for them to establish up to eight new branches nationwide without location requirements with effect from 2011. This flexibility will hence allow these LIFBs to scale up operations in Malaysia in order to better serve targeted customer segments and niche areas, and contribute more effectively to the Malaysian economy. To date, two LIFBs have leveraged on the greater operational flexibility and obtained approvals to open three new branches in market centres around Malaysia.

One of the priorities for economies in the region is the development of infrastructure. In support of this, nine ASEAN member countries, including Malaysia, pooled resources for infrastructure development in the ASEAN region through the establishment of the ASEAN Infrastructure Fund in September 2011. The Fund, which will be domiciled in Malaysia, will be backed by an initial equity contribution of USD485.2 million, of which USD335.2 million will be contributed by the ASEAN countries with the balance funded by the Asian Development Bank (ADB). The Fund will eventually issue foreign currency debt to finance infrastructure projects in the region in partnership with the ADB and other development organisations. The Fund is thus expected to have an important role in mobilising and channelling regional funds towards productive investments in Asia, and help enhance the breadth and depth of the regional financial markets.

An important milestone in promoting deeper regional financial integration was the endorsement of a high-level framework by the central banks of ASEAN countries to advance regional financial integration towards realising the vision of an

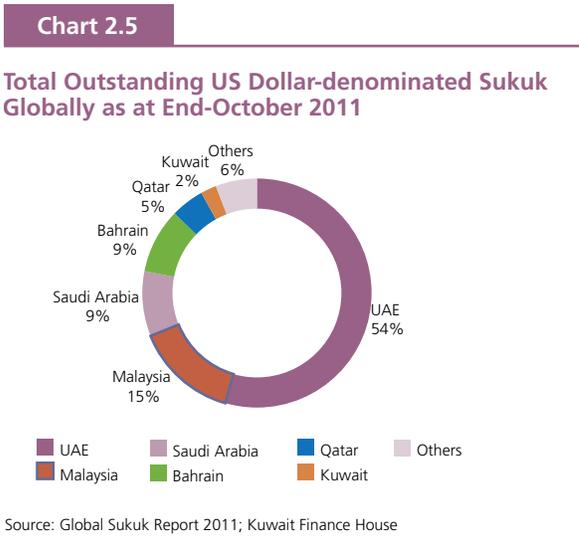
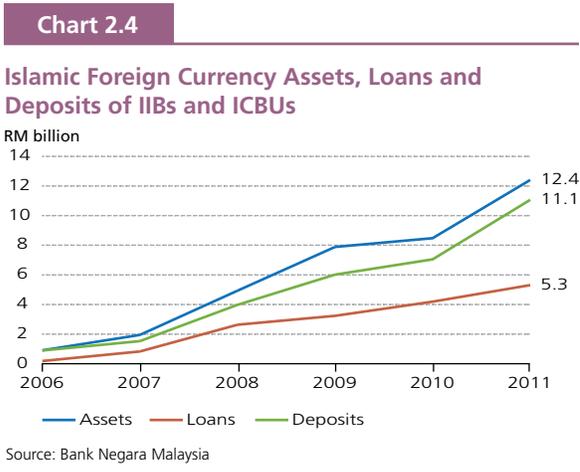
ASEAN Economic Community. The framework will reinforce cross-border coordination and cooperation among ASEAN member countries in support of a more dynamic role for ASEAN banks in driving regional integration. It aims, amongst others, to build capacity and promote sound regulatory frameworks as important preconditions for the expansion of ASEAN banks in the region, while preserving regional financial stability.

A high-level framework has been endorsed to reinforce cross-border coordination and cooperation among ASEAN member countries in support of a more dynamic role for ASEAN banks in driving regional integration

Another important achievement in regional cooperation was realised with the establishment of reciprocal bilateral arrangements among the central banks in the region to promote more efficient cross-border liquidity management during normal times and provide critical liquidity support in periods of stress. The Bank was among the first to initiate these cross-border collateral arrangements. Under such arrangements, Malaysian financial institutions with operations in foreign countries which are parties to the agreement can pledge ringgit-denominated sovereign and central bank securities to the respective central banks for liquidity facilities. Reciprocally, foreign banks operating in Malaysia will also be able to pledge home currency-denominated sovereign and central bank securities to obtain ringgit liquidity from the Bank. The Bank has signed Memoranda of Understanding with the Monetary Authority of Singapore and the Bank of Thailand to effect such cross-border collateral arrangements, with others expected to be concluded in 2012. These initiatives complement ongoing arrangements for financial cooperation in the region which have continued to intensify. In particular, the Bank continues to participate actively in regional surveillance through the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP) Monetary and Financial Stability Committee, and is actively involved in a current undertaking to strengthen the regional framework for crisis management and resolution among EMEAP economies.

**MALAYSIA AS AN INTERNATIONAL ISLAMIC FINANCIAL CENTRE**

Malaysia made further progress as our Islamic financial system transitions to become an international Islamic financial centre, recording commendable growth despite the volatile international financial markets and uncertainties clouding the global economy. Total assets in the Islamic banking sector (including DFIs) increased by 23.8% to RM434.6 billion to account for 22.4% of total banking system assets as at end-2011. The volume of Islamic foreign currency business conducted by IIBs and International Currency Business Units (ICBUs) within licensed Islamic banks has also increased substantially over the years (Chart 2.4). In the takaful sector, total assets of takaful funds increased by 15.8% to RM17 billion as at end-2011, while total takaful contributions



## Advancements in Liquidity Management in Islamic Finance

A robust and efficient liquidity management framework is integral to the development of a comprehensive and stable Islamic financial system. Such a framework is an important component for the operations of Islamic financial institutions in conducting funding and investment activities. Over the recent decade, liquidity management in Islamic finance has become increasingly important with the significant growth in Islamic banking deposits. The growth in Islamic banking deposits has outpaced its conventional counterpart by almost three times, growing at a 10-year average annual rate of 17.6%, compared to 7.1% for the conventional deposits. The continuous demands and challenges of effectively managing liquidity and the associated asset-liability maturity mismatches, as illustrated in Chart 1, have provided the impetus for wide-ranging efforts to further enhance the liquidity management framework in Islamic finance.

The measures that have been introduced have focused on developing and strengthening six key components that support more effective liquidity management, namely: (i) introducing wide-ranging Shariah-compliant liquidity instruments; (ii) establishing an efficient infrastructure to facilitate the issuance of Islamic financial instruments; (iii) promoting an active secondary market; (iv) ensuring a sound regulatory, supervisory and Shariah framework; (v) securing a strong financial safety net; and (vi) putting in place robust institutional policies and procedures. For each of these components, the important milestones and ongoing efforts are presented in Diagram 1.

These measures have collectively contributed towards the advancements in Islamic liquidity management, including the following:

- The development of a deep and vibrant Islamic money market with 55 registered interbank players and an annual trading volume exceeding RM1 trillion (Chart 2). This enables Islamic financial institutions to obtain and manage funds in a cost-efficient manner.
- The size of the Malaysian sovereign and corporate sukuk market has almost tripled from a total of RM120 billion in 2005 to RM353 billion in 2011, with an upward trend in total sukuk issuances (Chart 3). Malaysia remains the global leader in the sukuk market with a market share of 60% or USD108 billion in outstanding sukuk as at end-2011. Issuances of foreign currency-denominated sukuk in Malaysia have also increased steadily, accounting for 14.5% of US dollar-denominated sukuk issued globally (Chart 4). This provides Islamic financial institutions with a wider choice of investment avenues in managing the portfolio liquidity and expected returns of fund providers.
- The financing-to-deposit ratio of Islamic banks has gradually increased to stabilise within the range of 60% to 80% as Islamic finance continues to facilitate the efficient mobilisation of savings to finance economic activity (Chart 5).

Chart 1

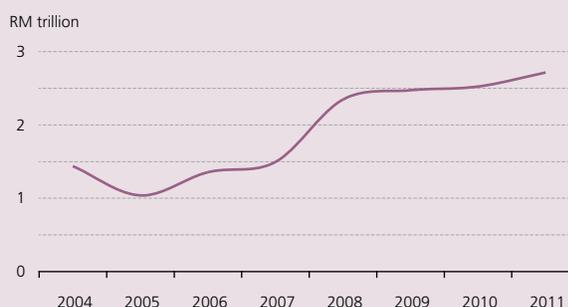
Assets Net of Liabilities of Islamic Banks by Contractual Maturity Buckets as at end-2011



Source: Bank Negara Malaysia

Chart 2

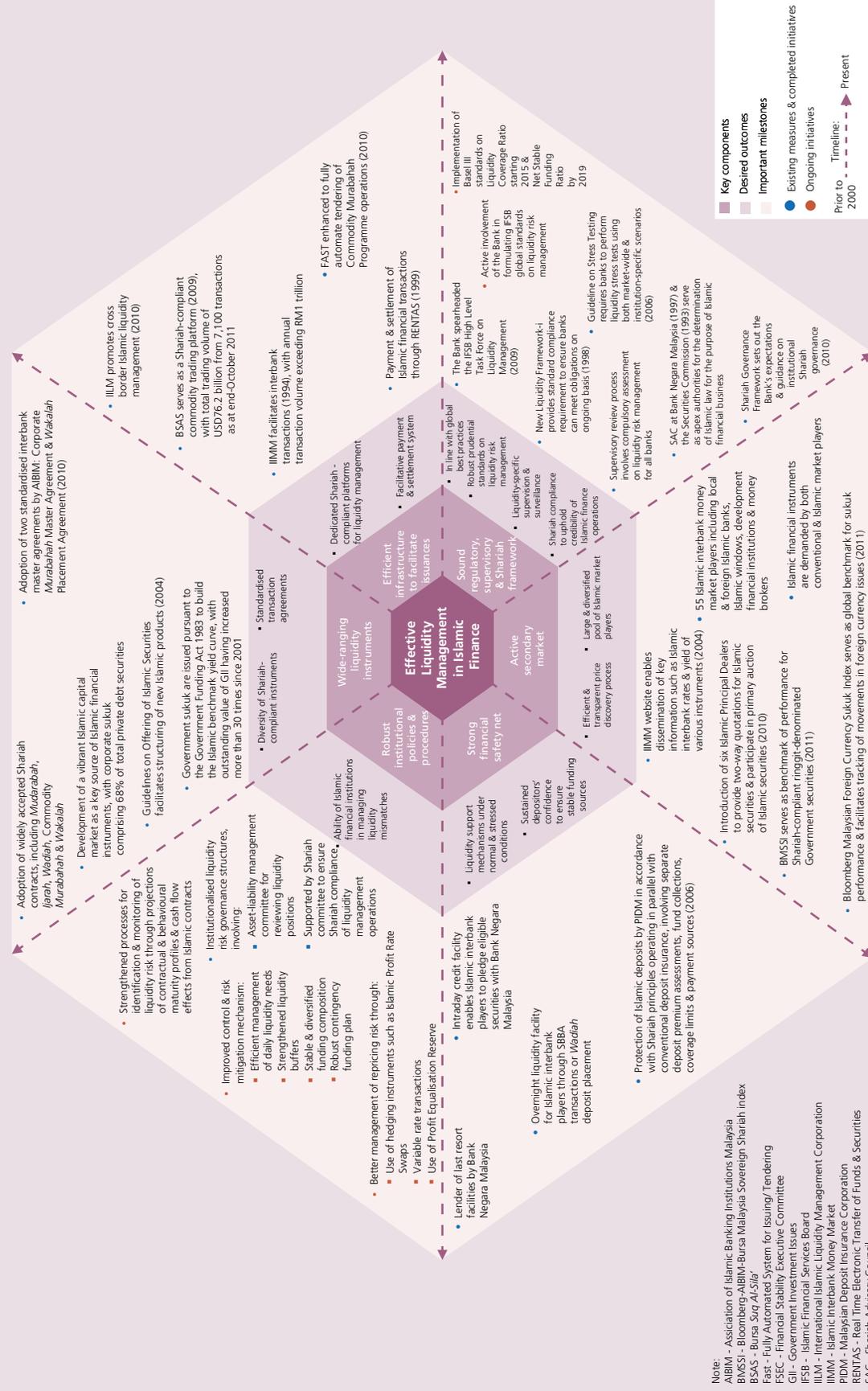
Islamic Interbank Money Market Transactions



Source: Bank Negara Malaysia

Diagram 1

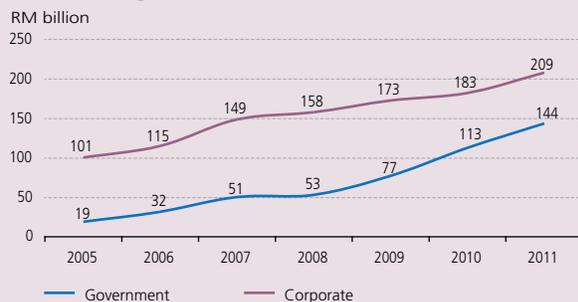
Advancements in Liquidity Management in Islamic Finance



Note:  
 ALBIM - Association of Islamic Banking Institutions Malaysia  
 BMSBI - Bloomberg-ABIM-Bursa Malaysia Sovereign Shariah Index  
 BASAS - Bursa Suq Al-Sila  
 FAST - Fully Automated System for Issuing/Tendering  
 FSFC - Financial Stability Executive Committee  
 GI - Government Investment Issues  
 IMMM - Islamic Interbank Money Market  
 ILMM - International Islamic Liquidity Management Corporation  
 ILMI - Islamic Interbank Money Market  
 PDM - Malaysian Deposit Insurance Corporation  
 RENTAS - Real Time Electronic Transfer of Funds & Securities  
 SAC - Shariah Advisory Council  
 SBBA - Sell & Buy Back Agreement

Chart 3

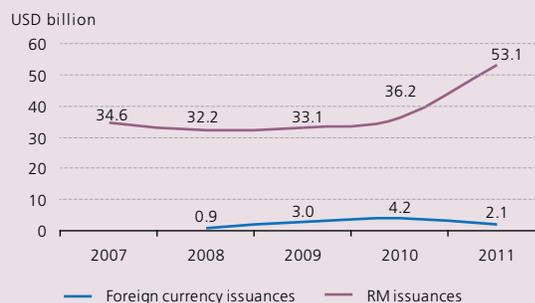
## Total Government and Corporate Sukuk Outstanding



Source: Bond Pricing Agency Malaysia

Chart 4

## Total Ringgit and Foreign Currency Sukuk Issuances in Malaysia



Source: Bank Negara Malaysia

- Innovations in Islamic finance have seen Islamic financial institutions offer a wider range of Shariah-compliant deposit and investment products, with more than 100 types of products and services currently available in Malaysia, providing competitive returns comparable to the offerings of conventional financial institutions. While sukuk in Malaysia used to be predominantly structured using debt-based contracts, the composition of sukuk structured using non-debt-based contracts such as *ijarah*, *wakalah*, and *musyarakah* contracts has now doubled from 12% in 2001 to 24% as at 31 December 2011 (Chart 6). Such continuous innovation widens the range of available financial solutions, enabling Islamic finance to fulfil the diverse financial needs of businesses and consumers.

Malaysia's framework for liquidity management in Islamic finance now encompasses all the necessary components to enable the efficient and stable functioning of the Islamic financial system. Moving forward, Malaysia, collaboratively with other Central Banks, are working towards securing a robust and resilient cross-border liquidity management infrastructure, promoting the development of globally-accepted Islamic liquidity instruments, and ensuring a conducive environment for the issuance of foreign currency instruments. The International Islamic Liquidity Management Corporation (IILM) will have a central role in such efforts towards supporting the global expansion of Islamic finance. In addition, with the implementation of the Basel III liquidity standards, efforts would also include a review of the structure and tenor of current Islamic funding sources to achieve a more stable funding base for Islamic financial institutions.

Chart 5

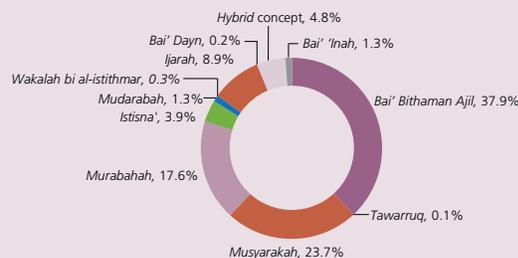
## Average Islamic Banks' Financing-to-Deposit Ratio



Source: Bank Negara Malaysia

Chart 6

## Outstanding Sukuk by Shariah Contracts in Malaysia as at end-2011



Source: Bank Negara Malaysia

accounted for 13% of total premiums and contributions in the insurance and takaful industry, up from 12.4% in 2010. Malaysian Islamic banks and takaful operators have also attained global recognition, with 39 institutions ranked among the world's top 500 Islamic financial institutions, and 21 institutions within the top 100 in The Banker Magazine's latest rankings published in 2011. Malaysia also continued to dominate the global sukuk market and remains a top investment destination for Islamic funds, with sukuk issued in Malaysia accounting for 73.2% (2010: 72.5%) of global sukuk issuances in 2011. In addition, outside the Gulf Cooperation Council region, Malaysia accounted for the highest amount of outstanding USD dollar-denominated sukuk globally (Chart 2.5).

In developing a comprehensive Islamic financial sector, priority has been accorded to developing a deep and liquid Islamic financial market that is able to mobilise funds effectively and efficiently, in accordance with Shariah principles. An important catalyst for this has been innovations in financial market instruments. In June 2011, the Wakala Global Sukuk amounting to USD2 billion was issued by Wakala Global Sukuk Berhad on behalf of the Government. As the first 10-year sovereign USD sukuk in the world, the issuance marked a significant milestone in the development of the sukuk market and attracted an overwhelming response from investors which saw the issuance over-subscribed by 4.5 times. In addition, the year also saw the landmark issuance of the world's first renminbi sukuk out of Malaysia.

The Bank also issued Bank Negara Monetary Notes-*Istithmar* in 2011 to increase the diversity of Islamic instruments in the Islamic money market and provide additional avenues for market participants to manage liquidity more efficiently. The Shariah-compliant Exchange Traded Funds (ETF), an innovative product launched in 2008, received an additional boost of RM200 million in seed funds as part of efforts to broaden the options available for investments of Islamic portfolio funds. These initiatives made important contributions to the promotion of vibrant and liquid Islamic financial markets to meet the varied needs of investors. The launch of the first international Islamic Interbank Benchmark Rate developed by Thomson Reuters in collaboration with the Association of Islamic Banking Institutions Malaysia (AIBIM) and major global financial institutions in November 2011 further supported the efficient pricing of Islamic financial products.

The Islamic financial market infrastructure has also been strengthened to promote a higher level of transparency and improved liquidity of Islamic financial products. In early 2011, Bloomberg launched its Islamic Finance Platform in Kuala Lumpur to capture key Islamic financial market information, including financial data, analytics and proprietary news. The Bloomberg Malaysian Foreign Currency Sukuk Index, a non-ringgit-denominated index developed in collaboration with the Bank, also became an important reference measure of the performance of sukuk. A new global milestone is set to be achieved with the expected issuance of the first short-term sukuk by the Islamic Liquidity Management Corporation (IILM) by mid-2012. This instrument will help to address the supply of short-term papers in the Islamic financial markets, thus facilitating the more effective and efficient intermediation of cross-border financial flows, and supporting global liquidity needs in times of crisis. The initiatives that have been undertaken over the years to enhance the overall Islamic liquidity management framework in Malaysia is elaborated in the white box 'Advancements in Liquidity Management in Islamic Finance'.

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### The Bank actively facilitates the entry of international Islamic finance experts to complement and enrich the Islamic finance talent pool in Malaysia

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With the rapid pace of development in Islamic finance, addressing the demands for talent has been identified as a key priority to support the sustained growth and development of Islamic finance in Malaysia as well as globally. Initiatives have focused both on filling prevailing talent gaps, and building a deep and sustainable talent pool for the future. In this regard, the Bank actively facilitates the entry of international Islamic finance experts to complement and enrich the Islamic finance talent pool in Malaysia. During the year, the International Centre for Education in Islamic Finance (INCEIF) added 159 Chartered Islamic Finance Professionals to the talent pool. Currently, approximately 2,000 students from more than 70 countries have enrolled in the

various Islamic finance programmes, including the post-graduate programmes. INCEIF's global outreach and relevance were also solidified with the establishment of strategic alliances with 10 countries from the Middle East, Asia, Europe and Africa.

For existing industry talent, a training roadmap has been developed by the Islamic Banking and Finance Institute Malaysia (IBFIM). The Islamic Finance Qualifications Framework and Progression Route, drawn in consultation with the Bank and the financial industry, fills an important gap in structured and cohesive training programmes and approaches for the industry. It supports a progressive training path for the industry professionals in Islamic finance which reflects the business demands at different career levels and roles in the industry, thus allowing individuals and institutions to better plan training initiatives in a way that would deliver the desired impact on performance.

As part of efforts to promote deeper global dialogue and discourse on Shariah concepts in Islamic finance, Malaysia participated with Indonesia in the 5th *Muzakarah Cendekiawan Syariah Nusantara* (Regional Shariah Scholars' Dialogue), which explored the prospects and challenges in expanding equity-based financing applications in Islamic finance. Malaysia also hosted the 6th International Shariah Scholars Forum, which had resolved to conduct applied research to examine various aspects of the current financial system that can be aligned to achieve the objectives of Shariah (*maqasid*). The Bank also forged strategic alliances with the Turkish and Indonesian financial and business communities to promote cross-border investment opportunities and enhance cooperation in the areas of product development, trade finance and liquidity management. These efforts will further cement Malaysia's interlinkages with international economies through Islamic finance.

Initiatives to facilitate the promotion of Malaysia as an international Islamic financial centre also continued under the MIFC banner in 2011, with Malaysia emerging as an important destination for events relating to international Islamic finance, including seminars, conferences and training programmes.

## ENHANCING CONSUMER EDUCATION AND PROTECTION

Consumers have an important role in promoting effective, efficient and responsible financial intermediation activities through the discipline that they can provide over the financial intermediaries. Helping consumers evaluate financial choices and understand the consequences of the financial decisions they take is therefore an important component of strategies to deliver better outcomes for consumers, and contribute towards building a stable and competitive market for financial services in Malaysia.

Over the recent few years, sustained awareness campaigns by the Bank and financial industry, together with improved disclosures on financial products and services, have contributed to a notable increase in the level of consumer engagement on financial matters. This can be seen from the increasing number of financial consumers that use various channels provided by the Bank and industry to seek financial information, advice and redress. The Bank's Integrated Contact Centre received 320,028 enquiries from individuals and businesses in 2011 compared to 284,020 in 2010, and 29,004 five years ago. The Centre also handled 9,975 complaints against financial institutions, helping to resolve more than 90% of these cases. A cross-country study undertaken by the Organisation of Economic Co-operation and Development (OECD) on the financial behaviour

### Key Findings from the OECD Pilot Survey on Financial Literacy

- Financial literacy level is 11% higher in the central region (Selangor, Kuala Lumpur and Negeri Sembilan) compared to the overall population.
- Insignificant differences in financial literacy across gender and race.
- Joint financial decision-making with spouse is commonly practised.
- Malaysians tend to be cautious about spending and recognise the need to save for the future.
- Malaysians understand the risk-return trade off but are less familiar with the concept of diversification or risk spread/reduction.

and knowledge of Malaysian households in money management showed that financial literacy levels in Malaysia are comparable to those in the developed economies. The survey also revealed a strong positive correlation between financial literacy levels and the level of education. However, Malaysians are found to have a relatively lower understanding of financial risk management. These and other findings from the survey provided useful insights for improving the financial capability of Malaysian consumers.

One priority has been to build the foundations for financial capability at an early age. During the year, the Bank collaborated with the Ministry of Education to embed financial education within the formal school curriculum to provide early exposure to financial knowledge and promote responsible financial values. The aim is to enhance financial education in a way that students can relate to as they progress through school and higher education, and enable them to retain knowledge and understanding of financial matters in managing their financial affairs in their adult lives. Substantial foundational work has been advanced to incorporate basic money management disciplines such as saving and investing, spending, credit and debt management, financial risk management, and consumer responsibilities in selected core subjects taught at the primary and secondary school levels, in stages beginning in 2014. This is being accompanied by preparatory workshops organised for teachers with the support of financial institutions and industry associations to enhance their knowledge in financial matters in order to lead these subjects.

The POWER! Programme introduced in 2011 for young adults and first time borrowers has had a significant impact in reaching Malaysian borrowers to provide practical financial knowledge and skills, and tools to aid them in making sound and responsible borrowing decisions. In 2011, 23,000 individuals nationwide had participated in the roadshows, classes and seminars organised by the Credit Counselling and Debt Management Agency (Agensi Kaunseling dan Pengurusan Kredit, AKPK). The POWER! Online Learning Portal, a web-based alternative learning module launched in November 2011 will further widen the reach of the POWER! Programme and

encourage the application of lessons learned through access to interactive toolkits, including budget planners and financial calculators to help consumers account for their finances. Moving forward, plans are already underway to extend the POWER! initiative to address specific financial education priorities for other target consumer groups.

The Bank continues to reach out to consumers through the Financial Awareness Week, or *Minggu Kesedaran Kewangan 2011* (M2K 2011), organised together with the Securities Commission Malaysia, the Financial Mediation Bureau, AKPK, Malaysia Deposit Insurance Corporation (Perbadanan Insurans Deposit Malaysia, PIDM) and financial institutions. The event attracted over 10,000 visitors to the various educational briefings, activities, exhibitions and financial clinics featured. In conjunction with M2K 2011, the Bank also launched a new financial education website, *Islamicfinanceinfo*, which features information on Islamic finance such as Shariah concepts and products available in the Islamic retail finance market to facilitate consumer understanding of Islamic financial products and services and aid decision-making.

## TALENT DEVELOPMENT IN THE FINANCIAL SECTOR

The development of talent for the financial sector continues to present considerable challenges for the industry as demand continues to exceed supply. In the medium to longer term, this can increase pressures on wages, and undermine the ability of financial institutions to maintain competitive positions and effectively control risks. Significant investments have therefore been made by the Bank to support the development of high quality talent for the financial sector, across all levels, from entry to leadership positions.

Since its implementation in 2007, the Financial Sector Talent Enrichment Programme (FSTEP) developed by the Bank in collaboration with the financial industry has prepared more than 1,000 new graduates for careers in the financial sector. FSTEP has achieved a remarkable success rate with almost all of its participants rapidly absorbed into permanent employment by financial institutions. The programme was further enhanced in February 2011 to incorporate more

diverse forms of experiential learning through the use of case studies, role-plays and simulations, in addition to practical attachments with financial institutions. As a reflection of its success, more financial institutions are electing to be sponsors of FSTEP participants as a preferred strategy to recruit and train entry-level staff, affirming the value and quality of the programme in preparing graduates for employment in the financial sector.

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### FSTEP has achieved a remarkable success rate with almost all of its participants rapidly absorbed into permanent employment by financial institutions

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For professionals already employed within the financial industry, the Asian Institute of Finance (AIF) and its affiliate institutions, namely the Institute of Bankers Malaysia (IBBM), the Malaysian Insurance Institute (MII) and IBFIM, have a key role in building and strengthening core competencies to meet the new demands of the fast-changing and more complex financial landscape. The Risk Management Centre and the Applied Finance Research and Publication Centre which were established by AIF in 2010 have developed and introduced nine programmes which aim to support continuing improvements in risk management capabilities in the conventional banking, Islamic banking, insurance, takaful and capital markets sectors, having regard to new and emerging risks. This is reinforced by applied research in risk management undertaken by AIF which would provide input to upscale and improve the quality of these programmes over time. During the year, AIF also established the Financial Inclusion Centre to develop training programmes on

microfinance. The Centre is on track to roll out its first programme in 2012 which will focus on leadership and technical skills required to successfully manage microfinancing operations. The application of AIF's Learning Programme Assessment and Accreditation Framework standards to programmes offered by its affiliate institutions has further contributed towards enhancing the overall quality and relevance of training programmes offered for the industry. Beginning from 2011, all programmes offered by AIF affiliate institutions must meet, and be independently assessed against, the standards set under the Framework. The involvement of trained and experienced industry practitioners in the assessment of industry training programmes has been an important contributing factor in substantially raising the quality of training provided for the industry.

The Iclif Leadership and Governance Centre (Iclif) remained focused on building strong leadership and governance capabilities in developing world-class leaders, in particular for the financial industry. Iclif continued during the year to expand the diversity of its training offerings to address critical leadership and organisational challenges in modern business and finance. Given the often unique nature of these challenges, demand also increased for Iclif's advisory services which are supported by experts from world-leading institutions. Iclif also continued to support the continuing education of financial institution directors through the Financial Institutions Directors' Education (FIDE) programme. The programme continues to have a demonstrable impact in promoting more effective boards in the financial sector. Further information on FIDE is provided in Chapter 3: Regulatory and Supervisory Framework under the section "Corporate Governance". Moving forward, Iclif will also produce proprietary research on leadership and governance which is Asian-focused with global perspectives.

## **Proposals for New Legislative Framework for Financial Regulation and Supervision**

In 2011, the Bank completed a comprehensive review of existing regulatory laws governing financial institutions, markets and payment systems under the Bank's purview. The review built on the foundations for promoting financial stability that have been established in the Central Bank of Malaysia Act 2009, and in particular, puts forward proposals to support three primary functions of the Bank under that Act – regulating and supervising financial institutions under the Bank's purview, providing oversight over the money and foreign exchange markets, and exercising oversight over the payment systems.

The review aims to ensure that the regulatory laws remain current and effective in enabling the Bank to discharge its regulatory and supervisory mandate in a way that would preserve the stability of the financial system, while recognising important differences between the regulated industries and institutions. The Bank drew extensively on its experience in regulating the financial sector and the resolution of financial institutions as well as lessons and recommendations emerging from the global financial crisis that served as inputs to the review. The review focused on the following key outcomes:

- Opportunities for regulatory arbitrage should be minimised through a consistent approach in dealing with similar risks in the financial system, regardless of where they originated. In line with this, proposed changes also aimed to close current gaps in legislation with respect to the oversight of business conduct, group-wide supervision, and systemically important financial institutions that were not subject to prudential supervision.
- Regulation and supervision should be proportionate to the risks posed by regulated institutions and markets.
- The Bank should have the ability to take early actions to avert failures, including sufficient flexibility to influence and correct imprudent market behaviours in a timely manner as conditions changed.
- Where failures did occur, the Bank should have the necessary tools to minimise losses to depositors and policyholders as well as costs to the overall financial system.
- There should be clarity of supervisory mandates for which the Bank is accountable, and an appropriate level of transparency in the way that the Bank discharged those mandates.

A starting point for the review is the proposed consolidation and rationalisation of existing regulatory laws to achieve a more cohesive legislative framework. A dual framework will be maintained for the conventional and Islamic financial business consistent with the dual financial system in Malaysia. Within this dual framework, the prudential and market conduct supervision of institutions and markets under the Bank's purview will be integrated under the proposed new legislation which will replace the existing Banking and Financial Institutions Act 1989, Islamic Banking Act 1983, Insurance Act 1996, Takaful Act 1984, Payment Systems Act 2003 and Exchange Control Act 1953.

Other key recommendations from the review are discussed below.

### **Clarity of Regulatory Objectives**

In pursuing the principal object of the Bank to safeguard financial stability, the proposed legislation seeks to provide clarity on the accountability of the Bank. This allows for directing resources to the key responsibilities, while carefully balancing the outcomes of regulation and supervision that drive the Bank's priorities. It will also serve to identify areas where coordination with other authorities will be important. The proposed legislation accordingly aims to reflect the Bank's current commitment to foster: (i) the safety and soundness of financial institutions; (ii) the integrity and orderly functioning of the money market and foreign exchange market; (iii) reliable, safe and efficient payment systems and payment instruments; and (iv) fair, responsible and professional

business conduct of financial institutions. This will provide clarity on the observance of international core principles on effective banking and insurance supervision which require the mandates and responsibilities of the regulator to be clearly specified in legislation.

### Differentiated Intensity of Regulation and Supervision

Under the Bank's risk-based approach to supervision, the scope and coverage of regulatory requirements and level of supervisory intensity applied to institutions and markets under the Bank's purview are differentiated based on the level of systemic risk posed by such institutions or markets. Systemic risk refers to the potential for the failure of an institution or market that will disrupt the financial intermediation process, the orderly functioning of key markets, or precipitate a general loss of confidence in the financial system. In line with this approach, the review aims to provide a clearer distinction in the legislation, specifically through differentiated frameworks described below, to promote a more transparent and accountable regime in which powers accorded to the Bank are proportionate to the need for such powers in order to deliver the Bank's legislated mandates.

	Applicable regime (proposed)	Intensity of Regulation and Supervision
<ul style="list-style-type: none"> <li>Banking institutions</li> <li>Insurers</li> <li>Takaful operators</li> </ul>	Licensing	Subject to comprehensive prudential, business conduct and consumer protection requirements.
<ul style="list-style-type: none"> <li>Systemically important payment systems</li> </ul>	Designation	Subject to requirements to ensure the safety, efficiency and reliability of designated payment systems.
<ul style="list-style-type: none"> <li>Insurance/takaful brokers</li> <li>Money brokers</li> <li>Financial advisers</li> <li>Payment system operators</li> <li>Designated payment instruments issuers</li> </ul>	Approval	Subject mainly to business conduct and consumer protection requirements.
<ul style="list-style-type: none"> <li>Loss adjusters for insurance or takaful claims</li> <li>Providers of merchant acquiring services in conjunction with payment systems</li> </ul>	Registration	Oversight primarily focused on promoting professional conduct in activities that relate to businesses that are licensed or approved.

### Transparent Assessment Criteria for Authorisation and Shareholder Suitability

A key aspect of a sound financial regulatory system is a rigorous process for authorising institutions to carry on regulated financial businesses, including assessment of their significant owners and controllers. The Bank proposes to improve the transparency of this process and reinforce the integrity of the regulatory framework, by defining the factors that are taken into consideration in admitting institutions into the financial sector. It also seeks to pre-emptively manage concerns on complex structures and incentives or conditions that encourage excessive risk-taking which can significantly complicate the effective supervision of financial institutions. The proposed factors therefore include, in addition to an institution's financial strength and track record, a consideration of whether it can demonstrate sound and realistic business plans for its operations, the extent to which its corporate structures could impede effective regulation and supervision, and the potential for altering market structures or conditions in a way that would increase risks to financial stability.

### Provisions for Oversight over Non-regulated Institutions

A focus of reforms following the global financial crisis has been around concerns that the coverage of prudential supervision has been too narrow. This has led to calls for regulatory regimes to take

appropriate account of systemic risks that can emerge from the interaction between regulated and unregulated institutions, activities and markets. The Central Bank of Malaysia Act 2009 provides for the Bank to obtain information on institutions that are systemically important, and where necessary direct an institution not regulated by the Bank to take specific measures to avert a risk to overall financial stability. These important powers were designed to promote financial stability, and are corrective in nature to respond to specific risks to financial stability. There is now wide consensus, including by the Financial Stability Board, that it would be necessary for non-bank institutions with significant financial intermediation activities or which are closely connected with the banking system to be brought under a system of continuing prudential oversight to minimise any regulatory arbitrage and promote conduct that is compatible with financial stability. Based on this rationale, it is recommended that the Minister of Finance may subject an institution that is engaged in financial intermediation activities to ongoing regulation and supervision if it is determined that the institution poses or is likely to pose a risk to overall financial stability.

### **Greater Focus on Business Conduct and Consumer Protection**

While current regulatory laws impose clear obligations for financial institutions to comply with prudential regulatory prescriptions that promote safety and soundness, the obligation to comply with business conduct requirements is less defined. This has to some extent limited the enforcement actions that the Bank can take, including public action, to address business conduct concerns. The proposed legislation seeks to close this gap in three main ways: (i) charging the Bank with a clear mandate for consumer protection with respect to the conduct of financial service providers regulated by the Bank; (ii) clarifying the obligations of financial service providers to comply with business conduct standards, and equipping the Bank with effective tools to enforce these standards; and (iii) strengthening existing arrangements for consumer redress through the approval and oversight by the Bank of a financial ombudsman scheme for the resolution of disputes involving financial service providers under the Bank's purview. However, this will not alter the existing arrangements with regard to market conduct of investment banks which are now under the purview of the Securities Commission.

### **Flexibility to Specify Prudential and Business Conduct Standards**

Consistent with the differentiated intensity of regulation and supervision, it is important for the Bank to be able to: (i) specify prudential and business conduct standards that may be differentiated between regulated institutions or categories of regulated institutions according to their risk profiles; and (ii) calibrate such standards over time as conditions require, to address new or emerging risks. This also results in important efficiency gains in allowing the Bank to provide appropriate flexibility to institutions to manage their business in the most optimal way when the risks have been effectively managed. To this end, specific recommendations have been made to recast existing requirements and introduce new provisions that will support this flexibility. The provisions include specific responsibilities placed on the board to oversee the risks and internal control strategies of financial institutions to promote their long-term viability and fair dealings towards consumers.

### **Sharper Focus on Shariah Compliance and Governance in the Islamic Financial Sector**

In a dual financial system in which conventional and Islamic financial products are offered in parallel, a critical aspect of the regulatory framework is the consistency of rules and regulations across both sectors to eliminate possibilities for regulatory arbitrage. At the same time, there is a need to reflect the fundamental differences in the nature of risk inherent in Islamic financial products and services. The proposed new legislation for Islamic finance seeks to provide greater visibility to Shariah compliance and the effective implementation of Shariah governance by Islamic financial institutions, thus ensuring a coherent regulatory framework. Among others, proposed provisions have been put forward to allow the Bank to specify standards on Shariah matters, including on Shariah governance, principles and practices of Shariah in relation to the business and affairs of an Islamic institution, as well as requirements for Shariah compliance audits. In line with Shariah requirements, the proposed new law will also clarify the process and priority of payments in the event of a winding up of a financial institution involved in Islamic financial business.

**Strengthened Ability to Supervise Financial Groups on Consolidated Basis**

The effective supervision of financial groups has emerged as one of the more important charges of the regulatory reform agenda in the wake of the global financial crisis. The primary prudential aim of group supervision is to minimise contagion risk from group operations that could affect the safety and soundness of regulated institutions within a group. While current legislation and practice support the supervision of regulated institutions on a solo basis, the framework for the supervision of financial groups is not as well-advanced. To support the Bank's current work to put in place appropriate formal arrangements, including prudential requirements for the supervision of financial groups, the proposed new legislation seeks to provide a clear mandate for the Bank to exercise oversight over financial groups that have one or more licensed institutions within the group. This includes powers for the Bank to formally authorise financial holding companies, obtain information on and examine any entity within the group, apply appropriate prudential standards to the holding companies or other subsidiaries, and require corrective measures to be taken to mitigate any identified risks to the licensed institution or the financial group. Such powers will be supplemented with enhanced provisions for the Bank to cooperate with other domestic or foreign supervisory authorities, in areas including the sharing of supervisory information and the conduct of examinations.

**Enhanced Supervisory Interventions**

Central to the Bank's current supervisory approach is the early identification of risks, and a robust process for progressively escalating the intensity of supervisory interventions. Reflecting this approach, proposed legislative changes will also seek to strengthen the Bank's ability to intervene at an early stage. The proposals seek to expand the range of pre-emptive supervisory tools available to the Bank to address a problem, and allow for different approaches to be taken in circumstances where an institution's problems are less serious and the management is cooperative, as opposed to situations that require more formal actions with severe penalties for non-compliance. This is consistent with promoting supervisory measures that are proportionate. Proposals include strengthened provisions for the Bank to direct an institution to take specific remedial actions to address the Bank's concerns, and the ability to enforce commitments by institutions to implement measures designed to maintain the safety and soundness of the institution. It is also proposed that the enhanced supervisory interventions be reinforced with a new penalty framework that will include, in addition to criminal sanctions, the ability for the Bank to impose monetary or non-monetary administrative penalties and pursue civil actions, thus allowing for more expedient enforcement actions which are proportionate to the nature and gravity of non-compliances.

# 2011

## REGULATORY AND SUPERVISORY FRAMEWORK

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### INTRODUCTION

The regulatory and supervisory framework continued to support financial stability in Malaysia in the face of continuous risks in the external environment and heightened domestic competition. The framework has also stood up well against the changing character of the domestic financial system which saw the entry of new market participants and the more pronounced regional and international complexion of the financial sector. In 2011, the Bank continued to reinforce and advance further the core tenets of regulation and supervision, building on earlier work undertaken to strengthen the legislative framework and improve risk management, governance and business conduct practices. The progress made on the global regulatory reforms also had an important bearing on the Bank's work. While taking these reforms carefully into account, the Bank has remained focused to ensure relevancy of the reforms and achievement of the intended outcomes. The Bank has continued to leverage its supervisory insights and engagements with the industry to further enhance the integrity and strength of the regulatory and supervisory system in Malaysia.

### REGULATORY DEVELOPMENTS AND SUPERVISORY ASSESSMENTS

#### *Regulatory capital and liquidity standards*

Further to the announced plans to implement the Basel III reform package in Malaysia in December 2011, the Bank released details on the implementation plan, including the timelines. The plan sets out the Bank's expectations of banking institutions in transitioning towards the new regime, which also includes the approach to be adopted by banking institutions for the individual components of the reform package.

The Basel III reform package seeks to strengthen global capital and liquidity standards for banking institutions by improving the quality and quantity of regulatory capital and ensuring adequate high-quality liquidity buffers. These standards will be implemented in Malaysia in phases, beginning 2013 until 2019, in line with

the globally-agreed levels and implementation timelines as illustrated in Table 3.1. While the banking system in Malaysia is well-positioned to meet the requirements of the new regime within a shorter timeframe, the adoption of the extended timeframe set by the Basel Committee on Banking Supervision (BCBS) will allow for more gradual adjustments by banking institutions to the new requirements, thus mitigating any adverse impact on credit intermediation, particularly in an environment of slower global growth. The current performance trend and projections for banking institutions in Malaysia suggest that the capital requirements can be largely met through prudent earnings retention policies over the period of implementation, thereby avoiding potential market dislocations from synchronous capital-raising actions by the banking institutions.

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The current performance trend and projections for banking institutions in Malaysia suggest that the capital requirements can be largely met through prudent earnings retention policies over the period of implementation

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In addition to the new minimum regulatory capital levels, a primary element of the Basel III reform package is the revised **definition of regulatory capital** which is intended to ensure higher levels of high-quality and loss-absorbent capital. Going forward, common equity, comprising paid-up capital and retained earnings will form the predominant component of Tier-1 capital, thus substantially strengthening the loss-absorbing capacity of banking institutions. Following a detailed assessment of the rules text, the Bank has identified potential areas where implementation could present some challenges for the domestic banking system. These include overcoming the

operational complexities of the methodologies specified by the BCBS for the treatment of deferred tax assets as well as the investments in capital instruments of other financial institutions. The Bank will consult with the industry and market participants on proposals to enhance the loss absorption qualities of capital instruments, particularly on a going concern basis. This would involve requiring all capital instruments to contain provisions for a principal write-down or conversion into common equity when an institution becomes non-viable ("gone concern" basis), or when its capital falls below pre-specified triggers ("going concern" basis). A concept paper on the revised regulatory capital definition will be issued for industry feedback in the first half of 2012. Beginning 2016, banking institutions will also be required to hold a capital conservation buffer that can be drawn upon during periods of stress.

Basel III also introduces a **leverage ratio** which is intended to mitigate the effects of excessive deleveraging in the banking system during distressed periods. While the BCBS has targeted implementation of the ratio from 2018, the

Bank will require banking institutions to begin reporting their leverage positions beginning June 2012. The leverage position reporting would allow the Bank to assess the impact on the behaviour of banking institutions and identify any unintended consequences. This includes the possibility that the non-risk-based nature of the ratio may lead banks to favour higher-risk activities at the expense of low-risk, but economically productive activities such as trade financing. While banking institutions are expected to meet the requirement, a decision to formally adopt the leverage ratio as a binding measure, as well as the need to fine-tune the measurement of the ratio, will be determined by the Bank closer to the targeted 2018 deadline.

The strengthened **liquidity standards** proposed under Basel III will be implemented through enhancements to the existing Liquidity Framework that has been in place since 2000. Similar to the leverage ratio, an "observation period" will begin in June 2012 with the requirement that banking institutions report both the Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) positions before the measures become binding in 2015

Table 3.1

Phase-In Arrangements for the Implementation of Basel III in Malaysia<sup>1</sup>

	2012	2013	2014	2015	2016	2017	2018	2019
Leverage Ratio	Observation period						Standard in force	
Minimum common equity		3.5%	4%	4.5%	4.5%	4.5%	4.5%	4.5%
Capital conservation buffer					0.625%	1.25%	1.875%	2.5%
Minimum common equity plus capital conservation buffer		3.5%	4%	4.5%	5.125%	5.75%	6.375%	7%
Minimum Tier-1 capital		4.5%	5.5%	6%	6%	6%	6%	6%
Minimum Tier-1 capital plus capital conservation buffer		4.5%	5.5%	6%	6.625%	7.25%	7.875%	8.5%
Minimum total capital		8%	8%	8%	8%	8%	8%	8%
Minimum total capital plus capital conservation buffer		8%	8%	8%	8.625%	9.25%	9.875%	10.5%
Capital instruments that no longer qualify	Phased out over a 10 year horizon beginning 2013							
Liquidity Coverage Ratio	Observation period			Standard in force				
Net Stable Funding Ratio	Observation period						Standard in force	

<sup>1</sup> All dates are as of 1 January. Shading indicates transition periods.  
Source: Bank Negara Malaysia

and 2018 respectively. The Bank shares similar concerns expressed by a number of supervisory authorities that the liquidity standards, as currently calibrated, do not adequately address the specific characteristics of funding markets that are unique in some countries. For example, in Malaysia, institutional savings schemes (such as the Employees Provident Fund) capture a significant share of household savings which are in turn deposited by the schemes with banks. Under the standards, such deposits are subjected to severe withdrawal assumptions (or “run-off” rates) which are not reflective of the profile of the underlying liquidity risks. Data collected from the observation period will be used to consider appropriate adjustments to the run-off rates where needed. An area that will be monitored during the observation period is the potential impact on market liquidity arising from an increase in captive demand by banking institutions for eligible liquid assets and how this in itself may alter the characteristics of such instruments in terms of the availability to meet liquidity needs in times of stress. The requirements under the liquidity standards are also likely to have significant impact on Islamic banks given that investments must comprise only Shariah-compliant instruments. To facilitate compliance with the standards, the Bank will encourage and support the development of solutions by the industry to deepen the sukuk market, while cooperating with other agencies to formulate an appropriate regulatory framework for the issuance of new instruments by banking institutions. The Bank is also concerned that the NSFR in particular should not undermine the important maturity transformation role of banking institutions and would consider suitable options for the NSFR implementation.

For the insurance industry, a number of planned enhancements to the **Risk-Based Capital Framework** (the RBC framework) were completed in 2011. This included the necessary changes to converge the valuation rules for financial instruments under the RBC framework with the Financial Reporting Standards 139. Following the adoption of the FTSE Bursa Malaysia KLCI as the main index for the equity market in July 2009, the calibration of market risk charges for indexed investments was also reviewed to ensure that the treatment for the new index reflects the relative volatility of the constituent stocks.

However, these changes had minimal impact on the capital adequacy positions of insurers. Work on more fundamental enhancements to the RBC framework is continuing, including proposals to refine the valuation methodology for life insurance liabilities and the treatment of reinsurance arrangements. Another important area of review is ensuring consistency between current capital buffers provided under the RBC framework and the implementation of more robust internal capital management processes for insurers. This will also take into account ongoing developments in the Common Framework for the Supervision of Internationally Active Insurance Group (ComFrame) that are being advanced by the International Association of Insurance Supervisors (IAIS). One of the objectives of the ComFrame is to foster global convergence of regulatory measures, including regulatory capital, and supervisory approaches for internationally-active insurance groups, a number of which have significant operations in Malaysia. The IAIS has also released the revised Insurance Core Principles that further define sound practices in solvency assessments which will inform the Bank’s work. The Bank will review the RBC framework with the objective to further improve the alignment of capital with risk and support a more consistent approach to capital standards for financial groups, while at the same time preserving a prudent level of capital that is appropriate for the operating environment in Malaysia.

In April 2011, the Bank issued a concept paper on **Risk-Based Capital Framework for Takaful Operators** (RBCT). During the industry consultation, a number of issues were raised, including Shariah-compatible options that could incentivise takaful operators to build strong takaful funds, the treatment of *Qard* as a component of capital available and the calibration of risk charges for general takaful and expense liabilities. Following the feedback received, the RBCT proposals are being refined to take into account the objectives of prudential and Shariah principles. At the same time, the trigger point for shareholders’ provision of *Qard* to restore deficits in the takaful fund was clarified through the issuance of the revised Guidelines on Takaful Operational Framework in September 2011. This guidelines help ensure that standardised practices are adopted by takaful and retakaful operators in addressing deficits in takaful and retakaful funds in a timely manner.

Banking institutions' internal processes for capital management were subjected to greater scrutiny by the Bank following the issuance of the Guidelines on the Internal Capital Adequacy Assessment Process (ICAAP) in 2010. The guidelines set out the Bank's approach to **Pillar 2** (Supervisory Review Process), which require each banking institution to assess the adequacy of capital relative to its risk profile, including risks which are not covered or fully captured under Pillar 1. Full compliance with the requirements of the guidelines is expected by end-2012. Supervisory reviews of banking institutions' implementation of the ICAAP were initiated in 2011, focusing on the quality of board and management oversight of the ICAAP, integration of the capital planning process with risk appetites, the robustness of frameworks to identify and measure material risks, and the methodologies adopted by banking institutions for incorporating stress scenarios in the determination of internal capital targets. In general, the Bank observed improvements in the processes and methodologies applied for measuring material risks and in estimating the level of capital required, both at the entity and group level. Banking institutions were observed to make better use of stress test results in capital planning. Nonetheless, there is scope for further improvements in banking institutions' measurement and capital allocation for non-Pillar 1 risks, including concentration risk, as well as the quality and integrity of systems and processes for risk reporting, and model development and validation.

In the insurance industry, all insurers must set and observe on a continuing basis individual target capital levels that are determined by the insurer and agreed with the Bank. Progress has similarly been observed in the capital management processes of insurers. This progress was uneven among insurers, leading the Bank to require a few insurers to undertake corrective measures, including improving systems to capture risk and adopting prudent earnings retention policies to shore up capital reserves. This was followed by the issuance of the concept paper on Guidelines on ICAAP for Insurers in September 2011 on the expectations on insurers for sound capital and risk management.

#### ***Risk management and prudential framework***

A clear focus on risk management remained central to the Bank's regulatory and supervisory priorities. Over the years, and as a result of a sustained focus by the Bank in this area, there

has been closer alignment between the Bank's expectations and the risk management practices observed among financial institutions. In 2011, the Bank saw continued improvements in two notable areas. One was the more explicit reflection of the risk appetite and risk tolerance set by the board in an institution's business plans and strategies. The second was more effective risk oversight provided by the board and risk committees in providing constructive feedback and challenge to the business strategy development process. In the light of recent global developments in risk management approaches and perspectives, the Bank views that future progress in risk management practices within Malaysia's financial services industry would benefit from specific guidance, including where appropriate, clear requirements on effective risk governance. This would also serve as a focal point for more effective interactions between the Bank and financial institutions on risk issues and developments concerning an institution.

In February 2012, the Bank released an updated concept paper on sound **risk governance** practices, incorporating industry feedback on the earlier paper, developments in international standards and leading practices in risk governance, and supervisory observations on existing domestic practices. Key areas of emphasis in the concept paper issued by the Bank are on: (i) the role of the board in setting and controlling an institution's risk strategy and risk appetite; (ii) promoting a sound understanding of the institution's group structures to ensure that exposures arising from interactions with other group entities are clearly understood and managed; (iii) incentive and remuneration systems that are aligned with a sound risk culture; (iv) clear mandates, independence and appropriate stature of the chief risk officer and the risk management function; and (v) effective and rigorous oversight of internal risk assessments and models, including processes that adequately challenge the integrity, limitations and reasonableness of any judgments applied. The Bank expects to finalise the standards for adoption in the second half of 2012.

An important component of the prudential framework adopted for managing risks in the banking system is the limit imposed on banking institutions' **exposures to individual counterparties** or groups of connected counterparties. The prudential limit serves as a

regulatory backstop measure to safeguard against risk concentrations to particular counterparties that could materially threaten a bank's financial position. During the year, the Bank completed a significant review of the existing prudential framework, including its coverage, to ensure that the limit would continue to fulfil its purpose of containing risk concentrations in an environment which has become more interconnected, with risk correlations being correspondingly more pronounced. Several enhancements to the single counterparty exposure limit framework are being proposed, including: (i) an expanded definition of counterparties that includes counterparties connected due to economic dependence; (ii) a broader scope of exposures to capture both on- and off-balance sheet exposures; (iii) recognition of selected credit risk mitigation techniques to reduce exposures; (iv) a defined approach for measuring exposures to collective investments and similar schemes; and (v) incorporation of sound practices for managing name risk concentration.

With the intense competition in the retail lending space, the Bank maintained its heightened supervisory vigilance on the **credit risk management practices** of banking institutions. There were signs of continued pressure on the pricing of retail lending products although supervisory reviews of actual lending practices suggest that the most aggressive lending rates are mostly applied selectively to customers with low risk profiles. There were some isolated cases in which banking institutions had reduced vigilance over breaches of lending policy and adopted highly optimistic assumptions in pricing policies. These banking institutions have been required to take appropriate remedial measures and remain under close scrutiny for any further signs of deterioration in underwriting standards. As a broader pre-emptive measure, the Bank issued a concept paper on Guidelines on Risk-Informed Pricing for Retail Loans/Financing in December 2011 to strengthen the oversight of, and promote more risk-informed approaches to retail loan pricing. The guidelines set out the Bank's supervisory expectations on the board's oversight responsibilities and internal controls in pricing of loans, as well as the pricing components that should be reflected in banking institutions' pricing methodologies. While the Bank does not have prescribed pricing levels, the proposed guidelines seek to ensure that banking

institutions price risk appropriately based on realistic assumptions and with a complete understanding of the key risk drivers involved. The Bank expects to finalise the proposed guidelines in the second quarter of 2012 after assessing the feedback received.

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As a broader pre-emptive measure, the Bank issued a concept paper on Guidelines on Risk-Informed Pricing for Retail Loans/Financing in December 2011 to strengthen the oversight of, and promote more risk-informed approaches to retail loan pricing

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Following consultations with the Islamic banking industry on proposals to strengthen the governance and transparency in the management of **displaced commercial risks** through the use of the profit equalisation reserve (PER), the Bank issued the revised Guidelines on Profit Equalisation Reserve in May 2011. The enhancements contained in the guidelines serve three important purposes: (i) supporting the proper attribution of PER to banking institutions and investment account holders based on the contractual profit-sharing ratio; (ii) improving disclosures on PER in the financial statements, including disclosures on the institution's accounting policy for the computation and apportionment basis for PER and detailed movements of PER during the financial year; and (iii) strengthening the accountability of Islamic banks' Shariah committees for ensuring the appropriateness of profit distributions and amounts to be transferred to PER. These outcomes have also helped achieve compatibility between the use of PER and its treatment under the Financial Reporting Framework adopted in Malaysia.

#### **Corporate governance**

The Bank continued to observe sustained improvements in the corporate governance practices of banking institutions and insurers. In particular, the boards of directors are playing a more active role in setting and overseeing

the effective implementation of risk policies, business strategy and capital management. There has also been an increase in the number of independent directors represented on the boards, with greater attention by the nominating committees to improve the mix of relevant competencies and experience of boards. The vast majority of non-executive directors appointed to the boards of banking institutions and insurers during the year had strong backgrounds in risk, finance, banking or insurance business. The Bank also noted an increased level of engagement between the nominating committees and proposed board members, indicating a higher level of due diligence conducted by nominating committees. This followed an enhanced process implemented by the Bank to seek assurances from the board that it was satisfied with a candidate's ability to contribute effectively to the board's oversight role. Nonetheless, the renewal of board members remains a challenge for many financial institutions. Greater effort is needed to develop a wider pool of qualified independent directors that can serve on the boards of financial institutions. In support of this effort, the Bank is working closely with the Malaysia Deposit Insurance Corporation (PIDM), the International Centre for Leadership in Finance, and the Financial Institutions Directors' Education (FIDE) Forum (members include directors who have attended the FIDE programme) to establish a programme for the development of a pool of potential directors for boards of financial institutions. This programme is expected to commence with the process of identifying individuals for the talent pool in 2012.

A firm commitment to directors' education has been instrumental in improving the quality of board oversight within the financial sector. The number of directors who have completed the core FIDE programme increased further to 437 in 2011. More than 230 directors have supplemented this training by attending more specialised programmes on specific board roles and governance issues offered under the FIDE programme. In response to strong demand for such programmes, FIDE's complement of specialised or elective programmes has grown from three initially, to 13 in 2012.

Under a functional approach to regulation, prudential standards on corporate governance are largely aligned across the financial

industries regulated by the Bank. The remaining differences reflect specific supervisory priorities of the Bank given the stage of development of an industry and the capacity to comply with higher standards. These differences have narrowed over time, most notably among development financial institutions (DFIs) that have been required to observe governance standards that are consistent with those applied to banking institutions and insurers. The Bank views this as a critical enabler for the DFIs to fulfil their development mandates more effectively and in a sustainable manner. In September 2011, the requirements to ensure the fitness and propriety of key responsible persons, earlier adopted for banking institutions and insurers, were extended to DFIs. A key aim of the requirements is to strengthen the role and accountability of the board, supported by sound processes for suitability assessments, in appointing and retaining individuals in key responsible positions within the DFIs.

#### ***Consumer and market conduct regulatory and supervisory framework***

In the aftermath of the global financial crisis, there has been an increased focus globally on consumer conduct issues, not only in protecting individuals from excessive risk, but also in protecting the financial system from systemic risk. As the authority responsible for the conduct of business by financial institutions under the Bank's purview, the Bank has long recognised the need for a regulatory framework that supports responsible financial behaviours and fair outcomes for consumers. This is achieved through market conduct regulations that: (i) promote a stronger alignment between the interests of financial institutions and their consumers; and (ii) afford appropriate protection to consumers against harmful practices.

During the year, the Bank extended its market conduct focus to developments in the wider macroprudential context. The more challenging economic environment, intense competition and strong growth in retail lending activities had increased the potential for imprudent and irresponsible practices among lenders that may lead to adverse outcomes for consumers and risks to the broader financial stability. While the impaired loans ratio for lending to the household sector has remained low and stable, the Bank moved pre-emptively to reinforce sound underwriting standards that also serve to protect consumers from the unaffordable

accumulation of debt. In November 2011, the Bank issued the **Guidelines on Responsible Financing** which promotes more consistent practices across the industry in assessments by financial institutions of the creditworthiness of customers and their ability to service debt obligations. Under the guidelines, affordability should be determined through the observance of prudent debt service ratios and throughout the tenure of the loan. Standards that must be observed by lenders in verifying the income of prospective borrowers were also strengthened, along with expectations for lenders to improve engagements with customers on the ability to service debt obligations without recourse to additional debt.

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In November 2011, the Bank issued the Guidelines on Responsible Financing which promotes more consistent practices across the industry in assessments by financial institutions of the creditworthiness of customers and their ability to service debt obligations

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To support responsible borrowing decisions on the part of consumers, lenders must also provide specific and clearly disclosed information on the total repayment amount, total finance cost as well as the impact of an increase in the financing rate so that consumers understand the full implications of a borrowing decision. This follows earlier measures during the year to prohibit credit card issuers from increasing credit limits without obtaining the prior consent of cardholders, and providing unsolicited credit advances. Disclosures to cardholders were also enhanced to draw the attention of consumers to the financial implications of paying less than the full amount of outstanding credit card balances in efforts to encourage better financial discipline.

In the Islamic banking sector, consumer outcomes were improved with the greater harmonisation of practices in two areas. This concerned the offering of waivers to customers of **sale-based financing**

**contracts** (such as *murabahah* and *bai' bithaman ajil*) upon early settlement. The guidelines were issued by the Bank to mandate the granting of *ibra'* to all customers upon early settlement, which must observe requirements governing its calculation and disclosure. The second area relates to **late payment charges** which may be imposed by Islamic banks. A lack of clarity in the permissibility and treatment of such charges from a Shariah perspective risked encouraging unhealthy consumer behaviours in which delinquent borrowers may systematically prefer payments of debt obligations to conventional banks over Islamic banks. More generally, this would undermine efforts to promote prudent financial discipline among Malaysian borrowers. To address this, the Bank established the parameters for the imposition of penalties (*gharamah*) and compensation charges (*ta'widh*) on delinquent consumers of Islamic financial products and services (see Table 3.2). The parameters provide a common standard for the computation of late payment charges with due consideration to defaulters with genuine financial difficulties. In line with Shariah principles, *ta'widh* received may be recognised as income, while *gharamah* receivables must be channelled to charity.

More generally, the Bank continued the efforts to improve the **transparency of fees and charges** imposed by financial institutions on consumers and other retail customers and took firm actions against prohibited or excessive fees and charges which saw more than RM4 million in such fees being refunded by financial institutions to customers during the year.

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With effect from 1 August 2011, insurers and takaful operators are required to advise customers on the market value of the vehicle insured at the point of purchase or renewal of motor insurance based on a credible valuation database

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As part of a broader initiative to improve the conduct of business in the motor insurance and takaful sector, particularly with respect to **claims settlement practices**, the Bank introduced

Table 3.2

## Guidelines on Late Payment Charges for Islamic Banking Institutions

Components of combined late payment charge	Policy requirements
<p><i>Ta'widh</i> (compensation charge)</p>	<p>Islamic banks are allowed to be compensated by way of <i>ta'widh</i> based on the actual amount of losses incurred.</p> <p>However, this amount shall not be more than 1% per annum of:</p> <ul style="list-style-type: none"> <li>■ the overdue instalments of the Islamic product in the case of default of scheduled payments; or</li> <li>■ the outstanding balance of the Islamic product where a default results in the entire facility being recalled or brought to court for judgment prior to maturity.</li> </ul> <p>For delays occurring after maturity of a financing contract, Islamic banks are only allowed to charge <i>ta'widh</i> at a reduced rate based on daily overnight Islamic interbank money market rate.</p>
<p><i>Gharamah</i> (penalty)</p>	<p><i>Gharamah</i> is determined based on the difference between the combined late payment charges (capped at the respective Islamic bank's average financing rate at the point of default) and the amount of <i>ta'widh</i> imposed.</p> <p>The administration of <i>gharamah</i> distribution to approved benefactors or charitable organisations shall be determined by the Islamic bank's Shariah committee.</p>

specific measures to reduce the scope for over- or under-insuring motor vehicles, which had been a common source of complaints from consumers who were not compensated in full following an insurance or takaful claim. With effect from 1 August 2011, insurers and takaful operators are required to advise customers on the market value of the vehicle insured at the point of purchase or renewal of motor insurance based on a credible valuation database. In the event of a subsequent claim, the insurer or takaful operator must use the same reference database to determine the market value of the vehicle. This has had a positive effect in aligning the expectations of consumers and helping consumers determine with greater confidence the value at which to insure the vehicles.

Based on feedback from the Bank's engagements with consumer groups, **financial contracts, agreements and policy documents** are perceived to be too lengthy and complex. Efforts to encourage better informed and better protected consumers have therefore also focused on improving the communication of contractual rights and responsibilities under a financial contract to consumers through the use of plain language and simplified documentation. An initiative to adopt plain language for widely-used consumer financial

and insurance or takaful contracts commenced in early-2011, and will be implemented in stages. Plain language was introduced in life insurance contracts, with similar efforts underway for loan agreements. As part of this initiative, the Bank will undertake field tests to determine its impact on consumer decision-making and where appropriate, work with the industry to further improve documentation in a way that helps consumers better understand contractual rights and obligations when making financial decisions.

More competitive conditions in the financial sector led the Bank to devote significant resources during the year to pre-empting and addressing failures in the way financial products are sold or marketed to consumers. Given the increased volatility in financial markets, the Bank was mainly concerned that consumers need to be given clear and accurate information on the risks to which they were exposed, and that financial institutions were discharging responsibility to properly advise consumers on the suitability of products based on assessments of consumers' risk preferences and financial circumstances. Following a thematic review conducted by the Bank that focused on the sale of structured products, a number of banking institutions were required to further strengthen

internal oversight arrangements over the product origination, approval, sales and complaints handling processes to ensure that consumer conduct issues are sufficiently considered and addressed in accordance with the policies and guidelines issued by the Bank. Supervisory actions were also taken against insurers and takaful operators that were found to have mis-sold products. The insurers and takaful operators concerned were directed to withdraw misleading promotional materials, provide restitution to affected policy/certificate owners, effect the claw back of commission payments to errant intermediaries and suspend, terminate or retrain the intermediaries involved. Such actions saw premiums totalling RM53.7 million being refunded to more than 6,900 policy owners and 61 notices served on financial service providers requiring the withdrawal or modification of incomplete and/or inaccurate disclosures.

Initiatives were also undertaken in collaboration with industry associations to elevate the **level of service and efficiency** in the provision of financial services to consumers. This led to commitments by financial institutions to publish processing times for common financial services which were disclosed in customer service charters. Processes were also further simplified and streamlined across the industry for financing products available to small and medium enterprises with the launch of the “PARTNER” initiative in June 2011 by the Association of Banks in Malaysia. Moving forward, greater emphasis will be accorded towards raising the standards of professionalism and business conduct of intermediaries, to ensure intermediaries act with integrity and high ethical standards when dealing with consumers in the insurance and takaful industries.

## **PRESERVING THE INTEGRITY OF THE FINANCIAL SYSTEM**

The Bank’s regulatory and supervisory activities also aim to reduce the scope for the regulated financial sector to be used for illegal purposes, including money laundering and financial crime. This is important to preserve the integrity of, and public confidence in, the financial system. Efforts in Malaysia have intensified in recent years to ensure the continued effectiveness of the legal infrastructure, systems and processes to promptly detect and prevent money laundering, terrorism financing and other illegal activities, in light of the more sophisticated and global nature of methods used to commit

financial crime. These initiatives contribute, and demonstrate Malaysia’s continued commitment, to global efforts to strengthen measures against financial crimes and reduce the illicit flows of funds.

In 2011, key legislative and regulatory reforms in the **money changing and remittance** industries were advanced with the passage of the Money Services Business Act (MSBA) in July 2011. This set in motion an intensive undertaking by the Bank to re-license all existing money changers and remittance service providers to ensure that those that remained in the industry are able and willing to implement effective controls to prevent these players from being used for illegal purposes. In support of this exercise, the Bank increased the scope and intensity of its fit and proper assessments of key responsible persons and its on-site reviews, focusing mainly on the quality of internal controls, recordkeeping and anti-money laundering and counter financing of terrorism (AML/CFT) compliance. On the whole, the Bank found significant room for improvement in the oversight, systems and controls of licensees, resulting in specific directions issued to many licensees to improve controls, particularly with respect to ensuring the complete and accurate recording of all transactions, observance of customer due diligence procedures and improvements in knowledge of AML/CFT requirements. As at end-2011, a total of 62 money changing licences were revoked for more serious failures to comply with various requirements under the law.

The MSBA which came into force on 1 December 2011 provides a single and uniform legal and regulatory framework for the money services business industry, which comprises the money changing, remittance and wholesale currency businesses. Along with the more intensive supervision of licensees, the successful implementation of the MSBA will also entail a focus on: (i) clarifying existing regulations to provide clearer guidance to the industry on the Bank’s expectations regarding effective measures to prevent financial crime; (ii) increasing the level and effectiveness of engagement with the industry to promote greater awareness and understanding of legal and regulatory requirements; (iii) strengthening industry arrangements, including the role of industry associations, to complement the Bank’s efforts to raise standards of professionalism in the industry; and (iv) improving the quality of the

Bank's intelligence on developments that increase the industry's exposure to financial crime. The Bank has consolidated its internal resources and established a dedicated Money Services Business Regulation Department to drive these priorities.

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To further strengthen Malaysia's AML/CFT regime, efforts were also advanced to forge closer cooperation among international counterparts, notably in the sharing of financial intelligence and assistance in cross-border financial crime investigations

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At the national level, the AML/CFT regime continued to be strengthened through the progressive implementation and enforcement of AML/CFT measures, supported by greater international cooperation. The Bank has observed strengthened compliance practices among financial institutions, especially an increased focus by the senior management of financial institutions on addressing compliance gaps and enhancing compliance capabilities through improvements in information technology systems and a higher commitment to training. Sustained engagements with relevant enforcement agencies and reporting institutions, including regular information sharing sessions and expanded outreach activities by the Bank, had an important role in aligning priorities and ensuring that the implementation of the National Strategic Plan reflected developments in the nature and profile of financial crime. The profile of continuing efforts at the national level to combat financial crime through a strong AML/CFT regime was raised further with the successful organisation of the Sixth AML/CFT Compliance Officers' Conference.

To further strengthen Malaysia's AML/CFT regime, efforts were also advanced to forge closer cooperation among international counterparts, notably in the sharing of financial intelligence and assistance in cross-border financial crime investigations. In 2011, Malaysia entered into two new Memoranda

of Understanding (MoUs) with the financial intelligence units of Papua New Guinea and Macau SAR of the People's Republic of China, bringing the MoUs in place so far to a total of 34. Such arrangements have significantly expedited financial investigations and increased the quality of intelligence gathered on entities of interest in cooperating countries.

## **SUPERVISORY CAPACITY AND COOPERATION**

In light of the expansion of domestic financial groups across borders as well as the growing presence of foreign financial institutions operating in Malaysia, the Bank initiated and actively supported more structured approaches to cooperation with other supervisory authorities. In particular, the Bank moved to better leverage on the role of supervisory colleges in informing supervisory assessments, coordinating supervisory activities and generally promoting more coherent supervisory frameworks for the cross-border operations of financial institutions. During the year, the Bank hosted an inaugural meeting of the college of supervisors for a regionally-active Malaysian financial group, which included the relevant host supervisors. In its capacity as host supervisor, the Bank also participated in supervisory college meetings involving foreign financial institutions with operations in Malaysia. These discussions have enabled the Bank to form a more comprehensive view of the financial groups, which provided a deeper understanding of issues that concerned the authorities responsible for the supervision of entities within the group and how the group itself undertook group oversight and management of group-wide risks. Insights gained have also enabled the Bank to validate its assessments of the extent to which parent support and the centralisation of key functions present risks to regulated institutions in Malaysia. Moving forward, the Bank intends to organise more frequent supervisory colleges, in particular for the internationally-active Malaysian financial groups, while also leveraging on existing bilateral channels to share supervisory assessments and conduct joint examinations.

On the domestic front, the Bank continued to strengthen its cooperation with other domestic regulatory authorities. This includes

the coordination of supervisory activities with the Securities Commission on the supervision of investment banks and entities supervised by the Commission that are part of financial groups. The Bank and PIDM also completed a review of the Strategic Alliance Agreement (SAA) between both agencies to further strengthen the existing cooperative arrangements and to reflect the expanded scope of collaboration following the enactment of the Malaysia Deposit Insurance Corporation Act 2011. The enhanced SAA will, among others, provide for an enhanced scope and frequency of information sharing and improved coordination of intervention and resolution actions in respect of member institutions in line with the enhanced powers and responsibilities accorded to PIDM. The Bank expects that the scope and intensity of its cooperation with other authorities will continue to evolve to preserve an effective supervisory system as the nature of financial intermediation evolves. The Bank therefore places a high priority on building and maintaining effective relationships with other supervisory authorities, and will continue to review and ensure the relevance and effectiveness of existing cooperative arrangements.

Given the growing complexity of the task of supervision, both at a system-wide and institutional level, the Bank continued to invest significantly in strengthening its supervisory capacity. During the year, further enhancements were made to the existing supervisory training programmes to further enhance the ability of supervisors to identify, analyse and form appropriate judgements on risk issues. This has become increasingly important in an environment where risk can affect institutions in significantly different ways and to different degrees depending on an increasingly complex interplay of factors. Supervisory responses, in turn, need to be tailored accordingly so that these actions work effectively to address key risks facing an institution. The Bank's training

programmes for supervisors have increased focus on: (i) deepening supervisors' knowledge of business activities, inherent risks and risk management practices; (ii) delivering training in a more practical context to hone the ability of supervisors to react swiftly in specific circumstances, including through the greater use of simulations; and (iii) incorporating a better balance between supervisory and industry perspectives in the training content.

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Moving forward, the Bank intends to organise more frequent supervisory colleges, in particular for the internationally-active Malaysian financial groups, while also leveraging on existing bilateral channels to share supervisory assessments and conduct joint examinations

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A broader programme to enhance the Bank's supervisory resources, processes and tools is also underway to: (i) further strengthen the Bank's stress testing capabilities; (ii) improve the allocation of supervisory resources to make more optimal use of specialised knowledge residing within the Bank; (iii) enhance the efficiency and effectiveness of supervisory reporting through increased automation and more integrated surveillance systems; (iv) implement an improved framework for the prioritisation and supervision of consumer conduct issues (See white box 'Market Conduct Supervisory Approach'); and (v) strengthening the oversight of enforcement activities. The Bank expects to complete most of these initiatives in 2012.

## Market Conduct Supervisory Approach

The global financial crisis highlighted the potential for market conduct issues to result in large-scale losses to consumers and cause widespread disruption to financial institutions and markets, as was evident in the mis-selling of mortgage products in the United States. Since then, there has been renewed regulatory focus on the importance of establishing effective oversight arrangements to ensure that financial institutions conduct business in a responsible manner, while empowering consumers to make informed financial decisions. This requires an appropriate regulatory framework and a credible supervisory process that is proportionate to the risks that consumers may face from improper business practices of financial service providers (FSPs).

The Bank regulates 298 FSPs offering a broad spectrum of products and services to retail consumers in the banking, insurance and takaful sectors. Given such a wide remit and the increasing importance of managing market conduct risk in a more competitive and complex environment, the Bank has strengthened its market conduct supervisory approach in 2011 with the aim of: (i) improving the prioritisation of market conduct issues and institutions for supervisory attention; and (ii) improving the Bank's engagements with FSPs, particularly with the institutions' senior management and board, on market conduct developments and concerns. These enhancements involve the principles that: (i) the board and senior management of FSPs must be primarily responsible for ensuring fair conduct towards consumers; and that (ii) consumers have an important role in protecting their own interests by using available avenues to seek information and redress, and to engage more actively with FSPs in making their financial decisions. The enhancements will enable the Bank to allocate its supervisory resources more optimally to key market conduct risks which have the highest potential for causing widespread detriment to consumers or a general loss of confidence in the financial system, and will also support the Bank's more forward-looking and preventive interventions.

A central piece of the enhanced supervisory approach involves changes in the manner in which the Bank obtains and analyses consumer information. Sources of information have been significantly expanded from mainly complaints and submissions of product information, to include a more regular cycle of direct feedback obtained from engagements with consumers, as well as observations from the Bank's assessments of the significant activities and control functions of institutions supervised by the Bank. Conversely, any material concerns identified through the Bank's market conduct reviews will form inputs to the Bank's prudential assessments to the extent that it increases an institution's potential exposures to financial losses due to legal or regulatory actions, loss of reputational goodwill, or collective behaviours of FSPs that contribute to heightened systemic risks as experienced during the subprime crisis. The Bank will also leverage on its presence throughout the country to obtain early indications of unhealthy practices in specific localities before they spread to other parts of the country. In addition, the Bank intends to review the scope and form of current complaints and product information reported to improve the quality and consistency of the data collected for purposes of its risk analysis.

The Bank will use this information to detect new trends in product innovations and distributions that carry inherent risks to consumers, and to support more complete cross-sectoral and industry-wide assessments of risks which form the basis of the Bank's thematic reviews. This will provide a deeper understanding of the factors that influence consumer behaviours. For this purpose, the Bank will begin work in 2012 to examine how consumers relate their decision-making to general or specific information provided on financial products and services, and the factors that promote or impede the ability of consumers to change FSPs. The Bank will also begin gathering more detailed information to understand the ways in which the interplay between collective actions of FSPs and consumer behavioural biases can increase systemic risks.

The Bank's strengthened analysis of market conduct risk will drive several other important changes in its supervisory approach. Thematic work, targeting specific products, services and practices identified through the Bank's risk analysis, will assume a more prominent role in the Bank's approach. This allows

for dealing more comprehensively across the industry with identified conduct risks, strong signalling effects of areas of concern to the Bank, and greater impact achieved from more targeted and coordinated interventions applied consistently across FSPs.

The Bank will complement its thematic work with the current review of market conduct practices of individual financial institutions. However, this will be based on an enhanced process for identifying institutions that will be subject to individual monitoring and that will attract greater supervisory attention. The Bank expects to complete a baseline assessment of the most active banking institutions, insurers and takaful operators in the retail market, based on considerations of size, profile of target market, product complexity and distribution channels, by mid-2013. This work has already started and is based on a more structured framework to assess how well an FSP is controlling its conduct risks. FSPs will be assessed against expectations of fair and responsible practices which are enumerated in various guidelines and circulars issued by the Bank across seven key areas: (i) product development and governance; (ii) transparency and disclosure of information; (iii) sales and marketing practices; (iv) after-sales support; (v) personal data protection; (vi) management and control of third party service providers; and (vii) advisory and redress channels. The baseline assessment will drive the intensity of the Bank's supervisory activities for such individual institutions. The Bank will maintain an ongoing review of all institutions identified for individual monitoring to track developments that may alter the baseline assessment and by extension, the level of supervisory intensity applied to them.

As highlighted earlier, a higher level of engagements with FSPs represents an important aspect of the Bank's enhanced supervisory approach. The implementation of a more consistent framework for supervisory assessments in the area of market conduct will enable the Bank to engage FSPs more constructively on its market conduct concerns. The assessments also aim to bring greater focus by the board and senior management on their critical role in promoting an institution-wide culture of ethical and responsible dealings in their conduct of business. This includes their role in setting remuneration policies, and ensuring that conduct issues are given appropriate attention in the institution's operational and risk management activities. The board and senior management will be accorded greater accountability for conduct failures. The Bank's interactions with FSPs will continue to be closely coordinated across the supervisory functions of the Bank to reduce duplicative burdens on FSPs. This will also promote greater focus on the growing interaction between the management of financial and market conduct risks.



# 2011

## PAYMENT AND SETTLEMENT SYSTEMS

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## PAYMENT AND SETTLEMENT SYSTEMS

In 2011, the payment and settlement systems continued to support the growth of the banking sector and the broader economic and financial system. Apart from promoting the smooth operation of the payment and settlement systems and strengthening the mitigation of associated risks, the Bank's efforts were also directed towards fostering efficient and effective payment services to support Malaysia's transition towards becoming a high value-added, high-income economy. These included specific initiatives to create an integrated payment ecosystem that would accelerate the country's migration to electronic payments (e-payments), thus delivering greater economic efficiency. The year also saw the broadening of regional cooperation in developing the market infrastructure for payments and financial instruments, and greater financial integration with regional and global economies supported by resilient and robust payment and settlement systems.

Apart from promoting the smooth operation of the payment and settlement systems and strengthening the mitigation of associated risks, the Bank's efforts were also directed towards fostering efficient and effective payment services to support Malaysia's transition towards becoming a high value-added, high-income economy

### PROMOTING THE SMOOTH OPERATION OF PAYMENT AND SETTLEMENT SYSTEMS

In providing oversight of payment systems in Malaysia, the Bank aims to ensure the continued reliability of the major payment systems and

thus promote public confidence and trust in the retail payment systems and instruments. The Bank's primary focus of oversight is directed at the major interbank clearing and settlement systems and the widely used payment instruments listed in Table 4.1. These systems supported payment transactions amounting to RM49.5 trillion in 2011, which is equivalent to 58 times of Malaysia's gross domestic product (GDP). The objective of the Bank's oversight is to: (i) mitigate systemic risks that can arise from disruptions in the operations of the payment systems, including through the application of appropriate prudential and operating standards for the payment systems; (ii) promote the efficiency of payment systems; and (iii) accord adequate protection for users of the payment systems and instruments.

Table 4.1

#### Major Payment Systems and Instruments in Malaysia in 2011

System/Instrument	Volume (million)	Value (RM billion)
RENTAS <sup>1</sup>	3.4	47,175.6
National Electronic Cheque Information Clearing System (eSPICK)	204.9	1,979.9
Interbank GIRO (IBG), Financial Process Exchange (FPX) and Direct Debit	61.8	171.6
Shared ATM Network (SAN)	215.4	69.7
Debit Card and Credit Card	342.1	95.1
Touch 'n Go Prepaid Card	796.8	2.3

<sup>1</sup> Comprises Interbank Funds Transfer System and Scripless Securities Depository System

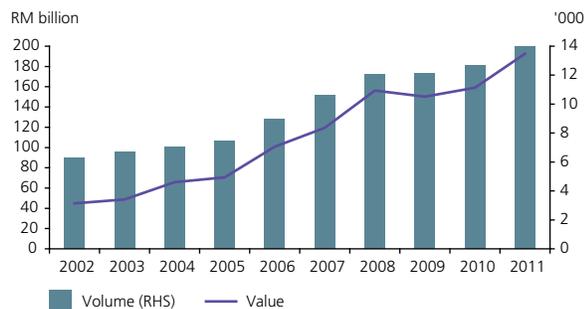
Source: Bank Negara Malaysia

### RENTAS

The Real-time Electronic Transfer of Funds and Securities System (RENTAS) is a real-time gross settlement system designed primarily for the transfer and settlement of high-value interbank payments and securities transactions. In 2011,

Chart 4.1

## RENTAS: Daily Average by Value and Volume



Source: Bank Negara Malaysia

transactions settled through RENTAS continued to increase in value to 55.3 times of Malaysia's GDP (2010: 51.5 times), with a higher daily average turnover following the increase in foreign direct investments and higher portfolio capital flows (Chart 4.1). Third party payments in RENTAS by individuals and corporates were also higher by 33% as efforts to promote the use of e-payments intensified further. While third party payments accounted for only 22% of the total settlement value in the system, the share of the number of transactions had progressively increased from 55% in 2007 to 69% in 2011.

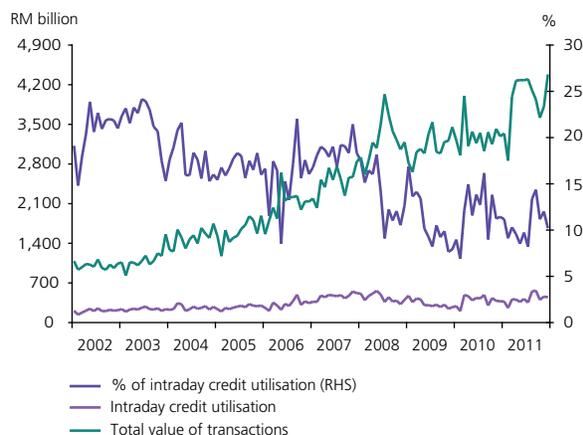
Throughout the year, RENTAS achieved 100% systems availability, with a significant reduction in the request for extension of operating hours

### Oversight over RENTAS

RENTAS is operated by the Bank's wholly-owned subsidiary, Malaysian Electronic Clearing Corporation Sdn. Bhd. (MyClear), in accordance with supervisory expectations and service level standards set by the Bank. These standards include having in place an effective risk management and control framework that supports the uninterrupted operations of RENTAS. Throughout the year, RENTAS achieved 100% systems availability. A significant

Chart 4.2

## Intraday Credit Usage



Source: Bank Negara Malaysia

reduction was also observed in participants' request for the extension of operating hours from 29 incidents in 2010 to only five in 2011, reflecting improvements in market efficiency and liquidity management by participants, which, combined with ample liquidity in the system, allowed participants to settle their payments early. Consequently, the share of intraday collateralised credit granted to participants to meet temporary liquidity shortages during the day fell from 11.9% in 2010 to 10.6% of the total settlement value (Chart 4.2).

To promote a sound and efficient infrastructure for payment and settlement systems, the Bank requires MyClear to ensure that RENTAS meets the international best practices as outlined in the Core Principles for Systemically Important Payment Systems (CPSIPS) issued by the Bank for International Settlements Committee on Payment and Settlement Systems (CPSS) and Recommendations for Securities Settlement Systems (RSSS) jointly issued by CPSS and the Technical Committee of the International Organisation of Securities Commission (CPSS-IOSCO). Self-assessments to evaluate RENTAS's operations against the CPSIPS and RSSS were carried out by MyClear on a regular basis. In 2011, MyClear has taken steps to further improve its observance of the three Core Principles that deal with operational risks (Core Principle VII), efficiency (Core Principle VIII) and access criteria (Core Principle IX). These involved a review of the participation rules, operational procedures and risk management framework for RENTAS,

**Table 4.2****Assessment of RENTAS against CPSIPS and RSSS**

	10 Core Principles for Systemically Important Payment Systems	19 Recommendations for Securities Settlement Systems
Observed	6	15
Broadly observed	3	2
Not applicable	1	2

Source: Bank Negara Malaysia

resulting in more stringent conditions for the extension of operating hours, more transparent access criteria, the adoption of higher standards with respect to system downtime and recovery period for business continuity, and more comprehensive coverage of disaster recovery live runs. With these measures, RENTAS now fully or largely observes all applicable core principles and recommendations (Table 4.2).

The Bank's oversight activities are directed towards ensuring operators of retail payment systems and issuers of payment instruments operate in a secure and reliable manner while safeguarding consumer interests

**Oversight over retail payments**

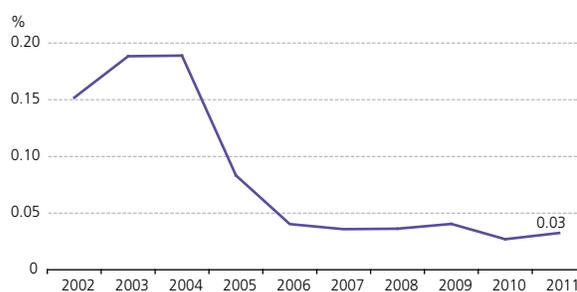
The Bank's oversight activities also cover the safety and efficiency of prominent retail payment systems and instruments to maintain public confidence in using such systems and instruments. Although payment transactions using these payment systems and instruments tend to be of relatively low value, the volume involved was substantial, accounting for 87.4% of the non-cash payments in 2011. In discharging the oversight responsibility on the retail payment systems, the Bank's resources have been directed on those payment systems, payment instruments and market infrastructure whose failure or disruption in operations could cause widespread public inconvenience, and which, if prolonged, could undermine confidence in the systems. Operators and issuers of prominent retail payment systems and instruments are

required to comply with the regulations and conditions for the operations, including minimum capital requirements, sound governance and risk management practices, adequate transparency including disclosures on fees and charges, effective anti-money laundering and counter financing of terrorism (AML/CFT) measures, and efficient operational procedures.

**Security of retail payments**

While technological advancements continue to transform the payment landscape and bring significant improvements in operational efficiencies and greater convenience to consumers, of importance is preventing the misuse of technology to defraud consumers. Overall fraud losses have remained negligible, accounting for only 0.001% of total value of retail payment transactions in 2011, a trend since 2006 following the industry-wide migration to chip-based Automated Teller Machine (ATM) cards and the Europay-MasterCard-Visa standard for credit cards. The Bank continues to monitor signs of emerging fraud trends and maintains collaborative efforts with the enforcement agencies, the payment industry and consumer associations to avert fraud incidents involving retail payment systems. This has contributed to ongoing enhancements to business practices to better protect consumers against new methods of perpetrating fraud, while a sustained consumer education programme has also helped to increase public awareness on fraud prevention measures.

In combating fraud, greater focus was given to promote the secure use of credit cards which is a widely used e-payment instrument in Malaysia. As a result, credit card fraud losses were contained to less than 0.05% since 2006 (Chart 4.3). More

**Chart 4.3****Credit Card Fraud: % of Total Transaction Value**

Source: Bank Negara Malaysia

than 60% of credit card fraud losses in 2011 involved card-not-present (CNP) transactions that did not require the presence of physical cards, such as for purchases made over the Internet, or through mail and telephone orders – a trend also observed globally with the continued rise in online transactions and e-commerce. Further measures have thus been taken to enhance the security features of the credit card infrastructure, including the introduction of transaction alerts via short message services and the adoption of stronger authentication methods for online transactions. Moving forward, the use of Personal Identification Number for verification of cardholder for card transactions performed at the point-of-sale may be adopted to replace the current requirement of signing on a paper receipt.

In the Internet banking space, fraud losses remained negligible during the year, accounting for only 0.0009% of total Internet banking transactions in value terms. However, incidents of phishing, which is a method used by fraudsters to deceive unsuspecting customers into divulging their login credentials and personal details, have continued to be prevalent. In 2011, the Bank and financial institutions intensified efforts to alert the public on the importance of safeguarding their personal information, leveraging on the media and other means of communication through frequent consumer touchpoints. Financial institutions had also deployed additional safeguards in securing Internet banking systems, such as stronger authentication methods and transaction monitoring. These efforts have contributed towards minimising losses due to phishing which decreased by 15.5% to approximately RM10 million in 2011. The Internet Banking Task Force (IBTF), which was set up in 2004 continues to have an important role in keeping abreast with developments and raising public awareness of increasingly sophisticated fraud techniques using more advanced technological capabilities. The members of the IBTF comprise the banking institutions, CyberSecurity Malaysia, the Malaysian Communications and Multimedia Commission, the Royal Malaysia Police and Bank Negara Malaysia.

### **Resilience**

The resilience of RENTAS to wide-scale operational disruptions was further

strengthened in 2011 following upgrades to the infrastructure supporting payments and securities settlements through RENTAS. This was reinforced by monthly disaster recovery (DR) exercises that were undertaken by MyClear which affirmed the robust business continuity strategy for RENTAS and eSPICK. The DR live exercises were designed to test the readiness and reliability of the recovery systems for RENTAS and eSPICK in the event of an operational failure at the production sites. During the year, MyClear also conducted two coordinated industry-wide DR live exercises which showed that all RENTAS and eSPICK participants were able to operate from their DR site and connect to the RENTAS and eSPICK host systems at the Bank's DR site. No major issues were encountered in both the independent and coordinated tests. To further enhance the business continuity arrangements for RENTAS, MyClear will introduce a contingency system of last resort in 2012 to provide a minimal level of essential services in the extremely unlikely event of a total failure of RENTAS at both the production and DR sites. The RENTAS-USD Clearing House Automated Transfer System (CHATS) Payment vs Payment (PvP) link with Hong Kong Interbank Clearing Limited (HKICL) also cleared three DR tests to affirm the connectivity between systems at the respective DR sites.

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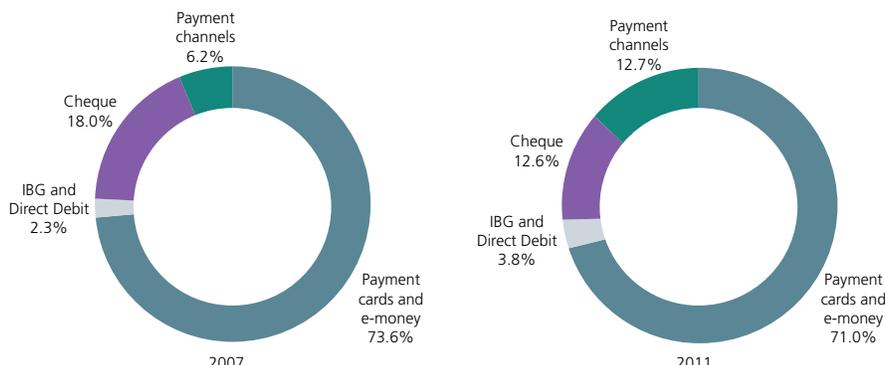
## The system capacity and technology platform of RENTAS were upgraded to improve the resilience of the infrastructure supporting RENTAS payments and securities settlements

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In the retail sector, payment system operators and payment instrument issuers are required to undertake similar DR exercises. Following the acquisition of the major retail payment systems by MyClear in September 2011, a post-acquisition DR exercise conducted jointly with member financial institutions and related service providers affirmed the resilience of the systems with no evidence of a material deterioration in services.

Chart 4.4

Share of Non-Cash Payments by Volume



Source: Bank Negara Malaysia

PAYMENT TRENDS

The Bank’s efforts in driving improvements in the efficiency of e-payment services coupled with support from the public and private sectors and improvements in the enabling environment, notably the advances in telecommunication services, have contributed to increasing the use of e-payments in Malaysia (Chart 4.4).

E-payments

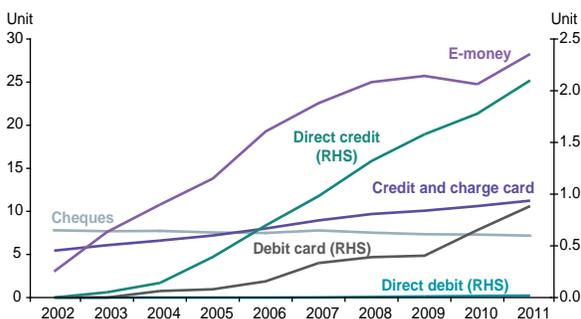
The average number of e-payment transactions per capita increased to 50 in 2011 (2010: 44). The increase was mainly attributable to the higher use of electronic money (e-money) and Internet banking. The mobile banking penetration rate was also higher in 2011, along with the wider use of ATM, debit cards and IBG for making payments.

Payment cards and e-money

E-payments at Electronic Funds Transfer at Point of Sale (EFTPOS) terminals continued to record steady growth with more consumers and merchants preferring the efficiency and convenience of payment cards over cash. Credit cards remained the predominant payment instrument, accounting for nine out of every 10 transactions at EFTPOS terminals. Spending via debit cards increased in 2011 by 37.1% and 33.1% in terms of volume and value respectively (Chart 4.6). This significant increase can largely be attributed to intensive marketing campaigns by banks to promote the use of debit cards and an increase in the number of international brand debit cards. An additional 5.1 million debit cards were issued during the year, bringing the total number of debit cards in the country to 35 million as at end-2011.

Chart 4.5

Non-Cash Payments per Capita



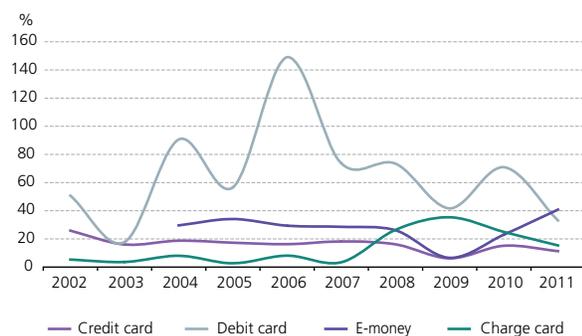
Source: Bank Negara Malaysia

Also underpinning the growth of payment cards has been an increase in the number of EFTPOS terminals. In 2011, more than 35,000 EFTPOS terminals were added, bringing the total number of EFTPOS terminals to 262,477 as at end-2011. Of these, 211,615 terminals accept international brand payment cards, whilst 141,076 and 31,236 accept domestic debit cards and e-money respectively.

E-money usage continued to expand in 2011, growing by 15.4% and 40.8% in terms of the number and value of transactions respectively. 806.8 million transactions worth RM3.8 billion were made in 2011 (2010: 699.3 million transactions worth RM2.7 billion). As e-money

Chart 4.6

### Payment Cards: Annual Growth by Transaction Value



Source: Bank Negara Malaysia

transactions were predominantly concentrated in the transportation sector, the growth was attributed largely to higher traffic flows along tolled highways and the roll-out of cashless ticketing machines on public buses operated by a major bus operator. The wider use of e-money was also observed for transactions in the mass transit and rail sectors which increased almost three-fold to 61.2 million transactions in 2011. For parking, more than 12.1 million payments were made using e-money, up by 45.8% from 2010. These trends clearly point to the growing public appeal and acceptance of e-money in Malaysia.

#### IBG and FPX

The value of IBG transactions increased by 31% to RM166.1 billion in 2011. Over RM60 billion of this was attributed to Internet and mobile banking transactions. The implementation of electronic dividend (e-Dividend) and electronic share payment (e-Share Payment) in the capital market and electronic tax refunds by the Inland Revenue Board of Malaysia, were key contributors to this growth. With the addition of two participating banks in the IBG, a total of 37 member banks now offer IBG facilities, making it accessible to the customers of nearly all banks in Malaysia. The volume and value of FPX transactions also increased to 878,357 transactions valued at RM618.9 million (2010: 488,899 transactions valued at RM309.9 million). These were mostly for purchases of airline tickets and repayment of consumer credit loans for purchases of home appliances in the retail sector. The wider adoption of e-payments for Government and insurance transactions also contributed to the increase.

#### Electronic channels (e-channels) and other electronic funds transfer systems

The use of Internet banking has continued to increase with wider household access to broadband services under the National Broadband Initiative. In tandem with the significant growth in the household broadband penetration rate from 15.5% in 2007 to 62.3% in 2011, the number of active subscribers of Internet banking has more than doubled over the past five years. Over the same period, the ratio of Internet banking turnover to GDP has tripled. Fund transfers and salary payments by the corporate sector accounted for the bulk of this growth.

The ATM is also widely used for interbank fund transfers, loan and card repayments, and bill payments. In 2011, 42.1 million financial transactions totalling RM37.3 billion were made via ATM (2010: 38.8 million transactions worth RM31.3 billion). During the year, the domestic SAN operated by the Malaysian Electronic Payment System Sdn. Bhd. (MEPS) expanded its membership to include five locally-incorporated foreign banks, allowing nearly all account holders in Malaysia access to 11,689 ATMs nationwide via a single network.

The use of mobile phones for payments has also expanded following moves by banks to enhance mobile banking applications for smart phone users to support a wider range of mobile banking transactions, and the introduction of mobile banking services by a major bank during the year. As with ATMs, the mobile banking channel is commonly used for bill payments, loan and credit card repayments and fund transfers.

#### Cash

Cash-in-circulation (CIC), a proxy for cash usage, increased from RM47.7 billion in 2010 to RM53.5 billion in 2011. While remaining high, its share of the total value of private consumption expenditure declined from 82% in 2000 to 68% in 2011, signifying the displacement of cash by more convenient e-payment alternatives, such as payment cards and electronic banking. The CIC-to-GDP ratio increased slightly to 6.3% in 2011, a level that is still considerably lower than other regional economies. It is, nevertheless, higher than levels observed in countries where payment cards are widely used, such as Australia (4.6%), Canada (4%) and New Zealand (2.2%).

## **Cheques**

While still representing an important payment instrument in Malaysia, cheque usage has declined to about seven cheques per capita from eight cheques in 2007. In 2011, the total number of cheques cleared decreased further to 204.9 million (2010: 206.7 million). This is due largely to the use of e-channels for dividend payments and the lower use of cheques for payments below RM1,000. While the value of cheques cleared increased to RM2 trillion in 2011 (2010: RM1.8 trillion), its share of non-cash payments has declined to 52% (2010: 59%). Payments by cheque as a share of private consumption has also declined from 7.9% to 5.2% during this recent decade as more individuals switched to e-payments.

## **PROMOTING EFFICIENT AND EFFECTIVE PAYMENT SERVICES**

In promoting e-payments as a viable alternative to paper-based payment, the Bank has focused on enhancing the key attributes of payment services that are important to users, namely the accessibility of payment services, the speed at which funds are made available to beneficiaries, the certainty of payment to the correct recipients, and the ease of identifying the purpose of payments. These attributes are the main reasons that users consider in choosing e-payments as a means of payment. In 2011, several initiatives were taken to further improve these attributes.

### ***Wider access via mobile banking and payments ecosystem***

The first phase of developing an open ecosystem that would enable the offering of mobile banking and payment services via a multi-bank and mobile network neutral infrastructure has been completed. The services, offered under the brand label “MyMobile”, are currently being piloted by three major banks. MyMobile is offered in partnership with two major mobile network operators and functions using the Unstructured Supplementary Service Data (USSD)<sup>1</sup> technology. Key features of MyMobile include the use of a common USSD short code (\*500\*888#) by all participating banks for their customers to access MyMobile services, and standardised menu design and banking procedures. Registered users can view transaction history, perform balance enquiries, fund transfers and bill payment transactions at any time and from any location. An attractive feature of MyMobile is its ability

to support fund transfers using the mobile phone numbers of beneficiaries instead of bank account numbers. This eliminates the need for bank account details to be divulged to senders as the bank account number of the beneficiary is provided directly to the bank of his or her choice either by prior registration with the bank, or when the funds are to be transferred. With its successful launch, more banks and mobile network operators are expected to participate in the open platform with more services added to the MyMobile offerings.

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The Bank accords priority to strengthening the key attributes of payment services that are important to users, namely the accessibility of payment services, the speed at which funds are made available to beneficiaries, the certainty of payment to the correct recipients, and the ease of identifying the purpose of payments

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### ***Faster payment services***

The system and process enhancements undertaken by the banking industry have delivered substantial improvements in the speed of interbank fund transfers. Fund transfers between accounts within the same bank are already on a real-time basis. For payments made via the IBG before noon, funds are available to beneficiaries on the same day. The member banks of RENTAS are also taking steps to reduce the time taken to credit a beneficiary’s account to within one hour from the time the payment is initiated. This is expected to be in place by the middle of 2012. With these improvements, Malaysia’s electronic fund transfer services will be among the most efficient in the region.

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<sup>1</sup> USSD is a technology used by a GSM network to send information, usually text menus between a mobile phone and an application on the network. A USSD session is requested through the use of short codes.

### ***Certainty of beneficiary***

An increasing number of banks have been providing additional validations to verify the proper beneficiaries of fund by confirming the identity card or business registration number in addition to the bank account number, prior to crediting funds into a beneficiary's account. To support the wider implementation of such validations across the industry, the Bank is working in collaboration with the National Registration Department of Malaysia and the Association of Banks in Malaysia to capture the MyKad numbers of all bank account holders by the first half of 2012.

### ***Efficient operational process***

To improve the capture of payment and remittance information, senders can now specify the purpose of transactions and beneficiaries can obtain the payment details from their banks upon request. This will allow payments to be more easily identified for reconciliation purposes. For a longer-term solution, work has commenced to formulate a framework on payment reference standards, covering electronic fund transfers, debit card transactions and bill payments, which would capture minimum payment information in a consistent manner across the various payment services. This would eliminate the need to perform tedious, time-consuming and costly reconciliations of payables and receivables due to inadequate reference information accompanying electronic fund transfers.

### ***Encouraging competition and market entry***

The Bank encourages all players to adopt international standards to facilitate interoperability, and to enhance the security and operational efficiency of the payment infrastructure. This also contributes to promoting fair and healthy competition in the retail payment sector, while making e-payments more convenient for consumers. The benefits from promoting consistent standards for e-payments have also become more pronounced in recent years, as more non-bank entities entered the payment space to provide a variety of payment services. In particular, the Bank encourages the adoption of the international contactless standards, such as the ISO 14443 standard, for e-money platforms to improve the security and operational efficiency of the card-based e-money

infrastructure and to allow consumers to use e-money seamlessly when making payments in any sector without the need to switch between cards for different purchases.

## **DRIVING E-PAYMENTS IN PRIORITY SECTORS**

A key strategy in the Bank's efforts to encourage the increased adoption of e-payments has been to focus on priority sectors that have high payment transaction flows, and where the Bank is able to work collaboratively with specific key stakeholders to accelerate the migration to e-payments. In 2011, further progress was made towards increasing e-payment usage for Government payments and receipts, and for transactions in the financial and transportation sectors.

### ***Government***

Having migrated nearly all Government payments to electronic fund transfers, the Government has set an ambitious goal to achieve 90% of all revenue collection and payments by the public to be effected via e-channels by 2015. During the year, the Government extended e-payment facilities further to various government agencies and offered wider choices of e-payment alternatives to the public. 236 government agencies now offer online payment services, up from 116 agencies in 2010. Federal and state agencies, local authorities, public universities and government-linked companies currently offer a combined total of 449 online payment services (2010: 281). As a result, payments to government agencies through the FPX system grew by 77.6% to 333,771 transactions valued at RM120.9 million in 2011 (2010: 187,958 transactions valued at RM70.9 million). The expansion of card payment facilities for agent payments at branches of the Road Transport Department of Malaysia nationwide has also contributed to a 50.2% increase in transactions using payment cards to 183,704 transactions amounting to RM91.8 million in 2011. The Government also plans to leverage on the mobile banking and payments ecosystem as a new channel to receive payments from the public with a launch by pilot agencies expected later in 2012.

### ***Banking, Insurance and Takaful***

Banking institutions have ceased cheque issuances for settlements among themselves, and are committed to progressively migrate

all internal payments (such as housing loan disbursements, payments to statutory bodies, utility companies, panel hospitals and clinics, board members, service providers and insurance companies) to e-channels. In addition, banks have also continued to introduce banking products with fee structures that incentivise the adoption of e-payments such as IBG and Interbank Funds Transfers via MEPS' SAN. Work is also progressing to increase the transaction limits for fund transfers.

Encouraging progress has been made in the adoption of e-payments by life insurers, with payments to agents, staff and statutory bodies having largely migrated to e-payments. The Bank is now working towards making e-payment options available for claim payments, which represent the bulk of payments made by insurers.

### **Capital Market**

Following the collaboration between the Bank and the Securities Commission to implement the e-Share Payment and e-Dividend initiatives, 59.4% of total dividend payments amounting to RM43.4 billion were made via e-Dividend in 2011, displacing 3.5 million cheques. About 2.1 million share payments valued at RM308 billion were made using e-channels. Building on the momentum of these two initiatives, efforts to accelerate the adoption of e-payments in the capital market have been extended to initial public offering (IPO) refunds, subscriptions and redemptions of unit trusts, and subscriptions of rights issues.

The first phase of the electronic refunds (e-refunds) for IPO applications was implemented in March 2012, allowing investors to enjoy same-day crediting of all types of refunds for IPO applications made via the electronic subscription service, including refunds for the difference between the final price and the indicative offer price. E-refunds for manual applications are expected to be operational in the second half of 2012. The unit trust industry commenced offering e-payments for income distributions and the redemption of units in the second half of 2011, and more investors are expected to avail of the e-payment options in 2012. Leveraging on the banks' electronic IPO channels, the Investor Corporate Exercise (ICE) framework was formulated to promote e-payments for corporate exercises undertaken by listed companies. Implementation of the ICE framework, with the participation of three pilot banks, is targeted for end-2012 and will be staggered, beginning with

the subscription of rights issues and refunds arising from excess rights applications.

The e-Dividend facility, which allows investors to receive dividend payments via direct credit into their bank accounts, will also be adopted in 2012 for other cash distributions, namely interest payments on loan or debenture stocks, coupon payments for listed bonds, income distributions made by collective investment schemes such as real estate investment trusts and exchange traded funds, capital repayments and cash payments in lieu of odd lots arising from distributions in specie.

### **Transportation**

In the transportation sector, the Integrated E-Payment Platform for Transportation (IEPT) Alignment Committee provides strategic direction on the formulation of a holistic e-payment master plan to promote the use of card payments in the transportation sector. Its members include the Bank and key stakeholders in the transportation sector. The IEPT master plan is aligned with one of the seven initiatives under the National Key Result Areas of the Government Transformation Programme 'Improving Urban Public Transport' and sets out a roadmap for the implementation of an Integrated Smart Ticketing system that would enable the seamless use of transport services across multiple transit operators and different modes of public transportation. The master plan is expected to significantly boost the penetration rate of e-money usage in the transportation sector.

## **MODERNISING RENTAS TO SUPPORT THE STRENGTHENING OF FINANCIAL INTEGRATION WITH THE REGION**

The Bank, via MyClear, has continued its initiatives to improve and enhance the capability of RENTAS in supporting cross-border payments and settlements. In March 2012, the onshore multi-currency funds and securities settlement facility was launched for renminbi (RMB) settlements. The RMB settlement facility in RENTAS will enhance the efficiency of RMB trade settlements for Malaysian corporates by reducing costs and ensuring finality of settlements.

During the year, MyClear also opened up participation in RENTAS to foreign entities. On 27 June 2011, Euroclear, an International Central Securities Depository, became the first foreign entity to be admitted as a member of RENTAS. With this, international investors can

now seamlessly access the securities and sukuk issued and deposited in RENTAS via Euroclear and its participants.

Efforts at the regional level to improve the post-trade processing infrastructure in Asia have also progressed under the Pan-Asian Central Securities Depository Alliance pilot platform which will link RENTAS with Euroclear. This will allow MyClear to provide custodian services for securities denominated in any currency. The Bank worked closely with central banks and central securities depositories in the region to implement the key development initiatives that has supported the successful implementation of the pilot platform in March 2012.

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The RMB settlement facility in RENTAS will enhance the efficiency of RMB trade settlements for Malaysian corporates by reducing costs and ensuring finality of settlements

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### **BROADENING REGIONAL COOPERATION IN PAYMENT INFRASTRUCTURE DEVELOPMENT**

Towards realising the ASEAN Economic Community vision by 2015, broad work plans, guided by key milestones for the ASEAN Financial Integration Framework have been formulated and endorsed by the ASEAN Central Bank Governors. These include strategic recommendations proposed by the Working Committee on Payment and Settlement Systems to improve the efficiency of cross-border payment and settlement services in ASEAN. As a member of the Committee, the Bank led the study on cross-border trade settlement and contributed inputs to studies in other focus areas covering retail purchases, remittance, standardisation and capital market transactions. These studies, which were concluded in the early half of 2011, form the basis for several strategic recommendations made by the Committee to address the specific development priorities of the ASEAN countries. One of the key priorities is to enhance the efficiency and affordability of cross-border payments and

settlements in ASEAN, supported by the wider use of international standards for payments and a greater convergence in legal frameworks. In the near term, the Committee will focus on conducting a feasibility study on potential payment system linkages, such as expanding the regional retail payment network to achieve greater cross-border payment efficiency, capacity building and joint research on specific issues.

### **BUILDING AN INTEGRATED E-PAYMENT INFRASTRUCTURE**

To effectively carry out its mandated role of driving the e-payment agenda, MyClear acquired IBG, FPX, e-Debit, the Direct Debit system and the MyMobile platform from MEPS in September 2011. The acquisition of these facilities by MyClear aims to rationalise overlapping e-payment infrastructures to reduce the cost of long-term investments, achieve higher levels of efficiency in e-payment services, and introduce a pricing structure that would encourage higher consumer adoption of e-payment services. With the acquisition, the Bank will be better positioned to drive cost reductions and efficiency improvements in the provision of e-payment services.

### **MOVING FORWARD**

Given the importance of e-payments in enhancing economic efficiency, the Bank will continue to focus on positioning **e-payments as the preferred medium for economic transactions in Malaysia**, and on elevating the country's migration to e-payments to the next level.

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The Financial Sector Blueprint focuses on positioning e-payments as the preferred medium for economic transactions in Malaysia

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This is outlined in five recommendations that encompass 19 key initiatives in the Financial Sector Blueprint 2011-2020. The success of these initiatives will be measured by four key performance indicators (Table 4.3), and will bring Malaysia closer to the level of e-payment adoption that has been achieved by others that have successfully migrated to e-payments.

Table 4.3

## Key Performance Indicators

Key Performance Indicators	Target by 2020	2010
E-payment transactions per capita	200 transactions per capita	44 transactions per capita
Debit card transactions per capita	30 transactions per capita	0.6 transaction per capita
Point-of-sale terminals per 1,000 inhabitants	25 terminals per 1,000 inhabitants	8 terminals per 1,000 inhabitants
Number of cheques cleared	100 million	207 million

Source: Bank Negara Malaysia

The realisation of these shared goals will require common focus and commitment from all stakeholders. Among the immediate priorities are to promote greater interoperability through

enhancements to the payment infrastructure, and to implement appropriate pricing reforms to strengthen incentives for the migration to more cost-effective payment modes.



# 2011

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Table A.1

## Key Financial Soundness Indicators

	As at end				
	2007	2008	2009	2010	2011 <sup>p</sup>
	% (or otherwise stated)				
<b>Banking System</b>					
Risk-Weighted Capital Ratio	13.2	12.6	15.4	14.8	15.1
Core Capital Ratio	10.2	10.6	13.8	13.0	13.2
Return on Assets	1.5	1.5	1.2	1.5	1.6
Return on Equity	19.8	18.6	14.0	16.6	17.4
Liquid Assets to Total Assets	14.3	14.6	14.2	15.6	16.0
Liquid Assets to Short-term Liabilities	38.5	41.9	42.9	48.1	45.5
Net Impaired Loans Ratio	3.2	2.2	1.8	2.3	1.8
Duration-Weighted Net Position to Capital Base	4.4	3.8	5.0	4.9	4.9
Net Open Position in FCY to Capital Base <sup>1</sup>	5.1	10.5	12.6	8.9	7.2
Equity Holdings to Capital Base	2.5	0.9	0.9	1.2	0.9
<b>Insurance &amp; Takaful Sector</b>					
Capital Adequacy Ratio (conventional only)	158.4	187.6	225.7	224.6	222.5
Profit before Tax (RM billion)	2.6	2.0	3.6	4.3	2.7
<b>Life Insurance &amp; Family Takaful</b>					
Excess Income over Outgo (RM billion)	14.6	8.7	12.6	14.1	12.7
New Business Premiums / Contributions (RM billion)	9.3	9.4	10.0	11.2	10.9
Capital Adequacy Ratio (conventional only)	151.8	200.0	254.4	253.2	248.5
<b>General Insurance &amp; General Takaful</b>					
Underwriting Profit (RM billion)	-0.1	0.2	0.9	0.9	0.6
Operating Profit (RM billion)	1.3	0.8	2.1	2.1	1.8
Gross Direct Premiums / Contributions (RM billion)	11.0	12.0	12.8	14.1	15.4
Claims Ratio	65.0	61.2	60.3	62.1	66.0
Capital Adequacy Ratio (conventional only)	182.1	181.1	184.9	204.4	222.9
<b>Household (HH) Sector</b>					
HH Debt (RM billion)	422.9	465.2	510.8	580.6	653.1
HH Financial Asset (RM billion)	1,160.0	1,068.2	1,225.8	1,383.3	1,499.8
HH Debt to GDP Ratio	65.9	62.7	75.1	75.8	76.6
HH Financial Assets to Total HH Debt Ratio	274.3	229.6	240.0	238.3	229.6
HH Liquid Financial Assets to Total HH Debt Ratio	175.3	141.5	152.6	154.1	148.1
Debt Repayment Ratio	41.1	39.4	49.0	47.8	48.1
Impaired Loans Ratio of HH Sector	5.3	4.1	3.1	2.3	1.8
<b>Corporate Sector</b>					
Return on Assets	5.8	3.7	4.3	4.8	4.8
Return on Equity	11.5	7.3	8.0	8.9	8.4
Debt-to-Equity Ratio	47.9	52.7	44.7	46.7	44.8
Interest Coverage Ratio (times)	5.5	4.3	4.9	7.5	6.3
Operating Margin	10.9	9.0	10.7	10.7	11.4
Impaired Loans Ratio of Business Sector	8.0	6.0	4.7	5.2	4.1
<b>Development Financial Institutions<sup>2</sup></b>					
Lending to Targeted Sectors (% change)	18.7	16.3	18.5	13.0	7.1
Deposits Mobilised (% change)	12.4	18.5	14.4	20.5	16.1
Impaired Loans Ratio	8.8	6.6	6.8	9.0	7.2
Return on Assets	1.9	2.9	2.3	2.2	2.7

<sup>1</sup> Beginning January 2008, the computation of net open position to capital base is based on Basel II Standardised Approach for Market Risk for foreign exchange risk

<sup>2</sup> Refers to development financial institutions under the Development Financial Institutions Act 2002

<sup>p</sup> Preliminary

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

Source: Bank Negara Malaysia, Bloomberg and internal computation

Table A.2

## Key Financial Indicators - Islamic Banking and Takaful Sectors

	As at end				
	2007	2008	2009	2010	2011 <sup>p</sup>
<b>Islamic Banking System</b>	RM million (or otherwise stated)				
Total assets <sup>1</sup>	203,868.8	250,988.1	303,244.1	351,195.0	434,853.3
% of total assets of entire banking system <sup>1</sup>	15.5	17.4	19.6	20.7	22.4
Total financing <sup>1</sup>	121,988.9	150,499.0	186,864.3	222,214.3	268,250.5
% of total financing of entire banking system <sup>1</sup>	17.3	18.9	21.6	22.7	24.3
Total deposits <sup>1</sup>	154,763.0	194,385.5	235,938.1	277,549.8	340,249.4
% of total deposits of entire banking system <sup>1</sup>	16.8	18.8	20.7	22.6	24.4
	% (or otherwise stated)				
Risk-Weighted Capital Ratio	15.8	14.0	15.6	15.5	14.3
Core Capital Ratio	13.0	11.8	13.2	13.3	11.5
Return on Assets	1.3	1.0	1.3	1.3	1.0
Net Impaired Financing Ratio <sup>2</sup>	3.3	2.3	2.2	2.1	1.5
<b>Takaful Sector</b>	RM million (or otherwise stated)				
<b>Takaful Fund Assets</b>	8,822.1	10,570.0	12,445.8	14,659.3	17,042.6
Family	7,445.7	8,900.6	10,536.6	12,420.9	14,427.7
General	1,376.4	1,669.4	1,909.2	2,238.3	2,614.8
% of insurance and takaful industry	7.1	8.0	8.3	8.7	8.9
<b>Net Contributions Income</b>	2,569.7	3,026.8	3,523.6	4,342.4	4,864.5
Family	1,990.5	2,374.7	2,719.8	3,392.8	3,705.8
General	579.3	652.1	803.8	1,015.5	1,158.7
% of insurance and takaful industry	9.5	10.7	11.8	14.5	14.9
<b>Family Takaful</b>					
New business contributions	1,488.6	1,981.7	2,177.8	2,587.1	2,695.2
<b>General Takaful</b>					
Gross direct contributions	766.0	869.4	1,052.1	1,325.7	1,599.5
Claims ratio	71.3	50.1	57.0	59.6	66.1

<sup>1</sup> Including development financial institutions under the Development Financial Institutions Act 2002

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

<sup>p</sup> Preliminary

Table A.3

Banking System<sup>1</sup>: Income and Expenditure

	For the calendar year				
	2007	2008	2009	2010	2011 <sup>p</sup>
	RM million				
Interest income	59,789.9	63,146.9	56,364.5	65,681.9	73,695.6
Less: Interest expense	32,847.4	34,058.1	26,557.8	31,331.3	38,893.2
Net interest income	26,942.6	29,088.8	29,806.8	34,350.6	34,802.4
Add: Fee-based income	6,896.4	7,385.8	7,856.8	8,562.6	8,948.9
Less: Staff cost	8,557.4	9,342.5	9,838.8	11,467.0	12,843.5
Overheads	9,522.0	10,826.0	10,840.7	12,209.4	11,830.5
Gross operating profit	15,759.6	16,306.1	16,983.9	19,236.9	19,077.3
Less: Impairment <sup>2</sup> and other provisions	5,370.1	4,170.1	4,903.7	4,366.9	2,799.3
Gross operating profit after provision	10,389.4	12,136.0	12,080.3	14,870.0	16,277.9
Add: Other income	7,312.4	7,033.8	4,910.5 <sup>3</sup>	8,088.7	9,944.0
<b>Pre-tax profit</b>	<b>17,701.9</b>	<b>19,169.7</b>	<b>16,990.8</b>	<b>22,958.7</b>	<b>26,221.9</b>
Pre-tax profit / Average assets (%)	1.5	1.5	1.2	1.5	1.6
Pre-tax profit / Average shareholders' funds (%)	19.8	18.6	13.9	16.6	17.4
Pre-tax profit / Average employee (RM'000)	165.0	169.5	148.5	193.5	212.3
Cost incurred per ringgit of revenue earned (sen)	43.9	46.4	48.6	46.4	46.0
Cost incurred per ringgit of net interest income (sen)	67.1	69.3	69.4	68.9	70.9
Overheads to staff cost (%)	111.3	115.9	110.2	106.5	92.1
Staff cost per employee (RM'000)	79.8	82.6	86.1	96.6	104.0

<sup>1</sup> Includes Islamic banks

<sup>2</sup> Refers to individual and collective impairment provisions in accordance with the Guidelines on the Classification and Impairment Provisions for Loans/Financing

<sup>3</sup> Includes a significant non-recurring impairment on overseas investment by a commercial bank

<sup>p</sup> Preliminary

Note: Numbers may not necessarily add up due to rounding

Table A.4

Commercial Banks<sup>1</sup>: Income and Expenditure

	For the calendar year				
	2007	2008	2009	2010	2011 <sup>p</sup>
	RM million				
Interest income	56,890.9	60,568.2	54,418.1	63,744.4	71,683.6
Less: Interest expense	30,619.2	32,180.0	25,402.6	30,103.6	37,392.1
Net interest income	26,271.7	28,388.2	29,015.5	33,640.8	34,291.5
Add: Fee-based income	5,596.7	5,967.2	6,289.2	6,590.5	6,902.0
Less: Staff cost	7,753.0	8,515.3	9,136.4	10,550.9	11,737.8
Overheads	8,590.1	9,949.8	10,065.5	11,105.8	10,830.5
Gross operating profit	15,525.4	15,890.3	16,102.9	18,574.5	18,625.2
Less: Impairment <sup>2</sup> and other provisions	5,517.7	4,128.3	5,011.4	4,170.7	2,887.3
Gross operating profit after provision	10,007.7	11,762.0	11,091.5	14,403.8	15,737.9
Add: Other income	5,647.8	6,726.6	4,667.5 <sup>3</sup>	7,802.8	9,383.4
<b>Pre-tax profit</b>	<b>15,655.4</b>	<b>18,488.6</b>	<b>15,759.1</b>	<b>22,206.5</b>	<b>25,121.3</b>
Pre-tax profit / Average assets (%)	1.4	1.5	1.2	1.6	1.6
Pre-tax profit / Average shareholders' funds (%)	19.2	19.6	13.9	17.2	17.7
Pre-tax profit / Average employee (RM'000)	153.6	176.2	148.4	201.9	220.1
Cost incurred per ringgit of revenue earned (sen)	43.6	44.9	48.0	45.1	44.6
Cost incurred per ringgit of net interest income (sen)	62.2	65.0	66.2	64.4	65.8
Overheads to staff cost (%)	110.8	116.8	110.2	105.3	92.3
Staff cost per employee (RM'000)	76.1	81.2	86.1	95.9	102.8

<sup>1</sup> Includes Islamic banks

<sup>2</sup> Refers to individual and collective impairment provisions in accordance with the Guidelines on the Classification and Impairment Provisions for Loans/Financing

<sup>3</sup> Includes a significant non-recurring impairment on overseas investment by a commercial bank

<sup>p</sup> Preliminary

Note: Numbers may not necessarily add up due to rounding

Table A.5

## Investment Banks: Income and Expenditure

	For the calendar year				
	2007	2008	2009	2010	2011 <sup>p</sup>
	RM million				
Interest income	2,899.0	2,578.6	1,946.4	1,937.5	2,012.1
Less: Interest expense	2,228.2	1,878.0	1,155.2	1,227.7	1,501.1
Net interest income	670.9	700.6	791.2	709.9	511.0
Add: Fee-based income	1,299.7	1,418.5	1,567.5	1,972.1	2,046.9
Less: Staff cost	804.4	827.2	702.5	916.0	1,105.7
Overheads	932.0	876.1	775.2	1,103.6	1,000.1
Gross operating profit	234.2	415.8	881.0	662.4	452.1
Less: Impairment <sup>1</sup> and other provisions	-147.5	41.8	-107.7	196.2	-87.9
Gross operating profit after provision	381.8	373.9	988.7	466.2	540.0
Add: Other income	1,664.7	307.1	243.0	285.9	560.6
<b>Pre-tax profit</b>	<b>2,046.4</b>	<b>681.1</b>	<b>1,231.7</b>	<b>752.1</b>	<b>1,100.6</b>
Pre-tax profit / Average assets (%)	2.9	1.0	2.0	1.1	1.7
Pre-tax profit / Average shareholders' funds (%)	26.4	7.5	14.2	7.8	12.3
Pre-tax profit / Average employee (RM'000)	276.9	83.6	150.0	86.3	117.4
Cost incurred per ringgit of revenue earned (sen)	47.8	70.2	56.8	68.0	67.5
Cost incurred per ringgit of net interest income (sen)	258.8	243.1	186.8	284.5	412.1
Overheads to staff cost (%)	115.9	105.9	110.4	120.5	90.5
Staff cost per employee (RM'000)	108.8	101.6	85.5	105.1	118.0

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

<sup>p</sup> Preliminary

Note: Numbers may not necessarily add up due to rounding

Table A.6

## Islamic Banking System: Income and Expenditure

	For the calendar year				
	2007	2008	2009	2010	2011 <sup>p</sup>
	RM million				
Income	7,688.8	9,123.7	9,707.7	11,795.2	13,627.9
Less: Expense	3,528.8	4,161.6	3,611.3	4,955.9	6,475.3
Net income	4,159.9	4,962.2	6,096.4	6,839.2	7,152.6
Add: Fee-based income	461.4	489.0	595.2	790.1	836.2
Less: Staff cost	800.0	886.2	932.8	1,166.4	1,380.9
Overheads	1,454.6	1,873.0	2,100.4	2,398.5	2,475.1
Gross operating profit	2,366.7	2,692.0	3,658.4	4,064.4	4,132.8
Less: Impairment <sup>1</sup> and other provisions	917.9	1,200.6	1,386.4	1,299.9	1,643.9
Gross operating profit after provision	1,448.8	1,491.4	2,272.0	2,764.5	2,488.9
Add: Other income	445.3	319.3	368.9	434.4	579.5
<b>Pre-tax profit</b>	<b>1,894.1</b>	<b>1,810.7</b>	<b>2,640.9</b>	<b>3,198.9</b>	<b>3,068.4</b>
Pre-tax profit / Average assets (%)	1.3	1.0	1.3	1.3	1.0
Pre-tax profit / Average shareholders' funds (%)	15.6	12.4	13.9	15.8	13.7
Pre-tax profit / Average employee (RM'000) <sup>2</sup>	130.4	107.7	100.6	138.2	113.1
Cost incurred per ringgit of revenue earned (sen)	26.2	27.8	28.4	27.4	25.6
Cost incurred per ringgit of net income (sen)	54.2	55.6	49.8	52.1	53.9
Overheads to staff cost (%)	181.8	211.4	225.2	205.6	179.2
Staff cost per employee (RM'000) <sup>2</sup>	55.1	52.7	45.3	50.4	50.9

<sup>1</sup> Refers to individual and collective impairment provisions

<sup>2</sup> Number of employees is estimated based on the percentage of institution's Islamic assets

<sup>p</sup> Preliminary

Note: Numbers may not necessarily add up due to rounding

Beginning financial year 2010, banking institutions are required to report impaired financing in accordance with the Guideline on the Classification and Impairment Provisions for Financing

Table A.7

## Banking System: Network and Workforce

	As at end				
	2007	2008	2009	2010	2011 <sup>p</sup>
Number of institutions	47	54	54	55	56
<i>Commercial banks</i>	22	22	22	23	25
<i>Investment banks</i>	14	15	15	15	15
<i>Islamic banks</i>	11	17	17	17	16
Office network	2,245	2,271	2,298	2,312	2,435
<i>Commercial banks</i>	1,968	1,979	1,999	2,006	2,050
<i>Investment banks</i>	120	131	131	133	133
<i>Islamic banks<sup>1</sup></i>	1,272	2,039	2,087	2,102	2,147
Number of banks with internet services	18	21	24	26	27
Number of employees	109,641	114,856	114,804	120,572	124,625
<i>Commercial banks</i>	96,146	99,593	98,846	103,089	105,887
<i>Investment banks</i>	7,721	8,561	8,129	8,972	9,505
<i>Islamic banks</i>	5,774	6,702	7,829	8,511	9,233

<sup>1</sup> Includes Islamic bank branches that are shared with conventional bank branches

<sup>p</sup> Preliminary

Table A.8

Commercial Banks<sup>1</sup>: Commitments and Contingencies

	As at end				
	2007	2008	2009	2010	2011 <sup>p</sup>
	RM million				
Assets sold with recourse and commitments with drawdown	19,574.6	12,744.2	5,871.4	6,247.1	6,509.9
Credit extension commitments	303,862.7	348,118.2	376,604.0	379,644.9	409,956.4
Direct credit substitutes	19,424.7	21,179.7	19,922.4	19,293.0	21,302.3
Foreign exchange related contracts	368,769.5	364,511.3	341,651.1	407,639.0	493,371.0
Interest rate related contracts	642,812.1	752,070.1	648,232.1	643,923.3	695,982.4
Trade-related contingencies	17,756.9	13,608.4	12,553.5	12,154.7	11,721.6
Transaction-related contingencies	29,031.1	34,035.8	35,873.1	35,037.2	41,686.5
Underwriting obligations	2,282.7	1,383.5	1,532.2	1,187.7	789.6
Others	44,026.3	52,838.9	54,334.2	61,185.2	65,938.4
<b>Total</b>	<b>1,447,540.5</b>	<b>1,600,490.1</b>	<b>1,496,574.0</b>	<b>1,566,312.2</b>	<b>1,747,258.0</b>

<sup>1</sup> Includes Islamic banks

<sup>p</sup> Preliminary

Note: Numbers may not necessarily add up due to rounding

Table A.9

## Investment Banks: Commitments and Contingencies

	As at end				
	2007	2008	2009	2010	2011 <sup>p</sup>
	RM million				
Assets sold with recourse and commitments with drawdown	2,049.9	79.1	5.4	326.9	20.4
Credit extension commitments	4,140.4	2,328.8	2,640.4	2,796.8	3,353.6
Direct credit substitutes	1,165.9	729.4	484.3	258.2	322.6
Foreign exchange related contracts	2,812.3	464.4	801.5	2,864.4	3,958.7
Interest rate related contracts	44,180.0	14,154.2	10,018.0	13,852.2	10,573.4
Trade-related contingencies	1.1	0.0	0.0	0.0	1.1
Transaction-related contingencies	806.7	151.4	10.5	10.5	10.5
Underwriting obligations	3,486.7	2,551.8	987.6	693.3	711.5
Others	26,943.7	8,988.4	5,792.1	2,343.8	1,523.1
<b>Total</b>	<b>85,586.6</b>	<b>29,447.6</b>	<b>20,739.7</b>	<b>23,146.0</b>	<b>20,474.9</b>

<sup>p</sup> Preliminary

Note: Numbers may not necessarily add up due to rounding

Table A.10

Life Insurance<sup>1</sup>: Income and Outgo

	For the calendar year				
	2007	2008	2009	2010	2011 <sup>p</sup>
	RM million				
<b>Income</b>					
Premium income	18,342.6	18,772.4	19,870.1	21,854.2	22,856.0
Net investment income	4,568.3	4,912.5	4,927.3	5,449.8	6,036.3
Profit on sale of assets and miscellaneous income	5,012.7	3,211.9	4,910.2	5,165.3	4,288.6
<b>Total</b>	<b>27,923.6</b>	<b>26,896.9</b>	<b>29,707.7</b>	<b>32,469.3</b>	<b>33,180.9</b>
<b>Outgo</b>					
Net policy benefits	9,081.8	10,025.4	11,857.3	13,035.4	14,000.1
Agency remuneration	2,582.9	2,718.7	2,944.4	3,248.3	3,384.3
Management expenses <sup>2</sup>	1,387.6	1,557.1	1,648.6	1,852.4	2,089.4
Loss on disposal of assets and other outgo	1,600.3	5,323.3	2,351.5	1,668.2	2,666.3
<b>Total</b>	<b>14,652.6</b>	<b>19,624.5</b>	<b>18,801.9</b>	<b>19,804.2</b>	<b>22,140.0</b>
Excess income over outgo	13,271.0	7,272.4	10,905.8	12,665.1	11,040.9

<sup>1</sup> Figures have been adjusted to reflect the global business of life insurance

<sup>2</sup> Inclusive of net bad and doubtful debts

<sup>p</sup> Preliminary

Note: Numbers may not necessarily add up due to rounding

Table A.11

General Insurance<sup>1</sup>: Underwriting and Operating Results

	For the calendar year				
	2007	2008	2009	2010	2011 <sup>p</sup>
	RM million				
Underwriting profit	16.0	102.5	742.7	804.3	483.5
Net investment income	796.6	820.0	772.0	813.3	922.5
Capital gains	635.4	153.3	439.9	328.3	161.8
Other income	60.2	109.9	125.2	131.9	101.3
Capital losses	107.1	534.0	133.4	87.9	88.0
Other outgo	62.0	40.8	97.9	80.5	46.8
Operating profit	1,339.0	610.9	1,848.5	1,909.4	1,534.2

<sup>1</sup> Figures have been adjusted to reflect the global business of general insurance

<sup>p</sup> Preliminary

Note: Numbers may not necessarily add up due to rounding

Table A.12

Family Takaful<sup>1</sup>: Income and Outgo

	For the calendar year				
	2007	2008	2009	2010	2011 <sup>p</sup>
	RM million				
<b>Income</b>					
Net contributions	1,990.5	2,374.7	2,719.8	3,392.8	3,705.8
Net investment income	282.2	298.8	354.8	447.3	500.0
Profit on sale of assets and miscellaneous income	103.1	165.1	307.1	336.4	535.8
<b>Total</b>	<b>2,375.8</b>	<b>2,838.6</b>	<b>3,381.6</b>	<b>4,176.5</b>	<b>4,741.6</b>
<b>Outgo</b>					
Net certificate benefits	535.5	633.4	905.4	1,601.2	1,623.6
Net commissions	178.0	297.1	432.7	531.6	600.0
Management expenses <sup>2</sup>	248.6	246.5	317.9	414.3	450.1
Loss on disposal of assets and other outgo	50.3	201.6	62.4	199.0	438.6
<b>Total</b>	<b>1,012.5</b>	<b>1,378.5</b>	<b>1,718.5</b>	<b>2,746.1</b>	<b>3,112.4</b>
Excess income over outgo	1,363.3	1,460.1	1,663.2	1,430.4	1,629.2

<sup>1</sup> Figures have been adjusted to reflect the global business and actual expenses borne by family takaful funds

<sup>2</sup> Inclusive of net bad and doubtful debts

<sup>p</sup> Preliminary

Note: Numbers may not necessarily add up due to rounding

Table A.13

General Takaful<sup>1</sup>: Underwriting and Operating Results

	For the calendar year				
	2007	2008	2009	2010	2011 <sup>p</sup>
	RM million				
Underwriting profit	-91.3	82.5	140.0	112.7	77.8
Net investment income	44.6	50.6	57.7	68.4	84.1
Capital gains	10.3	13.5	11.3	17.8	37.2
Other income	10.8	38.1	22.3	14.2	32.4
Capital losses	0.7	15.1	2.2	0.1	1.4
Other outgo	13.7	27.0	11.7	14.7	7.3
Operating profit	-37.6	141.0	216.5	202.5	229.1

<sup>1</sup> Figures have been adjusted to reflect the global business and actual expenses borne by general takaful funds

<sup>p</sup> Preliminary

Note: Numbers may not necessarily add up due to rounding

Table A.14

Development Financial Institutions<sup>1</sup> : Sources and Uses of Funds

	As at end				
	2007	2008	2009	2010	2011
	RM million				
<b>Sources:</b>					
Shareholders' funds	17,767.8	23,057.2	24,533.2	25,367.4	28,049.5
<i>Paid-up capital</i>	10,341.8	12,526.8	12,771.9	12,771.9	13,376.0
<i>Reserves</i>	3,390.7	5,004.2	5,298.6	6,041.2	6,356.9
<i>Retained earnings</i>	4,035.3	5,526.2	6,462.7	6,554.3	8,316.6
Deposits accepted	67,067.9	79,542.8	95,599.1	111,319.5	128,664.0
Borrowings	24,771.4	21,501.0	24,698.0	23,744.9	24,917.9
<i>Government</i>	17,188.6	13,599.1	14,066.2	18,086.7	18,407.4
<i>Multilateral/International agencies</i>	2,784.0	2,420.4	3,595.9	3,276.1	3,334.3
<i>Others</i>	4,798.8	5,481.5	7,035.9	2,382.1	3,176.2
Others	19,163.3	20,328.2	21,085.1	24,434.2	23,095.1
<b>Total</b>	<b>128,770.4</b>	<b>144,429.2</b>	<b>165,915.4</b>	<b>184,866.0</b>	<b>204,726.5</b>
<b>Uses:</b>					
Deposits placed	20,519.5	20,118.8	25,134.7	25,718.5	30,514.1
Investments	32,762.5	36,535.1	38,263.5	45,111.0	51,936.1
<i>of which:</i>					
<i>Government securities</i>	4,758.7	6,300.9	7,520.6	9,924.7	14,418.7
<i>Shares</i>	6,753.1	8,707.5	9,922.1	9,125.0	9,437.7
<i>Quoted</i>	6,434.7	8,422.7	9,012.8	8,681.4	9,242.2
<i>Unquoted</i>	318.4	284.8	909.3	443.6	195.5
Loans and advances	65,279.2	75,376.7	88,509.7	99,518.7	106,650.0
Fixed assets	4,614.9	5,398.9	5,869.0	5,865.5	5,751.1
Others	5,594.3	6,999.7	8,138.5	8,652.3	9,875.2
<b>Total</b>	<b>128,770.4</b>	<b>144,429.2</b>	<b>165,915.4</b>	<b>184,866.0</b>	<b>204,726.5</b>
<b>Contingencies:</b>					
Guarantee	5,113.9	4,780.5	3,305.9	2,514.5	2,224.5
Export credit insurance	1,057.9	1,068.8	835.8	807.7	496.6
<b>Total</b>	<b>6,171.8</b>	<b>5,849.3</b>	<b>4,141.7</b>	<b>3,322.2</b>	<b>2,721.1</b>

<sup>1</sup> Refers to Bank Pembangunan Malaysia Berhad, Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional, Export-Import Bank of Malaysia Berhad, Bank Pertanian Malaysia Berhad (Agrobank), Bank Perusahaan Kecil & Sederhana Malaysia Berhad (SME Bank), Malaysian Industrial Development Finance Berhad, Sabah Development Bank Berhad, Borneo Development Corporation (Sabah) Sendirian Berhad, Borneo Development Corporation (Sarawak) Sendirian Berhad, Credit Guarantee Corporation Malaysia Berhad, Sabah Credit Corporation and Lembaga Tabung Haji

Table A.15

Development Financial Institutions<sup>1</sup> under DFIA<sup>2</sup> : Sources and Uses of Funds

	As at end				
	2007	2008	2009	2010	2011
	RM million				
<b>Sources:</b>					
Shareholders' funds	11,498.3	16,814.5	18,840.8	19,598.4	22,739.9
<i>Paid-up capital</i>	7,194.9	9,374.9	10,132.4	10,132.4	10,486.5
<i>Reserves</i>	2,533.7	4,092.8	4,459.6	5,067.5	6,284.5
<i>Retained earnings</i>	1,769.7	3,346.8	4,248.8	4,398.5	5,968.9
Deposits accepted	50,450.3	59,210.4	71,268.6	83,050.7	95,867.0
Borrowings	19,877.1	15,913.3	17,806.7	18,485.8	19,785.6
<i>Government</i>	15,917.4	12,162.6	12,268.9	14,963.7	15,955.8
<i>Multilateral/International agencies</i>	2,574.5	2,257.0	3,237.8	2,872.1	3,234.8
<i>Others</i>	1,385.2	1,493.7	2,300.0	650.0	595.0
Others	15,269.5	16,238.8	16,797.7	21,757.2	20,871.9
<b>Total</b>	<b>97,095.2</b>	<b>108,177.0</b>	<b>124,713.8</b>	<b>142,892.1</b>	<b>159,264.4</b>
<b>Uses:</b>					
Deposits placed	11,171.7	11,673.7	14,325.5	17,309.7	22,407.8
Investments	20,873.3	19,597.9	19,097.5	23,199.3	27,380.2
of which:					
<i>Government securities</i>	4,726.1	6,300.9	7,520.6	9,924.7	14,418.7
<i>Shares</i>	646.5	464.2	1,428.1	1,697.4	1,109.1
<i>Quoted</i>	571.4	421.1	1,059.8	1,380.5	1,052.9
<i>Unquoted</i>	75.1	43.1	368.3	316.9	56.2
Loans and advances	60,473.0	70,338.4	83,354.5	94,201.1	100,934.6
Fixed assets	2,057.4	2,319.7	2,527.4	2,729.4	2,897.9
Others	2,519.8	4,247.3	5,408.9	5,452.6	5,643.9
<b>Total</b>	<b>97,095.2</b>	<b>108,177.0</b>	<b>124,713.8</b>	<b>142,892.1</b>	<b>159,264.4</b>
<b>Contingencies:</b>					
Guarantee	1,014.7	1,086.1	937.4	380.6	194.8
Export credit insurance	1,057.9	1,068.8	835.8	807.7	496.6
<b>Total</b>	<b>2,072.6</b>	<b>2,154.9</b>	<b>1,773.2</b>	<b>1,188.3</b>	<b>691.4</b>

<sup>1</sup> 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)

<sup>2</sup> Development Financial Institutions Act 2002

Table A.16

Development Financial Institutions<sup>1</sup>: Direction of Lending

	As at end				
	2007	2008	2009	2010	2011
	RM million				
Agriculture, forestry and fishery	3,968.3	4,976.9	6,340.3	6,169.9	6,634.6
Mining and quarrying	20.3	26.5	114.4	171.6	274.5
Manufacturing	5,687.8	5,852.2	5,560.1	6,359.0	5,610.8
Electricity, gas and water supply	3,497.5	3,763.1	3,590.5	3,345.8	2,651.9
Import and export, wholesale and retail trade, restaurants and hotels	1,030.8	1,493.2	1,989.4	1,981.9	1,950.9
Broad property sector	16,382.3	16,984.9	20,720.8	23,143.1	25,469.0
<i>Construction</i>	7,542.1	8,637.2	12,367.1	14,400.8	16,896.6
<i>Purchase of residential property</i>	7,396.7	7,021.2	6,875.4	6,590.7	6,266.8
<i>Purchase of non-residential property</i>	614.1	296.3	339.8	499.0	428.6
<i>Real estate</i>	829.4	1,030.2	1,138.5	1,652.6	1,877.0
Transport, storage and communication	5,610.0	5,705.5	5,847.5	5,750.7	5,434.9
Maritime	1,834.5	1,916.7	1,750.4	1,776.0	2,168.9
Finance, insurance and business services	1,056.6	785.5	1,209.0	1,292.0	1,652.5
Consumption credit	23,159.8	31,356.6	38,660.7	46,359.5	51,436.4
<i>of which:</i>					
<i>Purchase of motor vehicles</i>	2,376.4	2,513.3	2,370.0	2,053.7	1,679.1
<i>Credit card</i>	86.7	174.8	320.5	443.3	566.4
Purchase of securities	66.0	218.9	45.8	51.2	109.8
Others	2,965.3	2,296.7	2,680.8	3,118.0	3,255.8
<b>Total</b>	<b>65,279.2</b>	<b>75,376.7</b>	<b>88,509.7</b>	<b>99,518.7</b>	<b>106,650.0</b>

<sup>1</sup> Refers to Bank Pembangunan Malaysia Berhad, Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional, Export-Import Bank of Malaysia Berhad, Bank Pertanian Malaysia Berhad (Agrobank), Bank Perusahaan Kecil & Sederhana Malaysia Berhad (SME Bank), Malaysian Industrial Development Finance Berhad, Sabah Development Bank Berhad, Borneo Development Corporation (Sabah) Sendirian Berhad, Borneo Development Corporation (Sarawak) Sendirian Berhad, Credit Guarantee Corporation Malaysia Berhad, Sabah Credit Corporation and Lembaga Tabung Haji

Table A.17

Development Financial Institutions<sup>1</sup> under DFIA<sup>2</sup>: Direction of Lending

	As at end				
	2007	2008	2009	2010	2011
	RM million				
Agriculture, forestry and fishery	3,864.8	4,862.9	6,234.3	6,114.7	6,515.0
Mining and quarrying	14.2	22.8	112.3	122.5	204.5
Manufacturing	4,475.3	4,646.7	4,290.9	5,496.5	4,963.3
Electricity, gas and water supply	3,496.5	3,762.2	3,589.8	3,345.8	2,187.6
Import and export, wholesale and retail trade, restaurants and hotels	779.8	1,276.2	1,774.8	1,794.1	1,690.9
Broad property sector	14,794.9	15,301.7	18,956.8	21,127.0	22,930.1
<i>Construction</i>	7,030.1	8,072.6	11,895.2	13,934.9	15,911.3
<i>Purchase of residential property</i>	7,119.8	6,747.8	6,660.5	6,404.2	6,106.1
<i>Purchase of non-residential property</i>	561.4	237.4	256.1	413.6	344.9
<i>Real estate</i>	83.6	243.9	145.0	374.3	567.8
Transport, storage and communication	5,534.6	5,640.8	5,794.9	5,693.5	5,384.4
Maritime	1,834.5	1,916.7	1,750.4	1,776.0	2,168.9
Finance, insurance and business services	939.7	750.7	1,176.1	1,261.9	1,617.4
Consumption credit	22,433.5	30,417.6	37,733.1	45,362.5	50,240.7
of which:					
<i>Purchase of motor vehicles</i>	2,315.6	2,512.8	2,348.7	2,039.3	1,668.0
<i>Credit card</i>	86.7	174.8	320.5	443.3	566.4
Purchase of securities	66.0	218.9	45.8	51.2	109.8
Others	2,239.2	1,521.2	1,895.3	2,055.4	2,922.0
<b>Total</b>	<b>60,473.0</b>	<b>70,338.4</b>	<b>83,354.5</b>	<b>94,201.1</b>	<b>100,934.6</b>

<sup>1</sup> 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)

<sup>2</sup> Development Financial Institutions Act 2002

Table A.18

Development Financial Institutions<sup>1</sup> under DFIA<sup>2</sup>: Impaired Loans and Impairment Provisions

	As at end	
	2010	2011
	RM million	
Collective impairment provisions	2,418.7	2,703.1
Individual impairment provisions	4,096.1	3,031.2
Impaired loans	8,329.4	7,255.2
	(%)	
Ratio of gross impaired loans to total loans	9.0	7.2
Ratio of net impaired loans to net total loans	4.8	4.3
Ratio of individual and collective impairment provisions to total impaired loans	78.2	79.0

<sup>1</sup> 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)

<sup>2</sup> Development Financial Institutions Act 2002

Table A.19

## Bank Pembangunan Malaysia Berhad

Year of establishment	1973					
Objectives	To provide medium and long-term financing for infrastructure projects, maritime, capital intensive and high technology industries in manufacturing sector and other selected sectors in line with the national development policy.					
Sector	Loans Outstanding		Loans Approved		Loans Disbursed	
	As at end		During the year		During the year	
	2010	2011	2010	2011	2010	2011
	RM million					
Infrastructure	20,096.9	21,149.5	1,904.7	886.2	3,248.4	2,878.2
<i>Government programmes</i>	17,957.4	18,917.0	610.8	260.1	2,597.2	2,497.9
<i>Private programmes</i>	2,139.5	2,232.5	1,293.9	626.1	651.2	380.3
Maritime	1,776.0	2,168.9	845.0	400.5	480.7	829.5
<i>Shipping industry</i>	1,330.7	1,784.3	845.0	400.5	299.8	780.9
<i>Shipyards industry</i>	341.8	245.8	0.0	0.0	180.9	48.6
<i>Marine-related services</i>	103.5	138.8	0.0	0.0	0.0	0.0
Manufacturing: High technology	1,498.5	1,435.5	284.8	328.5	146.7	111.2
Others	16.7	15.3	1.2	1.6	1.1	1.2
<b>Total</b>	<b>23,388.1</b>	<b>24,769.1</b>	<b>3,035.7</b>	<b>1,616.8</b>	<b>3,876.9</b>	<b>3,820.1</b>

Source: Bank Pembangunan Malaysia Berhad

Table A.20

## Bank Perusahaan Kecil &amp; 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	
	2010	2011	2010	2011	2010	2011
	RM million					
SMEs	3,683.2	3,698.9	777.8	1,736.6	1,353.9	1,643.1
<i>Micro</i>	393.9	349.1	80.6	332.4	172.2	139.0
<i>Small</i>	1,369.6	1,396.7	311.9	768.0	515.8	686.5
<i>Medium</i>	1,919.7	1,953.1	385.3	636.2	665.9	817.6
Others	333.7	270.3	21.2	0.0	51.9	19.2
<b>Total</b>	<b>4,016.9</b>	<b>3,969.2</b>	<b>799.0</b>	<b>1,736.6</b>	<b>1,405.8</b>	<b>1,662.3</b>

Source: Bank Perusahaan Kecil &amp; Sederhana Malaysia Berhad

Table A.21

## Export-Import Bank of Malaysia Berhad

Year of establishment	1995					
Objectives	To provide credit facilities to finance and support the exports and imports of goods, services and overseas project financing with concentration to the non-traditional markets, and to provide export credit insurance services, export financing insurance, overseas investment insurance and guarantee facilities, as well as other services which are normally offered by the export-import financial institutions and credit insurance financial institutions.					
Loans Facility	Loans Outstanding (RM million)		Loans Approved (RM million)		Loans Disbursed (RM million)	
	As at end- 2010	As at end- 2011	2010	2011	2010	2011
Buyer credit facility	731.0	667.3	610.7	30.2	83.1	141.2
Overseas project financing	753.2	1,274.1	356.3	2,389.6	60.6	641.4
Overseas contract financing	399.0	354.0	106.9	105.7	122.1	47.2
Supplier credit facility	175.3	207.3	31.1	1,539.2	254.3	332.5
Malaysia Kitchen financing facility	14.2	17.4	13.9	11.4	2.1	6.5
Export credit refinancing	1,705.9	976.1	6,190.0	5,075.0	6,190.0	5,075.0
Others	4.2	17.9	14.5	306.0	6.9	43.7
<b>Total</b>	<b>3,782.8</b>	<b>3,514.1</b>	<b>7,323.4</b>	<b>9,457.1</b>	<b>6,719.1</b>	<b>6,287.5</b>
Guarantee and Insurance Policy	Contingent Liabilities (RM million)		Commitment Approved (RM million)			
	As at end- 2010	As at end- 2011	2010	2011		
Guarantee	380.6	194.8	9.5	318.3		
Insurance	807.7	496.6	1,722.2	1,815.0		
<b>Total</b>	<b>1,188.3</b>	<b>691.4</b>	<b>1,731.7</b>	<b>2,133.3</b>		

Source: Export-Import Bank of Malaysia Berhad

Table A.22

## Bank Kerjasama Rakyat Malaysia Berhad

Year of establishment	1954						
Objectives	Mobilises savings and provides financing services to its members as well as non members.						
<b>Deposits Accepted</b>	Deposits Accepted (RM million)						
	As at end-2010			As at end-2011			
	Members	Non-members	Total	Members	Non-members	Total	
	1,771.2	47,856.2	49,627.4	2,060.1	56,495.6	58,555.7	
<b>Direction of Financing</b>	Financing Outstanding (RM million)						
	As at end-2010			As at end-2011			
	<b>Sector</b>	Members	Non-members	Total	Members	Non-members	Total
	Agriculture	6.8	537.1	543.9	6.3	496.5	502.8
Purchase of residential property	1,720.8	1,540.6	3,261.4	1,871.5	905.9	2,777.4	
Purchase of non-residential property	65.4	279.4	344.8	63.6	221.2	284.8	
General commerce	0.0	170.0	170.0	0.0	125.0	125.0	
Purchase of securities	17.7	31.9	49.6	97.5	11.1	108.6	
Consumption credit	20,669.2	17,534.5	38,203.7	22,516.6	19,420.1	41,936.7	
<i>of which:</i>							
<i>Purchase of motor vehicles</i>	627.9	1,180.6	1,808.5	559.0	911.6	1,470.6	
Manufacturing	3.1	807.1	810.2	0.0	862.9	862.9	
Others	73.1	3,156.4	3,229.5	2.2	4,102.8	4,105.0	
<b>Total</b>	<b>22,556.1</b>	<b>24,057.0</b>	<b>46,613.1</b>	<b>24,557.7</b>	<b>26,145.5</b>	<b>50,703.2</b>	

Source: Bank Kerjasama Rakyat Malaysia Berhad

Table A.23

## Bank Simpanan Nasional

Year of establishment	1974	
Objectives	To focus on retail banking and personal finance especially for small savers.	
<b>Deposits Facility</b>	RM million	
	As at end-2010	As at end-2011
Fixed deposits	5,444.6	6,238.0
GIRO deposits	5,139.0	5,303.4
Islamic deposits	5,745.8	6,351.6
Premium savings certificates	1,454.6	1,578.0
Others	124.2	113.6
<b>Total</b>	<b>17,908.2</b>	<b>19,584.6</b>
<b>Investments</b>	RM million	
	As at end-2010	As at end-2011
Quoted shares	44.4	53.0
Government securities	7,060.6	7,685.7
<i>of which:</i>		
<i>Malaysian Government Securities</i>	3,723.6	3,474.1
Private debt securities	656.1	517.5
Subsidiary companies	32.0	32.0
Associate companies	231.8	231.8
Others	120.3	94.2
<b>Total</b>	<b>8,145.2</b>	<b>8,614.2</b>
<b>Direction of Lending</b>	RM million	
	As at end-2010	As at end-2011
Purchase of securities	1.6	1.2
Purchase of residential property	3,142.9	3,328.7
Purchase of non-residential property	68.8	60.0
Consumption credit	7,422.4	8,305.3
Others	269.7	313.5
<b>Total</b>	<b>10,905.4</b>	<b>12,008.7</b>

Source: Bank Simpanan Nasional

Table A.24

## 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 mobilise 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	
	2010	2011	2010	2011	2010	2011
<b>Sub-sector</b>						
<i>Oil palm</i>	1,218.6	1,090.7	240.7	573.6	149.9	256.1
<i>Food crops</i>	497.8	818.3	222.2	643.4	254.4	619.7
<i>Livestock</i>	684.2	699.1	229.4	168.2	145.5	174.5
<i>Fishery</i>	397.5	384.8	110.8	214.7	91.7	86.8
<i>Forestry</i>	119.0	83.9	6.0	3.9	3.1	2.8
<i>Tobacco</i>	2.1	1.5	0.6	0.0	1.3	1.3
<i>Rubber</i>	78.5	105.1	88.4	132.0	31.8	47.2
<i>Others</i>	2,497.1	2,786.8	966.2	1,953.8	876.1	1,540.9
<b>Total</b>	<b>5,494.8</b>	<b>5,970.2</b>	<b>1,864.3</b>	<b>3,689.7</b>	<b>1,553.8</b>	<b>2,729.3</b>

Source: Bank Pertanian Malaysia Berhad

Table A.25

## Development Financial Institutions: Selected Data

	As at end					
	2010			2011		
	Branch	ATM	Staff	Branch	ATM	Staff
<b>DFIs under DFIA<sup>1</sup>:</b>						
Bank Pembangunan Malaysia Berhad	-	-	363	-	-	325
Bank Kerjasama Rakyat Malaysia Berhad	127	388	4,055	134	433	4,150
Bank Simpanan Nasional	384	856	5,828	390	929	6,123
Export-Import Bank of Malaysia Berhad	-	-	227	-	-	246
Bank Pertanian Malaysia Berhad	167	200	2,954	166	228	3,181
Bank Perusahaan Kecil & Sederhana Malaysia Berhad	19	-	995	18	-	881
Sub-total	697	1,444	14,442	708	1,590	14,906
<b>Other DFIs:</b>						
Malaysian Industrial Development Finance Berhad	5	-	315	5	-	318
Sabah Development Bank Berhad	-	-	86	-	-	88
Borneo Development Corporation (Sabah) Sendirian Berhad	-	-	12	-	-	14
Borneo Development Corporation (Sarawak) Sendirian Berhad	-	-	35	-	-	34
Credit Guarantee Corporation Malaysia Berhad	16	-	493	16	-	481
Sabah Credit Corporation	12	-	193	12	-	188
Lembaga Tabung Haji	123	-	2,009	119	-	1,994
Sub-total	156	-	3,143	152	-	3,117
<b>Total</b>	<b>853</b>	<b>1,444</b>	<b>17,565</b>	<b>860</b>	<b>1,590</b>	<b>18,023</b>

<sup>1</sup> Development Financial Institutions Act 2002

Table A.26

## Total Outward and Inward Remittances

	2007	2008 <sup>4</sup>	2009 <sup>4</sup>	2010 <sup>4</sup>	2011
	RM million				
<b>Total outward<sup>1</sup></b>	<b>7,958.1</b>	<b>8,574.5</b>	<b>10,535.0</b>	<b>13,413.9</b>	<b>15,656.2</b>
<i>Remitted via:</i>					
Banks	7,093.0	6,563.1	6,591.2	6,711.3	7,765.2
Non-banks	865.1	2,011.4	3,943.8	6,702.6	7,891.0
<b>Total inward<sup>2</sup></b>	<b>5,773.6</b>	<b>4,788.3</b>	<b>4,676.8</b>	<b>4,692.2</b>	<b>5,164.0</b>
<i>Remitted via:</i>					
Banks	5,721.1	4,705.0	4,411.1	4,198.3	4,602.9
Non-banks	52.5	83.3	265.7	493.9	561.1
<i>As at end of period</i>					
<b>No. of remittance service providers</b>	<b>46</b>	<b>67</b>	<b>81</b>	<b>81</b>	<b>80</b>
Commercial banks	33	38	39	40	41
DFIs	1	2	2	2	2
Non-banks <sup>3</sup>	12	27	40	39	37

<sup>1</sup> Refer to total funds remitted from Malaysia to other countries for workers' remittances and remuneration for employees.

<sup>2</sup> Refer to total funds remitted from other countries to Malaysia for workers' remittances and remuneration for employees.

<sup>3</sup> Refer to total non-bank remittance service providers approved by Bank Negara Malaysia

<sup>4</sup> Refer to revised remittance transaction value for the years 2008 through 2010.

Table A.27

## Basic Payments Indicator

	2007	2008	2009	2010	2011
Population (million)	27.2	27.5	27.9	28.3	28.6
GDP (RM million)	642,049	742,470	679,938	765,965	852,734
Cash in circulation (CIC) (RM million)	36,247.1	40,424.6	43,439.2	47,685.2	53,497.9
<b>Transaction Volume Per Capita (unit):</b>					
Cheque <sup>1</sup>	7.8	7.5	7.3	7.3	7.2
E-payments:	35.6	39.8	41.9	43.5	49.8
Credit card	8.7	9.5	9.9	10.4	11.1
Charge card	0.2	0.2	0.2	0.2	0.1
Debit card	0.3	0.4	0.4	0.7	0.9
E-money	22.6	25.0	25.7	24.8	28.3
Interbank GIRO	1.0	1.3	1.6	1.8	2.1
Direct Debit	...	...	...	...	...
ATM <sup>2</sup>	0.8	0.8	0.9	1.4	1.5
Internet banking <sup>3</sup>	1.9	2.5	3.1	4.3	5.7
Mobile banking <sup>3</sup>	...	...	...	...	0.1
RENTAS - Third party transactions <sup>4</sup>	0.1	0.1	0.1	0.1	0.1
<b>Transaction Value Per Capita (RM):</b>					
CIC	1,333.3	1,467.8	1,557.2	1,687.9	1,873.7
Cheque <sup>1</sup>	63,049.5	63,962.9	60,068.5	65,209.1	69,340.5
E-payments:	233,205.8	305,940.3	297,306.2	332,847.7	441,488.3
Credit card	2,067.6	2,370.7	2,485.0	2,825.1	3,109.9
Charge card	89.0	111.1	148.6	183.3	209.2
Debit card	41.5	71.1	99.4	167.8	221.1
E-money	60.3	75.1	78.9	95.9	133.5
Interbank GIRO	2,462.9	3,254.1	3,902.0	4,490.9	5,818.8
Direct Debit	16.4	35.8	68.1	133.6	169.2
ATM <sup>2</sup>	857.6	696.8	708.9	1,107.4	1,305.8
Internet banking <sup>3</sup>	12,207.3	21,194.2	23,361.9	36,423.9	51,972.0
Mobile banking <sup>3</sup>	0.8	2.5	4.7	4.3	24.9
RENTAS - Third party transactions <sup>4</sup>	215,402.5	278,128.9	266,448.7	287,415.6	378,524.0
<b>Turnover to GDP:</b>					
CIC (%)	5.6	5.4	6.4	6.2	6.3
Cheque <sup>1</sup> (times)	2.7	2.4	2.5	2.4	2.3
E-payments (times):	9.9	11.3	12.2	12.3	14.8
% of GDP:					
Credit card	8.8	8.8	10.2	10.4	10.4
Charge card	0.4	0.4	0.6	0.7	0.7
Debit card	0.2	0.3	0.4	0.6	0.7
E-money	0.3	0.3	0.3	0.4	0.4
Interbank GIRO	10.4	12.1	16.0	16.6	19.5
Direct Debit	0.1	0.1	0.3	0.5	0.6
ATM <sup>2</sup>	3.6	2.6	2.9	4.1	4.4
Internet banking <sup>3</sup>	51.7	78.6	95.8	134.3	174.0
Mobile banking <sup>3</sup>	...	...	...	...	0.1
RENTAS - Third party transactions <sup>4</sup> (times)	9.1	10.3	10.9	10.6	12.7

<sup>1</sup> Cheques cleared via eSPICK

<sup>2</sup> Refer to payment transactions via ATM, including own and third party funds transfer. Exclude cash withdrawals

<sup>3</sup> Exclude non-financial transactions, credit card and IBG transactions performed online

<sup>4</sup> Refer to Government, custom duty and third party payments via Interbank Funds Transfer System. Third party payments refer to transaction with a minimum amount of RM10,000, where the beneficiary or ordering party is a non-RENTAS member.

... Negligible

Note: Numbers may not necessarily add up due to rounding

Table A.28

## Cashless Payment Instruments: Transaction Volume

	2007	2008	2009	2010	2011	2010	2011
	Million					% Annual change	
Cheque <sup>1</sup>	211.7	207.3	204.8	206.7	204.9	0.9	-0.9
Credit card	237.7	261.4	276.1	294.9	316.9	6.8	7.5
Charge card	5.6	5.6	5.2	5.0	4.2	-4.5	-15.0
Debit card	9.1	10.7	11.3	18.4	25.3	63.1	37.1
<i>International debit</i>	4.5	5.4	6.3	13.3	19.8	111.2	48.3
<i>e-Debit<sup>2</sup></i>	4.5	5.3	5.0	5.1	5.5	2.1	7.9
E-money	613.1	688.6	717.2	699.3	806.8	-2.5	15.4
<i>Card-based</i>	609.3	674.4	707.4	692.2	797.8	-2.1	15.2
<i>Network-based</i>	3.8	14.2	9.8	7.1	9.0	-27.8	27.6

<sup>1</sup> Cheques cleared via eSPICK

<sup>2</sup> Domestic PIN-based ATM card

Table A.29

## Cashless Payment Instruments: Transaction Value

	2007	2008	2009	2010	2011	2010	2011
	RM million					% Annual change	
Cheque <sup>1</sup>	1,714,063	1,761,571	1,675,630	1,842,189	1,979,858	9.9	7.5
Credit card	56,211	65,289	69,321	79,810	88,797	15.1	11.3
<i>Purchases</i>	52,972	62,052	66,092	76,285	85,364	15.4	11.9
<i>Cash advances</i>	3,239	3,237	3,229	3,525	3,432	9.2	-2.6
Charge card	2,419	3,060	4,144	5,177	5,973	24.9	15.4
<i>Purchases</i>	2,405	3,028	4,113	5,140	5,944	24.9	15.7
<i>Cash advances</i>	14	32	30	37	28	23.0	-24.4
Debit card	1,129	1,958	2,774	4,741	6,313	70.9	33.1
<i>International debit</i>	545	748	1,198	2,208	3,259	84.3	47.6
<i>e-Debit<sup>2</sup></i>	584	1,210	1,576	2,534	3,054	60.8	20.6
E-money	1,639	2,067	2,201	2,708	3,812	23.0	40.8
<i>Card-based</i>	1,591	1,903	2,020	2,113	2,425	4.6	14.7
<i>Network-based</i>	48	164	181	595	1,387	228.7	133.2

<sup>1</sup> Cheques cleared via eSPICK

<sup>2</sup> Domestic PIN-based ATM card

Table A.30

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

	2010		2011	
	Volume	Value	Volume	Value
	% share of total			
<b>Credit card</b>				
Fuel/petrol	31.3	7.6	29.6	7.2
Retail <sup>1</sup>	27.3	31.1	26.7	30.2
Professional and commercial services <sup>2</sup>	11.0	21.6	11.0	21.2
Mail and telephone order	6.7	7.5	7.6	8.7
Utilities	5.2	4.7	5.2	4.7
<b>Debit card</b>				
Retail <sup>1</sup>	49.2	34.7	48.7	39.8
Fuel/petrol	21.3	4.4	18.6	4.8
Professional and commercial services <sup>2</sup>	8.1	10.8	9.7	12.4
Utilities	3.9	2.6	5.9	4.0
Food and restaurant	6.2	2.9	5.8	3.3

<sup>1</sup> Purchases made at wholesalers, hypermarkets, clothing stores and any other miscellaneous stores/retailers not included in other categories

<sup>2</sup> Include medical, insurance, accounting, auditing, advertising services and other business services

Table A.31

## Payment Systems: Transaction Volume and Value

	2007	2008	2009	2010	2011	2010	2011
	Million/RM billion					% Annual change	
<b>RENTAS<sup>1</sup></b>							
Transaction volume	2.7	3.0	3.0	3.2	3.4	5.0	8.6
Transaction value	29,880.6	38,744.2	37,258.9	39,434.6	47,175.6	5.8	19.6
<b>Interbank GIRO</b>							
Transaction volume	26.6	36.2	43.8	49.8	60.4	13.7	21.3
Transaction value	67.0	89.6	108.8	126.9	166.1	16.6	31.0
	'000/RM million						
<b>FPX</b>							
Transaction volume	31.3	152.9	264.1	488.9	878.4	85.1	79.7
Transaction value	9.5	45.8	107.1	309.9	618.9	189.3	99.7
<b>Direct Debit</b>							
Transaction volume	39.9	173.3	288.2	438.6	575.7	52.2	31.3
Transaction value	445.0	986.3	1,899.1	3,774.0	4,832.0	98.7	28.0

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

Table A.32

## Payment and Securities Transactions Handled by RENTAS

Transaction Volume	2007	2008	2009	2010	2011	2010	2011
	'000					% Annual change	
<b>Total</b>	<b>2,659.7</b>	<b>2,984.9</b>	<b>3,001.7</b>	<b>3,152.7</b>	<b>3,425.0</b>	<b>5.0</b>	<b>8.6</b>
<b>IFTS<sup>1</sup></b>	<b>2,548.4</b>	<b>2,890.9</b>	<b>2,924.2</b>	<b>3,059.1</b>	<b>3,310.3</b>	<b>4.6</b>	<b>8.2</b>
Money market operations	108.3	111.5	96.7	98.2	95.9	1.5	-2.2
Foreign exchange settlement	47.7	68.0	64.6	74.0	85.9	14.6	16.0
<i>of which: USD CHATS<sup>2</sup></i>	22.5	39.5	35.8	42.0	44.4	17.5	5.5
Third party transactions	1,567.0	1,905.1	1,965.7	2,086.1	2,449.4	6.1	17.4
Others	825.5	806.3	797.1	800.8	679.0	0.5	-15.2
<b>SSDS<sup>3</sup></b>	<b>111.3</b>	<b>94.0</b>	<b>77.5</b>	<b>93.6</b>	<b>114.7</b>	<b>20.8</b>	<b>22.5</b>
<b>Transaction Value</b>	RM billion						
<b>Total</b>	<b>29,880.6</b>	<b>38,744.2</b>	<b>37,258.9</b>	<b>39,434.6</b>	<b>47,175.6</b>	<b>5.8</b>	<b>19.6</b>
<b>IFTS<sup>1</sup></b>	<b>27,909.7</b>	<b>37,256.3</b>	<b>35,653.1</b>	<b>37,437.6</b>	<b>44,227.9</b>	<b>5.0</b>	<b>18.1</b>
Money market operations	12,261.8	17,627.0	18,754.0	18,354.9	21,473.2	-2.1	17.0
Foreign exchange settlement	2,179.0	3,310.8	1,874.1	2,618.9	3,831.6	39.7	46.3
<i>of which: USD CHATS<sup>2</sup></i>	1,302.1	2,055.3	1,189.9	1,681.6	2,414.3	41.3	43.6
Third party transactions	5,855.9	7,659.8	7,432.7	8,119.6	10,807.9	9.2	33.1
Others	7,613.0	8,658.7	7,592.3	8,344.1	8,115.2	9.9	-2.7
<b>SSDS<sup>3</sup></b>	<b>1,970.9</b>	<b>1,487.8</b>	<b>1,605.8</b>	<b>1,997.0</b>	<b>2,947.7</b>	<b>24.4</b>	<b>47.6</b>
<b>Turnover to GDP (times)</b>	<b>46.5</b>	<b>52.2</b>	<b>54.8</b>	<b>51.5</b>	<b>55.3</b>		
<b>Daily average:</b>							
Transaction volume ('000)	10.6	12.0	12.1	12.7	14.0	5.0	10.0
Transaction value (RM billion)	119.5	156.2	150.2	159.0	192.6	5.8	21.1

<sup>1</sup> Interbank Funds Transfer System

<sup>2</sup> Payment versus Payment (PvP) link established in 2006, for interbank settlement of ringgit-US dollar trades through RENTAS USD CHATS

<sup>3</sup> Scripless Securities Depository System for Malaysian Government Securities, Treasury bills, and scripless public debt securities

Note: Numbers may not necessarily add up due to rounding

Table A.33

## Payment Channels: Transaction Volume and Value

Transaction Volume	2007	2008	2009	2010	2011	2010	2011
	Million					% Annual change	
Internet banking <sup>1</sup>	62.6	84.9	110.2	150.3	194.4	36.4	29.3
<i>Individual</i>	40.3	57.0	79.7	104.7	141.3	31.4	35.0
<i>Corporate</i>	22.3	27.9	30.5	45.6	53.1	49.5	16.4
Mobile banking	1.4	1.6	2.5	2.3	13.6	-5.3	485.4
ATM <sup>2</sup>	20.6	21.5	24.7	38.8	42.1	57.2	8.4
Transaction Value	RM million						
Internet banking	417,811	624,362	699,902	1,085,486	1,542,347	55.1	42.1
<i>Individual</i>	48,456	52,951	87,677	115,575	153,635	31.8	32.9
<i>Corporate</i>	369,355	571,412	612,225	969,911	1,388,712	58.4	43.2
Mobile banking	21	72	141	138	852	-2.1	518.1
ATM <sup>2</sup>	23,314	19,190	19,774	31,286	37,283	58.2	19.2

<sup>1</sup> Exclude non-financial transactions

<sup>2</sup> Refer to payment transactions via ATM, including own and third party funds transfer. Exclude cash withdrawals

Note: Numbers may not necessarily add up due to rounding

Table A.34

## Payment Transactions via Various Channels

Transaction Volume	2010			2011		
	Internet banking	Mobile banking	ATM	Internet banking	Mobile banking	ATM
	Million					
Funds transfer	63.2	0.1	19.9	70.5	0.6	23.7
<i>Of which: Interbank</i>	20.0	...	3.4	21.4	0.1	5.8
Bill payment <sup>1</sup>	42.6	0.1	5.0	46.6	0.5	4.7
Investment in share and unit trust	4.7	-	0.1	4.7	...	0.2
Re-load/Top up	0.1	0.5	4.5	15.2	1.0	4.3
Card & loan repayment	9.8	...	9.3	14.4	0.1	9.2
Transaction Value	RM million					
Funds transfer	757,928	60	19,354	1,050,936	576	23,014
<i>Of which: Interbank</i>	38,660	15	2,975	35,838	140	5,008
Bill payment <sup>1</sup>	7,000	15	3,078	9,376	139	3,687
Investment in share and unit trust	35,707	-	2,800	42,428	...	3,897
Re-load/Top up	51	8	241	279	14	400
Card & loan repayment	10,555	4	5,741	16,965	93	6,183

<sup>1</sup> Include insurance payments

... Negligible

Table A.35

## ATM Cash Withdrawals in Malaysia

Transaction Volume	2007	2008	2009	2010	2011	2010	2011
	Million					% Annual change	
<b>Total cash withdrawals</b>	<b>378.4</b>	<b>470.9</b>	<b>502.3</b>	<b>518.8</b>	<b>556.8</b>	<b>3.3</b>	<b>7.3</b>
<i>of which via:</i>							
MEPS Shared ATM Network	133.3	158.3	176.0	191.8	209.3	9.0	9.1
HOUSe network <sup>1</sup>	0.1	0.2	0.2	0.3	0.3	34.6	2.9
Transaction Value	RM million						
<b>Total cash withdrawals</b>	<b>175,293.6</b>	<b>216,191.6</b>	<b>236,211.7</b>	<b>255,308.7</b>	<b>279,484.7</b>	<b>8.1</b>	<b>9.5</b>
<i>of which via:</i>							
MEPS Shared ATM Network	34,941.3	43,546.1	49,000.8	57,365.1	64,708.6	17.1	12.8
HOUSe network <sup>1</sup>	68.5	96.0	121.0	170.1	177.6	40.6	4.4
<b>Average value per transaction (RM)</b>	<b>463.3</b>	<b>459.1</b>	<b>470.2</b>	<b>492.1</b>	<b>501.9</b>	<b>4.7</b>	<b>2.0</b>

<sup>1</sup> ATM network launched in 2006 for locally-incorporated foreign banks

Table A.36

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

	2011	
	Transaction Volume	Transaction Value
Cash	17.8	17.5
Cheque	7.9	19.5
Cash and Cheque Deposit Machine	41.1	27.5
Electronic Fund Transfer	33.1	35.5

Table A.37

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

As at end of period	2007	2008	2009	2010	2011
	Unit				
International brand payment cards <sup>1</sup>	119,490	146,473	160,443	180,589	211,615
e-Debit <sup>2</sup>	34,754	67,581	91,328	118,467	141,076
E-money	28,771	29,236	30,641	30,803	31,236
Terminals per 1,000 inhabitant <sup>3</sup>	5.8	6.7	7.3	8.0	8.9

<sup>1</sup> MasterCard, Visa, American Express and Diners Club

<sup>2</sup> Domestic PIN-based ATM card

<sup>3</sup> International brand payment card, proprietary ATM card and e-money terminals

Table A.38

Number of Merchants<sup>1</sup> Accepting Payment Cards

As at end of period	2009	2010	2011
	Unit		
Credit card	148,600	216,945	237,273
Charge card	158,269	168,166	184,286
International debit card	109,424	125,528	161,735
e-Debit <sup>2</sup>	72,257	84,590	107,956

<sup>1</sup> Include the merchants' outlets

<sup>2</sup> Domestic PIN-based ATM card

Table A.39

## Number of Cards and Users of Payment Instruments and Channels

As at end of period	2007	2008	2009	2010	2011	2010	2011
	'000					% Annual change	
Number of cards/accounts:							
Credit card	9,901	10,812	10,818	8,547	8,211	-21.0	-3.9
Charge card	246	286	285	182	155	-36.3	-14.7
Debit card	21,887	24,437	27,296	29,941	34,993	9.7	16.9
<i>of which: e-Debit<sup>1</sup></i>	17,352	19,480	23,691	26,120	30,500	10.3	16.8
E-money	53,150	61,534	68,462	74,701	84,183	9.1	12.7
Number of subscribers:							
Internet banking	4,599	6,191	8,119	9,842	11,885	21.2	20.8
<i>Individual</i>	4,523	6,057	7,958	9,638	11,656	21.1	20.9
<i>Corporate</i>	76	135	161	204	228	26.7	12.1
<i>Penetration rate (%) to population</i>	16.9	22.5	29.1	34.8	41.6		
Mobile banking	368	575	675	898	1,560	33.1	73.7
Penetration rate (%):							
<i>to population</i>	1.4	2.1	2.4	3.2	5.5		
<i>to mobile phone subscribers</i>	1.6	2.1	2.2	2.6	4.3		

<sup>1</sup> Domestic PIN-based ATM card

Table A.40

## Number of Participants and Instrument Issuers

As at end of period	2007	2008	2009	2010	2011
	Unit				
<b>RENTAS</b>	<b>53</b>	<b>59</b>	<b>61</b>	<b>64</b>	<b>68</b>
<i>Bank Negara Malaysia</i>	1	1	1	1	1
<i>Banks</i>	48	54	54	55	56
<i>DFIs</i>	2	2	4	5	6
<i>Non-banks</i>	2	2	2	3	5
<b>SPICK/eSPICK</b>	<b>37</b>	<b>43</b>	<b>44</b>	<b>45</b>	<b>46</b>
<b>Credit card</b>	<b>18</b>	<b>23</b>	<b>24</b>	<b>26</b>	<b>25</b>
<i>Banks</i>	16	21	21	22	21
<i>Non-banks</i>	2	2	3	4	4
<b>Debit card<sup>1</sup></b>	<b>15</b>	<b>19</b>	<b>23</b>	<b>23</b>	<b>22</b>
<i>International debit card</i>	6	8	8	8	11
<i>e-Debit<sup>2</sup></i>	11	11	14	14	13
<i>Others<sup>3</sup></i>	-	6	8	9	9
<b>Charge card</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>6</b>	<b>6</b>
<i>Banks</i>	5	5	5	4	4
<i>Non-banks</i>	3	3	3	2	2
<b>E-money<sup>4</sup></b>	<b>15</b>	<b>20</b>	<b>21</b>	<b>21</b>	<b>21</b>
<i>Banks</i>	4	5	5	6	6
<i>Non-banks</i>	11	15	16	15	15
<b>Internet banking</b>	<b>20</b>	<b>24</b>	<b>25</b>	<b>28</b>	<b>28</b>
<b>Mobile banking</b>	<b>7</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>12</b>
<b>FPX and Direct Debit</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>17</b>	<b>18</b>
<b>Interbank GIRO</b>	<b>31</b>	<b>33</b>	<b>33</b>	<b>36</b>	<b>37</b>

<sup>1</sup> There are banks issuing more than one type of debit card

<sup>2</sup> Domestic PIN-based ATM card

<sup>3</sup> Cards with both international debit and domestic PIN-based applications

<sup>4</sup> Include international brand prepaid card

