BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

Letter of Transmittal

Yang Amat Berhormat Dato' Seri Abdullah bin Hj. Ahmad Badawi,
Prime Minister/Minister of Finance,
Malaysia.

YAB Dato' Seri,

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 2007 which are incorporated into this Financial Stability and Payment Systems Report 2007.

Respectfully submitted,

Zeti Akhtar Aziz
Governor

26 March 2008

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Financial stability issues were dramatically brought to the forefront in 2007. The resilience of the global financial system has come under significant pressure following problems in the US subprime mortgage market which has rapidly broadened into large-scale liquidity strains. As events surrounding the turmoil continue to unfold with heightened concerns over global growth prospects, central banks and regulators are maintaining a close watch on the direction of risks to the financial system. Of importance, is the need to contain the implications of these developments on financial stability, and ensuring the ability to exercise firm and coordinated actions, including facilitating orderly resolutions, to avert a full-fledged crisis of global proportions.

The Malaysian financial system has so far been relatively insulated from the global financial turmoil, with negligible direct exposures of Malaysian banks to US subprime investments and ample liquidity in the system, in addition to an insignificant reliance by Malaysian banks on funding in offshore wholesale debt markets. The effects of widespread financial market volatility, however, were felt in the domestic financial markets. Increased two-way portfolio flows led to heightened volatility in the prices of financial assets during the year. Despite the increased volatility, banking institutions on the whole turned in a solid performance for the year, supported by strong loan growth, higher income from treasury and fee-based activities and continued improvements in the quality of credit exposures. Non-performing loans have declined to their lowest level since the Asian financial crisis. The capital and solvency positions of the banking and insurance industries remained strong during the year, while the payment systems has continued to perform well with no disruptions being experienced.

Malaysia's financial sector has continued, during the year, to transform and mature. The transformation combines market-based incentives, changes in the institutional configuration and the expansion of the depth and breadth of the financial markets. All of Malaysia's domestic banking groups have evolved into financial conglomerates, providing the comprehensive suite of financial solutions that cater to the broader range of consumers and businesses. Financial services are now provided through multiple and more convenient channels. This has significantly expanded the scope and reach of financial services. There has also been a more pervasive infusion of best business practices into domestic institutions with financial services taking on an increasingly international dimension. This has been reinforced by the liberalisation that has increased the diversity of the players and foreign participation in our financial system.

The continued strengthening of the financial sector has enabled Malaysia to pursue a progressive deregulation and liberalisation agenda. Deregulation and liberalisation measures have been carefully sequenced to promote improved performance, while avoiding destabilising implications arising from premature liberalisation. Important preconditions are strengthened domestic institutional capacity, efficient financial markets, a robust financial infrastructure, an inclusive financial system and a comprehensive financial safety net. As these have strengthened over the years, the Bank has progressively liberalised the financial sector to strengthen further our linkages with the global economy and promote new business activities. While this liberalisation has been accelerated, it has not only been accompanied by increased economic and financial resilience, but also the enhanced capacity of the Bank in surveillance and management of the risks associated with the liberalisation.

With the significant deepening of our financial markets, Malaysia's bond market in particular is now among the more developed in the region. This has bolstered business efficiency and growth by providing an alternative avenue for financing, while dispersing the concentration of credit risk from the banking sector. An exciting development has been being at the frontier in the development of Islamic finance. Islamic finance has flourished with its international dimension gaining greater significance. The Islamic financial system in Malaysia has become among the most comprehensive and active in the world. Accompanying this development has been the strengthening of the regulatory framework and the Shariah governance practices. The advanced stage of development of the Islamic financial system has enabled Malaysia to play a significant role in shaping the global Islamic financial landscape. In these efforts, Malaysia has considered it vital for greater engagement across jurisdictions to drive harmonisation and convergence on prudential practices and mutual recognition of Shariah interpretations. This greater international engagement and interface that has taken place thus far contributed to significant convergence. The establishment of the International Shariah Research Academy for Islamic Finance (ISRA) by Malaysia to be an academy within the International Centre for Education in Islamic Finance (INCEIF) aims to provide a formal institutional structure to facilitate this process. All of these developments have contributed to the efficient functioning of the financial system, its resilience and thus, to financial stability.

The Bank will remain vigilant to the new emerging trends and challenges to the Malaysian financial system which could result in risks to financial stability. In the domestic environment, competition in the banking sector has continued to intensify, with growing pressures on interest margins. The shift towards market-based credit intermediation through securitisation activities is also gaining momentum. This will add to the complexity and opacity of credit risk distributions in the system and the linkages between the credit markets and financial institutions. This raises the need for financial institutions to address the valuation challenges with the adoption of fair value measurement, and to have in place robust processes for valuations of complex instruments.

During the year, the Bank's surveillance capabilities were significantly strengthened. The external and domestic developments are being closely monitored for early signs of systemic implications on the financial system. Attention is also being focused on any deterioration in credit evaluations, any significant changes in the liquidity profiles of banking institutions or any impairment in the ability of institutions to effectively monitor and measure risk concentrations on a continuing basis. Such signs have not materialised. More rigorous supervisory assessments and the deployment of enhanced surveillance tools have been adopted to capture the more complex linkages between the different components of the financial system. The prudential regulatory framework has also been strengthened in a number of key areas – including capital adequacy standards, stress testing, risk management practices and corporate governance. The risk management processes within financial institutions have now become more robust, reflecting improved techniques for measuring and managing risk. The realignment of the regulatory and supervisory functions has also facilitated a more integrated approach to regulatory reforms and surveillance, and has enabled the more efficient allocation of supervisory resources within the Bank.

The institutional infrastructure to support greater financial inclusion is now well entrenched. An extensive support network has been established for small and medium (SME) and micro enterprises. This includes the newly transformed Credit Guarantee Corporation Malaysia Berhad, the SME Business Advisers Network, the Small Debt Resolution Scheme, the SMEinfo Portal, the SME Credit Bureau and more recently, the establishment of the Cooperative Societies Commission. Preparations are on track to establish the SME Central Coordinating Agency which will be responsible for coordinating SME policies and Government programmes across all sectors. In addition to strengthening the institutional structure, there has also been a proliferation of new financial products tailored to meet the specific needs of SMEs, while microfinancing strategies by financial institutions have gained significant momentum. These developments have significantly improved access to financing for this segment that has traditionally been underserved by the financial system, contributing to greater financial inclusion and increased participation of the sector in the economic mainstream.

The Bank continued to act proactively to contain consumer indebtedness within prudent levels. Consumer education remains a central piece of the Bank's efforts in equipping consumers to make well-informed financial decisions, to protect themselves from predatory lending practices, and to effectively manage their debts. Outreach efforts by the Bank expanded further during the year, through providing basic financial education to the younger population at earlier stages of the formal education process. The launch of BNMTELELINK further complements existing channels for the public to obtain information and assistance relating to financial services. The Credit Counselling and Debt Management Agency has expanded its presence in key regions in the country. In less than two years since its establishment, assistance has been provided to almost 50,000 consumers, including specific debt counselling and management assistance to more than 5,000 individuals with combined debts totalling RM478 million.

The institutional arrangements put in place by the Bank to strengthen the consumer protection framework has also had a significant and positive impact on the financial system. In particular, the Malaysia Deposit Insurance Corporation (MDIC) has established a strong domestic and international reputation as a model of best practice for deposit insurance systems, and is the first in the world to provide coverage on both conventional and Islamic deposits within one system under a Shariah-compatible model. The MDIC will enter its third assessment year in 2008 with the implementation of a differential premium system for premium contributions from member institutions, thereby reinforcing incentives for sound risk management within the institutions.

The Malaysian economy has continued to reap significant dividends from the efforts to develop and strengthen the resilience of the financial sector. The financial sector has now become a major source of economic growth, while broader access to financing and financial services has improved prospects for more Malaysians and businesses to benefit from economic progress. It has also contributed towards sustaining domestic-led growth, thus reducing Malaysia's vulnerability to external market conditions. There is a high level of confidence in Malaysia's financial system and the regulatory and supervisory regime. At the same time, improvements in the level of financial capability among Malaysian households and small businesses have promoted more prudent financial management, and encouraged innovation and a more competitive financial system.

Against a backdrop of an increasingly uncertain external environment, the Malaysian financial system is therefore well positioned, both financially and structurally, to weather the more challenging outlook for 2008. In the coming year, the focus will be on effective surveillance, institutional development, financial market and infrastructure development, as well as to ensure a state of readiness to cope with any potential shocks to the system, and thus sustain overall stability and confidence in the financial system. This will be achieved by further accelerating the development of a more diversified financial sector – that includes the Islamic financial system and the foreign exchange market so as to complement the other components of the financial system, strengthening the resilience of financial institutions to market-based shocks, and finally, enhancing the Bank's crisis management framework and surveillance capabilities. Significant attention is being devoted to intensively develop and secure skilled human capital resources needed to support the continued growth and development of the financial sector as well as the Bank's accountabilities in a far more challenging environment. Key pieces of financial sector legislation will also be strengthened and updated to reinforce a sound legislative framework for financial stability. The Bank is committed to achieving these results.

Zeti Akhtar Aziz
Governor

26 March 2008

Executive Summary

Executive Summary

The Financial Stability and Payment Systems Report aims to promote increased understanding of issues and developments that affect financial system stability. The Report covers Bank Negara Malaysia's assessment of key risks and trends in the financial system, and potential implications for the effective functioning of the system. The Report also reviews developments surrounding the transformation of the financial sector and payment systems, as well as key regulatory and supervisory initiatives to promote financial stability.

Risk Assessment and Performance of Financial Institutions

The Malaysian financial system remained resilient throughout 2007 despite challenging external conditions marked by a slowing United States (US) economy, rising global inflationary pressures, increased risk aversion by market participants and more volatile financial markets. During the year, global financial markets experienced unstable and increased uncertainties after a prolonged period of exuberance.

On the whole, financial institutions in Malaysia remained well capitalised throughout the year. In addition, the foundations for long-term stability have continued to strengthen with ongoing improvements in risk management capabilities, governance and operating efficiencies. Interbank and money markets remained amply liquid, with interbank rates holding steady throughout the year and banking institutions maintaining adequate liquidity buffers. These conditions enabled the Malaysian financial system to continue functioning effectively without major disruptions, in spite of the bouts of elevated volatility experienced in domestic financial markets.

Total financing extended to businesses through both the banking system and capital market expanded by 14.1% in 2007. With improved operating and financial performance, private investments by businesses remained robust. Demand for financing by households meanwhile also remained strong, with outstanding housing loans and securities financing facilities growing by 5.9% and 11.1% respectively. Overall, outstanding loans from the banking system grew at a stronger pace of 8.6%, while outstanding private debt securities (PDS) expanded by 15.2%. In the insurance sector, life insurers registered a 6.1% growth in new premiums while new family takaful business grew 15.8%, driven mainly by the growing demand for investment-linked products. Despite sluggish motor vehicle sales and continued pressure from higher claims exerted on underwriting margins, the general insurance sector maintained its positive, albeit more modest, growth momentum, increasing by 4.3% in terms of gross direct premiums.

Despite more intense competition weighing down on margins, credit discipline has been maintained. The net non-performing loan (NPL) ratio improved to 3.2%, its lowest level in a decade. The structural characteristics of Malaysian housing finance, including the deposit-based funding structure and more prevalent "originate-and-hold" business models adopted, provide sufficient incentives for banking institutions to control and monitor the quality of the loan portfolio on a continuing basis. This has been borne out by an improvement in asset quality observed in the housing finance segment which saw the NPL ratio decline to 7% in 2007 (2006: 8.7%).

With limited direct exposures to markets affected by the US subprime crisis and supportive domestic economic conditions, the profitability of banking institutions in Malaysia improved further. Preliminary unaudited pre-tax profits amounted to RM17.7 billion (2006: RM12.9 billion), mainly attributed to efficiency and productivity gains resulting from ongoing rationalisation efforts and investments in technology, as well as higher income from treasury and other fee-based activities. Improved returns were also harnessed from more efficient capital management programmes while continuous product innovations enabled banks to retain and grow their market shares.

Development of the Financial Sector

A more diversified financial system continued to evolve in 2007. The role of the capital market as a source of funds and avenue for risk diversification gained increasing importance. Debt security issuances during the year increased to RM302 billion (of which RM66.5 billion were PDS), representing a significant increase of 65.3% from issuances in 2006. Of significance, some new issues were also of longer maturities, shifting above 10 years. This has further lengthened the maturity structure of fixed income securities, thereby providing opportunities for insurance companies and pension funds to match and narrow the maturity gap between assets and liabilities. The more liberal foreign exchange administration policies that have been introduced in recent years also saw the turnover of foreign exchange transactions by non-residents more than double over the previous year, thereby contributing to the development of a more active foreign exchange market. This, in turn, will enable businesses and banks to manage their foreign exchange exposures more effectively, while reducing the cost of doing business.

The development of Islamic finance gained further momentum. Malaysia solidified its lead in global sukuk issuances, adding further to the breadth and depth of the domestic capital market. As at end-2007, sukuk originated in Malaysia accounted for 68.9% of global outstanding sukuk. Existing institutional structures supporting Islamic financial business were substantially strengthened as the remaining domestic banking institutions and two locally-incorporated foreign banks (LIFBs) with window operations took steps to transform these operations into full-fledged Islamic banking subsidiaries, thus providing a stronger and dedicated platform to expand the business.

A greater diversity of players in the market was also achieved with the introduction of Islamic banking operations by two more existing LIFBs, while 16 new approvals for the conduct of international currency business were granted under the Malaysia as an International Islamic Financial Centre (MIFC) initiative. Product innovations thrived during the year, supported by the pragmatic approach taken by the Shariah Advisory Council to ensure that new Islamic finance products offered are Shariah-compatible while encouraging innovation.

Going forward, the Shariah Advisory Council will be further supported by the International Shariah Research Academy for Islamic Finance (ISRA) which has been established under the International Centre for Education in Islamic Finance (INCEIF) to spearhead research in current Shariah issues. Additional flexibilities in the areas of tax, foreign exchange administration, immigration and foreign ownership rules as well as simplified regulatory processes were also introduced under the MIFC. These incentives together with the comprehensive infrastructure and diversity of players in Malaysia continued to attract significant foreign interest in Malaysia as a preferred centre for sukuk issuances. Total approvals for the issuance of foreign currency-denominated debt securities in 2007 increased by 58% in value to USD12.3 billion, of which 68% was foreign currency-denominated sukuk.

With the robust growth and rapid evolution of the financial sector, competition for highly-skilled financial professionals has remained intense. At the same time, the global dimension of such competition has become more pronounced as fast-growing financial markets in the region increasingly look to the same limited pool of talent to meet their needs. Competition for talent has been particularly intense in the fields of Islamic finance and investment banking, while specific expertise in the areas around Basel II, risk management and financial reporting continued to be in short supply.

The development of a strong talent pipeline for the financial sector was therefore identified as a key priority of the Bank in 2007. Significant resources have been invested by the Bank in driving and supporting initiatives in this area, paving the way for a more coordinated and effective approach to address the critical talent demand and supply gaps. While the needs remain significant, important progress was achieved during the year both in meeting the immediate short-term needs of the industry, and laying the foundation for longer-term collaboration between institutions of higher learning, the industry training institutes, the financial services industry as well as the Government and other regulatory agencies to identify and develop future talent. In November, the Financial Sector Talent Enrichment Programme (FSTEP), developed by the financial services industry in collaboration with the Bank, was launched to equip new graduates with the essential practical knowledge and skill sets to fill more than 2,000 existing entry-level vacant positions in the industry. Various initiatives were also taken forward to complement the development of relevant teaching and learning resources in line with the demands of the market and to enhance existing complementarities between the various training providers. INCEIF and the International Centre for Leadership in Finance (ICLIF) also continued to enhance their roles in providing a solid educational foundation in the field of Islamic finance, and harnessing the effectiveness of current and future leadership in the financial services industry respectively.

Prudential Regulation and Supervision

The development of a sound, effective and efficient prudential framework remained an important priority in 2007. The standardised approaches under the revised capital framework for conventional banks (Basel II) and the Capital Adequacy Framework for Islamic Banks, came into effect on 1 January 2008, while the Risk-Based Capital Framework for insurers entered a second year of parallel run. The Bank continued to work closely with financial institutions to ensure the smooth implementation of these revised frameworks, and more importantly, to integrate the frameworks with more robust risk management processes and systems within the institutions. On the whole, the net increase in capital requirements as a result of the revised capital frameworks is not expected to be material for most institutions.

The Bank's risk-based supervisory framework (RBSF) has been further enhanced to facilitate more granular and holistic risk assessments of financial institutions. During the year, the Bank also strengthened the supporting structure, processes and core capabilities required to effectively implement RBSF. This included putting in place a rigorous quality assurance framework, strengthening the specialised risk units and enhancing the Bank's supervisory information systems and infrastructure. The closer integration and coordination between the Bank's macro- and micro-surveillance functions have also served to reinforce sound supervisory assessments of financial institutions taking into account developments in the broader macroeconomy, while providing early signals of potential vulnerabilities at the macro level from developments observed at the institutional level. As at end-2007, the Bank's supervisory assessments affirmed that the vast majority of financial institutions remained in healthy positions with the capacity to manage the increased risks associated with the more volatile external environment.

A more principle-based regulatory regime continued to evolve, while preserving an appropriate balance between principle-based and rule-based regulations. This process has facilitated a more proportionate approach to regulation according to the size, complexity and risk profiles of different institutions. Financial institutions are also better positioned as a result to respond quickly to changing market conditions from both risk and competitiveness perspectives, without being unduly constrained by detailed rules. In supporting the transition from a rule- to principle-based regime, the Bank continued to direct significant attention at strengthening the necessary preconditions for sound risk management under the more flexible regime. In this regard, marked improvements in the effectiveness of board oversight and senior management continued to be observed, reinforced by firm supervisory actions taken by the Bank to address material deficiencies in financial and business practices within individual institutions. These developments have continued to support the growing momentum towards principle-based regulations in more recent periods. More than 50 prudential standards have been developed or reviewed under a more principle-based regulatory approach since 2001.

Financial Inclusion

Bank Negara Malaysia also continued to promote broad-based and balanced growth through financial inclusion, with a particular focus as in previous years on the small and medium enterprises (SMEs) and micro enterprises. SME loans approved by banking institutions and development financial institutions (DFIs) grew strongly by 34.3% to RM63.2 billion in 2007. The microfinance initiative, introduced in 2006, saw a further RM224.7 million in outstanding financing extended by nine financial institutions to more than 22,000 microfinance customer accounts. During the year, financial capacities and institutional arrangements of DFIs were also strengthened to complement access to special funds and financing facilities that are aimed primarily at supporting the agricultural sector and Malaysian companies venturing overseas.

New credit enhancement products introduced by the Credit Guarantee Corporation Malaysia Berhad and the launch of a securitisation programme by Cagamas Berhad for SME loans further enhanced the capacity of banking institutions to lend to SMEs. A more comprehensive advisory and support network has also been put in place for small borrowers over the years to assist in business expansions and effective management of debts. In 2007, this network was further expanded to include a one-stop web-based directory that allows SME business advisers to share expertise, while the Small Debt Resolution Scheme, which is aimed at assisting financially distressed SMEs, saw the participation of an additional three DFIs in the scheme.

Financial Capability and Fair Market Conduct

A more challenging environment continued to confront financial consumers. Specifically, consumers have to contend with the increasing choice and complexity of financial products offered in the market, while coping with easier access to credit and substantially reduced direct contact between financial institutions and consumers as a result of outsourcing trends and greater use of automated delivery channels for financial services. Extended life expectancies have also increased the need for consumers to take greater individual responsibility for sound financial planning.

Equipping consumers to manage these challenges remained an important part of the Bank's efforts to maintain confidence in the financial system, contain household indebtedness within prudent levels, and minimise the erosion of investments and savings as a result of unethical sales, servicing or advisory practices. For this purpose, product disclosure and transparency standards were further enhanced during the year, while best practices were introduced to improve the professionalism of insurance and takaful intermediaries and outsourcing service providers that interface with consumers. Heightened market conduct surveillance and enforcement activities undertaken by the Bank have led to improvements in the industry's overall observance of fair market conduct practices as evidenced by the Bank's follow up assessments, and corrective actions taken by institutions to address the market conduct deficiencies identified by the Bank.

The consumer redress and protection framework was enhanced further with the launch of the BNMTELELINK in July 2007 to complement existing channels for the general public to obtain information and seek assistance in relation to financial services. Public response to this new channel has been overwhelming, with more than 25,000 enquiries received in the first five months of its operations. The Credit Counselling and Debt Management Agency also continued to play an important role in helping individuals in managing debts, providing assistance to more than 5,000 individuals with aggregate debts of RM478 million under its debt management programme since its establishment in 2006.

During the year, the Bank led a more targeted approach to raise the level of financial capability among Malaysian financial consumers. Consumer education programmes and activities in 2007 focused in particular on women, school children, college and university students, rural communities and retirees. The Bank and the financial industry were also able to leverage more effectively on collaborative arrangements with schools, training institutes, regulatory agencies and interest groups to expand the reach of the Bank and industry's financial capability initiatives.

Payment System Safety and Stability

Both the large value and retail payment systems functioned efficiently and did not encounter major disruptions during the year. The value of non-cash payments handled by the Real-time Electronic Transfer of Funds and Securities (RENTAS) system in 2007 increased by 23.6% to RM124.5 billion in payment transactions daily. A self-assessment of RENTAS carried out during the year against the Bank for International Settlements Core Principles for Systemically Important Payment Systems affirmed a high level of robustness of the RENTAS system which came close to achieving full observance of the Core Principles. Fraud in the retail payment systems remained insignificant, with sustained initiatives by the Bank, payment systems operators and other regulatory authorities to combat this risk. Settlement risk has also been reduced following the establishment of Payment versus Payment (PvP) and Delivery versus Payment (DvP) links with Hong Kong which facilitate the simultaneous settlement of ringgit and US dollar payments and securities.

Payment System Efficiency

To promote efficiency in payment systems, initiatives were undertaken to enhance the payment infrastructure, foster the adoption of new technologies and provide support to stakeholders for the migration to electronic payments. The adoption of a fully image-based cheque clearing process in 2008 will expedite the receipt of funds while also providing cost savings through the elimination of physical handling and transportation of cheques. The year also saw the functionalities and availability of automated teller machine (ATM) services provided by banking institutions enhanced with the introduction of 24-hour ATM facilities on the shared network and expanded services offering mobile phone top-up facilities and interbank funds transfer services. Such services have also been expanded across borders through strategic partnerships signed between Malaysian Electronic Payment System (1997) Sdn. Bhd. and overseas ATM network operators in Indonesia, Thailand, Singapore and China.

Facilitative regulatory policies and support from the Government have continued to foster payment innovations and the adoption of various electronic payment applications. In this regard, several innovations were introduced during the year, including the world's first international mobile-to-mobile money transfer service and mobile remittance services using short messaging services, mobile operator outlets and prepaid cards. On a broader scale, the adoption of various electronic payment applications by the Government has contributed towards accelerating the pace of migration to electronic payments in the economy. This move by the Government has been strategically important in encouraging the wider use and acceptance of electronic payments as observed from the significant increase in value of Government payments made through electronic channels which has increased by almost three times from RM16.7 billion in 2004 to RM64.9 billion in 2007.

Financial Stability Report

Risk Assessment of the Financial System

Risk Assessment of the Financial System

OVERVIEW

Financial stability was preserved throughout the year although the financial markets experienced bouts of increased volatility, influenced primarily by developments in the external environment, particularly in the global financial and credit markets. The growing risk aversion and the continuous repricing of risks, which led to the tightening of liquidity and credit conditions in the global markets, however, had no major impact on the Malaysian financial system.

The financial system remained resilient with financial institutions exhibiting sound financial performance and stronger fundamentals, supported by continuous enhancements to risk management, financial infrastructure development as well as strengthened governance and oversight at the institutional level. Non-performing loans improved to a 10-year low of 3.2%, while return on equity of banking institutions rose to 19.7% in 2007.

The financial system remained resilient with financial institutions recording sound financial performance supported by stronger lending and treasury activities. This was further supported by continuous enhancements to the risk management infrastructure, practices and capability, financial infrastructure development, and strengthened governance and oversight at the institutional level. Financial intermediation remained robust throughout the year and supportive of economic activity, while developments in the capital market continued to remain favourable for fund raising by the private sector.

The risk-bearing capacity of the financial sector strengthened further, supported by the continuous accumulation of financial buffers. The level of capitalisation of banking institutions, measured in terms of the risk-weighted capital ratio (RWCR), remained at a level of at least 13% throughout the year while the quality of the loan portfolio improved significantly, with non-performing loans (NPLs) recording a 10-year low of 3.2% as at end-2007. Capital in excess of the minimum regulatory requirement of 8% RWCR stood at RM38.5 billion as at end-2007. With minimal exposures to the United States (US) subprime mortgage segment and associated derivatives, financial institutions in Malaysia generally benefited from the more vibrant domestic business environment, registering strong profitability despite greater volatility in the domestic financial markets. Preliminary unaudited pre-tax profit for the banking sector rose to RM17.7 billion resulting in a substantially higher average return on equity of 19.7%. The high degree of resilience of the banking institutions was also supported by the stress test results which demonstrated the strengthened risk absorption capacity and tolerance against adverse shocks.

Financial stability surveillance for the year was largely concentrated on monitoring and assessing the implications for asset markets arising from inflows of portfolio funds that persisted during the first half of the year, and the increased volatility in the financial markets following adverse developments and uncertainties in the external environment. Surveillance was also focused on the impact of rising prices on the debt servicing capacity and cash flow position of households and businesses.

GLOBAL MACROECONOMIC AND FINANCIAL DEVELOPMENTS

The year 2007 was highly challenging to policy makers and financial market participants globally. The prolonged period of excessive risk-taking activity in an environment of low risk premia and increasing sophistication of financial instruments has masked the excessive build-up of risk which experienced a major turning point in 2007. This was triggered by the rapid rise in mortgage delinquencies by subprime borrowers in the US.

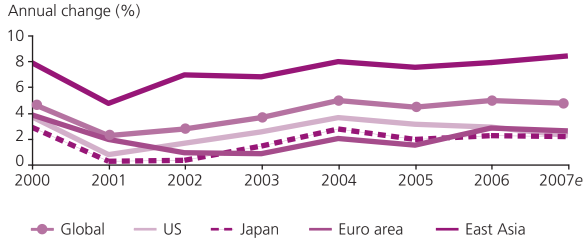
Such mortgages formed the underlying for a substantial portion of structured investments and risk transfer instruments. Beginning with the financial institutions and their structured investment vehicles and conduits, it has extended into a more widespread problem that has affected other financial markets. While global growth was generally sustained in 2007, the year ended on a pessimistic note. In addition, greater inflationary pressures from higher food, oil and commodity prices have increased the uncertainty on the outlook of the US economy and stability in the international financial system.

Global growth was sustained while the Asian region continued to expand amidst increasing inflationary pressures following rising oil and food prices

Global growth was sustained in 2007 in an environment of a slowing US economy, rising concerns on inflationary pressures and persistent financial market turbulence. The downturn in the US housing sector after decades of robust growth led to increased incidences of delinquency emanating from the subprime segment of the mortgage market that eventually led to broader disruptions in the credit markets and volatility in global financial markets. In the Asian region, while exports of electronic products and equipment have slowed, overall growth remained resilient, supported by strong domestic demand and robust expansion in the major economies (Chart 2.1).

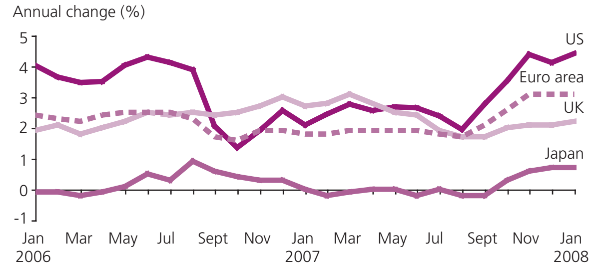
The prolonged period of favourable global growth for four consecutive years has created price pressures on resource utilisation and resulted in the high commodity prices. Oil prices have surged to record highs which has consequently contributed to higher food prices due to the

Chart 2.1
Real GDP Growth



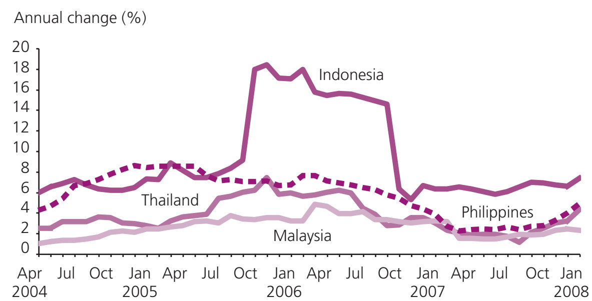
e Estimate
Source: National Authorities

Chart 2.2
Headline Inflation in Major Industrialised Countries



Source: National Authorities

Chart 2.3
Headline Inflation in Regional Countries



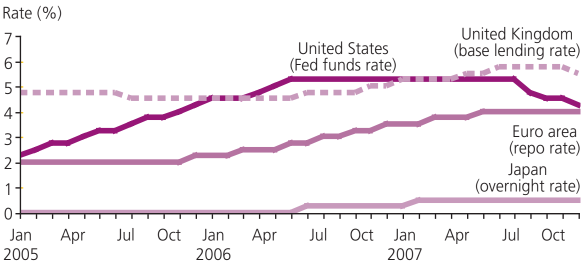
Source: National Authorities

increasing demand for conventional fuel substitutes, including renewable energy such as biodiesel and ethanol. More frequent incidences of adverse weather conditions as well as rising transportation costs, have also contributed to higher food prices. Recent trends seem to suggest that underlying demand conditions for commodities remain firm, especially in the fast-growing regions. Hence, in comparison to the previous year, there has been a pick-up in overall global inflation. The US economy has experienced increases in headline inflation, while the Euro area continued to record rapid money and credit growth amidst increasing pressures for higher wages. Meanwhile, in the Asian region, several countries faced price pressures from tighter labour market conditions in addition to the increase in food and energy prices (Charts 2.2 and 2.3).

Mixed monetary policy actions by major central banks

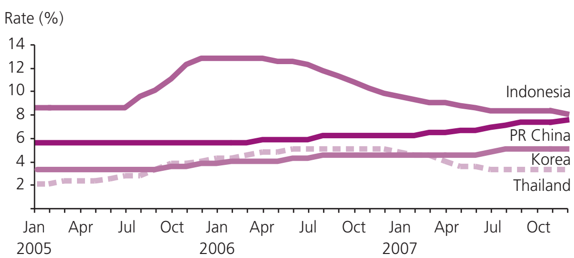
While global inflationary pressures heightened in 2007, disparate growth performance and

Chart 2.4
Interest Rate Movements in Major Industrialised Countries



Source: National Authorities

Chart 2.5
Interest Rate Movements in Regional Countries



Source: National Authorities

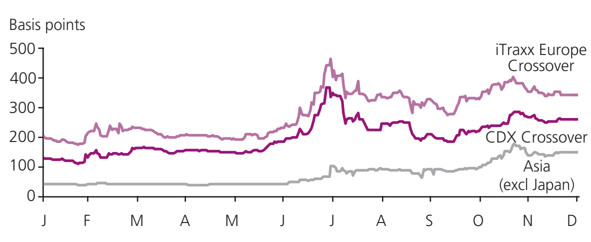
domestic issues between the industrialised and Asian countries resulted in mixed monetary policy actions by the respective central banks. In the US, the Federal Reserve Board reduced the policy rate by 100 basis points during the year to support growth as domestic demand weakened due to the major downturn in its housing market and the deepening financial and credit market crisis that led to credit tightening by financial institutions. In Europe, however, rising inflation prompted the European Central Bank to raise interest rates to curb inflationary pressures. The Bank of England raised interest rates during the early part of 2007 but subsequently eased monetary policy in December to support growth as the impact of the financial market turbulence intensified. In the Asian region, China raised interest rates to slow credit and investment growth while other regional economies, including South Korea and India, also tightened monetary policy to contain inflation. Meanwhile, the Philippines, Thailand and Indonesia reduced interest rates in 2007 to stimulate domestic demand as inflationary pressures eased (Charts 2.4 and 2.5).

Heightened risk aversion led to repricing of risks and increased volatilities across global financial markets in the second half of the year

Global and regional equity markets were largely bullish in the first half of 2007 despite emerging concerns of declining house prices in the US housing market and inflationary pressures following rising commodity prices. Capital flows into emerging economies and Asia were substantial in view of the strong prospects for growth in the region. Despite some signs of repricing of risk during the February-March 2007 sell-off in the global equity markets, the continued search for better returns by investors contributed to a quick rebound in equity prices and a sustained low bond yield environment.

Deterioration in house prices in the US in the second half of the year led to higher arrears and delinquencies in residential mortgages, particularly those in the subprime segment. This eventually precipitated a downward spiral in prices of residential mortgage-backed securities (RMBS) backed by subprime mortgages which subsequently spilled over into a wider class of structured credit products. Heightened uncertainties and increased risk aversion caused a widespread repricing of risks (Chart 2.6) and increased volatilities. Liquidity tightened in the asset-backed commercial paper (ABCP) and money markets as financial institutions retained liquidity in anticipation of potential losses from exposures to the subprime market and related securities. Flight to quality was evident as investors switched from corporate commercial papers into treasury bonds. While the flight to quality also affected the demand for sovereign bonds of emerging market economies, liquidity conditions remained favourable on account of

Chart 2.6
Spreads on CDX Crossover and iTraxx Crossover

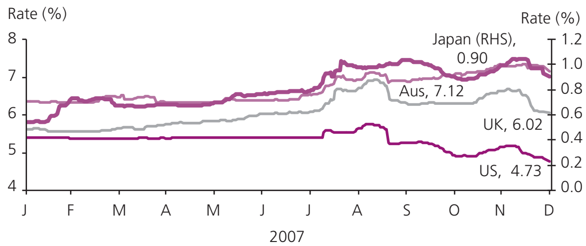


Source: Bloomberg

improved economic fundamentals, strong external balances and more developed financial markets (Charts 2.7 to 2.9).

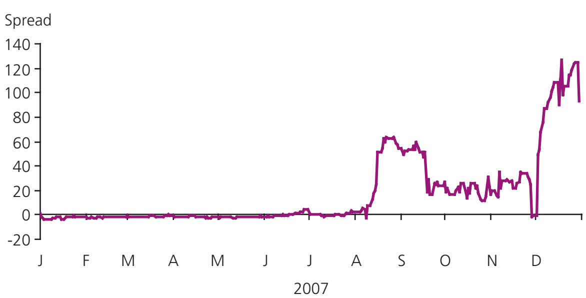
Tightened liquidity conditions and the increasing incidence of losses reported by major financial institutions in the US, Europe and some parts of Asia triggered periods of heightened volatilities and large declines in major

Chart 2.7
Money Market Rates in Major Industrialised Economies



Source: Bloomberg

Chart 2.8
US Asset-Backed Commercial Paper (30-day) Spreads[1]

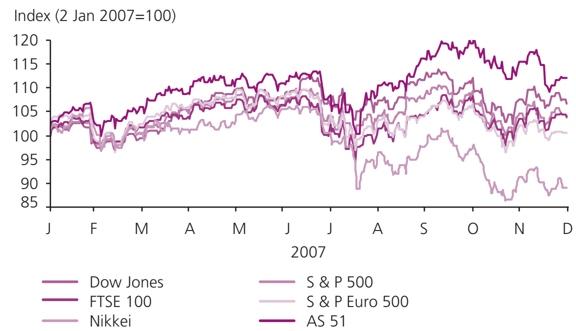


[1] Against US Libor of corresponding maturity
Source: Bloomberg

Chart 2.9
Emerging Market Bond Spread

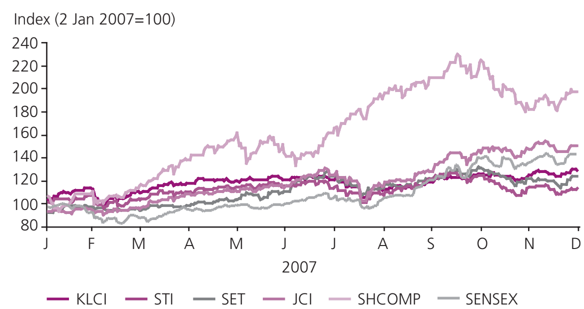
Source: Bloomberg

Chart 2.10
Major International Equity Indices



Source: Bloomberg

Chart 2.11
Regional Equity Indices

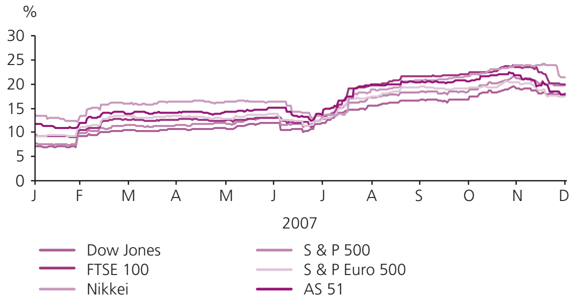


Source: Bloomberg

international equity indices. This was further exacerbated by the unwinding of carry trade activities. Although regional equity markets experienced some adjustments, the magnitude was relatively less and equity markets in the region rebounded fairly quickly on account of signs of sustained strong economic growth (Charts 2.10 and 2.11).

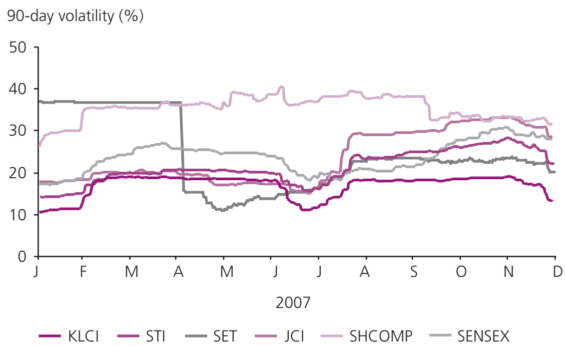
Meanwhile, global equity markets rebounded following central bank liquidity injections and the lowering of the policy rate in the US. Volatilities remained high across global and regional equity as well as bond markets (Charts 2.12 to 2.15), while the longer-term funding market in the major economies remained relatively less liquid given further write-downs and losses reported by financial institutions. In early 2008, confidence suffered yet another setback following the downgrades of several monoline insurers which sparked another round of sell-offs and further write-downs of securities by financial institutions.

Chart 2.12
Volatilities of Equity Indices in Major Economies



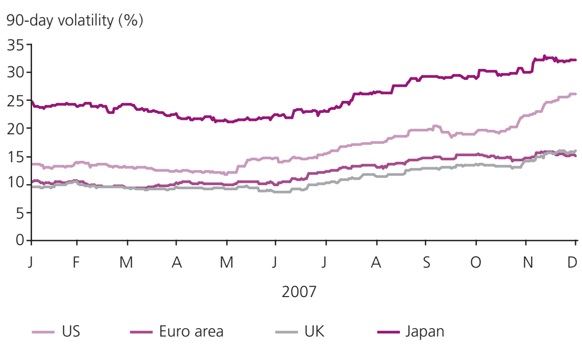
Source: Bloomberg

Chart 2.13
Volatilities of Equity Indices in Regional Economies



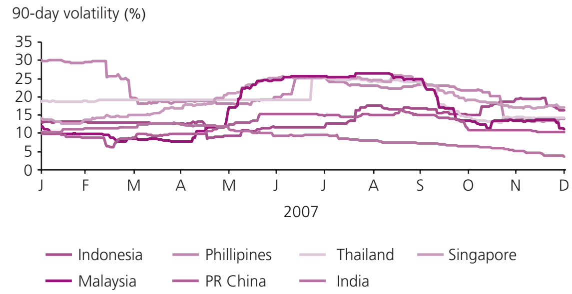
Source: Bloomberg

Chart 2.14
Volatilities of Benchmark Yields (10-Year) in Major Economies



Source: Bloomberg

Chart 2.15
Volatilities of Benchmark Yields (10-Year) in Regional Economies



Source: Bloomberg

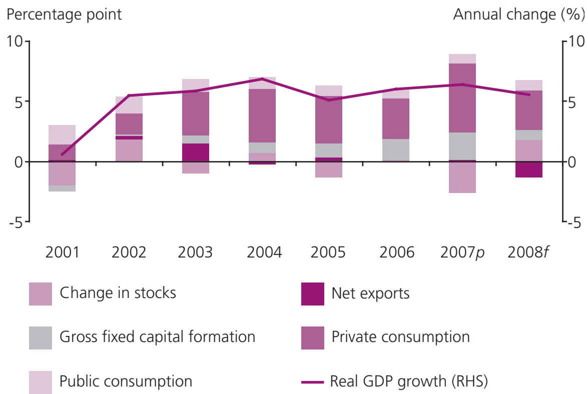
The ensuing widening of spreads in the credit default swap market and tightness of liquidity in the auction-rate securities market raised new sets of concerns regarding the capability of municipalities and public entities in the US to fund social and infrastructure development commitments which could have undesirable spillover implications for the already weakened US economy.

MALAYSIAN MACROECONOMIC AND FINANCIAL DEVELOPMENTS

Continued expansion in the Malaysian economy driven by strong domestic demand despite weaker external environment

The Malaysian economy strengthened further by 6.3% in 2007, driven mainly by strong domestic demand (Chart 2.16). Growth was led by the strong performance in the services sector and supported by the construction and mining sectors. Private consumption expenditure was robust, recording the highest growth of 11.7% since 2000. Consumers benefited from continued growth in disposable income supported by high commodity prices, salary increments in the public and private sectors, and favourable labour market conditions. Promotions in conjunction with the Visit Malaysia Year 2007 also encouraged higher consumer spending. Gross fixed capital formation expanded by 10.2%. Strong investment activity in the manufacturing, services, construction and oil and gas industries, combined with positive business sentiments, supported the higher growth in private investment by 12.3% compared to 7% in the

Chart 2.16
Contribution to Real Gross Domestic Product (GDP) Growth



p Preliminary
f Forecast

preceding year. This was further reinforced by the large inflows of foreign direct investment in 2007.

Growth was also supported by greater public sector activity. Public consumption increased by 6.4% supported by higher expenditure on emoluments as well as supplies and services. In addition, public investment expanded further at a sustained rate of 8% in 2007. Large development expenditure was channelled into projects to further improve the economic and social services sectors, particularly in enhancing the transportation and public utilities infrastructure, as well as upgrading and providing essential services such as healthcare and education.

Ringgit Developments

The broadly orderly performance of the ringgit against major and regional currencies during the year was driven by strong two-way trade and investment flows. While the ringgit benefited from a positive net trade balance, sustained inward direct investment and substantial repatriation of profits and dividends by Malaysian companies with investments abroad, there were significant outflows attributed to foreign direct investment by Malaysian corporations, the repatriation of profits and dividends of foreign multinationals operating in Malaysia, and the repayment and prepayment of foreign debt. Ringgit demand was further augmented by significant portfolio inflows, especially into the equity market, as expectations of further currency appreciation and the strong domestic economic growth performance enhanced investor sentiment. This was further reinforced by the generally optimistic investor sentiment towards the region and the broad weakness of the US dollar.

Inflation and Monetary Policy Developments

Headline inflation rate, as measured by the annual change in the Consumer Price Index (CPI), increased at a slower pace of 2% in 2007 (2006: 3.6%), attributed to the absence of major adjustments to price-administered items during the year. Nevertheless, the combined effect of rising global prices of primary commodities and food as well as strong private consumption led both headline and core inflation rates to edge slightly higher in the final quarter of the year. The Producer Price Index (PPI) increased by an annual rate of 6.7% in 2007 (2006: 5.1%), following higher global prices of commodities such as rubber, crude palm oil and crude oil. Against these developments, monetary policy took into consideration the downside risks to domestic growth following the weaker global growth performance, and the upside risks to domestic prices. The Overnight Policy Rate was thus kept unchanged at 3.5% with the monetary policy stance remaining still supportive of the domestic economy.

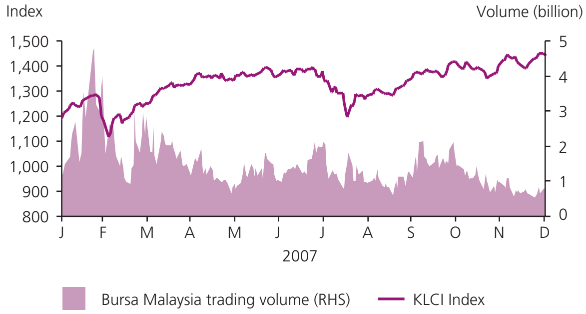
Financial Market Developments

Domestic financial markets remained resilient despite increased volatilities reflecting global developments

The Malaysian equity and bond markets exhibited strong rallies in the first half of the year, driven mainly by positive domestic macroeconomic conditions, expectations of a stronger ringgit, anticipation of changes in monetary policy and continued portfolio inflows into the region. Nonetheless, with the developments in global financial markets in the second half of the year, heightened volatilities in the domestic financial markets persisted.

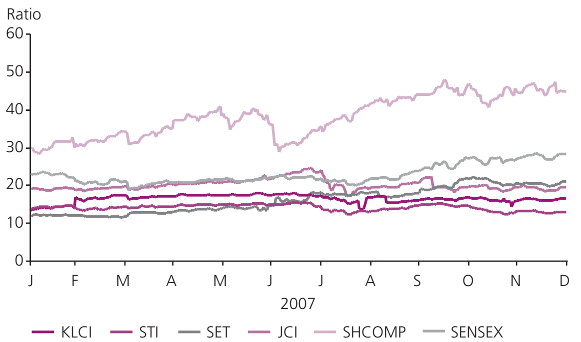
The Kuala Lumpur Composite Index (KLCI) remained resilient throughout 2007, supported by strong domestic conditions (Chart 2.17). Positive business sentiment was sustained with continued increase in capacity expansion and stronger recovery in the property sector. In addition, the

Chart 2.17
KLCI Performance



Source: Bloomberg

Chart 2.18
Price-Earnings Ratio of Regional Equity Indices



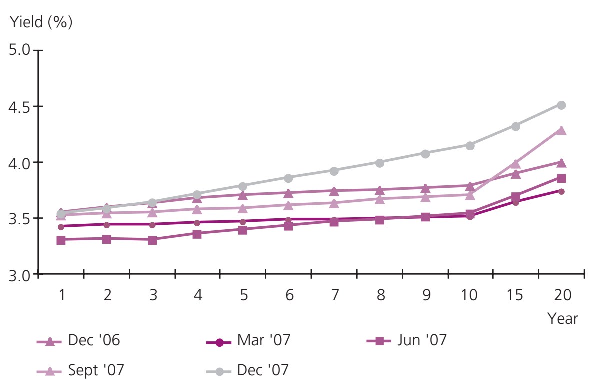
Source: Bloomberg

relatively lower price-earnings (P/E) ratio of the KLCI compared to regional indices and expectations of a stronger ringgit continued to attract higher foreign participation in the equity market (Chart 2.18). Against this backdrop, the KLCI concluded the year with an annual growth of 31.8% to reach 1,445.03 points, recording an all-year high of 1,447.04 points on 28 December. Following developments in the global financial markets, the domestic equity market experienced two major setbacks during the year, first in late February to early March attributed mainly to contagion effects from the weaker US macroeconomic performance and developments in the Chinese financial markets, and second, in the period July to August following concerns triggered by the US subprime market. There were also some profit-taking activities during the year. Total turnover in Bursa Malaysia was the highest since 1996, amounting to RM540.2 billion (2006: RM250.6 billion), with market capitalisation growing by 30.3% to RM1,106.2 billion or 172.4% of GDP as at end-2007. While the impact of the retracement in early 2007 was only temporary, the ensuing correction at the onset of the US subprime mortgage crisis that caused portfolio outflows from the region in the period June to August 2007 almost wiped out the earlier gains as the KLCI dipped to 1,191.55 points on 17 August. Nevertheless, the KLCI rebounded quickly to 1,273.52 points on 24 August as portfolio funds returned to the region.

The domestic bond market also grew significantly following the stronger new issuances of debt papers and sukuk during the year. As at end-2007, total outstanding public and private debt securities expanded by 22.8% to account for 86.8% of nominal GDP. With increased interest in the domestic bond market, the turnover in the bond market rose by 45.8% to RM777 billion.

Malaysian Government Securities (MGS) yields were more volatile in 2007 with movements generally reflective of domestic and global developments. Yields on MGS declined in the first quarter of 2007 following sustained investors' interest and expectations of a stronger ringgit. In the second half of 2007, amidst net portfolio outflows, portfolio rebalancing following greater uncertainties and increased risk aversion arising from the subprime and credit crisis, and a higher inflationary outlook, MGS yields readjusted upwards (Chart 2.19). The spread between the 10-year MGS and the shorter- and medium-term MGS widened and

Chart 2.19
Movements in MGS Yield Curve



Source: Bloomberg

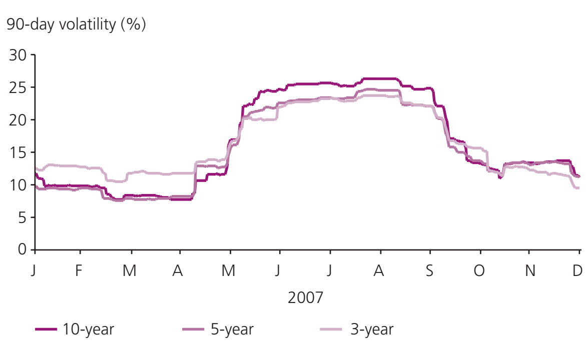
Chart 2.20
Implied Volatility Index

Source: Bloomberg

eventually led to the steepening of the MGS benchmark yield curve in December 2007. In the corporate bond market, yields generally moved in tandem with the movement of MGS yields, especially for the higher rated credits. However, during periods of uncertainty, a higher degree of risk aversion was observed particularly in the lower rated issues, as reflected in the slight widening in the spread between corporate bonds and MGS yields.

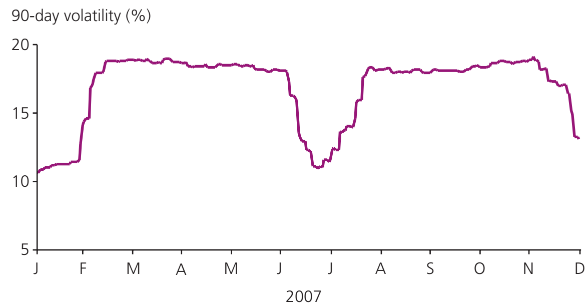
Given the openness of the domestic economy, the domestic financial markets are not insulated from uncertainties in the global environment. Volatility in the domestic equity and bond markets increased as global risk aversion became more pronounced in the second half of 2007 (Charts 2.20 to 2.22).

Chart 2.21
Volatility in MGS Yields



Source: Bloomberg

Chart 2.22
Volatility in KLCI

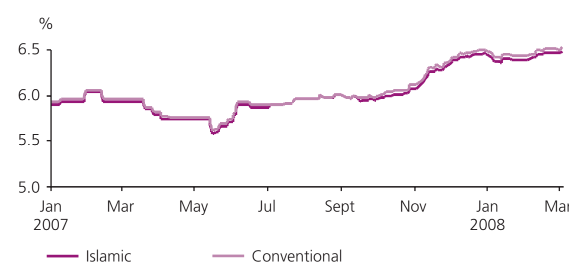


Source: Bloomberg

While volatility levels in the MGS market have generally subsided and stabilised, the domestic equity market remained susceptible to global market developments. The 90-day volatility in the KLCI remained at an elevated average level of 16.3% for the year.

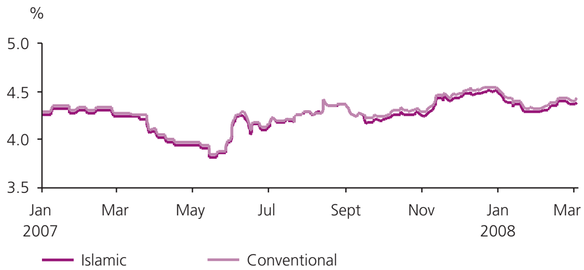
Yields on corporate sukuk were on average three basis points below similarly rated conventional asset-backed bonds, reflecting the lower cost of issuing these papers and strong demand for sukuk. The trend in sukuk yield movements mirrored the pricing of conventional bonds, suggesting that the sukuk market is already well-established and reflective of behaviours in a mature market. The distinctive features of Islamic financing require that any financial transactions must be supported by underlying trade- or business-related activities. These unique characteristics added to the attractiveness of sukuk as an investment instrument. Many investors thus adopted a

Chart 2.23
Yields on Malaysian Sukuk and Conventional Asset-Backed Securities (5-year) (A1 Rated)



Source: Bondweb Malaysia

Chart 2.24
Yields on Malaysian Sukuk and Conventional Asset-Backed Securities (5-year) (AAA Rated)



Source: Bondweb Malaysia

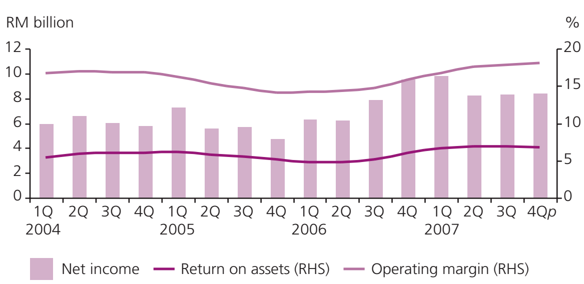
"buy-and-keep" attitude in view of its scarcity and high market demand. During the period when the general level of uncertainty rose in the wake of problems in the US subprime mortgage market where all asset classes were treated indiscriminately, the sukuk market was also affected. Yields on corporate sukuk converged with conventional yields during the period July to mid-September 2007 before trending to its normal level thereafter following the reduction in the US Federal Reserve Board federal funds target rate (Charts 2.23 and 2.24).

Non Financial Sector Developments

Corporate sector performance benefited from strong domestic growth despite rising cost pressures

Businesses experienced improved financial performance during the year in tandem with the favourable domestic economic conditions. Against the backdrop of robust domestic demand, higher tourism receipts and construction-related activities, business revenue and profitability strengthened despite increasing costs of production in an environment of high commodity and energy prices. Private investment by businesses remained encouraging, supported by continued access to financing at competitive costs. During the year, a total of RM405.5 billion was disbursed by the banking system for various activities and to a broad range of businesses, while new financing via the bond market amounted to RM66.5 billion. As at end-2007, total financing extended to businesses through the banking system and the capital market expanded at a rate of 14.1% to account for 79.3% of GDP.

Chart 2.25
Profitability for Selected Companies



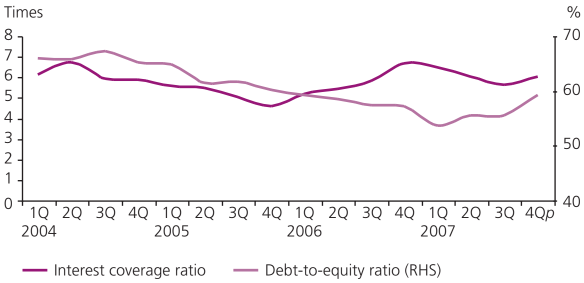
p Preliminary
Source: Bloomberg

Businesses registered improved operating and financial performance supported by favourable domestic economic conditions despite weaker export performance faced by export-oriented industries and escalating costs of production in an environment of high commodity and energy prices.

A sample of 100 listed corporations which represents approximately 60% of Bursa Malaysia's total market capitalisation showed that profits were higher since the third quarter of 2006 (Chart 2.25). In 2007, these listed companies recorded further improvements having achieved the highest returns on assets and equity since 2000 of 7% and 13.9% respectively. Meanwhile, the debt-to-equity ratio was sustained at 59.2% despite higher financing obtained. The debt servicing capacity of these corporations remained unchanged with the interest coverage ratio (measured as the ratio of earnings before interest and taxes to total financing cost) of 5.7 times (Chart 2.26). On aggregate, despite rising costs, the stronger business sector performance and resilience led to further improvements in the delinquency rates on bank loans (Chart 2.27).

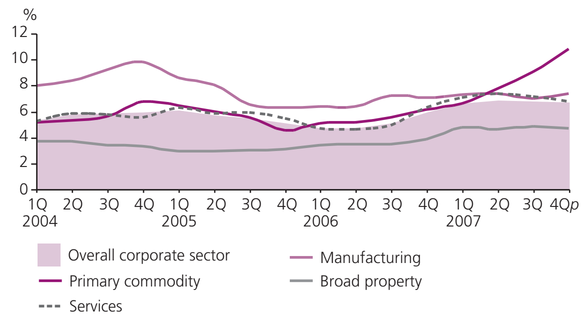
While businesses operating in some of the export-oriented industries were affected by the weaker external demand, the corporate sector

Chart 2.26
Debt Servicing Capacity and Leverage Position for Selected Companies



p Preliminary
Source: Bloomberg

Chart 2.28
Return on Assets for Selected Sectors



p Preliminary
Source: Bloomberg

generally benefited from strong domestic and regional demand as well as higher commodity prices (Charts 2.28 and 2.29). During the year, businesses in the plantation industries continued to strengthen on account of the strong rally in the prices of crude oil, crude palm oil and rubber. Similarly, businesses in the construction sector, especially those in the civil engineering segment and commercial and residential property development, also posted stronger performance following increased activity in the property market. Within the services sector, the performance of tourism and related industries, particularly leisure and hospitality and the retail and wholesale sectors, were boosted by the record level of tourist arrivals and higher hotel occupancy rates during the year.

Growth in the manufacturing sector moderated in 2007 attributable mainly to a slowdown in exports of electrical and electronics (E&E) goods, in particular computers and parts, amidst slower demand from the US. Financial indicators of selected companies in the E&E segment (Charts 2.30 and 2.31), however, exhibited sustained profitability, debt service capacity and cash flow position, despite lower prices of E&E exports.

Having registered negative growth since the second quarter of 2004, the construction sector turned around with a marginal expansion of 0.6% in the final quarter of 2006. It has sustained its momentum, expanding by 4.6% during 2007. In the property development segment, vacancy rates for offices and retail properties remained stable at 19.8% and 20.5% respectively. The level of overhang and unsold properties improved amidst a slightly lower number of new housing units launched. The average sales performance of new housing units launched during the year also improved to

Chart 2.27
Spreads and Delinquency Rate

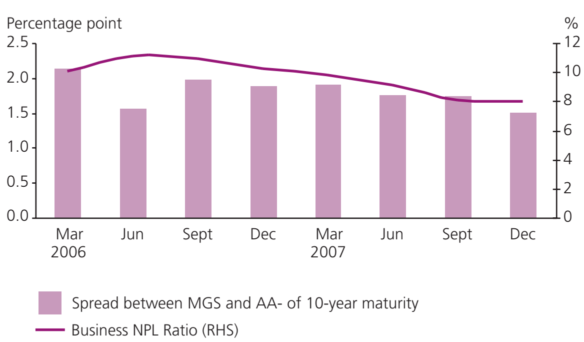
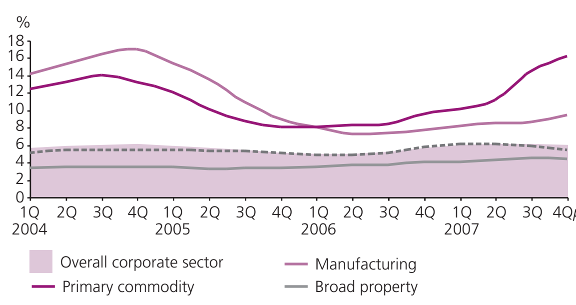


Chart 2.29
Interest Coverage Ratio for Selected Sectors



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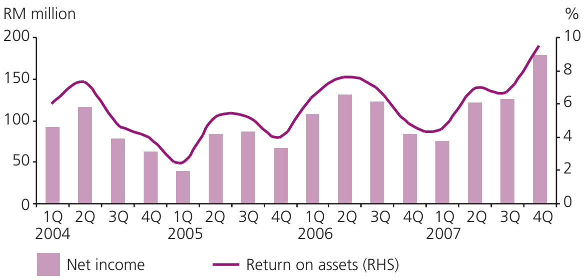
Source: Bloomberg

Chart 2.30
Profitability of Selected Companies in the E&E Segment



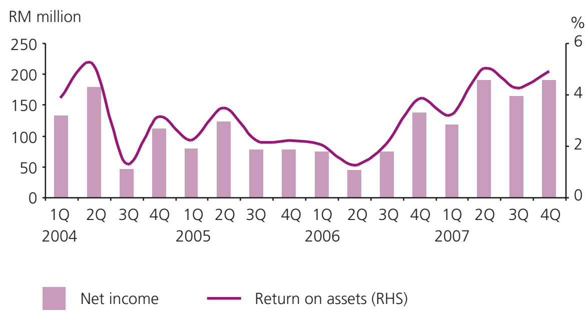
Source: Bloomberg

Table 2.1
Residential Property Transactions and Sales Performance

	1Q-3Q 2006	1Q-3Q 2007	Growth
Residential property transactions			
Units	*135,322*	*149,004*	*10.1%*
Value (RM billion)	*21.5*	*26.7*	*24.3%*
Sales performance	11.3%	19.7%	8.4 ppts
Unit launched	*34,670*	*33,617*	*-3.0%*
Unit sold	*3,912*	*6,611*	*69.0%*

Source: National Property Information Centre (NAPIC), Valuation and Property Services Department

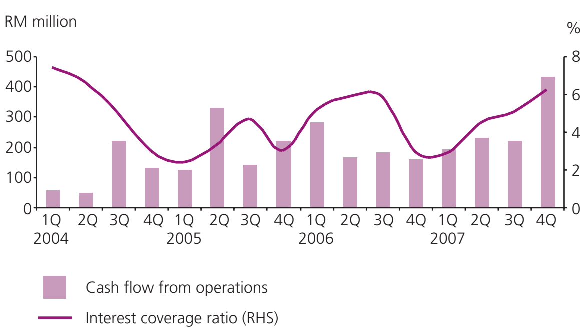
Chart 2.32
Profitability of Selected Companies in the Property Development Segment



Source: Bloomberg

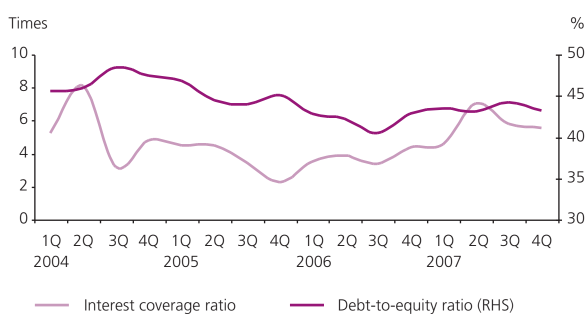
19.7% (1Q-3Q 2006: 11.3%), while residential property transactions registered an increase in both units and value of transactions (Table 2.1). The increased activity in the primary and secondary residential property market was stimulated by a series of measures by the Government to boost activity in the property market. These include the liberalisation of the Foreign Investment Committee rules to facilitate easier access to the domestic property market by foreign investors, the exemption of the Real Property Gains Tax, and the greater flexibility on the use of funds maintained with the Employees Provident Fund for property purchases. While the above developments contributed to easing concerns on the profitability and debt servicing capacity of property developers (Charts 2.32 and 2.33), rising prices of raw materials may pose risks to the growth of the property and construction sector as a whole going forward. Since early 2007, the cost of building materials has risen steadily as reflected by the Building Materials Cost Index (Chart 2.34) which increased to 136.7 as at end-2007 (130.5 at end-September 2007).

Chart 2.31
Cash Flow Position of Selected Companies in the E&E Segment



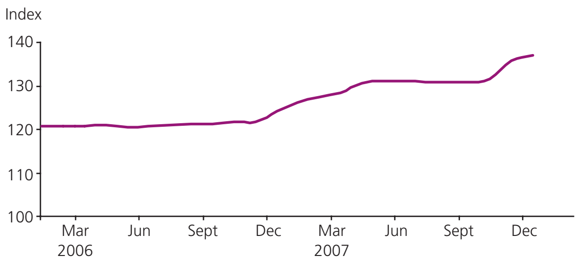
Source: Bloomberg

Chart 2.33
Debt Servicing Capacity of Selected Companies in the Property Development Segment



Source: Bloomberg

Chart 2.34
Building Materials Cost Index (for Kuala Lumpur, Selangor, Melaka & Negeri Sembilan)



Source: CEIC

Households demonstrated stronger adaptability and capacity to adjust to the rising cost of living

The balance sheet position of the household sector strengthened in 2007, supported by the continued rise in disposable income, especially among those employed in the commodity sector following a sustained period of high output prices. The higher income level was also achieved on account of wage increments in both the public and private sectors. The stronger wealth position of households was further supported by the strong performance of the equity market.

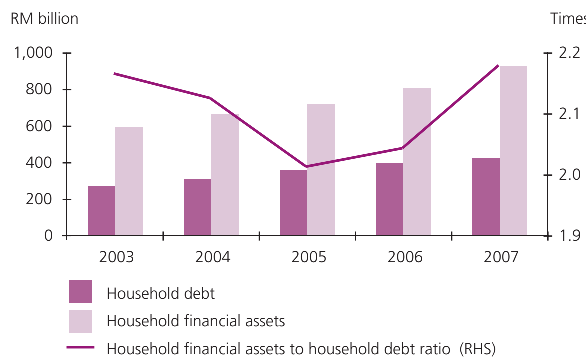
The household sector has demonstrated greater resilience to rising prices given the stronger financial position and improved indebtedness in an environment of favourable labour market conditions and wage levels.

In addition, a moderation in the pace of growth in indebtedness and the stronger liquidity position of households also strengthened their debt repayment capacity, thus resulting in the continued improvement in the quality of household borrowings throughout the year. This has placed households on a better position to adjust to the higher cost of living.

Aggregate household financial assets expanded strongly by 15.1% as at end-2007, mainly attributed to the higher growth in savings and deposits with financial institutions and increased net asset value of unit trust investments. This led to an increase in the ratio of household financial assets-to-debts to 217.8%, from 204.2% as at the end of the preceding year. In terms of liquidity, liquid assets grew strongly by 18.6% (2006: 12.8%) to account for nearly 60% of total financial assets. The ratio of household liquid assets[1]-to-debts consequently expanded further to 119.6% as at end-2007 (Charts 2.35 and 2.36).

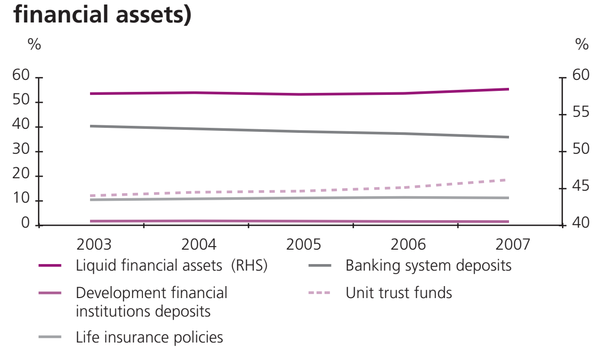
The level of indebtedness moderated slightly with the ratio of household debts to nominal GDP declining to 66.7% (2006: 69.3%) on account of

Chart 2.35
Household Financial Assets to Household Debt Ratio



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

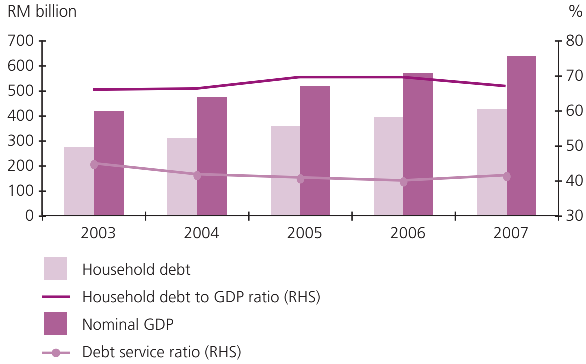
Chart 2.36
Composition of Household Financial Assets (expressed as % of total household financial assets)



Source: Treasury Housing Loans Division, Employees Provident Fund and internal estimates

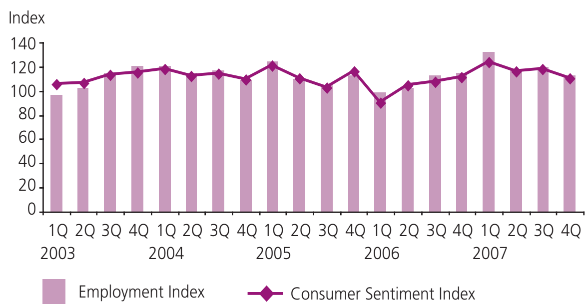
[1] Household liquid assets comprise deposits with banking institutions and two development financial institutions as well as investments in unit trust funds. Meanwhile, household financial assets also include funds in the Employees Provident Fund and insurance policies akin to deposits.

Chart 2.37
Household Indebtedness and Debt Service Ratio



Source: Treasury Housing Loans Division and internal estimates

Chart 2.38
Employment and Consumer Sentiment Indices

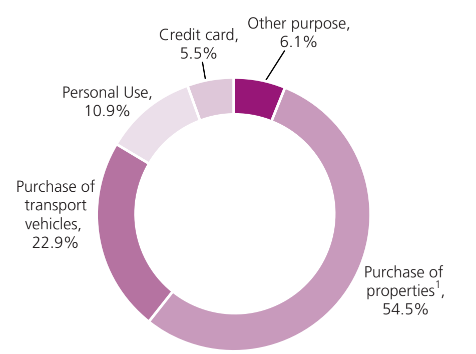


Source: Malaysian Institute of Economic Research

stronger GDP growth which outpaced the accumulation of household debts during the year (Chart 2.37). Household debts expanded by RM31.3 billion during the year to RM427.9 billion. The expansion in household debts in 2007 was more moderate at 7.9% compared to an annual average growth of 13.9% for the period 2001 to 2006. This, in part, was reflective of increased attention to spending in an environment of rising prices of food and other essentials. The Consumer Sentiment Index however only moderated from 124.1 to 110.7 as at end-2007 (Chart 2.38).

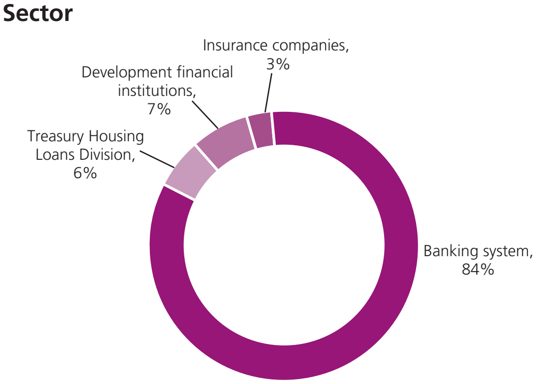
In 2007, almost 40% of the increase in household debts was to finance house purchases, while personal loans accounted for another 28.8% of the aggregate increase in household debts. In terms of the composition of outstanding loans, the bulk of household debts comprised loans obtained to finance the acquisition of assets (Charts 2.39 and 2.40). Demand for housing loans was sustained at a high level, particularly to finance the purchase of high-end properties. The strong demand and higher volume of transactions in the residential property market were partly in response to attractive property units with distinctive characteristics and innovative development concepts offered by developers. Demand was further supported by more flexible repayment and financing packages offered, particularly by banking institutions. As at the end of the year, outstanding housing loans grew by 5.9% to RM207.1 billion. Outstanding personal financing recorded a strong growth of 23.9% to amount to RM46.8 billion or 10.9% of total

Chart 2.39
Composition of Household Debt by Purpose



[1] Includes residential and non-residential properties
Source: Treasury Housing Loans Division and internal estimates

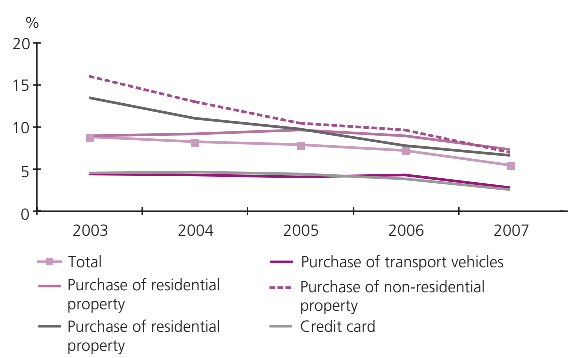
Chart 2.40
Composition of Credit Providers to Household Sector



Source: Treasury Housing Loans Division and internal estimates household debts (2006: 9.5%). After a weaker first half performance in car sales that recorded a decline of 12.2%, demand for hire purchase financing rebounded in the second half of the year with the introduction of new domestic and foreign car models at affordable prices. This resulted in a small increase of 2% in outstanding car hire purchase. The bullish equity market performance led to a growth of 11.1% in household borrowings for the purchase of quoted securities and unit trusts. Nevertheless, these borrowings accounted for only a small proportion of 3.4% of household debts.

The improved level of disposable income also strengthened the debt servicing capacity of households. Total loan repayments during the year surged by 16.2% resulting in an improvement in the ratio of repayments to disposable income to 41.1% and larger declines in the level of delinquencies. As at end-2007, the amount of non-performing household loans in the banking system reduced further by 19.3% to RM19.1 billion. Coupled with the moderate growth in household debts, the banking system NPL ratio of household loans improved to 5.3% at the end of the year (Chart 2.41). In addition, the number of personal bankruptcies also declined slightly by 0.6% during the year. This was also attributed to some restructuring of household debts both by the lending institutions as well as under the debt management programme of the Credit Counseling and Debt Management Agency (CCDMA) that has enabled borrowers to meet the scheduled instalment payments. Up to 2007, more than 5,000 borrowers with aggregate debts totalling RM478 million benefited from the debt management programme of CCDMA.

Chart 2.41
Banking System: NPL Ratio of Household Sector



While growth in unsecured loans continued to be high, particularly credit card and personal loans which expanded by 17.7% and 23.9% respectively during the year, potential vulnerabilities from these exposures remained fairly limited. On aggregate, these debts accounted for 16.4% of total household debts with delinquency rates of 2.5% for credit cards and 6.3% for personal loans. Despite the increase in credit card balances, growth in revolving balances moderated while the amount of cash advances remained small, collectively indicating manageable liquidity conditions of households. The number of cardholders with revolving balances accounted for 54.7% of total credit cards in circulation, of which 34% of cardholders settled at least half of the card balances. Cash advances accounted for only 5.8% of total credit card transactions during the year.

Efforts to enhance data collection at a more granular level on the household financial position remained an area of emphasis during the year. This is a necessary step towards enhancing the assessment of household sector issues, particularly in identifying potential stress in different segments of the population, hence enabling more pre-emptive policy responses to be implemented if and where necessary. Available data seemed to indicate that while employment conditions and income levels are favourable, increasing food prices, transportation costs and other costs of living might have some impact on certain segments of the household sector going forward, although the risk remains manageable at present. Learning from the experience of the late 90s, banking institutions are more forthcoming in formulating debt rehabilitation and management programmes to support the continued capacity of borrowers to meet their debt obligations, hence preventing premature delinquencies. In addition, households can also avail themselves of the advisory and debt management services provided by the CCDMA.

FINANCIAL SECTOR RISK ASSESSMENT

Financial system stability and soundness preserved amidst mounting challenges on the external environment

Key risks to the Malaysian financial system in 2007 emanated mainly from developments on the external front which translated into higher exposures of financial institutions to market and credit risks. The strong performance of the bond and equity markets during the year also encouraged increased investments and activity in financial assets and instruments, while competition in the lending market and growth in structured products and investments intensified further. Downside risks emanating from the US subprime and credit market events were felt only in terms of the increased volatility in the equity and bond markets given the small exposures of the financial institutions to subprime-related instruments. On aggregate, the financial system demonstrated stronger financial resilience. The continued accumulation of financial buffers has also led to an increased capacity of the financial sector to withstand higher risk levels from greater market volatility and financial shocks. This was affirmed by the series of stress tests performed during the year.

Assessment of financial sector risks during the year was largely concentrated on the implications of capital inflows for asset markets and lending behaviours of banking institutions, increased financial market volatility and rising food and raw material prices on the debt servicing capacity of households and businesses.

The banking system, both conventional and Islamic, posted stronger preliminary unaudited profit before tax (PBT) of RM17.7 billion for the year, resulting in a return on average equity of 19.7%. The increase of 36.4% in profits was achieved on account of more diversified income sources driven mainly by sustained growth in revenue from financing and related advisory activities, the provision of remittance and settlement services, portfolio and wealth management, as well as trading and investment activities. Meanwhile, higher overhead expenses relating to new establishments and rebranding strategies increased by 15.9%. The highly competitive labour market in the financial sector has also led to higher staff-related expenditures which posted a growth of 13.2%. This resulted in an increase in staff cost per employee to RM77,519 (2006: RM74,786). However, productivity improved for the year as evidenced by the PBT generated per employee of RM168,094 (2006: RM131,785).

The highly competitive and surplus liquidity environment continued to pose downward pressures on interest margins of banking institutions. NPLs improved to the lowest level in a decade, underpinned by higher recoveries and the reclassification of NPLs to performing status. This was also driven by intensified efforts to strengthen balance sheets through write-offs and the disposal of loans via securitisation and outright sales. As a result, net NPLs registered a significant decline of 26.6% to RM20.1 billion, or 3.2% of total net loans as at end-2007. Loans in arrears of between two to three months were also lower for the year, registering a decline of 7.2% to account for 1.5% of gross loans. These developments contributed to the sustained high level of capitalisation of banking institutions. The risk-weighted capital ratio (RWCR) was sustained at a level of at least 13% throughout the year, with excess capital above the minimum regulatory capital requirement of RM38.5 billion, providing a sizeable buffer against unexpected losses and shocks. Efforts to diversify and enhance the cost efficiency of capital continued during the year, as banking institutions benefited from greater innovation in capital management activities which contributed to a slight decline in the composition of Tier-1 capital to 70.8% of total capital (2006: 72.7%). On aggregate, the stronger financial resilience enabled the banking sector to continue to play an effective and efficient intermediary role in the economy and as an enabler of economic growth.

As at end-2007, total deposits mobilised by the banking sector amounted to RM869.9 billion or 135.6% of GDP, while loan and financing activities by the banking sector expanded at a strong pace of 8.6% to RM644.2 billion in outstanding loans and financing, or 100.4% of GDP. As large businesses continued to tap the capital market as an alternative source of financing, the financing portfolio of banking institutions continued to be concentrated in the retail-based sectors. Loans and financing extended to the household sector and the small and medium enterprises (SME) accounted for 55.9% and 17.7% of total financing outstanding respectively.

Table 2.2:
Key Financial Soundness Indicators

	As at end				
	2003	2004	2005	2006	2007*p*
	% (or otherwise stated)				
Banking System					
Risk Weighted Capital Ratio	13.8	14.4	13.7	13.5	13.2
Core Capital Ratio	11.1	11.4	10.7	10.7	10.1
Return on Assets	1.3	1.4	1.4	1.3	1.5
Return on Equity	15.6	16.7	16.7	16.2	19.7
Liquid Assets to Total Assets	8.2	8.0	8.0	8.7	18.6
Liquid Assets to Short-term Liabilities	10.7	10.6	10.2	11.1	23.6
Net Non-performing Loans Ratio - 3 months	8.9	7.5	5.8	4.8	3.2
Impact of a 1% increase of interest rates (in % of capital)	4.8	5.0	8.3	7.5	4.5
Net Open Positions in FX to Capital Base	3.8	3.9	1.1	4.7	4.5
Net Open Positions in Equities to Capital Base	2.9	2.3	2.1	2.6	2.5
Insurance Companies (RM million)					
Solvency Surplus[1]	6,073.6	7,369.5	7,939.0	9,485.1	18,351.2
Solvency Margin Ratio[1]	108.8	109.9	109.7	110.8	120.6
Capital Adequacy Ratio	n.a.	n.a.	n.a.	139.6	157.9
Life Insurance & Family Takaful (RM million)					
Excess of Income over Outgo	9,132.1	11,427.2	10,596.4	12,532.9	15,308.0
New Business Premiums / Contributions	5,363.0	7,264.9	7,426.9	8,428.2	9,066.3
Solvency Margin Ratio (conventional only)	107.9	108.8	108.7	109.9	121.8
General Insurance & General Takaful (RM million)					
Underwriting Profit	583.6	577.6	1,126.6	536.3	13.8
Operating Profit	1,422.6	1,294.2	1,714.9	1,517.9	1,371.5
Gross Direct Premiums / Contributions	8,587.8	9,049.4	9,939.6	10,352.9	10,800.5
Claims Ratio	59.0	60.2	54.9	60.5	66.1
Solvency Margin Ratio (conventional only)	112.4	114.2	114.4	115.2	120.7
Household (HH) Sector					
HH Financial Assets to Debt Ratio	216.4	212.4	201.2	204.2	217.8
HH Debt to GDP Ratio	65.7	66.0	69.3	69.3	66.7
HH Liquid Financial Assets to Total HH Debt Ratio	115.1	113.8	106.3	108.8	119.6
Debt Service Ratio	44.7	42.4	41.3	39.8	41.1
NPL Ratio of Household Sector	8.7	8.0	7.7	7.1	5.3
Corporate Sector					
Return on Assets	5.0	5.9	5.1	5.9	7.0
Return on Equity	11.6	11.0	10.8	12.5	13.9
Debt-to-Equity Ratio	66.6	65.2	60.1	57.2	59.2
Interest Coverage Ratio	5.5	6.1	5.1	5.8	5.7
Operating Margin	16.2	16.7	14.0	15.8	19.0
NPL Ratio of Business Sector	14.1	13.3	11.1	10.2	7.9
Development Financial Institutions[2]					
Lending to targeted sectors (% growth)	11.4	19.2	29.6	17.5	18.6
Deposits mobilised (% growth)	9.0	22.4	12.4	11.1	12.4
Non-performing Loans Ratio - 6 months	14.1	13.2	10.4	10.0	8.8
Return on Assets	1.4	1.3	3.0	1.5	1.9

[1] As at financial year end, except for 2007 position
[2] Refers to development financial institutions regulated under the Development Financial Institutions Act 2002
p Preliminary
n.a. Not available
Note: Insurance figures are based on unaudited calendar year, unless indicated otherwise

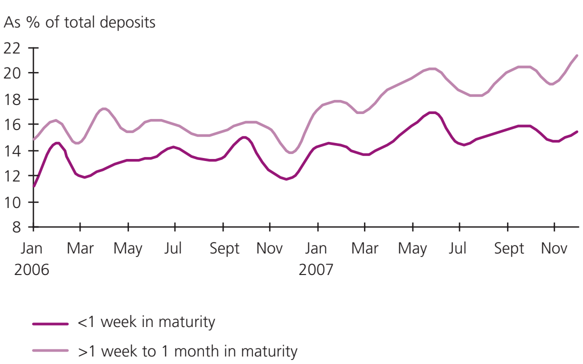
Meanwhile, the insurance and takaful sector recorded combined premiums and contributions totalling RM29.4 billion, representing a growth of 11.4% during the year. Driven primarily by stronger demand for savings and investment-related products, new business premiums and contributions in the life insurance and family takaful sector grew by 7.6% to amount to RM9.1 billion. Despite lower sales of motor vehicles in the first half of the year, the general insurance and takaful sector recorded moderate growth in the level of premiums and contributions of 4.3%. Operating profits were higher on account of larger income from treasury activities, albeit with weaker underwriting performance recorded due mainly to higher claims which also prompted higher reserving provisions. The solvency position of the insurance industry strengthened further with an aggregate solvency surplus of RM18.4 billion (on an unaudited basis) as at end-2007 to buffer against potential challenges.

Limited implications of the US subprime crisis on the Malaysian financial system

The subprime crisis has had a minimal impact on the operations, profitability and solvency of the Malaysian financial institutions, as well as on liquidity in the system. Both direct and indirect exposures of financial institutions in terms of holdings of securities linked to US subprime mortgages and lending to entities associated with the subprime mortgage business were minimal, accounting for about 0.3% of the banking system capital base. These exposures were limited to the overseas operations of a few domestic banks. On aggregate, banking system exposures to foreign securities holdings only accounted for less than 0.5% of total banking system assets. In the case of the insurance industry, investments in subprime related securities accounted for not more than 1% of total foreign assets in the investment-linked funds.

During the two-week period of heightened risk aversion and volatility in the financial markets in August 2007, Malaysia, like other regional economies experienced some net capital outflows as the unwinding of positions took place. Nevertheless, liquidity in the Malaysian financial system continued to remain ample and money market rates were stable with no banking institutions experiencing difficulty in sourcing funds for their liquidity needs (Chart 2.42). The Malaysian banking system lending is predominantly funded by deposit-based instruments. The securitisation market, which has been concentrated in the past on the funding of housing loans on a recourse basis, is now becoming increasingly significant for funding of other types of activities. As at end-2007, banking system deposits accounted for 60% of total funding, while total loans securitised by the banking system through Cagamas Berhad, the national mortgage corporation, was RM16.6 billion.

Chart 2.42
Banking System: Liquidity Buffer



Continued inflow of portfolio funds during the year amidst an environment of prevalent ample liquidity exerted downward pressures on interest rates

While liquidity in some major markets tightened, the persistent inflow of portfolio funds into Malaysia continued to pose liquidity management challenges to the banking institutions throughout 2007 (Chart 2.43). Up until the onset of the financial market turbulence period in the US and Europe, deposits mobilised by the banking system grew strongly by approximately 20% compared to the previous year, attributed partly to the higher growth in ringgit deposits by non-residents. The cumulative liquidity surplus of the banking system based on the estimated liquidity demands and unexpected withdrawals remained high. As at end-2007, the projected surplus was at RM104.5 billion for the maturity bucket of up to one-week and RM145.6 billion for the maturity bucket of up to one-month (Table 2.3). Given the ample liquidity conditions, the overnight and one-week money

Chart 2.43
Composition of Assets and Liabilities of the Banking System

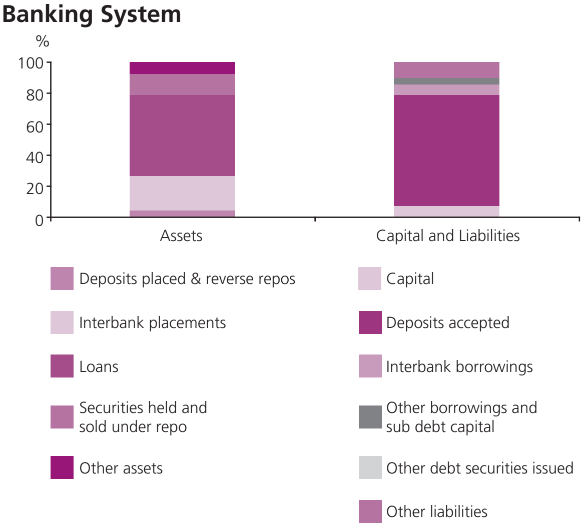


Table 2.3
Banking System: Liquidity Projection as at 31 December 2007

	Cumulative mismatch (RM billion)		Buffer as % of total deposits	
	≤1 week[1]	>1 week to 1 month[2]	≤1 week[1]	>1 week to 1 month[2]
Commercial banks	83.3	114.9	14.6	20.2
Islamic banks	9.7	17.2	16.1	28.5
Investment banks	11.5	13.5	34.7	40.9
Banking system	**104.5**	**145.6**	**15.8**	**22.0**

[1] ≤3 days bucket for investment banks
[2] >3 days to 1 month bucket for investment banks
Note: Numbers may not add up due to rounding

Chart 2.44
Movements in Interbank Rate, Average Lending Rate and Average Cost of Funds

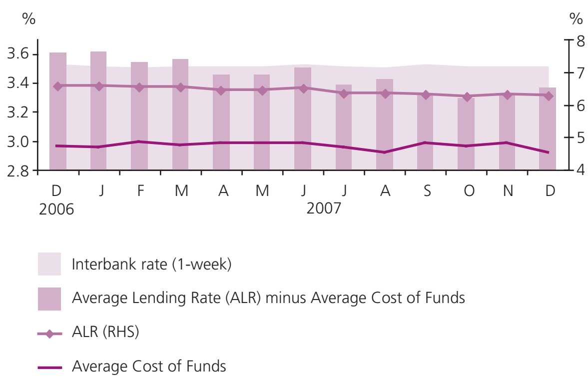
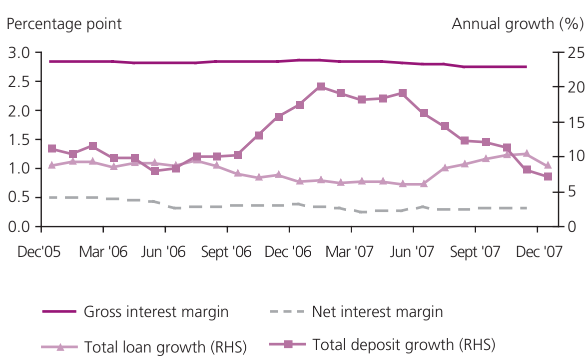


Chart 2.46
Banking System: Movement in PER and Average Quoted FD Rates

Chart 2.45
Banking System: Movement in Gross and Net Interest Margins



market rates remained almost unchanged at 3.49% per annum and 3.52% per annum at the close of 2007. The rapid growth in banking system deposits which outstripped the expansion in financing activities in the first half of the year led to downward adjustments in deposit rates offered by some banking institutions. While the adjustments helped to ease the rising pressures on interest margins, the increase of 16.9% in interest expense on deposits and intense competition in the lending market contributed to a 0.15 percentage point decline in the gross interest margin to 2.70 percentage points. Nevertheless, continued improvements in asset quality which reduced loan loss provisions partially offset the decline to record a marginal increase in the net interest margin of the banking system, albeit remaining tight at 0.39 percentage point (Charts 2.44 and 2.45). Meanwhile, the lowering of conventional deposit rates lessened the displaced commercial risk (shifting of Islamic to conventional deposits due to higher returns on conventional deposits) on Islamic deposits. Consequently, the profit equalisation reserves (PER) averaged at above RM300 million in 2007 (Chart 2.46).

Some of the portfolio inflows were also directed to the property market segment. Overall property prices remained largely stable, albeit with a slightly higher increase observed in the prices of residential properties in specific prime locations due to strong demand in the high-end segment from both residents and non-residents. The

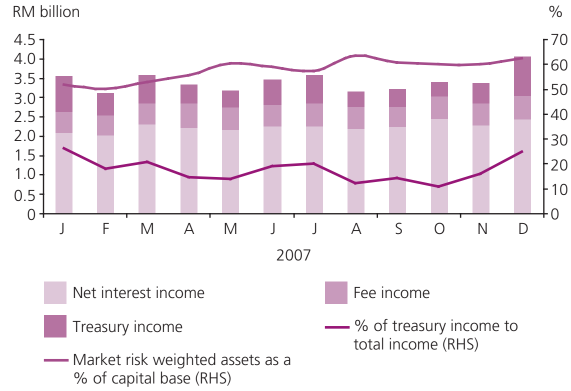
Malaysian House Price Index was sustained at 122.2 in the first half of 2007, with a moderate increase of 3.2% compared with the corresponding period in the previous year. While the average house price for the country stood at approximately RM169,000 in the first half of the year, the average house price for Kuala Lumpur was higher at approximately RM342,000 while that for the state of Selangor was approximately RM248,000 reflecting the higher prices in the prime locations. Risks arising from financial institutions' exposures to the property sector have remained within prudent levels, with more robust criteria applied by financial institutions in assessing and approving loan applications. Moreover, the risks are further balanced by the stable outlook for property prices. The favourable developments in the property market will not only provide a stronger impetus for growth in housing loans, but also have positive effects on other supporting industries, hence promoting further opportunities for financial institutions.

Financial institutions generally benefited from the vibrancy of the domestic financial markets albeit faced with higher credit and market risks

The bullish performance and higher trading activities in Bursa Malaysia led to higher financing demand for the purchase of quoted securities and unit trusts. The drawdown of existing credit lines by both individuals and business entities also expanded strongly especially in the first quarter, resulting in the robust growth in disbursements of 261.9% during the year. In addition, growth in approvals was also high at 305.3%. While credit risk exposures to the equity market increased, the level remained low at 4% of total outstanding loans (end-2006: 3.3%), with a corresponding improvement in the delinquency rate to 4.6% (end-2006: 9.5%).

In 2007, revenue from the fee-based business segment, particularly in corporate advisory services, remittances and wealth management services, expanded by 33.3% to account for 16.8% of total income (Chart 2.47). Income from treasury activities, supported by the bullish domestic financial market performance, posted a strong growth of 26.1% to account for 17.6% of total income (2006: 16.2%). Securities held for trading purposes grew by 55.2% to account for 4.3% of total banking system assets. The expanded size of the treasury portfolio of banking institutions translated into higher market risk exposures, in terms of both equity and interest rate risks, as reflected in the 31.3% expansion in

Chart 2.47
Banking System: Composition of Income

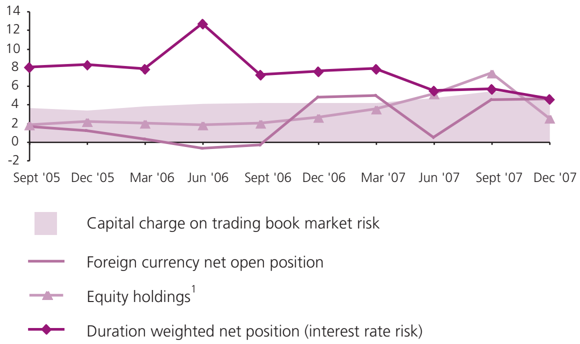


total market risk-weighted assets. Risk exposures arising from equity holdings remained below 1% of total banking system assets in 2007. On aggregate, the banking system exposure to equity market movements from proprietary holdings and margin financing remained low, accounting for only 2.5% of total banking system assets. Total holdings of securities, both fixed income and equities, by the insurers grew by 14.7% to account for 65% of total assets, the bulk of which was in the form of higher rated investment-grade corporate debt securities and MGS. The higher risk exposures of insurers were compensated by the significantly higher net gains from disposal of securities and investment income, which expanded by 63.8% to account for 59.3% of total income.

Exposures to currency fluctuations as a percentage of total market risk-weighted assets remained stable across all banking institutions, reflecting an unchanged risk appetite in currency trading and investment activities. While the directional open positions in certain major currencies were evident in anticipation of a further weakening of the US dollar in the aftermath of the subprime crisis, the potential impact of volatile foreign exchange rates remained low with the corresponding net open position accounting for only 4.5% of the capital base of the banking system (Chart 2.48). In terms of capital charge, foreign currency-denominated exposures accounted for 0.8% of capital base.

The greater usage of interest rate swaps and futures during the year led to lower interest rate risk exposures of banking institutions to account

Chart 2.48
Banking System: Market Risk Exposures



1 Amount of investment in quoted shares

Chart 2.49
Banking System: Annual Growth of Loan Applications

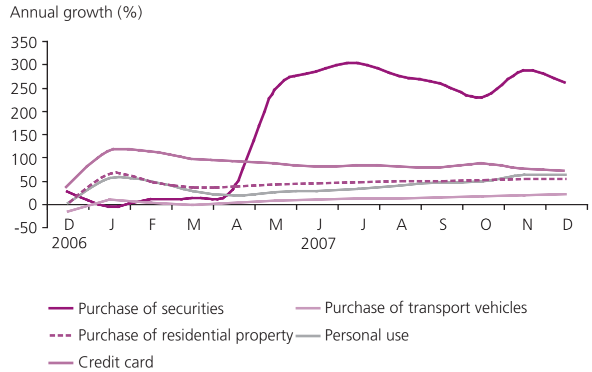


Chart 2.50
Banking System: Loan Approval Rates

for 4.5% of the capital base. The outstanding notional amount of these contracts increased by 9% during the year to RM507 billion. Spreads between MGS and corporate bonds remained fairly stable throughout 2007, both across tenures and credit grades. Nonetheless, a widening of such spreads, as observed in the early part of 2008, may amplify the magnitude of basis risk, thus affecting the effectiveness of hedging strategies previously undertaken.

Underwriting discipline was sustained in an environment of intensified competition and innovations in credit products

Competitive pressures in the credit market remained intense, especially in the retail lending market where the products and services offered are generally less differentiated. This was evidenced by the more competitive rates offered on housing loan packages, greater repayment flexibility and aggressive marketing and advertising strategies. Some of the attractive features offered include the lengthening of loan tenures, rebates on interest charged and flexible graduated repayment plans with an option to defer principal repayments. Meanwhile, competition was also visible in the non-bank segment that saw insurance companies offering cross-generation loans with flexible repayment options in addition to the traditional fixed-rate financing. The increased attractiveness of housing loan products resulted in an increase in housing loan applications received by banking institutions by 48.3%. Similarly, loan applications for personal use registered a higher increase of 59% in 2007. This was in part supported by promotional activities by banking institutions in attempts to expand the micro-credit portfolio by targeting new customers to establish new banking relationships (Charts 2.49 and 2.50). Meanwhile, on the funding side, strategies focused mainly on attracting deposits from high net worth individuals as a means to broaden the customer base and prospects for wealth management activities. As at end-2007, deposits placed by individuals expanded by 10.5% to RM330.6 billion.

These developments raised concerns on the underwriting standards and risk management practices of banking institutions, particularly in the light of the subprime problems in the US. The proliferation of creative advertising which to some extent, lacked proper disclosures on important information such as effective financing rates, interest computation methods and existence of incidental costs or charges, was another area of concern. An assessment of these concerns to identify the possible excessive build up of risks and weaknesses in risk management practices of banking institutions revealed that on aggregate, the downside risks emanating from the housing and personal loan portfolios of banking institutions remained subdued, underpinned by the strengthened credit assessment capacity and underwriting standards maintained by banking institutions. The assessment was supported by a number of factors:

- the risk management infrastructure and practices of banking institutions continued to strengthen. This included the adoption of a wider range of criteria and risk drivers in credit scoring and risk ratings, particularly in preparation for the implementation of Basel II (2008 for banking institutions adopting the standardised approaches and 2010 for those adopting the Internal Ratings-Based approaches);
- greater accessibility to current and more comprehensive information on the borrowers' debt levels and performance of their existing loans through the Central Credit Reference Information System (CCRIS) that enables a more informed decision making process;
- the overall approval rate for household loans was lower at 60% for the year compared to 66.2% in 2006, despite the strong demand. The approval rate for personal loans was much lower at 50.5%;
- unsecured personal loans accounted for a small proportion of 7.5% of outstanding household loans amidst a continued improvement in the NPL ratio to 6.3% as at end-2007 (2006: 7.7%); and
- NPLs for housing loans recorded a significant decline of 13.4% in 2007 to RM12.2 billion, resulting in the NPL ratio for housing loans improving to 7% (2006: 8.7%) from the peak of 9.9% in 2000. This was further supported by a fairly stable level of past due housing loans at approximately 4% of total outstanding loans.

The prevalent "originate-and-hold" business model adopted by banking institutions for the lending segment provides sufficient incentives for the continued vigilance in assessing the customers' repayment capacity and the constant monitoring of the quality of the loan throughout its lifespan. This is discussed in further detail in "Characteristics of Malaysian Housing Finance".

Characteristics of Malaysian Housing Finance

- "Originate-and-hold" versus "originate-and-distribute" business models
  - Financial institutions adopt the originate-and-hold business model where credit risks are retained within financial firms' balance sheets until the loan is fully repaid or refinanced with another institution. This provides strong natural incentives for lending institutions to vigilantly conduct thorough due diligence on prospective borrowers and to continuously monitor the performance of mortgages until maturity or full settlement.
  - The attractiveness of residential mortgage-backed securities and other forms of securitisation for credit risk reallocation purposes has thus far been limited due to the strong capitalisation of financial institutions, improving loan quality and continuous improvements in risk management infrastructure and practices.
- Deposit-based versus wholesale-based funding structure
  - The housing loan portfolio is funded largely from customer deposits given the high proportion of deposits placed with the banking institutions, while the housing loan portfolio of insurance companies is funded from premiums received from policyholders.
  - These limit the exposures of lending institutions to fluctuations in market liquidity.
- Fixed versus variable rate financing
  - Housing loans are typically based on variable rates and referenced against the Base Lending Rate, except for home financing under the Islamic principles which is largely based on a fixed profit rate, and those extended by insurance companies which are also based on fixed rates. As at end-2007, 82.8% of housing loans extended by banking institutions were on the variable rate basis.

- Most housing loan products offered by banking institutions provide for a preferential/graduated lending rate in the initial three to five years of the loan. This is reflective of the sell-then-build concept characteristic of residential property development in Malaysia, where full disbursement of the housing loan generally occurs in year three.

- Risk management infrastructure
  - At the institutional level, risk management practices have strengthened with the adoption of internal ratings-based and credit scoring models to facilitate underwriting processes and decisions. Some financial institutions have also begun to incorporate behavioural aspects of borrowers in their internal ratings. In addition, there has been a strong improvement in loan monitoring, management and recovery.
  - The Central Credit Reference Information System (CCRIS), to which all banking institutions have access, provides extensive information on the debt level and quality of the debt exposures of all borrowers, regardless of the value and performance of the exposures.
- Lending to low and middle income groups
  - Credit decisions and risk management standards for housing loans extended to the low and middle income segments are based on the same prudential considerations as other credits extended by financial institutions to ensure that such exposures do not unnecessarily result in excessive risk exposures to the institutions. Proof of income is a compulsory document required in the processing of loan applications.
  - Effective from 1 January 2008, the Government has set aside funds totalling RM50 million, through Syarikat Jaminan Kredit Perumahan and Prokhas Sdn. Bhd., to provide guarantees on housing loans extended by financial institutions to deserving low and middle income borrowers.
- Providers of housing finance
  - Housing finance is largely provided by regulated entities, namely banking institutions and development financial institutions, with a growing participation of life insurance companies in the more recent periods. Collectively, lending by these institutions account for 85.2% of total housing finance.
  - Other participants in the housing finance market include the Malaysia Building Society Berhad, the Treasury Housing Loan Division (that provides housing loans to public sector employees), the Sabah Credit Corporation and the Borneo Housing Mortgage Finance Berhad.
- Institutional arrangements for consumer education and financial literacy
  - Bank Negara Malaysia has established *bankinginfo*, an information portal on financial products and current rates offered by banking institutions, to facilitate comparisons by consumers.
  - The Credit Counselling and Debt Management Agency (CCDMA) provides counselling and advisory services relating to budgeting and financial management. The CCDMA also provides assistance in the resolution of potential credit issues through debt management and restructuring programmes for individual borrowers.

Downside credit risk remained low resulting from stronger risk management and supported further by the sustained debt servicing capacity of households and businesses

The strengthened institutional setup and enhanced risk management capacity of banking institutions contributed to the reduced downside risk of credit losses. This was further boosted by the stronger financial position of households which strengthened the flexibility of households to adjust to the gradual rise in the cost of living. Correspondingly, robust growth in the business sector has bolstered the capacity of corporations to service their debt obligations. Despite the moderation in exports, the financial performance of the business sector was sustained while delinquency rates improved further. As a result, the level of NPLs has continued to decline with improvements observed in SME and corporate loans (Chart 2.51).

Advancements in the risk management infrastructure and practices through the use of retail credit scoring, improved information and portfolio management systems, as well as

Chart 2.51
Banking System: Non-Performing Loans (NPL) Level and Ratio

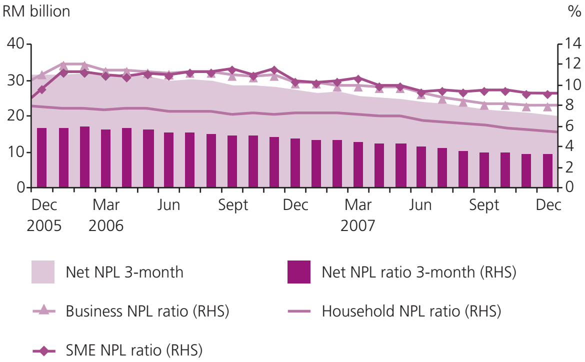
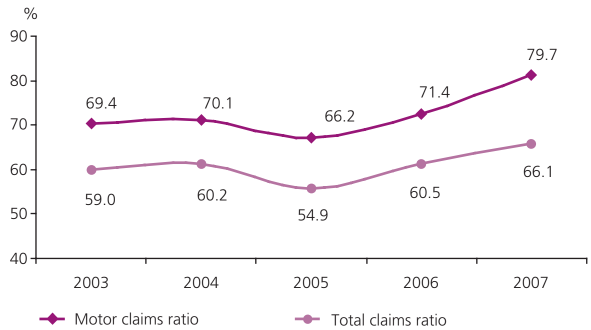


Chart 2.52
General Insurance and Takaful Businesses: Claims Ratios



enhanced loan administration, monitoring, management and recovery processes, have been fundamental in supporting improvements in asset quality and lowering the potential risk from continued loan growth. In line with ongoing efforts to fortify the loan management and resolution process, a number of banking institutions disposed off their NPLs to investors that specialise in loans management and recovery. Furthermore, the expansion in credit risk transfer instruments in the domestic market had also encouraged more hedging activities among financial institutions. Collectively, these developments strengthened credit risk management by financial institutions and improved recoveries and the reclassification of NPLs to performing status, while loan loss coverage of the banking system strengthened further to 77.3%.

Greater challenges in sustaining underwriting performance by general insurers and takaful operators, and in managing asset-liability mismatches by life insurers

The stronger solvency position and enhanced asset liability management contributed to the sustained performance of the insurance and takaful sector in 2007. This was also boosted by the favourable domestic financial market conditions that led to the generation of higher investment income. New premium growth for life insurers (+6.1%) and family takaful operators (+15.8%) was sustained due to the growing demand for investment-linked products. Meanwhile, the general insurance and takaful sector experienced weak performance in the motor segment particularly in the first half of the year, attributed to lower sales and prices of motor vehicles as well as higher claims primarily due to the increase in theft and bodily injury claims. This was compensated by strong growth in the medical and health, as well as the marine, aviation and transit business segments, resulting in a modest growth in overall gross direct premiums of 4.3% for the general sector. Coupled with higher claims reserving provisions by several large players, these developments exerted downward pressure on overall underwriting margin (Chart 2.52). Moving forward, the general insurance industry is likely to face continued challenges from higher claims experience in an environment of more volatile financial market conditions, increasing competition as well as a still relatively fragmented industry.

The life insurance industry continued to face challenges in managing the mismatch between assets of the insurance funds and the longer-term insurance liabilities. While the availability of long-term financial instruments has increased, continued inflows of portfolio funds intensified competition for high quality investments, leading to lower yields in the debt securities market. This made it more difficult for insurers to obtain acceptable securities that adequately match the duration profile and return requirements. Recognising these challenges, life insurers are required to provide capital to mitigate the mismatch risk. As at the end of 2007, the basic capital charges for interest rate risk in the life insurance funds (based on the Risk-Based Capital framework parallel run submissions by insurers) accounted for almost 22.5% of total capital charges.

Financial system expected to remain resilient under adverse stress scenarios

In view of the increasing interconnectedness between the domestic and international financial markets and higher contagion risks, a series of macro stress tests were conducted to assess the potential implications of adverse equity market movements for banking institutions, insurers, takaful operators and households, and their ability to adjust under such conditions. These were conducted in addition to the regular stress tests used as part of ongoing surveillance activities. Stress scenarios were simulated based on the February-March 2007 sell-off, the stock market fallout experienced during the Asian financial crisis and the 1993-94 equity price correction. As the transmission of stress could also be through the financial institutions' exposures to households, similar shocks were applied to the households' unit trust portfolio. Stress testing the scenarios on the position of the households revealed that households could withstand shocks from a significant decline in the net asset value of their unit trust investments which accounted for 16% of total household financial assets, without significantly affecting the debt servicing capability. In addition, the impact from potential second round effects on the debt servicing capacity of the household and corporate sectors was also assessed. The shocks were applied to both the loan and debt securities portfolios of the financial institutions based on the high losses experienced during the Asian financial crisis. The outcome of the stress tests again indicated that the financial institutions and households have the capacity and ability to make adjustments and adapt, given the wealth that had been accumulated over the past several years. For banking institutions, the strong reserves position with capital in excess of the minimum Basel I requirement of RM38.5 billion, also would enable potential losses to be absorbed with only a minimal impact on capitalisation, although the impact on profits from the maximum potential loss would be larger.

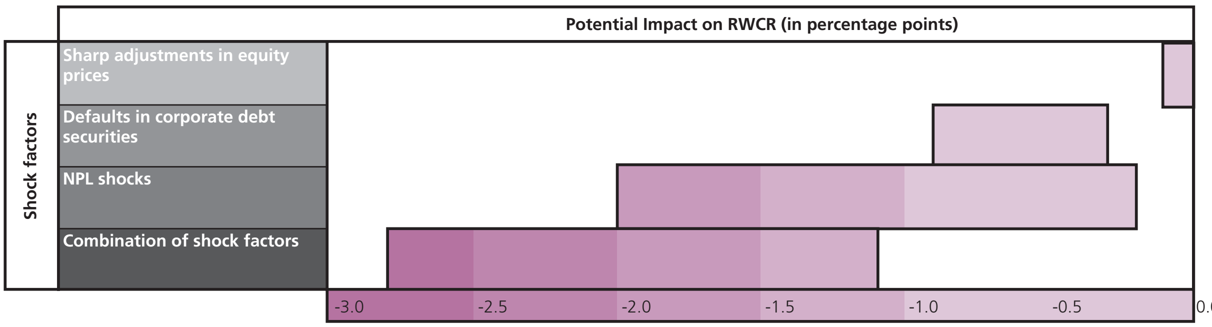
For the insurance and takaful sector, more severe shock scenarios were applied due to the higher exposures to the equity market of 14.2% of total assets. These tests produced favourable results, indicating a sufficient level of solvency surplus of the insurance industry to buffer against significant adverse movements in equity prices. In addition, micro level stress tests for the insurance industry were also performed based on a combination of additional stress parameters, such as bond downgrades and higher net claims. Despite the extent of the simulated scenarios, the solvency margin ratios of insurance companies remained sufficiently high with the exception of a small number of institutions that may require some capital injection under the most extreme scenario.

A series of stress tests conducted during the year yielded positive results indicating that financial institutions and households are well-positioned to adjust and adapt to stress conditions given the wealth accumulation over several years.

The series of financial market disruptions in the second half of the year led to some brief periods of net outflows from Malaysia. Outflows of foreign funds drove MGS yields upward and created greater volatility in the domestic securities market, while credit spreads on below-investment grade PDS widened in July and early August. While the implications for the domestic financial system were negligible due to the minimal subprime-related exposures, the resultant higher volatility in the domestic equity and bond market was the key transmission channel for the subprime crisis.

In anticipation of a possible worsening of external financial market conditions, another series of stress tests was conducted to assess the risk-bearing capacity of the financial system. Despite assuming high volatility shocks based on previous major sell-off events, the banking system remained well-positioned to absorb potential losses in their fixed income portfolios, with the potential impact on RWCR not exceeding 1 percentage point across all types of banking institutions (Chart 2.53). Similarly, equity price correction scenarios based on worst historical events were also simulated against banking institutions' direct investments in ringgit and foreign quoted shares. The maximum combined potential impact on the profitability of banking

Chart 2.53
Potential Impact on RWCR



institutions would not exceed 40%. In terms of insurance companies' equity exposures, tests revealed that the KLCI would need to contract substantially before fully depleting the unrealised gains of the insurers. Even in the extreme scenario whereby the entire market value of equity exposures were assumed to fall by 100%, the overall insurance industry would still record a solvency surplus of RM1.1 billion, demonstrating the resilience of the industry to shocks.

Risks emanating from payment systems remained low underpinned by the robust infrastructure and continued attention given to business continuity management

Preserving financial stability requires the stability of not only financial institutions and markets but also the payment systems. Thus, measures continued to be focussed on enhancing the systemically important payment systems (SIPs) to minimise potential payment and settlement disruptions that may pose risk to overall stability. These include the introduction of a delivery versus payment (DvP) settlement service during the year to facilitate the simultaneous delivery of Malaysian-issued USD-denominated securities deposited in the Real-time Electronic Transfer of Funds and Securities (RENTAS) system with their corresponding USD payments, thus eliminating potential settlement risk associated with the trading of these securities. On operational risk, comprehensive and robust business continuity management has been put in place whereby regular runs of contingency procedures were conducted by the Bank and members of the payment systems. In addition to enhancing SIPs, measures were also put in place to strengthen the retail payment systems particularly to mitigate risks associated with fraud. The risks as well as the mitigation measures are further elaborated in the chapter "Payment and Settlement Systems".

RISK ASSESSMENT GOING FORWARD

Economic outlook and potential risks

The 2008 global economic growth outlook is expected to be less favourable, with heightened downside risks to global growth arising from greater uncertainty in the state of the US economy, continued adverse developments in the global financial markets, potential disorderly unwinding of global imbalances and rising inflationary pressures emanating from higher food, commodity and energy prices. The financial markets are expected to remain volatile in 2008. The turbulence as experienced by some of the major financial markets is expected to worsen with the contagion having spread to the prime market and instruments. This has been influenced by the indiscriminate behaviour of investors and participants as deteriorating credit conditions and contraction in risk-taking are further compounded by the increasingly complex interdependencies in the financial system. The extent of the problem has also spread to a wider credit crunch in some economies. Continued uncertainty surrounding asset valuations, the scale and distribution of further losses as well as the ratings of securities insured by monolines remains high, and has not been fully accounted for by loss reports thus far. The further crystallisation of warehousing risk among major banks may trigger more write-downs as the demand and price of leveraged loans intended for distribution decline further. Distress in major global financial institutions as a result of more losses would further undermine investors' confidence, potentially leading to prolonged volatility across all major asset classes and financial markets. This will exert greater downward pressure on the capital position of US financial institutions that may weaken further their lending capacity. Effective ongoing measures to restore confidence in the creditworthiness and solvency of such financial institutions will therefore be crucial to ensure gradual improvements in international market liquidity and the credit intermediation process.

Surveillance of the financial sector in 2008 will focus on assessing the transmission implications of developments in the external environment, persistent large capital inflows, volatility in the financial markets and inflationary pressures for risks to financial stability. The use of forward looking assessments will intensify to ensure the Bank's state of readiness to implement pre-emptive policy responses in managing any challenging implications.

On the domestic front, the continued favourable growth prospect for the Malaysian economy is expected to provide a supportive environment for financial stability. However, the lower demand for domestic exports and a prolonged period of high prices of raw materials and energy would pose challenges to businesses. While businesses have accumulated large buffers over several years, strains on operating revenue and the thinning of margins may impact the debt servicing capacity of some businesses. The increased international linkages would also expose the domestic financial markets to greater volatilities. As investors' risk aversion heightens further, this could potentially cause spreads for Malaysian corporate securities to widen, hence increasing the cost of borrowings from the capital market. Continued pressures may compel businesses to pass on the increased costs to consumers at large. While the outlook for domestic employment and income levels remains favourable, the environment of increasing expenses will need to be managed by households. On aggregate, closer monitoring of the potential contagion risks emanating from a weaker global economic environment and protracted period of market turbulence would remain an area of priority given the openness of the Malaysian economy.

Meanwhile, the more favourable outlook for growth prospects in the Asian region and emerging economies will continue to attract continued inflows of capital into these economies, including Malaysia. Broadly, such developments would be favourable and desirable for growth and wealth creation, as well as for the performance of the domestic financial markets. At the same time, sustained periods of highly mobile capital inflows could potentially fuel the formation of asset price bubbles in the domestic financial and property markets which could have major adverse implications for financial stability.

As the fragility of the external environment remains an area of concern, any sudden reversals, especially that arising from higher risk aversion and the need to unwind investment positions to cover potential losses in other markets, may result in asset price corrections in the domestic financial and property markets. In addition, the persistent surplus liquidity in the system could also induce imprudent behaviour and practices within the financial institutions such as a compromise in underwriting standards for lending facilities. Balancing the trade-offs between realising the benefits from capital inflows and at the same time, managing the associated risks effectively will remain a key supervisory challenge.

Outlook for financial stability remains encouraging amidst heightened downside risks
Heightened uncertainty in the global macroeconomic and financial environment will present a more challenging environment to the Malaysian financial institutions in the year ahead. While worsening credit conditions and asset price volatility in the global financial system are expected to persist and could have wider ramifications on the international financial markets, the potential destabilising effects on the Malaysian financial system will be cushioned by the substantial financial buffers accumulated and enhanced risk management capacity. The improved risk bearing capacity, supported by strong profit performance, adequate liquidity buffers and capitalisation at levels well above the regulatory minimum, will enable the financial system to withstand further shocks and contagion effects emanating from the volatile external environment.

Recent trends in rising operating costs of financial institutions, partly stemming from higher overheads and marketing expenditures on rebranding and advertising to capture market share, will to some extent exert downward pressures on margins. In addition, the limited supply of new and specialised talent for the financial services industry, and the consequent higher remuneration packages offered to attract and retain competent and experienced staff amidst the intense competition and high mobility in the labour market are expected to pose further challenges to financial institutions. This necessitates closer surveillance to ensure that productivity levels continue to improve and that the higher staff cost and scarcity of talent in critical areas do not result in unfavourable implications for institutional stability.

Moving forward, the macroprudential surveillance and supervisory activities of the Bank will focus on several key areas:

- strengthening the robustness of risk transmission assessments, in terms of the channel and magnitude of transmissions from external developments to the Malaysian financial markets, businesses and households as well as the financial sector;
- ensuring that the risk-bearing capacity of financial institutions to respond to these risks is enhanced further;
- overseeing the comprehensiveness and effective implementation of enterprise-wide risk management within financial institutions;
- reviewing the effectiveness of current liquidity management plans to deal with sudden liquidity pressures in the domestic or foreign currency markets; and
- strengthening further the Bank's crisis management framework to secure its state of readiness to respond effectively to system-wide distress conditions.

These will be complemented by continuous enhancements in capacity building initiatives within the Bank. This includes efforts in enhancing the forward-looking aspects of the macroprudential surveillance framework which will encompass the development of quantitative assessment tools and leading indicators, as well as enhanced approaches for gathering market-based and more granular information. The development of surveillance tools, such as the vulnerability indicator for the banking sector (VIBeS) (discussed in further detail in the box article "Enhancing Bank Negara Malaysia's Surveillance Framework – Forward Looking Indicator of Banking System Vulnerability"), will facilitate a more integrated and predictive approach towards risk assessment. In view of recent financial market developments, the methods and approach to macro and micro stress tests will be further enhanced to ensure the robustness of the scenarios and assumptions used. These include the incorporation of sufficiently extreme and contagion events, as well as behavioural and second-round impacts to provide more realistic and holistic assessments.

Given the inter-linkages of the financial system with the real economy, the identification and monitoring of key risk drivers in various business segments will provide early warning signs of distress that may spill over into larger credit risk exposures borne by financial institutions. Efforts to enhance the assessment of household sector issues and collection of micro level household balance sheet and income data will also be another key area of focus for the year. These include the development of vintage profiles for housing loans and further enhancements to the CCRIS in terms of data granularity and coverage. This would ensure that the assessment of emerging risks in the various segments is not masked at the aggregate level. The enhanced information content in CCRIS will also assist in credit assessments and risk modelling by financial institutions. Another area of focus will be further strengthening the interaction between macro- and micro-surveillance activities within the Bank. This provides inputs for the implementation of a more structured and forward-looking assessment of financial institutions' risk profiles and risk management systems under the risk-based supervisory framework.

Enhancing the Surveillance Framework – Forward Looking Indicator of Banking System Vulnerability

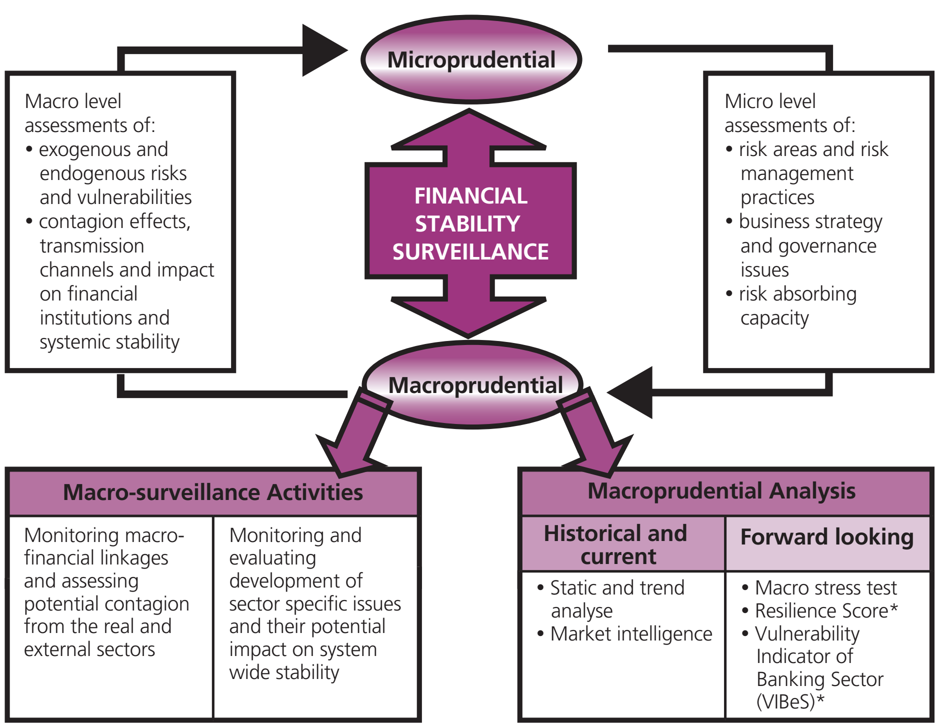
The task of preserving financial stability has become more challenging to policy makers especially in an environment of a rapidly evolving financial landscape and greater volatility in financial markets. The challenge is even greater for an open economy with increasing integration and inter-linkages with the external environment. Having in place a robust and integrated macroprudential surveillance framework is therefore critical to facilitate the early identification of emerging threats and risks to financial system stability. More importantly, it provides the lead time for appropriate policy responses and the implementation of pre-emptive measures to preserve the intermediation function and financial stability.

Macro-Surveillance Framework

Strengthening the Bank's macroprudential surveillance capabilities is a key priority of the Bank. The strategy adopted has been all-encompassing in terms of the framework and infrastructure development, capability enhancement, governance structure and communication. In formulating the macroprudential surveillance framework, the Bank takes cognisance of the potential threats that may emanate directly or indirectly from increasingly complex interlinkages between the financial system and the real sector, greater global trade and financial integration, as well as from payment and settlement systems. Essentially, the focus of the Bank's macro-surveillance activities encompasses:

- monitoring macro-financial linkages associated with developments and emerging trends in the external sector, domestic economy and financial markets, and corporate and household sectors, as well as assessing their potential contagion implications for the financial system; and
- monitoring and evaluating the development of sector specific issues within the financial sector and the potential implications for overall system wide stability.

An assessment of the extent of risk to financial stability is reached by incorporating both quantitative and qualitative information using static and trend analyses, as well as scenario and sensitivity analyses through integrated macro stress tests and market intelligence. These assessments are also integrated with the micro-surveillance oversight functions of the Bank.



** These forward looking surveillance tools are currently being developed for use by Bank Negara Malaysia*

Assessments of the potential risks to financial stability are conducted in a holistic manner, internally within the Bank and with other domestic regulators. The key potential risks to financial system stability once identified, assessed and ranked in the order of importance, are used as inputs to achieve coherent policy formulation and coordinated pre-emptive actions among key stakeholders including financial institutions, other domestic regulatory and supervisory authorities as well as with regulators from other jurisdictions. The outcome also ultimately forms the basis for communication of risks to financial system stability to the general public.

There is recognition that forward looking quantitative tools form a key component of a robust macro-surveillance framework. Accordingly, the continuous development of these tools to aid coherent and integrated analysis is given importance. The following describes the development of one of these surveillance tools which measures the level of vulnerability of the banking sector, the methodology and underlying assumptions adopted, as well as present efforts being undertaken to ensure the robustness of the tool.

Vulnerability Indicator for Banking Sector

The vulnerability indicator for the banking sector, or VIBeS, is a composite of risk indicators that measures the intensity of systemic distress at a particular point in time. Recognising the limitations of the previously developed binary variable Early Warning System in elucidating intensities of various distress symptoms and capturing the complexities of banking crises, a more robust composite indicator is being developed to quantify systemic vulnerability that may emerge from different sources. This measure of banking sector conditions aims to enable early prognosis of distress build-up prior to the occurrence of a crisis. Using information derived from macroeconomic and financial imbalances, VIBeS will assist in forecasting future conditions in the banking sector. The general approach used in developing the VIBeS framework is adapted from a Bank for International Settlements research paper[1], with modifications to enable its applicability in the context of the Malaysian banking sector.

Methodology and assumptions

The development of VIBeS involves a three-step approach as outlined below:

Methodology involved in developing VIBeS

Step 1: Selection of risk indicators

- Define and measure vulnerability level using risk indicators that satisfy pre-determined selection criteria

Step 2: Construction of vulnerability indicator

- Transform, normalise and aggregate the individual risk indicators

Step 3: Assessment of future vulnerability and stress testing

- Establish empirical relationship between vulnerability indicator and macroeconomic imbalances for forecasting and scenario analysis

[1] See Monnin, P and E Hanschel (2004), "Measuring and forecasting stress in the banking sector: evidence from Switzerland", *BIS Paper No 22.*

Selection of risk indicators

The risk indicators are selected mainly based on their ability to explain symptoms of instability during identified systemic distress periods. Other selection criteria include the availability of a long time series with quarterly frequency and widely used financial stability indicators. In our preliminary analysis, the various dimensions of banking vulnerability and risk indicators cover capitalisation, profitability, credit quality, liquidity and market-based information.

Based on historical trend analyses of various measures of capitalisation, annual growth in Tier-1 capital provides a more sensitive indication of change in capital levels during past distress periods. For example, the relatively stable risk-weighted capital ratio (RWCR) of banking institutions observed during the Asian financial crisis as a result of recapitalisation efforts by Danamodal Nasional Berhad did not adequately reflect the decline in the core capital positions of banking institutions. In terms of credit quality, the gross non-performing loans (NPL) ratio, after adjusting for loans sold to, and recovered by, Danaharta, was found to be more reflective of the occurrence of higher delinquencies during the same crisis. While accumulation in provisions has been widely used in some banking crisis literature to indicate banks' early detection of credit deterioration, it is also subject to potential biased signals of vulnerability due to reduced provisioning capacity in distressed periods, and differing provisioning behaviour in good times through the adoption of income smoothing or stricter provisioning policies.

In relation to liquidity risk, net interbank deposits of banking institutions is currently used to gauge possible liquidity shortages and funding problems in the system. Meanwhile, the sensitivity and applicability of other indicators such as weighted averages of interbank rates and spreads, liquid assets ratios and liquidity buffers as a percentage of deposits, are also being explored. As a measure of profitability and efficiency, return on assets is adopted as it takes into account regulatory and structural changes in the banking sector, for example, the rationalisation or emergence of new players. Market-based indicators of financial distress, such as the spread of debt securities issued by banking institutions or index of banks' share prices are also being considered to capture investors' evaluations of banks' idiosyncratic risks and their intrinsic value.

Construction of VIBeS

VIBeS is in essence a composite indicator. The construction of VIBeS involved the following process:

- transforming all components of the composite indicator to reflect higher vulnerability when symptoms of distress intensify;
- normalising all indicators with respect to their averages and standard deviations into comparable units; and
- aggregating normalised components using equal weights.

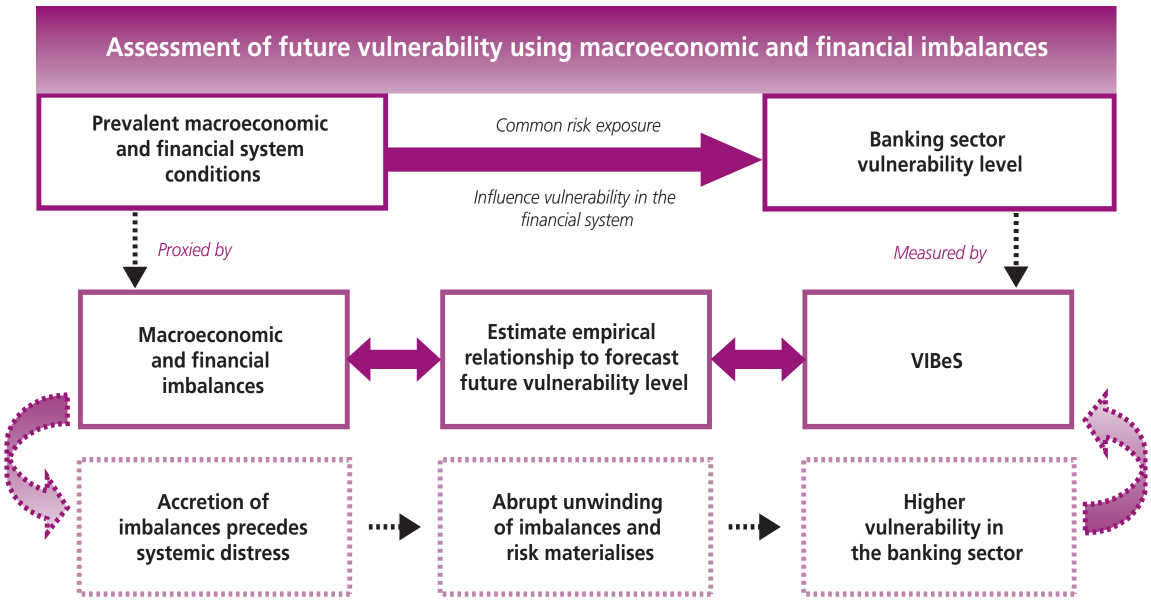
Assessment of future vulnerability and stress testing

While VIBeS is constructed to provide a snapshot of the current level of banking system vulnerability, it also aims to facilitate forward looking assessments of potential stress within the system. For this, the relationship between macroeconomic and financial imbalances, and the distress level of the banking system is currently being empirically modelled and tested. Any weakening of economic conditions, coupled with the accretion of macro imbalances and abrupt adjustments are often associated with destabilising consequences on financial stability. By focusing on early signals of potential instability amassing in macro imbalances which normally precede systemic distress, the empirical model will be able to identify the potential source of vulnerability.

The empirical relationship is established by regressing VIBeS on selected macroeconomic and financial indicators[2] that are robust determinants of past systemic distress episodes. These indicators are

[2] Indicators of macroeconomic and financial imbalances considered, inter alia, include (1) Gross domestic product (GDP), (2) ratio of domestic credit to GDP, (3) Kuala Lumpur Composite Index, (4) Malaysian House Price Index and (5) ratio of private investment to GDP.

computed to measure potential macroeconomic and financial imbalances by taking the deviation of selected macroeconomic and financial variables from their respective long term trends[3]. Subsequently, forecasts of the future vulnerability level are generated based on the regression model that satisfies the predetermined "best model" criteria[4]. The following diagram summarises the framework adopted to assess the future vulnerability level in the banking sector using these measures of imbalances.



To complement other variants of macro stress tests, additional scenario analysis is conducted via this framework to assess the impact of adverse macroeconomic developments on VIBeS. Regression coefficients from the best estimate model are used in simulating specific macroeconomic shocks and the results are compared with historical vulnerability levels to assess the current degree of resilience of the banking system.

Future Refinements to the Framework

Efforts are currently focused at further improving the robustness of the forecast capability of VIBeS by leveraging on higher frequency macroeconomic variables, for example, data on monthly portfolio flows and the consumer price index. Refinements are also being made to the regression model to adequately capture the non-linear interactions of macroeconomic and financial imbalances with that of systemic vulnerability. In addition, the framework's applicability in supervisory assessments of individual banking institutions is being explored to facilitate further integration of the Bank's macro- and micro-surveillance activities. Mindful of the transformation of the financial sector and constantly changing financial environment, attempts are also being made to broaden the scope of coverage by incorporating non-financial indicators including measures of structural changes and financial liberalisation, into VIBeS.

No tool, regardless of its sophistication, may predict the future with absolute precision. Given an increasingly complex financial landscape, the use of forward looking indicators such as VIBeS, serves only as a means to assess the level of vulnerability within the banking system in an unbiased and objective manner, and as a supplement to other surveillance tools within the Bank's framework. The ultimate aim is to achieve an in-depth and informed macroprudential as well as microprudential analysis of each component of the financial system and the interactions and feedback effects to ensure that emerging threats and risks are well anticipated and pre-emptively acted upon.

[3] The long run fundamental trend of each macroeconomic and financial variable considered is determined using the rolling Hodrick-Prescott filter. See Borio, C and P Lowe (2002), "Asset prices, financial and monetary stability: exploring the nexus", *BIS Working Paper* No 114, for full details.
[4] These include: (1) Minimum significance level of 10% for all regression coefficients, (2) Maximum lags of 16 quarters, (3) Minimum of four regressors, (4) Highest adjusted R-squared and (5) Comparable estimates between post-crisis and entire period samples.

Malaysia's Anti-Money Laundering / Counter Financing of Terrorism (AML/CFT) Programme

Overview

Malaysia has in place a comprehensive AML/CFT regime. The AML/CFT programme implemented in Malaysia is reinforced by the Anti-Money Laundering and Anti-Terrorism Financing Act 2001 (AMLA) and its related AML/CFT regulations, which are consistent with international standards, namely, the Financial Action Task Force on Money Laundering (FATF) Forty Recommendations on Money Laundering and Nine Special Recommendations on Terrorist Financing (FATF 40+9 Recommendations). The FATF is the inter-governmental body that sets the international standard for the development of national and international policies to combat money laundering and terrorism financing.

A coherent AML/CFT programme is achieved through a robust and comprehensive legal framework, preventive measures as well as effective domestic and international inter-agency cooperation to support capacity building, surveillance and enforcement activities of the respective authorities. The legal and institutional framework for AML/CFT in Malaysia has been incrementally implemented and strengthened since 2002 and is applied to financial institutions as well as designated non-financial businesses and professions (DNFBPs).

In early 2007, the second round of the Asia/Pacific Group on Money Laundering (APG) Mutual Evaluation Exercise was carried out on Malaysia. The APG Mutual Evaluation Exercise provides an independent assessment of the state of Malaysia's AML/CFT programme and its compliance with international standards. Malaysia's ratings were comparable with many developed countries. Based on the Mutual Evaluation Reports (MER) of 40 countries that were published as at July 2007, Malaysia was one out of only three countries that were rated "Largely Compliant" against the FATF Recommendation on customer due diligence, while no country has been assessed to be fully compliant.

Overall, Malaysia obtained nine "Compliant", 24 "Largely Compliant", 15 "Partially Compliant" and one "Non-Compliant" ratings against the FATF 40+9 Recommendations. The results of the APG Mutual Evaluation affirm Malaysia's significant efforts in developing and implementing a comprehensive legal system in criminalising money laundering and terrorism financing, law enforcement, financial intelligence, freezing, seizure and confiscation of proceeds of crime, as well as implementing effective preventive measures for financial institutions and DNFBPs, which have served to safeguard Malaysia's financial system against the threat posed by money launderers and terrorist financiers. As an ongoing effort, Bank Negara Malaysia will continue to be vigilant in monitoring and ensuring effective implementation of the AML/CFT legal and regulatory framework, while directing attention towards capacity building as well as domestic and international cooperation.

AML/CFT Legal and Regulatory Framework

The AML/CFT legal and regulatory framework is regularly reviewed and where necessary, appropriate amendments to the laws and regulations are made to ensure that they remain effective and relevant in dealing with money laundering and terrorism financing threats. In this regard, the Anti-Money Laundering (Amendment) Act 2003 and consequential amendments to four other related acts, namely, the Penal Code (Amendment) Act 2003, Criminal Procedure Code (Amendment) Act 2006, Courts of Judicature (Amendment) Act 2004, and Subordinate Courts (Amendment) Act 2004 were brought into force in March 2007. The amendments were made to incorporate provisions dealing with the offence of terrorism financing. The new Part VIA in the Anti-Money Laundering (Amendment) Act 2003 provides for measures to be taken for the prevention of terrorism financing offences and for the forfeiture of terrorist property and property involved in, or derived from terrorism financing offences. Consequently, Malaysia's anti-money laundering legislation became known as the Anti-Money Laundering and Anti-Terrorism Financing Act 2001.

These amendments have put in place a set of comprehensive laws and in particular, recognises the procedures for freezing of terrorist-related property, thus enhancing Malaysia's compliance with the FATF Special Recommendations on Terrorist Financing while facilitating Malaysia's accession to the United Nations International Convention for the Suppression of the Financing of Terrorism.

The list of predicate offences under the AMLA has also been expanded to include a broader range of offences commonly associated with money laundering and terrorist financing. These offences include corruption, fraud, criminal breach of trust, illegal gambling, credit card fraud, currency counterfeiting, robbery, forgery, human trafficking, extortion, smuggling and drug-related crimes. The list of predicate offences may be expanded by the authorities from time to time as deemed necessary.

In 2007, an offence relating to piracy or the counterfeiting of non-artistic goods was included as a predicate offence in the AMLA. With this inclusion, the list of offences in the AMLA is fully compliant with the FATF Recommendations. The comprehensive coverage of predicate offences in the AMLA will facilitate the more timely detection of money laundering and terrorism financing activities through the receipt of suspicious transaction reports (STRs) in relation to such offences from all reporting institutions. The STRs will also facilitate prompt investigations and prosecutions by law enforcement agencies into suspected money laundering or terrorism financing offences.

Preventive Measures for Financial Institutions and DNFBPs

Malaysia's AML/CFT preventive measures are uniformly applied to both conventional and Islamic financial institutions, and to the DNFBPs. In 2006, Bank Negara Malaysia issued the AML/CFT Guidelines and relevant Sectoral Guidelines for banking institutions and insurers. Under the Guidelines, financial institutions in Malaysia are required to consistently apply AML/CFT procedures and controls across all domestic and foreign branches as well as their subsidiaries. This would include the requirement for financial institutions to appoint compliance officers in each branch and subsidiary with appropriate independence and authority to access records and submit STRs.

Out of the 19 FATF Recommendations on preventive measures for financial institutions that were assessed in the APG MER, Malaysia was rated "Compliant" and "Largely Compliant" against 15 Recommendations. The remaining four Recommendations were rated "Partially Compliant", due mainly to the inability of the APG assessment team to fully establish the effectiveness of the implementation of the Guidelines as the APG MER was conducted during the early implementation phases of the AML/CFT Guidelines issued by the Bank. With the Guidelines having been fully implemented, the Bank is confident of being able to achieve broad compliance against these recommendations.

The effectiveness of the implementation of the relevant AML/CFT Guidelines and controls at financial institutions are evaluated under the risk-based supervisory framework, as part of the assessment of the overall safety and soundness of individual financial institutions. With the increasing focus on ensuring adequate AML/CFT internal control programmes, financial institutions have significantly strengthened their internal mechanisms for the detection of suspicious transactions, resulting in an improved quality of STRs submitted to the Bank and more timely provision of requested information for investigation purposes.

Obligations to establish an AML/CFT compliance programme for the DNFBPs sector came into force in early 2007 following the issuance of the AML/CFT Sectoral Guidelines to a licensed casino, licensed gaming outlets, lawyers, accountants and company secretaries. These AML/CFT Sectoral

Guidelines, which were issued to the relevant reporting institutions between February and April 2007, specify the regulatory requirements that are in line with the AMLA and the relevant FATF 40+9 Recommendations.

During the year, Bank Negara Malaysia undertook both on-site and off-site compliance examinations, targeted at selected reporting institutions, in particular, institutions engaging in predominantly cash-based transactions where the risk of money laundering and terrorism financing may be more prevalent. Such institutions include accountants, company secretaries and lawyers, as well as licensed gaming outlets. These compliance examinations enabled Bank Negara Malaysia to determine the state of compliance of DNFBPs with the AML/CFT legal and regulatory requirements.

Domestic Cooperation and Capacity Building

While Bank Negara Malaysia is the designated competent authority under the AMLA, the National Co-ordination Committee to Counter Money Laundering (NCC) consisting of 13 Ministries and Government agencies was set up in 2000 in order to achieve a coordinated approach towards ensuring the effective implementation of national AML/CFT measures. The NCC provides an integrated platform for the relevant Ministries, Government agencies and supervisory authorities to ensure that Malaysia implements an effective national AML/CFT system in line with the international standards. Bank Negara Malaysia, as the Secretariat to the NCC, continued to play an instrumental role in this process by promoting a collaborative culture between the Government and private sector towards achieving AML/CFT compliance. Among other things, regular engagements, dialogues and consultations with self-regulatory organisations (SROs) and associations were held during the year to enhance AML/CFT awareness while emphasising the importance of preventive measures.

In 2007, the NCC formulated a national action plan to address the various recommendations put forward in the APG MER over the next few years. The action plan includes legislative amendments, measures to strengthen regulatory guidelines and compliance monitoring, measures to enhance the investigative powers of law enforcement authorities and, in the longer term, the establishment of a national asset management corporation for seized and forfeited assets.

To further support the effective implementation of the AML/CFT programme, the development of the necessary expertise and capabilities within supervisory and regulatory agencies, law enforcement agencies (LEAs) and other related Government agencies and Ministries continued to receive priority. In 2007, training programmes on AML/CFT continued to focus on the supervisory and regulatory framework, legal aspects, typologies, financial investigative methods and analytical skills. These training programmes were organised by the relevant domestic agencies in collaboration with multilateral/regional bodies so as to promote a broader exchange of experiences and knowledge on implementation of effective AML/CFT programmes.

During the year, another 29 officers successfully completed the Certified Financial Investigator Programme (CFIP) and graduated as Certified Financial Investigators (CFIs) (2006: 24 officers). To reinforce the skill sets and competencies developed among the CFIs, two training programmes on forensic accounting and case analysis using the i2 software were organised by the Sub-Committee for Inter-Agency Training under the NCC as part of the continuous development programme for Alumni members.

International Cooperation

In view that money laundering and terrorism financing activities are transnational in nature, Bank Negara Malaysia continues to promote the exchange of financial intelligence with its international counterparts. In 2007, six Memoranda of Understanding (MoUs) on the exchange of financial intelligence were signed, bringing the total number of MoUs signed by Bank Negara Malaysia to 13, as follows:

No	International Counterparts	Country	Date Signed
1.	Australian Transaction Reports and Analysis Centre	Australia	2 August 2002
2.	*Pusat Pelaporan dan Analisis Transaksi Keuangan* (Indonesian Financial Transaction Reports and Analysis Centre)	Republic of Indonesia	31 July 2003
3.	Anti-Money Laundering Council	Republic of the Philippines	4 August 2004
4.	Anti-Money Laundering Office	Kingdom of Thailand	18 April 2005
5.	China Anti-Money Laundering Monitoring and Analysis Center- People's Bank of China	People's Republic of China	30 June 2006
6.	Korea Financial Intelligence Unit	The Republic of Korea	30 April 2007
7.	Japan Financial Intelligence Centre	Japan	29 May 2007
8.	Serious Organised Crime Agency	United Kingdom	30 May 2007
9.	*Finanspolisen Rikskriminalpolisen* (National Criminal Intelligence Service, Financial Unit)	Sweden	30 May 2007
10.	Financial Crimes Enforcement Network	United States of America	2 July 2007
11.	*Unidad de Análisis Financiero* (Financial Analysis and Intelligence Unit)	Republic of Chile	21 August 2007
12.	The Central Bank of Sri Lanka	Sri Lanka	18 January 2008
13.	Ministry of Finance	Brunei Darussalam	4 February 2008

The voluntary and unsolicited sharing of financial intelligence between competent authorities represents an important tenet of the MoUs signed by the Bank. In the recent past, this has resulted in valuable leads provided for further investigations into money laundering offences by the relevant LEAs, and the subsequent prosecution and conviction of perpetrators in foreign countries. This experience underscores the importance of cross-border information sharing and mutual cooperation.

Bank Negara Malaysia has also participated in regional capacity building programmes to enhance AML/CFT knowledge and technical capability in selected ASEAN member countries. The Bank in collaboration with the Australian Transaction Reports and Analysis Centre, provided technical assistance to the Anti-Money Laundering Office (AMLO) of Thailand in September 2007, focusing on enhancing the framework and infrastructure for reporting suspicious transactions to the AMLO.

Challenges Ahead

Bank Negara Malaysia, as the competent authority, together with the NCC remains vigilant to evolving money laundering and terrorism financing threats. Money laundering and terrorism financing typologies have indicated ongoing threats in high cash concentrated activities such as casinos, cash couriers, as well as informal remittance systems. In this regard, among others, the NCC has established a task force on cross border transportation of currency and bearer negotiable instruments to address the only "Non-Compliant" rating against the FATF Special Recommendation IX on Cash Couriers. The task force, which consists of Bank Negara Malaysia, the Royal Malaysian Customs, Ministry of Home Affairs and Immigration Department, will be making recommendations on appropriate regulatory and enforcement measures to prevent as well as to detect cash couriers moving funds illegally for criminal activity.

To mitigate the potential risk of criminal abuse from the prevalent use of alternative and informal remittance services provided through money changers, these businesses will be subject to more stringent supervisory measures, while the use of formal remittance channels such as banking institutions and licensed non-bank remittance operators will be further encouraged.

The effective compliance monitoring of DNFBPs remains a challenge due to the sheer number of these entities. There are approximately over 30,000 DNFBPs nationwide established either as sole proprietorships, partnerships or limited liability companies. The Bank will continue to promote a more active role on the part of the SROs or the trade bodies to ensure the compliance of DNFBPs with legal and regulatory AML/CFT requirements. This will be supplemented with the development of a comprehensive risk-based compliance framework that appropriately reflects the unique characteristics of this sector.

As financial institutions strengthen their internal AML/CFT programmes in line with the more stringent regulatory measures and international standards, it can be expected that perpetrators of illegal activities will seek alternative channels to further financial crimes. There is therefore a need to ensure on a continuous basis that the AML/CFT supervisory framework remains comprehensive in terms of reporting institutions covered and the effective enforcement of the AML/CFT measures. The challenge is, however, to ensure that the costs associated with increased regulatory and compliance measures are also balanced with the money laundering and terrorism financing risk. To this end, Bank Negara Malaysia and the NCC will continue to work with the relevant business communities in instituting appropriate AML/CFT measures that are commensurate with the size, complexity and risk exposure of the reporting institutions.

Development of the Financial Sector

Development of the Financial Sector

The globalisation of financial markets, the changing economic landscape, further technological advancements and greater customer expectations continued to drive developments in the Malaysian financial sector. With the increasing integration and complexity of the global financial system, the challenge for the Malaysian financial system is to adapt to the changing market realities and at the same time to support domestic economic development. The Malaysian financial industry itself has also emerged as an important source of economic growth, accounting for 10.7% of gross domestic product (GDP) in 2007. Given the increasing economic significance of the financial sector, Bank Negara Malaysia continued to accord attention to capacity building measures to further enhance the competitiveness and resilience of the financial system to support domestic-led growth. Efforts were in particular, directed towards developing and further strengthening the financial infrastructure and the financial markets. To position Malaysia as an international Islamic financial centre, a number of strategic initiatives were also implemented during the year. These contributed towards reinforcing a financial system that is comprehensive, diverse, robust and ready to compete in a more liberalised and globalised environment.

INSTITUTIONAL DEVELOPMENT

Continued enhancements were made by financial institutions to strengthen their financial and market positions, thus enhancing their prospects for long-term growth and stability. Within the banking sector, the top five banking groups by asset size have increased their market share of total outstanding loans to 61.1% in 2007 from 52.5% in 2001. These banking groups also recorded increasing profitability with return on equity up from 14.4% in 2001 to 19.4% in 2007 as a result of efforts to improve cost efficiencies and generate higher revenue streams, in response to competitive pressures and demands for improved shareholder value.

Capitalising on the healthy performance over several years, Malaysian financial institutions have taken the opportunity to strengthen and further consolidate their financial position in 2007. Notably, several domestic banking groups invested significant resources in strengthening risk management capabilities and enhancing business operating models. Capital injections received by some institutions from existing and new shareholders provided added financial flexibility to support further business expansions, investments in technology, capacity building initiatives and talent development. More efficient management of capital was also achieved through capital restructuring exercises which saw further issuances of subordinated bonds by several financial institutions. The governance of the financial group structures was also strengthened, while investment banks made significant progress towards completing the amalgamation of the people, systems and processes that were previously operating in separate banking and stockbroking entities.

Domestic banking groups have emerged stronger with strengthened financial positions and sustained market shares despite a more competitive operating environment.

As a result of these developments, domestic banking groups have emerged stronger with strengthened financial positions and sustained market shares despite a more competitive operating environment. These improvements were recorded across the board, including by institutions that had earlier received capital injections from Danamodal Nasional Berhad (Danamodal) during the Asian financial crisis. In line with its mandate to promote the long-term stability of the financial system, Danamodal had injected a total of RM7.49 billion into viable banking institutions based on commercial terms and market principles. As a strategic shareholder, Danamodal also infused best management practices and competencies into these institutions which resulted in enhanced risk management and operating efficiencies. Having emerged on a stronger footing, all of the recapitalised institutions have paid in full the capital injected by Danamodal. The successful turnaround, strengthened financial conditions and positive future outlook of the banking institutions have also attracted strong interest by several foreign financial institutions to establish strategic partnerships. The successful transformation of these recapitalised institutions contributed to positive net results of Danamodal, which recorded pre-tax profits of RM200 million.

The conversion of all Islamic banking windows of the domestic banking groups into Islamic subsidiaries in 2007 has increased the focus on Islamic banking business, supported by clearer accountabilities achieved under separate Board and management structures. This brings the total number of licensed Islamic banks in Malaysia to 16, including four new Islamic subsidiaries that are expected to commence operations in 2008. To tap the strong growth potential in Islamic finance, two locally-incorporated foreign banks (LIFBs) established Islamic banking window operations in 2007. In addition to the above, seven investment banks also offer Islamic banking services through the window structure.

All Islamic banking windows of the domestic banking groups have converted into Islamic subsidiaries.

POSITIONING MALAYSIA AS AN INTERNATIONAL ISLAMIC FINANCIAL CENTRE

Malaysia is at the frontier in the global developments in Islamic banking and finance. The Islamic banking system has emerged as a vibrant alternative financial system in Malaysia, with Islamic banking assets (including Islamic assets held by development financial institutions, DFIs) currently accounting for 15.4% (11.5% in 2003) of the total banking assets (including assets held by DFIs) of the Malaysian financial system.

Capitalising on the ready infrastructure and comprehensive Islamic financial system in Malaysia, the strategic development of Malaysia as an international Islamic financial centre was taken to a new level with the launch of the Malaysia International Islamic Financial Centre (MIFC) initiative in 2006. To accelerate the development of Islamic finance, new banking and takaful licences were offered to attract leading global players to establish operations in Malaysia. During the year, 16 approvals were granted to conduct international currency business operations. These include an international Islamic banking license to an investor from Bahrain, as well as approvals for other domestic financial institutions to establish dedicated international currency business units. Two additional retakaful licences were also granted in 2007 to qualified local and foreign players, further consolidating Malaysia's position as an international retakaful hub, while contributing to the development of enhanced underwriting and claims practices, and product innovations in the takaful industry. To further facilitate the conduct of takaful business, a tax treatment that recognises the unique characteristics of takaful operators has been introduced. The tax treatment provides for the appropriate recognition of income and expenses arising from takaful business, having regard to the distinct role of takaful operators as risk managers in contrast to conventional insurers which are risk underwriters. Other current initiatives include the review of the tax treatment for the business of leasing which aims to address taxation issues that currently impede the development and growth of leasing and *ijarah* business.

The Malaysian Government continues to provide strong support for the MIFC vision by granting flexibilities to improve business efficiencies and to attract the best talent to Malaysia. In 2007, the Government introduced an "executive green lane" for immigration procedures for foreign experts in Islamic finance, and has made available long-term employment passes with multiple entry visas and professional visit passes. In addition, the Government has also relaxed several Foreign Investment Committee rules for MIFC players, which include allowing 100% foreign equity ownership in Islamic financial institutions established under the MIFC and granting flexibilities in the acquisition of properties and land, both for own use and commercial purposes. In addition, further tax incentives were also granted to promote Malaysia as a centre for origination, distribution, and trading of sukuk (details on the tax incentives are provided in the box article "Sukuk: Efficient Diversification Mechanism and New Asset Class").

Sukuk: Efficient Diversification Mechanism and New Asset Class

Rapid Growth of the Global Sukuk Market

The global sukuk industry experienced enormous growth over this recent five years and is now at the centre of the rapid development of the Islamic financial system. The size of the global sukuk market, including sukuk denominated in domestic currencies, has grown from only USD336 million (or RM1.3 billion) in 2000 to an estimated USD82 billion (or RM281 billion) as at end-2007, representing an average annual growth of 40%. Total issuances in 2007 are valued at USD47 billion (or RM161 billion), an increase of 73% over the total value issued in 2006[1].

Sukuk Salient Features

- Sukuk is certification or trust of ownership for an asset or usufruct.
- It is an asset-based instrument structured in compliance with the precepts of Shariah.
- Returns on sukuk are tied to the underlying asset. Therefore, sukuk needs to be backed by a specific asset or usufruct throughout its entire tenure.

Initially regarded as a niche capital market instrument catering to corporate issuers, governments, state-owned enterprises and financial institutions in Islamic economies for capital-raising exercises, the appeal of sukuk has since extended to large international banks and corporate issuers. Established international financial centres have also taken a more active role in developing the market for this asset class, including enacting enabling legislative provisions which have contributed towards accelerating the development of the global sukuk market.

Record Growth of Malaysian Sukuk Industry

Malaysia continues to be at the forefront of the development of Islamic finance. Malaysia is the world's largest sukuk market with 68.9% or USD62 billion (RM213 billion) of the global outstanding sukuk as at end-2007 having been originated in Malaysia. Total issuances of corporate sukuk in Malaysia amounted to more than RM30 billion in 2007. Malaysia's lead in the development of the sukuk market extends beyond just volume, including as well the introduction of innovative and competitive sukuk structures that appeal to a wider investor base.

Chart 1
Malaysia: Outstanding Sukuk vs. Bonds

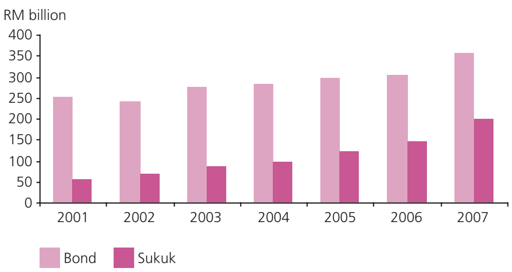
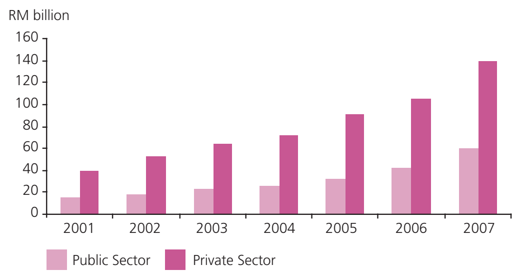


Chart 2
Malaysia: Total Outstanding Sukuk



Beginning with a modest issue size of RM125 million by Shell MDS Sdn. Bhd. in 1990, the Malaysian sukuk market has grown in size and sophistication. The depth of the sukuk market was clearly demonstrated by the recent issuance of the largest sukuk to date, valued at RM15.4 billion (USD4.7 billion), by Binariang GSM Sdn. Bhd., an investment-holding company that facilitated the privatisation of a cellular phone operator. Despite its significant size, the Binariang sukuk was twice oversubscribed.

[1] Source: Islamic Finance Information Service

The primary sukuk market in Malaysia is now one of the world's fastest growing, with an average annual growth in issuances of 22% recorded for the period 2001-2007. Having introduced the world's first global sovereign sukuk in 2002, Malaysia has continued its pioneering efforts in facilitating innovative structures such as the exchangeable *sukuk musharakah* by Khazanah Nasional Berhad, the investment-holding arm of the Malaysian Government. This landmark issuance is the world's first sukuk that incorporates full convertibility features that were previously common only to conventional equity-linked transactions.

Secondary trading in the Malaysian sukuk market has increased in depth and liquidity, with more corporations, including foreign-owned corporations, continuously tapping the market for funding. A significant number of corporate issues have been undertaken to finance long-term funding needs. The wide array and increasing size of sukuk transactions also offer attractive value proposition for investors seeking to diversify their asset portfolios, thus creating a vibrant secondary market.

Key Growth Factors Underpinning Strong Sukuk Development

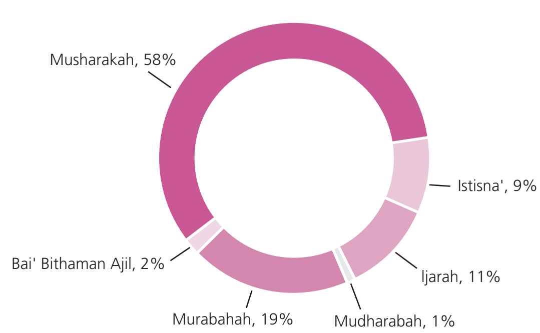
The strength of sukuk lies in its distinct structure. Sukuk is an asset-based instrument, bringing unique value proposition to both investors and issuers. For investors, sukuk offers added portfolio diversification benefits and investment opportunities in the form of new asset classes, while issuers can benefit from increased liquidity by tapping into the growing demand among an increasing number of high net-worth individuals and institutional investors for Shariah-compliant investment products.

The strong growth of sukuk, particularly in the recent five years has been supported by the following key factors:

I. Growing Sophistication of Structures

The flexibility of sukuk structures is a key factor that has led to its growing acceptance. Sukuk are tailored to meet the requirements and preferences of specific target markets. Over the years, sukuk structures have evolved from debt-based structures which are premised on cost-plus sale agreements *(murabahah)*, to lease-based *(ijarah)*, profit-sharing *(musharakah)* and manufacturing contracts-based *(istisna')* sukuk, as well as hybrid structures based on combinations of Shariah contracts that appeal to a wider range of investors.

Chart 3
Sukuk Approved in 2007 Based on Various Shariah Principles



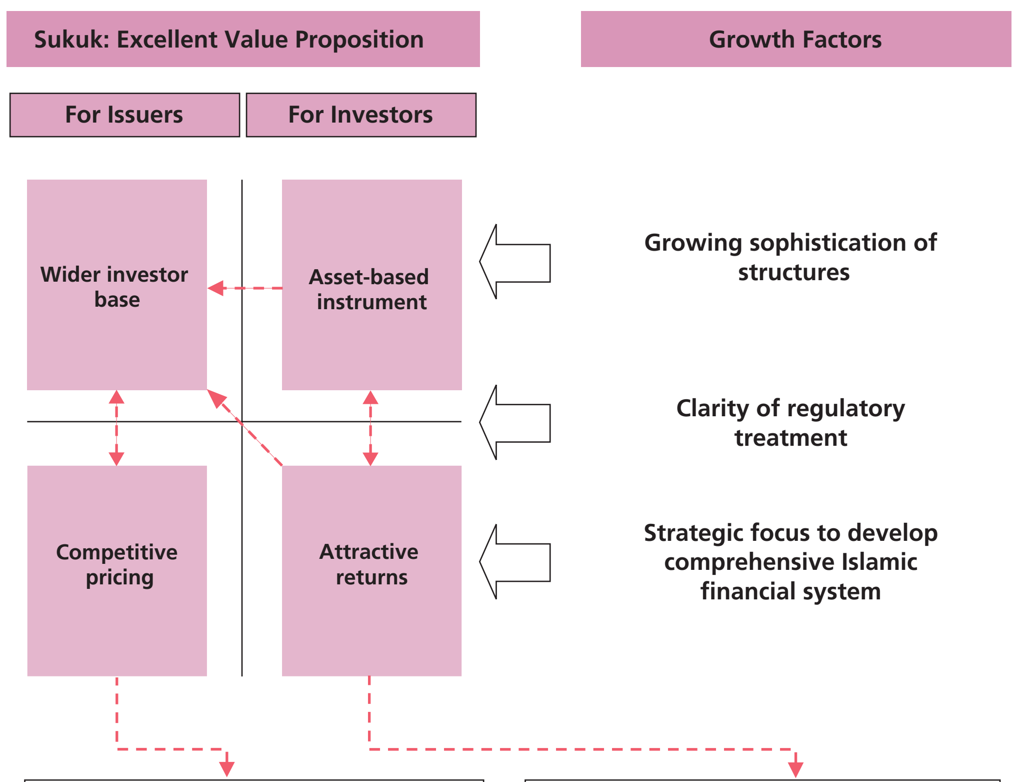
Source: Malaysian ICM Quarterly Bulletin (January 2008), Securities Commission Malaysia

II. Clarity of Regulatory Treatment

Greater clarity on the regulatory treatment of sukuk has provided regulatory certainty to Islamic financial institutions with regard to their investments in these instruments. This has been achieved through the adoption of the Capital Adequacy Standard issued by the Islamic Financial Services Board (IFSB), which specifies the prudential treatment of sukuk investments for regulatory capital purposes. Further work has also been undertaken by the IFSB to develop prudential standards for sukuk securitisation.

III. Strategic Focus to Develop Comprehensive Islamic Financial System

The broader range of instruments as well as structured products offered by the Islamic financial market in response to customer demands has also led to greater demand for sukuk. Sukuk has now become important in supporting the growing number of structured products offered by Islamic banks, takaful operators as well as fund management companies. For example, investments by takaful operators in sukuk have provided a good match for the medium- and long-term liabilities of takaful funds.



- Attracts both general bond investors and investors who invest in Shariah compliant funds.
- Opens up access to a new source of funds.
- Provides additional risk management options (for example in the case of *sukuk musharakah*, where the issuer shares the business risk with investors) and new mechanisms for price discovery.
- In the case of Malaysia, the high demand, as evidenced by issuances being over subscribed by two to thirteen times, has lowered the cost of issuance by at least 10 to 20 basis points.

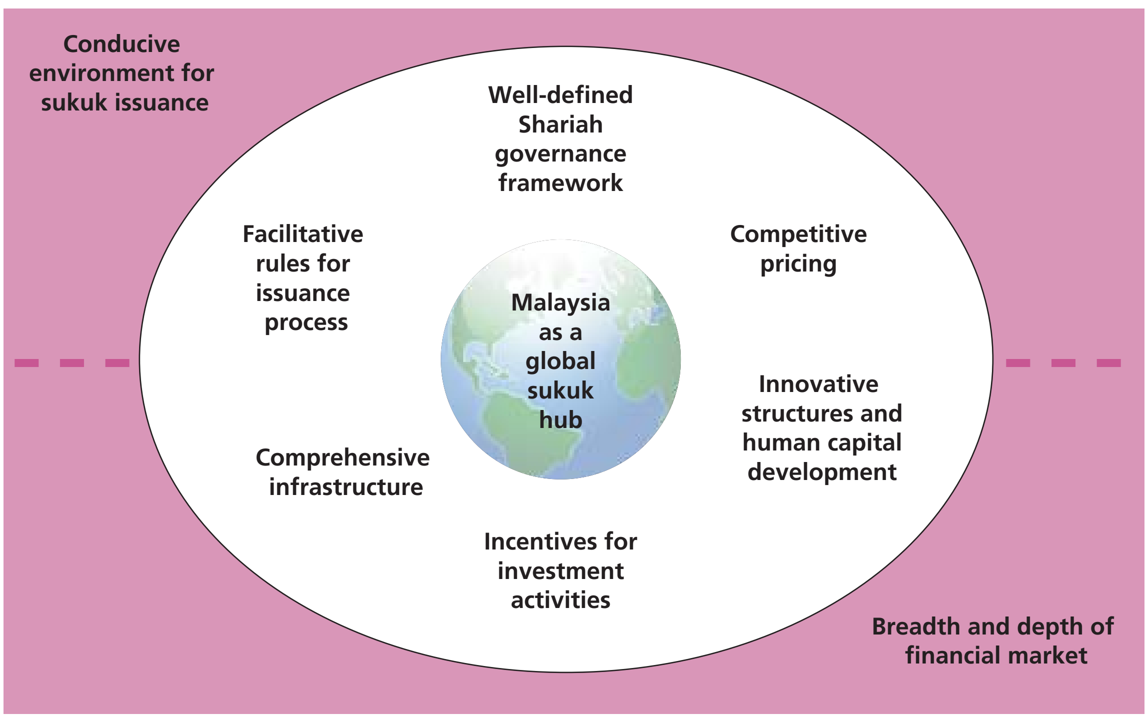
- Allows a share in an asset along with the cashflows, with risk commensurate with such ownership. This limits exposure to the value of the underlying asset, as the issuer cannot leverage in excess of the asset value.
- Scarcity of sukuk has contributed to higher pricing in the sukuk secondary market, thereby generating good investment returns for investors.
- A new asset class for portfolio diversification.

Malaysia's Leading Edge as a Global Sukuk Hub

Malaysia has emerged as a vibrant sukuk hub, offering a total solution for sukuk activities through its conducive issuance environment, facilitative policies for investment activities and comprehensive Islamic financial infrastructure. This has attracted global investors and issuers to Malaysia as a preferred sukuk issuance and investment destination. Global issuers have included international financial institutions such as the International Finance Corporation and the International Bank for Reconstruction and Development.

To further strengthen Malaysia's international position, the Malaysia International Islamic Financial Centre (MIFC) initiative was launched in 2006. MIFC serves to promote Malaysia as a centre for the offering of Islamic financial products and services in the global marketplace by facilitating the growth of investments in Islamic financial markets and by connecting international Islamic financial centres. The promotion of domestic and foreign currency sukuk origination, distribution and trading is one of the MIFC's key focus areas.

Total Solution Approach



Facilitative Rules for Issuance Process

The MIFC Secretariat and Promotion Unit, located in Bank Negara Malaysia, undertakes the coordination and promotion of MIFC's strategic initiatives, including in the area of the sukuk market. Formalised arrangements between the regulatory agencies in Malaysia through MIFC ensures a coordinated approach in continuously improving the delivery channel and efficiency in raising sukuk denominated in any currency in Malaysia. In 2007, flexibility under the foreign exchange administration rules was accorded to multilateral development banks, multilateral financial institutions, sovereigns, quasi-sovereigns and local or foreign multinational corporations to issue foreign currency-denominated sukuk in Malaysia.

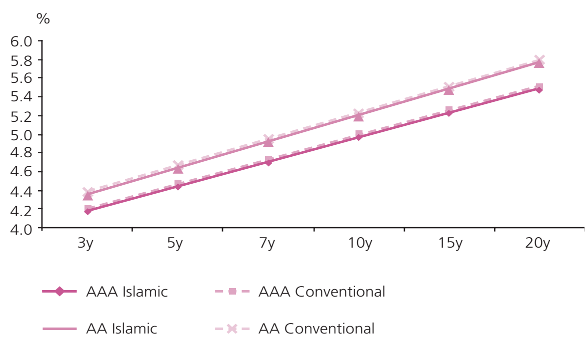
Simplified issuance procedures are adopted for international issuers with good credit ratings. Applications by issuers with a credit rating of at least 'A-' are deemed approved upon proper filing of requisite documents with the Securities Commission at least two working days prior to the issuance of foreign currency sukuk. Applications are also deemed approved upon receipt by the Securities Commission for issuance of ringgit sukuk by AAA-rated foreign sovereign or quasi-sovereign agencies.

To further facilitate the issuance process, no restrictions are placed on the ability to use international rating services, hedge positions and swap issuance proceeds into foreign currency.

Well-defined Shariah Governance Framework
Malaysia's well-defined Shariah governance framework has been instrumental in promoting the development of Islamic finance in general, including sukuk. Sukuk issuances must be approved by Shariah advisors at the respective originating financial institutions. For issuances involving new concepts or structures, further endorsement by the Shariah Advisory Council of the Securities Commission, which advises the Commission on matters pertaining to Islamic capital markets, is required. Together with the Shariah Advisory Council of Bank Negara Malaysia (which is the authoritative body on Shariah matters for financial institutions regulated by the Bank), the Councils serve to ensure compliance with Shariah principles which form the tenets of Islamic finance, while supporting innovation through their pronouncements on the Shariah-compatibility of innovative structures.

Competitive Pricing
One of the hallmarks of an efficient international financial centre is a conducive environment for cost efficient fund-raising platforms. In this regard, the high demand for sukuk, as evidenced by the over subscription of sukuk issuances, has kept the cost of issuance below that of similar rated conventional bonds.

Chart 4
Yield Curve for Corporate Bonds and Sukuk



Source: Bondweb Malaysia (as at 31 December 2007)

Various tax and regulatory incentives have further reduced the cost of issuance and time-to-market for sukuk issuances. These include the following:
- Special Purpose Vehicles (SPVs) used for the issuance of sukuk are not subject to the administrative tax procedures under the Income Tax Act 1967;
- Companies that establish SPVs are given tax deductions on the cost incurred by the SPV for the issuance of sukuk;

- The issuance cost for all Islamic securities approved by the Securities Commission are also eligible for tax deduction; and
- Stamp duty exemption is given on instruments relating to Islamic securities issued under the MIFC until 31 December 2016.

These measures and incentives are expected to further stimulate international currency sukuk issuances, thus expanding the diversity of the sukuk base in Malaysia.

Innovative Structures and Human Capital Development

Apart from the more common Shariah structures based on *musharakah, mudharabah, istisna'* and *ijarah*, Malaysia has pioneered many of the world's innovative sukuk structures. Among the various sukuk structures that were originated in Malaysia are:

1990 – First *bai' bithaman ajil* Islamic debt securities by Shell MDS Sdn. Bhd. (RM125 million)
1994 – First *sukuk mudharabah* by Cagamas Berhad (RM30 million)
2001 – First corporate *sukuk ijarah* by Kumpulan Guthrie Berhad (USD150 million)
2002 – First sovereign *sukuk ijarah* by the Government of Malaysia (USD600 million)
2003 – First tradable *sukuk istisna'* by SKS Power Sdn. Bhd. (RM5.6 billion)
2005 – First *sukuk musharakah* by Musharakah One Capital Berhad (RM2.5 billion)
2006 – First exchangeable sukuk by Khazanah Nasional Berhad (USD750 million)

This would not have been possible without the pool of requisite human capital available in the Malaysian Islamic finance industry. Skills and expertise in this area of finance is in high demand globally, resulting in the need to deepen the talent pool further to sustain current and future needs. In this context, strategic initiatives under the MIFC also include developing Malaysia into an international centre for Islamic finance education. The establishment of the International Centre for Education in Islamic Finance (INCEIF) in 2006 is aimed at supporting the dynamic and evolving global Islamic finance industry through the development of high calibre Islamic financial professionals. To achieve this, INCEIF offers the Chartered Islamic Finance Professional (CIFP) qualification programme, which is its flagship programme, as well as postgraduate Masters and PhD programmes.

Given the parallel financial system in Malaysia featuring both conventional and Islamic finance, the human capital requirements for the country's sukuk and Islamic financial activities are not only met by the pool of Islamic financial professionals, but are also supported by the workforce in conventional financial institutions. This ability to leverage on cross-sectoral expertise has been important in driving product innovation with sound structures and risk management foundations, while complying with Shariah requirements.

Incentives for Investment Activities

To further stimulate and attract investments in sukuk by global investors, several incentives and measures have been announced. These include the following:

- No withholding taxes are imposed on non-resident investors for the profit or income received on foreign currency sukuk originated in Malaysia and approved by the Securities Commission;
- Foreign investors in Malaysia are allowed to hedge their positions with onshore banks with respect to committed flows of funds, such as the repatriation of investment proceeds, dividends and profits from Malaysia as well as the purchase of ringgit assets in Malaysia; and
- Free inward and outward movement of funds relating to both foreign direct investments and portfolio capital investments.

Comprehensive Infrastructure

Malaysia's Islamic capital market continues to register strong growth as seen from the increasing year-on-year growth in assets and diversity of products offered. This can be attributed to the existence of a complete and well-established Islamic financial system with considerable depth and breadth in the capital market, a responsive and facilitative regulatory environment, as well as an increasing number and sophistication of intermediaries which continue to push the frontiers of product innovation.

A carefully planned and strategic approach which has been adopted in Malaysia to develop a comprehensive Islamic financial system that co-exists with the conventional system within the broader financial system has produced positive results. Malaysia has increased its appeal as an investment destination, offering a wide range of investment opportunities with considerable market depth and breadth. Of importance, the building blocks necessary for an efficient and well-functioning market, are now well entrenched.

A facilitative platform for sukuk issuance and trading activities has also supported more efficient issuances and enhanced the price discovery process. Malaysia's payment and settlement systems, including the Real-time Electronic Transfer of Funds and Securities (RENTAS) system, provide an efficient platform for the trading of bonds, with a high level of post-trade transparency and market liquidity. For global investments, flexibility is also accorded for foreign investors to leverage on international clearing and settlement systems.

Malaysia has continuously strengthened the legal, regulatory and Shariah framework underpinning the Islamic financial system. Its securities laws are formulated to incorporate best practices, and are comparable to those of developed markets, with regularly refinements made to ensure their continued efficiency and relevance. This is necessary to take into account the rapid pace of financial innovation and evolving practices of financial institutions. Malaysia's securities laws were recently updated with the passage of the Capital Markets and Services Act 2007 that came into effect in September 2007. The new Act reinforces a sound investor protection framework and orderly market development, while promoting international best practices in the capital market and among its participants. The Act also clarifies the legislative framework applicable to Islamic securities and provides for the universal nature of the Islamic banking licence accorded under the Islamic Banking Act 1983. With the coming into force of this new legislation, Islamic banks are positioned to take on a more pivotal role in the development of the Islamic capital markets.

The MIFC portal (www.mifc.com) was launched in 2007 as the primary public source of information on the latest MIFC initiatives and developments. Closer linkages are also being fostered with other Islamic financial centres to promote international economic and financial cooperation in the field of Islamic finance. Memoranda of Understanding (MoUs) were signed between Bank Negara Malaysia and two Islamic financial services authorities, namely, the Dubai Financial Services Authority and the Qatar Financial Centre Regulatory Authority. The MoUs signify the authorities' joint commitments to promote the development of the global Islamic financial services industry and pave the way for better cooperation between Islamic financial centres operating in different time zones. Areas covered under the MoUs include capacity building, human capital development and initiatives to enhance the breadth and depth of financial markets as well as promote Shariah harmonisation.

ENHANCING OPERATIONAL EFFICIENCY AND EFFECTIVENESS

With increasing competition in the financial sector placing continued pressure on profit margins, measures to enhance operational efficiencies have become more critical to financial institutions' long-term viability. In the banking sector, gross interest margins continued to decline from 3.2% in 2001 to 2.7% in 2007. This has increased the need for more strategic management of cost structures, product risks, and group synergies. To support the ability of financial institutions to respond quickly to changing market conditions, several regulatory guidelines and processes have been reviewed to accord financial institutions greater operational flexibilities. These included:

- Flexibility allowed for insurance companies to outsource fund management activities to

related entities within their respective financial groups, in order to leverage on group expertise and resources;
- Introduction of a "launch-and-file" system which removed the regulatory notification and approval requirements prior to the introduction of new products by banking institutions and DFIs, thus improving the time-to-market. The new "launch-and-file" system is applicable to all conventional banking products with the exception only of investment products that expose consumers to losses exceeding the principal sum invested and designated payment instruments which must be approved pursuant to provisions under the Payment Systems Act 2003; and
- Simplified regulatory procedures for applications to appoint and reappoint directors, senior management and expatriates of financial institutions. This has reduced the time taken for processing the applications.

Increasing customer sophistication and the more complex operating environment demands new and innovative products to cater to the evolving needs of the public and to support economic transformation. In this regard, further flexibilities were accorded to financial institutions, including:
- Flexibility for insurance companies to offer universal life and retirement financing products, which can be customised and have more features to meet the different needs of policyholders. For instance, the new universal life products allow policyholders to pay flexible or fixed premiums, while offering guarantees. Meanwhile, retirement products allow policyholders to choose from various combinations of accumulation and payout periods that are most suited to their requirements; and
- Liberalisation of the Guidelines on Negotiable Instruments of Deposits (NIDs) to allow floating rate NIDs to be priced against any indices other than the Kuala Lumpur Interbank Offered Rate (KLIBOR), and the issuance of NIDs in foreign currencies, thus broadening the product range to meet customers' differing risk appetites.

The Bank also introduced several new money market instruments for liquidity management and investment purposes, which in turn has broadened the range of money market instruments, including:
- The Commodity Murabahah Programme (CMP) which is a cash deposit product auctioned in the Islamic Interbank Money Market via the Fully Automated System for Issuing/Tendering (FAST) and is the first commodity-based transaction that uses crude palm oil as the underlying asset, thus contributing further towards deepening the Islamic money market; and
- Introduction of floating rate Bank Negara Monetary Notes, which are offered through competitive Dutch auctions (uniform price) via the principal dealer network.

To further support sustainable growth in financing, a joint venture was formed between Cagamas Berhad and the Hong Kong Mortgage Corporation to develop mortgage guarantee business in Malaysia and around the region. For financial institutions, the mortgage guarantee cover will provide an alternative tool to hedge credit risk exposures, while allowing institutions to tap into a wider market base and avail of greater growth opportunities, particularly in the Islamic housing finance markets. This development reflects the increasing role of the capital market in complementing the role of traditional financial institutions as a source of financing and in expanding avenues for better risk management. Over the medium term, affordable consumer access to home ownership financing will also be enhanced.

The Bank continued further liberalisation of the foreign exchange administration rules to facilitate business activities and create a conducive environment for economic growth. In 2007, the Bank announced a series of liberalisation measures, which included allowing residents and non-residents to raise foreign currency-denominated bonds and sukuk in Malaysia, abolishing the net open position limit imposed on licensed onshore banks and increasing the limit on foreign currency borrowing that can be obtained by resident corporations from RM50 million to RM100 million equivalent in aggregate. The foreign exchange administration operational procedures were also simplified with the abolition of registration requirements for certain transactions including forward foreign exchange contracts by residents, foreign currency borrowing by residents and prepayment and repayment of foreign currency borrowing by residents. The Monthly Report on Balances of Foreign Currency

Accounts of Residents was also abolished, while the individual reporting threshold for transactions between residents and non-residents was increased from RM50,001 to RM200,001 per transaction (or its equivalent in foreign currency). Details of the liberalised foreign exchange administration rules can be accessed at www.bnm.gov.my/fxadmin.

These and other measures introduced by the Bank to provide greater flexibilities and improve business efficiency have contributed towards the further development of the foreign exchange and bond markets. In 2007, the turnover of foreign exchange transactions by non-residents more than doubled over the previous year. In addition, efforts to position Malaysia as a centre of origination and trading of debt securities, including sukuk, has resulted in a growing interest by foreign corporations to issue debt securities in Malaysia. In 2007, approvals for the issuance of foreign currency-denominated debt securities by foreign corporations totalled USD12.3 billion (of which 68% was foreign currency-denominated sukuk), an increase of 58% from 2006. The more developed debt securities market and the conducive market environment have also encouraged a proliferation of structured products being offered. Structured products approved for issuance quadrupled in value from RM22 billion in 2006 to RM94.2 billion in 2007. Other forms of capital market innovations included asset-backed securities (ABS) and collateralised loan obligations. One such instrument is the issuance of pass-through ABS by financial institutions. The financial market also saw the issuance of more longer dated private debt securities (PDS), with an increase in the issuance of PDS with maturities of 10 years or more as a percentage of total PDS issuances from 8.4% in 2006 to 16.4% in 2007.

ENHANCING FINANCIAL MARKET INFRASTRUCTURE

Significant efforts have been undertaken to support the development of a more diversified and stable financial system. The Asian financial crisis had highlighted the risks associated with over-reliance on the banking sector and the importance of diversifying the country's sources of financing to the capital market. As at end-2007, total outstanding debt securities was RM557 billion compared to RM225 billion as at end-1999. Issuances of debt securities have also been on an increasing trend, with issuances totaling RM302 billion in 2007, an increase of about 65.3% from 2006. Public debt securities accounted for 59% of total issuances. The reduced reliance on the banking sector for financing by corporates is also evident from the increased size of private debt securities as a percentage of total bank loans and financing to corporates, from 36% in 1999 to 56.2% as at end-December 2007.

Issuances of debt securities have also been on an increasing trend, with issuances totalling RM302 billion in 2007.

Bank Negara Malaysia, Bursa Malaysia and the Securities Commission also collaborated to develop an electronic trading platform (ETP) for unlisted bonds. The ETP will assume the function of the Bond Information Dissemination System, currently maintained and managed by the Bank, as the central database on bond trading information. The ETP is expected to further enhance the price discovery mechanism that will facilitate real-time decision making by market participants. This, in turn, will enhance bond trading activities, leading to a more dynamic and vibrant capital market.

To support the Bank's policy making and surveillance functions, the Information and Surveillance System for Debt Securities (INSIDES) is being developed to pull together data and information relating to the debt securities market into one central database to provide a comprehensive view of the market. Once operationalised, the INSIDES system will facilitate a more efficient analysis of trends and impact assessments, while providing useful inputs for the formulation of policies by the Bank. FAST is also being upgraded to cater for new instruments and products in the financial market.

In line with efforts to enhance regulatory transparency, the Bank launched the Regulatory Handbook in June 2007 to enable more timely and efficient dissemination of regulatory guidelines to financial institutions under its purview. The Regulatory Handbook is made available through the Bank's enterprise portal, FI@KijangNet, with functionalities that allow for speedier interactions between the Bank and financial institutions as well as greater accessibility to the regulatory framework for all relevant officers within the institutions.

The Bank launched the Regulatory Handbook in 2007 to enable more timely and efficient dissemination of regulatory guidelines to financial institutions under its purview.

STRENGTHENING INTER-AGENCY COOPERATION

As the financial system becomes increasingly integrated, there is a greater need for a more holistic and comprehensive approach to the regulation and supervision of licensed financial intermediaries. Enhanced collaboration and coordination between the regulatory agencies in maintaining financial system stability has become more important as more players engage in activities that extend beyond their traditional roles with greater resulting overlaps in the scope of business. At the same time, increasing linkages between players and markets, both domestically and internationally, have posed challenges in detecting the sources of potential vulnerabilities.

As part of efforts to put in place an efficient and effective collaborative framework, Bank Negara Malaysia and the Securities Commission signed three MoUs relating to investment banks, payment and settlement systems as well as financial advisers and financial planners. The agreements provide for both agencies to enhance cooperation in areas relating to the joint surveillance of the capital market, strengthening the corporate governance framework for public listed companies and public interest entities, and developing Malaysia as an international Islamic financial centre. Similarly, a strategic alliance agreement between Bank Negara Malaysia and the Malaysia Deposit Insurance Corporation has been put in place to outline the accountabilities and responsibilities of both agencies in promoting sound risk management practices in the banking industry and in ensuring financial stability.

Broader collaboration and cooperation was also achieved at the national level to address specific issues impacting the operation and financial viability of licensed institutions. In particular, to address the escalating incidences of vehicle theft at the national level, the Vehicle Theft Reduction Council of Malaysia Berhad was established in 2007. The Council comprises representatives from the Royal Malaysia Police, Bank Negara Malaysia, Royal Malaysian Customs, Ministry of Transport, Road Transport Department, General Insurance Association of Malaysia, Malaysian Takaful Association, Malaysian Automotive Association and Association of Malaysian Loss Adjusters. An immediate priority of the Council will be to coordinate the formation of a National Vehicle Theft Information Exchange. This exchange will provide the platform for all relevant parties to share up-to-date information on stolen vehicles for theft detection, deterrence and also to prevent the sale of stolen vehicles.

HUMAN CAPITAL DEVELOPMENT

Recognising the paramount importance of having in place a sufficient pool of skilled talent to drive and support the long-term growth and development strategies of financial institutions, significant attention has been directed at achieving a more structured and well coordinated effort in human capital development to meet the industry's requirements. Similar to other fast growing emerging markets, the demand and competition for highly-skilled financial professionals has become more acute. Based on a survey conducted by the Bank in July 2007, the banking and insurance industries reported approximately 2,300 vacancies at the entry-level and approximately 1,700 vacancies at the mid-management level. To meet this demand, a holistic approach to talent development has been taken, encompassing initiatives that are tailored to the different levels of personnel in the financial services industry. The human capital development initiatives have also considered the specific requirements of financial services professionals as they progress through the different stages in their career development, from the pre-employment stage through to leadership positions.

At the entry-level, institutions of higher learning are the primary source of new talent for the financial industry. To ensure that graduates are well-equipped for the challenges of the more demanding financial services industry, collaborative efforts between the financial services industry and institutions of higher learning were enhanced. During the year, Bank Negara Malaysia, in collaboration with the Ministry of Higher Education, organised a well-received dialogue between the financial services industry and the institutions of higher learning to address critical competency gaps among new graduates trained in financial disciplines. The dialogue paved the way for the following collaborative initiatives between the financial services industry and institutions of higher learning aimed at closing the gaps identified:

- Involvement of industry practitioners in the development of higher learning curriculum, identification of research areas, design of case studies, and as teaching resources; and
- Implementation of a lecturers internship and research programme under which lecturers from institutions of higher learning will be provided with opportunities to pursue working attachments with financial institutions to obtain practical exposure, or to undertake applied research work in areas relevant and current to the financial services industry. The programme will enable participating financial institutions, lecturers and researchers to combine their respective specialisations, refine existing skills and knowledge, and develop new approaches, models and tools to better understand and deal with new challenges and business opportunities.

A holistic approach to talent development has been taken to meet the specific needs of financial services professionals at different levels and as they progress through different stages in their career development.

Partnerships and strategic alliances were also established between corporate learning centres, industry-based learning organisations and universities to strengthen efforts in research and development, training, and to promote the exchange of ideas and information on issues relating to human capital development. One such partnership was the participation of the Institute of Bankers Malaysia (IBBM) in the University of Nottingham Financial Services Research Forum.

To meet immediate demands for resources at the entry-level, the Financial Sector Talent Enrichment Programme (FSTEP) was developed to equip fresh graduates with the essential technical knowledge and skills needed to assume professional roles in the financial services industry. FSTEP, an industry-led initiative supported by the Bank, is a 12-month programme which integrates classroom training and practical internships with financial institutions. Participants will gain exposure through the programme to the business of commercial banking, investment banking, Islamic banking, insurance and takaful, thus providing them with a comprehensive overview of the financial services industry. In addition, participants will also receive training on key behavioural competencies required to perform effectively in the financial services industry. The first batch of participants commenced training on 10 December 2007.

To ensure that the Malaysian financial industry workforce is at par with their international counterparts while providing a more systematic and structured approach to support the development of capable knowledge workers in the industry, the Banking and Finance Industry Competency Framework was developed by IBBM. These competencies, which are benchmarked against international best practices, highlight the essential traits and skills that employees in the banking and finance industry would require. More importantly, the framework will assist training providers and financial institutions in developing training and assessment programmes and in managing staff development in a more effective manner. The Banking and Finance Industry Competency Framework was launched in November 2007.

In September 2007, Bank Negara Malaysia and the Securities Commission jointly issued proposals to enhance existing institutional arrangements for the professional training and development of financial industry personnel. Broadly, the proposals aim to strategically position the industry training institutes, namely the IBBM, Malaysian Insurance Institute, Islamic Banking and Finance Institute Malaysia and

Securities Industry Development Centre, to meet present and future demands for talent in a more efficient and effective manner, having regard to the increasingly integrated provision of financial services. This strategic initiative is expected to further enhance the quality of training provided, reduce duplication, address gaps in existing programmes and qualifications, and evolve more comprehensive training solutions for the industry.

The International Centre for Leadership in Finance (ICLIF) and the International Centre for Education in Islamic Finance (INCEIF) which were established by the Bank in 2003 and 2006 respectively have continued to play an instrumental role in meeting the human capital development needs of the industry, both in Malaysia and across the region. The mandates and achievements of INCEIF and ICLIF to date are detailed in the box below.

International Centre for Education in Islamic Finance (INCEIF)

Mission

As an Islamic financial education centre, INCEIF aims to elevate and advance Islamic financial knowledge globally by developing high-calibre practitioners, professionals and researchers who are well-versed in modern finance and Shariah principles, thereby contributing to the supply of talent and expertise in the Islamic financial services industry.

Programmes

- More than 1,300 students from 53 countries around the world including from Japan, Saudi Arabia and the United States of America have enrolled in INCEIF's flagship Chartered Islamic Finance Professional (CIFP) programme to date. The CIFP's holistic and comprehensive syllabus is specifically tailored to combine both practical and theoretical aspects of Islamic finance.
- Introduced the PhD by Coursework and Dissertation and PhD by Research programmes which aim to spur advances in theoretical and applied practice of Islamic finance, based on doctoral research conducted in specific areas of Islamic finance. 29 candidates have enrolled in the programme's first cohort.
- A Masters programme is currently being developed and is expected to commence in 2008.

Strategic Partnerships

- Established 11 strategic partnerships to date with various Islamic financial institutions, central banks, institutions of higher learning and training institutes, reflecting the global relevance of INCEIF's programmes and its growing international recognition. The strategic partnerships are with:
  - i. Indonesian Banking Development Institute (Lembaga Pengembangan Perbankan Indonesia)
  - ii. National Institute of Banking, State Bank of Pakistan
  - iii. Meezan Bank Pte. Ltd., Pakistan
  - iv. Ceylinco Sussex Business School, Sri Lanka
  - v. Emirates Institute of Banking and Financial Studies, United Arab Emirates
  - vi. Sudan Academy of Banking Financial Studies
  - vii. Central Bank of Syria
  - viii. Al-Ghurair University, United Arab Emirates
  - ix. University of Science and Technology, Yemen
  - x. La Trobe University, Australia
  - xi. Universiti Malaysia Terengganu
- Other collaborations included a five-day Continuing Professional Development Programme workshop organised with the University of Reading, United Kingdom and the National Association of Securities Dealers of New York which further contributed towards promoting dialogue and the transfer of skills and expertise in Islamic banking and finance at the international level.

Promoting Talent Development and Research in Islamic Finance

- Provided training opportunities to deserving candidates:
  - i. 38 students from Malaysia, Algeria, Thailand, Pakistan, Uzbekistan and Indonesia were sponsored under the Bright Scholars scholarship programme to participate in the CIFP;
  - ii. Established the INCEIF Fisabilillah Fund (RM400,000) to support the development of a pool of skilled scholars;
  - iii. Established the International Shariah Research Academy for Islamic Finance (ISRA) as a dedicated and specialised Shariah research centre within INCEIF to conduct applied Shariah research in various areas of Islamic finance. ISRA will:
    - a. spearhead research into current Shariah issues in Islamic finance, including in the areas of risk mitigation techniques and tools, product innovations, liquidity management and hedging;
    - b. strengthen human capital development in Shariah and Islamic finance; and
    - c. provide a platform for dialogue and knowledge sharing among practitioners, scholars, regulators and academicians, thereby promoting Shariah convergence and mutual respect.
- In addition, Bank Negara Malaysia has awarded 14 Shariah scholarships and two Shariah research grants under the Fund for Shariah Scholars in Islamic Finance which was established in part to contribute towards the development of Shariah experts in *fiqh muamalat*.

International Centre for Leadership in Finance (ICLIF)

Mission

To provide a focused and coordinated approach to the development of a generation of world class leaders for all sectors and corporations, but with special focus on the financial services sector so as to cater for the needs of the rapidly transforming Asian region by providing learning opportunities and experience through effective leadership development programmes.

Programmes

- Developed the ICLIF Leadership Competency Model which outlines the essential competencies for leadership and supports all developmental aspects of leadership.
- Conducted seven Global Leadership Development Programmes to foster the development of leadership skills and strategic management capabilities required to achieve and maintain high-performing organisations in a rapidly changing environment. The programme is designed and delivered by ICLIF in collaboration with several world-renowned learning institutions and leading consultants.
- Designed and delivered other cutting edge programmes on Leading Change, Leading Innovation, Scenario Thinking and Planning, and Talent Management.
- Entered into a five-year contract with the Indian Railways to conduct six Scenario Thinking and Innovation Workshops for more than 1,000 of its employees.

Strategic Partnerships

- Established strategic partnerships with international organisations to:
  - i. develop and deliver comprehensive and high quality courses in leadership development in banking and finance;
  - ii. facilitate the exchange of data, intelligence, education material, resource persons and experts; and
  - iii. facilitate reciprocal study visits by alumni and groups of banking executives.
- To date, strategic partnerships have been established with:
  - i. the South East Asia Central Banks (SEACEN) Research and Training Centre for its Advanced and Intermediate Leadership Courses on Central Bank Management and Policy Programmes;

ii. the Indonesian Banking Development Institute (Lembaga Pengembangan Perbankan Indonesia); and
iii. the Indian Institute of Banking and Finance.

BROADENING ACCESS TO FINANCIAL SERVICES

Promoting broad-based and balanced economic growth remained an important agenda of the Bank to elevate the standards of living of all segments of the population, thereby contributing to social and political stability. Thus, broad access to financial services which enables the pursuit of economic activities by all levels of society, has been a key policy focus of the Bank. Building on the positive results of previous initiatives, measures continued to be undertaken in 2007 to further promote the potential of small and medium enterprises (SMEs) and micro enterprises. Financing to SMEs by banking institutions registered strong growth, with loans approved increasing by 37.1% to RM55.1 billion during the year. During the same period, loans approved by the six DFIs under the purview of Bank Negara Malaysia[1] increased by 17.9% to RM8.1 billion.

Measures continued to be undertaken in 2007 to further promote the potential of small and medium enterprises and micro enterprises.

With SMEs constituting more than 99% of total business establishments and providing employment to more than 5.6 million people in Malaysia, the development of the SME sector is essential to promote domestic-led growth and to strengthen the resilience of the economy. Based on the Census on Establishment and Enterprise conducted in 2005, the Malaysian SMEs' contribution to GDP was 32% as compared to other countries such as Japan (55.3%) and Germany (57%), indicating the immense potential for a higher contribution of the SME sector to economic growth. To complement improvements made to the existing institutional infrastructure for SMEs, initiatives have been put in place to ensure the effective channeling of funds to SMEs, provide financial advisory support and promote greater awareness on financial products and programmes available for SMEs.

The Credit Guarantee Corporation Malaysia Berhad (CGC) embarked on a transformation exercise in 2005 to further enhance its role in supporting the growth and development of competitive SMEs. As the main provider of guarantee services to SMEs, the transformation aims to position CGC as a more responsive and financially sustainable institution that can better serve the current and evolving needs of the SMEs. Since the transformation, CGC has introduced a wider range of credit enhancement products and advisory services on financial and business development. These include the launch of the Credit Enhancer Islamic Scheme (Enhancer-i) and Direct Access Guarantee Scheme Start Up (DAGS Start-Up) in 2007. Enhancer-i provides access to financing of up to RM10 million and guarantee coverage of up to 90%, while DAGS Start-Up is targeted at new SMEs and provides guarantees for financing of up to RM2 million and coverage of up to 100%.

Access to funding by SMEs was also enhanced with the creation of the RM1 billion Overseas Project Fund established by the Bank in December 2006. The Fund, placed with Export-Import Bank of Malaysia Berhad (EXIM Bank), guarantees and provides co-financing facilities for Malaysian companies to fund their overseas projects. The participating financial institutions will provide financing up to 90% of the contract value in major currencies. As at end-December 2007, a total of RM190.9 million in loans were approved with guarantee coverage of RM143 million. In addition, Cagamas Berhad launched its first securitisation programme for SME loans valued at RM600 million. The securitisation provides banking institutions with greater flexibility in managing their SME loan portfolios, thereby further enhancing their capacity to lend to SMEs.

[1] Bank Pembangunan Malaysia Berhad, Bank Perusahaan Kecil & Sederhana Malaysia Berhad, Export-Import Bank of Malaysia Berhad, Bank Pertanian Malaysia, Bank Kerjasama Rakyat Malaysia Berhad and Bank Simpanan Nasional.

The lack of organised financial records, and perceived higher financial risk associated with SMEs have made complete credit risk assessments of SMEs by financial institutions more challenging. To address these constraints, CGC has entered into a strategic alliance on 3 July 2007 with a provider of credit information services, to set up the SME Credit Bureau. The SME Credit Bureau is a credit databank of SMEs which sources and pools data from various sources, including the Companies Commission of Malaysia, financial institutions and businesses' trade credit data. Information on individual SMEs and their credit ratings would be made available to financial institutions and businesses to facilitate underwriting decisions for loans and trade credit respectively. Further support to SMEs is provided through the establishment of the SME Business Advisers Network, a one-stop web-based directory in the SMEInfo Portal (www.smeinfo.com.my) that serves as a platform for SME business advisers to share expertise, thus facilitating the provision of comprehensive advisory services to SMEs. To further enhance access to commonly used banking services at minimal costs, the "Basic Banking Services Framework" was also extended to SMEs in 2007.

Moving forward, the Small and Medium Industry Development Corporation (SMIDEC) will be transformed into a SME Central Coordinating Agency, a single Government agency dedicated to spearhead the development of SMEs across all sectors of the economy. This initiative is aimed at accelerating the development of the SME sector by focusing on coordinating SME policies and Government programmes across all sectors, and providing one-stop information and advisory services to SMEs. The SME Central Coordinating Agency will report directly to the National SME Development Council and will be placed under the Ministry of International Trade and Industry.

To assist financially distressed SMEs, the financial institutions participating in the Small Debt Resolution Scheme (SDRS) that was established by the Bank in 2003 to facilitate viable on-going SME businesses to restructure their non-performing loans (NPLs) was extended to include Bank Kerjasama Rakyat Malaysia Berhad, Bank Pertanian Malaysia and EXIM Bank, in addition to the commercial banks, Islamic banks and the SME Bank that are already participating in the scheme. As at end-2007, out of 726 applications received, 565 applications involving NPLs of RM324 million had been approved for restructuring under the SDRS.

Small businesses also received special financial support during the widespread flooding throughout the country during the year. In January 2007, a Special Relief Guarantee Facility, with the participation of CGC and financial institutions, was established to alleviate the financial difficulties faced by small businesses that were affected by the floods. The facility provides a guarantee of 80% on new loans taken by the affected businesses for the purpose of resuming their business operations. A total of 4,640 loans valued at RM472 million were approved under the facility.

To further enhance access to financial services for the agriculture sector which is primed to be one of the key economic growth drivers for the country under the Ninth Malaysia Plan, new approaches and business models are required to deliver financial services in the most effective manner. An important step in this direction was taken with the initiative to restructure and strengthen Bank Pertanian Malaysia resulting in its corporatisation in December 2007. With the corporatisation, the paid-up capital of Bank Pertanian Malaysia was increased from RM42.5 million to RM1 billion, thereby expanding the financial resources needed for it to play a more significant role as an enabler of growth in the agricultural sector. Bank Pertanian Malaysia's corporatisation will complement the two agriculture venture capital funds totalling RM300 million established in September 2006 by Bank Negara Malaysia together with two banking groups. The funds are aimed at modernising and evolving a more integrated approach to agriculture business in Malaysia, particularly in farming, fisheries and livestock, as well as to finance new technology-intensive agriculture projects, including biotechnology. As at end-December 2007, total investments from these funds of RM72.9 million had been approved in seven companies.

The microfinance initiative which was introduced in 2006 has gained significant momentum. At present, nine financial institutions (six banking institutions and three DFIs) offer microfinance products. As at end-2007, total financing outstanding amounting to RM224.7 million had been provided to 22,788 microfinance customer accounts, with an average financing size of RM9,800. To create greater public awareness on the availability and benefits of microfinance, a national microfinance logo was launched in September 2007. Since the launch of the logo, financial institutions that offer microfinance have displayed the logo and their microfinance client charters to signify their participation and commitment towards the provision of microfinance services. Microfinance customers who have obtained such financing may also display the logo at their business premises.

The microfinance initiative gained significant momentum in 2007.

Measures to expand the outreach of financial services to the non-urban areas were also pursued. As Malaysia strives to be an industrialised nation, financial inclusion will remain a priority on the Bank's agenda in the years to come. The vision is for the public to have easy and convenient access to banking, insurance and other financial services. Financial institutions also stand to benefit from the vast opportunities to be tapped from those segments of the population which are currently underserved. A number of banking institutions have formed strategic alliances with a variety of service providers to provide selected banking and remittance services to customers in the non-urban areas. Efforts to further expand these services as well as similar initiatives by other financial institutions are currently being pursued.

Advancements in information and communications technology have also enhanced the delivery of financial services. Recent advancements in banking services include cross-border transfers of money via mobile phones and mobile banking services via short messaging services for account enquiries, bill payment and funds transfers. Through the adoption of the latest technology, products and services can be delivered at lower cost with a wider reach to areas which otherwise may not have had access to financial services.

Developmental initiatives and trends relating to SMEs and microfinance are discussed in further detail in the box articles "Development of Small and Medium Enterprises" and "Development of a Vibrant and Sustainable Microfinance Industry" in the Bank's Annual Report 2007, jointly published with this Report.

CHALLENGES AND OUTLOOK

The development focus in 2008 will be directed at further enhancing domestic capacity, developing the financial infrastructure, minimising structural weaknesses as well as strengthening capital market fundamentals. Further, given the uncertainties of the external financial environment and increasing inter-linkages resulting from financial globalisation, efforts will also be geared towards strengthening regional and global cooperation and enhancing the timely exchange of information as part of the continuing efforts to promote financial stability.

The approach to financial sector liberalisation will be driven by the objectives of promoting a more efficient and competitive financial system, while ensuring balanced growth and financial stability.

Greater convergence and the blurring of lines between the banking, insurance and securities industries will continue to define the changing financial landscape. Bank Negara Malaysia will continue to facilitate ongoing consolidation exercises by creating the appropriate operating environment. In addition, the approach to financial sector liberalisation will be driven by the objectives of promoting a more efficient and competitive financial system, while ensuring balanced growth and financial stability.

In the area of Islamic finance, the Bank will continue to strengthen the legal and Shariah infrastructure to reinforce sound financial practices in this sector, while encouraging further innovation in products and services to support specialised Islamic fund and wealth management services. The development of the sukuk market will be accelerated as an important conduit to mobilise longer-term funds to match funding needs and facilitate effective risk transfers. Infrastructure development to facilitate an increase in the supply of suitable Islamic financial instruments to address funding mismatches and promote sound asset-liability management practices will continue to be enhanced. Efforts will also be intensified to achieve greater alignment and harmonisation of business models, processes and principles for the orderly development of the industry.

With continued prospects for increased convergence in products and delivery systems, bancassurance and bancatakaful will be encouraged to enhance the distribution capacity and increase insurance penetration. Work is also ongoing to promote the provision of affordable health-related insurance products and private pension products in view of the changing demographic structure of the population. To support balanced economic development, initiatives will continue to be undertaken to provide the segment of the population that is currently underserved with greater access to affordable financial products and services. Efforts will also continue to be put in place to support the growing SME and microfinance sectors that will become more significant in the economy.

The Landscape of the Malaysian Financial System Today

Introduction

The financial system has undergone significant transformation since the 1990s to meet the needs of an expanding economy and changing market demands. Today, the financial system has evolved to become more diversified, efficient and resilient, thus enabling it to effectively perform the intermediation function and reinforcing its role as a key contributor to economic growth. With an average annual growth rate of 7.4% since 2001, the financial sector now contributes 10.7% to real gross domestic product (GDP). This has been accompanied by enhanced access to a wider array of financial products, services and delivery channels, improved quality of customer service and greater technological innovations.

Diversified Institutional Players and Vibrant Financial Markets Supporting the Needs of the Economy

Structural reforms after the Asian financial crisis, prompted by business considerations and regulatory initiatives, have reshaped the financial landscape and enhanced the competitive capabilities of institutional players. While the commercial banking, investment banking and Islamic banking institutions form the nucleus of the financial system, the financial system has become more diversified. Today, the banking system constitutes about 50% of the financial system's assets. The consolidation and rationalisation of the domestic banking industry and the introduction of the investment banking framework have strengthened the performance of domestic banking institutions and enhanced their role in the economy. Assets of the banking system grew at an average annual rate of 8.2% since 2000, driven mainly by strong growth in loans and holdings of private debt securities (PDS), while total deposits increased by an average annual rate of 8.5% over the same period.

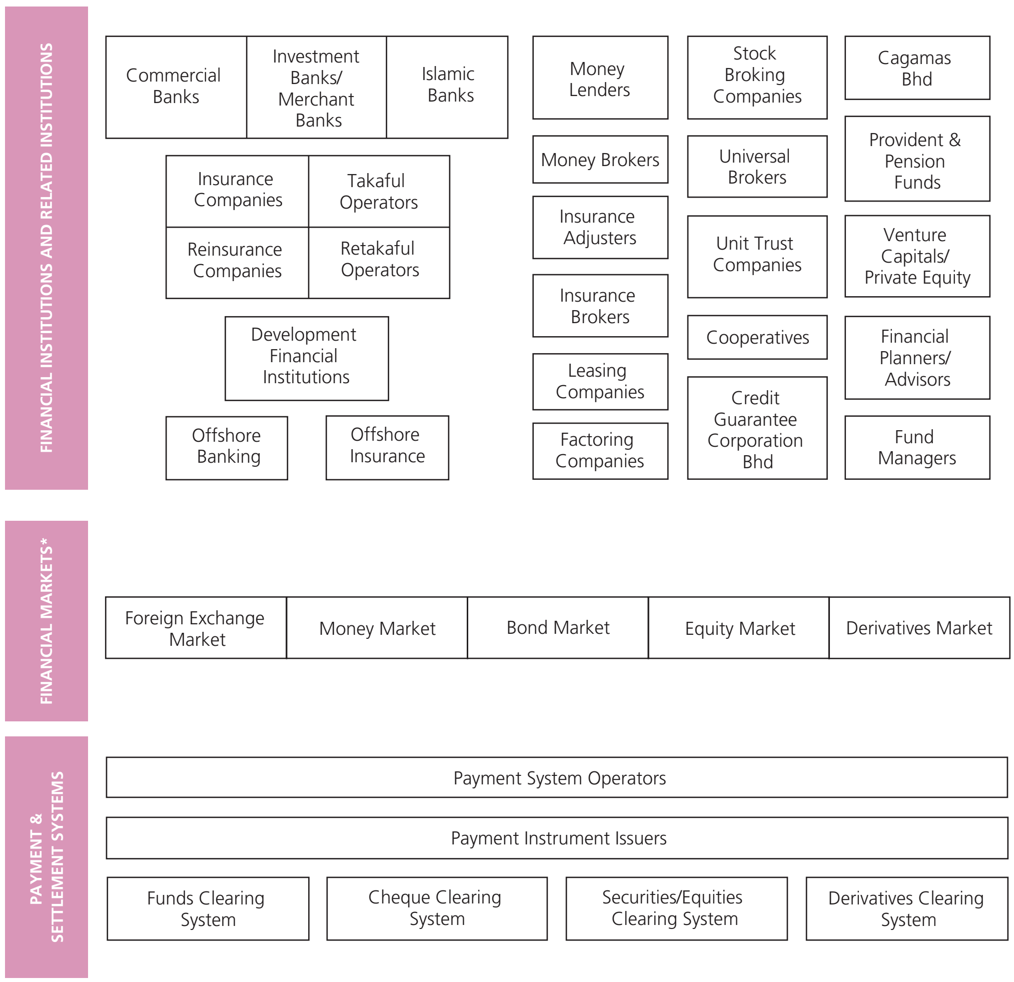
The blurring of the traditional boundaries between the different types of financial activities and the increasing demand for financial services that are offered under one roof have brought about the formation of financial conglomerates. Today, all domestic banking groups undertake the full range of commercial banking (including retail financial services), investment banking and Islamic banking activities. Many of the conglomerates also have insurance companies, fund management and unit trust companies within their groups. This has contributed towards the realisation of the benefits derived from greater economies of scale, as well as the diversification of risks and sources of revenue.

Table 1
Financial Sector: Number of Players

Financial Institutions	1999	2007
Commercial Banks	34	22
Finance Companies	32	0[1]
Investment Banks/Merchant Banks	12	14
Universal Brokers	5	1
Discount Houses	7	0
Islamic Banks	2	11
Insurance Companies	56	41
Life	*7*	*8*
General	*38*	*25*
Composite	*11*	*8*
Reinsurance Companies	11	7
Takaful Operators	2	8
Retakaful Operators	0	2
Development Financial Institutions	14	13[2]

[1] Rationalisation of finance companies and commercial banks within a banking group.
[2] Of which six development financial institutions are regulated under the Development Financial Institutions Act 2002 (DFIA).

The Malaysian Financial Landscape Today



* Includes Islamic Financial Markets

Operating in parallel with conventional finance, Islamic finance has experienced rapid growth over the more recent period, enhancing its significance in the Malaysian financial system. The establishment of dedicated subsidiaries by banking groups to offer Islamic banking products and the entry of new foreign players in the Islamic banking, takaful and retakaful sectors has spurred the growth of Islamic banking assets, which expanded at an average annual rate of 19.3% since 2003 to constitute 15.4% of assets of the total banking system in 2007. Total assets of the takaful sector grew by 18.9% on average annually since 2003 to account for 6.9% of total assets of the insurance and takaful industry. The diversity of players has added a new dimension to financial services, not only in the delivery of financial products but also in the introduction of innovative financing structures such as *mudharabah* and *musharakah* to meet the varying needs of the economy.

Table 2
Assets of the Financial System

	1999	2007*p*
	RM billion	
Banking system	**803.4**	**1,651.8**
Bank Negara Malaysia	147.0	424.9
Commercial banks	471.0	1,050.2
Islamic banks	11.7	81.8
Investment banks	n.a.	94.9
Finance companies	115.9	n.a.
Merchant banks[1]	39.2	n.a.
Discount houses[1]	18.6	n.a.
Non-bank financial intermediaries	**367.2**	**824.1**
Provident, pension and insurance funds	243.6	526.1
Employees Provident Fund	*168.6*	*318.3*
Other provident and pension funds	*28.5*	*76.4*
Life insurance funds	*32.3*	*110.0*[2]
General insurance funds	*14.2*	*21.3*[2]
Development financial institutions[3]	22.4	128.3
Other financial intermediaries	101.2[4]	169.7[5]
Total	**1,170.6**	**2,475.9**

[1] These institutions have been rationalised to become investment banks.
[2] Includes assets of takaful funds.
[3] Includes DFIs not directly regulated by Bank Negara Malaysia.
[4] Includes unit trusts (ASN, ASB, ASW 2020 and ASM Mara), building societies, savings institutions, Pilgrims Fund Board, Credit Guarantee Corporation, Cagamas Berhad, leasing companies, factoring companies and venture capital companies.
[5] Includes unit trusts (ASN and ASN Mara), cooperative societies, leasing and factoring companies and housing credit institutions (comprising Cagamas Berhad, Borneo Housing Mortgage Finance Berhad and Malaysia Building Society Berhad).

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The development financial institutions (DFIs) in the Malaysian financial system have also undergone a significant transformation in the recent few years. Six out of the 13 DFIs in the country are placed under the Bank's supervisory oversight since 2002. The policy focus to strengthen the DFIs through rationalisation and greater realignment of their roles and functions, has enabled them to better serve the economy and complement banking institutions in the mobilisation and allocation of funds to key growth areas in the economy, such as agriculture, international trade and, most notably, small and medium enterprises (SMEs). SME loans granted by the six DFIs regulated by the Bank now account for 12.1% (RM13.8 billion) of total outstanding loans channelled to the SME industry, while total outstanding loans by the six DFIs to the agriculture sector accounted for 12.9% (RM3.9 billion) of total loans granted to this sector as at end-2007.

More recently, the Malaysian Cooperatives Commission, proposed by Bank Negara Malaysia, was set up in January 2008 as a central body to spearhead the development of cooperatives in a holistic manner, focusing in particular on the stability and soundness of the cooperative sector. Cooperatives, given their wide distribution network across the nation, provide an additional avenue for micro enterprises to have access to financing, thus complementing the role of the banking institutions and DFIs. The Commission, which regulates more than 4,000 cooperatives nationwide, is expected to enhance the support to the cooperative sector, thereby enabling it to contribute to the socio-economic development of the nation.

With the evolution of a more diversified financial system, the capital market has assumed an increasingly significant role in mobilising and allocating resources to finance capital expenditures for both the public and private sectors. In the debt securities market, total outstanding debt securities increased from RM225 billion as at end-1999 to RM557 billion as at end-2007. Of significance is the rapid growth in the issuance of sukuk, which accounted for 40.7% of total debt security issuances in 2007 (RM122.9 billion) compared to only 13.4% in 1999 (RM20.3 billion). Malaysia is now the global leader in sukuk issuance, with 68.9% of the global outstanding sukuk having been originated in Malaysia in 2007, in line with the agenda to develop Malaysia as an international Islamic financial centre and a major centre for sukuk issuance, origination and trading. In the secondary market, the volume of debt securities traded has increased significantly in recent years, with higher sale and purchase transactions amounting to RM387.5 billion in 2007 (1999: RM151.2 billion). Malaysian Government Securities (MGS) still remain the most actively traded papers, accounting for 57.8% of total trading activities and with a turnover ratio of 1.16 times in 2007 (1999: 0.81 times).

Chart 1
Malaysia: Total Outstanding Debt Securities

The corporate sector has increasingly tapped the bond market to raise funds. The finance, insurance, real estate and business services sector has been the main issuer of PDS since 1999, accounting for 37.7% of the total funds raised in 2007 (1999: 21.5%). The transport, storage and communication sector accounted for 31.8% of the total funds (1999: 35.7%), while 15.2% was attributed to the utilities sector (1999: 0.3%). While PDS issuances with tenures between one and 10 years continue to constitute the bulk of new PDS issues, the PDS yield curve has lengthened considerably over the last few years. This provides long-term investment options for investors, especially insurance companies that require long-dated investment instruments to reduce their asset-liability mismatches.

Chart 2
Size of Corporate Debt Securities Market against Corporate Loans

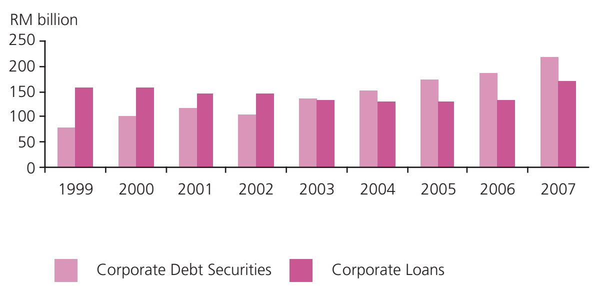
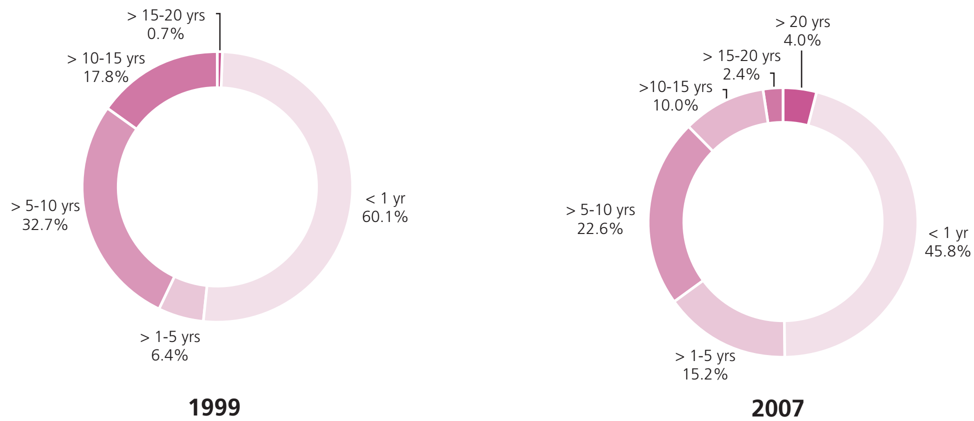


Chart 3
PDS Issues by Tenure



Consequently, life insurance companies are today active investors in the capital market after banking institutions and the Employees Provident Fund. Investments by direct insurers in MGS grew from RM6.2 billion in 1999 to RM18.7 billion in 2007, to account for more than 10% of total MGS holdings as at end-2007. Similarly, insurers' investments in PDS increased from RM6 billion to RM32.3 billion over the same period to constitute more than 16% of total PDS outstanding as at end-2007.

Demonstrating the increased attractiveness of the Malaysian market to foreign institutional investors in view of the conducive operating and legal environment, foreign investor holdings in the debt securities market have risen from RM0.8 billion or 0.3% of total outstanding debt securities as at end-2001, to RM81.4 billion or 14.7% as at end-2007. As larger players in the debt securities market, these investors contribute towards enhancing the overall liquidity of the market through an expanded investor base and by providing an alternative source of demand for papers. The expansion of the Real-time Electronic Transfer of Funds and Securities (RENTAS) settlement infrastructure to include USD-MYR transactions via the implementation of Payment versus Payment and Delivery versus Payment links with Hong Kong in 2006 and 2007 respectively also facilitates the simultaneous settlement of ringgit and US dollar payments and securities during Malaysian business hours. This has allowed market participants to better manage their foreign exchange settlement risk.

The other components of the financial markets, namely the equities, money, foreign exchange and derivatives markets have demonstrated improved performance over the past decade. The total market capitalisation of Bursa Malaysia has risen from RM553 billion as at end-1999 to RM1.1 trillion as at end-2007. The robust development of the money market has also facilitated the channelling of short-term funds between financial institutions to meet their funding and portfolio adjustment requirements, with the total volume of money market transactions in 2007 growing to RM2.8 trillion (1999: RM1.4 trillion). Similarly, the foreign exchange market has witnessed an increase in foreign exchange transactions, including hedging transactions. The narrowing of bid-offer spreads in the foreign exchange market indicate a more refined and maturing market. Derivative contracts, uncommon previously, have increased with the advent of financial innovation that has led to more advanced and sophisticated product offerings in the derivatives market. Apart from being used as hedging instruments, derivatives are also used by financial institutions to further expand the variety of investment products offered to sophisticated clients.

Strong Players with Domestic and Regional Presence

The growing business complexities arising from the increased convergence of activities and intensified competition have compelled financial institutions to reengineer themselves to focus on their core competencies, optimise operational efficiencies and diversify revenue streams in order to increase productivity. Among other things, greater efficiency and productivity have been achieved through the outsourcing of non-core business operations such as data processing, the marketing of products and services and information and communication technology infrastructure to external parties, both onshore and offshore. Domestic and locally-incorporated foreign banking institutions have also established centralised data processing centres in Malaysia which cater to their businesses locally and abroad. This development augurs well towards promoting Malaysia as a shared services and outsourcing centre.

The evolution of the financial system has also been driven by the diversity of shareholders that bring new strategic and management perspectives, new innovations and increased business opportunities. Flexibilities granted for financial institutions to enter into strategic alliances with both foreign and domestic institutions have brought about greater opportunities for synergistic and collaborative arrangements that maximise the potential of domestic institutions. Domestic players are able to leverage on the international expertise and capabilities that these institutions bring, and benefit from the transfer of knowledge, skills, technology and innovation.

The strengthened capacity of domestic financial institutions brought about by the rationalisation exercise and capacity building efforts has enabled the expansion of domestic financial institutions' business operations abroad. To date, six domestic banking groups have a presence in 19 countries in the form of branches, representative offices and subsidiaries. The intensified regional and overseas expansions by domestic banking groups are in recognition of the growing business opportunities within the region brought about by increasing liberalisation and integration amongst the regional economies. Such ventures will diversify their earnings capacity and enhance their business potential beyond the domestic market. Total assets of the overseas operations of domestic banking groups amount to approximately RM111.6 billion, while the average contribution of total overseas profits to total group profits is 10.7% (2002: -4.3%). Revenue and profit contributions from overseas operations are expected to grow further in significance over the next few years with the strengthening of the presence of domestic financial institutions abroad, and as investments in these countries progressively mature.

Comprehensive Range of Products and Services to Support Economic Needs

Deposit products offered by banking institutions have evolved over the years to cater for changes in customers' risk-return and liquidity preferences. Today, deposit products have broadened in range from plain vanilla deposits to structured products that offer returns tagged to the performance of underlying assets, currency movements or indices. In line with robust economic growth, total deposits placed with banking institutions during the period 2000-2007 grew at an average annual rate of 8.5%. Deposits now account for 172.5% of GDP. With the establishment of the Malaysia Deposit Insurance Corporation in 2005, depositors are guaranteed for up to RM60,000 on total deposits placed with a single member institution, that is commercial banks and Islamic banks.

In terms of financing, the growth over the recent decade has been predominantly attributed to lending to the household sector, fuelled by higher consumer spending that is supported by rising incomes and positive labour market conditions. The share of outstanding loans to individuals and the household sector increased from 35% in 1999 to 55.9% of total outstanding loans as at end-2007. As the larger corporates turn to the capital market to meet their funding needs, lending strategies have also focused on capturing a greater share of the market for SMEs. As at end-2007, loans to SMEs accounted for 43.6% of outstanding business loans compared to 30% in 1999. Most banking

Table 3
Sources and Uses of Funds of the Financial System

	1999	2007*p*
	RM billion	
Sources:		
Capital, reserves and profit	113.2	227.6
Currency	30.5	42.2
Deposits	561.3	1,147.1
Borrowings	31.9	112.8
Funds from other financial institutions[1]	69.6	122.7
Insurance, provident and pension funds	213.9	486.2
Other liabilities	153.9	337.2
Total	**1,174.3**	**2,475.9**
Uses:		
Currency	9.4	9.0
Deposits with other financial institutions	178.8	468.8
Loans and advances[2]	489.4	861.4
Securities	261.3	661.2
Treasury bills	*3.7*	*2.0*
Commercial bills	*12.8*	*10.9*
Malaysian Government Securities (MGS)	*75.4*	*202.0*
Corporate[3]	*163.0*	*355.8*
Private Debt Securities (PDS)	*n.a.*	*175.1*
Equities	*n.a.*	*180.8*
Foreign	*1.5*	*5.2*
Others	*4.9*	*85.3*
Gold and forex reserves	113.8	334.4
Other assets[4]	121.5	141.1

[1] Equal savings, fixed and other (NIF, LPHT, etc.) deposits + NIDs + repos.
[2] Includes statutory reserves of banking institutions.
[3] Breakdown of Corporate Securities between Private Debt Securities (PDS) and Equities available from 2003.
[4] Effective 2006, portions of 'Other assets' have been re-classified.

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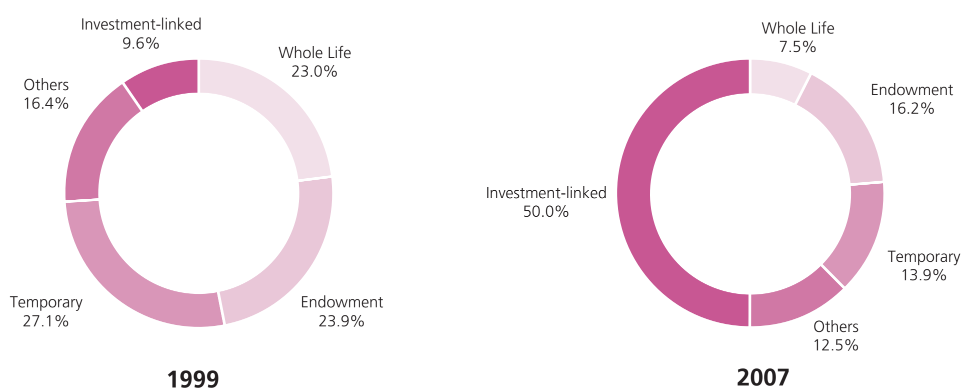
institutions have expanded their financing role to include providing developmental and advisory services to their SME clients, thus contributing towards strengthening the growth potential of the SME sector. Given that about 80% of the SMEs in Malaysia are micro enterprises, several banking institutions have also begun to offer microfinance products to capitalise on opportunities in this untapped market.

Banking institutions have further evolved from their traditional lending role to providing more comprehensive financial solutions that offer end-to-end value added services to their customers. Given the increasingly sophisticated and affluent consumer market, portfolio and wealth management services as well as private banking catering to the needs of high net worth clients, have expanded considerably over the last few years.

In terms of delivery channels, the traditional concept of bank branches has evolved to cater for customised market segments of banking institutions. The reconfiguration of branches into specialised, customer-centric centres now allows banking institutions to serve customers in a more efficient and effective manner. Technological advancements have also provided a further impetus for the evolution of the branch network, with electronic terminals and 24-hour internet banking facilities increasingly substituting the services which were previously performed over the counter. The offering of insurance products through the branches of the banking institutions under bancassurance arrangements has also grown in importance in recent years. More recently, banking institutions have formed strategic alliances with unit trust and wealth management companies to offer a wider array of investment-linked and capital market-related products to customers. Other tie-ups include using retail stores as cheque collection points and providing remittance services in collaboration with specialised service providers. These activities have contributed towards increasing the fee-based income generated by the banking system by an average annual rate of 11.3% since 2000.

Insurance companies have also expanded their product lines to include mortgage financing. The mortgage financing facilities are typically long-term assets of the life insurers, providing them with a natural maturity-hedge for their long-term insurance liabilities. Mortgage loans extended by life insurers grew by 7.4% in 2007 to account for 3.4% share of the total assets of life insurance funds (1999: 2.8%). Insurance products have also advanced from the traditional life products which offer pure protection coverage to those which are investment-linked in nature. As at end-2007, investment-linked premiums account for 50% of total new business premiums written, as compared to 9.6% in 1999.

Chart 4
Distribution of New Business Premiums of Direct Life Insurers



In line with the objective of promoting greater financial inclusion and more equitable growth in the economy, strategies to encourage financial institutions to widen their outreach to consumers have begun to yield encouraging results. Various initiatives have been taken to encourage banking institutions to leverage on alternative modes of bank branches such as mobile units and other service providers to serve a wider segment of the population. Today, the estimated population size served per bank branch nationwide has decreased from 8,262 in 1999 to 7,931 as at end-2007. As at end-2007, 27% of bank branches are domiciled in non-metropolitan areas.

Conclusion

The Malaysian financial system has developed and grown in maturity since the Asian financial crisis. The sector has advanced from being an enabler of economic growth to a source of growth in its own right, sustained by continuous and progressive achievements in institutional development as well as infrastructure building and enhancement. Players in the financial system have continued to innovate and reinvent themselves to better serve consumers and the economy as a whole, as well as to remain relevant in the increasingly competitive financial landscape. Financial markets have also continued to develop in depth and breadth, complementing the role of the banking sector in financing economic activities. As the financial system advances to the next stage of development, this evolution will be important to ensure that it continues to support the needs of the economy, while maintaining financial stability.

Key Developments in the Malaysian Financial Sector

Institutional Developments

- Industry-wide consolidation into nine domestic financial conglomerates
- Rationalisation of commercial banks and finance companies
- 14 investment banks from integration of discount houses, merchant banks, stock broking companies and universal brokers
- Establishment of Islamic banking subsidiaries
- Strategic alliances with foreign institutions/specialised service providers
- Six domestic banking groups with presence in 19 countries
- Restructuring and rationalisation of DFIs
- Growing sophistication and diversification of products and services of financial institutions
- Expanded and more efficient delivery channels

Financial Market Developments

- Third largest bond market in Asia in relative terms to GDP (Asian Bonds Online)
- Largest sukuk issuer globally, accounting for 68.9% of total global sukuk outstanding as at end-2007
- Stronger participation of corporate sector in debt securities market with corporate debt securities accounting for 56.2% of total corporate financing (1999: 36%)
- Foreign investor holdings in debt securities market account for 14.7% of total outstanding debt securities (2001: 0.3%)
- Market capitalisation of Bursa Malaysia: RM1.1 trillion (1999: RM553 billion)
- Volume of money market transactions: RM2.8 trillion (1999: RM1.4 trillion)
- Volume of spot and swap transactions in Kuala Lumpur foreign exchange market: RM1.2 trillion (1999: RM647.8 billion)

Infrastructure Developments

- Access to financing
  - Credit Guarantee Corporation Bhd
  - Cooperatives Commission (2008)
- Access to assistance in financial matters
  - Small Debt Resolution Scheme (2003)
  - Financial Mediation Bureau (2005)
  - Malaysia Deposit Insurance Corporation (2005)
  - Credit Counselling & Debt Management Agency (2006)
- Access to financial information
  - Islamic Interbank Money Market website (2004)
  - Fully Automated System for Issuing/Tendering (FAST) (2005)
  - *Laman Informasi, Nasihat & Khidmat* (LINK) (2005)
  - BNM TELELINK (2007)
  - Bond Info Hub (2007)
  - BankingInfo, InsuranceInfo & SMEInfo portals
- Credit risk management
  - Central Credit Reference Information System (CCRIS) (2001)
- Human capital development
  - International Centre For Leadership In Finance (ICLIF) (2003)
  - International Centre for Education in Islamic Finance (INCEIF) (2006)
  - Financial Sector Talent Enrichment Programme (FSTEP) (2008)
- Review of legislative framework
  - Development Financial Institutions Act 2002
  - Payment Systems Act 2003

Prudential Regulation and Supervisory Framework

Prudential Regulation and Supervisory Framework

Maintaining a robust, effective and efficient regulatory and supervisory framework remained a key priority for Bank Negara Malaysia in 2007. Given the continuing evolution of the financial landscape as well as the greater volatility in the financial markets, the Bank remained focused on ensuring that its prudential regulations and supervisory framework are responsive to changing economic conditions in maintaining the resilience of financial institutions, while providing a conducive environment for financial innovation and growth.

The Bank is responsible for the regulation and supervision of commercial banks, investment banks, Islamic banks, insurance and reinsurance companies as well as takaful and retakaful operators. Since 2002, the Bank also assumed responsibility for the regulation and supervision of six development financial institutions which are charged with specific mandates within the broader financial sector. The Bank also regulates insurance brokers, loss adjusters, money brokers and payment system operators which are covered in the chapters "Market Conduct and Enhancing Financial Capability" and "Payment and Settlement Systems".

The evolution of the regulatory and supervisory framework in the recent period has been cognisant of the fundamental changes to the financial landscape, characterised by the following trends:

- the increasing diversity of the financial sector which has seen the emergence and more significant presence of new players in the market such as investment banks, private equity firms, boutique investment advisors as well as new international players in Islamic finance;
- increasing linkages between the banking, insurance and capital market sub-sectors as a result of financial conglomeration and with it, greater financial innovation at a much faster pace than previously experienced;
- the significant growth of Islamic banking which now accounts for 15.4% of the assets of the banking system, which has further contributed to the increasing level of product sophistication and innovation;
- the growing importance of market-based finance, with the capital markets assuming a more significant role in the financing of economic activities. This in turn, has resulted in banking institutions shifting more towards treasury-based activities while stimulating the growth of the derivatives market; and
- the growing volume of cross-border capital flows with greater global financial integration both in terms of the increased foreign participation in the Malaysian financial sector and the increased regional expansion by domestic players.

In adapting to these new trends, the Bank's approach to regulation and supervision has focused on three main complementary strands:

- firstly, achieving an optimal balance between principle-based and rule-based regulation to appropriately reflect the greater complexity and diversity of the financial sector, while having the agility to continuously adapt to changing economic and market conditions;
- secondly, the implementation of an enhanced risk-based supervisory framework with more granular assessments of individual institutions' unique risk profiles and risk management control functions, thus ensuring that supervisory attention continues to be proportionately focused on financial institutions that are of higher risk; and
- thirdly, strengthening the conditions for effective market discipline to play a more important role in ensuring sound financial and business practices by financial institutions.

Progress achieved on each of these strands has also resulted in the closer alignment of the Bank's regulatory and supervisory framework with international standards and guidance issued by the Basel Committee on Banking Supervision, the International Association of Insurance Supervisors and the Islamic Financial Services Board.

IMPLEMENTATION OF PRINCIPLE-BASED REGULATION

Principle-based regulations have gained greater prominence within the prudential framework. Under a more principle-based regulatory regime, prudential standards issued by the Bank have progressively shifted towards establishing high level principles, in place of detailed prescriptions, which frame the Bank's supervisory expectations regarding sound financial and business practices. This shift is not synonymous with less supervision or regulation, but aims to achieve greater focus on an institution's ability to effectively manage its risks instead of a mechanical compliance with detailed rules. This, in turn, would result in a regulatory framework that is more robust against the vagaries of changing market conditions, while addressing the limitations of a "one-size-fits-all" rule-based regulatory system through an appropriate differentiation between institutions according to their size, complexity and risk profile. Financial institutions have considerable flexibility within this framework to determine the most appropriate means by which the Bank's supervisory expectations can be met in a way that is also in line with the institution's own strategic objectives and business models. The Bank believes that ultimately, this approach is more sustainable over time in reinforcing financial stability and promoting a more competitive financial system.

The implementation of a more principle-based regulatory regime for the financial sector in Malaysia remains at a relatively early stage. While committed to this process, significant attention continues to be directed at strengthening the preconditions necessary to support the move towards a more principle-based regulatory framework without compromising financial stability outcomes. This is reflected in the clear emphasis placed on corporate governance over the recent few years, beginning with substantive revisions to the Bank's prudential standards on corporate governance. The new standards focus in particular on the role of the board and senior management in ensuring a sound risk management and internal control environment within financial institutions. These standards set out the Bank's expectations regarding effective board compositions that include strong independent members, the presence of relevant competencies on the board and senior management team, transparent board processes and clearly delineated accountabilities for operating and internal oversight functions.

The Bank's supervisory processes have also concurrently been enhanced to ensure that directors and chief executive officers of financial institutions fulfil fit and proper criteria on an ongoing basis. In addition to supervisory reviews carried out to check the suitability of proposed chief executives and directors prior to their appointments, the Bank also engages more frequently with the board and senior management of financial institutions, either individually or collectively, on key strategic and risk developments affecting the institution. This has facilitated more effective assessments of how the board and senior management are discharging their responsibilities in practice, while providing deeper insights into potential governance issues within an institution.

Based on the Bank's ongoing supervisory assessments, the effectiveness of board oversight and senior management has, on the whole, continued to improve. More specifically, a heightened awareness of risk with clear strategies for managing key risks, enhanced disclosures, closer scrutiny of management by the board and prompt actions to detect and remedy internal control deficiencies have been evident among financial institutions. Financial institutions which did not meet the Bank's supervisory expectations were required to maintain a higher proportion of independent directors, or replace board members or chief executives who no longer fulfilled the fit and proper criteria. These developments underpinned the presence of stronger governance structures within institutions and supported the growing momentum towards principle-based regulations in more recent periods.

The shift towards more principle-based regulations is not absolute, but rather aims to strike an optimal balance between principle-based and rule-based regulations.

Since 2001, more than 50 prudential standards have been developed or reviewed under a more principle-based regulatory approach. In the process, a majority of prescriptive limits and regulatory requirements or restrictions have been replaced with broad principles that emphasise the responsibility of the board and senior management to manage risks in a manner appropriate to the circumstances and exposures of a particular institution. Among the regulatory prescriptions that have been abolished under the more flexible, principle-based regulatory regime are the individual counter limits imposed on investments in shares by banking institutions, restrictions placed on credit facilities to connected parties, prescribed scenarios for stress testing and prior notification requirements for the introduction of new products.

The shift towards more principle-based regulations is not absolute, but rather aims to strike an optimal balance between principle-based and rule-based regulations in order to preserve a sound prudential framework at the different stages of development of the financial sector. Prescriptive rules and requirements are accordingly retained in specific areas. For example, baseline, or Pillar 1, capital adequacy requirements for the banking and insurance sectors which are a fundamental cornerstone of the prudential framework remain largely prescriptive in nature. The Bank considers certainty and consistency in this particular area essential to maintain confidence in the financial system and avoid materially distortive competitive effects in the system. Regulatory reporting requirements have also remained prescriptive to facilitate the Bank's micro- and macro-surveillance functions. Where appropriate, the Bank has retained prudential limits as well – for example, on exposures to single counterparties – in certain areas as a minimum safeguard against excessive risk-taking. More specific prudential requirements have also continued to serve a useful purpose in achieving

Prudential Standards Issued in 2007

(i)	***Guidelines on Investment in Shares and Interest-in-Shares (issued in February 2007)***	▪ Provides greater flexibility for banking institutions to undertake equity-related activities according to the institution's internal risk management policies.
(ii)	***Guidelines on Stress Testing (issued in March 2007)***	▪ Introduces a more robust stress test regime by giving financial institutions greater flexibility in designing their stress test framework that would be most appropriate for their business profile, while encouraging financial institutions to better understand the risk drivers of their institution.
(iii)	***Guidelines on the Role of the Appointed Actuary for Takaful Operators (issued in March 2007)***	▪ Sets out the expected quality of actuarial investigations into the financial condition of family takaful funds by, among others, setting out: • the qualifying criteria for the appointment of appointed actuaries; and • their responsibilities to continuously evaluate the financial well being of the family takaful business, having due regard to certificate holders' reasonable expectations and developments in the business that may impact the financial condition of the funds.
(iv)	***Property Development and Property Investment Activities by Islamic Banks (issued in March 2007)***	▪ Sets out the duty of the boards of Islamic banks to ensure that adequate governance, sound internal controls and a strong risk management infrastructure are in place to support Islamic banks' direct participation in property development and property investment activities which is allowed under the Islamic Banking Act 1983.
(v)	***Revised Risk-Weighted Capital Adequacy Framework (issued in April 2007, implementation from January 2008)***	▪ Sets out the methodologies for quantifying the minimum regulatory capital requirements for credit, market and operational risk for conventional banking institutions.

	■ In October 2007, the market risk component was incorporated in the framework with enhanced guidance on trading book governance and the provision for banking institutions to adopt the Internal Models Approach, subject to the Bank's approval.
(vi) Risk-Based Capital Framework for Insurers (issued in April 2007, implementation from January 2009)	■ Replaces the existing solvency framework with the parallel run commencing from June 2007. ■ Sets out more transparent and risk-adjusted capital and valuation requirements that address all major financial risks of insurers. ■ A similar framework for takaful operators is being developed, with a concept paper expected to be released in 2008.
(vii) Valuation of Liabilities for Mortgage Reducing Term Takaful (MRTT) (issued in April 2007)	■ Specifies the minimum valuation requirement based on the net premium valuation method to be adopted by takaful operators in determining the reserves that must be provided for to meet future liabilities under MRTT contracts.
(viii) Capital Adequacy Framework for Islamic Banks (issued in June 2007, implementation from January 2008)	■ Sets out the capital adequacy requirements for Islamic banks covering credit, market and operational risks, which are consistent with the Capital Adequacy Standards issued by the Islamic Financial Services Board. The framework addresses risk characteristics unique to Islamic finance contracts. ■ Introduces specific capital requirements for inventory and commodities risks to reflect exposures to price fluctuations associated with the ability of Islamic banks to undertake the sale and purchase of assets.
(ix) Guidelines on Credit Transactions and Exposures with Connected Parties (issued in August 2007)	■ Provides greater flexibility for banking institutions to extend credit in the ordinary course of business to connected parties (previously prohibited) based on arm's length principles and subject to sound risk management practices and concentration limits.
(x) Policy on Musharakah and Mudharabah Contracts (issued in September 2007)	■ Sets out the Bank's expectations regarding key governance, risk management and internal control functions to support the sound conduct of investment and financing transactions based on *musharakah* and *mudharabah* contracts.
(xi) Guidelines on Single Counterparty Exposure Limit (concept paper issued in September 2007)	■ Strengthens the prudential requirements for controlling concentrated exposures to single names in line with international standards and best practices. ■ Proposed changes include the requirement to observe the limits on a consolidated basis, greater consideration of interconnected exposures based on financial and commercial interdependence, refinements to the basis for the computation of limits, and the application of permitted credit risk mitigation techniques to reduce exposures to a particular counterparty.

(xii) Corporate Governance Standards for Licensed Islamic Banks (issued in September 2007)	■ Outlines the broad principles and minimum standards for sound corporate governance which address management oversight, accountability, audit and transparency. ■ Strengthens the Shariah compliance framework through requirements for the establishment of a Shariah committee, Shariah internal audits and enhanced disclosures relating to Shariah matters in the annual report.
(xiii) Guidelines on Introduction of New Products (issued in November 2007)	■ Introduces a more efficient regulatory process for the offering of new products by banking institutions and development financial institutions. ■ Institutions are now allowed to offer new products in the market immediately upon submission of required information to the Bank (thereby replacing the former 21-day prior waiting period for supervisory reviews), subject to meeting the Bank's supervisory expectations set out in the guidelines. ■ A similar system will be introduced for insurers in 2008.
(xiv) Appointment of External Auditors (issued in November 2007)	■ Addresses the responsibility of financial institutions in evaluating the integrity, objectivity and professional competence of external auditors appointed under the relevant financial sector legislation.
(xv) Guidelines on Risk Governance (concept paper issued in December 2007)	■ Outlines high level principles on risk management governance for the board and senior management as well as supervisory expectations regarding the risk management control functions of banking institutions, insurers and takaful operators. ■ More specific risk management guidelines on credit, market and operational risks are concurrently being developed to provide further guidance on supervisory expectations in each risk area, with the concept papers expected to be released in 2008.
(xvi) Policy on the Recognition and Measurement of Profit Sharing Investment Accounts as Risk Absorbent (issued for implementation from January 2008)	■ Islamic banks that satisfy the minimum requirements of the framework would be allowed to deduct the credit and market risk-weighted assets funded by profit sharing investment accounts from the total risk-weighted assets for the computation of the risk-weighted capital ratio, in recognition of the effective transfer of risks from the Islamic banks to the investment account holders.

The Shariah Advisory Council of the Bank also issues pronouncements on Shariah matters to be observed by financial institutions regulated by the Bank. Please refer to the box on "Shariah Pronouncements in 2007".

certain minimum standards of sound management in certain sectors which are less developed in terms of risk management sophistication (e.g. development financial institutions), where specific guidance remains necessary to build capabilities (e.g. valuation standards for takaful funds), or to address present and emerging risks (e.g. specific requirements that may be imposed under conditions of distress).

To reinforce the dynamic nature of the balance between principle- and rule-based regulations, the Bank will continue to enhance the structure of the prudential framework to provide greater clarity on the interplays between the regulations issued by the Bank. The priority will be towards developing a comprehensive set of general prudential standards which establish high level principles covering the key risk management control functions that should exist within all financial institutions. To this end, significant efforts have been taken in recent years to review and develop standards in the areas of board oversight, senior management, internal audit and risk management, which would provide the overarching prudential framework for all regulated financial institutions.

The overarching framework will be complemented by more specific prudential standards that address the Bank's supervisory expectations regarding the management of significant activities undertaken by financial institutions. These may be specific to the respective banking, insurance or takaful sectors, and may include appropriate prudential limits and more detailed requirements prescribed by the Bank. Over time, the Bank expects to evolve a more cohesive and consistently expressed prudential framework that:

(i) addresses all the main elements of effective risk management control functions which are applicable across all significant activities of financial institutions (general standards);
(ii) is appropriately tailored, while avoiding any overlaps, to specific areas of activity (specific standards); and
(iii) provides for regulatory prescriptions where needed as minimum prudential safeguards.

The Bank generally expects that financial institutions would require some time to adapt to a more principle-based regime. Going forward, the pace of transition toward a more principle-based regime will depend on several key factors. The first is a corresponding change in the behaviours of financial institutions from a focus on compliance-based outcomes, to one that focuses on the effective management of risks by institutions in an integrated manner. Greater reliance will be placed on boards to set the "tone at the top", while ensuring that there is broad-based engagement within the organisations across various levels and functions in setting risk strategy, establishing acceptable levels of risk-taking and defining accountabilities. Following from this, the Bank will expect financial institutions to have the necessary processes, systems and expertise effectively in place to support sound operating decisions and judgements, thus maintaining financial stability under the more principle-based regime.

For institutions to operate with a reasonable degree of certainty as to acceptable practices under a less prescriptive framework, there is also a need for greater dialogue between the Bank and the industry, particularly in the initial stages of transition, to build a common understanding of the range of acceptable practices and approaches which would satisfy the regulatory principles established by the Bank. The Bank will continue to actively engage the industry on this front, while ensuring consistent supervisory assessments and actions to reinforce good practices.

The Bank further envisages significant scope for the key industry associations and related professional bodies to play a more active role in promoting dialogue within the industry and providing industry-specific guidance on how principles promulgated by the Bank may be applied in practice. These entities include the Association of Banks in Malaysia, the Malaysian Investment Banking Association, the Life Insurance Association of Malaysia, the General Insurance Association of Malaysia, the Actuarial Society of Malaysia, the Malaysian Takaful Association, the Association of Islamic Banking Institutions Malaysia and the professional accounting bodies. While the Bank encourages the development of useful guidance by the industry, individual financial institutions will remain responsible for ensuring that the application of such guidance provided by the industry adequately addresses the institution's own risk exposures, having regard to the specific circumstances under which the institution operates.

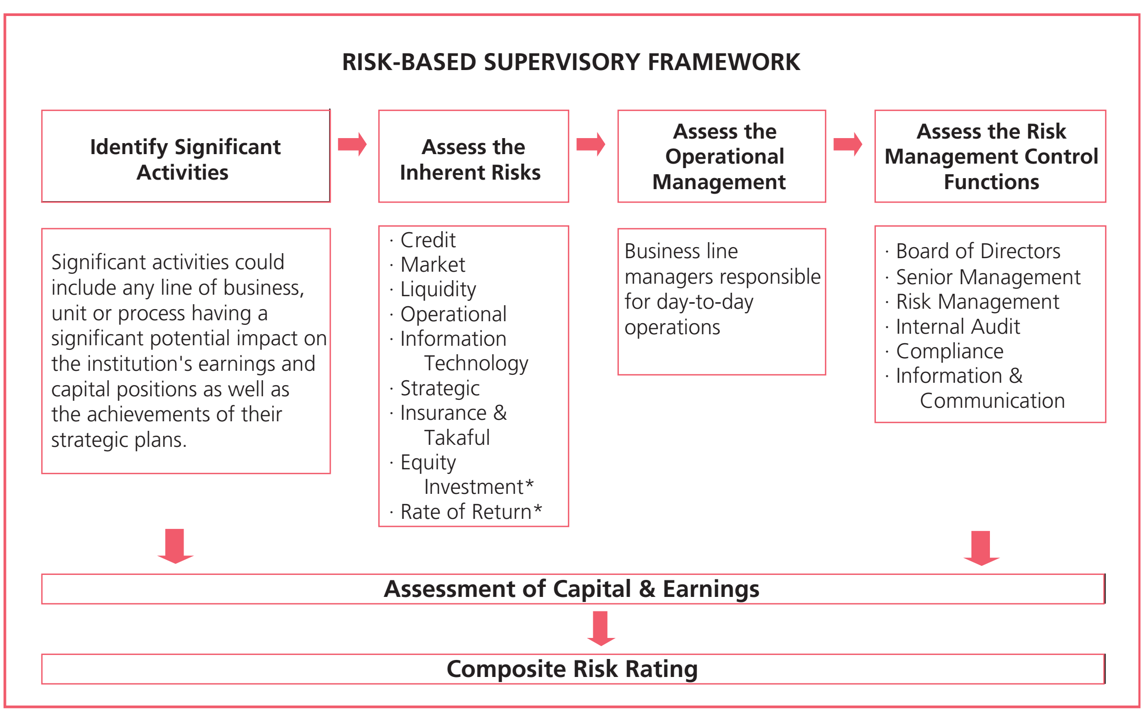
RISK-BASED SUPERVISION

A risk-based approach to supervision has been adopted by the Bank since 1997. In 2004, an enhanced risk-based supervisory framework (RBSF) was implemented for insurers and takaful operators, followed progressively thereafter by the adoption of the framework for banking institutions and development financial institutions. The RBSF further strengthens the Bank's risk and impact-focused approach to supervision, underpinned by more comprehensive and holistic risk assessments of individual financial institutions under the purview of the Bank. It is applied to all financial institutions regulated by the Bank, thereby ensuring that similar risks are addressed in a consistent manner across the financial sector. The framework also facilitates the appropriate concentration of supervisory attention on institutions that are of higher risk. Supervisory resources and activities are thereby more efficiently and effectively managed, with greater scrutiny on weaker and systemically important institutions.

The RBSF further strengthens the Bank's risk and impact-focused approach to supervision, underpinned by more comprehensive and holistic risk assessments of individual financial institutions.

The RBSF is a dynamic supervisory tool that identifies and assesses the emerging risks in a financial institution based on an in-depth understanding of the institution, the industry and environment in which it operates, and factors that could adversely alter the risk profile. A key output of the RBSF is an assessment (known as the composite risk rating) of an institution's ability to meet its obligations to depositors, creditors and policyholders on a continuing basis, including under stress conditions. The composite risk rating (CRR) is derived from an assessment of the risks inherent in an institution's significant activities, the overall quality of its operational management and risk management control functions to mitigate the inherent risks, and the extent of capital and earnings support available to the institution to absorb unexpected losses (Chart 4.1). The CRR provides the basis on which the Bank determines the appropriate level of intensity of supervision over a particular institution and supervisory actions, including the imposition of additional capital requirements, that need to be taken to address residual risks. The CRR is also a factor considered by the Malaysia Deposit Insurance Corporation in the application of the differential premium charges on member banking institutions for deposit insurance.

Chart 4.1 Supervisory Framework under RBSF



* For Islamic banks

The RBSF is centrally supported by "relationship managers" in the Bank whose primary responsibilities are to carry out supervisory assessments of institutions, conduct ongoing supervisory reviews, recommend appropriate interventions and maintain open lines of communication with the institutions to ensure that developments – both internal and external to the institutions – are quickly identified and factored into supervisory assessments on a continuing basis.

Based on the Bank's supervisory assessments under the RBSF, the vast majority of financial institutions remained in a healthy position as at end-2007, with the capacity to manage the increased risks associated with the more volatile external environment.

During the year, the Bank continued to strengthen the supporting structure, processes and core capabilities required to effectively implement the RBSF through:

- the institution of a quality assurance framework which provides for more rigorous internal processes to promote accurate risk assessments and feedback across the Bank's supervisory departments, as well as timely and effective interventions. Among other things, the framework provides for internal peer reviews of supervisory assessments to validate the judgements exercised by relationship managers in respect of individual institutions. These panel reviews ensure that supervisory assessments are appropriate, having regard to the supervisory expectations established in guidelines issued by the Bank, the institution-specific exposures and risk management practices, and assessments of other institutions with similar risk profiles;
- significantly strengthened technical capabilities residing in specialised risk (credit, market, operational and insurance) and econometrics units established within the Bank. These units are staffed by qualified supervisors and subject matter experts who provide key support to the relationship managers on more technical aspects associated with statistical modelling, complex risk assessments and the evaluation of internal risk models; and
- improved supervisory information systems and infrastructure with enhanced capabilities to support more efficient supervisory assessments.

In implementing the RBSF, the Bank has also enhanced its supervisory documentation to ensure that supervisory assessments are well-supported, and provide a clear trail of risk issues, developments and actions taken in relation to each individual institution. Greater integration between the Bank's macro-surveillance and supervision functions was also achieved with enhanced two-way flows of information that provided supervisors with up-to-date developments of emerging risks within the broader financial system that could impact the risk profile of individual institutions, while institution-specific insights from supervisors contributed towards a deeper understanding and more effective monitoring by the Bank of potential risks to financial stability.

Greater integration between the Bank's macro-surveillance and supervision functions was also achieved with enhanced two-way flows of information that provided supervisors with up-to-date developments of emerging risks.

Under the RBSF, greater reliance is placed on an institution's internal oversight functions to identify emerging risks and safeguard an institution's financial condition. To support such reliance, the Bank has continued to regularly engage the board and senior management as well as those principally responsible for internal audit, risk management, compliance and management information support within institutions, on risk issues concerning the institution. Greater reliance is also placed by the Bank on the work of external auditors and actuaries appointed by financial institutions. In this connection, the Bank has regular discussions with external auditors and actuaries to enhance awareness and clarity of the Bank's expectations of their roles, and the degree of reliance placed on their work for supervisory purposes.

ENSURING A COHESIVE PRUDENTIAL AND SUPERVISORY FRAMEWORK

The framework for prudential regulation and supervision is both interdependent and mutually reinforcing. In implementing the RBSF and more principle-based approach to regulation, significant attention is directed at ensuring the effective integration of the regulatory and supervisory processes to achieve a coherent framework that contributes to financial stability.

Significant attention is directed at ensuring the effective integration of the regulatory and supervisory processes to achieve a coherent framework that contributes to financial stability.

In line with the transition from a "one-size-fits-all", compliance-focused regulatory regime, to one that is more differentiated according to risk and more reliant on the exercise of supervisory judgements, enhanced processes have been adopted to further integrate critical supervisory inputs into policy thinking and formulation. Specifically:

- prudential policy priorities are confirmed against key risks to financial stability highlighted through supervisory observations and assessments;
- policy development is jointly approached between the regulatory and supervisory functions of the Bank, thus allowing for broader-based assessments of proposed policies while ensuring a common understanding of the specific outcomes of prudential policies. This, in turn, facilitates supervisory assessments of individual institutions under the RBSF that will be aligned with, and reinforce, the supervisory expectations set out under the principle-based regulations; and
- the exercise of sound supervisory judgement is further reinforced through the inclusion of staff involved in policy development in the supervisory review panels and intervention deliberations. This further contributes towards ensuring that supervisory assessments and interventions are appropriate, having regard to specific outcomes intended by the prudential standards issued.

During the year, the Bank also completed an assessment of revisions to the legislation applied to financial institutions under the Bank's purview to ensure an enabling legislative framework that is supportive of the more principle-based regulatory approach as well as risk-based supervision. More than 166 provisions of the Banking and Financial Institutions Act 1989 and the Insurance Act 1996 were reviewed with the aim of:

- aligning the legal provisions with the more principle-based regulations and developments in international supervisory standards;
- ensuring that the Bank will have the necessary authority to act under the risk-based approach to supervision when necessary;
- enhancing cross-sector consistency;
- enhancing clarity of the law; and
- reducing the administrative burdens on financial institutions where appropriate.

The Islamic Banking Act 1983 and Takaful Act 1984 have also been concurrently reviewed together with an exercise to update and strengthen these respective legislations. The Bank expects to complete the legislative process to effect these amendments in 2008.

To ensure the efficiency and integrity of the prudential framework, the Bank made further progress in efforts to rationalise and update the prudential framework across the industries regulated by the Bank, as well as in relation to the capital market intermediaries regulated by the Securities Commission. During the year, the Bank completed an exercise to identify divergent regulatory requirements in common areas of activity involving its regulated institutions, reviewed 18 regulatory requirements and identified a further 14 areas for review in 2008.

The Bank continued to obtain relevant input from the financial industry and other key stakeholders to maintain a robust framework that is reflective of changing market realities and is implementable in practice. During the year, six concept papers were issued to the industry, with another eight in the final stages of completion for expected issuance within the first half of 2008. Responses received from stakeholders continued to provide important insights into the efficiency implications of proposed policies, consistency across industries as well as their likely impact on business and financial activities. Where appropriate, policies were modified to address significant issues raised.

The Bank remained mindful of the trade-off between the benefits and costs of regulation. As in previous years, a large part of feedback received during the consultation process highlighted the concerns of institutions regarding practical implementation issues. The Bank held dialogues with the industry and individual institutions to understand these concerns more fully and develop implementation solutions that appropriately balanced the costs of implementation with risks to financial stability. In an environment of increased volatility and competition, however, financial institutions clearly recognised the urgent need to enhance risk management systems and governance structures within their organisations.

Outside the Bank, closer coordination with other regulatory and supervisory agencies was also achieved with the conclusion of formal agreements with the Securities Commission and the Malaysia Deposit Insurance Corporation that clearly set out the roles, responsibilities and cooperation arrangements aimed at minimising regulatory overlaps and inconsistencies. The arrangements have continued to work well in enhancing regulatory efficiency and facilitating the sharing of information between agencies where appropriate. The Bank also signed a Memorandum of Understanding with the State Bank of Vietnam to facilitate greater cross-border supervisory collaboration.

Supervisory cooperation at the regional level deepened further.

At the regional level, supervisory cooperation through the various regional groupings of which the Bank is a member, such as the Executive Meeting of East Asia and Pacific Central Banks (EMEAP) and South East Asian Central Banks (SEACEN), deepened further. Cooperation focused in particular on facilitating the implementation of Basel II within the region as well as strengthening the regional frameworks for macro-surveillance and crisis management. During the year, the Bank also maintained its commitment to strengthen the region's influence in the development of international standards through its participation in various working groups, and by providing feedback on more than 15 draft standards and surveys issued by the international standard setting bodies.

IMPLEMENTATION OF REVISED CAPITAL ADEQUACY FRAMEWORKS

During the year, substantial progress was achieved in final preparations for the implementation of the revised capital adequacy frameworks for banking institutions and insurers. The revised frameworks will align regulatory capital requirements more closely with the specific risk profiles of individual institutions and adopt underlying valuations that are consistent with international financial reporting standards.

Revised Risk-Weighted Capital Adequacy Framework (Basel II) for Banking Institutions

The revised risk-weighted capital adequacy framework (Basel II), which is applicable to commercial banks and investment banks, became effective from 1 January 2008 for a total of 27 banking institutions that are adopting the simpler approaches, namely the Standardised Approach for credit risk and either the Basic Indicator, Standardised or Alternative Standardised Approaches for operational risk. The remaining seven banking institutions (including four locally-incorporated foreign banking institutions) have been allowed to remain under the existing capital adequacy framework (Basel I) until their migration to the more advanced Internal Ratings-Based (IRB) approaches for credit risk under Basel II from 1 January 2010. The option for direct migration which is intended to minimise the cost of Basel II implementation, was granted only to banking institutions that had met preconditions set by the Bank, such as the availability of resources and expertise to meet the supervisory expectations under IRB approaches as well as the ability to demonstrate a high level of commitment and discipline in implementation preparations.

With respect to Islamic banks, 10 out of 12 Islamic banks have adopted the revised framework for Islamic banks (Capital Adequacy Framework for Islamic Banks or CAFIB) which specifies the standardised approach to capital computations, while reflecting the differences in the underlying contracts and incorporating specific elements peculiar to Islamic banking such as the capital requirements for inventory risks as well as the treatment of profit sharing investment accounts. The remaining two Islamic banks have been allowed to migrate directly to the IRB approach in January 2010.

The Bank anticipates that most banking institutions would experience only modest increases in their regulatory capital requirements following the adoption of the revised capital frameworks, based on results from the parallel run exercise in 2007. While the revised frameworks introduce a new operational risk charge, the anticipated additional capital requirements are expected to be partly mitigated by savings on the credit risk capital charge derived from the lower risk weights applied for residential mortgages and retail exposures. In this connection, there has been greater emphasis for banking institutions to improve the collection of data on operational losses. While this is not a pre-requisite for the implementation of the Basic Indicator Approach under the revised frameworks, the Bank views the collection of loss data as critical in allowing banking institutions to better understand their operational risk profiles as a basis for the development of enhanced operational risk management capabilities.

For some institutions, the ability to quantify the effects of comprehensive credit risk mitigation techniques used, and the holdings of a significant portion of investment-grade debt securities, would generate further capital savings. The parallel run calculations also indicated a minimal impact on capital arising from the revised requirements for market risk which, among other things, incorporate a new capital requirement for commodity risk positions and recognise offsetting liability positions in the trading book. For Islamic banks, the inclusion of physical assets as eligible collateral and the recognition of profit sharing investment accounts as a risk absorbent under the revised framework would also allow for additional capital relief.

Most banking institutions would experience only modest increases in their regulatory capital requirements following the adoption of the revised capital frameworks.

For banking institutions that have been allowed to migrate directly to the IRB approaches, significant attention and resources have been directed towards the proper construction of risk and data management systems and infrastructural enhancements, as well as strengthening the internal risk modelling and analytical capabilities. The Bank will monitor these preparations closely to ensure that these banking institutions remain on track to comply with the IRB approaches by 2010.

Risk-Based Capital (RBC) Framework for Insurers

The Risk-Based Capital (RBC) framework was issued to the insurance industry in April 2007. The framework provides for regulatory capital requirements that are more sensitive to the underlying risk exposure of insurers, compared to the existing solvency requirements. This allows for more flexible investment rules, while introducing revised valuation requirements that are market consistent. All insurers are currently conducting a parallel run exercise in preparation for the effective implementation of the framework in January 2009.

While the Bank anticipates some increase in capital requirements among several insurers, the parallel run exercise indicated that the majority of insurers would be able to comfortably meet the minimum regulatory capital requirement. While insurance risk contributed most significantly to the overall regulatory capital requirement, market risk also represented a significant source of risk for life insurers, mainly associated with equity exposures and interest rate mismatches.

The majority of insurers would be able to comfortably meet the minimum regulatory capital requirement.

The adoption of market consistent valuations of assets and liabilities may also result in some increased volatility in the financial results of insurers. For life insurers in particular, the insufficient volume of long-term debt instruments in the domestic market currently, coupled with the prevailing low interest rate environment, has continued to place some pressure on guaranteed business, resulting in higher exposures to asset-liability mismatch risks. However, most insurers should experience only modest increases in volatility as asset positions adjust proportionately against corresponding liability positions.

PRIORITIES IN 2008

Bank Negara Malaysia's regulatory and supervisory priorities in 2008 will continue to focus on strengthening the Bank's capabilities and capacity to respond pre-emptively to emerging risks in the financial system. This would include:

- ensuring that regulatory requirements continue to remain appropriate over time and in relation to the changing environment, as well as clearly setting out the Bank's supervisory expectations with regard to the management of key risks;
- ensuring, through vigilant supervision, that institutions are adequately managing their risks in practice in line with the supervisory expectations of the Bank; and
- continuously building capacity within the Bank to support both of these activities.

The implementation of the revised capital frameworks for the banking and insurance industries will remain a key priority in 2008. Banking institutions which have been granted approval to adopt the IRB approaches for credit risk will be required to submit their internal models to the Bank for review before the models can be used to determine regulatory capital requirements. Significant supervisory resources will be devoted to the review and validation of these models ahead of the 2010 deadline for implementation of the IRB approaches. The Bank will also continue to closely monitor the quantitative impact of regulatory capital adjustments within institutions and across the industry for both banking institutions adopting the standardised approaches and insurers applying the RBC framework on a parallel run basis in 2008. The Bank expects to provide greater clarity to the industry on its approach to the determination of additional capital requirements under the supervisory assessment process (Pillar 2) for specific institutions, as well as advance forward its work on market disclosures to reinforce sound financial management (Pillar 3). Remaining implementation and calibration issues surrounding the revised frameworks will also be resolved. The Bank further intends to initiate work to develop an equivalent RBC framework for the takaful operators.

The implementation of the revised capital frameworks for the banking and insurance industries will remain a key priority in 2008.

Other priorities for the Bank in 2008 are the completion of reviews of the relevant financial sector legislation to reinforce the Bank's new approaches to regulation and supervision; development of a revised and more cohesive compendium of risk management standards; and preparations for the implementation of international financial reporting standards on financial instruments and insurance contracts. The Bank also expects to engage the industry on the proposed approach to the supervision of financial groups, focusing in particular on the application of the revised capital adequancy frameworks and the RBSF in the context of financial groups.

Another priority will be in the area of corporate governance. While the Bank does not envisage substantive changes to its current set of principles applicable to financial institutions, further efforts will be taken to harmonise standards across institutions regulated by the Bank and, to the extent appropriate, with the updated requirements under ongoing reforms to the Companies Act 1965 and developments in national codes of corporate governance. The Bank also expects to take forward initiatives in the area of directors' education which are aimed at supporting effective board functions.

Shariah Pronouncements in 2007

The Shariah Advisory Council (SAC) is the sole authoritative body on Shariah matters pertaining to Islamic banking, takaful and Islamic finance. Its jurisdiction covers all financial institutions regulated and supervised by Bank Negara Malaysia. As the reference body and advisor to the Bank on Shariah matters, the SAC is also responsible for validating all Islamic banking and takaful products to ensure compatibility with Shariah principles.

In 2007, the SAC convened 12 meetings and among its major decisions were:

(i) ***Application of Ijarah Mausufah fi Zimmah in house financing***
The SAC approved the application of *ijarah mausufah fi zimmah* (forward lease) as a supporting contract in house financing based on *ijarah* as the primary contract. The decision bears particular significance for the financing of uncompleted assets as it will resolve the issue of rental payments made for the period commencing from the execution of the contract to the completion of the asset. Prior to the decision, rental charges for the period before completion of the asset were not justifiable as the tenant could not enjoy the usufruct during this interim period. With the application of the forward lease, however, such payments can be treated as future rentals. The decision has been recognised by scholars from different schools of thought and will further refine existing contracts incorporating Shariah principles.

(ii) ***Application of Wakalah bi Istithmar contract***
The SAC also approved the application of the *wakalah bi istithmar* (agency for investment) contract in deposit accounts. This contract involves deposit-taking mobilised through *wakalah* (agency), in which the funds mobilised are invested in instruments that would generate an agreed minimum rate of return. In contrast to deposits mobilised through *wadiah* or *qardh*, the *wakalah* contract feature would allow Islamic financial institutions to offer additional benefits such as takaful coverage with *wakalah* deposit accounts to enhance the product's attractiveness to customers. However, the implementation of such contracts must be carried out prudently to avoid any element of guarantee by the agent on the investment returns. The resolution by the SAC is expected to further diversify Shariah-compliant products and at the same time allow Islamic banks to be more creative and innovative in their product offerings.

Recognising the importance of Shariah compliance in Islamic finance, Bank Negara Malaysia, in March 2007, published a compilation of resolutions made by the SAC in a book entitled "Shariah Resolutions in Islamic Finance". The book is intended to serve as a reference for the Islamic finance community, especially Shariah officers and practitioners. To inform the market in a timely manner, the Bank has also disseminated recent resolutions made by the SAC through press releases as part of its continuing effort to increase transparency and enhance the understanding of Shariah issues among market players.

To promote quality research on Shariah compliance while improving regulatory efficiency, the presentation of Shariah issues and new product proposals by Islamic banks to the SAC are required to be submitted in a standard format which incorporates issues, opinions and views of renowned Shariah scholars. Institutions offering Islamic products are also required to state clearly the views of the institutions' Shariah committee and the rationale behind such views. This will contribute towards deepening the understanding of the issues being discussed, thus promoting sound Shariah resolutions.

The SAC is supported by Shariah research carried out by Bank Negara Malaysia on Shariah aspects of product innovations as well as on immediate and long-term policy issues. In 2007, research undertaken on the application of the *wakalah bi istithmar* concept in savings deposit products supported the approval given by the SAC for this product, considered the first *wakalah*-based savings product in the world. The Bank also conducted research to establish the applicability of existing financial reporting principles as a guide to develop Islamic financial reporting standards. Based on the Bank's research, the SAC pronounced that these principles are consistent with Shariah and can serve as guiding principles to develop similar standards for Islamic financial reporting. The SAC also highlighted the need for existing financial reporting standards to be enhanced in order to support Shariah requirements.

Distinct Features of Islamic Financial Transactions: Perspective on *Musharakah Mutanaqisah* (Diminishing Partnership)

> *"The very objective of the Shariah (**Maqasid Shariah**) is to promote the welfare of the people which lies in safeguarding their faith, their life, their intellect, their posterity and their property. Whatever ensures the safeguard of these five serves public interest and is desirable."* - Al Ghazali

Islamic finance is founded on Shariah principles which express an explicit intention to meet the financial needs of participants with integrity and in a manner that is just, fair, trustworthy and honest, while ensuring a more equitable wealth distribution. Chart 1 briefly summarises the essential features of Islamic finance.

Chart 1
Essential Features of Islamic Finance

Overarching Principles

- Towards achieving the objectives of Shariah *(Maqasid Shariah)*
  - ✓ High ethical values - justice, fairness, trust, honesty and integrity

Materiality and Validity of Transactions

- Economically productive underlying activities
- Avoidance of interest-based transactions
- No involvement in illegal and unethical activities
- Genuine trade and business transactions
- Avoidance of speculative transactions

Mutuality of Risk Sharing

- Entitlement of profit contingent upon risk taking
- Honouring both substance and form of contract

Embedded governance ⟷ **Disclosure & transparency requirements**

Unlike conventional finance, Islamic finance is governed by Shariah rules that prohibit interest-based transactions. Islamic financial transactions are also required to be accompanied by genuine underlying trade and business activities that generate fair and legitimate profits. This reinforces the close link between financial and productive flows which underpin Islamic finance, thereby insulating the Islamic financial system from risks associated with excessive leverage and speculative financial activities. The risk- and profit-sharing characteristics of Islamic financial transactions (such as in *mudharabah* and *musharakah* contracts) which are clearly defined at the onset, serve as additional in-built mechanisms that further strengthen incentives for the adoption of sound risk management practices by Islamic financial institutions. In particular, these features demand the exercise of appropriate due diligence by Islamic financial institutions and higher standards of disclosure and transparency to be observed which, in turn, act to enforce market discipline and minimise informational asymmetries.

Collectively, these intrinsic features and requirements of Islamic finance act as natural stabilisers and restraints against the risks and excesses associated with excessive leverage, financial speculation and mis-selling that can threaten the effective functioning of financial systems.

The range of Islamic financial products has broadened considerably in recent years in response to the more diverse and differentiated requirements of participants. For example, Islamic financing contracts have expanded from simple-mark up contracts to include those that are equity-based. While Islamic finance has continued to evolve rapidly, the distinct features of Islamic financial transactions have been preserved in the new innovations in order to ensure that the religious and ethical principles of participants are not compromised. This is illustrated in the following example of *musharakah mutanaqisah*, an equity-based contract which has been widely accepted in many jurisdictions.

A Study on *Musharakah Mutanaqisah*

Musharakah mutanaqisah *– A form of partnership in which one partner promises to gradually acquire the equity share of the other partner until the share of ownership is completely transferred to the first partner.*

Musharakah mutanaqisah can be applied in home financing products. Based on the joint-ownership concept, the banking institution and the customer contribute their respective shares of the capital required to acquire the property according to a pre-determined ratio agreed to between them at the beginning of the contract. The banking institution leases the property to the customer who undertakes to incrementally acquire the full ownership of the property from the banking institution over an agreed period. Once the customer has fully acquired the banking institution's share of the property, the partnership comes to an end with the customer becoming the sole owner of the property. This contract incorporates elements of both sale and lease *(ijarah)* contracts, which are integral in ensuring that no element of *riba* (interest) is involved in the *musharakah mutanaqisah* transaction. The dynamics, at different transaction stages, of a *musharakah mutanaqisah* contract for completed property is illustrated in Chart 2.

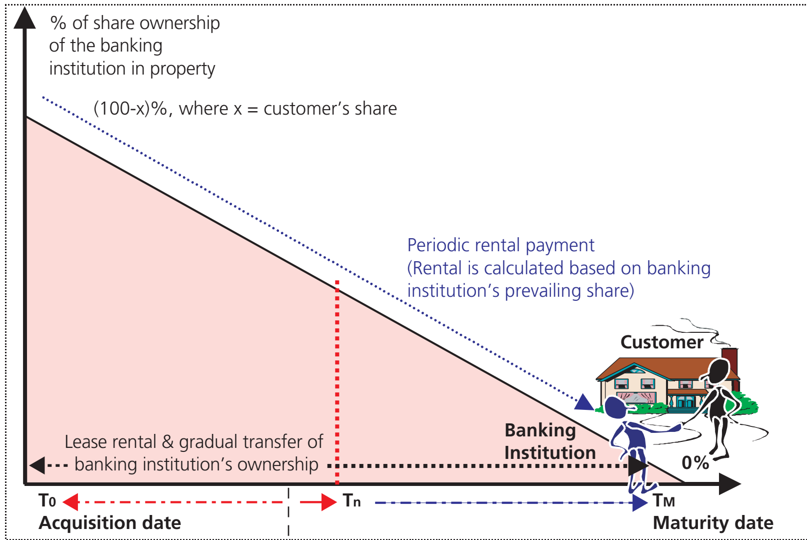
The application of Shariah principles in *musharakah mutanaqisah* contracts creates distinct relationships, rights and obligations of the parties to the contracts. As a result, banking institutions are exposed to both market risk associated with the joint ownership of the underlying asset, as well as credit risk associated with the obligation on the part of the customer to acquire, and on the banking institution to sell, its share of ownership in the asset. This distinct risk exposure requires the banking institution to adopt more robust methodologies supported by reliable and adequate data and systems that are able to detect and provide best estimates of potential losses arising from adverse developments in the credit profile of the customer. The risk management processes and infrastructure of a banking institution offering such a product must also be dynamic in identifying, measuring, controlling and managing all the relevant risks associated with *musharakah mutanaqisah* transactions. Chart 3 shows the key risk exposures and risk management practices at the different stages of a transaction in *musharakah mutanaqisah*, as well as additional risk mitigants that can be introduced.

Chart 2
Dynamics of *Musharakah Mutanaqisah* Contract for Completed Property

Musharakah Mutanaqisah

Shariah Advisory Council (SAC) Resolutions

The SAC in its 56th meeting held on 6 February 2006 has recognised the application of *musharakah mutanaqisah* as a permissible contract in Islamic *muamalat* which inculcates the element of sharing in terms of capital and liability between the financier and customer.



	T_0	T_0-T_M	T_M
STAGE OF TRANSACTION	Acquisition of property by both parties.	Lease rental and gradual transfer of bank's ownership.	Full transfer of bank's ownership to customer.
CONTRACTUAL RELATIONSHIP	Banking institution and customer enter into partnership contract to jointly purchase the property based on an agreed share ownership between them in the property.	Diminishing partnership and *ijarah* (lease).	Transfer of full ownership of the property to the customer.
KEY FEATURES	They are partners/joint owners of the property based on the pre-agreed ratio, e.g. 10% will be paid by customer and the bank will pay the remaining 90%. The parties also agree on profit sharing ratios and the loss will be based on the proportion of each party's capital contribution.	Under *ijarah*, customer pays the lease rental and gradually reduces the banking institution's ownership (rental payment is inclusive of the use of asset and purchase of the banking institution's share of the asset). The rental rate may be fixed or floating.	• Full settlement of the agreed rental. • Allows early settlement by acquiring bank's share of ownership.

T_n – Prepayment / Withdrawals

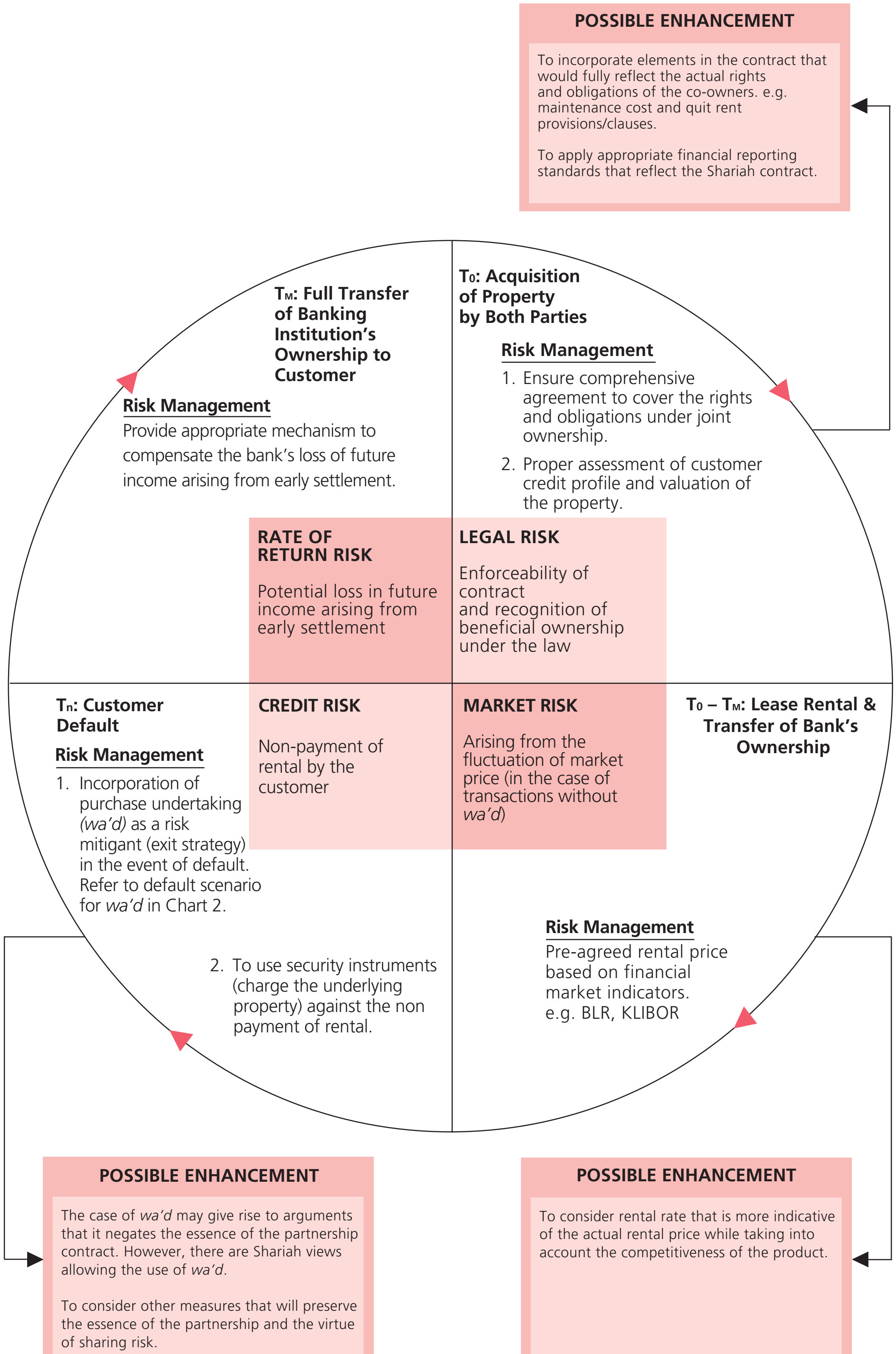
- Customer may opt to make partial prepayments by acquiring a higher proportion of the banking institution's ownership.
- Flexibility for customer to withdraw his share by selling off his ownership share to the banking institution.

T_n – Default Event

In the event of customer default, the partnership will be terminated.

- Without *wa'd* (purchase undertaking), the asset will be sold and the proceeds will be divided according to the latest ownership shares of the banking institution and customer.
- With *wa'd*, the customer is obliged to acquire the banking institution's remaining share. This creates a debt to be paid by the customer to the banking institution.

Chart 3
Management of Key Risks in *Musharakah Mutanaqisah* Contracts



Several jurisdictions have also applied specific regulatory requirements to ensure the appropriate management of risks associated with this type of contract. For example, in jurisdictions adopting capital adequacy frameworks based on the Capital Adequacy Standard issued by the Islamic Financial Services Board, Islamic banking institutions are required to allocate sufficient regulatory capital to cover the exposures to both the price risk based on the proportion owned by the banking institution in the underlying assets, as well as the credit risk arising from the outstanding rental payable by the customer. In tandem with the banking institutions' diminishing share of ownership in the asset, the capital requirement for the price risk would gradually decline over the period of contract.

With its distinct features, and in-built checks and balances, the development of Islamic finance as a viable form of financial intermediation is expected to contribute towards enhancing financial stability. Moving forward, further product innovations in Islamic finance can be expected. This needs to be supported by further in-depth research on Shariah issues relating to risk mitigation, liquidity management and hedging in order to ensure that the fundamental tenets of Shariah which underpin the stabilising factors inherent in Islamic financial transactions, are preserved.

Market Conduct and Enhancing Financial Capability

Market Conduct and Enhancing Financial Capability

The increasing diversity and complexity of the financial system has resulted in a more pronounced focus on fair market conduct and financial capability as important elements in ensuring a sound framework for financial stability. In this regard, Bank Negara Malaysia's objectives are twofold: (i) fostering sound practices and codes of conduct that will ensure fair treatment of consumers; and (ii) increasing financial literacy levels of Malaysian consumers.

In 2007, the following key trends and developments in the current operating environment that may affect Malaysian consumers were identified:

- the emergence of innovative and complex financial products including structured investment products and investment-linked products, which offer potential for higher returns but with greater investment risks, have gained greater popularity among consumers. Consumers need to fully understand the terms and conditions, the actual costs and the investment risks associated with these products before investing in such products. In this context, effective internal controls to mitigate mis-selling practices and a greater focus by financial institutions on customer suitability assessments to ensure that financial products sold are appropriate to the needs of customers have now become more important. Improved disclosure and product transparency would not only bring benefits to consumers but help to mitigate risks to consumers;
- the demographic trend towards an ageing population and increased longevity, has increased the need for consumers to take greater individual responsibility for financial planning, including retirement planning. This has increased the importance of financial capability to empower consumers to make sound financial decisions;
- the greater ease with which consumers can access credit in general and obtain credit cards has increased the potential risk of over-indebtedness in the household sector. Financial incentives for consumers to obtain credit, such as interest free periods and balance transfers on credit cards as well as introductory or teaser rates for mortgages can have a similar effect. Greater financial literacy can equip households to better manage their financial exposures, while ensuring that consumer credit remains within prudential limits; and
- as part of strategies to improve efficiency and productivity levels, financial service providers are gradually expanding their outsourcing arrangements to include marketing and debt collection activities. Under such arrangements, there is a need to preserve the fair treatment of consumers through ethical practices by both financial institutions and their outsourcing partners.

Against this backdrop, the Bank intensified efforts to promote fair and equitable market practices, raise the level of financial capability with an increased focus on target groups and further enhance the efficacy of consumers' access to redress avenues.

PROMOTING FAIR AND EQUITABLE MARKET PRACTICES

Measures undertaken by the Bank in 2007 were primarily directed towards further enhancing product transparency and disclosure and promoting high standards of professionalism among financial service providers, namely financial institutions and designated payment instrument issuers, in their dealings with consumers.

During the year, the Bank developed a more consistent and comprehensive disclosure framework for retail financial products. The framework is aimed at facilitating consumers' understanding of important product features, thus enabling consumers to make meaningful comparisons prior to making financial decisions. The disclosure framework will build on existing requirements for banking institutions to disclose fees and charges imposed on banking products and services, as well as minimum standards on product disclosure and transparency currently applicable to the insurance sector. The new framework outlines general and product-specific disclosure principles that should be observed by financial service providers and specifies different disclosure requirements at different stages of entering into a financial contract (namely prior to, at the point of entering into, and during the term of, the contract) to enable consumers to make informed decisions when purchasing financial products. In developing the disclosure framework, the Bank has strived to balance between the needs of ensuring an appropriate level of transparency and disclosure to support informed decisions by consumers, and avoiding excessive regulatory costs on financial service providers.

The Bank has developed a more consistent and comprehensive disclosure framework for retail financial products.

In addition to enhancing disclosures on fees and charges, the Bank remained vigilant in ensuring that fees and charges imposed by financial institutions on products and services offered to retail customers are reasonable, having regard to the actual costs incurred by financial institutions in providing products and services to consumers. Given the more competitive environment, capital investments made by financial institutions have increased substantially to support product innovations and enhancements, and to improve services to consumers. These investments have led to a significantly broader range of products made available to consumers, and increased convenience and speed in the delivery of financial services. While corresponding adjustments to fee structures on financial products may be commercially justified, the Bank expects such adjustments to be commensurate with the product quality or service, and cost of providing the product or service. The cost considerations by financial institutions should also be offset by the cost savings that are reaped from more efficient and automated processes.

Given the proliferation of diverse financial products and services that are also now increasingly more customised, the determination of fees and charges is primarily a matter to be decided by financial institutions. The Bank, however, has issued guiding principles on the imposition of fees and charges which financial institutions are required to observe to ensure the fair treatment of consumers. In enforcing these principles, several banking institutions were required during the year to review or cease the imposition of certain fees and charges on products and services offered to retail customers which did not reasonably reflect the costs incurred by the financial institutions in providing such products or services. Over time, the Bank expects that with increased transparency and financial capability, the exercise of consumer preferences will further reinforce greater discipline on the financial institutions in this area.

Consistent with the efforts to promote broader participation in financial services by consumers, the Bank intensified efforts to increase public awareness of savings and current accounts being offered under the Basic Banking Services (BBS) Framework. First introduced to individuals in 2005, these "no-frills" deposit products are aimed at meeting the general banking needs of retail customers and are offered at minimum cost. Apart from the on-going outreach programmes to increase public awareness of the BBS, posters explaining the features of BBS in four languages have been printed and distributed nationwide in 2007 for display in the premises of banking institutions throughout the country. During the year, the BBS framework was also extended to small and medium enterprises (SMEs). As at end 2007, about 3.6 million consumers had basic savings accounts, accounting for 13.7% of total savings accounts maintained in banking institutions.

The use of credit cards as a payment instrument has continued to be increasingly popular among the public with the number of credit cards in circulation rising by 12.1% to 9.9 million credit cards in 2007. Despite the increase, most credit cardholders have been able to manage their payment commitments. In 2007, the number of credit card-related bankruptcies remained low, accounting for only 0.07% or 1,873 cases out of the 2.7 million principal cardholders. Nevertheless, there is a need to ensure that consumers fully understand the responsibilities of card ownership, particularly with the intense competition and the adoption of aggressive marketing practices by certain credit card issuers to pressure consumers to sign-up for multiple cards. As at end 2007, nearly 2,500 individuals with credit card-related debts sought assistance under the Credit Counselling and Debt Management Agency's (CCDMA) debt management programme. As aggressive marketing practices can undermine efforts to promote responsible and prudent management of household debts, the Bank has issued minimum requirements for the sale, marketing and promotion of credit cards aimed at curbing such marketing practices by credit card issuers. The Bank also introduced guidelines requiring card issuers to adopt a tiered pricing structure for credit cards that incentivises prudent credit card usage by consumers. Under this structure, cardholders would be tiered according to their repayment behaviour, with those demonstrating disciplined use enjoying reduced charges which are capped at 15% per annum, compared with the ceiling rate of 18% per annum applicable to other cardholders. The new structure will come into full effect on 1 July 2008.

The Bank has issued minimum requirements for the sale, marketing and promotion of credit cards.

To prevent unethical practices by financial service providers and their agents in the area of debt collection, the Bank has also issued guidelines on fair debt collection practices. While the Bank recognises that effective recovery of debts by financial service providers is an important element of good credit risk management, the recovery should be conducted in a manner that is fair to borrowers, including the protection of the borrowers' privacy during the recovery process.

ENHANCING FINANCIAL CAPABILITY OF CONSUMERS

Bank Negara Malaysia's financial capability initiatives in 2007 continued to be directed towards empowering consumers to take greater responsibility for their own personal financial management. In particular, the Bank continued to expand its outreach programmes by providing information to the public on the increasing array of financial products and services available to them, and educating consumers on their rights and responsibilities. In an effort to reach a wider demographic, the Bank's outreach efforts during the year were also specifically focused on target groups such as women, school children, college and university students, rural communities and retirees.

bankinginfo* and *insuranceinfo

bankinginfo and *insuranceinfo* remained the main focus of the Bank's consumer education initiatives. During the year, the *bankinginfo* and *insuranceinfo* websites were enhanced to incorporate tools such as financial calculators that allow visitors to compute household budgets, motor insurance premiums and hire purchase instalments. Financial planning guides and new comparative information on common financial products were also added to make it easier for consumers to evaluate their financial requirements and compare available solutions offered by different financial institutions. There are currently eight comparative tables on banking products in the *bankinginfo* website which provide key information on common products presented in a consistent manner for purposes of comparison, including financing and deposit rates as well as fees and charges. Three new information booklets for financial consumers were also published, bringing the total number of booklets published under *bankinginfo* and *insuranceinfo* to 24 each. More than 360,000 of these booklets were distributed to Malaysian consumers in 2007.

Outreach Activities

The Bank's outreach activities expanded in breadth in terms of people and segments reached, as well as depth in terms of financial knowledge disseminated. This was achieved by adopting a more targeted and collaborative approach which enabled the Bank to focus its resources where the biggest impact and multiplier effect could be gained. In this regard, the Bank participated in a total of 70 outreach activities during the year, including financial exhibitions as well as seminars and briefings organised for consumers. At these events, the Bank focused on issues relating to personal and household budgeting, basic banking services, the rights and responsibilities of consumers, financial scams and redress avenues.

The School Adoption Programme entered its 10th year in 2007. The programme is a collaborative effort between the Bank, the Ministry of Education and financial institutions aimed at eliminating financial illiteracy amongst school children by raising awareness on the importance of financial management. Since its introduction, more than 7,000 schools nationwide have been adopted by financial institutions, with Student Financial Clubs (SFCs) formed as part of the co-curricular activities in more than 2,000 schools. The SFCs serve as an effective focal point for financial institutions' outreach activities at schools by leveraging on the clubs' activities to increase the interest of students in financial matters.

To increase awareness of the student pocket money book, *Buku Wang Saku*, and encourage its wider use among school children as part of efforts to inculcate good financial habits at an early age, the Bank, in collaboration with the Ministry of Education organised the *National Buku Wang Saku* competition in July 2007. The event drew interest from 3,200 students. More than 738,000 copies of *Buku Wang Saku* were distributed to school children all over the country in 2007. To date, 5.9 million copies of *Buku Wang Saku* have been made available to students under the School Adoption Programme.

The establishment of the Financial Education Working Committee (FEWC) in February 2007 marked an important milestone in the Bank's collaboration with other quasi-governmental agencies such as the Credit Counselling and Debt Management Agency (CCDMA), Financial Mediation Bureau (FMB) and the Malaysia Deposit Insurance Corporation. The FEWC will serve as a platform to coordinate financial education initiatives and facilitate the more efficient allocation of resources between the agencies in achieving mutual goals.

5,000 individuals with total debts of RM478 million received assistance under CCDMA's debt management programme.

The CCDMA, which was established by the Bank in 2006, opened three new branches in Malacca, Ipoh and Kuantan during the year, in addition to the existing regional offices located at the five Bank Negara Malaysia branches, thereby expanding its services to a wider segment of the Malaysian population. As at end-2007, nearly 50,000 customers had sought the services of CCDMA. Of these, more than 5,000 individuals with total debts of RM478 million received assistance under its debt management programme, with a low termination rate of 8.6%. In line with its mandate, the agency also continued to contribute towards improving financial education in Malaysia as a pre-emptive measure to promote prudent financial management. During the year, a module on personal financial management to be taught at public universities was developed by the agency with the aim of preparing graduates to face the challenges of managing their finances wisely at the start of their careers.

STRENGTHENING AVENUES FOR CONSUMER REDRESS

In Malaysia, dedicated complaints units of financial institutions, BNMLINK (Bank Negara Malaysia Laman Informasi Nasihat dan Khidmat) and the FMB have served as the primary avenues for redress to resolve consumer disputes.

Complaints received against banking institutions during the year were mainly on customer service standards and credit card related matters including unauthorised transactions and billing issues. In the insurance sector, complaints were mostly related to delays in processing insurance claims and the conduct of agents. All complaints received by the Bank and FMB were promptly investigated with the financial institutions concerned according to the Bank's and FMB's respective client charters. Investigations into complaints on unauthorised credit card transactions which were mainly due to card theft and negligence of cardholders, did not reveal any concerns over inadequacies in the control functions of credit card issuers. Several financial institutions also took steps to introduce Consumer Advocates within their organisations to provide an additional redress avenue for consumers dissatisfied with the resolution of their complaints by the institution's complaint units.

In July 2007, the Bank launched BNMTELELINK to complement existing channels for the general public to obtain information on financial services and seek assistance to resolve related issues that they faced. Modelled after BNMLINK which provides assistance to walk-in visitors on their complaints and queries, response to the new channel which handles written and telephone enquiries and complaints has been encouraging, with a total of 25,012 queries received in the first five months of its operations. Most queries related to requests from the public for credit reports generated from the Central Credit Reference Information System (CCRIS) which is maintained by the Bank, and enquiries regarding such information.

MARKET CONDUCT SUPERVISION AND ENFORCEMENT

Principles of fair market conduct and the role of financial institutions in supporting national financial capability initiatives were reinforced through the Bank's market conduct supervision and enforcement activities. The Bank supervises the practices of financial service providers by reviewing product-related information (including fees and charges), conducting on-site reviews, telephone interviews, media surveillance as well as industry and consumer surveys. These activities enable the Bank to identify and respond in a timely manner to emerging market practices that undermine public confidence in the market for retail financial services.

In an effort to improve the service standard levels of the financial services industry, the Bank's market conduct supervisory activities in 2007 focused on assessing the practices of financial service providers, in relation to public access to financial services and information, and assistance to consumers. The relevant financial institutions have taken corrective actions to address the market conduct deficiencies identified by the Bank, which had resulted in improvements in the industry's overall observance of fair market conduct practices.

The Bank also reviews advertisements and special promotions by financial institutions published in major newspapers, websites and brochures to ensure fair and transparent terms and conditions. As a result of these reviews, 11 incidents of advertisements and promotions which failed to adequately disclose information on fees and charges as well as essential product features were modified or withdrawn by the financial institutions concerned at the Bank's direction.

REGULATION OF INSURANCE AND TAKAFUL INTERMEDIARIES

With nearly two-thirds of insurance and takaful business distributed through intermediaries, including agents, the regulation of insurance and takaful intermediaries remained an important part of efforts by the Bank to promote sound market conduct practices in the insurance and takaful sectors. As at end-2007, a total of 82 insurance and takaful intermediaries were regulated by Bank Negara Malaysia.

Table 5.1
Insurance and Takaful Intermediaries as at end 2007

Licensees	Number of licensees
Insurance Act 1996	
Insurance brokers	34
Adjusters	37
Financial advisers	7
Takaful Act 1984	
Takaful brokers	30[1]
Takaful adjusters	36[2]

Reference
[1] Twenty six of these takaful brokers are also insurance brokers licensed under the Insurance Act 1996.
[2] These takaful adjusters are also adjusters licensed under the Insurance Act 1996.

During the year, initiatives to promote high standards of market conduct and professionalism among insurance and takaful intermediaries were mainly led by the industry associations with the support of the Bank. To instil greater market discipline and improve customer service standards in the general insurance industry, the Malaysian Insurance and Takaful Brokers Association, the General Insurance Association of Malaysia and the Malaysian Takaful Association have jointly developed the Best Practices Framework for brokers, insurers and takaful operators. The framework which came into effect in July 2007, is an industry effort aimed at further improving the general insurance premiums settlement practices by facilitating the reconciliation of accounts as well as payments of premiums and commissions between brokers and insurers or takaful operators. It also provides for the more effective enforcement of premium warranty conditions for certain non-motor classes of insurance and takaful, thereby reducing risks borne by insurers and takaful operators for policies on which premiums have not been received.

The proposed adoption of the Inter-Takaful Operators Agreement (ITA) by the takaful operators will further enhance the level of professionalism in the takaful industry. The ITA governs the conduct of takaful practitioners and intermediaries and provides for the establishment of a centralised mechanism for the registration of takaful intermediaries, enforcement mechanisms and a disciplinary framework to ensure compliance by its members. The implementation of the ITA will promote orderly conduct and ensure more consistent market practices among takaful operators while promoting a level playing field between insurance and takaful players in the industry.

Greater convergence and efficiency in the regulatory framework for insurance intermediaries was also achieved with the signing of a Memorandum of Understanding (MoU) between Bank Negara Malaysia (which regulates financial advisers) and the Securities Commission (which regulates financial planners) in August 2007. In addition to providing for the mutual recognition between both licensing regimes through the harmonisation of licensing requirements, the MoU also introduces green-lane processes for financial advisers and financial planners licensed under the respective regimes to apply for licences under the other regime. The streamlined processes will enable such intermediaries to provide a more complete suite of financial solutions to meet consumer needs while minimising the regulatory burden of complying with both regulatory regimes.

MOVING FORWARD

The thrust of policy initiatives in 2008 will focus on strengthening the legislative framework to support a comprehensive and effective regulatory and supervisory market conduct regime. Relevant pieces of legislation would be amended to empower the Bank to prescribe and enforce standards of fair and equitable market practices in the banking and insurance industry.

The Bank also envisions a greater role for market discipline and self-regulation in ensuring sound market conduct practices in the industry in the near future. In this regard, the Bank will be working with the industry to consider possible options to achieve a workable self-regulatory regime. The Bank recognises that financial capability of consumers is a key cornerstone of such a regime, and that current investments and efforts undertaken by the Bank in this area are important to support the transition towards a self-regulation framework. The pace at which the industry transitions toward such a framework will also depend largely on the existence of a well functioning and effective infrastructure for enforcement by the industry. This requires financial institutions, individually and collectively, to take a longer-term view of sustainable performance by building confidence in, and a strong reputation for, the industry, as opposed to focusing only on shorter-term gains (e.g. through excessive and unjustified fees and charges or mis-selling to meet annual revenue targets).

The thrust of policy initiatives in 2008 will focus on strengthening the legislative framework to support a comprehensive and effective regulatory and supervisory market conduct regime.

A more efficient regulatory framework for intermediaries will also be considered to balance the cost of regulation with the risks that they pose to financial stability. This will be accompanied by continued efforts to strengthen the consumer protection framework with the introduction of an Ombudsman law that will provide consumers with an enhanced alternative avenue for redress in their dealings with financial service providers. In addition, the Bank will continue to address principles of fair market practices in all major aspects of financial dealings, including ensuring the protection of personal financial information, maintaining appropriate standards of disclosures, and ensuring that consumers receive the support and information needed, through financial education and proper advice, to enable them to make informed decisions. The Bank expects to intensify its market conduct surveillance activities in the coming year to ensure that these outcomes are achieved.

Payment Systems Report

Payment and Settlement Systems

Payment and Settlement Systems

The Bank's oversight responsibilities for the payment and settlement systems in the country are drawn from the Payment Systems Act 2003 (PSA). As payment systems are fundamental to the functioning of the economy, the Bank's oversight activities are directed towards ensuring the reliability of the major payment and settlement systems and mitigating risks in these systems. While the Bank's main focus is on systemic risk reduction, promoting an efficient payment and settlement infrastructure and efficiency in the provision of payment services are important considerations. Efforts to minimise risk are also balanced against considerations of costs, needs and practicality. This balance is important in promoting cost-effective and efficient payment services that would encourage the wider use of safe payment alternatives. Although the Bank's mandate pursuant to the PSA is to promote the reliable, efficient and smooth operation of the national payment and settlement systems, its scope extends beyond its statutory mandate. The Bank also assumes a central role not only in fostering payment innovations but also in facilitating and driving developments in the payment landscape to enhance the safety, security and efficiency of the payment systems. This includes sustaining public confidence in the retail payment systems and the use of payment instruments, and steering the national agenda of promoting the migration to electronic payments (e-payments).

Oversight activities are directed towards ensuring the reliability of the major payment and settlement systems and mitigating risks in these systems.

In 2007, the Bank focused its oversight efforts on further addressing systemic risk in the major payment systems, sustaining public confidence in the retail payment systems, and improving the overall efficiency of the payment system. Continuing its efforts in promoting the migration to e-payments, the Bank together with the payment industry collaborated towards enhancing the payment infrastructure, fostering the adoption of new technologies, and providing support to stakeholders in targeted sectors including the Government that has been identified as a prime mover in the nation's migration to e-payments.

MANAGING PAYMENT SYSTEM SAFETY AND STABILITY

The oversight activities undertaken by the Bank in 2007 were centred on containing systemic risks and reducing overall risks in the payment system. Guided by this, the Bank focused its oversight resources on the Real-time Electronic Transfer of Funds and Securities (RENTAS) system where large values of payments are settled and where the occurrence of risks would have the greatest impact on financial stability. More than 90% of total non-cash payments in 2007 valued at RM29.9 trillion were routed through RENTAS. On average, RENTAS handled RM124.5 billion in payment transactions daily in 2007, an increase of 23.6% compared to 2006.

As the operator of RENTAS, the Bank places great importance in ensuring its adherence to international best practices. In 2006, the Scripless Securities Trading System (SSTS) module of RENTAS was assessed against the Recommendations of the Committee on Payment and Settlement Systems (CPSS) and the Technical Committee of the International Organisation of Securities Commissions (IOSCO) for Securities Settlement Systems. The self-assessment concluded that the SSTS module of RENTAS achieved a high degree of observance of the Recommendations. Further details of this assessment are available in the Financial Stability and Payment Systems Report 2006. In 2007, a broader self-assessment was carried out on RENTAS and its operations [comprising the Interbank Funds Transfer System (IFTS), SSTS and RENTAS-USD CHATS] against the Bank for International Settlements (BIS) Core Principles for Systemically Important Payment Systems (CPSIPS), together with an assessment of the responsibilities of the Bank in applying the Core Principles.

Benchmarking Against BIS CPSIPS

The BIS core principles are used by many central banks as a benchmark in ensuring reliable and sound operations of systemically important payment systems (SIPS). The CPSIPS sets out ten core principles covering legal risks (Core Principle I), financial risks (Core Principle II to VI), operational risks (Core Principle VII), efficiency (Core Principle VIII), access criteria (Core Principle IX) and governance (Core Principle X). Overall, the self-assessment conducted in 2007 concluded that the RENTAS system continued to exhibit a high level of robustness and came close to fully observing the international standards. A summary of the CPSIPS requirements and RENTAS' observance of the principles is provided in the following box.

Core Principles and Central Bank Responsibilities for SIPS
(RENTAS' level of observance is indicated in parentheses)

CP I – *Legal basis (fully observed)*
The system should have a well-founded legal basis under all relevant jurisdictions.

CP II – *Understanding financial risks (broadly observed)*
The system's rules and procedures should enable participants to have a clear understanding of the system's impact on each of the financial risks they incur through participation in it.

CP III – *Management of financial risks (fully observed)*
The system should have clearly defined procedures for the management of credit risks and liquidity risks, which specify the respective responsibilities of the system operator and the participants and which provide appropriate incentives to manage and contain those risks.

CP IV – *Prompt final settlement (fully observed)*
The system should provide prompt final settlement on the day of value, preferably during the day and at a minimum, at the end of the day.

CP V – *Settlement in multilateral netting systems (not applicable as RENTAS is a real time gross settlement system)*
A system in which multilateral netting takes place should, at a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participant with the largest single settlement obligation.

CP VI – *Settlement assets (fully observed)*
Assets used for settlement should preferably be a claim on the central bank; where other assets are used, they should carry little or no credit risk and little or no liquidity risk.

CP VII – *Security and operational reliability (broadly observed)*
The system should ensure a high degree of security and operational reliability and should have contingency arrangements for timely completion of daily processing.

CP VIII – *Efficiency (broadly observed)*
The system should provide a means of making payments which is practical for its users and efficient for the economy.

CP IX – *Access criteria (fully observed)*
The system should have objective and publicly disclosed criteria for participation, which permit fair and open access.

CP X – *Governance (broadly observed)*
The system's governance arrangements should be effective, accountable and transparent.

Responsibilities of the Central Bank in Applying the Core Principles

Responsibility A – *Disclosure of objectives, role and major policies (broadly observed)*
The central bank should define clearly its payment system objectives and should disclose publicly its role and major policies with respect to systemically important payment systems.

Responsibility B – *Compliance of central bank systems (broadly observed)*
The central bank should ensure that the systems it operates comply with the Core Principles.

Responsibility C – *Oversight of non-central bank systems (not applicable)*
The central bank should oversee compliance with the Core Principles by systems it does not operate and it should have the ability to carry out this oversight.

Responsibility D – *Cooperation with other authorities (fully observed)*
The central bank, in promoting payment system safety and efficiency through the Core Principles, should cooperate with other central banks and with any other relevant domestic or foreign authorities.

Settlement Risk

Another focus of the Bank continues to be in the area of settlement risk. The introduction of the Payment versus Payment (PvP) infrastructure for the settlement of interbank ringgit/US dollar foreign exchange (FX) trades through RENTAS-USD CHATS in November 2006 has significantly reduced the settlement risk of FX transactions. The PvP link enables the simultaneous settlement of ringgit in Malaysia and US dollars in Hong Kong during Malaysian business hours, thereby eliminating FX settlement risk. In 2007, 59.8% of the total ringgit-US dollar FX trades and 61.6% of ringgit-US dollar transactions between participating members were settled through the link.

Leveraging on the PvP infrastructure, in October 2007, the Bank introduced the Delivery versus Payment (DvP) settlement service for US dollar securities that are issued, deposited and traded in Malaysia. With the implementation of DvP, the delivery of the Malaysian-issued US dollar securities that are deposited with RENTAS will be made simultaneously with its corresponding US dollar payment, thus eliminating the settlement risk associated with the trading of such securities in Malaysia.

Cooperative Oversight with the Hong Kong Monetary Authority

To mitigate systemic risk associated with the cross-border link between RENTAS and the USD CHATS in Hong Kong, a cooperative oversight arrangement between Bank Negara Malaysia, as the overseer of RENTAS, and the Hong Kong Monetary Authority (HKMA), as the overseer of USD CHATS, was established. Based on the principles of confidentiality and reciprocity for information exchanged between the Bank and the HKMA, both regulatory agencies have established points of contact and procedures for the oversight activities of the link. This cooperative arrangement also includes business continuity plans for the PvP and DvP links of RENTAS-USD CHATS.

Operational Risk and Business Continuity Management

The RENTAS system did not encounter any major disruptions during the year. Nonetheless, the Bank continued to ensure that operational risks in RENTAS are adequately addressed, thereby preventing systemic disruptions to the operations of financial markets. In this respect, the Bank strives to ensure that the design and operation of RENTAS meet an appropriately high standard of availability and resilience. As RENTAS is part of a complex IT infrastructure with numerous interfaces, components and sub-systems interlinked with each other, a glitch in any of the systems or sub-systems could potentially adversely affect RENTAS operations. The likelihood and severity of operational problems will depend on the resilience of the infrastructure for these systems and the adequacy of their back-up arrangements. The Bank, in its efforts to mitigate risk from key dependencies of RENTAS on other systems, has enhanced further its business continuity management to ensure that there will be minimal disruption in the operations when faced with the wide range of contingencies.

RENTAS did not encounter any major disruptions during the year. The Bank's efforts are directed towards ensuring that the design and operation of RENTAS meet an appropriately high standard of availability and resilience.

As part of the Bank's continuous efforts to ensure the reliability and uninterrupted availability of the RENTAS system, particularly at the RENTAS Disaster Recovery Centre (DRC) sites, the Bank successfully conducted an industry-wide Disaster Recovery (DR) live run operation in June 2007. While RENTAS members are required to conduct live runs from their DR sites at least four times a year to test the state of readiness of their DR sites, it is important that such testing should not only be conducted by members in isolation. Testing of business continuity arrangements on a coordinated basis involving the user community serves to reinforce the robustness and resilience of the systemically important payment system. In addition, the Bank has introduced a second level back-up facility to RENTAS members which may be activated only in the event that both their production and DRC sites are down.

Enterprise Public Key Infrastructure

Public Key Infrastructure (PKI) technology has been employed by the Bank since 1999 to ensure the confidentiality and non-repudiation of RENTAS transactions, and to control access to the system. The Bank currently acts as the restricted certification authority for the issuance of digital certificates to RENTAS members. However, in keeping with the technological developments and to meet business needs, the Bank had, in 2007, initiated work to replace the existing PKI technology with a new system that will relieve the Bank of its role as the restricted certification authority. When fully implemented in 2008, RENTAS members will obtain digital certificates from the licensed public certification authorities in the country. The implementation of the new security system will contribute towards addressing new security threats and risks, thereby effectively maintaining the confidentiality, data integrity, authenticity and non-repudiation of daily RENTAS transactions. The new security system will also be adopted for the Cheque Truncation and Conversion System.

Optimising Liquidity Management for the RENTAS System

While the RENTAS system has achieved its objective of mitigating settlement risk by providing participants with a means of settling payment obligations in real time with finality, the settlement of payment transactions on a gross basis imposes liquidity costs on participants.

The addition of new financial products settled through RENTAS, accompanied by a more active interbank bond market as well as growth in economic activities, have resulted in an increase in the value of RENTAS transactions and thus, higher liquidity requirements. In 2007, the volume and value of RENTAS transactions rose by 19.5% and 19.6% respectively. In addressing the associated increase in liquidity costs faced by RENTAS participants, enhancements to improve the efficiency in liquidity management of the RENTAS system will be undertaken. This will be achieved through the implementation of a combination of gross, bilateral and multilateral netting settlements that leverages on the real time gross settlement system for making immediate payments, and the deferred net settlement system for continuous bilateral and/or multilateral netting of payments. The availability of intraday credit facilities throughout the operating hours of the system will also be introduced. These enhancements will facilitate the continuous settlement of interbank transactions with lower liquidity requirements, hence enabling more efficient liquidity management by RENTAS participants without increasing settlement risk.

Preserving Public Confidence in Retail Payment Systems and Payment Instruments

While the Bank's oversight of payment systems focuses mainly on the operational performance of RENTAS, ensuring the robustness of the retail payment system is also important to promote public confidence. In this regard, initiatives and measures to ensure system availability, reliability and efficiency were instituted by Malaysian Electronic Payment System (1997) Sdn. Bhd. (MEPS), the major retail payment system operator and Rangkaian Segar Sdn. Bhd., the system operator and issuer of the Touch 'n Go card. No major disruptions were experienced during the year.

In addition, as part of its business continuity management, MEPS successfully conducted two DR exercises on "live" run mode for three of its core services, namely the Shared ATM Network, Electronic Debit at Point-of-Sale (e-Debit) and Interbank GIRO (IBG). The exercises also served to familiarise the MEPS Disaster Recovery team, financial institutions and related service providers with the disaster recovery process. Such DR exercises will continue to take place on a routine basis, thus minimising operational risk in these retail payment systems.

Chart 6.1
Credit Card Fraud

Managing Fraud Risks in Retail Payments

Promoting a safe and reliable payment environment in the country has become more challenging with the increasing sophistication of fraud techniques, brought about by rapid technological advancements. Nevertheless, proactive measures undertaken in collaboration with the industry and relevant authorities have successfully mitigated these risks, hence sustaining public confidence in the use of payment instruments.

Payment Cards

The successful migration to the Europay-MasterCard-Visa (EMV) standard for credit cards in 2005, led to a significant reduction in the number of cases and amount of losses associated with credit card fraud from counterfeiting activities (Chart 6.1). The EMV has also effectively disabled the use of cloned domestic credit cards for purchases in the country. However, other types of credit card fraud increased slightly in 2007, mainly associated with lost and stolen cards as well as card-not-present (CNP) transactions that do not require the presence of physical cards, e.g. for purchases made over the Internet or mail/ telephone orders. Cases of the fraudulent use of counterfeited Malaysian cards in countries that have yet to adopt the EMV standard also contributed to the increase. Nevertheless, credit card fraud remained insignificant, accounting for less than 0.04% of total credit card transactions during the year.

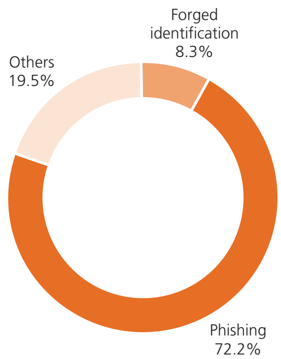
To combat credit card fraud, the Bank conducts regular dialogues with the National Cards Group, whose members consist of all credit card issuers, and works closely with the industry to consider new mitigation measures. During the year, more credit card issuers adopted the 3D secure scheme that requires cardholders to complete an additional verification process when purchasing over the Internet to further minimise the risk of fraud. The Bank also continued to conduct awareness programmes to educate cardholders on the importance of safeguarding their credit cards and credit card information.

The Malaysian Risk Management Task Force (MRMTF), whose members include credit and charge card companies, issuers and acquirers, the Royal Malaysia Police and Bank Negara Malaysia, continued to provide an important platform for cooperation among its members to prevent fraud. The MRMTF also participates in the South East Asia (SEA) Cross-Border meetings, held annually to discuss cross-border issues relating to credit card fraud, and share information on fraud experiences in individual countries as well as emerging fraud trends and threats.

Internet Banking

Losses emanating from Internet banking fraud have been negligible, accounting for only 0.0002% of the total value of Internet banking transactions in 2007. Social engineering techniques such as phishing remained the most common method employed to conduct Internet banking fraud. Phishing involves the sending of fake e-mail messages purportedly from the financial institutions to lure recipients into

Chart 6.2
Internet Banking Fraud Cases in 2007



divulging personal information such as personal identification numbers (PINs) and passwords, resulting in identity theft. About 70% of the Internet banking fraud cases reported during the year involved phishing. Banking institutions have therefore taken various measures to strengthen the safety of Internet banking services, including extensive consumer awareness programmes. All banking institutions have also implemented the two-factor authentication for Internet banking transactions as well as fraud warning systems to detect and report suspicious transactions.

Notwithstanding the low incidence of Internet banking fraud, the Bank continues to constantly monitor trends and developments and undertake the necessary measures to mitigate any potential new risks, vulnerabilities and threats that may emerge. In this regard, the Bank will be issuing a guideline on electronic banking which will outline the minimum requirements on risk management for all forms of electronic banking, whether conducted through the Internet, telephone, mobile phone or other electronic means.

PROMOTING GREATER EFFICIENCY IN THE PAYMENT SYSTEM

The Bank has a responsibility to promote improvements in the payment system to increase the overall efficiency of the payment system as well as to make payments more convenient and cost-effective for end-users. During the year, efforts by the Bank together with the payment industry were geared towards enhancing the payment infrastructure to provide a wider array of payment channels and services, fostering the adoption of new technologies in promoting payment innovations and providing support for the migration to e-payments.

Efforts were geared towards enhancing the payment infrastructure, fostering the adoption of new technologies and providing support for the migration to e-payments.

Enhancing the Efficiency of Cheque Clearing and Settlements

Although the payment mode has shifted from cheques to more e-payments over the recent five years, in terms of transaction value, cheques still account for a significant portion of non-cash retail transactions, at 93% in 2007 compared to 97% in 2003. Hence, enhancing the efficiency of cheque clearing is still an important area of focus for the Bank in efforts to lower the cost of doing business.

In modernising the way cheques are processed and to pave the way towards the electronification of cheques, the Bank and the banking industry embarked on a major initiative to introduce a fully image-based cheque clearing process. The Cheque Truncation and Conversion System (CTCS), better known as eSPICK, is scheduled for implementation in May 2008, initially in Kuala Lumpur and neighbouring towns. It will thereafter be extended, in phases, to the rest of the country by early-2009. eSPICK allows the clearing of cheques to be done through truncation or conversion modes, hence eliminating the physical movement of cheques once deposited at the collecting banks. In cheque truncation, both the image of the cheque and the magnetic ink character recognition (MICR) code line data are captured and transmitted electronically throughout the cheque clearing process; while in cheque conversion, only the MICR code line data is captured and converted into a payment instruction to effect the transfer of funds from the drawer's account into the drawee's account. Both modes would reduce the risks and costs associated with the physical handling of cheques and improve the efficiency of the entire cheque clearing process. The payment and receipt of funds by customers would be expedited with customers receiving funds on the next business day, regardless of where the cheque is deposited, compared to between two to eight business days currently.

While eSPICK may be perceived to be inconsistent with the agenda to actively promote the migration to e-payments, the experience in the United States has shown that cheque conversion is a necessary prelude to transforming such paper-based payment modes into e-payments. In 2006, almost 3 billion cheques issued by individuals, or 9.1% of total cheques issued in the United States were converted and cleared as e-payments, an eightfold increase from 2003. More than 10% of the increase recorded in e-payments during the three-year period was attributed to cheque conversions. The conversion of these cheque payments into e-payments has translated into considerable cost savings for businesses from the elimination of costs associated with the physical handling and transportation of cheques. Similarly in Malaysia, businesses that receive high volumes of cheque payments from their customers such as utility and telecommunication companies as well as insurers, can utilise the cheque conversion feature under eSPICK to collect payments.

Enhancing Product Delivery and Services over the ATM Network

Leveraging on the wide outreach of the ATM network in providing convenient and efficient payment services to its member institutions' growing customer base, MEPS enhanced its ATM network in July 2007 to allow members to provide 24-hour banking services to improve customer convenience. Five members have since offered the 24-hour ATM facility.

MEPS further enhanced the functionality of the domestic shared ATM network to introduce facilities for mobile phone users to top-up their prepaid accounts with effect from January 2007. This complements existing Internet banking and mobile banking channels offered by the banks that also provide such facilities, thus increasing channel options for banking customers to perform mobile prepaid top-ups. The facility, which is now available at over 1,000 ATMs of four participating banking institutions, has recorded 62,687 transactions valued at RM1.1 million up to the end of 2007.

Following the encouraging response to the provision of interbank funds transfer services via the ATM network, three more banking institutions have since offered the service. This brings the total number of banking institutions providing this service to five, with about 4,000 ATMs combined nationwide. There were 151,242 interbank funds transfer transactions amounting to RM125.2 million made via the ATM channel in 2007.

With Malaysia receiving an increasing number of tourists from China, MEPS entered into a strategic partnership with China UnionPay (CUP) in September 2007 to enable CUP cardholders from China to benefit from the convenience of performing cash withdrawals at the ATMs in Malaysia. By end-2007, over 5,000 cash withdrawal transactions valued at RM4 million were performed at the ATMs of the three participating banks in Malaysia. MEPS would be including more banking institutions in 2008, while expanding the service to allow Malaysian ATM cardholders to perform cash withdrawals in China. Similar strategic partnerships have already been established by MEPS with ATM service providers in Indonesia, Thailand and Singapore. Cash withdrawals made at Malaysian ATMs in 2007 by cardholders from these three countries increased eightfold from the previous year to RM24.4 million.

Fostering Payment Innovation and Adoption of New Technologies

The liberalised e-money and remittance access policies coupled with the innovations in mobile telephony, have also presented opportunities to enable e-money transfers over mobile networks as a new method for remittance. Given the potential of mobile-based remittances due to the sizeable population of foreign workers and the high level of mobile phone penetration in Malaysia, several mobile remittance services were introduced during the year. This included the world's first international mobile-to-mobile money transfer service between a Malaysian mobile operator and a Philippines telecommunications operator that allows subscribers in Malaysia to instantly remit up to the value of RM500 per transaction at a competitive rate of RM5.15 per transaction [including the short messaging service (SMS) cost of 15 sen] to their beneficiaries in the Philippines using mobile phones. The Malaysian mobile operator has since extended its reach to Indonesia, allowing its subscribers to send money via SMS to Indonesian bank accounts. The volume and value of transactions made using this service for the seven months since it was launched in May 2007 was 355 transactions valued at RM69,075, comprising mainly remittances to Indonesia.

Liberalised policies facilitated the introduction of innovative remittance products including the world's first international mobile-to-mobile money transfer service.

Another product launched during the year was a global mobile remittance service using the mobile phone following a tie-up between another Malaysian mobile operator and a banking institution which currently offers remittance services to Bangladesh, Indonesia and the Philippines. Customers of the mobile operator can remit up to RM5,000 per transaction to the three countries via SMS or over-the-counter at the participating mobile operator outlets. The services offer multiple payment delivery options including the depositing of funds into accounts of banking institutions in the receiving country or the collection of cash at designated agents in the three countries.

The year also saw a non-bank launch an international prepaid card that offers remittances, person-to-person funds transfers, bill payments and mobile reloads. Customers would also be able to use the card to withdraw cash from selected ATMs and make payments at more than 140,000 merchant outlets nationwide.

These mobile international remittance services, leveraging on the familiarity with the use of SMS, provide a convenient platform for foreign workers in Malaysia to send money back home. Remittances can be made at more affordable rates and at the speed of a text message from any location at any time. In addition, the emergence of these mobile remittance services has created a unique opportunity for the banking institutions to strengthen their customer relationships, while expanding the reach of banking services to the unbanked segment over the mobile network.

Collaboration with the Government Sector

During the year, the Bank continued with the active partnership entered into with the Government in facilitating the further deployment of e-payments in the economy. This included obtaining the support of the Government to expedite the widespread deployment of high-speed and reliable broadband Internet services which would spur further growth in Internet banking services and innovations that leverage on Internet technology. The announcement of tax incentives relating to broadband services and the formation of the Cabinet Committee on Broadband in 2007 will provide the impetus to achieve the two inter-related objectives of increasing broadband penetration and the use of the Internet for banking and payment related activities.

As part of the Government's ongoing efforts to improve its delivery of public services, the *myGovernment* portal was launched in December 2005. The portal which enables the public to have direct access to a comprehensive range of online services, was enhanced to offer online payment services in April 2007. This includes the acceptance of credit cards as well as payments made from banking accounts via the Financial Process Exchange (FPX) system. The online payment facility is currently offered by the Companies Commission of Malaysia for payments associated with electronic lodgements of company and business statutory documents, and by the National Higher Education Fund Corporation for the repayment of education loans. The Inland Revenue Board Malaysia has also offered FPX as an online payment mode to the public to complement its e-filing services.

Apart from promoting more payment transactions via the Internet channel, the Bank is also engaging the various Government agencies that receive substantial amounts of cash and cheque payments over-the-counter to accept payment cards. In this regard, several Government agencies namely the Immigration Department of Malaysia, National Registration Department, Road Transport Department (RTD) and the Royal Malaysia Police, Government hospitals and some local councils have begun accepting credit card and Bankcard. Another initiative underway is to enhance the JPJ eINSURANS system implemented jointly by the insurance industry and the RTD in January 2005 to incorporate e-payments. This would build upon the successful adoption of the JPJ eINSURANS system, which facilitates the online transmission of motor insurance details to the RTD for the purpose of road tax renewal, thus eliminating the usage of physical cover notes.

In 2007, the Bank collaborated with the Accountant General's Department and banking institutions to put in place the necessary processes for the reconciliation for payments and collections made by the Government through the RENTAS and IBG systems. Significant efficiency gains for the Government and payment recipients are expected to be derived from the adoption of these e-payment systems, including enhanced operational efficiency and productivity through the reduction or redeployment of resources, and cost savings from less cash handling and speedier payments and receipts.

Significant efficiency gains for the Government and payment recipients are expected to be derived from the adoption of e-payment systems.

These efforts have resulted in the increased use of e-payments in place of cash and cheques. The volume of Government payments via electronic channels has increased ninefold from 699,463 transactions in 2004 to 7,033,891 transactions in 2007, while the value of transactions increased almost threefold from RM16.7 billion in 2004 to RM64.9 billion in 2007.

Positioning Bankcard to Accelerate Migration to Electronic Payments

MEPS and banking institutions are taking advantage of the opportunities presented by the large number of 21.9 million Bankcards in circulation and payment terminals at merchants in promoting cashless payments. Bankcard is the ATM card issued by domestic banking institutions which also serves as a debit card. During the year, MEPS and banking institutions initiated steps to actively position the Bankcard as a convenient substitute for cash and as a more cost efficient payment instrument. Building on the e-Debit application that MEPS had launched in 2003,

Chart 6.3
Trend of Government Payments by Volume

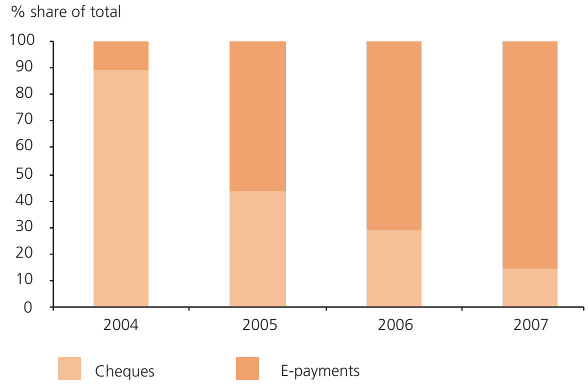
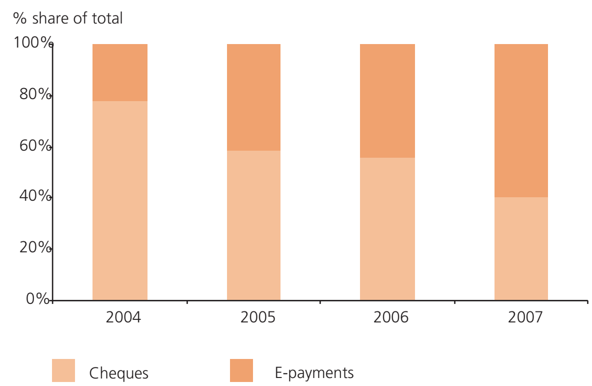


Chart 6.4
Trend of Government Payments by Value



efforts undertaken during the year included incorporating Bankcard as a payment option in the credit card terminals. The number of payment terminals accepting Bankcard increased from around 21,600 as at end-2006 to over 34,000 terminals as at end-2007. By the end of 2008, the number of terminals is expected to increase further to 50,000. With the infrastructure in place for the wider acceptance of the Bankcard, focus was shifted towards raising awareness of the Bankcard. Advertisements were placed in the media and more coverage on the Bankcard was provided on the websites of issuing banking institutions.

Bankcard offers an attractive value proposition to the merchants. Businesses and shops that receive cash payments have to incur high costs such as security and insurance to address the risk of theft, robbery and human error as well as time involved in balancing cash registers and in collecting and delivering cash to the banking institutions. With Bankcard, payments are credited directly into the merchant's account and the payment for purchases is guaranteed as the cardholder's account is verified for sufficient funds before payment is authorised. In addition, merchants enjoy lower merchant fees for Bankcard compared with credit cards. For consumers, Bankcard is as good as cash in the wallet, with added security features such as PINs that provide protection against theft and fraud.

Steps were taken to actively position the Bankcard as a convenient substitute for cash and as a more cost efficient payment instrument.

In 2008, greater attention would be directed at promoting the adoption of the Bankcard at Government counters as well as petrol stations. In developed economies such as Europe and the United States, debit cards are preferred over credit cards and the reasons cited for the preference include speed, convenience and security. With the necessary infrastructure in place and support from industry players, the potential for Malaysia to move in the same direction is enormous. The increasing preference for debit cards over credit cards would inculcate greater financial discipline as the expenditure of debit cardholders is limited to the amount available in their savings or current accounts.

Trends in Migration to Electronic Payments

Table 6.1
Cash Holdings and Non-Cash Transactions

	2003	2004	2005	2006	2007
CIC per capita (RM)	1,030.9	1,106.6	1,144.0	1,245.6	1,322.1
CIC-to-GDP (%)	6.2	6.0	5.8	5.9	5.7
Number of cheques issued per capita	7.7	7.7	7.6	7.5	7.7
Number of e-payment transactions per capita	13.8	17.6	21.6	28.0	32.5
Average value of ATM withdrawals (RM)	400.1	407.2	428.1	460.9	463.3

Note: E-payment refers to credit card, charge card, debit card, e-money, IBG and FPX

The role of cash in the economy exhibited a similar trend in 2007 with the cash in circulation (CIC)-to-GDP ratio declining while CIC per capita increased slightly. ATM withdrawals were sustained at about the same level. While cash is still viewed by many consumers as the cheapest and most convenient form of payment, the increasing availability and use of payment alternatives have affected how payments are being made. Many payments traditionally made by cash and cheques, are now being made electronically with plastic cards or through electronic channels. This is demonstrated by the increase in the number of e-payment transactions made per capita to 32.5 transactions in 2007 as compared to 13.8 in 2003.

Overall, the number of transactions for all e-payment channels and modes registered increases in 2007. The increase was most evident in the usage of payment cards, mainly in the form of e-money. E-money accounted for nearly half of the e-payment transaction volume, which was mainly attributable to the ease and convenience of using the Touch 'n Go card for payments in the

Chart 6.5
Share of Non-Cash Retail Payments by Volume

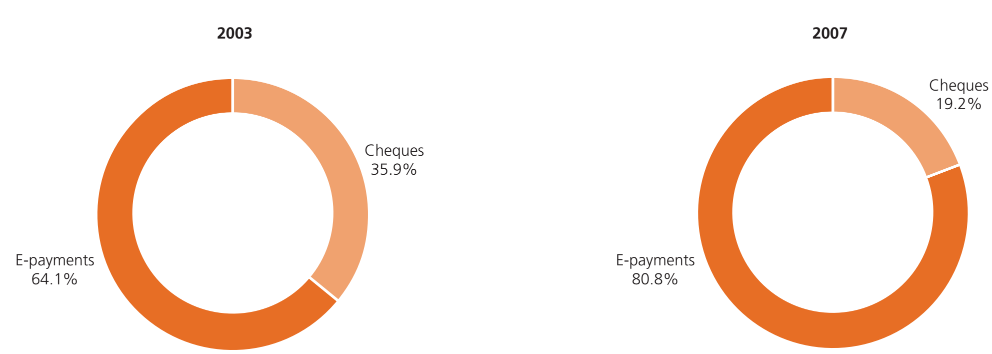


Chart 6.6
Share of Non-Cash Retail Payments by Value

transportation sector. Following rapid growth in the use of the Touch 'n Go card and its popularity as a means to pay toll charges on the nation's highways, the usage of the card is expected to be extended to the retail sector in the near future. In 2007, there were 237.6 million credit card transactions valued at RM56.2 billion, an increase of 13.8% and 18.2% respectively from the previous year.

The contactless credit cards, Visa Wave and MasterCard PayPass, have also gained popularity in 2007. There are currently eight issuers offering these contactless cards, which can be used at more than 7,000 merchant outlets in the country. Debit cards registered an exponential growth of 114% and 81% in terms of volume and value respectively in 2007. The notable progress made in debit card transactions was spurred by the growing acceptance of the public and the increasing use of the debit card instead of cash for payment of petrol purchases. The trend is expected to continue with the intensified efforts by the banking industry to deploy Bankcard terminals at merchants as well as conduct awareness and promotion programmes. Meanwhile, charge card transactions remained negligible accounting for only 0.5% of non-cash transactions in 2007.

Notable growth was also recorded in other e-payment channels such as the IBG, FPX, Internet banking and mobile banking during the year.

- The IBG continued to grow at a rapid double-digit rate, increasing by 42.6% in terms of volume and 46.3% in terms of value respectively. The increase was mainly attributed to the participation of three additional banking institutions in 2007, its encouraging usage in the Government sector and the aggressive recruitment of corporate clients to adopt IBG.

Chart 6.7
Trend of Non-Cash Retail Payments by Volume

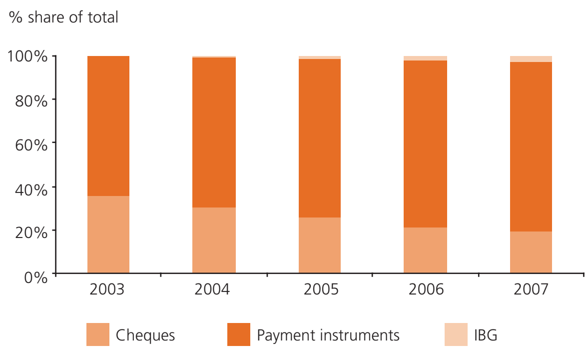
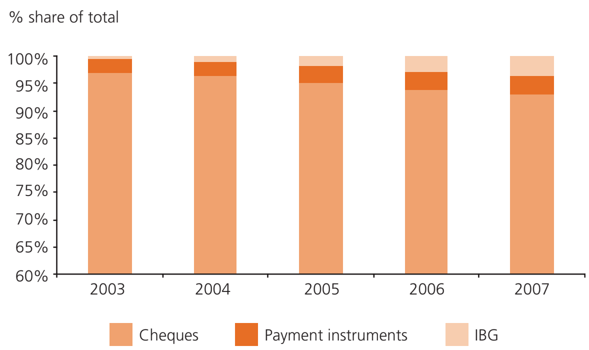
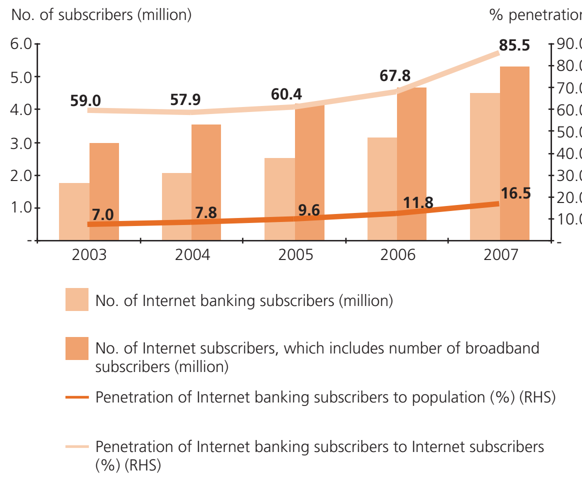


Chart 6.8
Trend of Non-Cash Retail Payments by Value



- Usage of the FPX in 2007 was also very encouraging, attributed to active merchant recruitment and recurring payments such as insurance premiums and instalments. The number of transactions made using the FPX during the year was 71,220 compared to 15,829 in 2006, while in terms of value, RM454.5 million was transacted against only RM25 million in the previous year.
- Internet banking continued to register strong growth in 2007. Internet banking subscribers-to-Internet subscriber penetration surged from 67.8% as at end-2006 to 85.5% as at end-2007 reflecting the increasing popularity of Internet banking services among Internet users. This also contributed to the increase in volume and value of transactions by 45.3% and 70% respectively in 2007. The Internet banking facilities have been used extensively for salary and bill payments, third party funds transfers and payment of credit card balances by subscribers.
- Mobile banking subscribers increased by 40.1% from the previous year, accounting for 1.5% of mobile phone subscribers and 1.3% of the population as at the end of 2007. More than half (51.7%) of the total value of transactions were to prepaid top-ups, followed by bill payments via funds transfers (24.2%) and own account fund transfers (24.2%).

Chart 6.9
Internet Banking Growth and Penetration



Roadmap for Migration to Electronic Payments

Following a consultative process with stakeholders in the payment sector, comprising the banking institutions and insurers, payment system operators and issuers, telecommunication companies and relevant Government agencies as well as views received from the National Payments Advisory Council members, the Bank finalised the Roadmap for migration to e-payments in 2007. The Roadmap seeks to align the strategies of key stakeholders, while investing the resources necessary to pursue the national agenda of accelerating migration to e-payments in a comprehensive and coordinated manner. Towards this end, the Roadmap seeks to bring together relevant stakeholders to remove the barriers currently impeding the greater adoption of e-payments.

Focusing on the main thrusts of safety, efficiency and public interest, the Roadmap seeks to capitalise on the high number of banking accounts of over 40 million in the country and the significant investments made by the Government and the industry in expanding their services via the Internet and mobile channels. In encouraging the payment industry to take advantage of these opportunities to offer new payment instruments and improve existing products by offering more convenient and cheaper alternatives, efforts are also being directed towards creating a conducive environment that will foster innovation and experimentation in payment systems. Towards this end, the Bank will continue to enhance the policy framework in line with new developments and remove barriers impeding the entry of qualified players or introduction of products that would bring greater efficiency and innovation in the market. This is to be achieved without compromising the Bank's primary objective of maintaining the overall safety and reliability of the payment system. It is also in line with the Bank's move towards placing greater reliance on market discipline to complement supervisory oversight.

The Roadmap calls for further improvements to be made in the retail payment systems that are crucial to reduce the use of cash and cheques. There is considerable scope for these systems to widen their access to the general public, thereby accelerating the migration to e-payments and achieving greater financial inclusion. The Roadmap contains action plans that would encourage or facilitate the transition to e-payments, such as developing enabling solutions for users, and defining necessary common standards as well as those that have a direct bearing on the growth in e-payments. This includes encouraging more businesses to engage in electronic commerce or electronic banking.

Achievement of greater efficiency gains in the payment system will reduce the cost of doing business, thereby improving the competitiveness of the economy.

The Roadmap also addresses important issues such as the need to build consumer confidence, increase consumer awareness of e-payments and have in place adequate redress mechanisms. Users need to be able to make better-informed choices in adopting the most efficient or cost-effective means for payments. In this regard, banking institutions and payment providers need to collaborate and design pricing structures that would motivate payment behaviours in the desired direction. The achievement of greater efficiency gains in the payment system serves not only the interest of the participants in the payment industry, but also the general public as a whole by reducing the cost of doing business, thereby improving the competitiveness of the economy.

Periodic dialogues between the Bank and the relevant stakeholders will continue to be held to identify and address issues of efficiency and cost effectiveness in a balanced and strategic manner. The potential economic and efficiency gains from reducing the use of paper-based payments are large and could lead to significant and meaningful gains in enhancing Malaysia’s competitiveness.

While the transition to e-payments will be gradual and may span several years, the shift is important given the significant pay-offs derived for both the providers as well as users of e-payments, and for the overall economy. Efforts would be intensified to encourage the public to use e-payment methods, with more initiatives to be undertaken in the years to come in tandem with advancements in technology. Further efforts will also be made to leverage on the Internet and mobile phone as powerful and low-cost delivery channels for banking and payment services.

Annex

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General Insurance Busines

Takaful Sector

Family Takaful Business

General Takaful Business

Development Financial Institutions

Household Sector

Payment and Settlement Systems

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

	2003	2004	2005	2006	2007*p*
	RM million				
Sources of Funds					
Capital, reserves and profit	148,901.8	167,017.9	180,639.1	215,542.9	227,579.9
Currency	29,445.4	32,353.9	34,396.7	37,896.0	42,192.7
Demand deposits	92,117.8	124,333.4	135,944.1	141,864.3	166,070.3
Other deposits[1] (of which)	617,286.6	711,307.5	787,169.3	936,089.0	981,070.5
Banking and financial institutions	*161,311.5*	*197,022.6*	*227,173.6*	*319,550.6*	*310,807.0*
Public sector	*40,563.0*	*38,809.9*	*44,415.0*	*34,176.8*	*37,810.1*
Private sector	*406,049.3*	*462,149.5*	*501,873.3*	*570,274.9*	*616,290.3*
Foreign	*9,362.8*	*13,325.4*	*13,707.4*	*12,086.7*	*16,163.1*
Borrowings	48,715.3	52,607.9	55,955.8	93,936.0	112,763.4
Funds from other financial institutions	87,571.5	71,717.6	84,238.8	79,121.0	122,726.0
Domestic[2]	*61,837.8*	*33,762.8*	*43,150.4*	*46,638.0*	*68,413.4*
Foreign	*25,733.6*	*37,954.7*	*41,088.4*	*32,483.0*	*54,312.6*
Insurance, provident and pension funds	305,657.0	337,937.6	373,645.1	425,637.3	486,219.2
Other liabilities	233,384.8	267,579.3	260,673.7	226,539.4	337,236.8
Total Liabilities	**1,563,080.0**	**1,764,855.0**	**1,912,662.6**	**2,156,625.9**	**2,475,858.7**
Uses of Funds					
Currency	5,573.8	5,058.3	6,057.3	6,531.3	8,980.1
Deposits with other financial institutions	226,303.7	247,947.3	259,429.4	347,383.6	468,844.4
Domestic	*211,075.6*	*214,355.2*	*232,385.7*	*299,065.4*	*379,938.9*
Foreign	*15,228.0*	*33,592.0*	*27,043.7*	*48,318.2*	*88,905.5*
Loans and advances	599,285.5	655,668.4	721,642.3	784,457.1	861,353.0
Banking and financial institutions	*24,295.3*	*24,382.2*	*22,449.5*	*55,863.5*	*61,555.2*
Public sector	*7,799.2*	*7,950.3*	*5,446.5*	*12,054.8*	*11,989.2*
Private sector	*564,850.9*	*620,712.1*	*691,258.2*	*713,482.6*	*781,751.7*
Foreign	*2,340.0*	*2,623.8*	*2,488.1*	*3,056.3*	*6,056.8*
Securities	409,488.6	433,071.0	472,883.8	599,508.3	661,178.1
Treasury bills	*3,539.4*	*445.2*	*1,698.4*	*1,687.1*	*1,969.8*
Commercial bills	*13,468.4*	*8,403.7*	*7,078.7*	*6,250.2*	*10,912.4*
Malaysian Government Securities (MGS)	*125,165.0*	*139,488.3*	*153,654.3*	*174,424.5*	*201,950.7*
Corporate	*254,197.9*	*271,630.7*	*291,606.4*	*297,301.0*	*355,849.7*
Private Debt Securities (PDS)	*122,237.8*	*130,213.0*	*140,405.4*	*135,384.5*	*175,065.1*
Equities	*131,960.1*	*141,417.7*	*151,201.0*	*161,916.5*	*180,784.6*
Foreign	*3,429.0*	*4,578.6*	*6,677.9*	*7,399.2*	*5,222.6*
Others	*9,688.7*	*8,524.5*	*12,168.0*	*112,446.3*	*85,273.0*
Gold and forex reserves	163,499.1	247,786.6	263,235.6	288,921.8	334,410.9
Other assets[3]	158,929.3	175,323.5	189,414.3	129,823.7	141,092.3
Total Assets	**1,563,080.0**	**1,764,855.0**	**1,912,662.6**	**2,156,625.9**	**2,475,858.7**

[1] Equals savings, fixed and other (NIF, LPHT, etc.) deposits + NIDs + repos
[2] Includes statutory reserves of banking institutions
[3] Effective 2006, portions of 'Other assets' have been re-classified
p Preliminary
Note: Numbers may not necessarily add up due to rounding

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

	For the calendar year		
	2005	2006	2007*p*
	RM million		
Interest income	43,659.6	52,134.5	59,742.2
Less: Interest expense	22,034.8	27,809.1	32,816.0
Net interest income	21,624.8	24,325.4	26,926.2
Add: Fee-based income	4,721.2	5,167.9	6,890.3
Less: Staff cost	6,280.0	7,509.5	8,503.8
Overheads	7,057.8	8,211.3	9,515.2
Gross operating profit	13,008.2	13,772.5	15,797.4
Less: Loan loss and other provisions	5,558.7	6,538.3	5,342.6
Gross operating profit after provision	7,449.6	7,234.2	10,454.9
Add: Other income	4,932.2	5,715.0	7,204.5
Pre-tax profit	**12,381.8**	**12,949.2**	**17,659.4**
Pre-tax profit/Average assets (%)	1.4	1.3	1.5
Pre-tax profit/Average shareholders' funds (%)	16.8	16.2	19.7
Pre-tax profit/Average employee (RM'000)	130.3	131.8	168.1
Cost incurred per ringgit of revenue earned (sen)	40.0	42.0	40.8
Cost incurred per ringgit of net interest income (sen)	61.7	64.6	66.9
Overheads to staff cost (%)	112.4	109.3	111.9
Staff cost per employee (RM'000)	65.3	74.8	77.5

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

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

	For the calendar year		
	2005	2006	2007*p*
	RM million		
Interest income	41,960.9	50,396.0	56,842.8
Less: Interest expense	20,768.9	26,486.7	30,587.7
Net interest income	21,192.0	23,909.3	26,255.1
Add: Fee-based income	4,367.0	4,885.7	5,592.8
Less: Staff cost	5,932.4	7,088.5	7,742.1
Overheads	6,876.9	7,926.3	8,560.7
Gross operating profit	12,749.8	13,780.2	15,545.1
Less: Loan loss and other provisions	5,444.7	6,339.3	5,495.9
Gross operating profit after provision	7,305.0	7,440.9	10,049.2
Add: Other income	3,790.3	4,642.2	5,600.5
Pre-tax profit	**11,095.3**	**12,083.1**	**15,649.7**
Pre-tax profit/Average assets (%)	1.3	1.2	1.4
Pre-tax profit/Average shareholders' funds (%)	16.2	16.4	19.2
Pre-tax profit/Average employee (RM'000)	120.1	126.9	157.4
Cost incurred per ringgit of revenue earned (sen)	40.9	42.2	40.4
Cost incurred per ringgit of net interest income (sen)	60.4	62.8	62.1
Overheads to staff cost (%)	115.9	111.8	110.6
Staff cost per employee (RM'000)	63.5	73.2	75.9

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

Table A.4
Investment Banks: Income and Expenditure

	For the calendar year		
	2005	2006	2007*p*
	RM million		
Interest income	1,698.7	1,738.5	2,899.5
Less: Interest expense	1,265.9	1,322.4	2,228.3
Net interest income	432.8	416.0	671.1
Add: Fee-based income	354.2	282.2	1,297.4
Less: Staff cost	347.6	421.0	761.7
Overheads	180.9	285.0	954.6
Gross operating profit	258.5	-7.7	252.3
Less: Loan loss and other provisions	113.9	199.0	-153.4
Gross operating profit after provision	144.5	-206.7	405.7
Add: Other income	1,141.9	1,072.8	1,604.0
Pre-tax profit	**1,286.5**	**866.2**	**2,009.7**
Pre-tax profit/Average assets (%)	2.9	1.5	2.7
Pre-tax profit/Average shareholders' funds (%)	23.2	13.8	24.7
Pre-tax profit/Average employee (RM'000)	484.1	281.8	357.5
Cost incurred per ringgit of revenue earned (sen)	25.6	37.6	44.9
Cost incurred per ringgit of net interest income (sen)	122.1	169.7	255.7
Overheads to staff cost (%)	52.0	67.7	125.3
Staff cost per employee (RM'000)	132.4	119.5	98.6

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

Table A.5
Islamic Banking System: Income and Expenditure

	For the calendar year		
	2005[1]	2006[1]	2007*p*
	RM million		
Income net of income-in-suspense	4,183.1	5,271.2	7,670.4
Less: Expense	1,639.8	2,418.9	3,506.3
Net income	2,543.3	2,852.3	4,164.1
Add: Fee income	232.7	297.7	461.2
Less: Staff cost	282.7	346.8	798.1
Overheads	468.5	812.7	1,320.6
Gross operating profit	2,024.8	1,990.4	2,506.7
Less: Financing loss and other provisions	652.5	575.3	1,104.8
Gross operating profit after provision	1,372.3	1,415.1	1,401.9
Add: Other income	170.3	197.2	414.5
Pre-tax profit	**1,542.6**	**1,612.3**	**1,816.4**
Pre-tax profit/Average assets (%)	1.9	1.6	1.4
Pre-tax profit/Average shareholders' funds (%)	24.0	18.7	16.6
Pre-tax profit/Average employee (RM'000)[2]	195.0	198.8	192.1
Cost incurred per ringgit of revenue earned (sen)	18.0	22.0	27.6
Cost incurred per ringgit of net income (sen)	29.5	40.7	50.9
Overheads to staff cost (%)	165.7	234.3	165.5
Staff cost per employee (RM'000)[2]	32.9	45.5	70.7

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

Table A.6
Banking System: Key Data

	As at end				
	2003	2004	2005	2006	2007
Number of institutions	46	41	43	42	47
Commercial banks[1]	*34*	*29*	*27*	*22*	*22*
Investment banks	*10*	*10*	*10*	*10*	*14*
Islamic banks	*2*	*2*	*6*	*10*	*11*
Office network	2,563	2,429	2,244	2,139	2,245
Commercial banks[1]	*2,414*	*2,276*	*2,072*	*1,952*	*1,968*
Investment banks	*17*	*17*	*19*	*19*	*120*
Islamic banks[2]	*132*	*136*	*766*	*1,167*	*1,271*
ATM network	4,396	4,708	4,892	5,238	6,210
Commercial banks[1]	*4,184*	*4,428*	*4,584*	*4,869*	*5,797*
Islamic banks	*212*	*280*	*308*	*369*	*413*
Number of banks with Internet services	12	13	13	13	15
Number of employees	90,844	93,948	96,106	100,414	109,699
Commercial banks[1]	*85,092*	*87,222*	*89,047*	*91,741*	*96,145*
Investment banks	*2,429*	*2,690*	*2,625*	*3,522*	*7,721*
Islamic banks	*3,323*	*4,036*	*4,434*	*5,151*	*5,833*

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

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

	As at end				
	2003	2004	2005	2006	2007*p*
	RM million				
Assets sold with recourse and commitments with drawdown	26,124.6	24,728.9	21,693.4	21,052.0	19,574.6
Credit extension commitments	180,149.3	204,293.3	228,723.2	258,026.1	303,862.7
Direct credit substitutes	14,795.5	14,713.9	16,026.4	16,404.2	19,424.7
Foreign exchange related contracts	101,477.0	175,269.0	161,030.2	212,377.6	368,769.5
Interest rate related contracts	124,496.6	163,101.1	252,488.9	552,340.1	642,812.1
Trade-related contingencies	20,507.2	23,851.7	21,049.1	20,767.3	17,756.9
Transaction-related contingencies	21,621.3	21,685.4	23,529.3	26,245.3	29,031.1
Underwriting obligations	1,868.4	1,522.9	1,605.7	1,310.4	2,282.7
Others	11,664.3	14,636.8	19,211.5	34,360.7	44,026.3
Total	**502,704.2**	**643,803.0**	**745,357.7**	**1,142,883.7**	**1,447,540.5**

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

Table A.8
Investment Banks: Commitments and Contingencies

	As at end				
	2003	2004	2005	2006	2007*p*
	RM million				
Assets sold with recourse and commitments with drawdown	1,595.2	2,493.7	2,418.3	2,968.0	2,049.9
Credit extension commitments	2,545.9	2,387.6	2,847.3	1,681.3	4,128.8
Direct credit substitutes	1,226.8	1,126.2	1,312.4	855.5	1,165.9
Foreign exchange related contracts	1,459.9	2,877.6	4,976.9	5,669.7	2,812.3
Interest rate related contracts	115,332.1	169,189.1	112,409.4	38,010.1	44,180.0
Trade-related contingencies	0.0	0.0	0.0	0.0	1.1
Transaction-related contingencies	818.2	676.6	1,794.5	1,304.5	806.7
Underwriting obligations	1,139.0	1,029.6	2,106.5	4,599.8	3,486.7
Others	55.4	44.6	506.2	7,950.4	26,943.7
Total	**124,172.6**	**179,825.0**	**128,371.5**	**63,039.2**	**85,575.0**

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

Table A.9
Life Insurance: Income and Outgo

Item	For the calendar year					
	2005		2006		2007*p*	
	RM million	%	RM million	%	RM million	%
Income						
Premium income	16,002.1	76.5	17,120.2	72.1	18,898.9	66.5
Net investment income	3,660.8	17.5	3,994.0	16.8	4,572.7	16.1
Profit on sale of assets and miscellaneous income	1,257.1	6.0	2,624.5	11.1	4,935.6	17.4
Total	20,920.0	100.0	23,738.7	100.0	28,407.2	100.0
Outgo						
Net policy benefits	6,268.7	30.0	7,311.1	30.8	9,653.9	34.0
Agency remuneration	2,504.6	12.0	2,453.7	10.3	2,566.6	9.0
Management expenses[1]	1,071.7	5.1	1,249.6	5.3	1,387.3	4.9
Loss on disposal of assets and other outgo	1,158.9	5.5	1,063.8	4.5	915.0	3.2
Total	11,003.9	52.6	12,078.2	50.9	14,522.8	51.1
Excess of income over outgo	9,916.1	47.4	11,660.5	49.1	13,884.4	48.9

[1] Inclusive of net bad and doubtful debts
p Preliminary
Note: Numbers may not necessarily add up due to rounding

Table A.10
General Insurance: Underwriting and Operating Results

Item	For the calendar year					
	2005		2006		2007*p*	
	RM million	% change	RM million	% change	RM million	% change
Underwriting profit	956.9	106.0	492.4	-48.5	39.2	-92.0
Investment income	641.2	8.0	697.8	8.8	758.6	8.7
Capital gains	106.7	-43.5	182.9	71.4	577.9	216.0
Other income	108.9	45.1	264.3	142.7	108.0	-59.1
Capital losses	87.6	365.5	86.5	-1.3	13.8	-84.0
Other outgo	191.1	53.4	112.8	-41.0	124.7	10.5
Operating profit	1,535.0	30.2	1,438.1	-6.3	1,345.2	-6.5

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

Table A.11
Family Takaful: Income and Outgo

Item	For the calendar year					
	2005		2006		2007*p*	
	RM million	%	RM million	%	RM million	%
Income						
Net contributions	977.1	79.6	1,242.3	77.6	1,975.8	83.6
Net investment income	192.3	15.7	232.0	14.5	284.5	12.0
Profit on sale of assets and miscellaneous income	57.7	4.7	126.5	7.9	104.3	4.4
Total	1,277.0	100.0	1,600.9	100.0	2,364.6	100.0
Outgo						
Net certificate benefits	347.2	28.3	400.8	25.0	534.2	22.6
Net commissions	93.0	7.6	129.4	8.1	186.6	7.9
Management expenses[1]	46.3	3.8	97.5	6.1	161.6	6.8
Loss on disposal of assets and other outgo	60.3	4.9	100.7	6.3	58.6	2.5
Total	546.8	44.6	728.5	45.5	941.0	39.8
Excess of income over outgo	680.3	55.4	872.4	54.5	1,423.6	60.2

[1] Inclusive of net bad and doubtful debts
p Preliminary
Note: Numbers may not necessarily add up due to rounding

Table A.12
General Takaful: Underwriting and Operating Results

Item	For the calendar year					
	2005		2006		2007*p*	
	RM million	% change	RM million	% change	RM million	% change
Underwriting profit[1]	169.6	50.1	43.9	-74.1	-25.4	-157.9
Investment income	19.6	33.2	32.3	64.2	44.6	38.3
Capital gains	3.2	52.0	3.8	18.1	10.3	171.3
Other income	5.8	94.3	19.2	228.9	8.6	-55.3
Capital losses	4.5	282.6	9.5	113.7	0.7	-92.8
Other outgo	13.9	-14.3	9.9	-29.0	11.0	11.8
Operating profit	179.9	55.9	79.8	-55.7	26.3	-67.0

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

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

	As at end				
	2003	2004	2005	2006	2007
	RM million				
Sources:					
Shareholders' funds	9,424.1	10,543.8	12,744.0	15,091.1	17,297.3
Paid-up capital	*7,192.3*	*7,862.3*	*8,563.4*	*10,296.7*	*10,341.8*
Reserves	*1,599.6*	*2,051.3*	*2,221.5*	*3,006.0*	*3,121.0*
Retained earnings	*632.2*	*630.2*	*1,959.1*	*1,788.4*	*3,834.5*
Deposits accepted	42,403.3	49,878.0	54,084.7	60,402.0	67,067.9
Borrowings	16,576.8	18,730.9	20,672.5	23,239.1	24,851.6
Government	*11,730.2*	*13,050.1*	*13,386.2*	*14,823.7*	*17,359.8*
Multilateral/International agencies	*3,158.5*	*4,044.2*	*4,103.2*	*4,050.7*	*2,755.4*
Others	*1,688.1*	*1,636.6*	*3,183.1*	*4,364.7*	*4,736.4*
Others	10,686.2	12,297.2	12,366.7	14,829.9	19,117.4
Total	**79,090.4**	**91,449.9**	**99,867.9**	**113,562.1**	**128,334.2**
Uses:					
Deposits placed	16,244.7	18,908.0	13,964.4	18,831.3	20,075.1
Investments	21,229.5	25,557.0	28,034.6	28,819.7	32,657.0
of which:					
Government securities	*2,950.8*	*2,629.3*	*4,489.2*	*4,617.7*	*4,759.0*
Shares	*6,778.1*	*8,256.0*	*8,370.5*	*8,005.6*	*6,825.0*
Quoted	*5,200.9*	*6,369.1*	*7,030.1*	*7,561.4*	*6,458.9*
Unquoted	*1,577.2*	*1,886.9*	*1,340.4*	*444.2*	*366.1*
Loans and advances	32,354.8	37,747.1	47,495.9	55,527.8	65,206.4
Fixed assets	3,707.5	4,057.7	4,205.3	4,449.7	4,726.4
Others	5,553.9	5,180.1	6,167.7	5,933.6	5,669.3
Total	**79,090.4**	**91,449.9**	**99,867.9**	**113,562.1**	**128,334.2**
Contingencies:					
Guarantee	3,661.6	3,949.0	4,341.0	5,365.7	5,952.6
Export credit insurance	123.3	308.6	380.5	348.8	659.4
Total	**3,784.9**	**4,257.6**	**4,721.5**	**5,714.5**	**6,612.0**

[1] Refers to Bank Pembangunan Malaysia Berhad, Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional, Export-Import Bank of Malaysia Berhad, Bank Pertanian Malaysia, 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. Prior to 1 October 2005, data include Bank Industri & Teknologi Malaysia Berhad and Malaysia Export Credit Insurance Berhad and exclude SME Bank

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

	As at end				
	2003	2004	2005	2006	2007
	RM million				
Sources:					
Shareholders' funds	5,359.4	6,178.1	8,398.1	10,484.2	11,278.6
Paid-up capital	*4,167.5*	*4,811.1*	*5,503.6*	*7,171.5*	*7,194.9*
Reserves	*964.1*	*1,339.4*	*1,479.9*	*2,207.7*	*2,322.6*
Retained earnings	*227.8*	*27.6*	*1,414.6*	*1,105.0*	*1,761.1*
Deposits accepted	30,762.7	37,278.5	40,225.5	45,098.7	50,450.3
Borrowings	12,347.7	14,586.9	16,437.2	18,729.1	19,948.4
Government	*9,039.8*	*10,438.2*	*12,201.1*	*13,758.7*	*16,079.7*
Multilateral/International agencies	*2,933.9*	*3,846.3*	*3,927.4*	*3,869.8*	*2,571.0*
Others	*374.0*	*302.4*	*308.7*	*1,100.6*	*1,297.7*
Others	8,403.7	9,730.3	9,550.1	11,343.1	15,207.6
Total	**56,873.5**	**67,773.8**	**74,610.9**	**85,655.1**	**96,884.9**
Uses:					
Deposits placed	11,383.5	12,949.5	8,204.7	12,713.4	11,150.8
Investments	12,970.7	15,868.1	18,634.9	17,500.6	20,829.5
of which:					
Government securities	*2,736.5*	*2,549.8*	*4,446.2*	*4,560.1*	*4,726.4*
Shares	*1,778.5*	*1,705.8*	*1,742.3*	*1,429.5*	*644.2*
Quoted	*1,664.7*	*1,616.7*	*1,625.7*	*1,325.5*	*569.0*
Unquoted	*113.8*	*89.1*	*116.6*	*104.1*	*75.2*
Loans and advances	28,072.3	33,472.5	43,374.9	50,961.4	60,402.2
Fixed assets	1,550.3	1,786.1	1,843.0	1,994.9	2,196.0
Others	2,896.7	3,697.6	2,553.4	2,484.8	2,306.4
Total	**56,873.5**	**67,773.8**	**74,610.9**	**85,655.1**	**96,884.9**
Contingencies:					
Guarantee	549.1	533.3	613.5	524.7	561.5
Export credit insurance	123.3	308.6	380.5	348.8	659.4
Total	**672.4**	**841.9**	**994.0**	**873.5**	**1,220.9**

[1] Refers to Bank Pembangunan Malaysia Berhad, Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional, Export-Import Bank of Malaysia Berhad, Bank Pertanian Malaysia and Bank Perusahaan Kecil & Sederhana Malaysia Berhad (SME Bank). Prior to 1 October 2005, data include Bank Industri & Teknologi Malaysia Berhad and Malaysia Export Credit Insurance Berhad and exclude SME Bank

[2] Development Financial Institutions Act 2002

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

	As at end				
	2003	2004	2005	2006	2007
	RM million				
Agriculture, forestry and fishery	2,874.0	3,261.3	3,359.1	3,575.7	3,968.5
Mining and quarrying	75.2	66.8	56.6	41.6	20.2
Manufacturing	3,952.0	4,126.2	4,474.3	4,655.7	5,698.0
Electricity, gas and water supply	617.1	1,228.9	2,253.0	2,920.9	3,477.8
Import and export, wholesale and retail trade, restaurants and hotels	250.4	698.8	643.3	761.2	1,030.9
Broad property sector	8,376.6	10,084.7	11,789.4	15,192.4	16,383.1
Construction	*4,009.4*	*4,186.6*	*5,246.6*	*7,057.1*	*7,548.6*
Purchase of residential property	*2,927.9*	*4,078.1*	*5,475.5*	*6,868.0*	*7,391.2*
Purchase of non-residential property	*441.1*	*463.9*	*429.6*	*545.8*	*614.0*
Real estate	*998.2*	*1,356.1*	*637.7*	*721.5*	*829.3*
Transport, storage and communication	4,433.7	4,665.2	5,837.1	6,281.1	5,509.1
Maritime	473.1	474.4	681.5	799.0	1,834.5
Finance, insurance and business services	1,694.7	984.2	766.1	877.4	1,037.8
Consumption credit	8,066.5	9,896.5	14,074.3	17,435.8	23,158.9
of which:					
Purchase of motor vehicles	*800.2*	*1,104.8*	*1,508.2*	*2,168.8*	*2,375.8*
Credit card	*23.7*	*24.3*	*32.6*	*50.4*	*86.7*
Purchase of securities	136.2	103.4	214.1	189.9	66.0
Others	1,405.3	2,156.7	3,347.1	2,797.1	3,021.6
Total	**32,354.8**	**37,747.1**	**47,495.9**	**55,527.8**	**65,206.4**

[1] Refers to Bank Pembangunan Malaysia Berhad, Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional, Export-Import Bank of Malaysia Berhad, Bank Pertanian Malaysia, 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. Prior to 1 October 2005, data include Bank Industri & Teknologi Malaysia Berhad and exclude SME Bank

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

	As at end				
	2003	2004	2005	2006	2007
	RM million				
Agriculture, forestry and fishery	2,749.1	3,148.3	3,239.5	3,513.7	3,865.0
Mining and quarrying	58.8	49.1	35.5	19.9	14.2
Manufacturing	2,675.3	2,872.2	3,254.5	3,422.1	4,486.1
Electricity, gas and water supply	617.1	1,228.9	2,251.6	2,919.7	3,476.8
Import and export, wholesale and retail trade, restaurants and hotels	151.5	260.7	356.8	502.2	780.9
Broad property sector	7,371.4	8,933.1	10,580.9	13,709.2	14,800.8
Construction	*3,842.0*	*3,973.7*	*4,908.8*	*6,566.4*	*7,036.1*
Purchase of residential property	*2,629.3*	*3,797.0*	*5,195.4*	*6,582.3*	*7,119.8*
Purchase of non-residential property	*438.8*	*461.2*	*429.1*	*480.8*	*561.3*
Real estate	*461.3*	*701.2*	*47.6*	*79.7*	*83.6*
Transport, storage and communication	4,390.0	4,615.0	5,778.3	6,200.0	5,433.8
Maritime	473.1	474.4	681.5	799.0	1,834.5
Finance, insurance and business services	896.0	827.4	657.0	763.1	940.2
Consumption credit	7,812.8	9,571.1	13,679.5	16,926.8	22,433.5
of which:					
Purchase of motor vehicles	*800.2*	*1,104.8*	*1,508.2*	*2,095.4*	*2,315.6*
Credit card	*23.7*	*24.3*	*32.6*	*50.4*	*86.7*
Purchase of securities	136.2	103.4	88.2	64.9	66.0
Others	741.0	1,388.9	2,771.6	2,120.8	2,270.4
Total	**28,072.3**	**33,472.5**	**43,374.9**	**50,961.4**	**60,402.2**

[1] Refers to Bank Pembangunan Malaysia Berhad, Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional, Export-Import Bank of Malaysia Berhad, Bank Pertanian Malaysia and Bank Perusahaan Kecil & Sederhana Malaysia Berhad (SME Bank). Prior to 1 October 2005, data include Bank Industri & Teknologi Malaysia Berhad and exclude SME Bank
[2] Development Financial Institutions Act 2002

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

	As at end	
	2006	2007
	RM million	
General provisions	1,126.5	1,286.6
Interest-in-suspense	828.6	960.0
Specific provisions	1,735.4	2,499.5
Non-performing loans	4,919.1	5,137.8
	Percent (%)	
Gross NPL ratio	10.0	8.8
Net NPL ratio	5.0	3.1
Total provisions/NPL	75.0	92.4

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

Table A.18
Bank Pembangunan Malaysia Berhad

Year of establishment	1973
Objectives	To provide medium and long-term financing for infrastructure projects, maritime, capital intensive and high technology industries in manufacturing sector and other selected sectors in line with the national development policy.

Sector	Loans Outstanding		Loans Approved		Loans Disbursed	
	As at end		During the year		During the year	
	2006	2007	2006	2007	2006	2007
	RM million					
Infrastructure	15,294.2	15,286.5	3,170.9	2,549.4	3,240.2	2,540.2
Government programmes	*12,843.7*	*12,572.5*	*373.6*	*1,355.6*	*636.2*	*1,660.6*
Private programmes	*2,450.5*	*2,714.0*	*2,797.3*	*1,193.8*	*2,604.0*	*879.6*
Maritime	799.1	1,834.5	1,802.8	539.0	262.4	1,358.7
Shipping industry	*437.0*	*776.4*	*640.8*	*338.6*	*128.2*	*480.0*
Shipyard industry	*182.8*	*868.9*	*942.0*	*200.4*	*16.8*	*826.1*
Marine-related services	*179.3*	*189.2*	*220.0*	*0.0*	*117.4*	*52.6*
Manufacturing *of which:*						
High technology	542.7	942.4	1,854.7	1,139.1	382.0	391.8
Others	57.7	59.7	6.3	3.1	5.4	6.3
Total	**16,693.7**	**18,123.1**	**6,834.7**	**4,230.6**	**3,890.0**	**4,297.0**

Source: Bank Pembangunan Malaysia Berhad

Table A.19
Bank Perusahaan Kecil & Sederhana Malaysia Berhad (SME Bank)

Year of establishment	October 2005
Objectives	To provide financing and advisory services to SMEs involve in manufacturing, services and construction sectors, particularly Bumiputera entrepreneurs.

Sector	Loans Outstanding		Loans Approved		Loans Disbursed	
	As at end		During the year		During the year	
	2006	2007	2006	2007	2006	2007
	RM million					
SMEs	1,504.5	2,204.7	2,135.6	3,051.9	992.0	1,742.7
Micro	*175.4*	*255.6*	*98.9*	*221.7*	*102.2*	*204.1*
Small	*795.1*	*1,115.3*	*463.4*	*806.6*	*558.3*	*753.2*
Medium	*534.0*	*833.8*	*1,573.3*	*2,023.6*	*331.5*	*785.4*
Others	413.6	439.3	0.0	0.0	233.0	122.1
Total	**1,918.1**	**2,644.0**	**2,135.6**	**3,051.9**	**1,225.0**	**1,864.8**

Source: Bank Perusahaan Kecil & Sederhana Malaysia Berhad

Table A.20
Export-Import Bank of Malaysia Berhad

Year of establishment	1995					
Objectives	To provide credit facilities to finance and support the exports and imports of goods, services and overseas project financing with concentration to the non-traditional markets, as well as to provide export credit insurance services, export financing insurance, overseas investment insurance and guarantee facilities, as well as other services which are normally offered by the export-import financial institutions and credit insurance financial institutions.					
Loans Facility	**Loans Outstanding (RM million)**		**Loans Approved (RM million)**		**Loans Disbursed (RM million)**	
	As at end-2006	As at end-2007	2006	2007	2006	2007
Buyer credit facility	420.0	639.6	826.6	169.0	108.3	521.7
Overseas investment credit facility	601.7	808.8	695.2	429.1	215.2	347.6
Supplier credit facility	236.2	290.3	1,633.4	850.1	594.0	723.9
Export credit refinancing	1,585.3	1,955.0	8,245.8	8,428.9	8,245.8	8,428.9
Total	**2,843.2**	**3,693.7**	**11,401.0**	**9,877.1**	**9,163.3**	**10,022.1**
Guarantee and Insurance Policy	**Contingent Liabilities (RM million)**		**Business Coverage (RM million)**			
	As at end-2006	As at end-2007	2006	2007		
Short-term Policies						
Comprehensive policies	*319.0*	*573.0*	*1,759.0*	*2,518.0*		
Bank letter of credit policy	*56.3*	*33.9*	*175.0*	*116.7*		
Specific policies	*17.0*	*0.9*	*24.0*	*1.0*		
Others	*54.2*	*33.1*	*99.0*	*57.2*		
Sub-total	446.5	640.9	2,057.0	2,692.9		
Medium and Long-term Policies						
Specific policies	*1.9*	*80.0*	*2.0*	*84.0*		
Buyer credit guarantee	*202.3*	*270.0*	*168.0*	*225.0*		
Bond indemnity support	*0.0*	*64.0*	*0.0*	*71.0*		
Overseas investment insurance	*10.8*	*3.1*	*12.0*	*3.5*		
Others	*212.0*	*162.9*	*0.0*	*0.0*		
Sub-total	427.0	580.0	182.0	383.5		
Total	**873.5**	**1,220.9**	**2,239.0**	**3,076.4**		

Source: Export-Import Bank of Malaysia Berhad

Table A.21
Bank Kerjasama Rakyat Malaysia Berhad

Year of establishment	1954					
Objectives	Bank Kerjasama Rakyat Malaysia Berhad mobilises savings and provides financing services to its members as well as non-members.					
Deposits accepted	Deposits Accepted (RM million)					
	As at end-2006			As at end-2007		
	Members	Non-members	Total	Members	Non-members	Total
	903.4	21,781.4	22,684.8	937.8	26,320.5	27,258.3
Direction of Financing	Financing Outstanding (RM million)					
	As at end-2006			As at end-2007		
Sector	Members	Non-members	Total	Members	Non-members	Total
Agriculture	43.7	13.2	56.9	39.0	12.7	51.7
Purchase of residental property	3,061.3	1,248.4	4,309.7	3,100.3	1,374.4	4,474.7
Purchase of non-residental property	83.2	348.0	431.2	98.6	396.3	494.9
General commerce	53.3	598.4	651.7	36.6	751.2	787.8
Purchase of securities	5.5	50.2	55.7	7.5	51.6	59.1
Purchase of motor vehicles	0.0	25.6	25.6	0.0	25.0	25.0
Consumption credit	10,705.6	3,392.5	14,098.1	12,543.9	5,625.4	18,169.3
Manufacturing	0.0	689.0	689.0	0.0	71.7	71.7
Others	0.0	92.3	92.3	0.0	598.6	598.6
Total	**13,952.6**	**6,457.6**	**20,410.2**	**15,825.9**	**8,906.9**	**24,732.8**

Source: Bank Kerjasama Rakyat Malaysia Berhad

Table A.22
Bank Simpanan Nasional

Year of establishment	1974	
Objectives	Bank Simpanan Nasional is a savings bank, incorporated under the National Savings Bank Act 1974 and focuses on retail banking and personal finance especially for small savers.	
Deposits facility	RM million	
	As at end-2006	As at end-2007
Savings deposits	360.2	190.0
Fixed deposits	7,496.1	6,210.0
GIRO deposits	4,572.0	4,745.1
Islamic deposits	472.6	1,276.9
Premium savings certificates	838.4	899.9
Others	81.0	103.1
Total	**13,820.3**	**13,425.0**
Investments	RM million	
	As at end-2006	As at end-2007
Quoted shares	908.9	214.4
Government Securities	5,135.1	4,668.2
of which:		
Malaysian Government Securities	*3,525.1*	*3,347.5*
Private debt securities	889.2	1,121.2
Subsidiary companies	467.5	467.8
Associate companies	231.8	231.8
Others	576.2	631.5
Total	**8,208.7**	**7,334.9**
Direction of Lending	RM million	
	As at end-2006	As at end-2007
Purchase of securities	9.2	6.9
Purchase of residental property	2,272.6	2,645.1
Purchase of non-residental property	49.7	66.5
Consumption credit	2,828.8	4,264.1
Others	493.8	420.7
Total	**5,654.1**	**7,403.3**

Source: Bank Simpanan Nasional

Table A.23
Bank Pertanian Malaysia

Year of establishment	1969					
Objectives	Bank Pertanian Malaysia was established 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	
	2006	2007	2006	2007	2006	2007
Sub-sector						
Oil palm	*801.2*	*851.2*	*304.3*	*465.3*	*169.8*	*198.4*
Food crops	*419.6*	*443.3*	*145.8*	*193.6*	*131.4*	*151.5*
Livestock	*423.6*	*477.2*	*191.6*	*263.8*	*101.8*	*137.1*
Fishery	*317.8*	*369.0*	*108.5*	*135.9*	*56.2*	*110.2*
Forestry	*63.5*	*42.4*	*47.2*	*41.5*	*18.4*	*2.1*
Tobacco	*36.2*	*19.8*	*1.0*	*0.6*	*5.3*	*4.8*
Rubber	*51.8*	*56.0*	*22.9*	*34.3*	*23.5*	*20.6*
Others	*1,328.3*	*1,546.5*	*417.4*	*654.7*	*417.8*	*618.1*
Total	**3,442.0**	**3,805.4**	**1,238.7**	**1,789.7**	**924.2**	**1,242.8**

Source: Bank Pertanian Malaysia

Table A.24
Development Financial Institutions: Selected Data

	As at end					
	2006			2007		
DFIs under DFIA[1]:	Branch	ATM	Staff	Branch	ATM	Staff
Bank Pembangunan Malaysia Berhad	–	–	465	–	–	499
Bank Kerjasama Rakyat Malaysia Berhad	109	135	3,078	112	165	3,239
Bank Simpanan Nasional	379	620	4,918	375	626	4,865
Export-Import Bank of Malaysia Berhad	–	–	180	–	–	205
Bank Pertanian Malaysia	172	146	2,657	172	148	2,683
Bank Perusahaan Kecil & Sederhana Malaysia Berhad	16	–	792	18	–	908
Sub-total	676	901	12,090	677	939	12,399
Other DFIs:						
Malaysian Industrial Development Finance Berhad	8	–	352	8	–	425
Sabah Development Bank Berhad	–	–	84	–	–	83
Borneo Development Corporation (Sabah) Sendirian Berhad	–	–	13	–	–	13
Borneo Development Corporation (Sarawak) Sendirian Berhad	–	–	35	–	–	35
Credit Guarantee Corporation Malaysia Berhad	16	–	393	16	–	415
Sabah Credit Corporation	10	–	208	10	–	201
Lembaga Tabung Haji	124	–	1,612	123	–	1,936
Sub-total	158	–	2,697	157	–	3,108
Total	**834**	**901**	**14,787**	**834**	**939**	**15,507**

[1] Development Financial Institutions Act 2002

Table A.25
Household Sector: Selected Indicators

	2003	2004	2005	2006	2007*p*
	RM million				
Household debt[1]	275,176	312,754	359,777	396,604	427,912
Household financial assets[2]	595,573	664,334	723,736	809,799	931,872
	%				
Household debt to GDP ratio	65.7	66.0	69.3	69.3	66.7
Household financial assets to household debt ratio	216.4	212.4	201.2	204.2	217.8
Household banking system NPL ratio	8.7	8.0	7.7	7.1	5.3

[1] Comprises household loans outstanding in banking system, Bank Simpanan Nasional, Bank Kerjasama Rakyat Malaysia Berhad, insurance companies and Treasury Housing Loans Division
[2] Comprises household deposits held in banking system, Bank Simpanan Nasional, Bank Kerjasama Rakyat Malaysia Berhad, total assets of life insurance funds, Employees Provident Fund contributions and net asset value of unit trust funds
p Preliminary

Source: Treasury Housing Loans Division, Securities Commission, Employees Provident Fund and Bank Negara Malaysia

Table A.26
Basic Payments Indicator

	2003	2004	2005	2006	2007
Population (million)	25.3	25.9	26.4	26.9	27.5
GDP (RM million)	418,769	474,048	519,451	572,555	641,499
Cash in circulation (CIC) (RM million)	26,101.4	28,616.9	30,177.6	33,519.4	36,290.8
Volume of transactions (unit)					
Per capita:					
Cheque	7.7	7.7	7.6	7.5	7.7
E-payments	13.8	17.6	21.6	28.0	32.5
Credit card	5.8	6.4	7.0	7.8	8.7
Charge card	0.3	0.3	0.2	0.2	0.2
Debit card	…	0.1	0.1	0.2	0.3
E-money	7.6	10.8	13.9	19.2	22.3
Interbank GIRO	0.1	0.1	0.4	0.7	1.0
FPX[1]	–	…	…	…	…
ATM[2]	n.a.	…	0.1	0.1	0.1
Internet banking[3]	0.3	0.5	0.7	1.0	1.5
Mobile banking[3]	n.a.	n.a.	...	...	...
Value of transactions (RM)					
Per capita:					
CIC	1,030.9	1,106.6	1,144.0	1,245.6	1,322.1
Cheque	49,855.1	52,841.7	51,467.1	53,584.9	62,443.1
E-payments	1,554.8	2,006.8	2,674.0	3,621.7	4,686.9
Credit card	1,159.6	1,348.6	1,550.3	1,767.2	2,047.3
Charge card	74.9	78.8	78.7	82.0	81.7
Debit card	3.5	6.4	9.9	24.1	42.9
E-money	22.4	28.4	37.3	47.3	59.2
Interbank GIRO	294.5	544.5	997.3	1,700.2	2,439.2
FPX[1]	–	0.1	0.5	0.9	16.6
ATM[2]	n.a.	6.2	145.1	79.8	161.4
Internet banking	403.9	552.7	705.1	1,059.4	1,765.2
Mobile banking	n.a.	n.a.	0.2	0.3	0.3
Percentage of GDP (%):					
CIC	6.2	6.0	5.8	5.9	5.7
Cheque	301.4	288.3	261.4	251.8	267.2
E-payments	9.4	10.9	13.6	17.0	20.1
Credit card	7.0	7.4	7.9	8.3	8.8
Charge card	0.5	0.4	0.4	0.4	0.3
Debit card	…	…	0.1	0.1	0.2
E-money	0.1	0.2	0.2	0.2	0.3
Interbank GIRO	1.8	3.0	5.1	8.0	10.4
FPX[1]	–	…	…	…	0.1
ATM[2]	n.a.	…	0.7	0.4	0.7
Internet banking	2.4	3.0	3.6	5.0	7.6
Mobile banking	n.a.	n.a.	...	...	...

[1] Financial Process Exchange, an Internet-based payment, launched in October 2004
[2] ATM transactions comprise bill payments, payments for electronic share application and loading transactions for MEPS Cash and Touch 'n Go
[3] Refer to transactional hits i.e. transactions with value
n.a. Not available
... Negligible
Note: Numbers may not necessarily add up due to rounding

Table A.27
Usage of Various Cashless Payments: Volume of Transactions

System/Instrument	2003	2004	2005	2006	2007
	Million				
RENTAS[1]	1.8	1.9	2.0	2.2	2.7
IFTS	1.7	1.8	1.9	2.1	2.5
SSTS	0.1	0.1	0.2	0.2	0.1
Cheque	195.1	200.2	199.9	201.2	211.7
Payment instruments:					
Credit card	146.3	164.5	184.6	208.8	237.6
Charge card	7.5	6.6	6.2	5.9	5.5
Debit card	1.2	1.6	2.1	4.2	9.1
E-money	192.4	279.4	365.6	516.8	612.0
Other systems:					
Interbank GIRO	1.3	3.7	10.4	18.7	26.6
FPX	-	...	...	...	0.1
ATM[2]	n.a.	0.3	3.6	1.8	3.4

[1] Real time gross settlement system - with two subsystems i.e. Interbank Funds Transfer System (IFTS), and Scripless Securities Trading System (SSTS)
[2] ATM transactions comprise bill payments, payments for electronic share application and loading transactions for MEPS Cash and Touch 'n Go
n.a. Not available
... Negligible
Note: Numbers may not necessarily add up due to rounding

Table A.28
Usage of Various Cashless Payments: Value of Transactions

System/Instrument	2003	2004	2005	2006	2007
	RM billion				
RENTAS[1]	13,370.6	17,872.7	19,314.6	24,974.6	29,880.6
IFTS	12,691.7	16,545.5	17,606.2	22,804.6	27,909.7
SSTS	678.9	1,327.1	1,708.5	2,169.9	1,970.9
Cheque	1,262.3	1,366.5	1,357.7	1,442.0	1,714.1
Payment instruments:					
Credit card	29.4	34.9	40.9	47.6	56.2
Charge card	1.9	2.0	2.1	2.2	2.2
Debit card	0.1	0.2	0.3	0.6	1.2
E-money	0.6	0.7	1.0	1.3	1.6
Other systems:					
Interbank GIRO	7.5	14.1	26.3	45.8	67.0
FPX	-	...	...	...	0.5
ATM[2]	n.a.	0.2	3.8	2.1	4.4

[1] Real time gross settlement system - with two subsystems i.e. Interbank Funds Transfer System (IFTS), and Scripless Securities Trading System (SSTS)
[2] ATM transactions comprise bill payments, payments for electronic share application and loading transactions for MEPS Cash and Touch 'n Go
n.a. Not available
... Negligible
Note: Numbers may not necessarily add up due to rounding

Table A.29
Payment and Securities Transfer Instructions Handled by RENTAS: Volume of Transactions

	2003	2004	2005	2006	2007
	'000				
IFTS[1]	1,728.9	1,797.0	1,881.3	2,065.8	2,548.4
Money market operations	93.9	101.3	93.1	103.2	108.3
Foreign exchange settlement	13.3	15.7	20.2	32.9	47.7
Government payment[2]	n.a.	n.a.	n.a.	0.2	36.8
Custom duty payment	103.3	91.0	82.8	62.4	68.2
Third party payment[2]	n.a.	n.a.	n.a.	106.2	1,462.0
Others	1,518.3	1,589.0	1,685.2	1,761.0	825.5
SSTS[3]	103.4	123.9	158.0	160.4	111.3

[1] Interbank Funds Transfer System
[2] Data were collected since November 2006. Third party payment refers to IFTS transaction with a minimum amount of RM10,000, where the beneficiary or ordering party is a non-RENTAS member
[3] Scripless Securities Trading System, for Malaysian Government Securities, Treasury bills, and scripless public debt securities
n.a. Not available
Note: Numbers may not necessarily add up due to rounding

Table A.30
Payment and Securities Transfer Instructions Handled by RENTAS: Value of Transactions

	2003	2004	2005	2006	2007
	RM billion				
IFTS[1]	12,691.7	16,545.5	17,606.2	22,804.6	27,909.7
Money market operations	4,955.8	6,912.8	7,354.4	10,576.4	12,261.8
Foreign exchange settlement	441.0	920.2	1,262.4	1,531.4	2,179.0
Government payment[2]	n.a.	n.a.	n.a.	3.5	39.9
Custom duty payment	2.6	2.2	2.6	2.3	2.6
Third party payment[2]	n.a.	n.a.	n.a.	458.6	5,813.4
Others	7,292.3	8,710.3	8,986.8	10,232.5	7,613.0
SSTS[3]	678.9	1,327.1	1,708.5	2,169.9	1,970.9

[1] Interbank Funds Transfer System
[2] Data were collected since November 2006. Third party payment refers to IFTS transaction with a minimum amount of RM10,000, where the beneficiary or ordering party is a non-RENTAS member
[3] Scripless Securities Trading System, for Malaysian Government Securities, Treasury bills, and scripless public debt securities
n.a. Not available
Note: Numbers may not necessarily add up due to rounding

Table A.31
Number of Payment Machines and EFTPOS Terminals

Terminals	2003	2004	2005	2006	2007
	Unit				
ATM[1]	4,396	5,568	5,777	6,147	7,156
CDM[2]	1,584	1,657	2,535	2,971	4,092
EFTPOS terminals:					
Credit card	n.a.	n.a.	84,751	102,871	133,574
Debit card (Bankcard)[3]	n.a.	n.a.	20,052	21,592	34,754
E-money	13,314	16,642	18,198	28,115	28,771

[1] Include non-banks' ATM in 2007
[2] Include cash and cheque deposit machines
[3] e-Debit only
n.a. Not available

Table A.32
Number of Users/Subscribers of Payment Instruments

	2003	2004	2005	2006	2007
	'000				
Credit card	5,098.1	6,583.0	7,815.5	8,833.0	9,899.3
Charge card	305.6	283.6	241.4	268.3	240.6
Debit card[1]	3,152.9	10,237.2	15,676.7	18,861.4	21,887.3
E-money	22,844.3	34,174.1	44,034.7	46,802.2	53,012.3

[1] Include International brand debit card and e-Debit

Table A.33
Usage of Internet Banking[1]

Items	2003	2004	2005	2006	2007
No. of subscribers (million)	1.7	2.0	2.5	3.2	4.5
Volume of transactional hits (million)[2]	8.9	12.6	18.6	27.7	40.3
Value of transactions (RM million)	10,225.7	14,292.4	18,600.5	28,507.9	48,456.0

[1] Individual subscribers only
[2] Refer to transactions with value

Table A.34
Usage of Mobile Banking[1]

Items	2003	2004	2005	2006	2007
No. of subscribers ('000)	n.a.	25.7	127.6	246.7	345.7
Volume of transactional hits ('000)[2]	n.a.	n.a.	391.8	237.8	341.4
Value of transactions (RM'000)	n.a.	n.a.	4,455.5	7,509.9	8,077.9

[1] Individual subscribers only
[2] Refer to transactions with value
n.a. Not available

Table A.35
Number of Participants and Instrument Issuers

	2003	2004	2005	2006	2007
	Unit				
RENTAS	54	52	55	53	54
Banks	*53*	*48*	*50*	*48*	*51*
Non-banks	*1*	*4*	*5*	*5*	*3*
Credit card	19	18	19	18	18
Banks	*18*	*17*	*17*	*16*	*16*
Non-banks	*1*	*1*	*2*	*2*	*2*
Debit Card					
Banks	*9*	*13*	*13*	*13*	*14*
Charge card	5	5	5	6	6
Banks	*1*	*1*	*1*	*3*	*3*
Non-banks	*4*	*4*	*4*	*3*	*3*
E-money[1]	*4*	*5*	*8*	*13*	*15*
Banks	*–*	*–*	*1*	*2*	*4*
Non-banks	*4*	*5*	*7*	*11*	*11*
Internet banking					
Banks	*13*	*14*	*14*	*16*	*18*
Mobile banking					
Banks	*3*	*4*	*5*	*6*	*7*
FPX					
Banks	*-*	*4*	*5*	*11*	*11*
Interbank GIRO					
Banks	*14*	*13*	*16*	*16*	*19*

[1] Include international brand prepaid card