



**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 2006 which are incorporated into this Financial Stability and Payment Systems Report 2006.

Respectfully submitted,

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

Zeti Akhtar Aziz  
Governor

21 March 2007

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# Governor's Statement



**BANK NEGARA MALAYSIA**  
CENTRAL BANK OF MALAYSIA

The recent decade has seen a rapid growth in the volume of financial transactions, increased complexity of the financial markets and a more interconnected global economy. This has resulted in greater potential vulnerabilities and risks to the stability of the financial system. As part of its core mandate, Bank Negara Malaysia is responsible for promoting a sound and efficient financial system which underpins financial stability. Such a system is characterised by its ability to withstand adverse economic cycles and shocks, thereby preventing inordinate disruptions to the intermediation process and maintaining confidence in the financial system. The Bank discharges this responsibility by preserving the soundness of financial institutions and the financial infrastructure. This is primarily achieved through its regulation and supervision of the licensed financial institutions, by ensuring the continued reliability of major payment and settlement systems, and actively contributing to the development of efficient financial markets.

This inaugural publication of the Financial Stability and Payment Systems Report signifies the Bank's ongoing efforts to promote a better understanding of issues and developments that affect financial system stability. The Report covers the Bank's assessment of key risks and trends in the financial system that emanate both from the domestic and international developments, and their potential implications for the financial system. It also covers the developments surrounding the transformation of the financial sector in Malaysia, including institutional developments, the financial markets, and the payment and settlement systems in the financial and retail markets. With increased knowledge of the pertinent information associated with aspects important to sustaining financial stability, it is hoped that financial institutions, market participants, businesses and households will be able to recognise the risks and vulnerabilities and better prepare for and manage these risks, thereby facilitating orderly adjustments in the financial system.

The Malaysian financial system has continued to strengthen in 2006. This has been achieved through the ongoing restructuring, consolidation, rationalisation, increased investments in technology, and enhanced governance and risk management practices. Financing activities and the recent increased involvement of banking institutions in treasury and investment-related activities have been well supported by strengthened risk management capabilities. This is reflected in the sustained profitability of banking institutions over an extended period and the continued improvements in the quality of assets. Insurance companies and takaful operators have also recorded continued profitability, supported by improved discipline in reserving and underwriting practices. Despite periods of volatility in the financial markets, financial institutions have, on the whole, demonstrated the capacity and resilience to absorb their impact. There were also no disruptions to systemically important payment systems. The implementation of the Payment versus Payment infrastructure in collaboration with the Hong Kong Monetary Authority was among the ongoing enhancements made in the payment system, further reducing the settlement risks for the ringgit and US dollar foreign exchange transactions.

Further structural adjustments continued to shape the financial system in Malaysia, enhancing its capacity to meet the changing needs of the economy. Notably, in 2006, the investment banking framework was successfully implemented with the amalgamation of the core businesses of merchant banks, stockbroking companies and discount houses. The retail product distribution system also continues to be transformed, prompted by increased competitive pressures, technological developments and regulatory reforms. This has paved the way for the more efficient delivery of financial services, with a more extensive range of financial products and services for consumers and businesses. Further consolidation in both the banking and insurance sectors and the increased investments in technology have also strengthened the institutional capacity of banks and insurers to face increasing competition and the more challenging operating environment.

A more diversified financial structure has also emerged. The advanced development of the bond market was a major structural enhancement to the financial system which not only diminished the risk of overconcentration on the banking system, but also facilitated enhanced efficiency and flexibility in financial management in the system. Malaysia's debt securities market today is among the region's most developed. The share of total private sector financing raised through the bond market has more than doubled in this recent decade with the creation of a deeper, broader and more efficient bond market. Continuous innovations and a supportive environment in the corporate bond market have increased access to the capital market as an alternative source of financing for businesses from a wide spectrum of economic sectors, thus further diversifying the sources of financing for the economy.

Improving financial system efficiency remained a focal point of regulatory policy. This includes policy measures aimed at containing increases in economic costs over time, thereby enhancing the agility of financial institutions to effectively adapt to changing conditions, particularly during stress periods. In this regard, the Bank continued to pursue a broad range of progressive deregulatory measures that complement the structural adjustments taking place in the system to foster greater operating and resource efficiencies. The measures include increased management, investment and operating flexibilities which have expanded opportunities to enhance capital efficiency, innovate, improve performance and diversify risk. As a result, there have been notable improvements in the key efficiency indicators of the financial system. Measures implemented to enhance efficiencies in the payment system have also resulted in wider access to payment products and services and more expedient clearing and settlements. Of importance is that a more rigorous supervisory oversight is pursued in this environment of increased flexibilities to ensure that the risks continue to be prudently managed by the financial institutions. Going forward, the Bank will also adopt a differentiated approach to regulation based on the ability of institutions to effectively manage risks in the more deregulated environment.

All of these developments underscore a stronger base from which the financial system would be able to cope effectively with periods of financial stress. With the financial system on a stronger foundation, this enhances the prospects for the economy to realise net benefits from

the progressive liberalisation. Malaysia's continued integration with the global economy remains important to harness new opportunities for Malaysian enterprises and to enhance access for Malaysian businesses and consumers to competitive financial products and services. An important consideration to the liberalisation process is that the benefit gained should be commensurate with the increased risks associated with the liberalisation. Also important is that the preconditions are in place for the system to adjust efficiently and effectively to the changes. The Bank will thus continue to adopt a gradual and progressive approach to liberalisation for the financial sector that aims to strengthen Malaysia's inter-linkages with the global economy, while preserving financial stability.

The significantly enhanced capacity of domestic financial institutions places them in a strong position to withstand greater competition arising from the more open market as well as more discerning consumers and investors. Indeed, given the strong foundation in place, the infusion of best practices in risk management and service standards into the domestic financial system is expected to accelerate further performance improvements by domestic financial institutions. These conditions have enabled the implementation of further liberalisation measures in the financial sector. The liberalisation has been particularly pronounced in the new areas of activity, including in investment banking, insurance and the Islamic finance sectors. In Islamic finance, new Islamic banking and takaful licences were issued, while foreign interest permitted in investment banking, insurance and Islamic finance were raised. In addition, the branching policy for locally incorporated foreign-owned banks was relaxed. There was also further relaxation of the foreign exchange administration rules.

Following the increased foreign presence and participation in the Islamic financial system in Malaysia, further measures were announced in 2006 to enhance the competitiveness of the system, including ensuring the supply of talent and expertise. These are aimed at positioning Malaysia as a key intermediation centre for Islamic finance in the global market and thus, accelerate the international integration of the domestic Islamic financial system. By extension, the resulting growth in inter-regional investment and trade flows, as well as the linkages with other financial systems, are expected to deepen the integration of Malaysia's broader financial system and economy with the global economy.

However, as a small open economy, the global dimension of risk has assumed greater significance with the increased international inter-linkages. The potential sources of contagion risk from global developments in a large part stem from volatile capital flows which could have adverse implications on the domestic financial markets. Macro and micro stress testing results suggest that the financial system would be able to absorb these risks. Moreover, strengthened safeguards – which include a more robust, risk-based regulatory and supervisory framework, an increased emphasis on crisis and business continuity management, as well as continuous enhancements to the institutional framework for consumer protection – will serve to mitigate the identified risks and avert potential disruptions to the financial intermediation process.

The Bank has continued to devote significant resources towards instituting robust surveillance processes that are critical to the effective identification and management of risks in the financial system. The approach to financial surveillance was further strengthened and refined with the establishment of the Financial Surveillance Department in November 2006. The underlying elements accompanying this change, which is part of a wider exercise during the year to realign the regulatory and supervisory functions under a more integrated approach, will foster a stronger macroprudential orientation of surveillance, with respect to both the identification of vulnerabilities and the calibration of assessment methodologies. The more effective use of scenario analysis and stress testing approaches has also facilitated more robust forward-looking assessments, while work continues concurrently on the development of an improved macro stress test framework and early warning system. These enhancements will assist with the early identification of emerging threats to financial stability, enabling the Bank to better monitor and assess the increasingly more complex inter-linkages associated with the international flow of funds across borders, as well as between the financial sector, the corporate sector, the financial markets and the macroeconomy.

Efforts to promote financial stability at the regional level were also enhanced following the completion of the report by the Task Force on Regional Financial Cooperation. It represented an important priority in the roadmap of the future strategic direction of financial co-operation among central banks in the region. As the region moves forward to implement the recommendations of the Task Force, emphasis would be placed on strengthening the regional institutional arrangements and establishing regional mechanisms in the areas of monitoring and risk management, financial market development and integration, crisis management and resolution, capacity building, information sharing and communications. The focus of co-operation in these areas was considered important to achieve the overriding objectives of promoting macroeconomic and financial stability in the region and achieving mutually reinforcing regional growth and prosperity. At the same time, the Bank will continue to forge strong ties with other supervisory authorities to enhance cross-border co-operation in the supervision of internationally active financial institutions.


Promoting greater financial inclusion remains a high priority for the Bank as part of efforts to enhance the effectiveness of the financial intermediation function. The main objectives of these efforts are to improve access to financial services as well as access to financing for all segments of society. This also involves improving the capability of Malaysians to make effective financial decisions and manage their finances. Access to financing to all economic sectors, including small and medium enterprises, continued to improve significantly in 2006. A strategic initiative to introduce and implement a microfinance institutional framework will further improve access to financing for micro enterprises.

Continuing efforts to improve financial literacy have also empowered more individuals to make informed financial choices. The Bank has continued to build on the consumer education platform that was launched in 2003 to increase the reach and coverage of our consumer outreach

initiatives. This has been reinforced by significantly enhanced regulatory standards introduced by the Bank on disclosure and needs-based selling which aim to ensure that consumers are properly advised and fully understand the risks associated with their financial transactions. These efforts support the ability of consumers to assume greater individual responsibility for sound financial planning and to make financial decisions with confidence, which in turn contributes to financial stability by facilitating the more efficient allocation of resources and risk in and through the financial system.

While the overall outlook for growth in 2007 remains positive and the strengthened financial system enhances the prospects for continued financial stability, continued vigilance will be maintained. Bank Negara Malaysia will continue to maintain a close watch on the risk-taking activities of financial institutions through its supervisory and surveillance functions. Much work lies ahead in developing prudential standards that are fundamentally applicable to institutions with varying levels of complexity and diversity. At the same time, enhancements will continue to be made to the existing regulatory framework that will clearly set out the Bank's supervisory expectations with respect to financial institutions' management of new and emerging risks, and to reinforce the building blocks for more robust capital adequacy assessments. The Bank's own internal capabilities are also being continuously strengthened to improve the quality of supervisory assessments as an important precondition for future regulatory adjustments to reflect changing market realities.

The key challenge for financial institutions will be staying the course in upholding sound risk management standards in the face of increasing competition and pressures on margins as forces of change continue to unfold. More importantly, institutions need to embrace the discipline of longer-term assessments of risk and continue to scale up their investments in risk management capabilities commensurately. Such investments will prove to be amply justified as advanced capabilities enable financial institutions to move more meaningfully beyond regulatory compliance to value-enhancing strategies of economic capital and resource management. Ultimately, the objectives of financial stability and sustainable value creation remain inextricably linked.



**Zeti Akhtar Aziz**  
**Governor**

21 March 2007

# Overview of the Financial System

## COMPONENTS OF THE FINANCIAL SYSTEM

Malaysia has a modern and comprehensive financial system that continues to evolve in response to the changing domestic and international conditions. Financial reforms, including the structural changes that proceeded after the Asian financial crisis, have evolved a more diversified, broader and deeper financial system, supporting Malaysia's economic growth through a more efficient intermediation process and strengthening Malaysia's interlinkages with the global economy and international financial system.

Financial reforms have evolved a more diversified, broader and deeper financial system supporting Malaysia's economic growth.

Bank Negara Malaysia and the banking industry consisting of commercial banks, investment banks and Islamic banks make up the **banking system**. In Malaysia, Islamic and conventional banking systems coexist and operate in parallel. Islamic banking activities are conducted either by Islamic banks that exclusively carry out Islamic banking, or through Islamic banking windows or subsidiaries set up by conventional banks. The ongoing modernisation of the financial system has seen the introduction of investment banks to the banking landscape in 2006 with the integration of discount houses, merchant banks and stockbroking companies.

The **non-bank financial intermediaries** (NBFIs) complement the banking institutions in mobilising savings and meeting the requirements of specific economic sectors. These institutions also play an important role in the development of the capital market and in providing social security. Development financial institutions (DFIs), provident and pension funds, insurance companies, takaful operators, savings

**Table 1.1**  
**Financial Institutions Regulated by Bank Negara Malaysia**

	2006
<b>Banking system</b>	
Commercial banks	22
Investment banks <sup>1</sup>	14
Islamic banks	10
<b>Non-bank financial intermediaries</b>	
Development financial institutions <sup>2</sup>	6
Direct insurers	42
Professional reinsurers <sup>3</sup>	6
Takaful operators	8

<sup>1</sup> Includes merchant banks and discount houses which have been rationalised to become investment banks

<sup>2</sup> The DFIs regulated by Bank Negara Malaysia under the Development Financial Institutions Act 2002 are Bank Pembangunan Malaysia Berhad, Bank Perusahaan Kecil & Sederhana Malaysia Berhad (SME Bank), Export-Import Bank of Malaysia Berhad, Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional and Bank Pertanian Malaysia

<sup>3</sup> Includes two professional reinsurers which have also been granted professional retakaful licences

institutions and unit and property trusts account for the bulk of total assets of NBFIs.

Banking institutions, insurance companies, takaful operators and six DFIs are regulated by Bank Negara Malaysia. DFIs are specialised financial institutions established by the Government with specific mandates to develop and promote strategic sectors of the economy. DFIs complement the banking system by providing financial resources to support activities in areas that have been identified as strategic sectors for socio-economic development purposes. This includes financing for new growth areas such as agro-based industries, as well as lending to support export activities in non-traditional markets and projects with long gestation periods or that are capital-intensive. DFIs are also instrumental in supporting the development of small and medium enterprises by providing access to financing for start-up businesses and entrepreneurs with limited credit history and inadequate collateral. The deposit-taking DFIs mobilise savings of the small savers



and provide financing to individuals, particularly those from the low income groups, as part of their mandates.

Assets of the banking system and NBFIs expanded by 9.3% to RM2,091.2 billion (2005: RM1,912.7 billion), constituting 382.8% of gross domestic product (GDP), at the end of 2006. Changes in the contribution of assets by types of institutions reflected the continuing transformation of the financial system.

## Growth momentum in Islamic banking system expected to continue, supported by new players and strong demand for Shariah-compliant financial products and services.

Notably, the merger between discount houses and merchant banks following the implementation of the investment banking framework resulted in an increase of 28.6% in assets of merchant banks. Consequently, the share of the assets of the merchant banks rose to account for a higher share of 2.9% (2005: 2.5%) of total assets of the financial system. Assets of the Islamic banking system (including Islamic banking windows operated by conventional banks) continued to expand at a strong pace, increasing at an average annual rate of 18.9% since 2000, supported by strong demand for Shariah-compliant financial products and services. As at the end of 2006, assets of the Islamic banking system accounted for RM133 billion or 6.4% (2005: 5.8%) of total assets in the financial system. The growth momentum in this sector is expected to continue with the commencement of operations by a wholly-owned foreign Islamic banking institution and three Islamic subsidiaries of domestic banking institutions in 2006, and the national aspiration to position Malaysia as an international Islamic financial centre.

The expansion in assets of NBFIs mainly reflected the higher increase in assets of the Employees Provident Fund, life insurance funds and DFIs. Improved investment results and growth

**Table 1.2**  
**Assets of the Financial System**

	Annual change		As at end-2006 <sup>p</sup>
	2005	2006 <sup>p</sup>	
	RM billion		
<b>Banking system</b>	67.9	135.4	1,415.5
Bank Negara Malaysia	10.6	27.6	323.0
Commercial banks <sup>1</sup>	40.4	83.3	951.5
Merchant banks <sup>2</sup>	4.2	13.4	60.3
Islamic banks	18.6	30.3	73.8
Discount houses <sup>2</sup>	-5.9	-19.2	6.8
<b>Non-bank financial intermediaries</b>	79.9	43.0	675.8
Provident, pension and insurance funds	39.7	44.4	467.5
<i>Employees Provident Fund</i>	23.4	26.4	290.2
<i>Other provident and pension funds</i>	5.7	5.1	61.9
<i>Life insurance funds</i> <sup>3</sup>	9.0	11.3	90.8
<i>General insurance funds</i> <sup>3</sup>	1.6	1.6	24.6
Development financial institutions <sup>4</sup>	8.4	14.2	114.0
Other financial intermediaries <sup>5</sup>	31.8	-15.6	94.2
<b>Total</b>	<b>147.8</b>	<b>178.5</b>	<b>2,091.2</b>

<sup>1</sup> Includes finance companies and Islamic banking windows operated by conventional banks

<sup>2</sup> These institutions have been rationalised to become investment banks

<sup>3</sup> Includes assets of takaful funds

<sup>4</sup> Including DFIs not directly regulated by Bank Negara Malaysia

<sup>5</sup> Includes unit trusts run by Amanah Saham Nasional Berhad (ASNB) and Amanah Saham Mara Berhad, cooperative societies, leasing and factoring companies and housing credit institutions (comprising Cagamas Berhad, Borneo Housing Mortgage Finance Berhad and Malaysia Building Society Berhad)

<sup>p</sup> Preliminary

Note: Numbers may not necessarily add up due to rounding

in lending and life insurance activity contributed to the increase in assets of NBFIs. As a group, the contribution of NBFIs to total assets of the financial system remained relatively stable at 32.3% (2005: 33.1%).

The financial markets in Malaysia comprise the money and foreign exchange markets, the capital market and the derivatives market. The Malaysian financial markets, recognised as one of the most developed in the region, have shown tremendous growth. In the **money market**, interbank deposits and a broad range

**Table 1.3**  
**Money Market<sup>1</sup>**

	2005	2006
	Volume (RM billion)	Volume (RM billion)
<b>Total money market transactions</b>	<b>1,868.3</b>	<b>2,086.8</b>
Interbank Deposits	887.6	876.1
Mudharabah Interbank Investments	254.7	256.1
<b>Money market instruments</b>	<b>726.0</b>	<b>954.7</b>
Repurchase Agreements	264.4	390.8
Malaysian Treasury Bills	8.5	9.4
Malaysian Islamic Treasury Bills	4.5	6.0
Bank Negara Bills/Bank Negara Monetary Notes <sup>2</sup>	50.4	78.5
Bank Negara Negotiable Notes/ Bank Negara Monetary Notes (Islamic) <sup>2</sup>	36.1	58.2
Bankers' Acceptances	44.2	49.9
Islamic Accepted Bills	9.4	12.2
Negotiable Instruments of Deposits	39.0	50.8
Negotiable Islamic Debt Certificates	8.6	14.9
Malaysian Government Securities	179.4	203.6
Government Investment Issues	43.2	61.9
Khazanah Bonds	20.3	4.0
Cagamas Bonds	16.3	11.4
Cagamas Notes	0.0	0.6
Islamic Cagamas Bonds	1.8	2.4

<sup>1</sup> All data are sourced from the Bonds Information and Dissemination System (BIDS), except for Interbank Deposits, Mudharabah Interbank Investments, Bankers' Acceptances, Islamic Accepted Bills, Negotiable Instruments of Deposits and Negotiable Islamic Debt Certificates, which are sourced from money brokers

<sup>2</sup> Bank Negara Bills and Bank Negara Negotiable Notes will be replaced by the issuance of Bank Negara Monetary Notes

Note: Numbers may not necessarily add up due to rounding

of short-term money market instruments, including Islamic instruments, facilitate the smooth channelling of funds between market participants with surplus funds and participants facing temporary funding shortfalls. Active trading by participants in the money market, which include commercial banks, investment banks, insurance companies, universal brokers and DFIs, resulted in the total volume of transactions in 2006 amounting to RM2,086.8 billion. The volume transacted continued on an uptrend, largely centered on trading of Malaysian Government Securities (MGS) with repurchase agreements increasing significantly since 2005 following the introduction of the

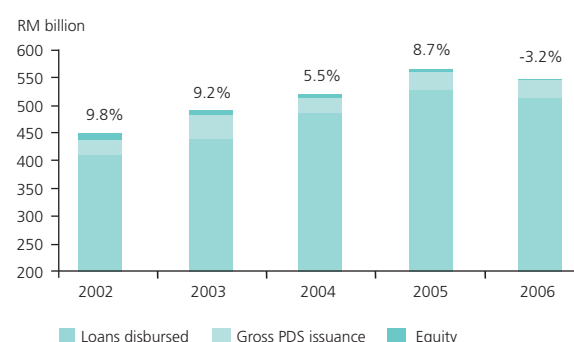
Institutional Securities Custodian Program (ISCAP), the regulated short-selling framework and a securities lending facility for principal dealers that further improved liquidity in the MGS market.

A well-developed **capital market** in Malaysia, comprising the equity and bond markets, provides an alternative and cost-efficient source of medium and long-term capital for corporates. 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 in both the public and private sectors. Total bonds outstanding (public and private) reached RM415.9 billion, or 76.1% of GDP as at the end of 2006, while the total market capitalisation of Bursa Malaysia was RM848.7 billion, or 155.3% of GDP.

## Capital market assuming more significant role, with increased breadth and depth.

Net funds raised in the capital market were lower at RM30.2 billion in 2006 (2005: RM41.7 billion), mainly due to higher redemptions of bonds maturing during the year. Funds raised in the capital market complemented loans extended by the banking system as an important source of financing for the private

**Chart 1.1**  
**Private Sector Gross Financing through the Banking System and the Capital Market**



Note: % refers to annual change

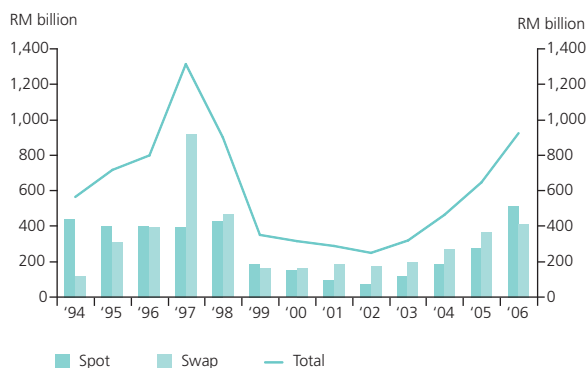
sector. In 2006, fund raising activity in the corporate bond market was sustained at a high level, while financing via the equity market was more subdued. Overall, total gross financing via the equity and private debt securities (PDS) markets for the year amounted to RM32.7 billion (2005: RM37.1 billion) or 6% of aggregate financing by the banking system and capital market.

Both the bond and equity markets have continued to broaden to include new asset classes such as real-estate investment trusts, exchange-traded funds and variations of Islamic securities. The Islamic bond market has been a leading segment of growth in the bond market, accounting for 31.3% of total bonds outstanding as at end-2006. During the year, issuances of Islamic medium-term notes and bonds contributed 50.3% of PDS issued. In recent years, an increasing array of new Islamic financial instruments have been developed and used in financial market activities, including the Bank Negara Malaysia Sukuk Ijarah, Bank Negara Monetary Notes, Islamic residential mortgage-backed securities, and most recently, the Commodity Murabahah Programme by Bank Negara Malaysia. This trend is expected to continue with the presence of new players in the market following the issuance of new Islamic banking licences by Bank Negara Malaysia.

A substantial part of trading activities in the interbank (i.e. wholesale) money and bond markets is arranged through money brokers. As at end-2006, there were eight licensed money brokers in operation. Total transactions executed through money brokers accounted for more than 65% of the total volume transacted in the money and bond markets in 2006.

An active **foreign exchange market** is supported by the continued expansion in economic activity and private investment, coupled with larger portfolio flows. Since the exchange rate was floated in July 2005, the increase in portfolio flows as well as hedging transactions have been key drivers of increased activity in the Kuala Lumpur interbank foreign exchange market. The total volume of spot and swap transactions

**Chart 1.2**  
**Volume of Interbank Transactions in the Kuala Lumpur Foreign Exchange Market**



Note: Data from 2002 onwards are based on the new Ringgit Operations Monitoring System (ROMS), whereas observations for previous years are based on transactions of the eight Authorised Dealers

in the Kuala Lumpur foreign exchange market amounted to RM925.9 billion in 2006, representing a significant increase of 42.4% from the previous year, with the bulk of transactions in ringgit against the US dollar.

The **derivatives market**, encompassing both over-the-counter (OTC) and exchange-traded derivatives, coexists with, and complements, the financial markets in offering additional financial products for risk management and investment purposes. Transactions in the OTC market were mainly concentrated in foreign currency and interest rate forward and swap contracts. In 2006, foreign currency forward and swap transactions undertaken with banking institutions in notional terms increased by 30.6% to RM208.4 billion (2005: RM159.6 billion). Total interest rate swaps with banking institutions were also significantly higher by 95.3% at RM364.4 billion (2005: RM186.6 billion). Meanwhile, in the exchange-traded derivatives market, a total of 4.2 million contracts were traded in 2006, up 66.4% from 2005. The Crude Palm Oil (CPO) futures and Kuala Lumpur Composite Index (KLCI) futures were the most actively traded instruments on Bursa Malaysia Derivatives, accounting for over 90% of the total volume traded on the exchange, while Kuala Lumpur Interbank Offer Rates (KLIBOR) futures, MGS futures and palm kernel oil futures accounted for the remaining volume of transactions.

An essential part of the financial infrastructure is the **payment system**. The development of an efficient, reliable and secure payment system has been instrumental in facilitating settlement, custody and delivery of financial products and services. The real time gross settlement system (RENTAS) for large-value interbank funds transfers and scripless securities, and SPICK, the image-based cheque clearing system, were introduced by Bank Negara Malaysia in 1999 and 1997 respectively. These are complemented by other proprietary systems owned and operated by financial institutions. They include the Interbank Giro (the batch-oriented inter-bank funds transfer system), e-Debit (the domestic debit card network) and Financial Process Exchange (the Internet payment system) operated by the Malaysian Electronic Payment System (1997) Sdn. Bhd. (MEPS) which is owned by the domestic banks. There are currently two shared automated teller machine (ATM) networks in Malaysia, the MEPS network for the domestic banks and several development financial institutions, and the HOUSE network for the locally-incorporated foreign banks. Clearing and settlement systems for securities (other than scripless securities settled through RENTAS) and derivatives are operated by Bursa Malaysia Berhad.

### FINANCIAL INTERMEDIATION – SOURCES AND USES OF FUNDS

Deposits placed with financial institutions and contributions to the provident, pension and insurance funds represent the main sources of financing for the financial system. Banking institutions remained the largest mobiliser of total deposits of the financial system, accounting for 77.1% of total outstanding deposits in 2006, while contributions to provident and pension funds continued to be largely dominated by the Employees Provident Fund which accounted for more than 90% of total contributions. Total resources of the financial system are mainly channelled into loans and advances, largely extended by banking institutions, as well as investments in securities.

**Table 1.4**  
**Sources and Uses of Funds of the Financial System**

	Annual change		As at end-2006p
	2005	2006p	
	RM billion		
Sources:			
Capital and reserves	13.6	26.6	207.2
Currency	2.0	3.5	37.9
Deposits	87.5	128.0	1,051.1
Borrowings	3.4	2.6	58.6
Funds from other financial institutions <sup>1</sup>	12.5	-8.4	75.8
Insurance, provident and pension funds	35.7	11.5	385.1
Other liabilities	-6.9	14.7	275.4
Total	147.8	178.5	2,091.2
Uses:			
Currency	1.0	-0.4	5.7
Deposits with other financial institutions	11.5	62.8	322.2
Loans and advances <sup>2</sup>	65.9	43.7	765.3
Securities	39.8	16.4	489.3
Treasury bills	1.3	0.0	1.7
Commercial bills	-1.3	-1.1	6.0
Malaysian Government (MGS)	14.2	1.1	154.8
Corporate	20.9	14.5	306.1
Private Debt Securities	10.2	-1.2	139.2
Equities	9.8	15.7	166.9
Foreign	2.1	0.6	7.3
Others	3.7	1.2	13.4
Gold and foreign exchange reserves	15.4	25.7	288.9
Other assets	14.1	30.4	219.8

<sup>1</sup> Includes statutory reserves of banking institutions

<sup>2</sup> Excludes loans sold to Danaharta

p Preliminary

Note: Numbers may not necessarily add up due to rounding

### PERFORMANCE OF THE FINANCIAL SECTOR

#### Banking Sector

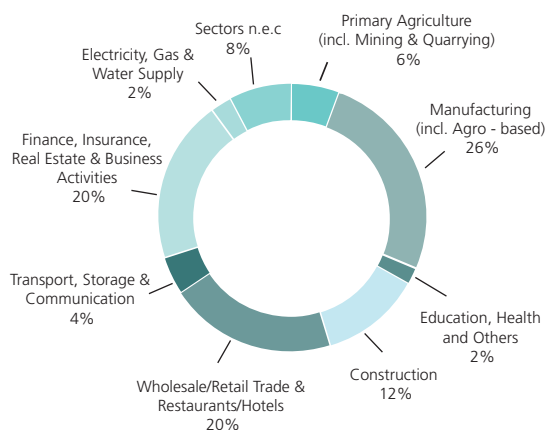
The banking sector, both conventional and Islamic, remains as the mainstay of the intermediation function within the economy and has strengthened further its role as an enabler of economic growth. Developments in the

economic, business, operating and regulatory environment have all contributed to the robust, sound and competitive banking sector that is seen today. Public access to banking and financial services continued to improve via the extensive branch network and modern delivery channels which leverage on advancements in information and communications technology such as the desktop and Internet as well as mobile phones. Growth in deposits mobilised by the banking sector averaged at an annual rate of 9.4% over the past six years, not only in volume terms but also in terms of diversity and product range. Similarly, more diverse and increasingly complex loan packages and financing instruments are being offered to meet the evolving needs of the economy. As at end-2006, deposits mobilised by the banking sector amounted to RM810 billion or 148.2% of GDP, whilst loans and financing remained steady at 108.5% of GDP amidst greater disintermediation by the capital market. The return on equity averaged at 16.1% in 2006. In terms of employment, a total of 100,414 persons (2000: 96,159 persons), representing about 1% of the labour force, were employed in the banking sector.

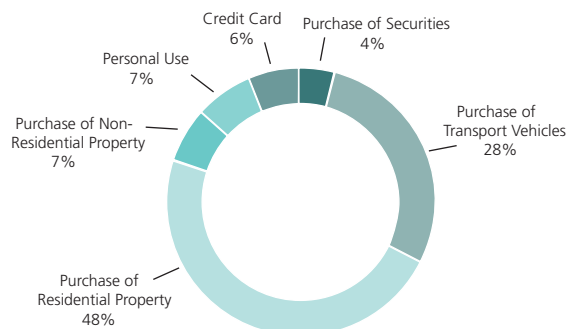
### ***Sustained lending activities***

Lending and financing activities were more moderate in 2006 influenced by the more cautious attitude and sentiments on the demand side during the early part of the year. Outstanding loans by

**Chart 1.3**  
**Lending to Business Sectors**



**Chart 1.4**  
**Lending to Households**



the banking system expanded by 6.3% to RM593 billion as at end-2006 (end-2005: RM558.1 billion). Portfolio rebalancing and strategies aimed at capturing greater market share in the retail sector amidst greater use of capital market funding by large businesses, have resulted in greater concentration in the retail-based sectors. Loans and financing extended to the household sector and the small and medium enterprises (SMEs) now account for 56.2% and 17.6% of banking system loans respectively, with emerging emphasis on micro enterprises. Loans extended to individuals were mainly in the form of mortgages (48%) and car financing (27%) while lending to SMEs was primarily concentrated in wholesale and retail trade (25%), manufacturing (25%), finance, real estate and business-related (14%), and construction-related (13%) industries. Non-performing loans (NPLs) continued to improve, underpinned by higher reclassification of NPLs to performing status and recoveries, as well as efforts to achieve healthier balance sheets via loan write-offs. This resulted in the decline in net NPLs based on the 3-month classification basis by 12.7% to RM27.4 billion to account for 4.8% of net loans as at end-2006.

### ***Strong capitalisation supported by active capital management activities***

Capital ratios remained high and well in excess of the minimum requirement. The risk-weighted capital ratio (RWCR) had consistently exceeded 12.5% throughout the year. The strong capital position also provided a sizeable buffer against



unexpected losses arising from credit and market risks.

Greater capital management activity has been observed in recent periods. With intensifying competition and increased pressures to ensure sustainable and attractive long-term returns to shareholders, many banking institutions have undertaken efforts to diversify and enhance the cost efficiency of capital. This has been facilitated by greater regulatory flexibility and innovations in capital management activities. Higher issuances of Tier-2 subordinated debt capital led to the decline in composition of Tier-1 capital to 71.6% of total capital as at end-2006 from 73.3% two years ago. At the same time, innovation in capital instruments has also seen the emergence of hybrid capital instruments, with characteristics of both debt and equity, which qualify for innovative Tier-1 capital. On aggregate, the core capital ratio was 10.3% as at the end of the year.

### ***Improved productivity and efficiency contributed to sustained profitability***

Preliminary unaudited pre-tax profit rose by 4.7% to RM13 billion, driven mainly by higher revenue from lending and financing activities, the provision of remittance and settlement services, as well as trading activities. The higher profit level reflected greater diversification in the business portfolios of banking institutions. Banking institutions have also ventured into new business areas such as the offering of investment-linked products, cross-selling of bancassurance and unit trust products, wealth management and other ancillary financial services. Greater operational flexibility accorded to banking institutions coupled with innovations in products and delivery channels further contributed towards improved efficiency and profitability.

Net interest income improved by 10.8% in line with continued growth in lending and financing activities, interbank transactions, as well as increased treasury activities. Amidst an environment of intense competition and surplus liquidity, coupled with higher interest expense on deposits, the gross interest margin remained almost unchanged at 2.80 percentage points. Meanwhile, the net interest margin (measured in terms of net interest income minus overheads and

provisions expressed as a percentage of interest-related assets) narrowed to 0.39 percentage point.

During the year, banking institutions continued to enhance business efficiency through improvements in IT systems and processes. Higher establishment and marketing expenses relating to rebranding and branch refurbishment strategies led to an increase in the expense ratio (staff costs and overheads to total income) to 41.3% (2005: 40%). The ability of banking institutions to withstand competitive pressures is determined by factors beyond that of asset and capital size. While the higher staff-related expenditures led to the increase in staff cost per employee to RM72,164 (2005: RM65,344), this has translated into improved productivity. Pre-tax profit generated per employee increased to RM131,899 compared to RM130,297 in the previous year.

### ***Growing significance of Islamic banking***

Operating parallel to conventional banking, Islamic banking has also grown in size, diversity and importance in the Malaysian financial landscape. The number of players in the Islamic banking sector has increased with the commencement of operations of four institutions during the year. Assets of the Islamic banking system expanded by 20.5% in 2006 to constitute 12.2% of banking system assets. This development has been underscored by growth in financing activities (+12.3%) which now accounts for 13.2% of banking system lending. Deposits mobilised by the Islamic banking system had also grown at a robust rate of 18.2% in 2006 to account for 12.2% of banking system deposits.

The Islamic banking sector remained well-capitalised, supported by higher pre-tax profit and the injection of capital by new entrants and players. The RWCR recorded a strong level of 16.6% whilst the core capital ratio stood at 12.6%. Preliminary unaudited profit before tax for the Islamic banking system amounted to RM1.7 billion, posting a growth of 9.6%. The higher profit was contributed largely by growth in financing income (13%), income from funds placement (75.1%) and recoveries from non-performing assets (22.8%). Consequently, return on assets and return on equity for the

Islamic banking sector was 1.3% and 16.4% respectively.

The Islamic banking sector continues to support various economic activities that contribute to the nation's economic growth. Total financing extended by the Islamic banking sector was RM78.5 billion as at end-2006. Similar to the trends observed for conventional banking, of the 12.3% increase in financing, 57.6% was channeled to the household sector. The level of non-performing financing continued to decline steadily as net non-performing assets as at end-2006 declined almost 25% to RM3.4 billion to account for 4.5% of net financing.

Investment deposits (general and specific) rose by 10.3% to account for 49.6% of Islamic banking deposits, the bulk of which was concentrated in the short-term maturity profile of below one year (95.2%). Meanwhile, savings and demand deposits expanded by 16.7% and 38.8% respectively, mainly attributed to the expanding retail customer base in Islamic banking.

The ratio of staff-related expenses and overheads to gross operating income rose to 42.6%. The increase in staff costs was attributed mainly to higher remuneration packages offered to retain and attract expertise amidst competition from the new entrants, as well as additional resources required to support the expansion of the industry. Meanwhile, higher overheads were due mainly to establishment and administrative expenses incurred in the setting up of new branches by Islamic banking institutions, in particular, by the new market entrants.

### **Insurance and Takaful Sector**

The insurance and takaful industry has gained greater significance in the Malaysian financial landscape both as a provider of risk protection as well as an alternative avenue for savings and investments. This has been achieved against the backdrop of increased awareness and acceptance among the public and businesses at large of the importance of risk protection. At the same time, growing preference among the

more affluent segments of the population for savings and investment-related products such as endowment and investment-linked products which offer increased investment flexibility, has also contributed to the growth of the sector. These developments were further boosted by the growing importance of bancassurance as a channel for marketing of life insurance products. Prospects for further growth in the insurance and takaful sector continue to remain positive given the favourable outlook of the economy and income growth as well as the relatively low level of insurance penetration of 5.1% of gross national product.

The insurance and takaful sector recorded combined premiums and contributions totalling RM26.6 billion during the year. This represented an increase of 6.8%, the bulk of which occurred in the second half of the year as expectations of a further increase in interest rates diminished and households and businesses became accustomed to the higher cost of living.

In the life insurance and family takaful sector, new business premiums and contributions posted a growth of 13.5% to RM8.4 billion (2005: RM7.4 billion) in 2006. Growth was driven primarily by investment-linked business which expanded at an impressive annual rate of 89% to RM3.4 billion to offset the decline in ordinary life business. At the close of the year, investment-linked products accounted for more than 40% of new business.

In terms of distribution channels, new premiums garnered through bancassurance tie-ups accounted for a higher share of 44.2% in 2006 (2005: 41.8%), while the market share of agency business declined to 44.8% (2005: 46%).

The general insurance and takaful sector expanded at a more moderate pace during the year. Gross direct premiums and contributions grew by 4.1% to RM10.3 billion (2005: +9.8% to RM9.9 billion). This was underpinned by lower business volumes in the motor sector as well as softening of premium rates for commercial



property, aviation and cargo risks. Meanwhile, these developments were mitigated by the stronger growth in marine hull, offshore oil-related, medical and health, and personal accident classes of business. The growth in marine hull business was attributed mainly to new business arising from the construction of navy patrol vessels, while the growth in offshore oil-related premiums reflected the increased oil and gas activities following the rise in oil prices.

The solvency position of the insurance industry remained comfortably strong with an aggregate solvency surplus of RM16 billion (on an unaudited basis) as at end-2006. Profitability levels were sustained in tandem with the favourable investment climate which led to higher net income from investment activity and write-back of provisions for diminution in value of investments. Combined with the higher new business premiums, excess of income over outgo for the life and family business expanded 17.8% to RM12.4 billion in 2006 (2005: -7.6% to RM10.6 billion). The surplus for life insurers improved to RM4.8 billion (2005: RM3.6 billion) supported mainly by improved investment returns and favourable experiences in mortality and morbidity. For the general insurance and takaful business, higher claims, primarily from motor business, led to a decline of 43% in underwriting results to RM0.6 billion (2005: RM1.1 billion). Higher investment earnings however, enabled the general insurance and takaful sector to sustain an overall operating profit at RM1.5 billion.

Total assets of the insurance and takaful industry continued to register double-digit growth of 12.6% to RM115.4 billion as at end-2006, supported mainly by the expansion in life fund assets (+14.1%). Of this amount, corporate and debt securities amounted to RM54.3 billion. Investments in foreign assets rose by almost 300% to RM1.2 billion (end-2005: RM0.3 billion) reflecting the strategies by insurers to match liabilities of foreign currency denominated products as well as capital guaranteed products with exposures in foreign markets. However, the share of foreign assets relative to total insurance fund assets remained low at 1% of total assets.

### ***Takaful sector registered robust growth***

The takaful industry continued to record a strong performance during the year. Total assets grew by 17.9% to account for 6.1% of total assets of the insurance industry, while combined takaful contributions rose to RM1.7 billion to account for 6.5% of total premiums of the industry. In the family takaful sector, new business contributions increased significantly by 74.6% to RM1.3 billion (2005: RM725.5 million). This was attributable mainly to growth in the mortgage takaful (+73.7% to RM0.7 billion) and investment-linked businesses (+200.1% to RM0.2 billion) which accounted for 68.2% of new business. The general takaful business maintained its strong growth momentum with gross direct contributions expanding by 29.4% to RM713.7 million (2005: RM551.4 million). This was driven largely by higher business volumes in the motor and fire sectors which recorded a growth of 42.9% and 34.7% respectively.

### **Development Financial Institutions**

The DFIs under the purview of Bank Negara Malaysia strengthened further in 2006, as evidenced by the overall favourable business performance and improved financial health. During the year, overall lending by the DFIs to their targeted sectors recorded a strong growth of 17.9%, with total loans outstanding increasing to RM51.1 billion as at end-2006 (end-2005: RM43.4 billion). In response to the increasing number of development projects in the infrastructure sector, lending extended to this sector increased further by 11.7% to RM14.9 billion, mainly to finance activities in the construction, transport and communication sectors. Financing to the SMEs, including those in the services, manufacturing and agriculture sectors, also expanded further by 9.9% to RM13.2 billion, supporting efforts by the Government to promote and develop the SME sector. As at end-2006, financing by DFIs to SMEs accounted for 25.9% of their combined total loans outstanding.

In support of efforts to revitalise the agriculture and agro-based sectors, lending to the sector recorded a higher growth of 8.5%



during the year (2005: 2.9%), channelled mainly to crops, livestock and agro-based processing activities. Financing to support export activities also remained robust, with 44% of the loans channelled to business ventures in the non-traditional markets. Meanwhile, financing for consumption credit by several DFIs increased by 23.7% (2005: 42.9%), reflecting sustained consumer demand, especially for personal loans from the lower income groups.

The NPLs of DFIs remained manageable, as evidenced by the declining gross and net NPL ratios to 9.4% and 3.9% respectively as at end-2006 (end-2005: 10.4% and 4.5% respectively). The improved asset quality was attributed to progressive efforts undertaken by the DFIs to enhance their credit processes and information systems, which had enabled them to better manage and control their NPLs. In addition, the

participation of almost all the DFIs in the Central Credit Reference Information System (CCRIS) has contributed to better credit assessments, thus resulting in lower incidences of new loans turning non-performing.

Total deposits mobilised by the deposit-taking DFIs to promote savings among small savers and cooperative members increased further to RM40.3 billion as at end-2006 (end-2005: RM36.2 billion). The sustained expansion in business operations continued to generate strong profits for the DFIs, amounting to RM1.3 billion in 2006 (2005: RM1.5 billion). Of this, more than 80% was contributed by operating profits. The favourable results complemented the capital injection by the Government to further strengthen the financial position of the DFIs with total shareholders' funds increasing to RM10.7 billion as at end-2006, from RM8.4 billion as at end-2005.

# Risk Assessment of the Financial System

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## OVERVIEW

The financial sector performs a key intermediary role in the Malaysian economy. Given this function, the growth and stability of the financial sector has significant interlinkages with developments in the real sector as well as macroeconomic conditions. In addition, with the increasing level of openness of the Malaysian economy and the financial system, resulting in greater integration with the external sector, the task of preserving stability of the financial sector becomes more complex and challenging. This is because developments in the external sector including global financial markets can substantially influence conditions and developments in the domestic economy and financial system as well as behaviours and risk attitudes of financial market players. This is further amplified by increased capital flows into emerging markets and in particular, into the region following greater capital account liberalisation. These and other developments, underscore the need for a heightened and more robust surveillance framework that expands beyond developments in the domestic economy in order to ensure that emerging risks and vulnerabilities are sufficiently identified and addressed in a timely and effective manner.

An important area of focus in 2006 was on identifying risks and vulnerabilities in the financial markets associated with the significant movements in capital flows particularly into emerging markets in Asia and Latin America amidst an environment of prolonged surplus liquidity. On the domestic front, issues confronting the household and corporate sectors emanating from supply-side inflationary pressures arising from higher prices of petrol and utilities, and expectations of rising interest rates, dominated the focus of macroprudential surveillance efforts particularly in the first half of the year.

The Malaysian financial system remained highly resilient in the face of a number of challenging developments including the impact

on the economy of the higher oil and commodity prices and increased volatility in the financial markets, in particular the equity price movements in May 2006 and in late February 2007. This resulted from the enhanced risk management capability, financial infrastructure development combined with strengthened governance and oversight at the institutional level. Moreover, the stronger financial position and improved key financial soundness indicators have also contributed to the continued resilience of the system. In particular, capitalisation remained high at levels above 12.5% throughout the year, profitability was sustained with preliminary unaudited pre-tax profit of RM13 billion and return on equity of 16.1%, and asset quality continued to improve recording a net NPL ratio of 4.8% at end-2006. The strong performance of the banking system is supported by the improved financial infrastructure and a robust regulatory and supervisory framework.

**The financial system and institutions continued to remain sound and stable, demonstrating strong resilience to the challenging environment, driven primarily by stronger financial positions, more sophisticated risk management and strengthened governance amidst enhanced regulatory and supervisory framework.**

The outlook for the financial system stability remains highly favourable as the strengthened resilience and robust financial performance as well as stronger institutional set up has strengthened further the capacity and capability of the financial sector, both at the system and institutional levels, to withstand future disturbances. The more diversified financial infrastructure will also enable

risks in the financial system to be managed in a more effective and efficient manner.

## GLOBAL MACROECONOMIC AND FINANCIAL DEVELOPMENTS

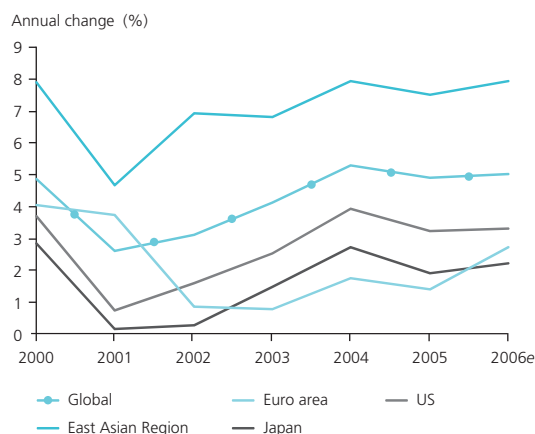
### *Continued expansion in industrial countries and sustained growth momentum in the Asian countries amidst moderation in the US economy*

Global growth continued at a firm pace in 2006, marking its fourth consecutive year of expansion above 4%, although it moderated in the latter half of the year following some slowing of the US economy. Despite an environment of high oil prices, rising interest rates, and increased volatility in the financial markets, global growth broadened, with continued recovery in Japan and the euro area reinforced by sustained expansion in the Asian region. Meanwhile, global inflation has started to stabilise amidst easing oil prices. Crude oil prices declined to below USD55 per barrel in January 2007 for the first time since mid-2005, after peaking at over USD77 per barrel in July 2006.

### *Monetary tightening in major economies and in parts of Asia*

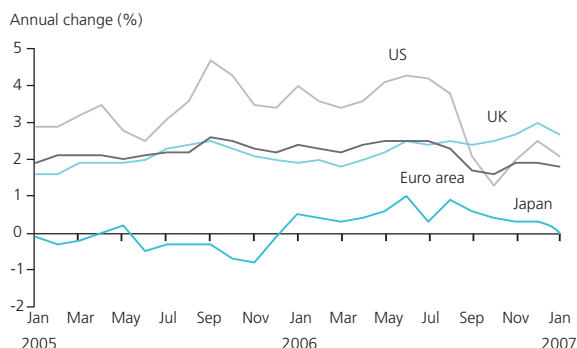
The need to manage inflationary expectations and potential pass-through pressures to underlying inflation led most central banks to pursue a

**Chart 2.1**  
**Real GDP Growth**

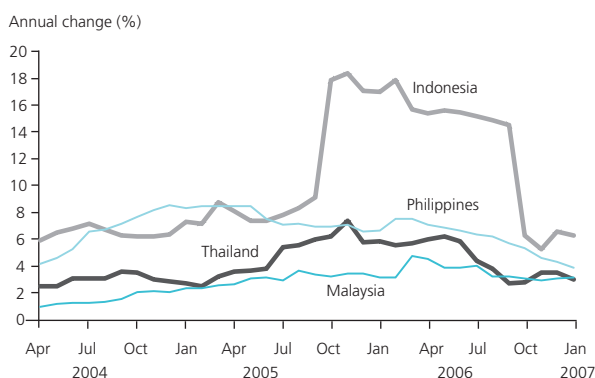


e Estimate  
Source: National Authorities

**Chart 2.2a**  
**Headline Inflation in Major Industrialised Countries**



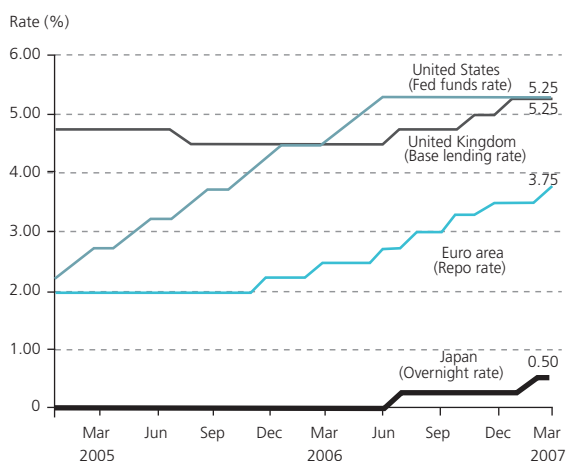
**Chart 2.2b**  
**Headline Inflation in Regional Countries**



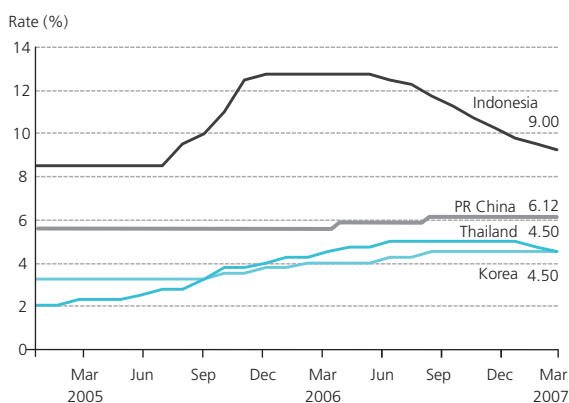
Source: National Authorities

tightening bias in monetary policy stance in 2006. Such a stance was pursued until signs of inflationary pressures clearly receded. The Federal Reserve Board raised rates to 5.25% by June 2006 and maintained its stance for the rest of the year while the Bank of Japan ended its zero interest rate policy in July 2006 following a return to positive inflation rates. Similarly, both the European Central Bank and the Bank of England raised interest rates to curb incipient inflationary pressures. In the Asian region, China raised rates to reduce the pace of credit and investment growth, while the higher rates in Korea were aimed to moderate the rapid rise in house prices. Other regional economies including Chinese Taipei and India also tightened monetary policy in 2006, the former to normalise real interest rates and the latter to contain inflationary pressures. In

**Chart 2.3a**  
**Major Industrial Countries: Official Interest Rates**



**Chart 2.3b**  
**Regional Countries: Official Interest Rates**



Source: National Authorities

Indonesia and Thailand however, interest rates were reduced amidst moderating inflation.

### ***Low volatility and risk premia permeated global financial markets***

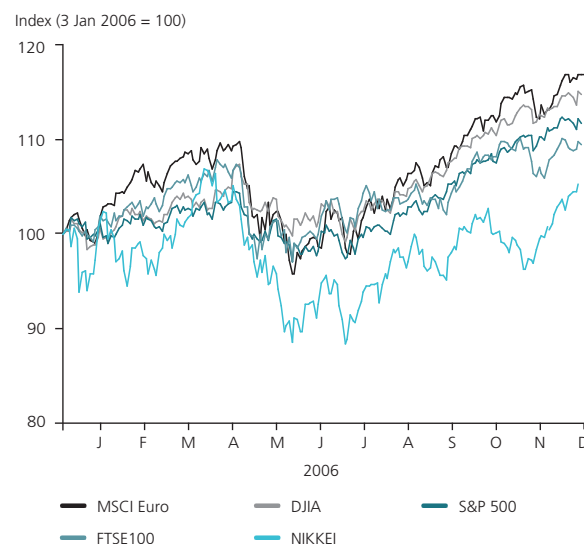
The prolonged environment of ample liquidity set the stage for larger global movements in capital in search of higher returns, reflecting a higher appetite for risk taking spurred by improved prospects for global economic conditions. Substantial capital flows into emerging market economies, which were mainly channelled to the equity markets, were also influenced by the improving corporate earnings and the overall macroeconomic environment.

Sound fundamentals in many emerging market economies, supported by stronger export performance, improved fiscal positions, as well as more developed financial sectors, were key drivers supporting these trends.

Coupled with a number of merger and acquisition activities and better than expected profit announcements by several large corporations globally, the equity market posted strong performance in the period leading to May 2006 (Charts 2.4a and b). Equity markets in emerging economies, being the primary beneficiary of the capital flows, registered strong gains as proxied by the MSCI Emerging Market Index. Similarly, in an environment of historically low corporate default rates, this period witnessed strong interest in high-yield corporate bonds. Strong buying into corporate bonds of emerging markets subsequently contributed to the narrowing of emerging market bond spreads to their historical lows.

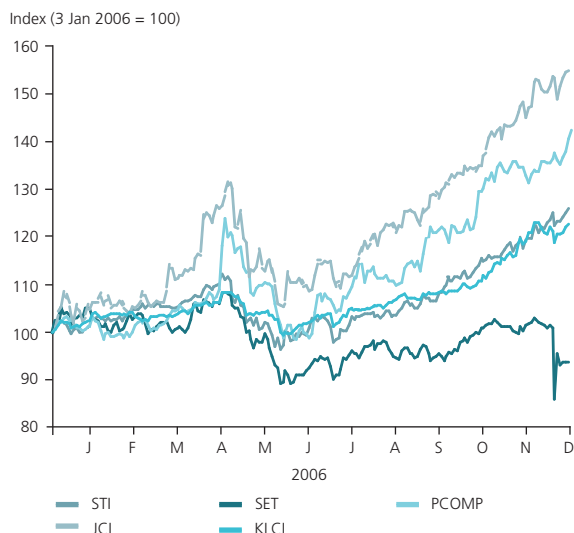
By May 2006, commodity prices including oil, copper and gold were at their record highs. This triggered a reassessment of risks on account of heightened uncertainties as well as increased expectations of inflationary pressure and monetary

**Chart 2.4a**  
**Performance of Major Equity Indices**



Source: Bloomberg

**Chart 2.4b**  
**Performance of Regional Equity Indices**



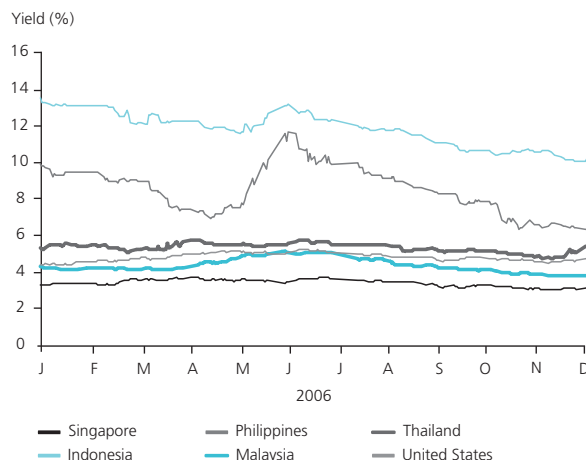
Source: Bloomberg

tightening in some economies, which culminated in a major sell off of financial assets particularly in the equity market. This had a considerable impact on equity markets in the emerging economies of Asia and Latin America. In the bond market, heightened risk aversion of investors following the reassessment of risk led to flight-to-quality trades, in favour of higher rated albeit lower yielding investments. In addition, yields on long-term US Government bonds rose, to more than 5% by end-June. Similar developments were observed in regional economies, particularly in Indonesia and the Philippines (Chart 2.5).

Notwithstanding the significant price movements observed in May 2006, the financial markets continued to be characterised by an overall low level of volatility (Charts 2.6a and b). To some extent, this was reflective of the improved fundamentals, greater sophistication in the financial sector and more efficient markets in recent years, as well as the optimism in financial markets' expectations regarding future risks and outlook for growth.

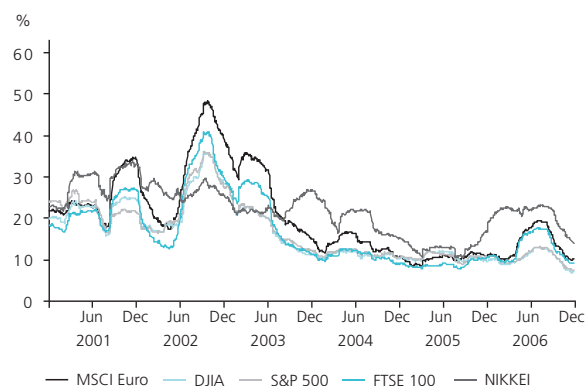
Most financial markets recovered strongly and swiftly after the correction in May on account of improved expectations on risks and outlook. In particular, with the economic fundamentals

**Chart 2.5**  
**10-Year Government Bond Yields for Selected Countries**



Source: Bloomberg

**Chart 2.6a**  
**Volatility of Major Equity Markets**

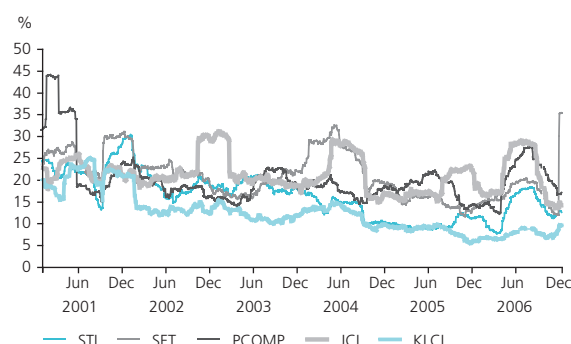


Note: Volatility is measured as the rolling standard deviation of daily returns over a 90-day period

Source: Bloomberg

remaining broadly intact, recovery took place against a backdrop of moderating oil prices, more stable commodity prices and a more optimistic global growth forecast including the expectation of a softer landing of the US economy and the continued low level of long-term interest rates. Together, these developments contributed to the resumption of capital flows into the emerging markets that drove equity prices to higher levels in the remaining period of the year. Similarly, inflows of capital especially in the longer end of the

**Chart 2.6b**  
**Volatility of Regional Equity Markets**



Note: Volatility is measured as the rolling standard deviation of daily returns over a 90-day period

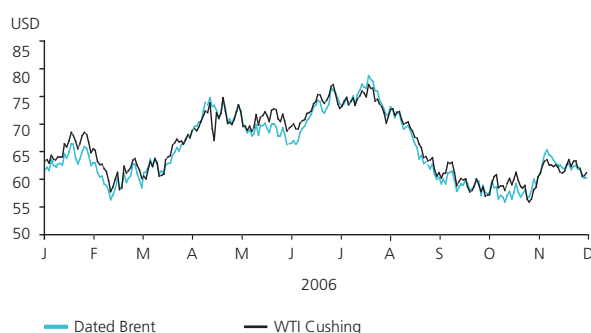
Source: Bloomberg

**Chart 2.7**  
**Goldman Sachs Commodity Index**



Source: Reuters

**Chart 2.8**  
**Oil Prices**



Source: Bloomberg

bond market caused a reversal in the yield curve as yields on longer-term bonds declined.

## ***Volatility had no destabilising effects in the region***

Whilst there were no visible signs of severe adverse implications on regional economies, financial markets within the region experienced brief periods of volatility arising from investors' heightened risk sensitivities to regional political developments and domestic measures to manage capital inflows. The impact of these developments on the region as a whole, was minimal and largely well-contained, albeit with some markets experiencing increased volatility. Overall, the region was relatively unaffected by these sporadic developments given its strong fundamentals, reinforced by lower public and corporate sector leverage, build-up of foreign reserves and improved investors' confidence, and by expectations of sustained economic growth and relatively well contained inflationary pressures.

## **MALAYSIAN MACROECONOMIC AND FINANCIAL DEVELOPMENTS**

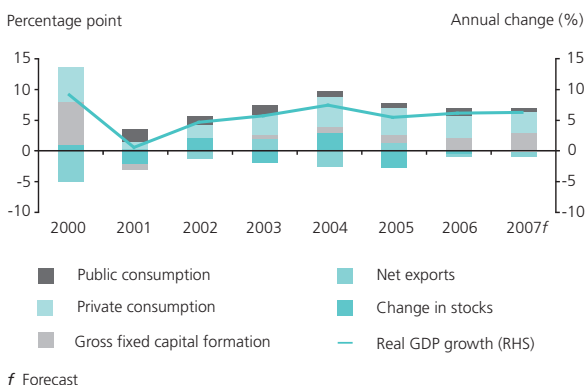
### ***Domestic economy expanded, underpinned by growth in private sector activity***

The Malaysian economy expanded by 5.9% in 2006. Growth was broad-based, led by the services, manufacturing and agriculture sectors. Private consumption expenditure remained strong, increasing by 7% in 2006, supported by higher disposable income amidst healthy labour market conditions, favourable export earnings and rising commodity prices. Gross fixed capital formation increased by 7.9% in 2006, led mainly by private sector capital spending in line with the favourable business sentiment. Strong investment spending was recorded in the manufacturing, services, oil and gas sectors, which all benefited from sustained growth in domestic and external demand.

Public consumption increased with Federal Government operating expenditure registering stronger growth of 17.7% during the second half of the year, arising from higher expenditure on emoluments, supplies and services. The Federal Government had also increased the disbursement



**Chart 2.9**  
**Contribution to Real GDP Growth**



of development expenditure during the course of the year especially on projects for education, agriculture and rural developments as well as public utilities.

## Ringgit Developments

The ringgit exhibited greater two-way movements in 2006, influenced by the underlying trade surplus, investment and financial flows into the region arising from favourable economic growth prospects and market expectations for exchange rate appreciation. By the same token, outward direct and portfolio investment, repayment and prepayment of external loans and the repatriation of profit and dividends also influenced movements in the ringgit.

## Inflation Developments

The combination of favourable global growth conditions and rising commodity prices contributed to the increase in domestic inflationary pressures in Malaysia in 2006. The average headline inflation rate, as measured by the annual change in the Consumer Price Index (CPI), increased from 3% in 2005 to 3.6% in 2006, mostly on account of adjustments to administered prices and supply-related factors.

A major contributor to the increase in the headline inflation rate was the higher transportation costs, following the increase in price of retail petroleum products in March 2006. Nonetheless, the inflationary pressures remained contained, as headline inflation moderated in the

second half of the year. This reflected the limited second-round impact of higher resource costs into consumer prices, which in turn, was attributed to the well-anchored inflationary expectations.

## Monetary Policy Developments

The Overnight Policy Rate (OPR) was raised twice in the early part of 2006 to align monetary conditions to the prevailing environment, against the backdrop of firm prospects for economic growth, and rising inflation. As the year unfolded, uncertainties emerged in the external environment, arising from sustained high energy prices, and geopolitical risks which could contribute towards some moderation of global growth. Amidst signs of limited second-round effects from higher prices, and the lack of demand-induced inflationary pressures, monetary policy took a pause to preserve the balance between sustaining the economic growth momentum and price stability. The OPR was maintained at 3.5% for the rest of the year.

## Financial Market Developments

### *Financial markets performance reflecting underlying growth momentum and in tandem with developments in global financial markets*

The performance of the Malaysian financial markets was influenced largely by both global and domestic developments. Amidst an environment of surplus global liquidity and the consequential demand for higher yielding investments, Malaysia, with its strong economic fundamentals and more developed financial markets was one of the investment destinations. This led to significant capital flows into the country especially towards the year-end reinforced further by expectations of a stronger ringgit. While the year experienced some periods of distinct volatilities, implications on the financial sector remained well-contained.

As a whole, the Malaysian equity market ended the year on a significantly positive note despite a cautious start to the year (compared with regional counterparts), and notwithstanding some distinct periods of volatility. The Kuala Lumpur Composite Index (KLCI) concluded the year with an annual gain of 21.8%, the highest since 2003, to reach

1,096.24 points, surpassing the psychological level of 1,000 points. Total turnover in Bursa Malaysia was RM250.6 billion (2005: RM177.3 billion), with market capitalisation growing 22.1% in 2006 to RM848.7 billion or 155.3% of GDP as at end-2006.

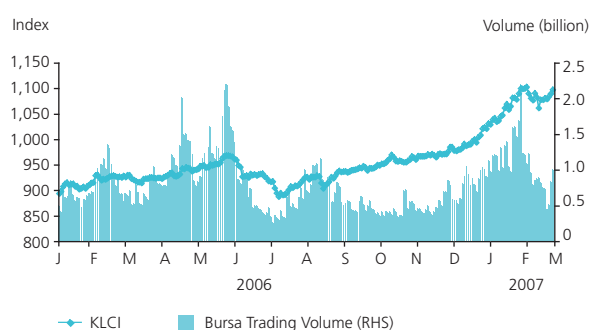
Prior to the mid-year correction, expectations of stronger export performance for the electrical and electronics sector influenced inflows of capital into technology counters in the Second Board and MESDAQ. Following the price correction in May, these portfolio flows left the country and resulted in a broad-based increase in volatility in the domestic equity market. The volatility level nonetheless remained well below that recorded during the Asian financial crisis (Chart 2.12). The impact of these developments

was relatively minimal and short-lived, as the equity market recovered strongly, largely on account of the stream of positive economic and corporate indicators that led to resurgence of capital inflows into the country, particularly into the larger counters and blue chip stocks on the Main Board. There were also upward revisions of corporate earnings forecasts by analysts, and increased merger and acquisition activities (84 successful deals valued at approximately RM90 billion in 2006 compared to RM47.3 billion in 2005). The rally in the equity market was also supported by optimism ahead of the implementation of the Ninth Malaysia Plan.

The equity market continued with its strong performance in the early part of 2007, supported by further inflows of non-resident funds. The KLCI reached a high of 1,283.47 points on 23 February 2007 before the correction in late February and early March. This was the result of the contagion effect from the weaker numbers in the US and developments in the Chinese financial markets, as well as some profit-taking activities given the considerable growth recorded. As the strong underlying fundamentals remained unchanged, the equity market has since recovered. As at 7 March 2007, the KLCI stood at 1,156.58 points or 5.5% higher compared to end-2006.

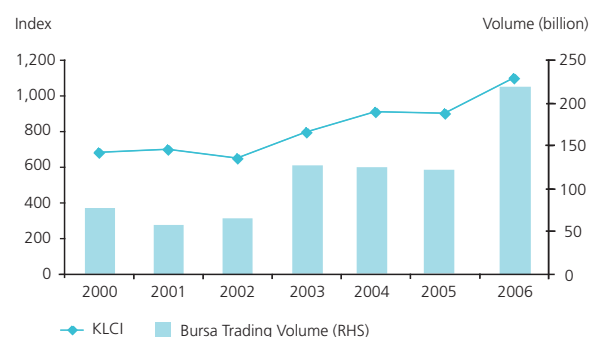
Similarly, the performance of the domestic bond market was influenced by domestic and global developments. The inflation outlook and direction of monetary policy largely influenced

**Chart 2.10**  
**KLCI Performance**



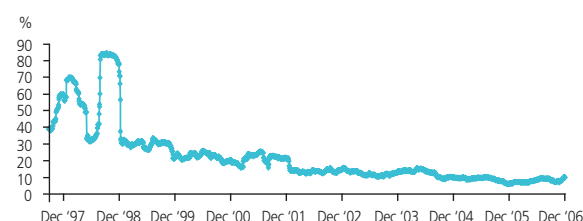
Source: Bursa Malaysia

**Chart 2.11**  
**Historical KLCI Performance**



Source: Bursa Malaysia

**Chart 2.12**  
**Volatility of KLCI Index**



Note: Volatility is measured as the rolling standard deviation of daily returns over a 90-day period

Source: Bloomberg



the rising trend in yields in the early part of 2006. By June 2006, yields on the Malaysian Government Securities had risen by as much as 80 basis points. As the inflation outlook improved, coupled with expectations of further strengthening of ringgit and supported by the continuing ample liquidity, the yields peaked in June following a marked reversal in the outlook and assessment of risks. The return in capital flows in periods following the mid-year correction sparked buying interest in the longer end of the bond market as investors' risk appetite increased, which caused long-term yields to decline. The possible inclusion of the Malaysian bond market in the Citigroup World Government Bond Index, also in part led to pre-emptive buying by global fund managers in the latter part of the year.

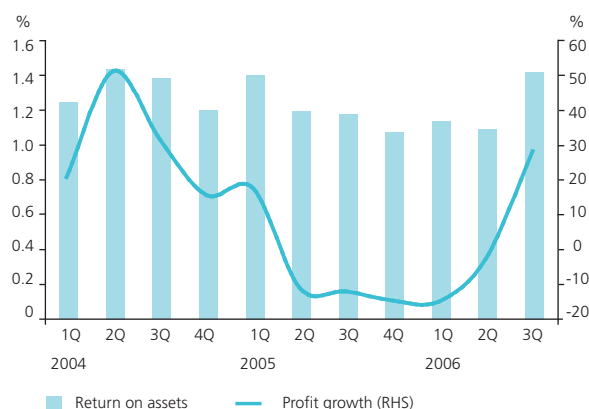
### NON FINANCIAL SECTOR

#### ***Strong business sector tolerance amidst initial uncertainties***

Developments in the business sector remained favourable for the greater part of the year. Accounting for 39.6% of banking system loan exposures and with more than RM186.1 billion of corporate bonds outstanding, the strong business sector performance had favourable spillover effects on the banking sector and financial markets. Businesses appeared to have adapted, at a relatively rapid pace, to the new levels of operating costs following higher costs of transportation, raw materials and financing.

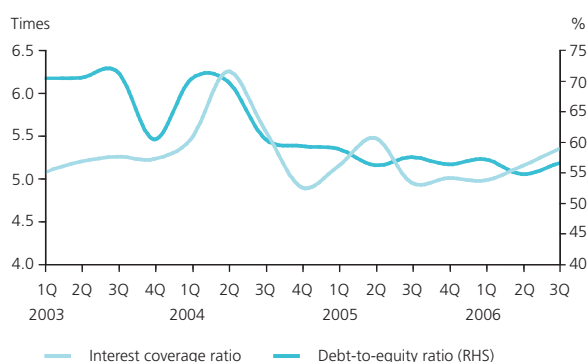
In the corporate sector, aggregate profits of a sample of listed corporations, representing more than 70% of Bursa Malaysia's total market capitalisation, rebounded strongly in the third quarter. After being in the range of below 1.2% for three quarters, the average return on assets for these listed companies improved to 1.4% in the third quarter of 2006. Meanwhile, the overall debt-to-equity ratio remained almost flat at 56.3%. The stronger profit performance and stable leverage position resulted in an improvement in the debt servicing capacity (measured as the ratio of earnings before interest, depreciation and taxes to total financing cost) of these corporations to 5.3 times. In addition, spreads on corporate bonds

**Chart 2.13**  
**Profitability**



Source: Bloomberg

**Chart 2.14**  
**Debt Servicing and Leverage**

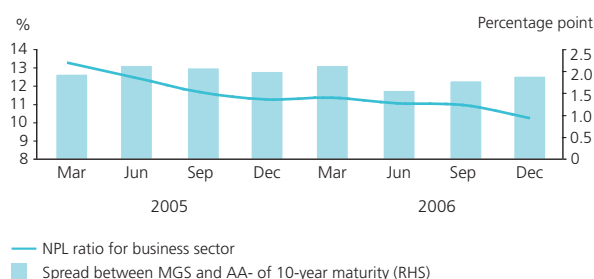


Source: Bloomberg

narrowed and the NPL ratio declined further in 2006 broadly reflective of the improvement in the performance of the business sector. With improved balance sheets and financial positions, a conducive operating environment and continued strengthening of confidence and business sentiment, the corporate sector remained well-positioned for future expansion in 2007. On aggregate, downside risks to the banking system emanating from developments in the corporate sector remained subdued.

The performance of the corporate sector was to a large extent, influenced by the inter-linkages among the industries in the economy. Reflecting strong domestic and external demand

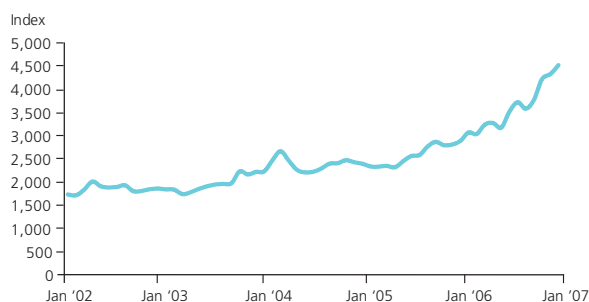
**Chart 2.15**  
**Spread and NPL Ratio**



as well as high commodity prices, improved profitability was apparent for businesses in the manufacturing, primary commodity and services sectors (Chart 2.16). Within the manufacturing sector, a robust pick-up in the earnings of the metal processing and fabrication, and building materials industries was highly correlated with the improvement in the construction sector.

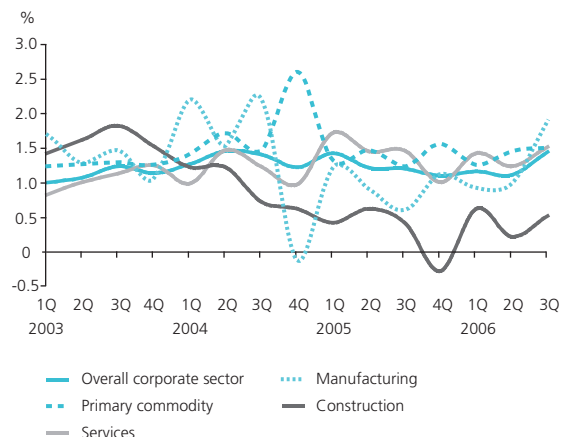
Similarly, the strengthening in the profitability of businesses in the primary commodity sector was driven largely by higher commodity prices including crude oil, palm oil and rubber. Nonetheless, while higher petroleum prices had benefited the oil and gas industry, the transport and storage businesses had to contend with the rising costs that had affected their profit levels. Meanwhile, within the construction sector, prospects for growth of the civil engineering segment improved considerably following the implementation of the Ninth Malaysia Plan.

**Chart 2.16**  
**Movement in Plantation Stock Index**



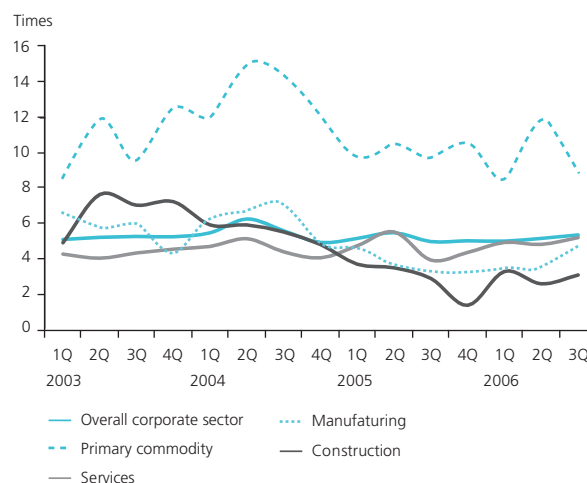
Source: Bloomberg

**Chart 2.17**  
**Return on Assets for Selected Sectors**



Source: Bloomberg

**Chart 2.18**  
**Interest Coverage Ratio for Selected Sectors**

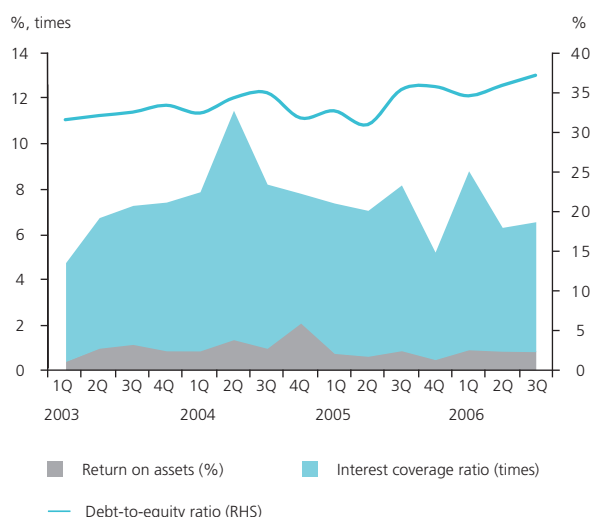


Source: Bloomberg

At the industry level, the effects of adjustments in demand-side factors particularly moderation in the sale of residential properties and passenger vehicles, on selected industries remained manageable.

In the property sector, the moderation in overall demand for residential properties has led to lower sales and revenue growth hence, raising some concerns on the debt servicing capacity of some property developers (Chart

**Chart 2.19**  
**Financial Strength of Selected Companies in the Property Sector**



Source: Bloomberg

2.19). The increased cost of living combined with higher prices of new launches appeared to have induced more cautious behaviour amongst prospective homebuyers. On the supply side, property developers appeared to have factored these developments, resulting in moderation in units launched in 2005 and 2006. Overall demand was boosted however, by demand for high-end and prime location properties which were also supported by increased interest from foreign purchasers and investors. Intense competition has also driven developers to offer new housing concepts and designs as well as innovative housing products in the market. With the continued rise in urbanisation set to continue amidst growing affluence, prospects for property developers are expected to improve.

Meanwhile, slowing demand for new passenger cars saw the softening of the automotive sector, with total industry sales (including commercial vehicles) declining by 11.1% to 490,768 units in 2006 (2005: +13.3%, 552,316 units). This translated into the lower demand for new bank financing as reflected in the 23.9% decline in applications for car hire purchase. Cautious consumer behaviour has overshadowed the lower prices of vehicles following the announcement of the National Automotive Policy in March 2006. The corresponding decline in prices of used cars in particular, has discouraged trade-ins and replacement of existing cars. With lower sales, profits of the automotive sector (based on a sample of auto companies representing more than 85% of Bursa Malaysia's market capitalisation for the auto sector) declined in the first nine months of 2006 causing a decline in the debt servicing capacity (Charts 2.20 and 2.21).

A related implication of the decline in vehicle sales was on the performance of the auto parts manufacturers. Notably, the interest coverage ratio of the auto parts manufacturers declined to 6.5 times (Q3 2005: 9.9 times) and their debt-to-equity ratio increased to 38% (Q3 2005: 29.2%). Nonetheless, the banking sector remained well-positioned to absorb the potential risk given that its exposure in this segment of the business sector has remained low at only 0.5% of banking system business loans as at end-2006.

Overall, developments in the automotive industry are not expected to pose any systemic risk to financial stability. Expected launches of new models by both national and non-national

**Table 2.1**  
**Residential Property Transactions**

Period	2000	2001	2002	2003	2004	2005	2006
Residential property transactions							
Units	170,932	176,208	162,269	164,723	195,241	181,762	176,277
Value (RM billion)	21.9	22.2	21.1	23.0	29.3	28.4	28.7

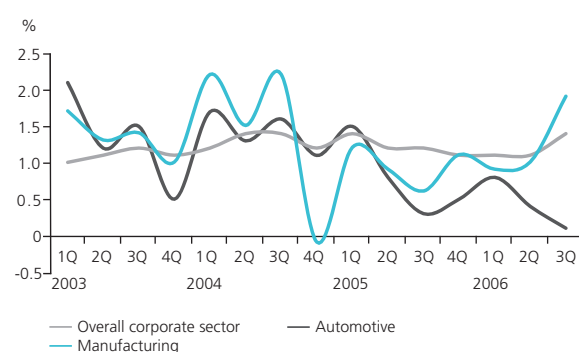
Source: National Property Information Centre (NAPIC), Valuation and Property Services Department

**Table 2.2**  
**Sales of Vehicles (in units)**

Period	2000	2001	2002	2003	2004	2005	2006
Passenger cars	282,103	327,447	359,934	320,524	380,568	416,692	366,738
Commercial vehicles	33,732	37,623	42,727	50,882	70,948	97,820	90,471
4x4 vehicles	27,338	31,311	32,293	34,339	36,089	37,804	33,559
<b>Total</b>	<b>343,173</b>	<b>396,381</b>	<b>434,954</b>	<b>405,745</b>	<b>487,605</b>	<b>552,316</b>	<b>490,768</b>

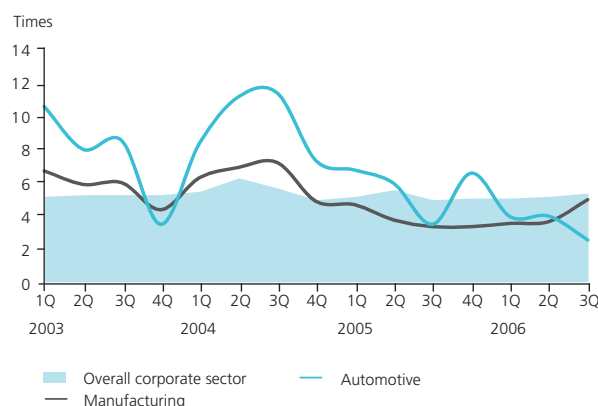
Source: Malaysian Automotive Association

**Chart 2.20**  
**Return on Assets for Selected Companies in the Automotive Industry**



Source: Bloomberg

**Chart 2.21**  
**Interest Coverage Ratio**



Source: Bloomberg

### **Potential catalyst and risks to corporate performance moving forward**

With the growth momentum of the Malaysian economy expected to remain favourable in 2007, the financial position of the corporate sector will likely strengthen further. Several sectors are expected to perform strongly benefiting from the implementation of projects under the Ninth Malaysia Plan and the Visit Malaysia Year 2007 (VMY 2007) programme. These include a total of 880 new construction-related projects totalling RM15 billion which would have a favourable impact mostly on the civil engineering subsector. The manufacturing sector, particularly construction-related industries, which supply raw materials to the construction sector, is also expected to benefit from robust demand amidst improving market conditions. For the services sector, the tourism industry, during VMY 2007, is expected to have positive spillover effects in the retail, leisure and hospitality sub-sectors.

Increased merger and acquisition activities involving major listed companies from various sectors such as plantations, construction, oil and gas, manufacturing and services (utilities and gaming sub-sectors) are expected to provide further synergistic improvement to the corporate sector. In the long run, these adjustments provide significant potential for improved profitability as well as greater financial resilience for the sector. Another major catalyst is the positive impact expected from further reforms of the Government Linked Companies (GLCs) under Phase 3 of the GLC Transformation Programme in 2007.

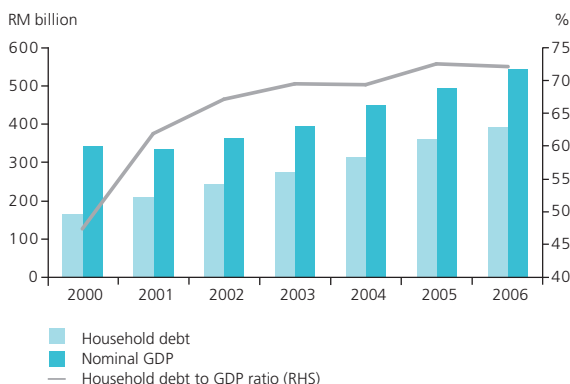
car makers and moderating inflationary pressures are expected to provide the impetus for sustained performance in 2007.

## Household sector remained resilient amidst challenges

Not unlike the business sector, the household sector is closely linked to developments in macroeconomic conditions. While higher commodity prices and strong gains in the equity market partly contributed to firmer growth in the financial assets of households, expectations surrounding the rising cost of living appeared to have prompted households to become more cautious particularly for large item spending. Underpinned by the more subdued housing and automotive markets, household debts grew at a moderate pace of 9.8% in 2006 after six years of rapid growth. In line with these developments, the debt service ratio (DSR) of the household sector (calculated as the share of disposable income devoted to principal and interest repayments on debt) appeared to have stabilised with the overall credit quality of household sector exhibiting improving trends.

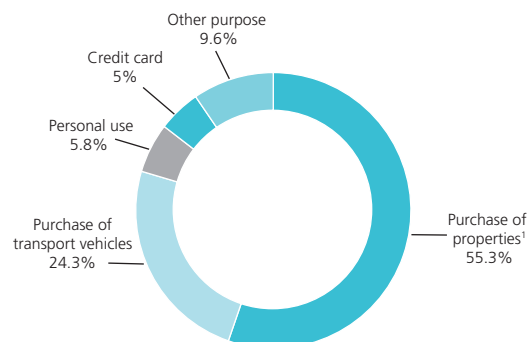
The ratio of household debt to nominal GDP stabilised at 72.3% (2005: 72.6%) on the backdrop of an easing in household debt accumulation which, in turn, was attributed to lower purchases of cars and residential properties (collectively accounted for approximately 70% of total household debts). Moderation in household borrowing was broad-based across the different credit providers. The banking system remains the primary financier given their extensive branch network and more flexible financing packages.

**Chart 2.22**  
**Household Indebtedness**



Source: Treasury Housing Loans Division and Bank Negara Malaysia

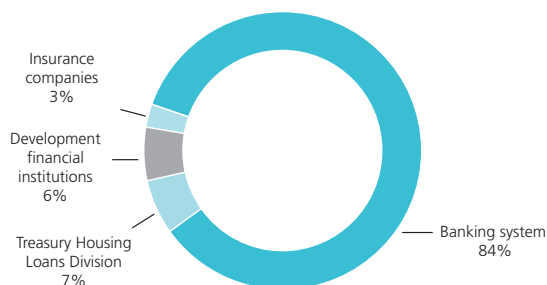
**Chart 2.23**  
**Composition of Household Debt by Purpose**



<sup>1</sup> Includes residential and non-residential properties

Source: Treasury Housing Loans Division and Bank Negara Malaysia

**Chart 2.24**  
**Composition of Credit Providers to Household Sector**



Source: Treasury Housing Loans Division and Bank Negara Malaysia

Nevertheless, household's financial assets grew by an estimated 11.9% mainly boosted by strong performance in the equity market especially towards the end of 2006, and growing investments in unit trust funds. The strong growth in financial assets reflected the improved financial positions arising from the increase in wealth of the household sector. At end-2006, the household financial assets to debt ratio was 205.1% compared to 201.2% at end-2005. In addition, liquid assets, comprising deposits with banking institutions and DFIs as well as investments in unit trust funds, recorded a buoyant growth of 12.8% (2005: 7.5%) to account for more than half of total household financial assets. Supported by a

sufficiently high liquid assets to household debt ratio of 109.3% (2005: 106.4%), the household sector is well-positioned and has the capacity to service its debt even in the short run.

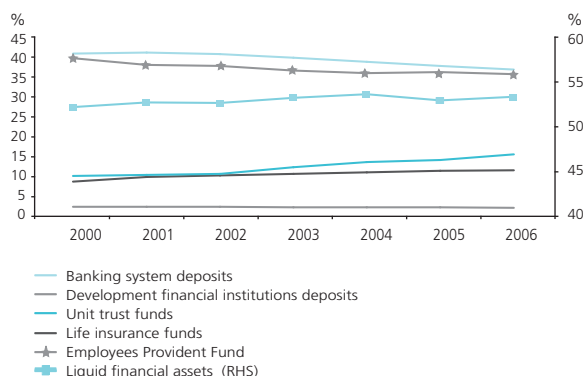
**Supported by stable labour market conditions, continued growth in income levels, and the moderate pace of increase in indebtedness, the household sector now has greater capacity to withstand shocks.**

**Chart 2.25**  
**Household Financial Assets to Debt Ratio**



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

**Chart 2.26**  
**Composition of Household Financial Assets**  
(Expressed as a Percentage of Total Household Financial Assets)

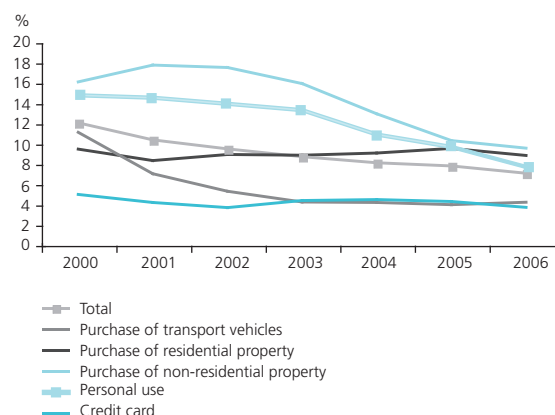


Source: Securities Commission, Employees Provident Fund and Bank Negara Malaysia

The debt servicing capacity of the household sector improved, as reflected by the decline in the ratio of repayments to disposable income to 40.9% (2005: 41.3%). Notably, the overall position of the household sector continued to remain favourable supported by stable labour market conditions as reflected by lower unemployment rate and continued income growth, moderation in the pace of new household borrowings, and the higher level of commodity prices. Growth in wages and salaries in the manufacturing sector was sustained whilst strong commodity prices during the year continued to support income of workers in rural areas. A survey of a few banks indicates, however, that there were some early signs of distress, resulting in some households restructuring their loan facilities or lengthening repayment periods to allow for a more orderly management of the debts. Aggregate household NPL ratios continued to downtrend to 7.1% (2005: 7.8%). In addition, the number of bankruptcies declined by 14.3% in 2006 (2005: -2.4%). Collectively, these factors suggest that the vulnerability of the household sector to adverse shocks continue to remain low (Chart 2.27).

Although relatively small in proportion to total household debt (2006: 10.8%), loans for personal use and credit card balances have been posting double-digit growth in recent periods, thus necessitating greater surveillance for indications of distress in the household sector. In 2006, loans for personal use expanded at 16.4% (2005: 15.2%)

**Chart 2.27**  
**Non-performing Loan (NPL) Ratio of Household Sector**





whilst credit card balances rose by 19% (2005: 17.3%). An important highlight is that bulk of the increase in credit card balances was not from transactions involving cash advances, which remained marginal, accounting for only 6.1% of total credit card transactions (2005: 6.5%), supporting the assessment that the liquidity position of the households remains at manageable levels. Delinquencies for credit cards were largely associated with imprudent spending behaviour. The Credit Counselling and Debt Management Agency (CCDMA) has provided debt management advice to such customers where 53.5% of the individuals faced difficulties in servicing their debts due to misuse of credit cards, rather than difficulty in meeting the repayment obligations for mortgages or car financing. Notwithstanding, the overall NPL ratio for credit cards has declined to 3.7% in 2006 (2005: 4.3%). Moreover, the proportion of credit cards in circulation with revolving balances (2006: 56%, 2005: 55.1%) remained fairly stable, lending support to the assessment that a majority of credit card holders settle their card balances in full upon due date. These indicators seem to suggest that vulnerability arising from credit card usage remained broadly limited and well-contained.

While aggregate information on household indebtedness and delinquency patterns is well-established, micro level information such as household income, wealth and expenditure, in particular the distribution of wealth across various asset classes and income distribution are either not readily available or less comprehensive. In some instances, the collection of such information is done less frequently, across a smaller sample size and coupled with the lack of granularity. Efforts are being made to enhance data collection on a wider spectrum of households' financial assets and liabilities as well as to collect micro level data on financial position. This would contribute significantly to an enhanced surveillance framework that would facilitate effective detection and assessment of emerging vulnerabilities to the financial system arising from evolving developments in the household sector.

**The banking sector has weathered well the challenging external and domestic developments in 2006. Supported by strengthened financial structures and profit performance as well as risk management capability, the banking sector has greater capacity to weather future challenges.**

### FINANCIAL SECTOR RISK ASSESSMENT

#### ***Banking system resilience unfettered amidst challenges***

The banking sector sustained its resilience amidst the challenging external and domestic developments in 2006. Contributing to a strengthened capacity to buffer against future challenges, banking institutions remained well-capitalised and exhibited sustained profit performance. This was further underpinned by the improving level of non-performing loans (NPLs), partly reflecting general improvements in credit quality and enhanced risk management standards and practices over the years. The resilience of the banking system will be further reinforced with ongoing efforts towards the implementation of Basel II, which is expected to provide a significant boost to the capacity and capability of the banking institutions in risk measurement and management. The Malaysian banking system has also accumulated significant financial buffers of profits and capital over a number of years that will contribute to insulating the industry from future shocks and disturbances. Collectively, these developments contribute to better prospects for improved efficiency in the allocation of resources and distribution of risks within the economy.

#### ***Credit quality remained stable amidst higher debt service level***

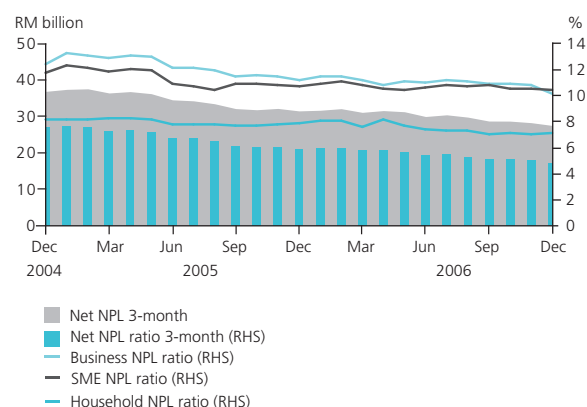
The higher interest rates, coupled with inflationary

pressures experienced during the first half of 2006, had no evident signs of significant deterioration in the debt servicing capacity of borrowers. This is consistent with the higher tolerance demonstrated by the household and business sectors. The level of NPLs continued to improve further in 2006, underpinned by the sustained encouraging economic environment amidst progressive strengthening of risk management practices and infrastructure by banking institutions. As at end-2006, the net NPL ratio (net of loan provisions) declined to 4.8% (end-2001: 11.5%), attributed mainly to the higher rate of reclassification of NPLs to performing status and continued write-offs, while the loan loss coverage of the banking system strengthened to 64.7% (end-2005: 59.1%).

With approximately 64% of banking system loans based on variable-rate financing, increases in the level of interest rates would result in higher repayment obligations for borrowers. While this is generally the case for businesses, households however, tend to be more insulated as approximately 45% of lending to households comprised fixed-rate hire-purchase financing and residential mortgages based on the Islamic financing concept. Notwithstanding the higher exposure to variable-rate financing, the NPL ratio for businesses had improved to 10.1% as at end-2006.

While the portfolio exposure to the retail sectors has increased in recent years, this development has resulted in a more balanced overall credit portfolio where 56.2% of total banking system loans as at end-2006 constituted household sector lending (end-2000: 34.4%). The low value high volume nature of household loans enables a more efficient distribution of credit risk exposure across the sector. Moreover, the high ratio of financial assets to debt of households of 205.1% provides added flexibility for households to adjust to the changing environment. Meanwhile, total lending to the small and medium enterprises (SMEs) expanded to account for 17.6% and 44.5% of total loans and business loans respectively. Under the new SME definition which covers a greater number of entities, the NPL ratio for SMEs improved slightly to 10.2%.

**Chart 2.28**  
**Banking System Non-Performing Loans (NPL) Level and Ratio**



With the outlook for growth and employment remaining positive in the year ahead, the risks for credit deterioration in the immediate and near term remain moderate. This is evidenced by the 2.4% decline in total loans-in-arrears (net of NPLs) of between two and three months to RM10.1 billion to account for 1.7% of total outstanding loans.

## ***Risk of increased concentration in household sector mitigated***

On the supervisory front, an industry-wide thematic examination was conducted during the second quarter of 2006 to ensure that the rapid expansion in banking institutions' exposures to the household sector would not pose increased risk to financial stability. The examination included an assessment of the adequacy, robustness and effectiveness of the risk management infrastructure, standards and practices of banking institutions. Specifically, issues relating to governance, market conduct, product development, loan origination and underwriting processes, collateral valuation and management, portfolio management, loan maintenance and recovery, as well as information management and reporting systems, were included in the scope of the examination.

Overall, the supervisory findings were satisfactory. Although some weaknesses surfaced, the examinations showed that measures were already being implemented by banking institutions



to mitigate the identified risk areas. These include the progressive strengthening of risk management infrastructure and practices through the use of retail credit scoring and ratings, improved information and portfolio management systems, as well as enhanced loan administration, monitoring, management and recovery. These measures, while at varying stages of progress and implementation, contribute towards lowering the potential risks from increased exposure to the household sector.

The Bank also performed stress tests at both the system and individual institution levels to assess risks to macro and micro stability. The tests were conducted in mid-2006 to assess the impact of exceptional but plausible adverse events, including adjustments in bond prices, deterioration in corporate sector performance and weakened financial position of the household sector. The outcome of the scenario testing was favourable. The overall potential impact on the banking system remained manageable given the strong capitalisation and profit levels.

### ***Interest rate mismatch remained manageable***

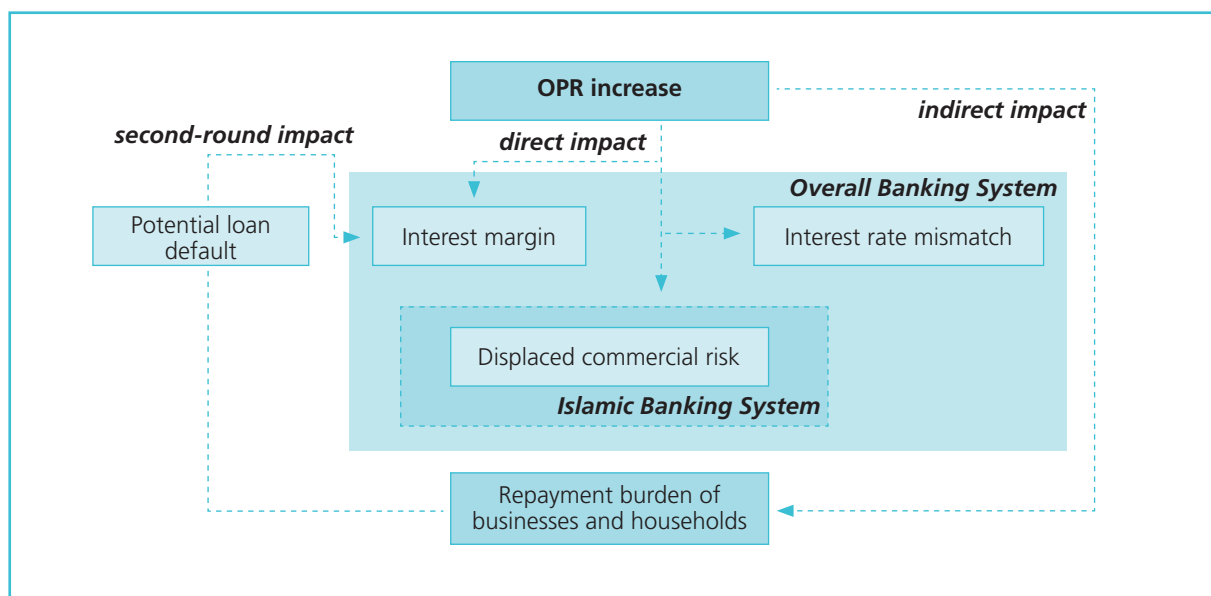
Increases in the OPR had a limited impact on the banking sector's risk position. While the size and volume of fixed-rate instruments offered by banking institutions as well as their involvement in treasury and investment-related activities have, in recent years, expanded to account for

36% of banking sector assets, the risk exposure remained fairly low. Indeed, the impact of a one percent increase in interest rates on the solvency position of banking institutions, measured on the duration-weighted net position (DWP) approach, was estimated to result in a 1.6 percentage points decline in the RWCR (Table 2.3).

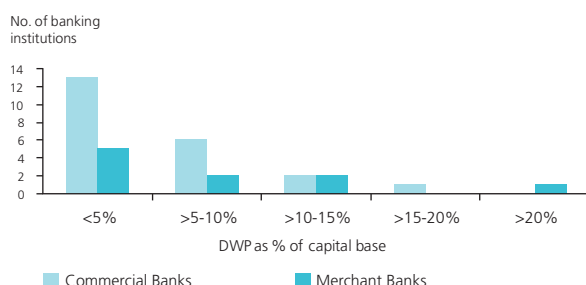
Amidst a sustained competitive environment, spreads between average lending rates (ALR) and average cost of funds (ACF) remained almost unchanged given the relatively rapid response and consequent adjustments in the deposit and money market rates. These swift adjustments reduced the potential for higher margins arising from increase in lending rates. Following the OPR increases, the average quoted base lending rate has risen by a total of 74 basis points since end-November 2005 to 6.72% as at end-2006, which corresponded with a 59 basis points increase in the ALR to 6.57% per annum.

Supported by continued ample liquidity in the system, deposits outstanding grew by 15.5% during the year outpacing the 6.3% expansion in outstanding loans. This added downward pressure on the gross interest margin which declined marginally to 2.80 percentage points as at end-December 2006.

Given Malaysia's dual banking system, the brief periods which saw limited interest rate



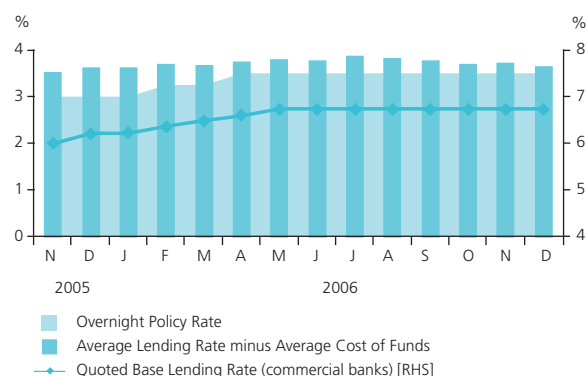
**Chart 2.29**  
**Banking System<sup>1</sup>: Distribution by Duration**  
**Weighted Position as Percentage of Capital Base as**  
**at 31 December 2006**



<sup>1</sup> Excludes Islamic banks but includes price risk of Islamic type exposure

hikes in the conventional financial system added, to some extent, to competitive pressures in the Islamic financial system in terms of meeting revised expectations on the rate of return payable to depositors. A key feature of Islamic banking, the return payable to the depositors is mainly influenced by the actual yield earned on the assets of an Islamic banking institution as opposed to contractual fixed interest rate payable to conventional depositors. In view that finance income has consistently accounted for more than 80% of total income of Islamic banking institutions over the past three years, the rate of return on Islamic deposits is largely dependent on the income generated from financing activities which are mostly fixed-term in nature (Chart 2.32). This has the impact of somewhat limiting

**Chart 2.30**  
**Movement in Interest Rates since the First Increase**  
**in the Overnight Policy Rate in November 2005**



the responsiveness of Islamic banking institutions to increases in interest rates.

The higher conventional deposit rates observed during the early part of the year in response to OPR increases resurfaced the issue of displaced commercial risk faced by Islamic banking institutions. In managing the expected rate of return to depositors, the profit equalisation reserves (PER) were utilised to smoothen the distributable returns to depositors. This caused the PER to decline steadily for the greater part of the year. However, as upward adjustments in the financing rate took place towards the end of 2006, PER began to accumulate once more.

**Table 2.3**  
**Banking System: Impact of 1% Rise in Interest Rate on Capital Strength**

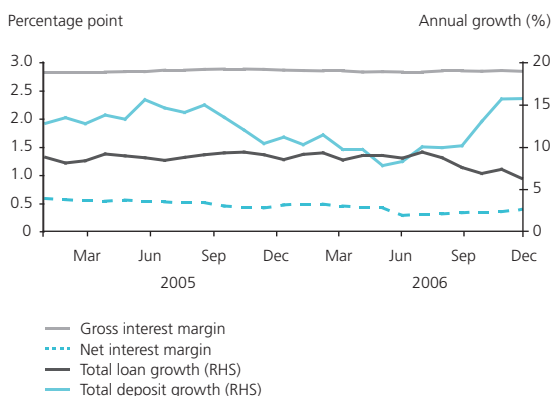
	Duration-weighted net position					
	RM million		As percentage of capital base (%)		Impact on risk-weighted capital ratio (percentage point)	
	As at end					
	2005	2006	2005	2006	2005	2006
Commercial banks <sup>1</sup>	-6,453	-5,803	-8.4	-7.5	-1.7	-1.4
Merchant/Investment banks	-311	-478	-6.3	-8.4	-2.3	-6.5
Banking system <sup>2</sup>	-6,765	-6,281	-8.3	-7.5	-1.7	-1.6

<sup>1</sup> Includes finance companies

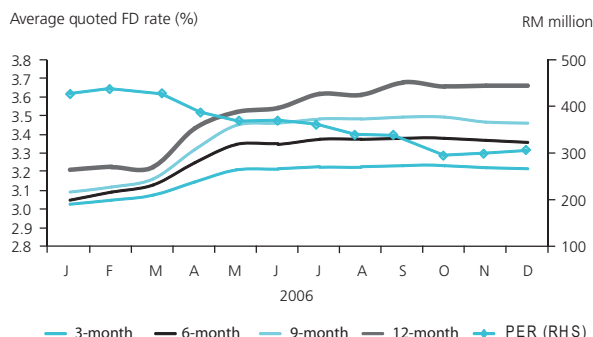
<sup>2</sup> Excludes Islamic banks but includes price risk of Islamic type exposures

Note: Total may not add up due to rounding

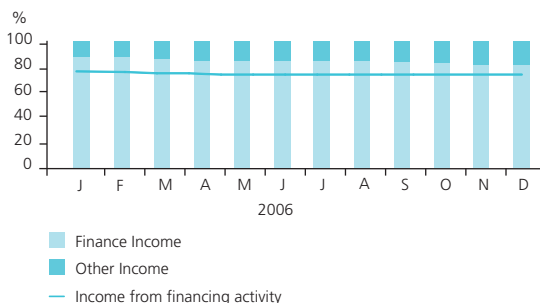
**Chart 2.31**  
**Movement in Gross and Net Interest Margins**



**Chart 2.33**  
**Movement in PER and Average Quoted FD Rates**



**Chart 2.32**  
**Income Composition of Islamic Banking Institutions<sup>1</sup>**



<sup>1</sup> Includes Islamic windows

## **Potential impact from market movements remained marginal**

The exposure of the banking system to equity and foreign exchange risks remained small and continued to pose minimal risk to systemic stability. In terms of equity, risk exposures arising from holdings of quoted and unquoted shares only accounted for 0.2% and 2.6% of the banking system assets and capital base respectively. Equity holdings increased slightly by 3.4% to RM3.1 billion as at end-2006 attributed mainly to limited acquisition of shares following fewer loan restructuring activities during the year. Likewise, the volume of net trading income remained low, accounting for 6.4% of total banking system income during the year. Financing extended for purchase of securities remained small at 3.3% of

outstanding banking system loans with an NPL ratio of 9.5%.

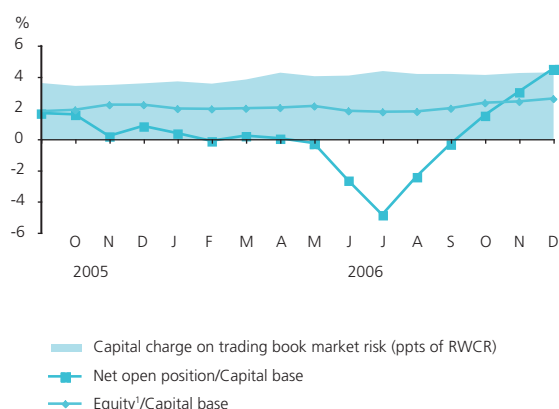
With an aggregate exposure to the equity market, in the form of proprietary holdings and, loans and financing, of only 2% of banking system assets, the risk to the banking sector remained negligible. This was further evident with the recent increased volatility in the equity market in February 2007 that had no impact on the resilience of individual banking institutions as well as the overall financial system.

Meanwhile, on the foreign exchange front, the net open foreign currency position (NOP) exhibited greater fluctuations since the adoption of the flexible exchange rate regime in July 2005. Its level, nonetheless, remained small to account for only 4.5% of capital base. Consistent with this position, total capital charge for market risks in trading books of banking institutions only accounted for 4.3% of capital base. This translates into a one percentage point decline in the risk-weighted capital ratio (RWCR) as at end-2006.

## **Strong capitalisation providing ample buffer against potential adverse shocks**

The banking system was well-capitalised throughout the year as banking institutions continued to diversify and lower the cost of capital while maximising value to shareholders. With RWCR at 12.8%, the current level of capitalisation provides a strong buffer against credit and other risks facing the banking institutions as well as

**Chart 2.34**  
**Banking System: Market Risk Exposures**



¹ Amount of investment in quoted shares

being supportive of continued expansion of lending and trading activities.

Since 2004, there has been active capital management activity to enhance returns to shareholders. The positive spread between US and domestic interest rates as well as expectations of a stronger ringgit spurred the issuance of US dollar-denominated subordinated debt. In addition, greater regulatory flexibility, which recognised innovative capital instruments as Tier-1 capital led to issuances of ringgit-denominated hybrid capital instruments by some banking institutions. The issuance of these hybrid instruments is not expected to dilute the strength of Tier-1 capital as such transactions remained largely limited given that total issuance of innovative Tier-1 capital instruments are capped at 15% of total Tier-1 capital. Tier-1 capital continued to be the major component of banking system capital with the core capital ratio maintained sufficiently high at between 10-12%. The bulk of the Tier-1 capital constituted paid-up capital, retained earnings and reserves, which can provide substantial support against risks accumulation. This was further supported by RM31.9 billion of capital available in the banking system in excess of the minimum capital requirement of 8%.

## ***Ample liquidity environment amidst intensifying competition***

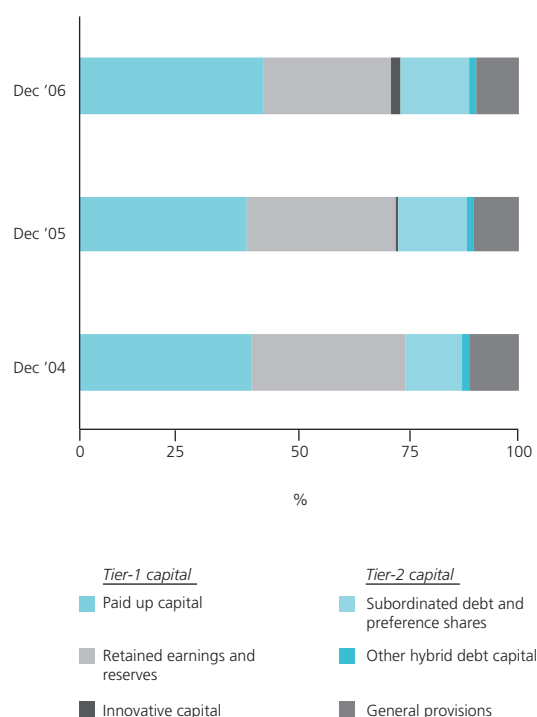
Liquidity in the banking system continued to remain ample following higher inflows of export earnings and steady inflows of foreign direct investment and portfolio funds. As at end-2006, the cumulative liquidity surplus of the banking system was projected at RM76.1 billion based on estimated liquidity demands and unexpected withdrawals of up to one-week. On an individual basis, all banking institutions also projected surpluses both in the one-week and one-month buckets, in excess of existing regulatory requirements.

An area of close monitoring is that the increasing competition in an environment of excess liquidity in the banking system could have implications on risk-taking behaviour or risk-pricing by banking institutions.

## ***Insurance and takaful sector sustaining its resilience***

The strong performance of the insurance and takaful sector in 2006 contributed towards enhanced

**Chart 2.35**  
**Banking System: Components of Capital (% of total)**



**Tier-1 capital**

- Paid up capital
- Retained earnings and reserves
- Innovative capital

**Tier-2 capital**

- Subordinated debt and preference shares
- Other hybrid debt capital
- General provisions

**Table 2.4**  
**Banking System: Liquidity Projection as at 31 December 2006**

	Cumulative mismatch (RM billion)		Buffer as % of total deposits	
	1-week	1-month	1-week	1-month
Commercial banks	59.5	64.2	10.7	11.5
Islamic banks	8.5	13.1	17.0	26.3
Merchant/Investment banks	8.2	8.5	51.3	53.2
<b>Banking system</b>	<b>76.1</b>	<b>85.8</b>	<b>12.2</b>	<b>13.7</b>

Note: Total may not add up due to rounding

resilience and soundness of the sector. This was further boosted by continued improvement in risk management practices especially in areas of underwriting and investment practices. Overall, these developments led to further strengthening of the capacity of the industry to withstand the more challenging operating environment. No new major risks have emerged whilst existing vulnerabilities remained manageable. The solvency margin ratio for conventional insurers measured in terms of excess of admitted assets over the computed amount stood in excess of 200%, well above the minimum regulatory requirement of 100%. The proposed implementation of the risk-based capital framework for insurers will complement measures aimed at improving risk management practices by insurers. It is also expected to contribute towards more optimal allocation of capital by the insurance sector.

Managing the mismatch in assets and liabilities continued to be a key challenge for life insurance and family takaful businesses. While financial markets have gained depth and breadth, the supply of longer-term financial instruments that are of acceptable quality and yield to match the long-term nature of insurance liabilities, which typically range between 20 to 30 years, remains limited. Reflecting the extent of the mismatch, a survey conducted by the Bank based on life fund positions for the financial year ended 2005 revealed that mismatch risk accounted for up to 17.5% of total capital charges. The introduction of investment-linked products which essentially transfer the investment risk to policyholders, greater flexibility in investment management including investments abroad and the continuous measures to develop the financial markets,

constitute important developments that help life insurers manage and mitigate the effects of mismatch risk. Meanwhile, the impact of developments in the domestic financial markets on the insurance companies was fairly limited. Despite movements in the bond yields, the profitability and thus the solvency positions of insurers were not adversely affected as bonds held by insurance companies are valued based on cost rather than market price.

In respect of general insurance, the increasing trend in escalating court awards for motor accident fatalities and injuries is a source of concern. Added to this is the potential for reduction in reinsurance capacity for unlimited liability covers in relation to bodily injury losses. Moreover, developments in the automotive industry have implications on the performance of the general insurance sector, in particular, the motor business segment. A prolonged period of low sales that is accompanied by increased competition can exert greater pressure for general insurers particularly those that are niche players in this business segment, to seek out new areas of growth in order to diversify their business and sustain future revenue. These developments and their impact on the general insurance industry will continue to be monitored closely by the Bank so as to ensure that such risks are adequately addressed.

Changes in meteorological phenomena and increase in natural calamity events, while not evident and conclusive, could potentially be an emerging source of risk for the insurance sector. Preliminary estimates on gross insured losses stemming from the recent flood incidences in the

southern part of Peninsula were in the region of RM178 million. While some insurers have yet to fully establish the actual extent of the losses, especially in respect of the second and third waves of flood occurrences, those losses are expected to be within manageable levels and will not constitute a threat to the solvency position of the insurance companies.

Due to a recent court case, the long held principle that a fire policy is a contract of indemnity is now in question. The Bank is monitoring developments and reviewing implications of this case, and is studying various policy options on the matter including amendments to the Insurance Act 1996.

### **RISK ASSESSMENT GOING FORWARD**

Global economic growth is expected to be sustained at a level above 4% in 2007. Notwithstanding some weaknesses in the residential and automotive sectors, the US economy is expected to sustain its underlying growth, whilst growth prospects in the euro area is anticipated to improve. In the region, the Japanese economy is expected to strengthen further. Economic conditions across the region are expected to remain favourable and corporate earnings growth is likely to exceed that of companies in developed markets. The sustained growth outlook for Asian economies suggests continuing sizeable portfolio inflows to the region. Meanwhile, on the domestic front, the growth prospects for the Malaysian economy is expected to remain favourable. While the export sector could be impacted somewhat by moderation in the external environment, continuing robust domestic demand including sustained private consumption and investment activity would provide support for the growth momentum of the domestic economy. This would be further complemented by the progressive implementation of the Ninth Malaysia Plan and other development projects such as the Southern Johor Economic Region project, Penang Bridge and Monorail projects which will have positive spill-over effects on the domestic front.

**Surveillance efforts in 2007 will focus on developments in the external environment, movements in capital flows and, implications on asset prices and their potential implications on the financial sector will be continually assessed to ensure risks to financial stability will be effectively managed.**

### **Potential risks**

Notwithstanding these positive developments, risks to the stability of the financial system continue to be monitored closely. Given the openness of the Malaysian economy and the increased integration with other markets and economies, the country is not insulated from the risks of contagion.

### ***Global growth remains exposed to risks of disorderly adjustment to global imbalances including a sharper-than-expected slowdown in the US economy***

While recent developments suggest that the US current account deficit is stabilising, aided by the decline in oil prices and improved growth prospects in other major industrial countries, the risk of a disorderly adjustment cannot be discounted. While the effect of the cooling housing market on the US economy has largely been concentrated in residential property investment, the prospect of further housing market weakness still exists. This is based on the share of residential property investment in GDP which remains above the historical average, the high level of inventories and homeowner vacancy rates, all of which seem to suggest that oversupply persists. Weakness in this market is likely to have an adverse impact on private consumption and capital spending that could lead to a sharper-than-expected slowdown in US growth which could also potentially lead to a diversification of portfolios away from dollar-based assets. Similar pressures could arise from continued monetary



policy tightening in other industrial countries which, in turn, may affect carry trade activities and reduce the support for dollar due to narrowing yield differentials. These risks and vulnerabilities continue to be an area of focus for surveillance at this point in time.

### ***Sudden surge in oil prices could rekindle inflationary pressures***

Although oil prices have declined from the July 2006 peak, uncertainties persist as to whether the lower prices would be sustained. A sudden reversal of this trend could increase the potential for slower global growth and rekindle inflationary pressures. Based on the International Energy Agency estimates, global oil demand is expected to rise faster in 2007 by 1.6% compared to 0.9% in 2006. There are also potential supply-

side shocks. With the current spare capacity at low levels, any disruption or further escalation of geopolitical concerns in the key oil-producing economies could lead to another upward oil price spike. Mitigating factors, including investment in new production and refining capacity both within and outside the OPEC, diversification into alternative energy sources and increased conservation efforts, would only be felt in the medium term.

### ***Persistency of capital flows could potentially lead to higher asset prices and formation of asset bubble***

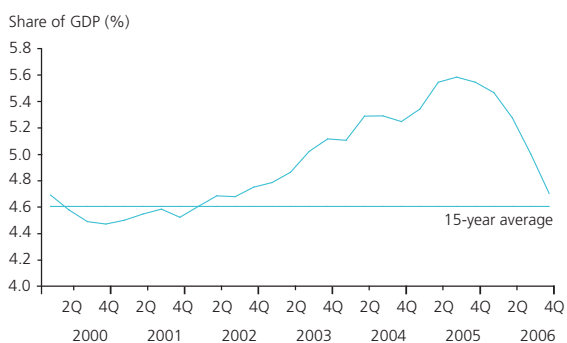
Global financial markets have grown significantly, driven by expanding capital flows and growth of new financial intermediaries. These developments are generally favourable and desirable, and have to a large extent contributed towards the strengthened performance of these markets. At the same time, capital flows could also stimulate growth and contribute towards increased wealth creation. Whilst increased investors' optimism on the macroeconomic conditions and outlook bodes well for these economies, sustained periods of excessive capital flows into financial markets coupled with high capital mobility, could potentially result in the formation of asset price bubbles particularly if the trades are speculative in nature and are not supported by strong fundamentals. Sudden withdrawals by foreign investors that are accompanied by a marked correction of asset prices may pose risk to economies.

In addition, capital flows could also stimulate prices in the real estate market and induce greater activity to take place. Given the size of banking sector exposures to the broad property sector, any material and sustained movements in real estate and property prices could have implications on credit quality of banking institutions' loan portfolios.

### ***Phenomenon of low volatilities and risk premia, and reversal in capital flows could potentially have destabilising effects***

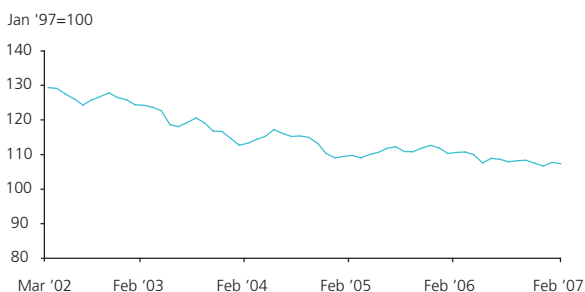
In addition to the implications of movements in asset prices, the build up in exposures particularly in emerging markets raises the vulnerability of

**Chart 2.36**  
**US Residential Property Investment as Percent of GDP**



Source: Bureau of Economic Analysis, US

**Chart 2.37**  
**Trade-weighted Movement of USD**



Source: The Federal Reserve Board, US

financial markets to sudden and sharp reversals in capital flows. An impulsive change in expectations or a dramatically heightened risk aversion of investors may lead to a reassessment of risks causing a sharp reduction in asset prices resulting from rapid and disorderly portfolio adjustments and liquidations. Given the potential destabilising effects, such risks continue to be the subject of close monitoring by the Bank so that appropriate and pre-emptive policy measures can be undertaken to address and mitigate the implications.

***Outlook for financial system stability remains favourable***

The financial system exposures to credit, market and liquidity risks associated with the households

and businesses as well as their involvement in financial markets remain well-contained within prudential limits. While developments in the external environment and domestic market may exert pressures, the robust financial performance and high capitalisation of the financial system following years of strong profit performance and increasingly more diversified revenue base, will enable the financial system to withstand such developments and the attendant shocks and disturbances. The more diversified financial infrastructure and the more developed capital markets will similarly enable the financial system to manage risks more effectively and efficiently.





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

#### **Overview**

The national AML/CFT regime is implemented based on strategic collaboration between Bank Negara Malaysia, the authority appointed by the Minister of Finance to administer the Anti Money Laundering Act 2001 (AMLA), and the relevant government agencies and supervisory authorities. The AML/CFT programme is aimed at preventing Malaysia's financial institutions as well as the designated non-financial businesses and professions from being targeted as the conduit for money laundering and financing of terrorism activities. The strong support given by the other supervisory authorities, law enforcement agencies and the private sector, in particular, financial institutions, has been instrumental in ensuring the successful implementation of the AML/CFT programme. The effective implementation of the AML/CFT regime is a key area of focus in ensuring that Malaysia's financial system remains resilient and able to facilitate and support the economic growth process.

The experience suggests that the main source of money laundering originates from illegal proceeds of drug trafficking activities as evidenced by the proceeds seized or confiscated under the Dangerous Drugs (Forfeiture of Property) Act 1988 [DD(FOP)]. However, the drug trafficking problem in Malaysia has been mitigated by the constant and vigorous enforcement carried out by the Royal Malaysia Police which enforces the DD(FOP).

Thus far, the Attorney-General's Chambers of Malaysia has prosecuted 21 money laundering cases, of which, two cases were convicted in 2005 and 2007 respectively. The other 19 cases are at various stages of prosecution. These cases involved a total of 738 charges of money laundering offences with an accumulated amount of RM262.1 million.

At the regional and international level, Malaysia continues to play an active role within the Association of Southeast Asian Nations (ASEAN) by fostering efforts to enhance regional capacity building of personnel involved in the effort to counter money laundering and terrorist financing activities.

#### **Recent Developments in the National AML/CFT Programme**

##### ***Extension of the AMLA Regulatory Net***

Continuous efforts have been undertaken to extend the implementation of the AMLA to other categories of reporting institutions. This is complemented by outreach initiatives to raise the awareness on AMLA requirements to new as well as prospective reporting institutions. In 2006, the AMLA regulatory net was extended to include moneylenders, pawnbrokers, registered estate agents, unit trust management companies, fund managers, futures fund managers, trust companies, the Malaysia Building Society Berhad, non-bank remittance service providers and non-bank affiliated issuers of charge cards and credit cards.

The extension of the AMLA provision has been undertaken in two stages beginning with the invocation of the reporting of suspicious transactions, followed by the remaining provisions under Part IV of the AMLA that deal with customer due diligence and compliance programme. These remaining legislative provisions in Part IV were invoked on gaming establishments, a development financial institution, company secretaries, accountants, lawyers and notaries public on 10 August 2006.

Cash threshold reporting (CTR) requirement of RM50,000 and above in a day was invoked in September 2006. Banking institutions were the first group of reporting institutions required to submit CTR to Bank Negara Malaysia under the AMLA. The invocation of the CTR complements the mandatory legal obligation imposed on banking institutions and other categories of reporting institutions to submit suspicious transaction reports (STR). These submissions by the banking institutions are expected to enhance the analysis of the financial intelligence currently conducted by Bank Negara Malaysia.

### ***Enhancing AMLA Regulatory & Supervisory Mechanism***

#### ***I. AML/CFT Guidelines***

A set of revised AML/CFT Guidelines were issued in November 2006 to the banking institutions and insurance and takaful industries to replace the guideline on "Know Your Customer Policy" (GP9) and JPI/GPI 27 Guidelines on Anti-Money Laundering that were issued in 1995 and 2001 respectively. These revised AML/CFT Guidelines specify the regulatory requirements that are in line with the Financial Action Task Force on Money Laundering (FATF)'s 40+9 Recommendations and the AMLA. Among others, the revised Guidelines place significant emphasis on effective oversight by the Board of Directors to ensure that the policies and procedures adopted by the institution are in compliance with the AMLA and the related regulatory requirements.

#### ***II. Compliance Monitoring***

The policy measures in 2006 continue to focus on ensuring AML/CFT compliance and the effectiveness of the AML/CFT internal programme established by the reporting institutions. The designated compliance officer at each reporting institution plays an important role to ensure that the reporting institution adopts, develops and implements internal AML/CFT programmes, policies and controls to guard against and to detect money laundering or financing of terrorism offences. The reporting institutions are also required to carry out an independent audit on the internal AML/CFT compliance programme to ensure that their internal AML/CFT measures are effective, up to date and comply with the requirements of AMLA and regulatory guidelines that are issued by Bank Negara Malaysia. Consistent with this policy, Bank Negara Malaysia has implemented a comprehensive AMLA supervisory framework to facilitate effective supervision of the financial institutions' AML/CFT measures. The continuous surveillance of the AML/CFT programmes by the supervisors has contributed significantly towards improved compliance of the institutions to international standards on AML/CFT as well as the quality of STRs submitted to Bank Negara Malaysia.

#### ***III. Leveraging on Information and Communication Technology***

Bank Negara Malaysia has also embarked on a project to enhance its Financial Intelligence System (FINS) since November 2005, to among others, enable online submission of CTRs by the banking industry. In addition, FINS would also enhance the quality and timeliness of the financial intelligence analysis through the use of advanced intelligence analytical software, case management tools and information dissemination software. The newly added features of FINS would also significantly facilitate the law enforcement agencies in expediting investigations.

### ***International Co-operation***

#### ***Asia/Pacific Group on Money Laundering Mutual Evaluation Exercise***

Malaysia has now undergone a second round Mutual Evaluation Exercise conducted by the

Asia/Pacific Group on Money Laundering (APG) in February 2007. The purpose of the Mutual Evaluation (ME) is to assess member countries' compliance with the international standards, namely, the Financial Action Task Force on Money Laundering (FATF) 40 Recommendations on money laundering and 9 Special Recommendations on terrorist financing. Unlike the APG ME in 2001, the ME in 2007 is based on the FATF **revised** 2004 Methodology that sets out over 250 essential criteria for the 40+9 Recommendations. It covers Malaysia's legal system, related institutional measures, preventive measures in financial institutions and designated non-financial businesses and professions, as well as, national and international co-operation.

Consistent with the international trend, laws need to be put in place to criminalise acts of terrorism and terrorist financing. In this connection, the relevant legislative provisions in Malaysia have been brought into force in March 2007. The ME is expected to highlight areas in which Malaysia has yet to comply with the FATF standards and recommendations by assessors to address any identified gaps that still remain. These recommendations will be incorporated in the Mutual Evaluation Report that will be forwarded for adoption at the APG Annual Meeting in July 2007.

### ***Egmont Group of Financial Intelligence Units***

Bank Negara Malaysia is a member of the Egmont Group of Financial Intelligence Units (FIUs) since July 2003. The objective of the Egmont Group is to provide support for FIUs to improve their respective national AML/CFT programmes. This support includes expanding and systematising the exchange of financial intelligence among its 100 members, and improving expertise and capabilities of the intelligence personnel. The Egmont Group, which is an informal grouping, provides opportunities for Bank Negara Malaysia and other FIUs to rapidly exchange critical information on transnational crime. Currently, this grouping is in the process of formalising its structure. As the Chair for Asia, Malaysia is a member of the Implementation Committee that oversees the initiatives to formalise the Egmont Group through the setting up of a Permanent Secretariat in Toronto, Canada and the drafting of the Egmont Group Charter Document.

### ***Memorandum of Understanding (MoU) on the Sharing of Financial Intelligence***

Bank Negara Malaysia continues to promote the importance of cross-border sharing of financial intelligence and capacity building of officials. In June 2006, Bank Negara Malaysia signed an MoU with the People's Bank of China to exchange financial intelligence as well as co-operation in the area of staff training. In addition, MoUs were also signed with the FIUs of Australia, Indonesia, the Philippines and Thailand to share financial intelligence. More MoUs are scheduled to be signed once the deliberations are completed.

### ***Technical Assistance/Partner Support Programme***

Bank Negara Malaysia continues to provide technical assistance in anti-money laundering efforts to its ASEAN partners. In October 2006, Bank Negara Malaysia with the collaboration of the FIU of Australia and a domestic banking institution, conducted a technical assistance programme for two state-owned commercial banks from the Lao People's Democratic Republic to establish a basic AML/CFT regime that is in line with international standards. This technical assistance was funded by the Asian Development Bank as part of its Banking Sector Reform programme. In addition, Bank Negara Malaysia also provided resource persons to various AML/CFT training programmes organised by international organisations including the International Monetary Fund and the World Bank.

**Capacity Building****Human Capital Development*****I. Certified Financial Investigator Programme (CFIP)***

The National Co-ordination Committee to Counter Money Laundering (NCC), being the highest policy making body for the AML/CFT programme, continues to play its significant role in harnessing the expertise of its members which comprise 13 Ministries and Government agencies. Under the leadership of the NCC, the inaugural CFIP, which was introduced in March 2006, saw a total of 24 officers from the supervisory authorities as well as the law enforcement agencies graduating in December 2006. The CFIP aims at raising the level of professionalism and enhancing the skills and knowledge of financial investigators in fulfilling their tasks and duties to curb financial crimes. It also represents a major milestone in Malaysia's effort to enhance capacity building initiatives with a view to develop a pool of qualified financial investigators.

***II. Workshops for Compliance Officers***

Taking cognisance that reporting institutions' compliance officers are responsible for implementing the AML/CFT internal programmes, capacity building programmes were also organised by the respective training institutes to provide the necessary continuing professional education in the field of AML/CFT. These training workshops provide the compliance officers with the latest information on money laundering typologies as well as contribute towards better understanding of internal risk controls for enhanced AML/CFT procedures and controls in the institution.

***III. ASEAN SOMTC Training Initiatives***

Malaysia, as part of its leadership role on money laundering at the ASEAN Senior Officials Meeting on Transnational Crime (SOMTC), successfully organised the Basic and Advanced Net Worth Analysis Workshops in March and July 2006 respectively. The workshops constituted part of the work plan for the ASEAN+3 (China, Japan and Republic of Korea) Cooperation to Combat Transnational Crime and were organised by Malaysia's Ministry of Internal Security, in collaboration with Bank Negara Malaysia and the Inland Revenue Board of Malaysia. The workshops aimed to promote the upgrading of knowledge and skills required in financial investigations, so as to enhance regional capabilities in investigation, intelligence gathering, surveillance, detection, and monitoring of money laundering and other criminal activities. The participants for the workshops consisted of officers from law enforcement agencies and FIUs in the ASEAN+3 countries.

Future training initiatives will continue to emphasise on enhancing knowledge and skills of law enforcement officers in the investigation of money laundering and terrorist financing activities. Meanwhile, co-operation with foreign agencies including participation in relevant training programmes organised by foreign training providers will facilitate the sharing of experience and expertise among the enforcement community.

***AML/CFT Awareness Programmes******I. Study Visits by Foreign Parties***

Bank Negara Malaysia continues to assist other foreign counterparts by sharing our experience in the AML/CFT programme. In 2006, the FIU received study visits from Bank Indonesia, Da Afghanistan Bank, and the FIU of Sri Lanka.

***II. Non-Profit Organisation (NPO)***

The international AML/CFT community places attention to NPOs in view of the potential use of NPOs to finance terrorism. The APG has requested that its members conduct domestic review

of the NPO sector with the objective of reviewing the adequacy of the legislative and regulatory requirements to prevent or detect such activities. In this respect, an NPO sector review was jointly organised by Bank Negara Malaysia, the Registrar of Societies and the Inland Revenue Board of Malaysia. The review showed no significant regulatory weakness in the sector. Nonetheless, Bank Negara Malaysia in collaboration with the Registrar of Societies, has embarked on a nationwide awareness programme beginning in October 2006 to enlighten NPOs on Malaysia's AML/CFT regime and the potential vulnerability of NPOs to abuse by terrorist financiers and other criminals.

### **Challenges Ahead**

Moving forward, Bank Negara Malaysia in collaboration with other members of the NCC will continue to be vigilant and responsive to evolving AML/CFT threats, as well as AML/CFT standards and trends. A key challenge for regulators is in striking an appropriate balance, in terms of the regulatory focus, between overall risks pertaining to the financial system and those relating to AML/CFT. There are currently also no globally accepted models that can be used to quantify money laundering or terrorism financing risk in a given financial system. As such, the studies conducted by international bodies such as the FATF, the APG or the World Bank on AML/CFT threats would continue to be used to formulate best practices in Malaysia.

The scheduled expansion of the AMLA regulatory net to other categories of financial institutions and designated non-financial businesses, such as real estate agents, e-money issuers, dealers in precious metals/stones as well as leasing and factoring companies, requires the NCC to develop appropriate regulatory measures that are practical and provide adequate safeguards against abuse by perpetrators of criminal activities. In this respect, the disclosure system needs to be supported by a robust suspicious transaction reporting mechanism. This will be reinforced by an expanded collaborative relationship among the stakeholders, in particular the NCC members. In this regard, Bank Negara Malaysia will continue to accord attention to the development of the legislative and regulatory requirements that are in accordance with international standards and will also intensify efforts to enhance co-operation amongst domestic agencies.

# Transformation of the Financial Sector

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The Malaysian financial system and landscape have undergone a major transformation in this recent decade. These changes have included financial and regulatory reforms and financial infrastructure development, thus paving the way for a more robust, diversified and efficient financial sector today. Much of the transformation of the Malaysian financial sector was attributed to significant strides made in the bond market and the significant advancements made in Islamic finance. In addition, the progressive liberalisation and deregulation, industry consolidation and technological advancements have also resulted in new delivery channels, wider range and diversity of products and services, and emergence of new non-traditional players in the domestic financial sector. The maintenance of financial stability under such a dynamic environment has, therefore, become increasingly complex and challenging.

**Much of the transformation of the Malaysian financial sector was attributed to significant strides made in the bond market, Islamic finance, progressive liberalisation and deregulation, industry consolidation and technological advancements.**

In meeting the challenges, the policy thrust adopted by Bank Negara Malaysia in 2006 continued to be directed towards preserving the stability by supporting and strengthening institutional transformation, promoting an efficient and effective financial infrastructure, facilitating financial market development and promoting a balanced and effective regulatory and supervisory environment that fosters the development of a progressive, dynamic and resilient financial system. Emphasis was also given to further enhance financial inclusion to

ensure access to a wider choice of services to all levels of society.

## INSTITUTIONAL TRANSFORMATION

In the continuously evolving financial landscape, the year 2006 saw further progress being made towards rationalising the domestic financial institutions following the completion of several mergers and consolidation among market intermediaries in the banking, insurance and capital market sectors, as well as the commencement of business by new licensees in the Islamic banking and takaful sectors.

The investment bank framework in particular, achieved a significant milestone during the year with almost all of the entities involved completing the transformation process. The framework, which provides for the development of full-fledged investment banks through consolidation and rationalisation between several entities (nine merchant banks, nine stockbroking companies, five discount houses and three universal brokers), saw all of the eligible entities obtaining the necessary approvals to transform into 12 investment banks. Nine financial groups with merchant banks, stockbroking companies and discount houses have completed the legal transformation and commenced operations as investment banks in the first quarter of 2007. Three universal brokers have been incorporated into investment banks while another two universal brokers are still in the process of meeting the necessary pre-requisites. One discount house was issued a merchant banking licence and will complete its transformation into an investment bank within six months. With the creation of investment banks, the discount houses are no longer in the financial landscape.

The emergence of investment banks in the financial landscape has enhanced the capacity and capability of domestic financial institutions to capitalise on business opportunities both locally and within the region and widen the range of financial and advisory activities, hence strengthening their competitive advantage.



Consequently, these developments have further enhanced the potential of the investment banks to contribute towards our economic transformation and to play a pivotal role in the development of a vibrant and dynamic financial system.

The banking and insurance sectors continued to see further consolidation and rationalisation in 2006. The banking sector saw the completion of a merger between two domestic banking groups which consequently reduced the number of domestic banking groups to nine. The insurance sector also witnessed a merger of two general insurers driven by acquisition activity at the shareholder level. As players in the financial sector focus on strengthening their resilience, developing internal capabilities, leveraging on group synergies between different entities and building economies of scale in order to remain competitive, the resulting increase in vibrancy would drive further product innovation, competition, improvement in consumer service levels and ultimately better quality of products.

**The entry of new players into the Islamic financial industry is expected to accelerate the pace of industry development and lead to improved business efficiency, product development and service quality that would elevate the domestic Islamic banking and takaful industry to new levels of dynamism.**

In the area of Islamic finance, liberalisation of the Islamic financial industry has been brought forward with the issuance of three new Islamic bank licences to foreign Islamic financial institutions from Kuwait, Saudi Arabia and Qatar. This was made possible by the progress made in the development of the Islamic banking sector and strategies aimed at enhancing global linkages. Another important strategic measure undertaken since 2004 was the move by several

conventional banking groups participating in the Islamic banking scheme (IBS) to transform the current 'Islamic window' institutional structure into an 'Islamic subsidiary' (IS). Thus far, seven Islamic banking windows have been transformed into subsidiaries. There are now 11 Islamic banks comprising six Islamic subsidiaries, two domestic Islamic banks and three new foreign Islamic banks.

To enhance the global integration of the takaful industry, four new takaful licences comprising joint ventures between domestic and foreign operators were issued. New licences were also granted to takaful brokers and adjusters. This move is in line with the objective to create an efficient, progressive and comprehensive Islamic financial system and develop takaful as one of the important components of the Malaysian financial system. As at end-2006, there were eight takaful operators including three new takaful operators. Another new takaful operator would commence operations in 2007. In the area of retakaful, Bank Negara Malaysia in 2006 granted approval to two retakaful companies to be established in Malaysia under the Takaful Act 1984.

The entry of the new players into the Islamic financial industry can be expected to contribute towards accelerating the pace of industry development. Healthy competition in the marketplace is expected to lead to greater consumer benefits in terms of improved business efficiency, product development and service quality which in turn would elevate the domestic Islamic banking and takaful industry to new levels of dynamism. The new entrants with their own distinct capabilities, modalities and strengths will not only add further depth and diversity in the growing domestic Islamic banking and takaful industry, but will also be able to tap new markets in the region and the Middle East. With the added diversity of players, it is envisaged that the development of the Islamic banking and takaful sector will gain further momentum with new areas, such as debt capital market, private banking and fund and wealth management, also gaining increased significance.

With the growing maturity of the Malaysian financial system, licensed institutions may now

**Table 3.1**  
**Financial Sector: Number of Players**

Financial Institutions	1998	2005	2006
Commercial Banks	35	23	22
Finance Companies	31	4	0
Investment Banks/Merchant Banks	12	10	14 <sup>1</sup>
Discount Houses	7	7	0
Islamic Banks	1	6	11 <sup>2</sup>
Insurance Companies	58	42	42
Reinsurance Companies	10	7	6 <sup>3</sup>
Takaful Operators	2	5 <sup>4</sup>	8
Development Financial Institutions	14	13 <sup>5</sup>	13 <sup>5</sup>

<sup>1</sup> Includes a merchant bank in the midst of transforming into an investment bank and three universal brokers that transformed into investment banks in January 2007

<sup>2</sup> Includes a foreign Islamic bank that commenced operations in January 2007

<sup>3</sup> One licence of a foreign reinsurer was surrendered following a group rationalisation exercise by its parent company abroad

<sup>4</sup> Includes a takaful operator that commenced operations in January 2006

<sup>5</sup> Of which six development financial institutions are regulated under the Development Financial Institutions Act 2002 (DFIA)

simultaneously enter into multiple negotiations relating to mergers and acquisitions. Interested parties are given the flexibility to enter into initial talks to acquire or dispose of interest-in-shares of institutions regulated by the Bank.

## FINANCIAL INFRASTRUCTURE DEVELOPMENT

Financial infrastructure development is key to supporting active economic activities and provides a strong foundation for future growth.

During the initial years after the Asian financial crisis, the focus of financial infrastructure development was mainly related to strengthening the supporting infrastructure for credit risk management and enhancing the quality of credit assessment. This was apparent with the introduction of supporting systems including the Central Credit Reference Information System (CCRIS) and the accreditation requirement for credit personnel. With the development of the financial sector gaining momentum, the focus shifted to deepening and diversifying the financial markets and, at the same time, promoting consumer education and enhancing the consumer protection framework. Measures to strengthen

the development of the domestic bond market in 2006 included:

- The upgrading of the **Fully Automated System for Issuing/Tendering (FAST)** into a **web-based** application to enhance the effectiveness and coverage of information dissemination and transparency on primary market activities. FAST, operated by Bank Negara Malaysia, is the centralised system to facilitate the issuing and auctioning of Government and corporate debt securities and enables the Bank to conduct liquidity management via repurchase agreements (repo) or money market auctions.
- The issuance of **Commercial Papers (CPs) and Medium Term Notes (MTNs) on a scripless basis** since 15 May 2006 under the Real Time Electronic Transfer of Funds and Securities (RENTAS). Dematerialising the CPs and MTNs facilitates simultaneous book-entry transfer of securities and funds under the delivery-versus-payment principle, thereby eliminating the risks of settlement and non-delivery of securities.
- The **enhancement to the architecture of the Institutional Securities Custodian Program (ISCAP)** which was originally launched in January 2005 to increase secondary market liquidity. The ISCAP enables the Bank to borrow securities and use them as part of its operations via repo and securities lending to release captive holdings of securities by institutional investors and financial institutions.
- The issuance of the **Guidance Notes on Repurchase Agreement Transactions** in July 2006 to align Malaysian rules and regulations with international best practices. Repo transactions are now subject to the Global Master Repurchase Agreement which provides for, amongst others, the absolute transfer of titles, marking-to-market of transactions, use of haircut and margin maintenance, and events of default. This compulsory agreement as well as other stipulations in the Guidance Notes contribute towards maintaining a sound and orderly operation of the repo market by enhancing legal protection and instilling greater confidence among parties to a transaction.
- The introduction of the first **Islamic Derivative Master Agreement (ISDM)** in the world by

Persatuan Pasaran Kewangan Malaysia, with the first transaction using the agreement signed in December 2006. The ISDM was modelled against the International Swap and Derivatives Association (ISDA) agreement and will be endorsed by ISDA in 2007. The legally binding agreement further deepens the Islamic derivatives market by providing an avenue to Islamic investors for enhanced risk management and greater transparency in market dealings.

- The issuance of “**A Guide to Malaysian Government Securities (MGS)**” as part of Bank Negara Malaysia’s efforts to promote foreign investment in MGS. The guidebook provides essential information on the features of MGS and the characteristics of the local bond market, and is also available in the Bond Info Hub website (at <http://bondinfo.bnm.gov.my>).
- Introduction of an **MGS switch auction** aimed at increasing the trading on liquid benchmark MGS in the market in January 2007. The increased amount of these benchmark securities will enhance trading in the secondary market, thus improving the overall liquidity in the Malaysian bond market and providing added flexibility in maintaining regular issuances of MGS.

Measures implemented in 2006 to safeguard of consumer interests included:

- Commencement of operations of the **Credit Counselling and Debt Management Agency (CCDMA)** on 17 April 2006 which provides an avenue for consumers to seek advice on areas relating to credit, financial management and education as well as debt restructuring.
- Publication of new **multi-lingual booklets** under the **BankingInfo and InsuranceInfo** programmes.

### FINANCIAL MARKET DEVELOPMENT

The Malaysian financial markets play a crucial role in financing the growth of the economy. Previously, the banking sector served as the predominant source of financing for the nation’s economy. This concentration of risk in the

banking sector was evident during the Asian financial crisis, prompting a move towards the diversification of financing sources to the capital market. This resulted in an increase in total private debt securities (PDS) outstanding as a percentage of total financing (PDS outstanding + outstanding loans from banking institutions) from 10.1% in 1998 to 23.9% in 2006. Given its increasingly prominent role in financing the economy, continuous market development is vital to sustain the economy on a steady growth path. The year 2006 saw greater financial market development in the form of measures undertaken to promote an enabling environment for the introduction of new products and entry of new participants.

A tranche of **callable MGS** was issued on 15 December 2006 which allows the Government to better manage its cash flows. Besides improving product diversity, it is envisaged that the introduction of this new product will further develop the Malaysian bond market, especially the primary market for corporate bonds, as callable MGS may serve as a benchmark for private sector issuers to price their own callable PDS.

#### Bank Negara Monetary Notes (BNMN)

were also introduced in December 2006 to replace the existing Bank Negara Bills and Bank Negara Negotiable Notes for the purpose of managing liquidity in both the conventional and Islamic financial markets. The main objective of BNMN is to promote financial system efficiency in absorbing excess liquidity and thus reducing its undesirable impact in the domestic financial market. The maximum maturity of these issuances has also been lengthened from one year to three years. This is, however, not intended to signal any targeted level of long-term interest rates.

Product diversity in the financial market was enhanced with the **review of the Guidelines on Negotiable Instruments of Deposit (NIDs)**. With effect from 15 June 2006, liberalisation of pricing took place when floating rate NIDs were allowed to be priced against indices other than the Kuala Lumpur Interbank Offer Rate (KLIBOR).

The Guidelines also allowed issuance of NIDs in foreign currency, providing an additional source of foreign currency funding and, thus, deepening the profile of foreign currency depositors. Foreign currency NIDs also provide an investment alternative in the onshore market for domestic investors.

**Given the financial market's increasingly prominent role in financing the economy, continuous market development in product diversity, liquidity and innovation are vital to support the economy towards a steady growth path.**

The Bank introduced, on 16 February 2006, **Bank Negara Malaysia Sukuk Ijarah** based on the Islamic concept of *ijarah* or 'sale-and-lease-back'. Its issuance is timely in meeting the demand from international market players desiring Islamic financial instruments which are also compatible with principles subscribed to by Middle East Shariah scholars. This additional instrument to manage liquidity in the Islamic Money Market will be issued regularly. It will also serve as the new benchmark for other short to medium-term Islamic bonds. It is part of the ongoing efforts of the Bank to meet the diversified requirements of a global market.

The entry of new players into the Islamic financial industry contributed towards the development of a wide range of new Islamic banking products. A number of new financing products were introduced in the Islamic banking industry using the Shariah contracts of *mudharabah*, *musharakah* and *ijarah* in addition to the traditional *bai' bithaman ajil* (deferred payment sale). These include home financing-i using the concept of *musharakah mutanaqisah* (diminishing partnership), vehicle financing-i using the concept of *ijarah* (leasing) and cash

financing-i using the contract of *tawarruq*. In the takaful sector, there were 30 family takaful products approved by Bank Negara Malaysia during the year, of which 73.3% were investment-linked and mortgage products. 56.7% of the new products were from new takaful operators. The enhanced product diversity augurs well for the growth of the Islamic financial sector.

To promote further efficiency and provide alternatives in their funding operations, development financial institutions (DFIs) are allowed to participate in the interbank market. The **Guidelines on Participation in the Interbank Market by DFIs** was issued in December 2006 detailing the pre-requisites for market participation which include meeting risk management and liquidity requirements. The participation of DFIs in the interbank market will allow them to make direct placement of funds in the market to obtain better prices and to have direct access to money brokers' competitive rates. The DFIs are also allowed to issue and trade NIDs and Islamic Negotiable Instruments (INIs), both of which are instruments capable of enhancing the liquidity and diversification of the DFIs' funding sources.

### REGULATORY AND SUPERVISORY INITIATIVES

Bank Negara Malaysia's approach to prudential regulation and supervision has also evolved in response to the changing landscape and maturity of the financial sector. Efforts continue to be made to ensure that the regulatory framework remains relevant and adaptable to the changing environment which would encourage institutions to embrace innovation and technological advancements to improve their competitive edge.

Consequently, the prudential framework has been reviewed to gradually move away from prescriptive regulations and one-size-fits-all approach to a more principle-based regime that is adaptive and conducive to changing market conditions and innovations. At the same time, it enables banking

institutions to react pre-emptively to new risk areas to reinforce the safety and soundness of the financial sector. Greater emphasis and responsibility is placed on financial institutions to manage risks appropriately in line with individual business strategies and within a broad-based prudential framework.

Given the diversity and complexity of products and services, and the various levels of risk management capabilities, the risk profiles of financial institutions can differ quite considerably from one another and hence require varying levels of oversight and supervision by Bank Negara Malaysia. In order for regulation and supervision to be effective and efficient, Bank Negara Malaysia adopts a risk-based approach where supervisory resources are prioritised towards areas that pose significant risks to the stability and soundness of the financial system and individual financial institutions. With the growing maturity of the market and its players' capabilities, this supervisory approach is further reinforced by differentiated regulation and supervision which accords greater flexibility to institutions that have strong risk management and corporate governance practices in place. Initiatives have also been directed towards strengthening conditions for effective market discipline to reinforce prudential regulation and supervision.

### **Strengthening the Risk Management and Corporate Governance Framework**

#### ***Implementation of Basel II, Risk-based Capital Framework and Enhancements to Capital Adequacy Standards***

For the banking sector, ongoing initiatives were taken to prepare the banking institutions for Basel II which is aimed at promoting better risk management practices, building capacity and enhancing competitiveness of banking institutions by facilitating greater operating flexibility with appropriate prudential safeguards. The implementation of Basel II is expected to result in more efficient capital management by banking institutions through a more risk sensitive mechanism to compute capital

adequacy which accords due recognition of risk mitigation techniques within individual banking institutions. The adoption of the Internal Ratings Based framework under Basel II in the future will also provide for an alternative method of determining capital adequacy based on internal models developed by banking institutions taking into consideration their own risk profiles and business experience.

In 2006, proposed revisions to the market risk component of the capital adequacy framework were issued to the industry for consultation. This was in recognition of the growing complexity of financial activities undertaken by banking institutions and the evolution of best practices in risk management following the adoption of Basel II internationally. The proposal also included the treatment of interest rate risk in the banking book which will be implemented in tandem with Basel II. Preparations are on track towards implementing Basel II from 1 January 2008 for the Standardised Approach for credit risk and the Basic Indicator, Standardised and Alternative Standardised Approaches for operational risk, with the parallel run for these approaches scheduled to commence during the first half of 2007.

Similarly in the insurance sector, the risk-based capital (RBC) framework has been finalised and will be implemented in 2007 on a parallel run for two years with the existing margin of solvency requirements. A two-year parallel run would provide an orderly transition to the new framework, with early adoption in 2008 permitted for insurers that have met supervisory expectations in terms of the requisite financial and risk management capabilities. The RBC framework will align solvency requirements applicable to insurers with their individual risk exposures and profiles. The capital requirements will also facilitate more effective supervisory interventions by providing early warning signals of deterioration in the capital adequacy levels. In addition, the revised requirements for the



valuation of assets and insurance liabilities will provide for a more explicit quantification of prudential buffers (currently hidden within conservative valuation bases) in line with developments internationally to promote more transparent disclosures of an entity's financial position.

In tandem with the intention to implement the Capital Adequacy Standard (CAS) issued by the Islamic Financial Services Board in 2008, significant efforts have also been undertaken by the Islamic banks during the year in the preparation for the implementation of this new capital framework. A gap analysis was conducted as part of the initial assessment to identify the state of readiness of the Islamic banks to meet the requirements stipulated under CAS. Enhancements to information technology and data systems management have been identified as a key operational capability that needs to be strengthened. In the case of Islamic subsidiaries, the implementation strategy will be streamlined with the initiatives undertaken by their parent bank in implementing Basel II. Efforts have also been initiated to develop supervisory guidance for the implementation of CAS in collaboration with the industry. The supervisory guidance is expected to be finalised by the third quarter of 2007. Bank Negara Malaysia will continue to monitor the progress of the action plans and the risk management capabilities of the Islamic banks during the implementation of the new capital framework.

In managing risks, the DFIs also continued to strengthen their risk management infrastructure, including human resource, systems and processes. In particular, efforts have been undertaken to enhance the human resource capability through continuous and structured training, especially on credit processes as well as product development and innovation to meet the financing and developmental needs of the respective targeted sectors. In addition, the Bank imposes regulatory standards on DFIs to adopt good corporate governance practices so as

to ensure that they are better positioned to achieve their mandated roles with greater efficiency and effectiveness. This is supported by the continuous enhancement of risk management systems and internal processes to identify, measure, monitor and control possible risks associated with the conduct of the mandated activities of the DFIs.

### ***Convergence with Developments in Financial Reporting Standards***

As financial reports are an important reflection of the performance of financial institutions, it is important that reporting standards meet and reflect the actual condition of financial institutions. The Bank is currently conducting a review of the regulatory financial reporting requirements and valuation standards for both the banking and insurance sector to promote consistency with Financial Reporting Standards (FRS) and convergence with international best practices. Among the areas currently being reviewed are:

- the basis for loan provisioning and classification of non-performing loans of banking institutions to consider parameters for loan impairment tests under FRS 139: Recognition and Measurement of Financial Instruments; and
- the requirement for valuation of investment properties held by life insurers at fair value (from cost or revaluation basis previously).

To ensure the integrity of fair values reported in financial statements, supervisory expectations will be issued on valuation policies and processes that must be in place within the financial institutions to support the implementation of the FRS. In addition to this, prudential filters through capital adjustments and other prudential safeguards will also be implemented where appropriate to ensure regulatory capital reflects the financial soundness of the institution and acts as an effective buffer for risk-taking activities. Bank Negara Malaysia is closely monitoring preparations by financial institutions to

achieve readiness for the adoption of FRS 139, and has engaged Boards of individual financial institutions to ensure proper oversight of preparations and to address any significant implications arising from the implementation of the FRS.

### **Other Measures**

During the year, further measures to enhance and strengthen the risk management capabilities of financial institutions were undertaken as follows:

- emphasis on the importance of **stress testing** as a key risk management tool which enables banking institutions to better understand their risk profiles and take appropriate pre-emptive actions;
- strengthened requirements on the **appointed actuaries** of life insurers;
- requirement to **solicit institutional issuer ratings** from the local rating agencies to enable Islamic financial instruments to be recognised as qualified liquefiable assets; and
- enhancement of the **internal audit function** of the DFIs to promote prudent conduct and strengthened operational procedures.

### **Investment Flexibility**

With the advent of a strengthened prudential framework, enhanced risk management capabilities and stronger governance within financial institutions, greater operational and investment flexibilities have been accorded to financial institutions as Malaysia transitions towards a more deregulated environment. The thrust of the policies is to provide greater flexibility for management of investment portfolios by financial institutions whilst ensuring that adequate safeguards are put in place to preserve financial stability.

The flexibilities granted include:

- relaxation of **capital treatment** for investments in **non-innovative Tier-1 capital instruments** of other financial institutions;
- relaxation of limits on **investment in debt securities** for life insurance and family

takaful funds, and in **foreign assets** in any one jurisdiction; and

- greater flexibility for banking institutions to manage their **equity-related activities and investments**.

### **Product Flexibility**

The investment flexibilities introduced under the various initiatives were complemented by further relaxation for financial institutions to offer new products and services. The regulatory philosophy evolved towards facilitating an environment conducive for innovation, and fostering equitable and efficient competition towards the development of a more diversified, efficient and customer-centric banking sector.

The initiatives undertaken to accord greater product flexibility include:

- facilitating **faster time-to-market** for new investment-linked to derivative (ILD) products and **expanding the type and amount of ILD products** that banking institutions can offer;
- allowing onshore licensed institutions to enter into **repo transactions with a non-resident** provided that the total amount of credit facilities of the non-resident, including the repo transaction, does not exceed RM10 million; and
- flexibility for banking institutions to sell non-performing loans (NPL) and non-performing financing (NPF) to external parties. The first major tender of distressed assets by a large domestic bank to foreign investors was transacted during the year and is expected to be completed in 2007. This augurs well for the development of a secondary market for distressed assets in Malaysia as more banking institutions take this opportunity to strengthen their balance sheets.

### **Supervisory Framework**

Bank Negara Malaysia's approach towards the supervision of financial institutions entailed greater emphasis on the early identification of emerging risks and system-wide issues as well as vigilant monitoring of financial conditions and operating soundness of financial institutions. Continued enhancements were made to the



risk-based supervisory framework to provide a structured and forward-looking approach to assess financial institutions' risk profiles and risk management systems. Supervisors are now able to allocate resources optimally when supervising the institutions, focusing on specific risk areas which are identified to pose greater risk to the safety and soundness of the financial institutions.

The increased complexity in banking activities, emergence of new risk factors and continuous change in the financial landscape has also prompted the establishment of specialised risk units which are the Credit Risk, Market Risk and Operational Risk units. These units which are equipped with specialist skills and subject expertise will provide integral support to the supervisory and regulatory functions of the Bank.

Supervisory activities in 2006 focused on the assessment of the strength and capability of universal brokers and discount houses to ensure that these institutions meet the pre-conditions before assuming the new roles as investment banks. Due diligence exercises were conducted on these institutions to assess financial capacity, level of corporate governance, robustness of risk management, effectiveness of internal audit function and adequacy of information systems. Subsequent exercises were conducted to assess the corrective measures undertaken to address the identified weaknesses in these areas.

The enhanced supervisory framework also called for greater reliance on internal and external auditors. To meet this objective and ensure greater responsibility and accountability on the part of the auditors, Bank Negara Malaysia conducted industry dialogues with both the internal and external auditors of the financial institutions where views on the supervisory expectations of auditors and the new developments and challenges facing the financial industry were exchanged.

The transformation of the domestic financial landscape also involved greater cross-market and cross-industry integration and

consolidation, adding to a blurring of the lines between capital market and banking activities. The regulatory and supervisory framework was therefore enhanced to ensure harmonisation of rules and address areas of regulatory overlaps, gaps and regulatory arbitrage. In this regard, supervisory co-operation between Bank Negara Malaysia and other regulatory agencies, such as the Securities Commission has also been strengthened and enhanced. The Bank and the Securities Commission are finalising a Memorandum of Understanding to coordinate working arrangements, given that investment banks will be subject to co-regulation by both authorities.

Following the establishment of Malaysia Deposit Insurance Corporation (MDIC), a strategic alliance agreement was also executed between Bank Negara Malaysia and MDIC to strengthen areas of regulatory and supervisory co-operation. This alliance has been recognised by the International Association of Deposit Insurers as an excellent model of co-operation between deposit insurers and regulators. In complementing the supervisory functions of the Bank, key frameworks with regard to risk assessment, enterprise risk assessment and monitoring and payout activities were developed, with the differential premium systems framework to be implemented in 2008. MDIC has also issued "Guidelines on Total Insured Deposits" and "Guidelines on Disclosure Requirements for Joint Accounts and Trust Accounts" as well as implemented governance policies which includes a whistle-blowing policy.

### FINANCIAL INCLUSION

Promoting greater access to financial services by all segments of society continued to be at the forefront of the Bank's agenda in 2006. Efforts made during the year focused on strengthening the institutional framework and putting in place the necessary measures to further enhance access to financing and also the level of financial literacy.

Leveraging on the complementary role and developmental mandate of the DFIs in supporting

the Government's socio-economic objectives, several strategic initiatives were undertaken to promote greater access to financing for all segments of the economy. In particular, these include the small and medium enterprises (SMEs) and businesses in the priority sectors.

### **The development of the microfinance industry is crucial in promoting greater financial inclusion, given that almost 80% of the SMEs in Malaysia are micro enterprises.**

During the year, the Bank embarked on an important strategy to promote the development of the microfinance industry in Malaysia. This initiative is crucial in promoting greater financial inclusion, given that almost 80% of the SMEs in Malaysia are micro enterprises with less than five full-time workers. The Census of Establishment and Enterprises conducted by the Department of Statistics in 2005 revealed that micro enterprises mainly relied on their own funds, and borrowings from family and friends to meet their financing needs for their businesses. In this respect, a sustainable microfinance industry is important in providing a channel for micro enterprises to obtain financing from the formal financial system.

To ensure that institutional arrangements put in place will be able to provide continuous access to financing for micro enterprises, it is important that the institutions operate in a financially sustainable manner. Thus, the source of funds and the market-based lending rate charges have to be sufficient to cover the funding and operating costs as well as credit risk, whilst generating a reasonable profit margin. Microfinance providers which operate on a sustainable basis need to have an extensive outreach, as opposed to microfinance schemes relying on Government funding which generally have limited capabilities. In this regard, the development of a sustainable and commercially-driven microfinance industry will thus complement the existing Government-sponsored microfinance programmes undertaken by institutions such

as Amanah Ikhtiar Malaysia (AIM) and Yayasan Tabung Ekonomi Kumpulan Usaha Niaga Nasional (TEKUN).

The development of the microfinance industry involves a number of key initiatives. To enhance the role of DFIs as microfinance providers, Bank Simpanan Nasional has been mandated to provide microfinance to micro enterprises and individuals operating a business. Bank Kerjasama Rakyat Malaysia will also provide microfinance to members of co-operatives, while Bank Pertanian Malaysia (Bank Pertanian) will continue to provide microfinance to those micro enterprises involved in activities in the agriculture and agro-based sector.

The involvement of banking institutions also plays a pivotal role in providing microfinance, given their financial capacity and extensive outreach. Bank Negara Malaysia spearheaded a number of initiatives to create awareness amongst banking institutions on successful global practices of sustainable microfinance. Among these initiatives included joint study visits by financial institutions to successful microfinance institutions in India and Indonesia and the development of global case studies on microfinance to serve as reference materials in assisting banking institutions and DFIs to develop their business models.

As a result of the initiatives to promote microfinancing, a number of banking institutions have started to offer loans for micro enterprises. Common features of these include small loans ranging from RM500 to RM50,000 that are provided to individuals and micro enterprises for business purposes at commercial interest rates. The loan tenure is typically short ranging from one month to five years with flexible collateral or security requirements. The time taken to approve such loans is also fast, between five to eleven working days. Some financial institutions also offer repayment incentives in the form of rebates to encourage good repayment practices among the borrowers.

The development of a "Graduation Programme" is another initiative by the Bank to enable micro enterprises to obtain the right type and amount of financing to meet their

requirements as their businesses grow. Through this structured programme, micro enterprises requiring larger funds to finance their business growth are assisted in obtaining such financing from the providers of microfinance and other commercial banks as well as the SME Bank. It is envisaged that the development of a robust and sustainable microfinance industry will provide a complementary alternative for consumers who may not be currently served by the mainstream financial industry.

With the agriculture and agro-based sector having been identified as a key promoted sector under the Ninth Malaysia Plan, Bank Negara Malaysia embarked on a number of initiatives to ensure continuous access to financing for the sector. To realise the Government's vision for the sector to become the third engine of growth, efforts have been undertaken to ensure that adequate funds are available and channelled effectively and efficiently to support businesses in the sector. As a specialised financial institution for the agriculture sector, Bank Pertanian was restructured and strategically positioned to act as the catalyst to facilitate greater access to financing to the agriculture sector and agro-based industries. Bank Pertanian has adopted a comprehensive approach towards paving its new strategic direction whilst putting in place measures to strengthen its financial capacity and capability, accord greater focus on human resource development, and enhance risk management systems and processes. It is envisaged that Bank Pertanian will, post-restructuring, be on a stronger footing to carry out its mandate as the implementing agency to support the agriculture and agro-based sector as an increasingly important growth sector in the economy.

Access to agriculture financing was further enhanced with the establishment of two venture capital funds of RM150 million each for the agriculture sector. The funds, jointly established by Bank Negara Malaysia with two banking groups, are aimed at creating and developing an integrated agricultural business which will generate spillover effects to benefit the entire value chain of the agriculture

sector. Targeting areas of integrated farming and fisheries and biotechnology ventures, these funds are invested at the holding company level which will then be responsible for the development and provision of technical and business support to farmers, breeders and fishermen. The first fund was launched in September 2006 with the other expected to be launched early 2007.

In line with the Government's call to encourage Malaysian companies and enterprises to venture offshore in order to expand markets, efforts continued to be taken to enhance access to financing by these companies. In December 2006, a RM1 billion Overseas Project Fund was established by Bank Negara Malaysia at Export-Import Bank of Malaysia to promote greater access to financing by Malaysian companies undertaking projects overseas. Through the credit guarantee facility introduced in the first phase, Malaysian companies, particularly the SMEs and professional service providers, will have greater access to financing to support business ventures abroad. The co-financing scheme is targeted for introduction at a later stage in 2007.

### **MALAYSIA INTERNATIONAL ISLAMIC FINANCIAL CENTRE (MIFC)**

Against the backdrop of a rapidly growing Islamic financial services industry within the global financial markets, the Malaysian Government launched the initiative known as the Malaysia International Islamic Financial Centre (MIFC) on 14 August 2006. Besides marking the beginning of a new era for the future landscape of Islamic finance in Malaysia, the initiative also aimed at enhancing the competitive advantage that Malaysia has in the area of Islamic finance, having in place a strong and comprehensive Islamic financial system with a robust regulatory regime and well established legal framework.

The envisioned landscape is that MIFC will be a centre for the offering of Islamic financial products and services in international currencies with a large pool of highly skilled Islamic finance expertise. Ongoing efforts are focused to enhance Malaysia's position as a centre of origination, distribution and trading of Islamic capital market and treasury instruments, Islamic fund and wealth management,

international currency Islamic financial services, and takaful and retakaful business. It is also aimed at positioning Malaysia as the gateway for tapping investment opportunities in the rapidly growing Southeast Asian region. To complement this initiative, measures are also intensified towards positioning Malaysia as a centre of excellence in education, training, consultancy and research in Islamic finance.

### The envisioned landscape is that MIFC will be a centre for the offering of Islamic financial products and services in international currencies with a large pool of highly skilled and competent Islamic finance expertise.

The MIFC will also strengthen Malaysia's already strong links with the global market place. The initiative plays an important role in accelerating the process of bridging and strengthening the relationship between Islamic financial markets internationally and thereby expanding the investment and trade relations between the Middle East, West Asia and North Africa regions and East Asia. The promotion of capital and cross-border trade flows between the financial communities of these regions are expected to further strengthen the international integration of the domestic Islamic financial system. In addition, this initiative is expected to enhance the performance of the Islamic financial services industry and strengthen its competitive edge in the increasingly integrated global environment.

As part of the efforts to establish an efficient and effective delivery system in the implementation of the MIFC recommendations, the MIFC Executive Committee was set up on 11 August 2006. The Committee is chaired by the Governor of Bank Negara Malaysia with members comprising senior representatives from the relevant Ministries, Government departments and agencies, financial and market regulators,

and industry representatives from the banking and takaful sectors. The Committee is a single coordinating committee that is entrusted with overseeing the implementation of policy recommendations, providing direction as well as reviewing existing policies for the comprehensive and coordinated promotion of MIFC. The secretariat is Bank Negara Malaysia, which acts on behalf of the Committee as a one-stop entity to undertake this task.

Major measures were introduced in 2006 to promote Malaysia as an Islamic banking hub including issuance of new category of licences known as International Islamic Banks (IIB) under the Islamic Banking Act 1983 to qualified foreign and Malaysian financial institutions to conduct business in international currencies. Similarly, new registrations were made under the Takaful Act 1984 to qualified foreign and Malaysian insurance companies to conduct takaful business in international currencies as International Takaful Operator (ITO), and approvals have been given for the establishment of International Currency Business Units (ICBU) by Malaysian Islamic banks and takaful operators. The IIB and ITO establishment can either be a branch or a subsidiary of the parent financial institution. Incentives provided for international currency business include a tax holiday for 10 years under the Income Tax Act 1967 starting from the year of assessment 2007. In addition, approval was granted for Labuan Islamic banking institutions and Islamic divisions of offshore banks and takaful operators to establish operational offices anywhere in Malaysia. Notwithstanding the physical location, the Labuan tax law will continue to be applied to these players. These measures are aimed at creating the necessary critical mass of players that will contribute towards achieving the objectives of the MIFC and creating the business volume for a vibrant Islamic financial centre.

The MIFC initiative was further strengthened with the liberalisation of the foreign exchange administration rules to allow residents and foreign issuers to raise foreign currency-denominated bonds, in particular Islamic bonds in the Malaysian capital market. Foreign issuers that are eligible to take this opportunity include

sovereigns, agencies or national corporations of foreign governments, multilateral development banks, multilateral financial institutions and multinational corporations. This is also part of the continuous efforts to promote the development of the Malaysian bond market, and to enhance Malaysia as a centre of origination, distribution and trading of sukuk. The issuance of foreign currency-denominated bonds will also provide additional flexibility for both residents and foreign investors to diversify their investments into non-ringgit investments in Malaysia. In boosting the cost competitiveness of product offering and structuring of instruments, the Government granted a 10-year stamp duty exemption on instruments executed by entities under the MIFC and instruments relating to ringgit and foreign currency-denominated Islamic securities.

With regard to human talent development, a personal tax relief up to a maximum of RM5,000 per year on study fees was extended to courses in Islamic finance approved by Bank Negara Malaysia or the Securities Commission in local institutions of higher education including at the International Centre for Education in Islamic Finance (INCEIF).

To complement MIFC are the efforts on talent development in Islamic banking and finance. As part of this initiative, INCEIF has signed a Memorandum of Understanding with nine institutions of higher learning, paving the way for closer collaboration with institutions of higher learning to realise the common objective of developing a significant pool of expertise in Islamic finance globally. This collaborative move, aims to establish a network of mutual co-operation and collaboration that would strengthen the efforts between the institutions of higher learning in the areas of curriculum development, research, training, exchange of ideas and information, and resources in Islamic finance. In addition to this, INCEIF has commenced collaborative initiatives with five takaful operators in promoting and undertaking research, development, training and education in Islamic finance. In the international arena, INCEIF has established strategic alliances with the Islamic Research and Training Institute (IRTI) of the Islamic Development Bank, Lembaga Pengembangan Perbankan Indonesia (LPPI) of

Bank Indonesia, National Institute of Banking and Finance (NIBAF) of State Bank of Pakistan and Ceylinco Sussex Business School, Sri Lanka, among others.

In an effort to spur research and development in Islamic finance, INCEIF has granted research grants for ongoing as well as new research projects on a competitive basis covering a broad range of areas ranging from Islamic financing, product innovation, risk management and governance. To date, INCEIF has more than 600 registered students with 26% comprising foreign students from 21 major countries.

Initiatives have also been taken to enhance the pool of talent in the field of Shariah. Towards achieving this objective, the Shariah Scholarship and Research Grant Awards have been provided from the Fund for Shariah Scholars in Islamic Finance which was announced in August 2006.

### INTERNATIONAL CO-OPERATION

As the global economy becomes more integrated through increasing intra-regional trade, Bank Negara Malaysia has continued to participate actively in promoting regional and international economic and financial co-operation. Trade agreements constitute a means by which this process can be facilitated via preferential treatments between parties, enabling market access and trade privileges. While such agreements would allow parties to benefit from comparative advantages and potentially reap mutual benefits, they also involve trade-offs that need to be taken into account. Hence, an appropriate balance between the promotion of greater competition, efficiency, trade and investment flows and that of maintaining financial system and socio-economic stability, has to be reached. Ultimately, there needs to be commensurate benefits derived from entering into trade agreements.

Committed towards gradual and progressive liberalisation, promotion of trade facilitation and international co-operation, Bank Negara Malaysia continued to play an active role in the trade negotiations at the bilateral, regional and multilateral levels and had acted as the lead agency



in undertaking negotiations on trade in financial services. Malaysia's approach to financial services negotiations, whether at the bilateral, regional or multilateral levels, is principally based on a net-benefit approach – to dismantle policy impediments in areas where gradual liberalisation is deemed as a necessary means to facilitate the achievement of broader economic objectives and where the overall benefits to the country are meaningful and significant.

**Committed towards gradual and progressive liberalisation, promotion of trade facilitation and international co-operation, Bank Negara Malaysia adopts a net-benefit approach to financial services negotiations – to dismantle policy impediments in areas where gradual liberalisation is deemed as a necessary means to facilitate the achievement of broader economic objectives.**

On an international level, a forum to share and leverage on expertise and mutual experience of counterparts in various countries is important to assist in developmental efforts towards building a resilient financial sector. In this endeavour, Bank Negara Malaysia participates actively in international meetings, which include amongst others, the Executives' Meeting of East Asia and Pacific Central Banks (EMEAP) Working Group that focuses on three main areas relating to financial stability – banking supervision, financial markets and payment and settlement systems. The participation in the working, technical and high level committees have contributed towards efforts to:

- facilitate the adoption of international standards for banking supervision and financial stability through appreciation of implementation issues from a regional perspective;
- identify supervisory priorities and areas of concern that will have impact on financial stability; and

- improve techniques relating to supervision and surveillance at the national and regional levels. Pertinent areas that are discussed include implementation of Basel II, home-host supervisory issues, International Accounting Standards (IAS) 39 and macroprudential surveillance framework.

### OUTLOOK : FUTURE POLICIES

The thrust of policy measures in 2007 will focus on establishing and reinforcing the supporting prudential and legal framework for financial institutions, facilitating the emergence of core domestic players to spearhead the development of the financial sector and enhancing the level of efficiency within the financial system through deregulation and allowing greater operational flexibility. In addition, continued focus will be given in driving the MIFC agenda to further develop the Islamic finance industry and strengthening the role of DFIs and financial market players to contribute towards the economic transformation.

The consolidation process and group rationalisation that took place over the years have resulted in a more vibrant, diversified and resilient financial sector. It has also facilitated the emergence of increasingly complex group structures as financial entities move towards integration to reap the potential benefits of economies of scale as well as to leverage on business and management synergies. The Bank will continue to strengthen prudential regulation and surveillance over diversified financial conglomerates. Policy initiatives will be directed towards establishing a holistic framework for consolidated supervision and ensuring that the activities of financial conglomerates are within appropriate risk levels and do not pose any systemic risk to the financial system. The framework would encompass measures to further strengthen cross-border and cross-sector co-operation and information sharing between Bank Negara Malaysia and other financial regulators and supervisors.

The year 2006 also saw an increasing interest by foreign institutions to have a more meaningful presence in Malaysia by taking up strategic stakes

in domestic financial institutions. One insurance group will strengthen its presence in Malaysia by locally incorporating itself, while two domestic financial groups had received proposals from foreign institutions to participate as shareholders. One foreign financial group also completed its acquisition of a strategic stake in a domestic insurance company during the year. The strategic repositioning of these institutions by co-operating with foreign partners should contribute to further strengthening the capabilities and capacities of the institutions in the areas of technical expertise, innovativeness, reputation and network to further enhance efficiency and competitiveness. Bank Negara Malaysia would continue to play a facilitative role in encouraging the formation of strategic partnerships that aim to bring mutual benefits to the parties involved and the nation generally, whilst preserving financial stability at all times and evolving a financial system that contributes to socio-economic stability.

In terms of the prudential framework, policy initiatives will continue to be focused on establishing and reinforcing the supporting framework for the implementation of Basel II, risk-based capital and risk-based supervision. These measures would include the development of comprehensive risk management standards for all major risk components of banking and insurance operations and the strengthening of supporting infrastructure. Greater responsibility will be accorded to the Boards of financial institutions in ensuring proper oversight of the strategic direction and that internal governance and risk management processes of institutions are firmly in place and effectively implemented. Measures will also be taken to outline preconditions for enhanced market discipline such as improved disclosure requirements, in line with the focus towards greater transparency. This move towards greater market-oriented oversight and discipline aims at providing greater flexibility for financial institutions to innovate and enhance competitiveness in a dynamic operating environment.

The transformation of the financial sector will be further supported by the strengthening of the legal and regulatory framework in 2007. The

review of the legislative framework will reflect the progressive changes in the regulatory and supervisory approach over the years, moving towards minimising regulatory impediments to facilitate a more effective and efficient environment for financial institutions to operate. The revised legal framework will also align existing practices with developments in financial markets, business practices and financial reporting standards as well as increase uniformity with other governing legislation.

Endeavours in consumer awareness and education, which play an indispensable role in the continuous efforts of the Bank to achieve financial inclusion, will be improved upon. These include intensifying promotion of basic banking accounts as a measure to increase access to financial services at minimal costs. Improving product transparency and the professionalism of financial service providers and intermediaries which are becoming increasingly important to boost consumer confidence in the financial system, will also be addressed.

The major policy thrust for DFIs in 2007 will continue to focus on strengthening the regulatory standards to ensure the development of sound and robust DFIs capable of supporting their mandated activities in an effective and efficient manner. Several measures, tailored according to the unique nature and specific roles of the DFIs, will be introduced to further enhance their capacities and capabilities in order to develop strategic sectors of the economy. In addition to offering a wider range of facilities via innovation of products and services, emphasis will be on the provision of value-added advisory, consultancy and technical assistance to the targeted sectors.

The year 2007 will also see a concentration of efforts to achieve the MIFC agenda whilst further strengthening the resilience, capability and capacity of Islamic financial institutions in Malaysia. Recognising the importance of Shariah compliance in the Islamic finance industry, Bank Negara Malaysia will continue in its efforts to enhance the Shariah framework. Among these efforts include formulating standard Shariah



parameters as the main reference in developing Shariah compliant products and instruments, strengthening the supervisory framework over Islamic finance operations and promoting greater innovation and diversity in Islamic financial products and investments. The impending implementation of equity-based contracts would promote the gradual shift from predominantly asset-based financing to equity-based financing. Given the unique risk and rewards profile of these innovative contracts, Bank Negara Malaysia will continue to ensure that adequate measures and prudential safeguards are in place to address the regulatory, Shariah and legal aspects of these contracts.

While Malaysia is unilaterally committed to liberalising the financial sector under the Financial Sector Masterplan, the proliferation of trade agreement negotiations has provided new opportunities and challenges for Malaysia. However, the gradual and progressive financial liberalisation efforts in Malaysia will continue to be

sequenced and implemented accordingly in order to maximise opportunities from the liberalisation process whilst avoiding destabilising effects on the financial sector and overall economy. The process will be accelerated in areas where Malaysia deems liberalisation as a necessary means to facilitate the achievement of economic objectives and national socio-economic policies.

In this era of globalisation, keeping up with the accelerated pace of evolution in the financial sector poses a highly challenging feat in itself. While the developmental efforts have contributed significantly in achieving a vibrant and resilient Malaysian financial sector, the domestic financial sector needs to rise to the challenge to operate and thrive in a more integrated domestic and international market. Bank Negara Malaysia's initiatives thus far and moving forward would hence focus on balancing the various objectives to build an efficient, effective, diversified and resilient financial sector whilst ensuring that financial stability is preserved at all times.

### Market Conduct and Consumer Capability

Market confidence is crucial to effective intermediation and the efficient functioning of the financial markets. In today's dynamic environment, given the important link between market confidence and financial stability, considerable effort has been undertaken by the Bank to put in place the appropriate framework and measures that allow the financial services sector to evolve, while at the same time ensuring the safety and soundness of the financial system as well as efficient market and fair practices.

Consumer financial requirements and expectations are changing rapidly in the face of increasing personal wealth, growing sophistication and the demand for differentiated product offerings and value-added services. These trends have not only become important in reinforcing a more competitive environment in the financial services industry but have also spurred significant structural changes in the financial sector with greater diversity of players, more innovative and complex products and services as well as more efficient delivery channels. While these changes have generally been positive and often leading to more varied product offerings, lower costs and better quality to consumers, they also present new challenges to consumers as their financial knowledge may not have kept pace with the dynamic developments in the financial sector. An important aspect of the Bank's regulatory strategy and approach therefore, has been to ensure that the continued growth of the financial sector is underpinned by fair market practices and conduct. Equally important is the need to enhance consumer capability to ensure that consumers are better equipped with information and knowledge necessary to make financial decisions that improve their economic well-being. The establishment of the Consumer and Market Conduct Department marks another milestone in the Bank's ongoing commitment towards according greater focus on elevating consumers' financial literacy levels, promoting sound and fair market practices, as well as putting in place the necessary infrastructure for consumer protection and redress. The mission is therefore to promote greater consumer activism aimed at engendering greater competition and better performance in the financial sector, by:

- formulating and implementing consumer-related market conduct requirements;
- conducting surveillance and initiating remedial or enforcement actions for any breach of market conduct requirements; and
- promoting financial capability of consumers.

#### Promoting Fair and Equitable Market Practices

Financial service providers and their intermediaries are expected to implement fair consumer practices with policies and systems that focus on the customers' information and other requirements in order to foster continued public confidence in the financial system. In addition to promoting sound business practices, the Bank will also continue to direct efforts towards enhancing market conduct surveillance and take enforcement actions against financial service providers that adopt unfair practices. At the same time, efforts are also focused on promoting self-regulation in the industry through enhancing the roles and effectiveness of the industry associations and their enforcement of the respective codes of good business practice.

Consumers also need to be empowered to take responsibility for their own well-being and thus be given the relevant information on which to base their financial decisions. In this regard, requirements are in place for the banking sector to disclose and make available information on fees and charges imposed on products and services offered to individuals and small and medium

enterprises (SMEs) at all their branches and websites. For the insurance sector, apart from improving transparency in product features and sales practices, disclosure is required for commissions, fees and charges for insurance products with savings and investment features that are sold through banking institutions. In addition, greater disclosure requirements have been introduced for the family takaful business. Except for medical and health takaful products, the allocation of investment profit, surplus or fees to the takaful operators must be disclosed in the proposal form, certificate documents and brochures. Going forward, product disclosure and transparency will be enhanced to ensure that consumers have access to information that accurately represents the features, risks and returns associated with the financial products and services. As part of these efforts, the Bank has reviewed the broad guiding principles on the imposition of fees and charges for conventional and Islamic banking products and services for individuals and SMEs. While committed to a framework of greater market orientation in determining product pricing, fees and rates, the Bank will continue to ensure that cost and cost savings are allocated fairly and equitably between the financial service providers and consumers.

A sound financial system hinges on, amongst others, the resilience of the players and market confidence. In their dealings with consumers, financial service providers are therefore expected to act with due care and diligence as well as seek the pertinent information from customers and assess their financial needs before concluding a contract or giving advice and handling the private information with due care. Life insurers have an obligation to provide more extensive sales illustrations in marketing life policies, while life agents must observe proper advice practices in the sale of life products. In addition, the Bank has tightened regulations on claims settlement practices and strengthened controls over bonus reductions by life insurers. The Code of Good Practice for Life Insurance Business has also been revised to maintain a high standard of professionalism in the design and sale of insurance products, including the requirement for 'truth in selling' with proper disclosure. In line with these developments, the Guidelines on Family Takaful Products were issued to establish the minimum requirements for the introduction of any new family takaful products, including marketing information to prospective participants of family takaful schemes.

It is also important for loss adjusters, insurance brokers, takaful brokers, financial advisers and money brokers to have adequate knowledge and high level of professionalism in their dealings with customers. As they represent an important interface between consumers and financial service providers, their good market conduct is equally essential to promote confidence in the financial system. To raise the benchmark on the quality of financial advice, financial advisers are also being promoted as a new distribution channel for life products and other products such as savings for children's education, retirement planning and investments for the future.

### **Enhancing Financial Capability of Consumers**

In a competitive environment where market discipline and consumer activism drive financial performance, consumers need to be increasingly financially savvy. The presence of more confident and financially astute consumers will promote greater competition and thus market efficiency and innovation. This can however, only be achieved when consumers have access to information on the financial products and services that are being offered and are equipped with sufficient knowledge to understand the risks and obligations involved in order to make informed decisions. Measures have been undertaken by the Bank to promote consumer awareness and knowledge on financial products and services of conventional banks, Islamic banks, insurance companies and takaful operators, as well as electronic payments channels and instruments. The Bank together with the financial industry have implemented the Consumer Education Programme (CEP) as part

of the efforts to increase consumer awareness. A total of 23 articles have been published in the BankingInfo website and 24 articles in the InsuranceInfo website. These articles are also published as information booklets in English, Bahasa Melayu, Mandarin and Tamil. To date, the BankingInfo and InsuranceInfo websites have received significant response. The BankingInfo website has also been enhanced to include comparative information on financial products to facilitate and reduce the cost of information search by consumers.

To enhance the outreach of the CEP, various target groups including school children, housewives, young adults and retirees have been identified and information on a broad range of subjects such as household finance management, savings, use of credit, e-payments, general banking and insurance have been provided. Working collaboratively with the Ministry of Education, more than 7,000 schools nationwide have been adopted by banking institutions to impart to students, the importance of savings and smart money management. In order to achieve the common goal of enhancing financial capability of consumers, the strategic alliances with the Financial Mediation Bureau (FMB), Credit Counselling and Debt Management Agency (CCDMA), Malaysia Deposit Insurance Corporation and the Securities Commission have been strengthened with the establishment of the Financial Education Working Committee. The Committee, chaired by the Bank, aims to foster greater coordination and collaboration amongst its members in enhancing consumer awareness and financial capability.

### **Strengthening the Enabling Infrastructure**

A good dispute resolution process that is simple and easily accessible is an essential element to ensure the fair treatment of consumers. In this regard, conventional and Islamic banks, insurance companies and takaful operators have established their own respective Complaint Units. Going forward, a dedicated Complaint Unit will also be extended to payment systems operators. Intervention is on ensuring that these Complaint Units deal with complaints and claims effectively and fairly through an equitable process, rather than on issues relating to commercial decisions such as pricing of loans and contractual arrangements. The Bank also would not intervene in the cases heard in court or that are pending legal action given that only a court of law can resolve those disputes and award damages that are legally binding on both parties. To ensure that consumers have recourse to an independent, fair and impartial dispute resolution mechanism, the FMB is an alternative redress avenue for consumers of financial service providers under the Bank's purview.

As part of the Bank's efforts to improve access by the public to information relating to our operations and policies, the Laman Informasi Nasihat dan Khidmat (Bank Negara Malaysia LINK) was established, as a one-stop reference for members of the public and the SMEs in matters relating to financial products and services. Since its inception in February 2005, the response to the Bank Negara Malaysia LINK has been overwhelming with more than 40,000 visitors comprising individuals and SMEs that sought information on various issues pertaining to banking, loan related matters, insurance, foreign exchange administration and credit reports. In relation to this, a Contact Centre will be established in May 2007 as an integrated customer information service at the Bank that aims to improve response to queries by increasing access channels for the public to refer financial related matters.

With the robust growth in private consumption, growing consumer affluence and increased access to the financial sector, enhanced capacity to manage finances and debts prudently become essential to preserve the resilience of the household sector. In this regard, the Bank has established the CCDMA in April 2006 to provide an avenue for consumers to obtain advice on matters relating

to debt management. Consumers who are unable to meet their financial obligations arising from unexpected developments or overstretched finances, can seek the advice of CCDMA. The agency also counsels consumers on financial and money management as well as assists, free of charge, in rescheduling or restructuring their housing loans, hire purchase, credit card and personal loans through out-of-court procedures, based on repayment plans and terms that have been agreed upon by both creditors and debtors. In October 2006, CCDMA established regional offices at the Bank's branches in Penang, Johor Bahru, Kuala Terengganu, Kuching and Kota Kinabalu. To date, over the span of less than a year, more than 15,000 customers have sought the services of CCDMA and more than 2,000 customers have received assistance under the Debt Management Programme.

In a move to combat fraud in the financial sector, initiatives have been taken to strengthen collaboration with the industry and law enforcement agencies. The Bank, the financial sector and representatives from the Royal Malaysia Police have established a Joint Steering Committee and a Joint Working Committee to share information and knowledge among the members to identify and mitigate fraud risks in the insurance and takaful sectors. During the year, several training programmes and workshops were held in major cities in Malaysia to facilitate sharing of information on, and increase understanding of, fraud risks among the industry participants. For the banking sector, the Bank works closely with the industry associations with the aim to alert the banking institutions on the trends and new *modus operandi* on frauds and preventive measures that should be taken to minimise the occurrence of frauds. The Bank will also continue to ensure that the financial sector implements appropriate systems and controls in managing fraud risks, and collaborates with law enforcement agencies to combat financial fraud.

### **Moving Forward**

In an environment of rapid transformation of the financial sector, a more principle-based market conduct regime will be adopted. Such a regime however, requires certain preconditions to be in place to provide the supporting infrastructure and incentives that will align market practices with sound principles. Greater emphasis will therefore be accorded towards enhancing governance, integrity and transparency as the foundation for industry players to maintain public confidence and trust. Similar focus will be given to further strengthen the financial capacity of consumers as well as improving the effectiveness of redress mechanisms. This is based on the premise that a progressive financial sector is one where prudential safety and soundness, competition and consumer protection co-exist to effectively serve the interests of the various stakeholders in the financial markets.

The aim is to achieve an appropriate balance between providing an adequate level of protection for consumers while promoting increased competition and innovation in the financial system. The overriding objective is to facilitate a market place where consumers are in a position to choose from a wide range of products and services on the basis of being empowered with pertinent information and knowledge. Fostering a dynamic and progressive financial sector is a shared responsibility of the regulator, the industry, consumers and other stakeholders. In this context, consumers are expected to assume a greater responsibility in managing their finances by understanding their rights and obligations as well as in exercising due care and skill in their selection of products and services. Complementing this, financial service providers are expected to operate in a fair, equitable and transparent manner in providing their financial services to customers.

# The Payment and Settlement Systems

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A well-functioning payment system is crucial for the efficient operation of the financial markets and in maintaining financial stability. Given its importance, the promotion of a secure, safe and efficient payment system is one of the main pillars of the Bank in addition to maintaining monetary and financial stability.

The Payment Systems Act 2003 (PSA) recognises the Bank as the sole authority responsible for the oversight of payment systems in the country. The objective of the Act is to ensure the safety and efficiency of the payment systems infrastructure, and to safeguard public interest. In discharging its responsibilities under the Act, the Bank performs three roles, namely, as the operator and overseer of the payment systems, and facilitator in the development of payment system services.

## The thrust of the Bank's policies and initiatives in payment systems focused on strengthening further its oversight function and improving payment efficiency.

In 2006, the thrust of the Bank's policies and initiatives in payment systems focused on strengthening further its oversight function in fortifying payment system stability and confidence, enhancing safety and reducing risks in the payment systems. In addition, efforts were also directed towards improving payment efficiency via increased competition and greater use of electronic means of payments.

### MANAGING PAYMENT SYSTEM STABILITY AND CONFIDENCE

As the sole authority responsible for the oversight of payment systems in the country, the Bank has the responsibility for the stability and confidence of the payment and settlement systems operating in the country. Central to this oversight responsibility from the stability perspective is

to ensure the continued reliability of the major payment systems and to sustain public confidence and trust in the retail payment systems and payment instruments. Measures undertaken by the Bank in discharging its responsibilities included an assessment of systemically important payment systems (SIPS) against internationally recognised standards and strengthening of its oversight function over remittance operators, designated payment instrument issuers and clearing houses which do not fall under the purview of the PSA.

### ***Benchmarking against CPSS-IOSCO Recommendations***

In 2006, the Bank carried out a self-assessment of the Scripless Securities Trading System (SSTS) operated by the Bank based on 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 SSTS constitutes an important infrastructure to support the activities and development of the bond market. It provides depository, clearing and settlement services for all unlisted ringgit public and private debt securities issued in Malaysia. As at end-2006, a total of 1,883 primary public and private debt securities valued at RM443 billion were deposited and RM2.2 trillion were settled through the system. In view of the significant value that passes through the SSTS and the critical role it plays in supporting capital market initiatives in Malaysia, it is crucial that the operation of the SSTS conforms to the CPSS-IOSCO Recommendations. A summary of the CPSS-IOSCO "Recommendations for Securities Settlement Systems" and the Bank's observance of the Recommendations is provided in the following box.

The self-assessment concluded that the SSTS module of the Real-time Electronic Transfer of Funds and Securities (RENTAS) system achieved a high degree of observance of the Recommendations that are applicable to the system. Two of the Recommendations relating to

**The CPSS-IOSCO Recommendations for Securities Settlement Systems**  
**(The Bank's level of observance is indicated in parenthesis)**

**Legal risk**

**1. Legal framework (fully observed)**

Securities settlement systems should have a well-founded, clear and transparent legal basis in the relevant jurisdictions.

**Pre-settlement risk**

**2. Trade confirmation (fully observed)**

Confirmation of trades between direct market participants should occur as soon as possible after trade execution, but no later than trade date (T+0). Where confirmation of trades by indirect market participants (such as institutional investors) is required, it should occur as soon as possible after trade execution, preferably on T+0, but no later than T+1.

**3. Settlement cycles (fully observed)**

Rolling settlement should be adopted in all securities markets. Final settlement should occur no later than T+3. The benefits and costs of a settlement cycle shorter than T+3 should be evaluated.

**4. Central counterparties (CCPs) (not applicable as it does not act as a central counterparty)**

The benefits and costs of a CCP should be evaluated. Where such a mechanism is introduced, the CCP should rigorously control the risks it assumes.

**5. Securities lending (fully observed)**

Securities lending and borrowing (or repurchase agreements and other economically equivalent transactions) should be encouraged as a method for expediting the settlement of securities transactions. Barriers that inhibit the practice of lending securities for this purpose should be removed.

**Settlement risk**

**6. Central securities depositories (CSDs) (fully observed)**

Securities should be immobilised or dematerialised and transferred by book entry in CSDs to the greatest extent possible.

**7. Delivery versus Payment (DvP) (fully observed)**

CSDs should eliminate principal risk by linking securities transfers to funds transfers in a way that achieves DvP.

**8. Timing of settlement finality (fully observed)**

Final settlement should occur no later than the end of the settlement day. Intraday or real-time finality should be provided where necessary to reduce risks.

**9. CSD risk controls to address participants' failures to settle (broadly observed as there was no evaluation and clear procedure to address the possibility of multiple failures scenario. However, issues related to failure to settle transactions are governed under the Rules on SSTs)**

CSDs that extend intraday credit to participants, including CSDs that operate net settlement systems, should institute risk controls that, at a minimum, ensure timely settlement in the event that the participant with the largest payment obligation is unable to settle. The most reliable set of controls is a combination of collateral requirements and limits.

**10. Cash settlement assets (fully observed)**

Assets used to settle the ultimate payment obligations arising from securities transactions



should carry little or no credit or liquidity risk. If central bank money is not used, steps must be taken to protect CSD members from potential losses and liquidity pressures arising from the failure of the cash settlement agent whose assets are used for that purpose.

### Operational risk

#### 11. **Operational reliability (fully observed)**

Sources of operational risk arising in the clearing and settlement process should be identified and minimised through the development of appropriate systems, controls and procedures. Systems should be reliable and secure, and have adequate, scalable capacity. Contingency plans and backup facilities should be established to allow for timely recovery of operations and completion of the settlement process.

### Custody risk

#### 12. **Protection of customers' securities (fully observed)**

Entities holding securities in custody should employ accounting practices and safekeeping procedures that fully protect customers' securities. It is essential that customers' securities be protected against the claims of a custodian's creditors.

### Other issues

#### 13. **Governance (fully observed)**

Governance arrangements for CSDs and CCPs should be designed to fulfill public interest requirements and to promote the objectives of owners and users.

#### 14. **Access (broadly observed as eligibility criteria to be a RENTAS member are not made public but provided upon request)**

CSDs and CCPs should have objective and publicly disclosed criteria for participation that permit fair and open access.

#### 15. **Efficiency (fully observed)**

While maintaining safe and secure operations, securities settlement systems should be cost-effective in meeting the requirements of users.

#### 16. **Communication procedures and standards (fully observed)**

Securities settlement systems should use or accommodate the relevant international communication procedures and standards in order to facilitate efficient settlement of cross-border transactions.

#### 17. **Transparency (the Bank has not conducted the self-assessment)**

CSDs and CCPs should provide market participants with sufficient information for them to identify and evaluate accurately the risks and costs associated with using the CSD or CCP services.

#### 18. **Regulation and oversight (fully observed)**

Securities settlement systems should be subject to transparent and effective regulation and oversight. Central banks and securities regulators should cooperate with each other and with other relevant authorities.

#### 19. **Risks in cross-border links (not applicable as it does not handle cross-border transactions)**

CSDs that establish links to settle cross-border trades should design and operate such links to reduce effectively the risks associated with cross-border settlements.

central counterparties and cross-border links are not applicable to RENTAS as it currently does not act as a central counterparty nor does it handle cross-border transactions.

### ***Reinforcing Oversight***

In May 2005, the Bank for International Settlements (BIS) published a report, "Central Bank Oversight of Payment and Settlement Systems", which sets out principles for the oversight of both domestic and cross-border payment systems. For domestic payment systems, the report recommends, amongst others, that central banks should have both the authority and the capacity to carry out oversight. While the authority of the Bank for its oversight function is drawn from the PSA, the Bank is also the operator of SIPS, namely, RENTAS (the real time gross settlement system) and SPICK (the national image cheque clearing system). To reinforce its oversight responsibilities and to conform with the BIS Recommendations, the Bank is currently reviewing the organisational responsibility with respect to the oversight of the SIPS with a view to segregating it from the operational responsibility.

Integral to the exercise of strengthening its oversight function are the resources and human capital required in carrying out the surveillance and oversight of the payment systems. In this respect, the Bank has recently realigned its resources to provide for greater focus and more effective surveillance framework to ensure the safety and soundness of the payment systems. With the realignment, the micro and macro perspectives of overseeing the industry and the individual players are segregated and carried out by two different departments. While the identification of emerging trends and potential vulnerabilities related to payment systems and the players would reside with one department, the formulation of policies and strategies to enhance and promote the safety and efficiency of the nation's payment systems is with a separate department.

### ***Oversight Over Remittance Operators and Designated Payment Instrument Issuers***

With the growing importance and significance

of remittance flows, in particular remittances abroad by foreign workers in the country and the objective to increase access to formal remittance channels, the Bank extended its regulatory oversight to cover non-bank remittance operators. The PSA will also be amended to enhance oversight provisions for the Bank to carry out its responsibility in ensuring the safety, efficiency and soundness of remittance services. In addition, the Bank also formulated a set of prudential requirements for remittance operators, which amongst others, include minimum shareholders' funds, daily transaction limit, transparency on service levels, management of customers' account and, 'fit and proper' criteria for shareholders and directors. In addition, remittance operators are also subjected to the Anti-Money Laundering and Counter Financing of Terrorism (AML/CFT) guidelines issued by the Bank which are in line with the Financial Action Task Force (FATF) Recommendations.

In line with efforts to migrate the country to electronic payments, the Bank is encouraging the introduction of innovative products and services including electronic money. While the development of electronic money in Malaysia is still in its infancy, the Bank is formulating a regulatory framework on electronic money to minimise risks associated with electronic money business to safeguard users' interest and instill confidence in its use. The prudential measures will include amongst others, maintenance of minimum shareholders' funds, introduction of purse limits, management of float balance, establishment of adequate governance and operational arrangements to ensure the integrity of electronic money schemes. The proposed electronic money regulation was circulated to the industry for comments in August 2006 and the Bank is currently finalising the regulation taking into consideration the industry's feedback and latest market developments. The electronic money regulation will come into effect before end-2007.

### ***Oversight Over Other Clearing Houses***

While the clearing houses recognised under the Securities Industry Act 1993 and approved under the Futures Industry Act 1993 are currently regulated and supervised by the Securities

Commission and excluded from the definition of payment system under the PSA, the safety and stability of the clearing houses could become a source of systemic risk. In this regard, the Bank and the Securities Commission will enter into a Memorandum of Understanding to outline the specific aspects of the co-operation, consultation and information exchange between the two regulators, to ensure their respective mandates are achieved.

### MANAGING PAYMENT SYSTEM RISKS

Another focus of the Bank continues to be in the area of enhancing the safety of the payment systems and minimising systemic risks, in particular, the large value interbank payment system.

### Focus continues to be in the area of enhancing the safety of the payment systems and minimising systemic risks.

#### ***Foreign Exchange Settlement Risk***

In November 2006, the Bank, in collaboration with the Hong Kong Monetary Authority, successfully implemented the Payment versus Payment (PvP) infrastructure for settling interbank ringgit-US dollar trade transactions. In such transactions, the risk arises when the party settling the ringgit it sold, may not receive the US dollar it bought. To mitigate such risk, a direct link between RENTAS in Malaysia for the settlement of ringgit and the USD CHATS system in Hong Kong for the settlement of the US dollar, was established to enable the simultaneous settlement of ringgit in Malaysia and US dollar in Hong Kong during Malaysian business hours.

The establishment of the PvP settlement mechanism was the result of a survey conducted by the Bank in late 2004 on foreign exchange (FX) settlement practices in Malaysia. The main objective of the survey was to assess the progress achieved by Malaysian banking institutions in managing FX settlement risk.

From the survey, it was noted that US dollar was the single largest currency for FX settlement in Malaysia, representing about 73.8% of the total payment flows. In terms of currency pairs, FX transactions involving ringgit and US dollar represented about 70% of total FX trades in Malaysia. Prior to the establishment of the link, banking institutions absorbed the settlement risk as they had to deliver ringgit in Malaysia during Malaysian time before they could receive the US dollar in New York during New York time. As ringgit is not an eligible currency to be settled through the Continuous Link Settlement (CLS) system, the Bank embarked on the development of the PvP infrastructure to mitigate the settlement risk for the ringgit and US dollar FX transactions.

Besides eliminating the settlement risk for ringgit and US dollar FX transactions, the PvP link also provides other benefits. Participating banks are now able to enjoy improved liquidity management as they can now utilise the US dollar much earlier during the day. The infrastructure now presents an avenue for US dollar denominated securities issued in Malaysia to be traded and settled on a DvP basis, eliminating the settlement risk for the trading of such US dollar securities in Malaysia.

As at end-2006, a total of 16 banking institutions participated in the RENTAS-USD CHATS link and four more banking institutions are expected to participate in the system in 2007. During the first one and a half months of its implementation, 44% of the total ringgit-US dollar FX trades, and 85.7% of ringgit-US dollar transactions between the participating banks were settled through the system. The FX transactions between the participating banks that were not settled through the system were mainly value-today transactions that were executed on the settlement day.

#### ***Operational Risk and Business Continuity Planning***

Efforts to mitigate operational risk and business continuity planning are critical in ensuring the resilience of payment systems, in particular for SIPS. Operational vulnerabilities can exacerbate various risks in payment systems, which may

lead to disruptions and affect the stability of the financial markets and undermine public confidence. The emphasis of attention is, therefore, on operational robustness, security and contingency planning for the SIPS and other major payment systems. The Bank accords high priority on business continuity planning to ensure uninterrupted availability of the payment systems through its Disaster Recovery Centre (DRC) for RENTAS and SPICK operations. Scheduled monthly live runs are conducted from the DRC for both systems. The live runs test the Bank's DRC state of readiness in times of crisis. Market players are also required to take a proactive approach in ensuring that their respective off-site disaster recovery sites are also in a state of readiness at any time to address any unexpected disruptions. In this regard, the RENTAS Participation and Operation Rules were amended requiring RENTAS participants to ensure that their RENTAS systems are operationalised within one and a half hours after the activation of the disaster recovery procedures. In addition, RENTAS participants are required to conduct live runs for their off-site DRC sites at least four times a year. As there were no major disruptions or breakdown in the RENTAS or SPICK systems during the year, it was not required to activate the Business Continuity Plan (BCP).

On the retail payments sector, Malaysian Electronic Payment System (1997) Sdn. Bhd. (MEPS) implemented its BCP by successfully conducting disaster recovery exercises for three of its core services, namely, the Shared ATM Network, e-Debit and Interbank GIRO (IBG). The primary objective was to test the efficiency and robustness of its disaster recovery infrastructure and procedures. The exercise also served to familiarise the MEPS Disaster Recovery team, financial institutions and related service providers with the disaster recovery process. The exercise was conducted as a live run with full activation of the disaster recovery procedures including network connectivity with financial institutions and processing of live data for the three core services.

### **Internet Banking Risk Mitigation**

Internet banking services are currently provided by 16 banking institutions. Such services provide

convenience and affordable accessibility to banking services especially in making funds transfer, bill and loan payments, reloading of mobile prepaid airtime, account balance enquiry, foreign telegraphic transfer, online share application service for initial public offering on Bursa Malaysia and other facilities.

The rising trend of phishing email and short messaging system scams as well as the latest Internet banking fraud known as 'script editing' have tested the level of security of the Internet banking services in the country. Collaborative efforts were initiated by the Internet Banking Task Force to address Internet banking fraud and to instill public confidence in Internet banking services. Overall, Internet banking security has not been breached but the cases generally involved consumers being deceived to disclose their username and personal identification number (PIN) or password. Thus, efforts to stem the fraud were focused on educating Internet banking consumers on security precautions via articles published in the media and alerts posted on Internet banking websites. The Internet Banking Task Force was set up in 2004. Its members comprise the banking institutions that offer Internet banking services, the Malaysian Cyber Security Agency (a national body established to address ICT security issues), the Malaysian Communications and Multimedia Commission, the Royal Malaysia Police, Bank Negara Malaysia and TM Net Sdn. Bhd.

To further strengthen the safety of Internet banking services, all banking institutions offering Internet banking services are required to implement two-factor authentication for Internet banking transactions. The second authentication factor is to complement the username and PIN or password (which is the first factor authentication) by way of using an additional authentication tool such as transaction authorisation code (TAC), digital certificate, smart card or USB token, or a customer's own biometric characteristic such as fingerprint or retinal pattern. The second authentication factor is required for high-risk transactions such as registering new payees or beneficiaries, third party funds transfer, payment to unregistered parties, prepaid airtime reloads, bill payments and changing confidential

information like correspondence address and contact numbers. As of end-December 2006, most banks have complied with the two-factor authentication requirement.

### **Payment Cards Risk Mitigation**

In line with the objective to ensure continued public confidence in using payment cards, particularly credit and debit cards, the Bank and the industry players have collaborated in a number of areas to mitigate the risk of fraud and strengthen the security standards of payment instruments. As part of this collaborative effort, the Malaysian Risk Management Task Force (MRMTF), whose members include the credit and charge card schemes and their issuers and acquirers, the Royal Malaysia Police and Bank Negara Malaysia, was established. The MRMTF is continuously promoting co-operation amongst the players to combat credit card fraud as well as to increase the awareness of credit card fraud activities. The MRMTF holds monthly meetings to update and discuss issues relating to credit card fraud and also to identify pre-emptive measures to combat such fraud.

Prior to the full implementation of the Europay-MasterCard-Visa (EMV) standard for credit cards, Malaysia had received negative media attention for credit card fraud. With the completion of the industry wide EMV chip migration at the end of 2005, Malaysia has significantly reduced skimming or counterfeit card fraud and improved its image internationally in terms of mitigating counterfeit card fraud. Since the implementation of the chip infrastructure, credit card fraud has declined substantially from RM69.9 million in 2004 to RM18.3 million in 2006. Complementing the EMV chip migration exercise and to promote a safer credit card environment, credit card institutions have also completed their data line encryption exercise in 2006 to ensure that credit card information transmitted over telecommunication lines are protected against 'wire-tapping' fraud.

Although there has been a significant reduction of counterfeit card fraud in the country due to the EMV implementation, other types of credit card fraud have surfaced. These include the usage of lost and stolen cards, card-not-present

fraudulent transactions via mail/telephone order and Internet, and forged credit card applications. Measures therefore continue to be developed to tackle these fraud risks to preserve the confidence of consumers, tourists and retailers in the usage and acceptance of credit cards in the country. The Bank will be issuing a revised set of guidelines on managing fraud and risks on card operations in 2007. These guidelines will set new minimum requirements for preventive, detective, corrective and containment measures that should be undertaken by card institutions to mitigate all types of risks and fraud in card operations.

### **ENHANCING COMPETITION AND INCREASING PAYMENT EFFICIENCY**

Payment system efficiency is characterised by several factors which include competition in price and quality of payment services, wider access to usage and variation of payment products and services, and the level of expediency in clearing and settlement of payments. The Bank's collaboration with the industry continued in 2006, with greater concerted efforts to facilitate enhancements to and the introduction of payment efficiency in the retail and wholesale payment systems via increased competition and innovation.

### **Greater concerted efforts in enhancing payment efficiency in the retail and wholesale payment systems.**

#### ***New Entrants and Innovative Products in the Card Sector***

The entry of non-bank credit card issuers would increase competition in an already competitive market. During the year, in providing greater consumer benefits, credit card issuers have rolled out several co-branded cards with their business alliances and new attractive range of benefits and privileges, such as free for life credit cards, cash rebates, free over limit fee, lower cash advance fee, zero-interest installment plan, flexi-pay scheme and 0% balance transfer.

Despite the stiff competition, credit card issuers are prudent and have undertaken the



necessary credit assessments prior to issuing their cards. Almost 60% of the total value of credit card transactions were paid in full in 2006 while the remaining balances were rolled over. The Bank continues to closely monitor the situation to ensure that the intensified competition for market share amongst the issuers does not lead to consumer over-indebtedness and deterioration in asset quality. Assessment on asset quality of credit cards is discussed in Chapter 2 on Risk Assessment of the Financial System.

Following the upgrading of the credit card infrastructure to EMV chip card technology, the credit card schemes, namely, Visa International and MasterCard Worldwide, have rolled out their contactless credit cards, Visa Wave and MasterCard Paypass, in February 2005 and February 2006 respectively. The contactless credit cards combine contact EMV chip cards with contactless technology. Leveraging on the security and robustness of the EMV chip card and contactless technology, these cards do not require customers' signature and remove the need to physically swipe or insert the card into a card reader. Payments are made using radio frequency, much like the 'Tap and Go' cards used in mass transit system, hence providing consumers a simple, fast, secure and convenient way to make payment. These contactless credit cards are suitable for cash-based retail environment with low-ticket items but high-volume transactions such as fast food outlets, supermarkets and petrol stations. To date, eight credit card issuers have offered the contactless credit cards, which can be used at more than 7,000 merchant outlets in the country. As a security measure, a limit is placed on the purchase transactions using these cards, currently set at RM110. The contactless credit card has escalated the country's EMV chip migration process to the next level by offering consumers innovative products while at the same time allowing issuers to leverage on their investments in EMV chip technology.

Another innovation introduced during the year is the mobile phone-based contactless payment which combines contactless credit card technology and Near Field Communication (NFC), a short-range wireless connectivity technology based on a

contactless chip embedded in mobile phones. Following the launch of the Visa Wave, a pilot was launched in April 2006 by Visa International to make payments using mobile phones at over 2,600 Visa Wave merchant outlets throughout the country. Malaysia is the first country in the world to launch Visa Wave contactless chip card technology and the Mobile Visa Wave Payment pilot.

A new charge card issuer, a foreign Islamic bank, was granted approval to issue Islamic charge cards during the year, which would provide consumers an additional choice as there was only one Islamic charge card issuer in the market previously.

### ***Promoting Electronic Money and Improving Remittance Services***

Following the policy change to allow more potential electronic money issuers to enter the market which was traditionally confined to banks, four new electronic money schemes were approved during the year. These newly introduced electronic money schemes provide consumers with additional payment methods for purchases on the Internet and the convenience of using mobile phones for payments. One of the schemes, which was launched in May 2006, enables the subscriber's mobile phone to be used to receive money and make payments to anyone who has a mobile phone. Subscribers can use this mode to make payments at over 9,500 participating merchants and do not have to pay any additional fees but instead stand to enjoy a cash rebate of up to 0.65%. Payments that are facilitated through this mobile payment facility include payment of utility bills and parking fees, mobile content, wallpapers, games and prepaid airtime reload apart from person-to-person transfers. The scheme enables the merchants particularly the utility and telecommunication companies, to improve operational efficiency through reduction in cash management and less number of customers visiting their outlets or branches. It also provides consumers the convenience and flexibility to make payments anytime and anywhere using their mobile phones.

Improved convenience and accessibility is also provided to the public on remittance services following the relaxation of the remittance access policy. There are now three non-banking institutions offering remittance services and two more will commence offering their services in early 2007. Two of these non-banking institutions are locally incorporated foreign companies that offer remittance services targeting foreign workers from their respective countries. The remittance services offered by the locally incorporated remittance companies have proven to be popular amongst the foreign workers as they are managed or manned by personnel from the same country as the foreign workers thus eliminating the cultural or language barriers. In addition, the availability of the services beyond banking hours as well as during weekends coupled with the large network of agents from whom the beneficiaries could collect funds in the corresponding countries, provide a significant increase in convenience. The fees are transparent to the sender as fees are established at the point of entry and paid by the sender. In 2006, the total value of outward remittances from the country amounted to RM7.1 billion (an increase of 10.9% in 2006 compared with RM6.4 billion in 2005), of which RM6.3 billion was made through the banking institutions where the bulk of the remittances were made to Indonesia, India, the Philippines, Bangladesh and Vietnam. The remaining RM0.8 billion was made via the non-banking institutions' channels.

In line with the policy to allow banking institutions to appoint non-bank agents to make their remittance services more accessible to the public by leveraging on the non-bank agents' network, a circular was issued in May 2006 outlining the requirements for the appointment. Following this, approval was granted to a bank to appoint a telecommunication company as its remittance agent.

### ***Enhancing the ATM Network and Leveraging on the Cash and Cheque Deposit Machines to Provide Greater Convenience to the Public***

During the year, the Bank supported the initiative by MEPS to enhance the domestic shared ATM network to enable the public to make funds transfer to their own accounts or to another

person's account in another bank. The service, which was launched in November 2006, enables the member banks to improve operational efficiency through reduction in visits to bank branches and to leverage on their ATM networks to provide a more cost-effective channel for domestic interbank funds transfer on a real-time basis. The initiative allows the banks to offer multi-channel banking and be more service-oriented. Two member banks with over 2,000 ATMs have started to offer the services while the majority of the remaining member banks and development financial institutions will be participating in 2007. With the participation of all member banks and development financial institutions, the public would be able to make interbank funds transfer using their ATM cards at over 5,900 ATMs. The domestic banks' shared ATM channel would be enhanced further to provide for a greater range of functionalities and services in the domestic market in the future. This includes bill payments and credit card repayment services.

On a separate initiative, and as part of the efforts to enhance the ATM functionality as an e-payment access point, three financial institutions have introduced bill payments via the ATM and Cash Deposit Machine (CDM), which are installed with barcode readers. The initiative facilitates consumers to make payments for utilities (water, telephone and electricity), satellite television and local council bills conveniently by scanning the bills' barcode at over 1,000 ATMs and CDMs nationwide. In 2006, the service recorded 405,732 transactions valued at RM162.3 million.

The other enhancement on ATM functionality during the year was the introduction of an IBG funds transfer service to third parties via the ATM by a bank. The service requires users to go through a one-time registration process and it can accommodate up to 10 beneficiaries. Another initiative undertaken by some banks in enhancing consumer convenience is the provision of hire purchase loan repayment facility at Cash and Cheque Deposit Machines.

In expanding the usage of ATM cards regionally, MEPS has established links with three of its counterparts in the region, namely,



PT Artajasa Pembayaran Elektronik in Indonesia in July 2005, Network for Electronic Transfers (Singapore) Pte. Ltd. in Singapore in March 2006 and National ITMX Co. Ltd. in Thailand in October 2006, to facilitate cross-border cash withdrawals. The facility allows Malaysian ATM cardholders travelling to these countries to withdraw cash at the participating banks' ATMs and likewise, their ATM cardholders at the participating Malaysian banks' ATMs at lower transaction fees compared to the current facility using international networks. To access this facility, Malaysian ATM cardholders will need to activate the facility at bank counters, via the ATM or call centre. The regional ATM services had recorded 6,989 withdrawals valued at RM3.1 million at the Malaysian ATMs since its launch. Over the course of 2007, efforts would continue to be taken by MEPS to recruit the remaining member banks to participate in the links as well as form new links with other shared ATM network providers in the region. Bank Negara Malaysia and the Central Banks of these three countries have supported the ATM cross-border link initiative and have encouraged a common broad framework and standards to be formulated to promote transparency and facilitate future links. The cross-border service would be expanded to balance inquiry and funds transfer later this year, and MEPS is considering other new collaboration such as regional e-Debit or Electronic Fund Transfer at Point-of-Sale (EFTPOS), which would facilitate the acceptance of e-Debit in the member countries.

Four locally-incorporated foreign banks had teamed up and established a new shared ATM network known as HOUSE, an acronym representing the first letter of each founding bank's name, with the last letter 'e' representing electronic channel. The network, which is open to all locally-incorporated foreign banks, was launched in July 2006. Its establishment is in line with the recommendation in the Financial Sector Masterplan to allow incumbent foreign banks to set up an alternative shared ATM network to provide greater customer convenience and competition in the payment system. ATM cardholders of the four banks can make cash withdrawals and balance inquiries at the banks' combined 300 ATMs nationwide. Interbank

funds transfer capability would be added to its offerings in the future.

### ***Cheque Truncation and Conversion System***

In enhancing efficiency in cheque processing, the Bank is in the process of implementing a cheque truncation and conversion system (CTCS) to transform the current cheque clearing system into an electronic transfer of cheque information. This is in tandem with the Bank's objective to promote greater usage of e-payments. The objectives of CTCS are to implement a paperless cheque clearing process, achieve a common day-hold throughout the nation, increase the efficiency of the clearing and settlement process and facilitate an electronic fund transfer mechanism for cheques.

The CTCS will enable the clearing of cheques either through processing of their images and data (truncation) or data only (conversion). The introduction of the system is targeted at reducing transportation and labour costs and efforts associated with the physical handling of cheques. The clearing cycle will be shortened and funds will be made available earlier whilst expediting payments. It is envisaged that the system will also improve customer service levels and mitigate cheque fraud risks. The CTCS will leverage on the current imaging infrastructure that is already in place and will provide opportunities for banking institutions to streamline their back office operations to reap cost savings from further automating their cheque processing and clearing operations.

The CTCS project is scheduled to be implemented by the first half of 2008, initially in Kuala Lumpur and the neighbouring towns and extended thereafter in phases to the rest of the country in late 2008.

### ***Roadmap for Migration to Electronic Payments***

While Malaysia has made considerable progress in building and improving the payment system infrastructure, further work is needed to facilitate more widespread adoption of

electronic payments and thus, accelerate the transition from paper-based systems to electronic payments. With the necessary payment infrastructure in place, supported by the effectiveness of the financial sector as an efficient mobiliser of savings as reflected in Malaysia's high deposit-to-gross domestic product (GDP) of 192.4% as at the end of 2006, the next stage is for Malaysia to migrate at a faster pace to electronic payments. New and bold steps are required in accelerating the migration to quicken the pace for the country to realise the potential of productivity enhancements and cost savings from electronic payments. The progression of payment system to the digital ecosystem on a nationwide basis requires commitment from all stakeholders to make the migration to electronic payments as a national agenda, a reality.

### **New and bold steps to accelerate the migration to quicken the pace for the country to realise productivity enhancements and cost savings.**

To drive this agenda forward, the Bank has initiated the formulation of an electronic payments roadmap that provides a high level strategic direction for the country to migrate to electronic payments. The roadmap aims to channel and coordinate industry efforts into making migration to electronic payments as a national agenda, and would identify the objectives, underlying building blocks and lay the key implementation milestones up to 2010. The main focus and priority of the Bank is to create a conducive environment to foster the orderly transition to electronic payments.

The Bank has shared the roadmap with the National Payments Advisory Council (NPAC) members. The NPAC, which was established in May 2001, acts as a reference and advisory body whilst providing market input on matters relating to the payment systems in the country. The NPAC is chaired by the Governor

and is represented by associations of financial institutions, related Government agencies, the Securities Commission, MEPS and two foreign central banks. Following the deliberation with NPAC members, the Bank would subsequently through a consultative process with the industry and other stakeholders, finalise the roadmap.

### ***Working in Partnership with the Government Sector***

Following the encouraging feedback from the Payment Systems Forum and Exhibition in November 2005, the Bank organised a Government sector workshop in July 2006 to provide a platform for more detailed discussions on the features of the various electronic payment services offered by the payments industry and to facilitate sharing of experiences on the efficiency gained by corporate users in adopting electronic payments. The workshop was participated by 80 officers from 20 different Government departments.

The Government is a critical stakeholder in the national agenda to migrate to electronic payments as it can be the catalyst for the uptake of electronic payments. In this regard, the Government has demonstrated a strong commitment to adopt electronic payments because of the potential efficiency gains it offers. This is also in line with plans to enhance the effectiveness of the public delivery system. In this respect, the Government, together with the Bank and the industry, will work together to accelerate the migration to electronic payments. One of the ongoing initiatives is the adoption of the Financial Process Exchange (FPX) as the payment gateway for the Malaysian Government portal, myGovernment.

### ***Understanding the Cost of Payments***

The Bank has initiated a payment cost study with several banks to better understand the cost of producing different payment methods and the pricing mechanism adopted. The study is based on both fixed and variable cost and price data for 2005. The study is to facilitate the proposal to move towards a direct-pricing framework that relates to the cost of producing the different payment methods as well as transparency in

pricing. Learning from the experiences of Norway and Sweden, transparent and cost-based pricing is a powerful tool to foster the migration of users to electronic payments, which are less costly to produce and provide the opportunity to reap economies of scale. As users' choice is sensitive to price, by giving the right price signals to users, they would be able to see the economic incentives and switch from the more expensive payment methods to cheaper alternatives. This would in turn encourage investment in and the offering of more cost efficient payment services, thereby resulting in cost savings and efficiency gains for the nation as a whole.

## **Trends in Migration to Electronic Payment**

The cash in circulation (CIC)-to-GDP ratio, which is the commonly used proxy to assess the role of cash in the economy, has been on a declining trend from 6.6% in 2002 to 6.1% in 2006. However, CIC per capita has increased from RM974.3 in 2002 to RM1,246.5 in 2006 and the average value of ATM withdrawals has increased from RM401 in 2002 to RM460 in 2006. While the decline in CIC-to-GDP ratio indicates a declining role of cash in the economy, cash remains a highly popular form of payment in Malaysia.

Over the recent five years, total non-cash retail payment transactions have increased significantly from 350.3 million to 868.9 million. The payment mode shifted from cheques to more electronic payments over the same period. In 2001, cheques

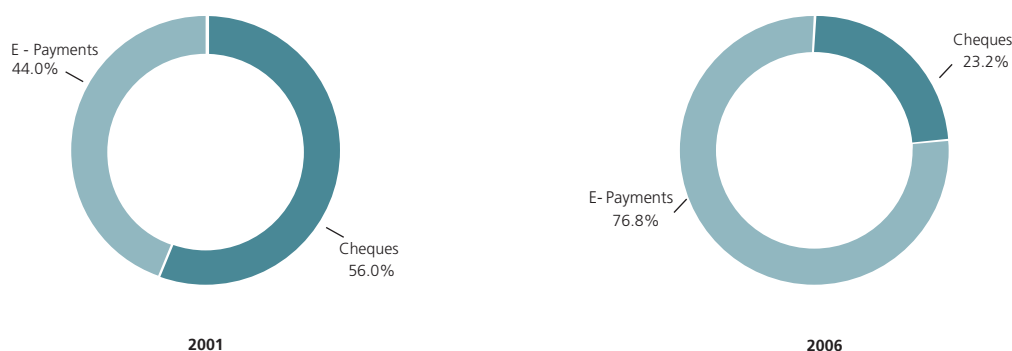
**Table 4.1**  
**Cash Holdings and Non-Cash Transactions**

	2002	2003	2004	2005	2006
CIC per capita (RM)	974.3	1,030.9	1,106.6	1,144.0	1,246.5
CIC-to-GDP (%)	6.6	6.6	6.4	6.1	6.1
Number of non-cash transactions per capita	17	22	26	30	33

dominated total non-cash retail payments at 56%. Today, cheques account for only 23.2% of total non-cash retail payments. This suggests that while cheques continue to be important, they have been replaced to a certain extent by more efficient electronic alternatives. Since 2002, the number of cheques issued per current account has steadily fallen from 72 to 66. The fall in cheque usage and the growth in the share of electronic payment may be attributed to the adoption of electronic payments in the Government sector, where the volume of cheques issued has fallen by 56.4% since 2004 and the use of electronic payments increased by 43.6% in the same period. However, in terms of transaction value, cheques still account for a significant portion of non-cash retail transactions and there was only a slight drop in its share of the wallet, from 98.1% in 2001 to 93.7% in 2006.

The volume of electronic payments has increased by 34.1% annually. Among the various types of electronic payments, payment cards experienced the biggest growth in terms

**Chart 4.1a**  
**Share of Non-Cash Retail Payments by Volume**



**Chart 4.1b**  
**Share of Non-Cash Retail Payments by Value**



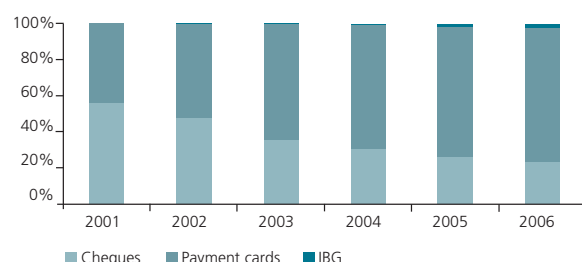
of numbers, with electronic money leading the way, followed by credit card. On average, every person made around 24 transactions per year using payment cards in 2006 as compared to 6 in 2001. Electronic money is gaining popularity with consumers as it represents half of the volume of non-cash transactions today. However, its use continues to remain mainly in the mass transit sector. The volume and value of credit card transactions have increased by 13.2% and 16.4% respectively in 2006. While its share of total non-cash transactions has declined from 40.7% in 2001 to 24.0% in 2006 in terms of volume, credit cards have experienced growth in the average transaction value from RM141 in 2001 to RM228 in 2006. Meanwhile, the use of charge cards continues to decline, representing only 0.7% of non-cash transactions in 2006. Debit cards are starting to gain some progress in the payments arena where their usage has grown at a rate of

28.6% and 33.3% in terms of volume and value respectively in 2006.

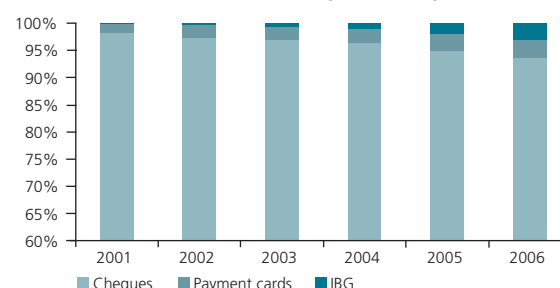
Recent years have seen an encouraging growth in the number and value for newer electronic payment channels such as the IBG, Internet banking and mobile banking.

- IBG recorded an average annual growth of 172.3% and 111.5% in terms of volume and value respectively over the last five years. Its share of the total number of non-cash retail payments has increased from 0.04% in 2001 to 2.2%, amounting to RM45.8 billion in 2006. This growth is partly attributed to the Government sector using IBG in place of cheques to effect payments.
- Internet banking has been recording an average annual increase of 74.2% and 93.7% in terms of volume and value respectively since 2001. It is popularly used for salary and bill payments, third party and

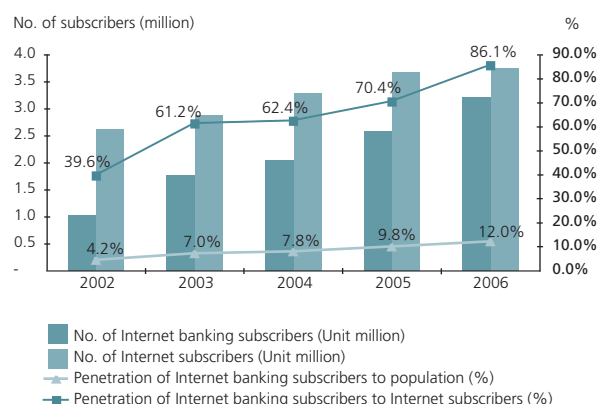
**Chart 4.2a**  
**Trend of Non-Cash Retail Payments by Volume**



**Chart 4.2b**  
**Trend of Non-Cash Retail Payments by Value**



**Chart 4.3**  
**Internet Banking Growth and Penetration**



own account funds transfer and payment of credit card balances.

- Mobile banking subscriber base has increased by 93.3% from the previous year, accounting for 1.3% of mobile phone subscribers as at end-2006. This service is mainly utilised for account enquiries, prepaid reload and bill payments.

The FPX which was introduced in October 2004 has yet to gain wide acceptance. However, it is expected to increase in usage with the participation of five banks in 2007.

Thus far, the switch to electronic payments has been gradual but is expected to gain momentum in the future. This will be driven by advances in technology, greater focus by the payment industry, the increased collaboration of all stakeholders in overcoming the barriers towards the adoption of electronic payments and the increased preferences for more cost-effective payment services.

## EXTERNAL RELATIONS

The Bank continued to participate actively in regional fora, particularly in the EMEAP (Executives' Meeting of East Asia-Pacific Central Banks) Working Group on Payment and Settlement System to enhance the safety and efficiency of the national payment and settlement systems in the region. With increased regional

**Table 4.2**  
**Electronic Payment Growth (2001-2006)**

Payment method	Transaction volume (%)	Transaction value (%)
Debit card	30.2	52.7
Credit card	7.9	18.8
Charge card	-11.4	4.3
E-purse	54.9	49.2
IBG	172.3	111.5
FPX <sup>1</sup>	2,542.6	76.7
Internet banking	74.2	93.7

<sup>1</sup> Refers to growth in 2006 as compared to 2005 in view that the FPX was introduced in October 2004

trade and economic co-operation, central banks in the region have enhanced regional collaboration in promoting the development of safe and efficient cross-border payment systems. Systemically important payment and settlement systems with a cross-border reach can be major conduits by which shocks can be transmitted across international financial systems and markets. Hence, a safe and efficient payment and settlement system infrastructure is a key requirement in maintaining and promoting financial stability and the development of financial markets across the region.

## Strengthening Regional Collaboration

In 2006, the EMEAP Payment and Settlement Systems Working Group shared experiences on issues of common interest and explored opportunities for mutual guidance and assistance. The two meetings held in Kuala Lumpur and Sydney facilitated an ample discussion of the results of self-assessments against the CPSS-IOSCO "Recommendations for Securities Settlement Systems" shared by members and the oversight activities carried out by members in relation to retail payment systems. In addition, the meetings also provided a platform for the Working Group to discuss and have a better understanding of the risk management arrangements and oversight framework on global infrastructure systems, such as SWIFT (Society for Worldwide Interbank Financial Telecommunication) and the CLS Bank, that play a critical role in the

international payment system infrastructure. Given the high dependency of the financial institutions in the region on these international infrastructure, and owing to the systemic importance of these systems to the stability of the payment systems in the region, oversight of these international infrastructure is crucial. Collaborating as a group would lend the EMEAP countries a greater voice in the oversight of these international infrastructure. In this regard, since 2005, the Working Group and the National Bank of Belgium (NBB) had been working towards putting in place an arrangement which would allow NBB to share information on its oversight of SWIFT with the Working Group. NBB is the lead overseer of SWIFT.

Recognising the considerable benefits that accrue from this regional collaborative initiative, the member central banks were in agreement that greater regional co-operation constitutes an important step towards achieving greater economic prosperity in Asia. The central banks agreed that the activities of the Working Group be expanded and focused on strengthening regional co-operation in the area of payment and settlement systems. In this regard, a roadmap would be drawn up to effectively support the pursuit of this objective and reap the gains from closer economic and trade ties in the region.

### MOVING FORWARD

A major focus of the Bank in the next few years would be to accelerate the migration to electronic payments and act as a catalyst in enabling electronic payments to deliver its full potential benefits. In this respect, the Bank will play a more active and leading role in making further progress towards the migration to electronic payments in line with the electronic payments roadmap. To successfully move forward, concerted efforts would be made to work collaboratively with other stakeholders

to remove unnecessary roadblocks that would affect its success and to improve efficiencies across the payment industry. The Bank's work on improving price transparency under its payment cost study would facilitate this process. To a certain extent, the success of electronic payments as a more cost effective alternative is dependent on how attractive the payment services are being priced to both merchants and consumers. Equally important to spur the migration to electronic payments is to generate greater awareness of the benefits and potential of electronic payments and build public confidence in electronic payment systems. Part of the Bank's mission is to develop an integrated awareness and educational programme with the industry to encourage the use of electronic payments.

### Regulatory framework will promote the development of efficient and innovative payment services while maintaining the overall stability and integrity of the payment system.

In ensuring the success of the agenda, it is crucial for the Bank to continue to review the regulatory framework in order to promote the development of efficient and innovative payment services while maintaining the overall stability and integrity of the payment system. It is also recognised that with rapid technology advancement, the emergence of new payment instruments and channels may create new risks. The Bank will therefore continuously strengthen the way in which oversight is conducted and will engage with the industry to monitor new developments and issues.



### Realignment of Regulatory and Supervisory Functions

This recent decade has seen a significant transformation of the global and domestic financial landscape due to the forces of globalisation, advances in information and communication technology, financial innovation, financial liberalisation and the trend towards greater market orientation. Developments in the financial sector have led to enhanced access to financial services, improved service delivery and greater diversity in financial instruments. These have also been accompanied by the blurring of activities between the different types of players within the financial system. In an environment that is rapidly changing with new risks emerging, maintaining financial stability has become increasingly more complex and challenging. As the financial system evolves to facilitate the economic development and transformation process, with a growing trend towards greater deregulation and market orientation, regulators are faced with new challenges to ensure that the financial institutions and markets continue to function effectively. In this respect, the development of the financial infrastructure, building the capacity of financial institutions, enhancing financial capability of consumers as well as ensuring adherence to fair market practices have become areas of focus for financial regulators, in addition to maintaining financial stability.

In the context of this environment, the Bank has therefore continued to reassess its strategies and internal capabilities to ensure that it remains effective in achieving its objectives, in particular in promoting monetary and financial stability to support the economic growth process. Thus, to be strategically positioned to effectively respond to the changing financial landscape, Bank Negara Malaysia has embarked on a holistic review of its financial sector regulatory and supervisory functions to ensure a sound and efficient functioning financial system. The realignment of the regulatory and supervisory functions of the Bank therefore aims to facilitate a more integrated and holistic approach to financial sector regulation and supervision as well as enhance understanding of the dynamics of the inter-linkages between the various sectors. A further objective is to promote greater harmonisation of the regulatory and supervisory frameworks across the different sectors, taking into account the uniqueness and stage of development of the respective industries. The realignment also aims to ensure an effective and integrated approach to market conduct supervision and to enhance consumer capabilities as well as the assessment of trade-offs between competing objectives. The realignment of the regulation and supervision functions will also promote greater integration and cohesiveness in the management of the Bank's resources.

An extensive review of best practices in regulatory and supervisory approach was conducted taking into account the distinctiveness and phase of development as well as the future development of the Malaysian financial system. In this regard, the regulatory functions have been realigned along functional lines, hence diverging from sector specific demarcation of responsibilities. The supervisory functions have also been realigned to enable greater focus on the supervisory process and greater accountability in the assessment of microprudential risks. The realignment exercise however has not included the Development Finance and Enterprise Department. The existing functions and structure of the Development Finance and Enterprise Department will continue to focus on facilitating an enabling environment for the development of small and medium enterprises and to nurture the development financial institutions during the initial period of being supervised by the Bank.

The realignment process has thus resulted in the creation of new departments and has entailed considerable reorientation, rationalisation and streamlining of roles and functions of the existing

departments. In particular, the functional responsibilities of the Bank Regulation Department and Insurance Regulation Department have now been mapped into five new departments namely Financial Sector Development Department, Financial Surveillance Department, Prudential Financial Policy Department, Consumer and Market Conduct Department and a supporting administrative unit, the Regulation and Supervision Support Unit.

The strategic developmental functions of both the banking and insurance sectors are now merged into the **Financial Sector Development Department (FSD)**. The FSD is vested with the responsibility for the progressive development of the financial services sector including the promotion of sustainable and robust financial institutions and financial infrastructure enhancement aimed at fostering a competitive domestic financial industry that is able to meet the changing needs of the economy.

Of equal importance is to strengthen the ability and capacity of the Bank to effectively identify and measure potential risks and vulnerabilities of the system and to assess its implications on the functioning of the financial system and on financial stability. This responsibility is now with the **Financial Surveillance Department (FS)**, which is entrusted to undertake comprehensive and integrated macroprudential surveillance and assessments of emerging trends and vulnerabilities of the financial system. This will facilitate the formulation of policies and risk mitigation measures to strengthen the robustness and resilience of the financial system. With the setting up of the FS, collaborative mechanisms within the Bank have also been reoriented to facilitate better assessment of the risks emanating from domestic and international developments on the overall stability and functioning of the financial system. As part of its overall surveillance framework, the department also works closely with the supervisors to ensure that risk assessment has incorporated both macro and microprudential perspectives. In addition, the FS is also vested with the responsibility to enhance the potential of the credit bureau in the surveillance process through robust data warehousing and strengthened analytical capabilities. This includes a review of the credit bureau's data coverage and accuracy, to further improve its predictive value and effectiveness in the risk management and surveillance process.

With greater financial innovations, the emergence of new distribution channels and the introduction of new players with more innovative and complex financial products and services, the need for a more consistent regulatory approach across all sectors within the system has heightened. Harmonisation of policies across sectors and products is essential so as to level the playing field to avoid regulatory arbitrage, and to reduce unnecessary regulatory burden and cost of compliance. It is within this context that the prudential policy functions of both banking and insurance sectors have been consolidated into the **Prudential Financial Policy Department** to undertake the development of a sound and robust prudential framework for financial institutions that promotes harmonisation and alignment of regulatory treatment across sectors and across functionally similar products as well as facilitates a more integrated risk-based supervisory approach.

With the development of a more diversified, more complex and sophisticated financial system, significant attention has been given to enhance the financial literacy and market conduct framework in Malaysia. This has essentially aimed at enabling consumers to make well-informed decisions on financial matters with confidence. Regulators and supervisors also have a greater role to play in the provision of safety nets aimed at ensuring the fair treatment of consumers. As such, adequate information on and access to financial products and services that is supported by strong regulatory oversight and an effective redress process, will contribute towards establishing

an appropriate balance of power between consumers and their service providers. The establishment of the **Consumer and Market Conduct Department (CMC)** is aimed at adding further focus to the Bank's efforts in enhancing the financial capability of consumers as well as strengthening the appropriate market conduct practices and fair consumer treatment by the financial service providers and intermediaries. In line with the mandates of the department to safeguard the interest of customers and promote adherence to fair market practices, the supervision of financial intermediaries is now placed with CMC. The department is also responsible for market conduct regulation and supervision of the wholesale markets that are under the purview of the Bank.

The vision to create a vibrant, innovative and competitive international Islamic financial services industry in Malaysia has prompted special efforts and focus on strengthening Malaysia's position as an international Islamic financial centre, MIFC. In this respect, the **Islamic Banking and Takaful Department** has also been streamlined to ensure this focus and to create an enabling environment through improvements in the regulatory regime to effectively support the unique characteristics of an Islamic financial system. The department is also vested with the responsibility of reinforcing the development of the relevant prudential policies aimed at promoting the robustness and soundness of the Islamic finance industry.

The Payment Systems Department was also rationalised and renamed **Payment Systems Policy Department** with the focus on the development of policies and strategies to promote the safety, security and efficiency of the payment systems and payment instruments in the country as well as to drive migration to e-payments initiatives. The rationalisation is also intended to achieve greater check and balance between payment system policy and operations in line with international best practices.

The responsibility to ensure the soundness and robustness of the financial institutions lies with the supervision departments. In this regard, the supervisory functions of the Bank have been realigned with the primary objectives of developing, enhancing and implementing an effective surveillance framework to ensure the safety and soundness of the financial institutions and to promote sound business and operational practices. In this respect, the function of administering the relevant banking, insurance, takaful and payment systems Acts has now been transferred to the respective supervision departments thus better aligning the principal accountabilities for the health of the financial institutions with the authority for decision making. The supervision sector helps foster the stability and strength of the financial system by monitoring the safety and soundness of the banks, insurance companies, takaful operators and other institutions under the purview of the Bank as well as actively promoting the adoption of international best practices in corporate governance and risk management. Consistent with these objectives, the supervision sector now includes the Financial Conglomerates Supervision, Banking Supervision, Insurance and Takaful Supervision and, IT and DFI Supervision Departments.

The **Financial Conglomerates Supervision Department (FCS)** is entrusted with the supervision of individual financial conglomerates while the **Banking Supervision Department** undertakes supervision of stand-alone commercial banks, stand-alone investment banks and all Islamic banks including Islamic banking subsidiaries of domestic banks. The responsibility to ensure the soundness and robustness of the insurance companies and takaful operators (including the reinsurance companies and retakaful operators) is vested with the **Insurance and Takaful Supervision Department**. The Information Systems Supervision Unit has now been renamed **IT and DFI Supervision Department** to reflect its enhanced role in supervising development

finance institutions, payment system operators and issuers of payment instruments in addition to its responsibility for information systems supervision of all institutions under the purview of the Bank.

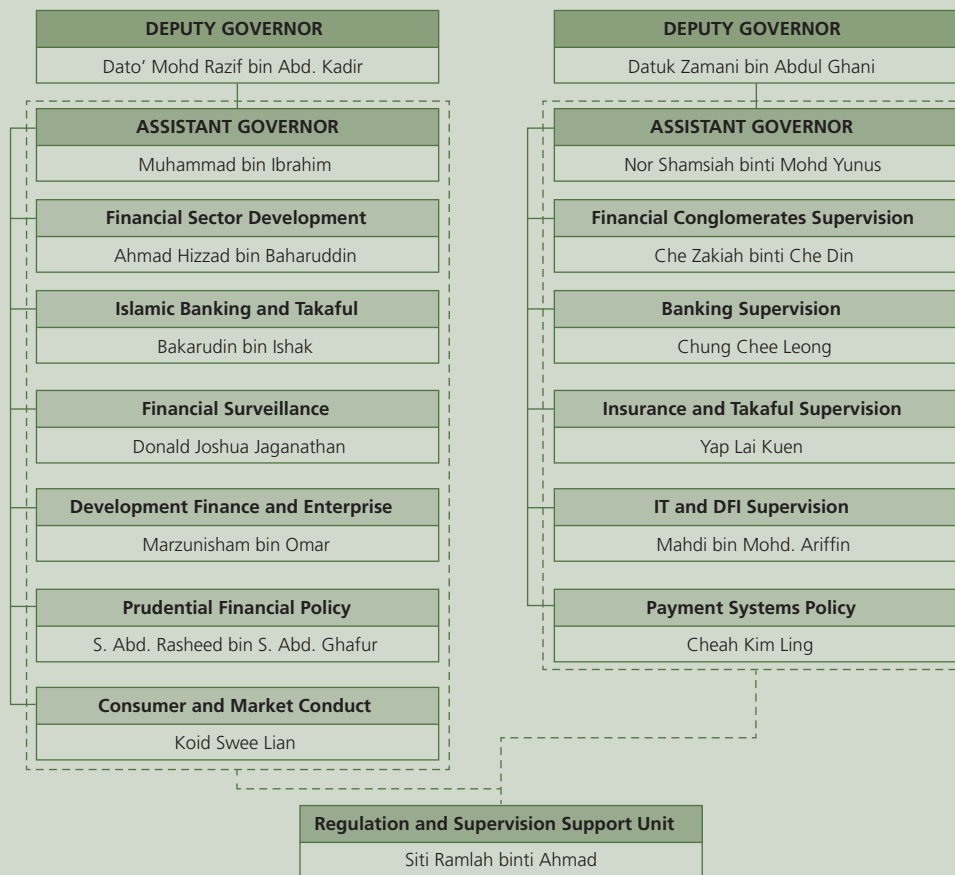
While the sector specific supervisory approach is retained, a matrix reporting framework has been adopted for the supervision of the financial institutions that are part of financial conglomerates so that an integrated approach to supervision and assessment of the risk profile can be undertaken on a group basis across the banking and insurance sectors. The new structure of the supervision sector also provides the necessary foundation for effective consolidated supervision to take place as the Bank adopts a more universal framework in its supervisory approach that is applicable across financial industries and moves towards principle-based and differentiated supervision.

The increased complexity in banking activities, emergence of new risk factors and continuous change in financial landscape have accentuated the need for the role of financial risk expertise that can undertake risk assessment both at the individual institution level as well as on a system-wide basis. For this reason, dedicated risk units on credit, market, operational and insurance risks have been established in the supervision departments to serve both the regulation and supervision sectors. These units provide technical input through monitoring and examination of developments and trends of risks in the financial system to support policy development, supervisory functions and macroprudential surveillance on risk management practices.

As part of the overall efforts to align the Bank's resources and enable departments to be more strategically focused, a dedicated administrative support unit, the **Regulation and Supervision Support Unit** has been established to provide centralised administration services, knowledge management support and coordinate the learning/development initiatives, for the efficient functioning of the regulation and supervision departments.

The new organisational structure of the regulation and supervision sectors came into effect on 27 November 2006. The changes to the organisational structure have been accompanied with the streamlining of internal processes to reflect the new workflow and reporting structure. Relevant collaborative mechanisms between all the departments in the Bank have also been enhanced to ensure seamless and effective coordination as well as mitigate potential risks arising from these changes. The realignment exercise has allowed for a more holistic, integrated and focused approach to financial regulation and supervision thus strengthening the ability of the Bank to effectively achieve its objectives and desired outcomes.

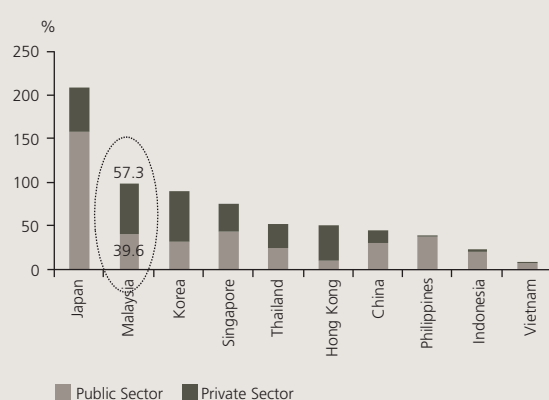
Table 1: Organisational Structure



### Malaysian Bond Market

The Asian Development Bank<sup>1</sup> (as at 30 June 2006) ranked the Malaysian debt securities market as the second largest in Asia after Japan at 96.9% of GDP. The Malaysian private debt securities (PDS) market (as a percentage of GDP) is also the largest relative to other regional economies.

**Chart 1**  
**Size of Asian Debt Securities<sup>1</sup> Market Relative to GDP**



<sup>1</sup> Includes short-term and long-term debt securities  
Source: Asian Bonds Online (as at June 2006)

**Table 1**  
**Size of Asian Debt Securities<sup>1</sup> Market**

	Size relative to GDP (%)	Public sector	Private sector	Total
		USD billion		
Japan	206.7	6,968.9	2,185.3	9,154.2
Malaysia	96.9	55.5	80.3	135.8
Korea	88.2	260.6	470.5	731.1
Singapore	73.9	52.6	38.0	90.7
Thailand	50.8	44.1	51.5	95.6
Hong Kong	49.3	16.6	73.8	90.4
China	43.5	716.4	332.5	1,048.9
Philippines	37.7	39.9	0.3	40.2
Indonesia	22.0	61.7	7.4	69.1
Vietnam	7.4	3.7	0.2	3.9

<sup>1</sup> Includes short-term and long-term debt securities  
Note: Numbers may not necessarily add up due to rounding  
Source: Asian Bonds Online (as at June 2006)

The current state of the Malaysian bond market is the culmination of concerted efforts undertaken by the Government, Bank Negara Malaysia and the Securities Commission. It has long been recognised that the existence of an efficient financial market, including a strong and vibrant domestic bond market, is important to support sustainable economic growth and financial stability. The presence of a deep and liquid bond market provides an alternative channel to raise financing to support economic activities, thus dispersing the concentration of credit risk and reducing excessive reliance on the banking sector. Financing through the bond market also reduces the risk of funding mismatch, particularly for projects with longer gestation periods. Moreover, with direct access to potential investors, bond issuers also enjoy lower funding cost and have the ability to custom-design a financing workout that best suits individual projects and cashflow needs. A deep and liquid bond market also provides investors such as insurance companies, pension funds, asset management companies and other institutional investors with an avenue for investment portfolio diversification that corresponds with their liability and risk-return profile.

Given these beneficial outcomes, considerable efforts have been undertaken to develop the Malaysian bond market as far back as the early 1980s. Historically, the Malaysian bond market has been dominated by Government bonds, mainly issued to finance the developmental needs of the

<sup>1</sup> Statistics collected by the Asian Development Bank encompass short-term and long-term debt securities



country. With the privatisation programme in the mid-1980s, and sustained economic growth, private sector demand for longer-term financing has risen sharply, providing further impetus to domestic bond market development. The Asian financial crisis further underscored the risk of over reliance on the banking system and the need for a diversified financial system.

The formation of the National Bond Market Committee in 1999 and formulation of strategic roadmaps as envisioned in the Capital Market Masterplan and Financial Sector Masterplan served as a catalyst for the development of the Malaysian bond market. Through structured and progressive initiatives, as well as coordinated efforts between Bank Negara Malaysia and the Securities Commission, the Malaysian bond market is now deeper, broader and more efficient, providing greater diversity of products across a wider range of tenures to meet the needs of investors and issuers alike.

### **Robust Development in the Bond<sup>2</sup> Market**

The Malaysian bond market has developed into one of the most sophisticated bond markets in the region. Total bonds outstanding increased at a rapid pace from RM157.3 billion at end-1998 to RM415.9 billion at end-2006 (outstanding debt securities, including short-term securities, grew from RM166.2 billion in 1998 to RM453.9 billion in 2006). This growth was driven by both the public and private sectors, underpinned by a steady increase in volume of bond issuance, which more than doubled since 1998 from RM31.8 billion to RM77.2 billion in 2006.

Of significance is the robust growth in the issuance of sukuk, which had increased during the same period from RM3.1 billion (9.7% of total bond issuance) in 1998 to RM31 billion (40.1% of total bond issuance) in 2006, reflecting the growing demand for sukuks in Malaysia and around the globe. Supported by a comprehensive Islamic financial system (fully functional Islamic banking, money market, capital market, Shariah compliant equity counters and takaful business), Malaysia's sukuks represented 67% of the total global sukuks outstanding valued at USD46.8 billion<sup>3</sup> as at 23 January 2007. Malaysia was the first country to issue sovereign global sukuk with a nominal amount of USD600 million in 2002, of which 15% of the total issue amount was subscribed by investors from European countries and the United States of America. The supportive operating landscape also attracted several well-regarded multilateral organisations (such as the International Finance Corporation and International Bank for Reconstruction and Development) to issue sukuks in ringgit.

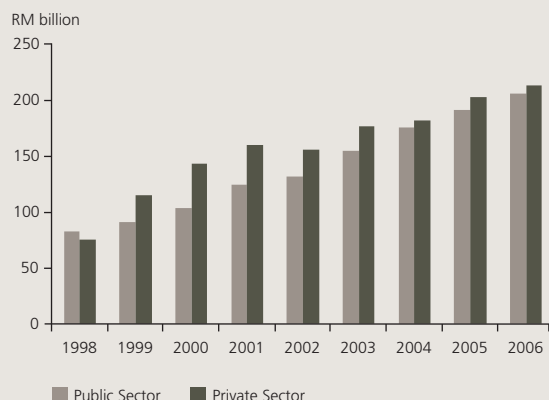
The private sector accounted for most of the increase in sukuk issuance, which saw private sukuks outstanding more than doubled as a percentage of total private bonds outstanding from 22.5% at end-2001 to 47.1% at end-2006. Meanwhile, public sukuks outstanding as a percentage of total public bonds outstanding increased at a slower pace from 11.4% to 15.1% during the same period. As at end-2006, RM30.9 billion and RM99.2 billion of outstanding sukuks were issued by the public and private sectors respectively.

In addition to the growing size, the volume of secondary trading in the Malaysian bond market has also increased with sale and purchase transactions amounting to RM366.9 billion

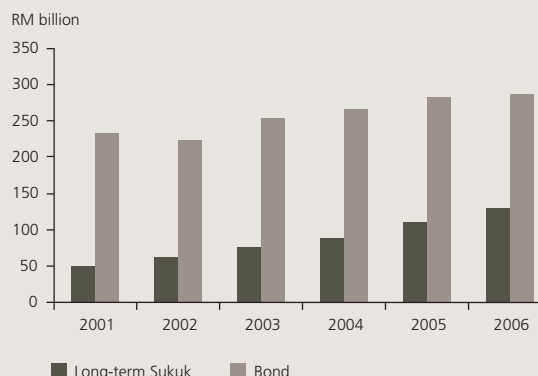
<sup>2</sup> Refers to debt securities with an original maturity period of more than one year

<sup>3</sup> Source: Bloomberg

**Chart 2**  
**Malaysia: Total Bonds Outstanding**

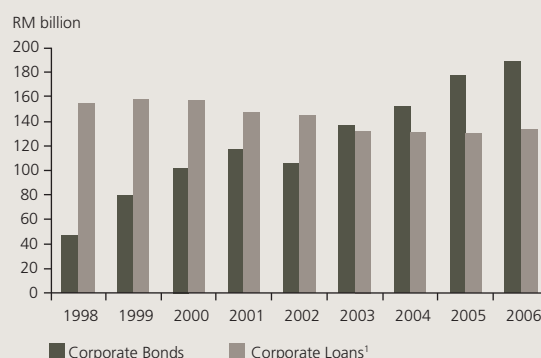


**Chart 3**  
**Outstanding Long-term Sukuk vs. Bond**



for the year 2006 (1998: RM62.2 billion). The most actively traded papers were the Malaysian Government Securities (MGS), accounting for 52.3% of total trading activities and with a turnover ratio of 1.08 times in 2006 (1998: 0.28 times). In addition, repurchase agreement (repo) transactions involving bonds recorded significant increase from RM85.3 billion in 2002 to RM586.1 billion in 2006. This increase was most prevalent in MGS repos as a result of the introduction of the Institutional Securities Custodian Programme (ISCAP) and securities lending facility for the principal dealers in 2005.

**Chart 4**  
**Size of Corporate Bonds Market against Corporate Loans<sup>1</sup>**



<sup>1</sup> Excludes loans to small and medium enterprises

Following the efforts undertaken to promote the private sector bond market, the composition of the Malaysian bond market had also changed. As at end-2006, private sector bonds accounted for 50.7% of the total bonds outstanding as compared with 48% as at end-1998, placing Malaysia as one of the few markets in the region where private sector bonds exceed that of the public sector. A positive trend was also observed in terms of diversifying the sources of financing for the

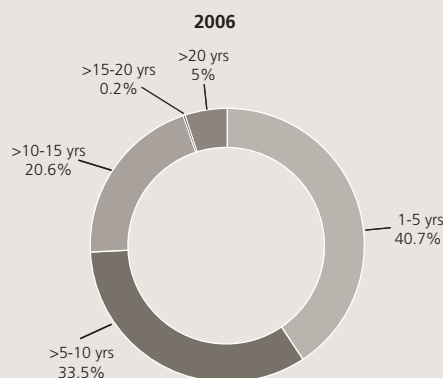
economy and reducing the reliance on the banking sector, whereby corporate bonds outstanding as a percentage of total corporate financing<sup>4</sup> has increased from 21.2% in 1998 to 57.8% in 2006.

Since 1998, it was observed that PDS issuers represented a wide scope of economic sectors indicating that corporations now have better access to the capital market as a source of financing. Although the finance, insurance, real estate and business services sectors remain as the major issuers of PDS, accounting for 41.5% of total PDS issued in 2006 (1998: 71.1%), there has been increasing participation from the transport, storage and communications; electronic, gas and water; and construction sectors. In recent years, the agriculture, forestry and fishing; and mining and quarrying sectors also raised financing through the bond market with total issuance volume of RM1.5 billion and RM1.6 billion in 2005 and 2006 respectively. Notably, 81% of the outstanding private sector bonds issued (in terms of total value) as at end-2006 were high-end investment grade issues of AA and above.

Reflecting the greater dynamism and innovation taking place in the Malaysian PDS market, there has been a proliferation of new types of instruments. In 1998, 72.3% of the bonds issued were straight bonds with a further 23.5% being issued by Cagamas Berhad (the national mortgage corporation). Since then, bonds with warrants, asset-backed bonds and bonds with additional features such as stepped-coupon and “floaters” have been issued in the Malaysian market. As a comparison, straight bonds and Cagamas bonds now only account for 22.3% and 18.4% of total PDS issued in 2006 respectively.

The extended maturity profile of the Malaysian PDS market provides investors with wider range of choices for their investment needs. In 2006, more than 50% of total PDS issuances had maturities of more than five years. More corporate issuers are tapping into the bond market to raise long-term funds as reflected by the increase in issuance of PDS with more than 20-year tenure (including a PDS with the tenure of 33 years).

**Chart 5**  
**PDS Issues by Tenure (excluding Cagamas)**



<sup>4</sup> Total corporate financing = Total corporate loans (excluding loans to small and medium enterprises) + corporate bonds

**Bond Market Development Supported by Comprehensive Measures**

Strong infrastructure and a comprehensive legal, regulatory and administrative framework put in place by the regulatory authorities have had a very significant impact on the development of the bond market. As summarised in Table 2, several initiatives were undertaken with focus on key strategic areas aimed at promoting further growth in the bond market and enabling it to play a more significant role in financing the needs of the economy.

**Table 2**  
**Initiatives Undertaken to Support the Development of the Bond Market in Malaysia**

Strategy	Initiatives
Introducing an efficient and facilitative issuance process	<ul style="list-style-type: none"> <li>• Release of Guidelines on the Offering of PDS – 2000</li> <li>• Introduction of a shelf-registration scheme – 2000</li> <li>• Release of Guidelines on the Offering of Asset-Backed Securities (ABS) – 2001</li> <li>• Release of Asset Securitisation Report to provide detailed information on ABS issuance including surveys and structures – 2002</li> <li>• Introduction of Guidelines on the Offering of Islamic Securities to set common standards between conventional and Islamic PDS – 2004</li> <li>• Introduction of a web-based Fully Automated System for Issuing/Tendering (FAST) – 2005</li> </ul>
Broadening the issuer and investor base	<ul style="list-style-type: none"> <li>• Universal brokers allowed to trade in the over-the-counter (OTC) bond market – 2002</li> <li>• Introduction of a tax-neutral framework and tax deduction on issuance expenses for ABS – 2003</li> <li>• Islamic PDS are accorded various tax incentives (e.g. stamp duty waiver, tax deductions on issuance expenses) and a tax-neutral framework – 2003, 2005</li> <li>• Multilateral development banks, multilateral financial institutions and multinational corporations are allowed to raise ringgit-denominated bonds – 2004</li> <li>• Removal of withholding tax on interest income derived from investments by non-residents in all ringgit-denominated bonds – 2004</li> <li>• Allowing a wider group of investors to have access to the information memoranda and trust deeds of ringgit-denominated bond issues database to facilitate decision making – 2005</li> </ul>
Improving liquidity in the secondary market	<ul style="list-style-type: none"> <li>• Non-financial institutions are allowed to enter into repurchase transactions with financial institutions – 2000</li> <li>• The Securities Borrowing and Lending Programme is introduced via the Real Time Electronic Transfer of Funds and Securities (RENTAS) system – 2001</li> <li>• ISCAP is introduced to facilitate securities lending by major institutional investors to Bank Negara Malaysia for use in market operations – 2005</li> <li>• Introduction of callable MGS and MGS switch auction to increase the amount of benchmark securities and further enhance trading in the secondary market – 2006, 2007</li> </ul>
Improving price discovery process	<ul style="list-style-type: none"> <li>• Establishment of Bond Information and Dissemination System (BIDS) as a central information platform to enable reporting of all bond market transactions and wide dissemination of information – 1997 (further information on the Malaysian bond market can be obtained from the following websites: <a href="https://fast.bnm.gov.my">https://fast.bnm.gov.my</a>; <a href="http://rmbond.bnm.gov.my">http://rmbond.bnm.gov.my</a>; <a href="http://iimm.bnm.gov.my">http://iimm.bnm.gov.my</a>)</li> <li>• Release of Guidelines on the Registration of Bond Pricing Agencies to provide independent and objective fair value prices, on a daily basis, for all ringgit-denominated bonds traded in the OTC bond market – 2006</li> <li>• Daily publication of indicative yield-to-maturity of Government securities (conventional and Islamic) – 2005</li> </ul>

Strategy	Initiatives
Establishing a reliable and efficient benchmark yield	<ul style="list-style-type: none"> <li>• Introduction of an annual auction calendar for MGS to enhance transparency and facilitate longer-term planning by issuers and market participants – 2000</li> <li>• Revision of the principal dealers system every two years – to enhance principal dealers' function as market makers for benchmark papers – 2006</li> <li>• Introduction of profit-based Government Investment Issues – 2005</li> </ul>
Facilitating the introduction of risk management instruments	<ul style="list-style-type: none"> <li>• Introduction of 3, 5 and 10-year MGS futures – 2002, 2003</li> <li>• Introduction of Guidelines on Regulated Short-selling of Securities – 2005</li> </ul>
Source: The Securities Commission and Bank Negara Malaysia	

Supplementing the bond market is a comprehensive and modern depository, delivery and settlement system. Malaysia adopts a scripless system for all bonds issued in the country. The trading of bonds is settled via the RENTAS system on a delivery versus payment basis. In addition, trading of MGS can be cleared with major global custodian banks and through the International Central Securities Depositories (ICSD) such as Euroclear and Clearstream. Selected authorised depository institutions (ADIs) that are clearing members in RENTAS, are appointed by the ICSDs as clearing agents in Malaysia. Non-residents and offshore investors may also individually appoint ADIs that are RENTAS members as custodians. Most of the financial institutions in Malaysia are also members of Society for Worldwide Interbank Financial Telecommunication (SWIFT), which facilitates the efficient transmission and confirmation of cross-border payment and settlement instructions in foreign currencies.

The significant growth in the bond market is also supported by the liberal foreign administration policies that allow free entry and exit of investors in the Malaysian financial market. In addition, the increasingly liquid market had improved the ability of investors to invest in or divest from the market. This was supported by the abolition of the 15% withholding tax on bonds or sukuks issued in Malaysia making such instruments more attractive and competitive in terms of yield. Moreover, hedging is freely allowed, providing investors with more risk management options. Further relaxation in the foreign exchange administration policies allows issuers to issue foreign currency-denominated conventional bonds or sukuks in Malaysia. This new policy is expected to further expand and diversify the available asset classes in the Malaysian financial market.

Foreign investors are also free to establish and maintain banking relationships with any licensed banking institutions (including locally-incorporated foreign banks) to facilitate investment activities in Malaysia. Similarly, non-residents can also obtain credit facility in ringgit, in aggregate amount of up to RM10 million, from any licensed banking institutions in Malaysia. In addition, non-resident stockbroking companies and custodian banks can now obtain any amount of ringgit overdraft facilities from any licensed banking institutions to finance funding gaps relating to settlement of ringgit instruments settled through the RENTAS and Bursa Malaysia. Supported by the increasing size of the Malaysian bond market coupled with the conducive operating and legal environment, and measures taken to broaden the investor base, the liquidity of the bond market is approaching that of the developed markets. These attributes have collectively increased the attractiveness of

the Malaysian market to foreign institutional investors. As at end-2006, foreign investors' holdings in the debt securities market amounted to RM35.5 billion or 8.5% of the total outstanding debt securities as compared with only RM0.8 billion or 0.3% in 2001.

Malaysia is fully supportive of stronger regional economic and financial co-operation initiatives that are aimed at broadening and deepening the domestic and regional bond markets in the East Asia Pacific region. In this regard, Malaysia has participated in both Asian Bond Funds (ABF) launched under the auspices of the EMEAP group ("Executives' Meeting of East Asia and Pacific Central Banks", comprising 11 central banks and monetary authorities in the East Asia and Pacific region).

Launched in June 2003, the ABF1 was aimed at channeling a small portion of the very sizeable official reserves held by Asian economies back into the region as well as providing useful means for Asian central banks and monetary authorities to diversify their investments beyond the traditional reserve assets and to enhance returns. Following the success of ABF1, ABF2 was launched in December 2005 with the objective of promoting domestic currency bond markets by introducing bonds of multi-currencies in a basket as a new asset class for investors. The launching of ABF2 also led to the inaugural listing of the ABF Malaysian country sub-fund (or ABF Malaysian Bond Index Fund) on Bursa Malaysia, which comprised investments in ringgit-denominated Government and quasi Government securities.

The Malaysian bond market is already well received by foreign investors and is included in major bond indices such as that of Lehman Brothers and JP Morgan. In July 2007, Malaysia is expected to enter the World Government Bond Index (WGBI) subject to meeting certain WGBI eligibility criteria. Upon inclusion, Malaysia will become the 23rd Government bond market to enter the WGBI. This is expected to bring more global long-term institutional investors to Malaysia, who seek to participate in markets and economies with sound fundamentals and best in class infrastructure. The strategic initiative of the Malaysia International Islamic Financial Centre that aims to develop Malaysia into a centre for the origination, distribution and trading of sukuk is expected to provide further impetus to the development of an increasingly vibrant and progressive bond market. Despite the success that has been recorded thus far, further efforts will continue to be undertaken to create a conducive environment to develop a bond market that is deep, liquid, efficient, transparent and effective to support the needs of the nation and to meet investors' expectations.



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

	2002	2003	2004	2005	2006p
	RM million				
<b>Sources of Funds</b>					
Capital, reserves and profit	134,871.7	148,901.8	167,017.9	180,639.1	207,180.9
Currency	27,137.4	29,445.4	32,353.9	34,396.7	37,896.0
Demand deposits	87,539.5	92,117.8	124,333.4	135,944.1	141,608.2
Other deposits <sup>1</sup> (of which)	547,135.3	617,286.6	711,307.5	787,169.3	909,493.4
<i>Public sector</i>	44,767.7	40,563.0	38,809.9	44,415.0	51,448.5
<i>Other financial institutions</i>	122,405.2	161,311.5	197,022.6	227,173.6	295,136.6
<i>Private sector</i>	372,884.1	406,049.3	462,149.5	501,873.3	550,821.6
<i>Foreign</i>	7,078.4	9,362.8	13,325.4	13,707.4	12,086.7
Borrowings	44,948.0	48,715.3	52,607.9	55,955.8	58,614.0
Funds from other financial institutions	70,836.8	87,571.5	71,717.6	84,238.8	75,803.6
<i>Domestic</i> <sup>2</sup>	46,973.0	61,837.8	33,762.8	43,150.4	44,465.3
<i>Foreign</i>	23,863.8	25,733.6	37,954.7	41,088.4	31,338.3
Insurance, provident and pension funds	274,384.5	305,657.0	337,937.6	373,645.1	385,136.6
Other liabilities	208,266.6	233,384.8	267,579.3	260,673.7	275,426.3
<b>Total Liabilities</b>	<b>1,395,119.8</b>	<b>1,563,080.0</b>	<b>1,764,855.0</b>	<b>1,912,662.6</b>	<b>2,091,159.0</b>
<b>Uses of Funds</b>					
Currency	7,369.8	5,573.8	5,058.3	6,057.3	5,685.9
Deposits with other financial institutions	187,883.0	226,303.7	247,947.3	259,429.4	322,247.9
<i>Domestic</i>	166,670.2	211,075.6	214,355.2	232,385.7	279,709.7
<i>Foreign</i>	21,212.7	15,228.0	33,592.0	27,043.7	42,538.2
Loans and advances	560,459.4	599,285.5	655,668.4	721,642.3	765,301.7
<i>Public sector</i>	10,191.1	7,799.2	7,950.3	5,446.5	6,037.6
<i>Other financial institutions</i>	23,746.4	24,295.3	24,382.2	22,449.5	22,229.2
<i>Private sector</i>	524,393.4	564,850.9	620,712.1	691,258.2	734,461.8
<i>Foreign</i>	2,128.5	2,340.0	2,623.8	2,488.1	2,573.0
Securities	361,113.2	409,488.6	433,071.0	472,883.8	489,261.6
<i>Treasury bills</i>	5,680.0	3,539.4	445.2	1,698.4	1,667.2
<i>Commercial bills</i>	13,321.8	13,468.4	8,403.7	7,078.7	5,952.8
<i>Malaysian Government Securities (MGS)</i>	104,354.9	125,165.0	139,488.3	153,654.3	154,773.0
<i>Corporate</i> <sup>3</sup>	226,671.9	254,197.9	271,630.7	291,606.4	306,149.6
<i>Private Debt Securities (PDS)</i>	n.a.	122,237.8	130,213.0	140,405.4	139,238.6
<i>Equities</i>	n.a.	131,960.1	141,417.7	151,201.0	166,911.0
<i>Foreign</i>	3,189.7	3,429.0	4,578.6	6,677.9	7,301.6
<i>Others</i>	7,894.9	9,688.7	8,524.5	12,168.0	13,417.4
Gold and forex reserves	127,515.1	163,499.1	247,786.6	263,235.6	288,874.0
Other assets	150,779.3	158,929.3	175,323.5	189,414.3	219,787.9
<b>Total Assets</b>	<b>1,395,119.8</b>	<b>1,563,080.0</b>	<b>1,764,855.0</b>	<b>1,912,662.6</b>	<b>2,091,159.0</b>

<sup>1</sup> Equals savings, fixed and other (NIF, LPHT, etc.) deposits + NIDs + repos

<sup>2</sup> Includes statutory reserves of banking institutions

<sup>3</sup> Breakdown of Corporate Securities between Private Debt Securities (PDS) and Equities available from 2003

p Preliminary

n.a. Not available

Note: Numbers may not necessarily add up due to rounding

## Financial Stability and Payment Systems Report 2006

**Table A.2**  
**Banking System<sup>1</sup>: Income and Expenditure**

	For the calendar year		
	2004	2005	2006 <sup>p</sup>
	RM million		
Interest income <sup>2</sup>	40,755.3	43,659.6	51,234.5
Less: Interest expense	20,591.0	22,034.8	27,279.3
Net interest income	20,164.4	21,624.8	23,955.2
Add: Fee-based income	4,229.4	4,721.2	5,080.4
Less: Staff cost	5,662.1	6,280.0	7,246.3
Overheads	6,427.1	7,057.8	7,859.3
Gross operating profit	12,304.6	13,008.2	13,930.0
Less: Loan loss and other provisions	4,586.9	5,558.7	6,230.8
Gross operating profit after provision	7,717.7	7,449.6	7,699.2
Add: Other income	3,851.7	4,932.2	5,261.2
<b>Pre-tax profit</b>	<b>11,569.4</b>	<b>12,381.8</b>	<b>12,960.4</b>
Pre-tax profit / Average assets (%)	1.4	1.3	1.3
Pre-tax profit / Average shareholders' funds (%)	16.0	16.5	16.1
Pre-tax profit / Average employee (RM'000)	125.2	130.3	131.9
Cost incurred per ringgit of revenue earned (sen)	40.1	40.0	41.3
Cost incurred per ringgit of net interest income (sen)	60.0	61.7	63.1
Overheads to staff cost (%)	113.5	112.4	108.5
Staff cost per employee (RM'000)	60.3	65.3	72.2

<sup>1</sup> Includes Islamic banks

<sup>2</sup> Effective January 2005, banking institutions no longer accrue interests on non-performing loan accounts

<sup>p</sup> Preliminary

Note: Numbers may not necessarily add up due to rounding

**Table A.3**  
**Commercial Banks<sup>1</sup>: Income and Expenditure**

	For the calendar year		
	2004	2005	2006 <sup>p</sup>
	RM million		
Interest income <sup>2</sup>	39,093.6	41,960.9	49,521.2
Less: Interest expense	19,395.0	20,768.9	25,972.4
Net interest income	19,698.6	21,192.0	23,548.8
Add: Fee-based income	3,878.0	4,367.0	4,795.4
Less: Staff cost	5,364.6	5,932.4	6,925.7
Overheads	6,272.5	6,876.9	7,702.6
Gross operating profit	11,939.5	12,749.8	13,715.9
Less: Loan loss and other provisions	4,485.4	5,444.7	6,039.4
Gross operating profit after provision	7,454.1	7,305.0	7,676.5
Add: Other income	3,300.8	3,790.3	4,317.4
<b>Pre-tax profit</b>	<b>10,754.9</b>	<b>11,095.3</b>	<b>11,993.9</b>
Pre-tax profit / Average assets (%)	1.3	1.3	1.2
Pre-tax profit / Average shareholders' funds (%)	16.1	16.0	16.1
Pre-tax profit / Average employee (RM'000)	119.7	120.1	126.0
Cost incurred per ringgit of revenue earned (sen)	40.7	40.9	42.0
Cost incurred per ringgit of net interest income (sen)	59.1	60.4	62.1
Overheads to staff cost (%)	116.9	115.9	111.2
Staff cost per employee (RM'000)	58.8	63.5	71.5

<sup>1</sup> Includes finance companies and Islamic banks

<sup>2</sup> Effective January 2005, banking institutions no longer accrue interests on non-performing loan accounts

<sup>p</sup> Preliminary

Note: Numbers may not necessarily add up due to rounding

**Table A.4**  
**Islamic Banks: Income and Expenditure**

	For the calendar year		
	2004	2005 <sup>1</sup>	2006 <sup>p1</sup>
	RM million		
Income <sup>2</sup> net of income-in-suspense	1,061.7	784.5	2,295.6
Less: Expense <sup>2</sup>	518.4	367.9	1,207.9
Net income	543.3	416.6	1,087.7
Add: Fee income	48.9	47.6	114.0
Less: Staff cost	186.3	147.3	161.3
Overheads	223.7	195.9	488.9
Gross operating profit	182.3	120.9	551.5
Less: Financing loss and other provisions	162.5	82.6	204.8
Gross operating profit after provision	19.8	38.4	346.7
Add: Other income	91.6	78.3	109.0
<b>Pre-tax profit</b>	<b>111.4</b>	<b>116.7</b>	<b>455.7</b>
Pre-tax profit / Average assets (%)	0.5	0.7	1.1
Pre-tax profit / Average shareholders' funds (%)	7.1	9.4	15.4
Pre-tax profit / Average employee (RM'000)	30.3	83.4	231.9
Cost incurred per ringgit of revenue earned (sen)	0.3	0.4	0.3
Cost incurred per ringgit of net income (sen)	0.8	0.8	0.6
Overheads to staff cost (%)	1.2	1.3	3.0
Staff cost per employee (RM'000)	46.2	94.5	68.0

<sup>1</sup> Excluding one Islamic bank that made exceptional loss

<sup>2</sup> From financing activities and securities

<sup>p</sup> Preliminary

Note: Numbers may not necessarily add up due to rounding



**Table A.5**  
**Merchant/Investment Banks: Income and Expenditure**

	For the calendar year		
	2004	2005	2006 <sup>p</sup>
	RM million		
Interest income <sup>1</sup>	1,661.7	1,698.7	1,713.3
Less: Interest expense	1,196.0	1,265.9	1,306.8
Net interest income	465.8	432.8	406.5
Add: Fee-based income	351.4	354.2	285.1
Less: Staff cost	297.5	347.6	320.6
Overheads	154.6	180.9	156.8
Gross operating profit	365.1	258.5	214.2
Less: Loan loss and other provisions	101.5	113.9	191.5
Gross operating profit after provision	263.6	144.5	22.7
Add: Other income	550.9	1,141.9	943.8
<b>Pre-tax profit</b>	<b>814.4</b>	<b>1,286.5</b>	<b>966.5</b>
Pre-tax profit / Average assets (%)	1.9	2.9	1.8
Pre-tax profit / Average shareholders' funds (%)	15.5	23.2	16.2
Pre-tax profit / Average employee (RM'000)	318.2	484.1	314.5
Cost incurred per ringgit of revenue earned (sen)	30.3	25.6	27.5
Cost incurred per ringgit of net interest income (sen)	97.1	122.1	117.4
Overheads to staff cost (%)	52.0	52.0	48.9
Staff cost per employee (RM'000)	110.6	132.4	91.0

<sup>1</sup> Effective January 2005, banking institutions no longer accrue interests on non-performing loan accounts

<sup>p</sup> Preliminary

Note: Numbers may not necessarily add up due to rounding

**Table A.6**  
**Banking System: Key Data**

	As at end				
	2002	2003	2004	2005	2006
Number of institutions	47	46	41	43	42
<i>Commercial banks<sup>1</sup></i>	35	34	29	27	22
<i>Merchant/Investment banks</i>	10	10	10	10	10
<i>Islamic banks</i>	2	2	2	6	10
Office network	2,531	2,563	2,429	2,244	2,139
<i>Commercial banks<sup>1</sup></i>	2,386	2,414	2,276	2,072	1,952
<i>Merchant/Investment banks</i>	17	17	17	19	19
<i>Islamic banks<sup>2</sup></i>	128	132	136	766	1,167
ATM network	4,213	4,396	4,708	4,892	5,198
<i>Commercial banks<sup>1</sup></i>	4,028	4,184	4,428	4,584	4,869
<i>Islamic banks</i>	185	212	280	308	329
Number of banks with internet services	12	12	13	13	13
Number of employees	90,864	90,844	93,948	96,106	100,414
<i>Commercial banks<sup>1</sup></i>	85,296	85,092	87,222	89,047	91,741
<i>Merchant/Investment banks</i>	2,451	2,429	2,690	2,625	3,522
<i>Islamic banks</i>	3,117	3,323	4,036	4,434	5,151

<sup>1</sup> Includes finance companies

<sup>2</sup> Includes Islamic bank branches that are shared with conventional bank branches

**Table A.7**  
**Distribution of New Business Premiums of Direct Insurers**

Year	Ordinary Life				Investment-Linked	Annuity	Total
	Whole Life	Endowment	Temporary	Others			
	RM million						
2002	436.9	1,032.8	810.3	409.6	891.6	1.2	3,582.4
2003	508.5	1,514.3	930.5	542.4	1,356.3	-	4,852.0
2004	418.4	2,268.4	1,130.9	590.6	2,252.5	0.4	6,661.2
2005							
Q1	86.1	835.9	321.9	174.6	271.7	...	1,690.2
Q2	210.5	1,607.5	641.3	351.8	818.6	...	3,629.7
Q3	327.2	2,123.0	945.2	500.0	1,230.5	...	5,125.9
Q4	491.5	2,615.2	1,227.3	646.7	1,720.2	0.5	6,701.4
2006							
Q1	97.1	297.9	370.4	215.4	615.4	0.1	1,596.3
Q2	229.5	679.9	681.9	349.3	1,276.6	0.1	3,217.3
Q3	365.3	1,089.9	954.0	492.3	2,184.6	0.1	5,086.2
Q4	523.8	1,553.8	1,220.1	688.5	3,173.3	0.1	7,159.6

... Negligible

Note: Numbers may not necessarily add up due to rounding

**Table A.8**  
**Income and Outgo**

Item	2004		2005		2006	
	RM million	%	RM million	%	RM million	%
<b>Income</b>						
Premium income	15,131.0	74.3	16,002.1	76.5	17,098.8	72.3
Net investment income	3,175.8	15.6	3,660.8	17.5	4,008.9	16.9
Profit on sale of assets and miscellaneous income	2,057.9	10.1	1,257.1	6.0	2,544.6	10.8
<b>Total</b>	<b>20,364.7</b>	<b>100.0</b>	<b>20,920.0</b>	<b>100.0</b>	<b>23,652.3</b>	<b>100.0</b>
<b>Outgo</b>						
Net policy benefits	5,397.3	26.5	6,268.7	30.0	7,309.2	30.9
Agency remuneration	2,382.3	11.7	2,504.6	12.0	2,464.7	10.4
Management expenses <sup>1</sup>	1,016.3	5.0	1,071.7	5.1	1,242.3	5.3
Loss on disposal of assets and other outgo	584.4	2.9	1,158.9	5.5	1,009.0	4.3
<b>Total</b>	<b>9,380.3</b>	<b>46.1</b>	<b>11,003.9</b>	<b>52.6</b>	<b>12,025.2</b>	<b>50.8</b>
Excess of income over outgo	10,984.4	53.9	9,916.1	47.4	11,627.1	49.2

<sup>1</sup> Inclusive of net bad and doubtful debts

Note: Numbers may not necessarily add up due to rounding

**Table A.9**  
**Assets of Life Insurance Funds**

Type of Investment	2002		2003		2004		2005		2006	
	RM million	%	RM million	%	RM million	%	RM million	%	RM million	%
Property, plant and equipment	383.0	0.7	439.3	0.7	355.8	0.5	432.6	0.6	528.1	0.6
Loans	6,661.9	13.0	7,619.6	12.7	8,455.4	12.1	9,725.2	12.4	10,811.7	12.1
Mortgages	1,213.4	2.4	1,877.8	3.1	2,329.3	3.3	3,003.3	3.8	3,800.3	4.2
Policy	4,566.3	8.9	4,971.9	8.3	5,335.9	7.7	5,790.5	7.4	6,245.8	7.0
Others	882.2	1.7	769.9	1.3	790.2	1.1	931.4	1.2	765.6	0.9
Investments	33,396.8	65.3	39,503.7	65.6	47,413.7	67.9	55,218.5	70.2	62,069.3	69.2
Malaysian Government papers/guaranteed loans	7,544.9	14.8	10,004.3	16.6	12,518.7	17.9	12,746.3	16.2	15,985.9	17.8
Corporate/debt securities	25,640.9	50.1	29,249.5	48.6	34,694.7	49.7	42,076.5	53.5	45,199.2	50.4
Others	211.0	0.4	249.9	0.4	200.3	0.3	395.7	0.5	884.2	1.0
Investment properties	2,708.4	5.3	2,661.1	4.4	2,969.4	4.3	3,007.0	3.8	2,997.5	3.3
Cash and deposits	6,428.5	12.6	8,258.0	13.7	8,899.1	12.8	8,278.2	10.5	10,337.6	11.5
Other assets	1,277.0	2.5	1,404.1	2.4	1,513.6	2.2	1,740.7	2.2	1,897.4	2.1
Foreign assets	315.9	0.6	309.7	0.5	168.4	0.2	260.4	0.3	1,081.6	1.2
<b>Total</b>	<b>51,171.5</b>	<b>100.0</b>	<b>60,195.5</b>	<b>100.0</b>	<b>69,775.4</b>	<b>100.0</b>	<b>78,662.6</b>	<b>100.0</b>	<b>89,723.2</b>	<b>100.0</b>

Note: Numbers may not necessarily add up due to rounding

## Financial Stability and Payment Systems Report 2006

**Table A.10**  
**Distribution of Gross Direct Premiums**

Year	Marine, Aviation and Transit	Contractors' All Risks and Engineering	Fire	Medical Expenses and Personal Accident	Motor			Liability	Workmen's Compensation and Employers' Liability	Miscellaneous	Total
					'Act' Cover <sup>1</sup>	Others	Total				
	RM million										
2002	748.2	413.0	1,458.6	703.6	405.4	3,026.3	3,431.7	205.3	85.6	403.1	7,449.1
2003	908.5	465.9	1,585.1	809.0	413.5	3,211.3	3,624.8	262.2	104.5	426.2	8,186.3
2004	880.2	412.7	1,668.6	895.5	446.2	3,425.2	3,871.4	249.7	113.0	466.4	8,557.5
2005											
Q1	235.5	114.3	508.3	247.3	124.2	967.2	1,091.4	75.5	30.3	145.8	2,448.3
Q2	574.8	193.7	937.8	492.1	248.6	1,937.0	2,185.7	142.1	58.1	267.2	4,851.5
Q3	761.7	297.1	1,323.8	731.4	377.1	2,948.8	3,325.9	207.4	91.0	387.3	7,125.8
Q4	1,015.9	391.7	1,700.5	963.3	503.1	3,925.1	4,428.1	268.3	121.0	499.3	9,388.2
2006											
Q1	192.3	91.9	507.6	285.5	129.2	988.1	1,117.3	77.4	33.1	161.8	2,467.0
Q2	675.6	183.6	946.3	556.4	251.7	1,951.8	2,203.5	155.9	64.8	287.1	5,073.2
Q3	889.4	288.0	1,348.6	823.5	380.6	2,937.8	3,318.4	223.1	99.7	409.2	7,399.9
Q4	1,144.4	373.7	1,741.5	1,089.0	502.0	3,852.3	4,354.3	276.7	130.6	525.7	9,635.9

<sup>1</sup> Compulsory insurance cover required under the Road Transport Act 1987

Note: Numbers may not necessarily add up due to rounding

**Table A.11**  
**Claims Ratio<sup>1</sup>**

Year	Marine, Aviation and Transit	Contractors' All Risks and Engineering	Fire	Medical Expenses and Personal Accident	Motor			Liability	Workmen's Compensation and Employers' Liability	Miscellaneous	Total
					'Act' Cover <sup>2</sup>	Others	Total				
2002	58.6	67.7	45.4	65.9	141.5	57.3	67.1	44.0	22.8	90.9	62.9
2003	58.4	64.3	34.3	56.2	162.7	58.2	70.1	23.4	22.0	64.6	59.8
2004	62.6	56.6	39.4	56.1	179.6	56.6	70.8	35.1	22.7	58.4	60.9
2005											
Q1	44.8	37.4	39.2	42.7	194.2	53.7	69.6	25.8	10.3	55.7	56.8
Q2	50.9	44.9	36.2	45.7	177.3	52.5	66.8	24.0	16.6	54.1	55.7
Q3	42.3	49.1	37.4	48.2	169.6	53.3	66.6	36.2	22.5	52.6	56.1
Q4	41.3	27.7	39.2	47.1	166.3	54.1	66.9	22.9	19.1	50.9	55.4
2006											
Q1	47.6	54.4	38.8	50.4	151.8	55.1	65.8	15.0	23.0	64.2	56.7
Q2	55.0	39.2	38.8	52.4	202.3	56.1	72.3	49.0	26.0	50.8	60.8
Q3	49.2	47.0	37.8	53.7	198.5	56.0	71.8	41.6	27.7	50.2	60.3
Q4	45.4	45.6	41.9	49.2	196.1	55.5	71.1	32.2	25.6	51.3	59.4

<sup>1</sup> Net claims incurred as a ratio of earned premium income

<sup>2</sup> Compulsory insurance cover required under the Road Transport Act 1987

Note: Numbers may not necessarily add up due to rounding

**Table A.12**  
**Underwriting and Operating Results**

Item	2002		2003		2004		2005		2006	
	RM million	% change	RM million	% change	RM million	% change	RM million	% change	RM million	% change
Underwriting profit	232.8	73.7	469.6	101.7	464.6	-1.1	956.9	106.0	615.2	-35.7
Investment income	523.8	1.7	538.1	2.7	593.7	10.3	641.2	8.0	698.1	8.9
Capital gains	130.8	87.1	189.5	44.9	188.9	-0.3	106.7	-43.5	183.2	71.7
Other income	138.7	-34.9	335.1	141.6	75.0	-77.6	108.9	45.1	192.4	76.8
Capital losses	86.5	-33.4	89.7	3.7	18.8	-79.0	87.6	365.5	86.5	-1.3
Other outgo	120.5	119.1	138.5	14.9	124.6	-10.0	191.1	53.4	110.9	-42.0
Operating profit	819.1	9.7	1,304.1	59.2	1,178.8	-9.6	1,535.0	30.2	1,491.5	-2.8

Note: Numbers may not necessarily add up due to rounding

**Table A.13**  
**Assets of General Insurance Funds**

Type of Investment	2002		2003		2004		2005		2006	
	RM million	%	RM million	%	RM million	%	RM million	%	RM million	%
Property, plant and equipment	696.1	4.5	734.3	4.4	733.0	4.3	720.9	4.0	834.9	4.4
Loans	210.4	1.4	242.4	1.5	226.5	1.3	244.8	1.4	255.5	1.3
Investments	7,093.8	45.8	7,429.7	44.7	8,149.3	47.7	9,105.9	50.7	9,328.0	49.7
<i>Malaysian Government papers/guaranteed loans</i>	1,862.6	12.0	1,952.3	11.8	2,292.2	13.4	2,671.4	14.9	3,150.7	16.8
<i>Corporate/debt securities</i>	5,086.5	32.9	5,370.8	32.3	5,685.1	33.3	6,224.6	34.6	5,886.4	31.4
<i>Others</i>	144.7	0.9	106.6	0.6	172.0	1.0	209.9	1.2	290.9	1.5
Investment properties	426.0	2.8	454.6	2.7	429.7	2.5	428.2	2.4	279.7	1.5
Cash and deposits	5,447.6	35.2	6,010.4	36.2	5,837.6	34.2	5,562.6	30.9	6,113.1	32.6
Amount due from clients/intermediaries/reinsurers	1,006.2	6.5	1,223.1	7.4	1,172.2	6.9	1,368.3	7.6	1,390.8	7.4
Other assets	586.9	3.8	511.3	3.1	520.7	3.1	536.8	3.0	558.7	3.0
Foreign assets	4.4	...	5.7	...	8.0	...	8.2	...	12.4	0.1
Total	15,471.4	100.0	16,611.5	100.0	17,077.0	100.0	17,975.7	100.0	18,773.1	100.0

... Negligible

Note: Numbers may not necessarily add up due to rounding

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**Table A.14**  
**Distribution of New Business Contributions**

Year	Ordinary Family						Investment-linked	Annuity	Total
	Endowment		Temporary		Medical & Health	Others			
	Education	Others	Mortgage	Others					
	RM million								
2003	7.5	47.0	340.5	59.3	39.0	9.6	3.2	4.9	511.0
2004	29.1	75.8	373.6	33.7	62.7	17.5	9.4	1.9	603.7
2005	45.7	97.2	376.6	41.6	70.4	21.6	70.1	2.2	725.5
2006	37.3	100.4	654.1	118.8	122.6	21.9	210.4	1.1	1,266.6
	% change								
2004	286.0	61.4	9.7	-43.1	60.8	82.6	197.5	-62.0	18.1
2005	57.2	28.2	0.8	23.4	12.3	23.1	642.7	15.6	20.2
2006	-18.4	3.2	73.7	185.4	74.1	1.5	200.1	-48.5	74.6
	% share								
2003	1.5	9.2	66.6	11.6	7.6	1.9	0.6	1.0	100.0
2004	4.8	12.6	61.9	5.6	10.4	2.9	1.6	0.3	100.0
2005	6.3	13.4	51.9	5.7	9.7	3.0	9.7	0.3	100.0
2006	2.9	7.9	51.6	9.4	9.7	1.7	16.6	0.1	100.0

Note: Numbers may not necessarily add up due to rounding

**Table A.15**  
**Income and Outgo**

Item	2002		2003		2004		2005		2006	
	RM million	%	RM million	%	RM million	%	RM million	%	RM million	%
<b>Income</b>										
Net contributions	663.8	83.1	762.5	78.7	794.4	77.2	977.1	78.8	1,242.5	77.5
Net investment income	110.2	13.8	165.3	17.1	156.6	15.2	192.3	15.5	232.0	14.5
Other income	25.0	3.1	41.2	4.3	78.4	7.6	70.0	5.6	129.5	8.1
<b>Total</b>	<b>799.0</b>	<b>100.0</b>	<b>968.9</b>	<b>100.0</b>	<b>1,029.4</b>	<b>100.0</b>	<b>1,239.3</b>	<b>100.0</b>	<b>1,603.9</b>	<b>100.0</b>
<b>Outgo</b>										
Net certificate benefits	178.6	22.4	201.4	20.8	281.0	27.3	347.2	28.0	400.8	25.0
Net commissions	46.4	5.8	46.5	4.8	83.1	8.1	93.0	7.5	129.6	8.1
Management expenses <sup>1</sup>	25.2	3.2	60.0	6.2	86.3	8.4	91.7	7.4	123.7	7.7
Other outgo	34.5	4.3	51.4	5.3	136.3	13.2	60.7	4.9	131.1	8.2
<b>Total</b>	<b>284.7</b>	<b>35.6</b>	<b>359.3</b>	<b>37.1</b>	<b>586.7</b>	<b>57.0</b>	<b>592.5</b>	<b>47.8</b>	<b>785.2</b>	<b>49.0</b>
<b>Excess of income over outgo</b>	<b>514.3</b>	<b>64.4</b>	<b>609.6</b>	<b>62.9</b>	<b>442.7</b>	<b>43.0</b>	<b>646.8</b>	<b>52.2</b>	<b>818.7</b>	<b>51.0</b>

<sup>1</sup> Management expenses from 2003 onwards include the expenses borne by the shareholders' fund in respect of family takaful fund

Note: Numbers may not necessarily add up due to rounding

**Table A.16**  
**Assets of Family Takaful Funds**

Type of Investment	2002		2003		2004		2005		2006	
	RM million	% share	RM million	% share	RM million	% share	RM million	% share	RM million	% share
Property, plant and equipment	3.1	0.1	7.2	0.2	4.9	0.1	3.2	0.1	2.3	...
Investment properties	61.8	2.0	66.0	1.7	70.0	1.6	179.4	3.6	182.2	3.1
Financing	89.3	2.8	84.0	2.2	36.9	0.9	55.8	1.1	52.0	0.9
Investments	1,725.1	54.5	2,227.2	57.7	2,717.1	63.1	3,284.8	65.1	3,510.4	60.5
<i>Government Islamic papers</i>	273.5	8.6	368.1	9.5	498.3	11.6	555.8	11.0	603.7	10.4
<i>Islamic private debt securities and equities</i>	1,447.0	45.8	1,850.5	47.9	2,215.1	51.5	2,671.1	52.9	2,844.5	49.0
<i>Others</i>	4.6	0.1	8.5	0.2	3.8	0.1	57.9	1.1	62.3	1.1
Foreign assets	7.7	0.2	7.7	0.2	7.7	0.2	18.1	0.4	54.3	0.9
Cash and deposits	1,254.0	39.6	1,436.1	37.2	1,413.0	32.8	1,401.9	27.8	1,834.5	31.6
Other assets	21.8	0.7	32.8	0.9	55.6	1.3	105.2	2.1	167.9	2.9
<b>Total</b>	<b>3,162.8</b>	<b>100.0</b>	<b>3,861.0</b>	<b>100.0</b>	<b>4,305.1</b>	<b>100.0</b>	<b>5,048.4</b>	<b>100.0</b>	<b>5,803.5</b>	<b>100.0</b>

... Negligible

Note: Numbers may not necessarily add up due to rounding

**Table A.17**  
**Distribution of Gross Direct Contributions**

Year	Marine, Aviation and Transit	Fire	Motor			Contractors' All Risks and Engineering	Personal Accident	Miscellaneous	Total
			'Act' Cover <sup>1</sup>	Others	Total				
	RM million								
2003	35.0	166.1	15.2	104.9	120.1	28.5	20.5	31.3	401.5
2004	75.4	185.9	17.7	132.1	149.7	22.3	21.7	36.9	491.9
2005	69.5	172.7	17.0	191.3	208.3	33.7	28.2	38.9	551.4
2006	40.6	232.6	26.7	271.1	297.7	54.4	33.5	54.8	713.7
	% change								
2004	115.3	12.0	16.6	25.9	24.7	-21.8	5.6	17.8	22.5
2005	-7.8	-7.1	-3.7	44.9	39.1	51.3	30.4	5.3	12.1
2006	-41.6	34.7	56.9	41.7	42.9	61.5	18.5	40.9	29.4
	% share								
2003	8.7	41.4	3.8	26.1	29.9	7.1	5.1	7.8	100.0
2004	15.3	37.8	3.6	26.8	30.4	4.5	4.4	7.5	100.0
2005	12.6	31.3	3.1	34.7	37.8	6.1	5.1	7.1	100.0
2006	5.7	32.6	3.7	38.0	41.7	7.6	4.7	7.7	100.0

<sup>1</sup> Compulsory coverage required under the Road Transport Act 1987

Note: Numbers may not necessarily add up due to rounding



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**Table A.18**  
**Claims Ratio<sup>1</sup>**

Year	Marine, Aviation and Transit	Fire	Motor			Contractors' All Risks and Engineering	Personal Accident	Miscellaneous	Total
			'Act' Cover <sup>2</sup>	Others	Total				
2003	30.1	6.1	245.6	16.8	46.3	33.1	75.9	62.9	37.3
2004	13.1	11.8	99.6	44.6	51.4	83.9	69.5	48.4	64.0
2005	23.1	24.6	100.3	45.1	50.4	29.5	56.8	37.6	42.8
2006	73.5	26.3	162.8	50.9	59.4	294.8	97.1	69.0	59.2

<sup>1</sup> Net claims incurred as a ratio of earned contribution income

<sup>2</sup> Compulsory coverage required under the Road Transport Act 1987

**Table A.19**  
**Underwriting and Operating Results**

Item	2004		2005		2006	
	RM million	% change	RM million	% change	RM million	% change
Underwriting profit	69.5	-2.0	113.3	63.0	-5.8	-105.1
Investment income	14.7	-31.3	19.6	33.2	32.3	64.4
Capital gains	2.1	527.0	3.2	52.0	3.8	18.1
Other income	3.0	439.4	5.8	94.3	17.7	203.7
Capital losses	1.2	62.8	4.5	282.6	9.5	113.7
Other outgo	16.2	-5.4	13.9	-14.3	9.9	-29.0
Operating Profit	72.0	-4.6	123.6	71.8	28.6	-76.9

Note: Numbers may not necessarily add up due to rounding

**Table A.20**  
**Assets of General Takaful Funds**

Type of Investment	2002		2003		2004		2005		2006	
	RM million	% share	RM million	% share	RM million	% share	RM million	% share	RM million	% share
Property, plant and equipment	0.5	0.1	1.3	0.2	1.5	0.2	6.1	0.7	7.6	0.7
Investment properties	34.4	7.4	33.8	5.9	33.2	4.6	41.9	5.0	41.2	3.7
Financing	14.3	3.1	13.6	2.4	8.5	1.2	6.6	0.8	6.2	0.6
Investments	190.5	41.0	257.2	45.3	349.6	48.3	434.3	52.3	477.1	42.4
<i>Government Islamic papers</i>	46.4	10.0	58.6	10.3	99.1	13.7	106.4	12.8	128.9	11.5
<i>Islamic private debt securities</i>										
<i>and equities</i>	142.5	30.7	197.1	34.7	248.9	34.4	326.6	39.4	346.8	30.8
<i>Others</i>	1.6	0.3	1.4	0.3	1.5	0.2	1.3	0.2	1.4	0.1
Foreign assets	2.5	0.5	2.5	0.4	2.5	0.3	2.5	0.3	2.5	0.2
Cash and deposits	183.0	39.4	207.1	36.5	244.6	33.8	230.4	27.8	424.5	37.8
Other assets	38.9	8.4	52.7	9.3	83.7	11.6	108.3	13.0	165.3	14.7
<b>Total</b>	<b>464.1</b>	<b>100.0</b>	<b>568.1</b>	<b>100.0</b>	<b>723.5</b>	<b>100.0</b>	<b>830.0</b>	<b>100.0</b>	<b>1,124.3</b>	<b>100.0</b>

Note: Numbers may not necessarily add up due to rounding

## Financial Stability and Payment Systems Report 2006

**Table A.21**  
**Development Financial Institutions<sup>1</sup>: Sources and Uses of Funds**

	As at end				
	2002	2003	2004	2005	2006
	RM million				
<b>Sources:</b>					
Shareholders' funds	7,905.4	9,424.1	10,543.8	12,744.0	15,952.6
<i>Paid-up capital</i>	6,012.4	7,192.3	7,862.3	8,563.4	10,296.7
<i>Reserves</i>	1,517.0	1,599.6	2,051.3	2,221.5	2,530.3
<i>Retained earnings</i>	376.0	632.2	630.2	1,959.1	3,125.6
Deposits accepted	39,797.6	42,403.3	49,878.0	54,084.7	59,756.8
Borrowings	13,977.0	16,576.8	18,730.9	20,672.5	23,018.9
<i>Government</i>	8,875.4	11,730.2	13,050.1	13,386.2	15,030.7
<i>Multilateral/International agencies</i>	3,434.3	3,158.5	4,044.2	4,103.2	4,016.5
<i>Others</i>	1,667.3	1,688.1	1,636.6	3,183.1	3,971.7
Others	10,766.4	10,686.2	12,297.2	12,366.7	15,313.5
<b>Total</b>	<b>72,446.4</b>	<b>79,090.4</b>	<b>91,449.9</b>	<b>99,867.9</b>	<b>114,041.8</b>
<b>Uses:</b>					
Deposits placed	12,446.2	16,244.7	18,908.0	13,964.4	18,913.6
Investments	19,268.1	21,229.5	25,557.0	28,034.6	29,124.1
<i>of which:</i>					
<i>Government securities</i>	1,952.3	2,950.8	2,629.3	4,489.2	4,601.7
<i>Shares</i>	6,427.4	6,778.1	8,256.0	8,370.5	8,406.0
<i>Quoted</i>	5,325.6	5,200.9	6,369.1	7,030.1	7,888.5
<i>Unquoted</i>	1,101.8	1,577.2	1,886.9	1,340.4	517.4
Loans and advances	29,442.4	32,354.8	37,747.1	47,495.9	55,577.2
Fixed assets	3,606.7	3,707.5	4,057.7	4,205.3	4,452.3
Others	7,683.0	5,553.9	5,180.1	6,167.7	5,974.6
<b>Total</b>	<b>72,446.4</b>	<b>79,090.4</b>	<b>91,449.9</b>	<b>99,867.9</b>	<b>114,041.8</b>
<b>Contingencies</b>					
Guarantee	3,160.1	3,661.6	3,949.0	4,341.0	5,357.7
Export credit insurance	151.4	123.3	308.6	380.5	348.8
<b>Total</b>	<b>3,311.5</b>	<b>3,784.9</b>	<b>4,257.6</b>	<b>4,721.5</b>	<b>5,706.5</b>

<sup>1</sup> Refers to Bank Pembangunan Malaysia Berhad, Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional, Export-Import Bank of Malaysia Berhad, Bank Pertanian Malaysia, 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

Note: Numbers may not necessarily add up due to rounding

**Table A.22**  
**Development Financial Institutions<sup>1</sup> under DFIA<sup>2</sup>: Sources and Uses of Funds**

	As at end				
	2002	2003	2004	2005	2006
	RM million				
<b>Sources:</b>					
Shareholders' funds	4,087.6	5,359.4	6,178.1	8,398.1	10,685.1
<i>Paid-up capital</i>	3,288.5	4,167.5	4,811.1	5,503.6	7,171.5
<i>Reserves</i>	877.7	964.1	1,339.4	1,479.9	1,782.3
<i>Retained earnings</i>	-78.6	227.8	27.6	1,414.6	1,731.3
Deposits accepted	29,373.9	30,762.7	37,278.5	40,225.5	45,098.7
Borrowings	9,851.7	12,347.7	14,586.9	16,437.2	18,502.5
<i>Government</i>	6,248.0	9,039.8	10,438.2	12,201.1	13,766.0
<i>Multilateral/International agencies</i>	3,135.1	2,933.9	3,846.3	3,927.4	3,835.6
<i>Others</i>	468.6	374.0	302.4	308.7	900.9
Others	8,358.2	8,403.7	9,730.3	9,550.1	11,691.8
<b>Total</b>	<b>51,671.4</b>	<b>56,873.5</b>	<b>67,773.8</b>	<b>74,610.9</b>	<b>85,978.1</b>
<b>Uses:</b>					
Deposits placed	8,212.5	11,383.5	12,949.5	8,204.7	12,712.2
Investments	11,637.0	12,970.7	15,868.1	18,634.9	17,746.7
<i>of which:</i>					
<i>Government securities</i>	1,952.3	2,736.5	2,549.8	4,446.2	4,542.2
<i>Shares</i>	6,427.4	1,778.5	1,705.8	1,742.3	1,784.6
<i>Quoted</i>	5,325.6	1,664.7	1,616.7	1,625.7	1,645.2
<i>Unquoted</i>	1,101.8	113.8	89.1	116.6	139.4
Loans and advances	25,191.1	28,072.3	33,472.5	43,374.9	51,137.8
Fixed assets	1,496.0	1,550.3	1,786.1	1,843.0	1,997.6
Others	5,134.8	2,896.7	3,697.6	2,553.4	2,383.8
<b>Total</b>	<b>51,671.4</b>	<b>56,873.5</b>	<b>67,773.8</b>	<b>74,610.9</b>	<b>85,978.1</b>
<b>Contingencies</b>					
Guarantee	575.4	549.1	533.3	613.5	524.7
Export credit insurance	151.5	123.3	308.6	380.5	348.8
<b>Total</b>	<b>726.9</b>	<b>672.4</b>	<b>841.9</b>	<b>994.0</b>	<b>873.5</b>

<sup>1</sup> Refers to Bank Pembangunan Malaysia Berhad, Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional, Export-Import Bank of Malaysia Berhad, Bank Pertanian Malaysia 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

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

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**Table A.23**  
**Development Financial Institutions<sup>1</sup>: Direction of Lending**

	As at end				
	2002	2003	2004	2005	2006
	RM million				
Agriculture, forestry and fishery	2,964.3	2,874.0	3,261.3	3,359.1	3,572.9
Mining and quarrying	90.0	75.2	66.8	56.6	48.3
Manufacturing	3,356.6	3,952.0	4,126.2	4,474.3	4,968.4
Electricity, gas and water supply	453.8	617.1	1,228.9	2,253.0	2,818.0
Import and export, wholesale and retail trade, restaurants and hotels	240.4	250.4	698.8	643.3	818.6
Broad property sector	7,840.6	8,376.6	10,084.7	11,789.4	15,084.4
<i>Construction</i>	3,790.6	4,009.4	4,186.6	5,246.6	6,826.3
<i>Purchase of residential property</i>	2,785.2	2,927.9	4,078.1	5,475.5	6,851.6
<i>Purchase of non-residential property</i>	393.4	441.1	463.9	429.6	669.5
<i>Real estate</i>	871.4	998.2	1,356.1	637.7	737.0
Transport, storage and communication	4,362.1	4,433.7	4,665.2	5,837.1	6,144.8
Maritime	530.4	473.1	474.4	681.5	797.6
Finance, insurance and business services	1,780.5	1,694.7	984.2	766.1	939.8
Consumption credit	6,716.1	8,066.5	9,896.5	14,074.3	17,409.4
<i>of which:</i>					
<i>Purchase of motor vehicles</i>	816.5	800.2	1,104.8	1,508.2	2,095.4
<i>Credit card</i>	48.0	23.7	24.3	32.6	50.4
Purchase of securities	173.2	136.2	103.4	214.1	189.9
Others	934.4	1,405.3	2,156.7	3,347.1	2,785.4
<b>Total</b>	<b>29,442.4</b>	<b>32,354.8</b>	<b>37,747.1</b>	<b>47,495.9</b>	<b>55,577.2</b>

<sup>1</sup> Refers to Bank Pembangunan Malaysia Berhad, Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional, Export-Import Bank of Malaysia Berhad, Bank Pertanian Malaysia, 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.24**  
**Development Financial Institutions<sup>1</sup> under DFIA<sup>2</sup>: Direction of Lending**

	As at end				
	2002	2003	2004	2005	2006
	RM million				
Agriculture, forestry and fishery	2,823.1	2,749.1	3,148.3	3,239.4	3,513.7
Mining and quarrying	80.5	58.8	49.1	35.5	26.6
Manufacturing	2,130.2	2,675.3	2,872.2	3,254.5	3,734.8
Electricity, gas and water supply	453.8	617.1	1,228.9	2,251.6	2,816.8
Import and export, wholesale and retail trade, restaurants and hotels	125.9	151.5	260.7	356.8	559.6
Broad property sector	6,846.9	7,371.4	8,933.1	10,580.9	13,635.9
<i>Construction</i>	3,641.3	3,842.0	3,973.7	4,908.8	6,477.6
<i>Purchase of residential property</i>	2,480.3	2,629.3	3,797.0	5,195.4	6,582.3
<i>Purchase of non-residential property</i>	391.3	438.8	461.2	429.1	480.9
<i>Real estate</i>	334.0	461.3	701.2	47.6	95.2
Transport, storage and communication	4,321.6	4,390.0	4,615.0	5,778.3	6,063.9
Maritime	530.4	473.1	474.4	681.5	797.6
Finance, insurance and business services	877.6	896.0	827.4	657.0	825.4
Consumption credit	6,567.8	7,812.8	9,571.1	13,679.5	16,926.8
<i>of which:</i>					
<i>Purchase of motor vehicles</i>	741.2	800.2	1,104.8	1,508.2	2,095.4
<i>Credit card</i>	48.0	23.7	24.3	32.6	50.4
Purchase of securities	173.2	136.2	103.4	88.2	64.9
Others	260.1	741.0	1,388.9	2,771.6	2,171.8
<b>Total</b>	<b>25,191.1</b>	<b>28,072.3</b>	<b>33,472.5</b>	<b>43,374.9</b>	<b>51,137.8</b>

<sup>1</sup> Refers to Bank Pembangunan Malaysia Berhad, Bank Kerjasama Rakyat Malaysia Berhad, Bank Simpanan Nasional, Export-Import Bank of Malaysia Berhad, Bank Pertanian Malaysia 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

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

Note: Numbers may not necessarily add up due to rounding

**Table A.25**  
**Development Financial Institutions<sup>1</sup> under DFIA<sup>2</sup>: Non-performing Loans and Loan Loss Provisions**

	As at end	
	2005	2006
	RM million	
General provisions	939.3	1,132.1
Interest-in-suspense	879.2	868.2
Specific provisions	1,699.9	1,934.7
Non-performing loans	4,348.1	4,635.6
	Percent (%)	
Gross NPL ratio	10.4	9.4
Net NPL ratio	4.5	3.9
Total provisions/NPL	80.9	84.9

<sup>1</sup> 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, Bank Pertanian Malaysia

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



**Table A.26**  
**Bank Pembangunan Malaysia Berhad**  
**(formerly known as Bank Pembangunan dan Infrastruktur Malaysia Berhad)**

Year of establishment	1973							
Objectives <sup>1</sup>	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 period		During the year	During the period		During the year
	2005	2006	Jan - Sept 05 <sup>2</sup>	Oct - Dec 05	2006	Jan - Sept 05 <sup>2</sup>	Oct - Dec 05	2006
	RM million							
Infrastructure	13,297.2	14,857.9	1,643.0	247.4	3,170.9	3,990.9	669.7	3,337.4
Government programmes	9,473.4	10,081.4	276.6	70.0	373.6	2,552.9	190.6	636.3
Private programmes	3,823.8	4,776.5	1,366.4	177.4	2,797.3	1,438.0	479.1	2,701.1
SMEs <sup>3</sup>	-	-	1,317.0	-	-	597.7	-	-
of which:								
Bumiputera SMEs	-	-	1,226.0	-	-	577.2	-	-
Maritime	681.5	797.6	-	8.9	1,802.8	-	57.1	165.2
Shipping industry	396.1	437.4	-	3.7	640.8	-	47.8	128.2
Shipyard industry	221.4	182.8	-	0.0	942.0	-	1.2	16.8
Marine-related services	64.0	177.4	-	5.2	220.0	-	8.1	20.2
Manufacturing	185.8	540.8	-	23.0	1,854.7	-	39.0	382.0
of which:								
High technology	185.8	540.8	-	23.0	1,854.7	-	39.0	382.0
Others	53.9	58.4	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>14,218.4</b>	<b>16,254.7</b>	<b>2,960.0</b>	<b>279.3</b>	<b>6,828.4</b>	<b>4,588.6</b>	<b>765.8</b>	<b>3,884.6</b>

<sup>1</sup> Revised following the rationalisation exercise effective 1 October 2005

<sup>2</sup> Refers to data for Bank Pembangunan dan Infrastruktur Malaysia Berhad

<sup>3</sup> Business of SME financing was transferred to SME Bank effective October 2005 following the rationalisation exercise

Source: Bank Pembangunan Malaysia Berhad

## Financial Stability and Payment Systems Report 2006

**Table A.27**  
**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 period		During the year	During the period		During the year
	2005	2006	Jan - Sept 05 <sup>1</sup>	Oct - Dec 05	2006	Jan - Sept 05 <sup>1</sup>	Oct - Dec 05	2006
	RM million							
SMEs	1,718.4	2,016.1	-	333.8	2,136.1	-	319.7	1,069.6
<i>Bumiputera</i>	1,440.1	1,731.0	-	311.2	1,932.9	-	271.0	1,003.2
<i>Non-Bumiputera</i>	278.3	285.1	-	22.6	203.2	-	48.7	66.4
Maritime <sup>2</sup>	-	-	214.0	-	-	111.8	-	-
<i>Shipping Industry</i>	-	-	118.4	-	-	55.3	-	-
<i>Shipyard Industry</i>	-	-	80.6	-	-	24.3	-	-
<i>Marine-related services</i>	-	-	15.0	-	-	32.2	-	-
Manufacturing <sup>2</sup>	-	-	234.5	-	-	122.0	-	-
<i>of which:</i>								
<i>High technology</i>	-	-	0.0	-	-	17.9	-	-
Others	443.9	517.4	0.0	0.0	0.0	7.6	0.0	201.2
<b>Total</b>	<b>2,162.3</b>	<b>2,533.5</b>	<b>448.5</b>	<b>333.8</b>	<b>2,136.1</b>	<b>241.4</b>	<b>319.7</b>	<b>1,270.8</b>

<sup>1</sup> Refers to data of former Bank Industri & Teknologi Malaysia Berhad

<sup>2</sup> Businesses of maritime and high-technology financing were transferred to Bank Pembangunan Malaysia Berhad effective October 2005 following the rationalisation exercise

Source: Bank Perusahaan Kecil & Sederhana Malaysia Berhad

**Table A.28**  
**Export-Import Bank of Malaysia Berhad**

Year of establishment	1995					
Objectives <sup>1</sup>	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.					
<b>Loans Facility</b>	Loans Outstanding (RM million)		Loans Approved (RM million)		Loans Disbursed (RM million)	
	As at end-2005	As at end-2006	2005	2006	2005	2006
Buyer credit facility	410.6	420.0	393.3	826.6	145.9	108.2
Overseas investment credit facility	659.1	560.7	215.8	695.2	160.1	215.2
Supplier credit facility	260.4	277.2	539.0	1,633.4	455.8	594.0
Export of services financing facility	-	-	-	-	-	-
Export credit refinancing	1,508.3	1,585.3	7,286.1	8,245.8	7,286.1	8,245.8
<b>Total</b>	<b>2,838.4</b>	<b>2,843.2</b>	<b>8,434.2</b>	<b>11,401.0</b>	<b>8,047.9</b>	<b>9,163.2</b>
<b>Guarantee and Insurance Policy</b>	Contingent Liabilities (RM million)		Business Coverage (RM million)			
	As at end-2005	As at end-2006	2005	2006		
Short-term Policies						
<i>Comprehensive policies</i>	369.0	319.0	1,577.0	1,759.0		
<i>Bank letter of credit policy</i>	46.0	56.2	103.0	175.0		
<i>Specific policies</i>	0.0	17.0	0.0	24.0		
<i>Bond indemnity support</i>	0.0	0.0	0.0	0.0		
<i>Others</i>	198.5	132.5	64.0	99.0		
Sub-total <sup>2</sup>	613.5	524.7	1,744.0	2,057.0		
Medium and Long-term Policies						
<i>Specific policies</i>	0.0	2.0	0.0	2.0		
<i>Buyer credit guarantee</i>	250.0	202.3	206.0	168.0		
<i>Bond indemnity support</i>	23.0	0.0	23.0	0.0		
<i>Overseas investment insurance</i>	11.0	11.0	12.0	12.0		
<i>Others</i>	96.5	133.5	0.0	0.0		
Sub-total	380.5	348.8	241.0	182.0		
<b>Total</b>	<b>994.0</b>	<b>873.5</b>	<b>1,985.0</b>	<b>2,239.0</b>		

<sup>1</sup> Effective 1 October 2005, the bank has been entrusted with a new and revised mandated role following the merger with Malaysia Export Credit Insurance Berhad (MECIB)

<sup>2</sup> Excluding Banker's export finance insurance policy

Source: Export-Import Bank of Malaysia Berhad

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**Table A.29**  
**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.					
<b>Deposits Accepted</b>	Deposits Accepted (RM million)					
	As at end-2005			As at end-2006		
	Members	Non-members	Total	Members	Non-members	Total
	828.3	18,717.4	19,545.7	903.4	21,781.4	22,684.8
<b>Direction of Financing</b>	Financing Outstanding (RM million)					
	As at end-2005			As at end-2006		
	Members	Non-members	Total	Members	Non-members	Total
Agriculture	45.7	14.9	60.6	43.7	13.2	56.9
Purchase of residential property	2,699.3	1,044.6	3,743.9	3,061.3	1,248.4	4,309.7
Purchase of non-residential property	101.3	288.7	390.0	83.2	348.0	431.2
General commerce	58.2	497.6	555.8	53.2	598.4	651.6
Purchase of securities	7.9	69.3	77.2	5.5	50.2	55.7
Purchase of motor vehicles	12.4	0.0	12.4	25.6	0.0	25.6
Consumption credit	8,734.4	2,860.1	11,594.5	11,466.9	2,631.2	14,098.1
Manufacturing	0.0	100.8	100.8	0.0	92.5	92.5
Others	0.0	295.1	295.1	0.0	688.9	688.9
<b>Total</b>	<b>11,659.2</b>	<b>5,171.1</b>	<b>16,830.3</b>	<b>14,739.4</b>	<b>5,670.8</b>	<b>20,410.2</b>

Source: Bank Kerjasama Rakyat Malaysia Berhad

**Table A.30**  
**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.	
<b>Deposits facility</b>	RM million	
	As at end-2005	As at end-2006
Savings deposits	882.6	440.1
Fixed deposits	6,823.7	7,496.1
GIRO deposits	4,262.5	4,571.9
Islamic deposits	265.0	472.6
Premium savings certificates	850.5	838.4
Others	0.9	1.2
<b>Total</b>	<b>13,085.2</b>	<b>13,820.3</b>
<b>Investments</b>	RM million	
	As at end-2005	As at end-2006
Quoted shares	1,208.8	909.0
Malaysian Government Securities	3,626.6	3,507.3
Private debt securities	1,319.4	960.4
Subsidiary companies	437.8	467.5
Associate companies	231.8	231.8
<b>Total</b>	<b>6,824.4</b>	<b>6,076.0</b>
<b>Direction of Lending</b>	RM million	
	As at end-2005	As at end-2006
Purchase of securities	11.0	9.2
Purchase of residential property	1,451.5	2,272.6
Purchase of non-residential property	39.1	49.7
Consumption credit	2,072.7	2,828.8
Others	587.3	493.8
<b>Total</b>	<b>4,161.6</b>	<b>5,654.1</b>

Source: Bank Simpanan Nasional

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**Table A.31**  
**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.					
<b>Agriculture, Forestry &amp; Fishery</b>	Loans Outstanding (RM million)		Loans Approved (RM million)		Loans Disbursed (RM million)	
	As at end		During the period		During the period	
	2005	2006	2005	2006	2005	2006
<b>Sub-sector</b>						
<i>Oil palm</i>	703.6	801.2	237.0	304.3	186.4	169.8
<i>Food crops</i>	428.4	461.5	110.3	148.3	85.8	134.3
<i>Livestock</i>	391.5	423.6	109.2	191.6	63.5	101.8
<i>Fishery</i>	308.4	317.8	67.3	108.5	42.5	56.2
<i>Forestry</i>	83.6	63.5	16.2	47.2	7.6	18.4
<i>Tobacco</i>	66.9	36.2	1.6	1.0	14.0	5.3
<i>Rubber</i>	39.7	51.8	16.6	22.9	8.5	23.5
<i>Others</i>	1,141.7	1,286.4	307.2	415.1	300.5	414.9
<b>Total</b>	<b>3,163.8</b>	<b>3,442.0</b>	<b>865.4</b>	<b>1,238.7</b>	<b>708.7</b>	<b>924.2</b>

Note: Numbers may not necessarily add up due to rounding

Source: Bank Pertanian Malaysia

**Table A.32**  
**Development Financial Institutions: Selected Data**

	As at end					
	2005			2006		
	Branch	ATM	Staff	Branch	ATM	Staff
<b>DFIs under DFIA<sup>1</sup>:</b>						
Bank Pembangunan Malaysia Berhad <sup>2</sup>	-	-	377	-	-	474
Bank Kerjasama Rakyat Malaysia Berhad	106	127	2,860	108	136	3,090
Bank Simpanan Nasional	390	616	5,098	379	628	4,918
Export-Import Bank of Malaysia Berhad <sup>3</sup>	-	-	160	-	-	180
Bank Pertanian Malaysia	186	142	2,628	184	146	2,657
Bank Perusahaan Kecil & Sederhana Malaysia Berhad <sup>3</sup>	15	-	678	16	-	792
Sub-total	697	885	11,801	687	910	12,111
<b>Other DFIs:</b>						
Malaysian Industrial Development Finance Berhad	8	-	332	8	-	352
Sabah Development Bank Berhad	-	-	81	-	-	84
Borneo Development Corporation (Sabah) Sendirian Berhad	-	-	13	-	-	13
Borneo Development Corporation (Sarawak) Sendirian Berhad	-	-	35	-	-	35
Credit Guarantee Corporation Malaysia Berhad	16	-	374	16	-	393
Sabah Credit Corporation	10	-	210	10	-	208
Lembaga Tabung Haji	120	-	1,601	125	-	1,612
Sub-total	154	-	2,646	159	-	2,697
<b>Total</b>	<b>851</b>	<b>885</b>	<b>14,447</b>	<b>846</b>	<b>910</b>	<b>14,808</b>

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

<sup>2</sup> Formerly known as Bank Pembangunan dan Infrastruktur Malaysia Berhad

<sup>3</sup> Refers to DFI after rationalisation effective 1 October 2005

**Table A.33**  
**Household Sector: Selected Indicators**

	2002	2003	2004	2005	2006 <sup>p</sup>
	RM million				
Household debt <sup>1</sup>	243,201	275,007	312,623	359,693	394,826
Household financial assets <sup>2</sup>	530,919	595,573	664,349	723,726	809,800
	%				
Household debt to GDP ratio	67.2	69.6	69.4	72.6	72.3
Household financial assets to debt ratio	218.3	216.6	212.5	201.2	205.1
Household banking system NPL ratio	9.5	8.7	8.1	7.8	7.1

<sup>1</sup> Comprises household loans outstanding in banking system, Bank Simpanan Nasional, Bank Kerjasama Rakyat Malaysia Berhad, insurance companies and Treasury Housing Loans Division

<sup>2</sup> 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

<sup>p</sup> Preliminary

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



## Financial Stability and Payment Systems Report 2006

**Table A.34**  
**Basic Payments Indicator**

Items	2002	2003	2004	2005	2006
Population (million)	24.5	25.3	25.9	26.4	26.9
GDP (RM million)	362,012	395,170	450,152	495,239	546,343
Cash in circulation (RM million)	23,896.8	26,101.4	28,617.0	30,177.6	33,542.7
Volume of transactions (unit)					
<b>Per capita:</b>					
Cheques	7.9	7.7	7.7	7.6	7.5
Credit card	5.2	5.8	6.4	7.0	7.8
Charge card	0.3	0.3	0.3	0.2	0.2
Debit card	...	...	0.1	0.1	0.1
E-purse <sup>1</sup>	3.1	7.6	10.8	13.8	16.0
Interbank GIRO	...	0.1	0.1	0.4	0.7
FPX <sup>2</sup>	-	-	...	...	...
Internet banking	0.1	0.3	0.5	0.7	1.0
Mobile banking	n.a.	n.a.	n.a.	...	...
Value of transactions (RM)					
<b>Per capita:</b>					
CIC	974.3	1,030.9	1,106.6	1,144.0	1,246.5
Cheques	48,699.8	49,855.1	52,451.1	51,467.0	53,584.9
Credit card	1,031.7	1,159.6	1,348.6	1,550.1	1776.5
Charge card	73.1	74.9	78.8	78.7	81.9
Debit card	3.0	3.5	6.4	9.9	15.2
E-purse <sup>1</sup>	9.2	22.4	28.4	36.9	41.5
Interbank GIRO	192.7	294.5	544.5	997.3	1,700.2
FPX <sup>2</sup>	-	-	0.1	0.5	0.9
Internet banking	82.4	392.6	552.3	705.1	1,059.4
Mobile banking	n.a.	n.a.	n.a.	0.2	0.3
<b>Percentage of GDP (%):</b>					
CIC	6.6	6.6	6.4	6.1	6.1
Cheques	330.0	319.4	301.3	274.2	263.9
Credit card	7.0	7.4	7.7	8.3	8.7
Charge card	0.5	0.5	0.5	0.4	0.4
Debit card	...	...	...	0.1	0.1
E-purse <sup>1</sup>	0.1	0.1	0.2	0.2	0.2
Interbank GIRO	1.3	1.9	3.1	5.3	8.4
FPX <sup>2</sup>	-	-	...	...	...
Internet banking	0.6	2.5	3.2	3.8	5.2
Mobile banking	n.a.	n.a.	n.a.	...	...

<sup>1</sup> Touch n' Go and MEPS Cash only

<sup>2</sup> Financial Process Exchange, an Internet based payment platform

n.a. Not available

... Negligible

**Table A.35**  
**Usage of Various Cashless Payments: Volume of Transactions**

System/Instruments	2002	2003	2004	2005	2006
	Million				
RENTAS <sup>1</sup>	1.7	1.8	1.9	2.1	2.3
IFTS	1.6	1.7	1.8	1.9	2.1
SSTS	0.1	0.1	0.1	0.2	0.2
Cheques	192.9	195.1	200.2	199.9	201.2
<i>Payment cards:</i>					
Credit card	127.0	146.3	164.5	184.5	208.8
Charge card	7.5	7.5	6.6	6.2	5.9
Debit card	1.0	1.2	1.6	2.1	2.7
E-purse	75.0	192.4	279.3	364.5	431.6
<i>Other systems:</i>					
Interbank GIRO	0.6	1.3	3.7	10.4	18.7
FPX	-	-	...	...	...
ATM network <sup>2</sup>	n.a.	n.a.	n.a.	0.8	0.8

<sup>1</sup> Real time gross settlement system - with two subsystems i.e. Interbank Funds Transfer System, and Scripless Securities Trading System

<sup>2</sup> ATM transactions consist of bill payments and share application transactions

n.a. Not available

... Negligible

**Table A.36**  
**Usage of Various Cashless Payments: Value of Transactions**

System/Instruments	2002	2003	2004	2005	2006
	RM billion				
RENTAS	12,091.4	13,370.6	17,872.6	19,314.7	24,974.5
IFTS	11,568.9	12,691.7	16,545.5	17,606.2	22,804.6
SSTS	522.5	678.9	1,327.1	1,708.5	2,169.9
Cheques	1,194.5	1,262.3	1,356.4	1,357.7	1,442.0
<i>Payment cards:</i>					
Credit card	25.3	29.4	34.9	40.9	47.6
Charge card	1.8	1.9	2.0	2.1	2.2
Debit card	0.1	0.1	0.2	0.3	0.4
E-purse	0.2	0.6	0.7	1.0	1.1
<i>Other Systems:</i>					
Interbank GIRO	4.7	7.5	14.1	26.3	45.8
FPX	-	-	...	...	...
ATM network	n.a.	n.a.	n.a.	3.7	2.0

n.a. Not available

... Negligible

## Financial Stability and Payment Systems Report 2006

**Table A.37**  
**Payment and Securities Transfer Instructions Handled by RENTAS: Volume of Transactions**

Systems	2002	2003	2004	2005	2006
	('000)				
IFTS <sup>1</sup>	1,599.7	1,728.9	1,797.0	1,881.3	2,065.8
Money market operations	103.6	93.9	101.3	93.1	103.2
Foreign exchange settlement	14.4	13.3	15.7	20.2	31.1
Customs payment	101.3	103.3	91.0	82.8	62.4
Others <sup>2</sup>	1,380.4	1,518.4	1,589.0	1,685.2	1,869.1
SSTS <sup>3</sup>	88.4	103.4	123.9	158.0	160.4

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

<sup>2</sup> Others include third party payments

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

**Table A.38**  
**Payment and Securities Transfer Instructions Handled by RENTAS: Value of Transactions**

Systems	2002	2003	2004	2005	2006
	RM billion				
IFTS	11,568.9	12,691.7	16,545.5	17,606.2	22,804.6
Money market operations	4,908.0	4,955.8	6,912.8	7,354.4	10,576.4
Foreign exchange settlement	416.8	441.0	920.2	1,262.4	1,451.5
Customs payment	2.8	2.6	2.2	2.6	2.3
Others	6,241.3	7,292.3	8,710.3	8,986.8	10,774.4
SSTS	522.5	678.9	1,327.1	1,708.5	2,169.9

**Table A.39**  
**Number of Payment Machines and EFTPOS Terminals**

Terminals	2002	2003	2004	2005	2006
	Unit				
ATM	4,213	4,396	4,981	5,853	6,056
CDM <sup>1</sup>	n.a.	1,584	1,657	2,535	2,906
EFTPOS terminals:					
Credit card	n.a.	n.a.	n.a.	84,751	102,871
Debit card <sup>2</sup>	n.a.	n.a.	n.a.	n.a.	26,055
Touch n' Go	267	486	1,516	1,670	1,744
MEPS Cash	866	12,828	16,019	16,452	25,491

<sup>1</sup> Include cash and cheque deposit machines

<sup>2</sup> Domestic e-debit only

n.a. Not available

**Table A.40**  
**Number of Payment Cards**

Cards	2002	2003	2004	2005	2006
	('000)				
Credit card	4,357.2	5,098.0	6,583.0	7,815.5	8,833.0
Charge card	342.1	305.6	283.6	241.4	268.3
Debit card <sup>1</sup>	n.a.	2,825.4	10,237.2	15,676.7	18,595.1
E-purse <sup>2</sup>	n.a.	n.a.	4,230.0	5,660.0	6,494.0

<sup>1</sup> Include international brand debit card and domestic e-debit

<sup>2</sup> Touch n' Go cards only

n.a. Not available

**Table A.41**  
**Usage of Internet Banking<sup>1</sup>**

Items	2002	2003	2004	2005	2006
No. of subscribers ('000)	1,025.5	1,742.8	2,016.4	2,522.3	3,162.4
Volume of transactional hits ('000)	2,990.6	8,573.4	13,956.5	18,583.2	27,727.4
Value of transactional hits (RM million)	2,020.7	9,940.4	14,282.4	18,600.5	28,507.8

<sup>1</sup> Individual subscribers only

**Table A.42**  
**Usage of Mobile Banking<sup>1</sup>**

Items	2002	2003	2004	2005	2006
No. of subscribers ('000)	n.a.	n.a.	25.7	127.6	246.7
Volume of transactions ('000)	n.a.	n.a.	n.a.	391.8	849.2
Value of transactions (RM'000)	n.a.	n.a.	n.a.	4,455.5	7,509.9

<sup>1</sup> Individual subscribers only

n.a. Not available

**Table A.43**  
**Number of System's Participant and Instrument Issuer**

Items	2002	2003	2004	2005	2006
	Unit				
RENTAS	55	54	52	55	53
<i>Banks</i>	54	53	48	50	48
<i>Non-banks</i>	1	1	4	5	5
Credit card	19	19	18	19	18
<i>Banks</i>	18	18	17	17	16
<i>Non-banks</i>	1	1	1	2	2
Debit Card					
<i>Banks</i>	8	9	13	13	13
Charge card	5	5	5	5	6
<i>Banks</i>	1	1	1	1	3
<i>Non-banks</i>	4	4	4	4	3
Prepaid card					
<i>Banks</i>	-	-	-	1	2
E-money					
<i>Non-banks</i>	3	4	5	7	11
Internet banking					
<i>Banks</i>	12	13	14	14	16
Mobile banking					
<i>Banks</i>	1	3	4	5	6
FPX					
<i>Banks</i>	-	-	4	5	11
<i>Merchants</i>	-	-	5	15	66
Interbank GIRO					
<i>Banks</i>	13	14	13	17	16