



Payment Systems Report

Payment and Settlement Systems

107	Reinforcing Oversight
107	Designated Payment Systems
109	Public Confidence in Retail Payment Systems
111	Oversight Over Remittance Service Providers
111	Migration to Electronic Payments
115	Moving Forward

Payment and Settlement Systems

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

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

Reinforcing oversight

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

establishment of MyClear, paves the way for more effective surveillance, independent assessment and monitoring of risks in the major payment systems.

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

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

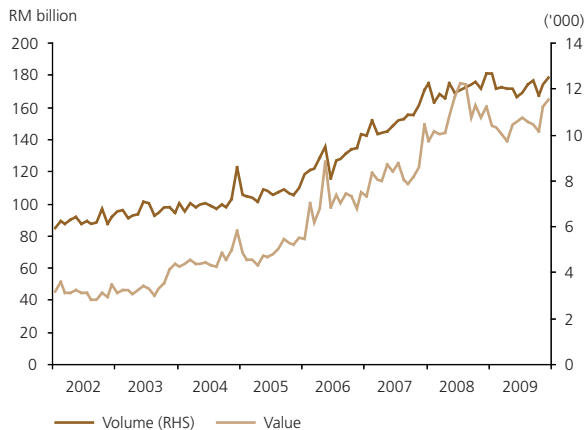
MyClear had conducted its first self-assessment on eSPICK and its operations against the Bank for International Settlements (BIS) Core Principles for Systemically Important Payment Systems (CPSIPS). The objective of the exercise was to assess the level of compliance with the relevant CPSIPS and identify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

Designated payment systems

RENTAS

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

Chart 4.1
Daily Average of RENTAS Transactions
by Value and Volume



Source: Bank Negara Malaysia

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

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

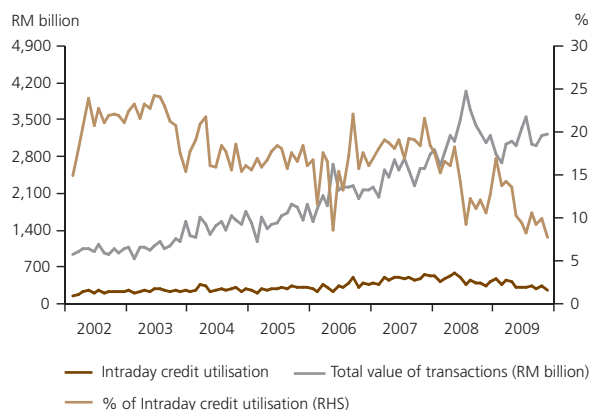
The value of foreign exchange (FX) settlements in 2009 fell by almost half of that in the previous year with a transaction amount of RM1.9 trillion. The transaction volume however recorded a marginal decline of 5% to 64,628 transactions in 2009 from 68,039 transactions in 2008. In 2009, a total of RM1.2 trillion of FX trades were settled through the

Payment versus Payment (PvP) link established between RENTAS in Malaysia and USD Clearing House Automated Transfer System (USD CHATS) in Hong Kong in 2006 to mitigate ringgit and US dollar FX settlement risk. This accounts for 63.5% of the total FX trades, resulting in a significant reduction in FX settlement risk of ringgit-US dollar trades. On a daily basis, an average of RM4.8 billion was settled via the link in 2009.

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

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

Chart 4.2
Intraday Credit Usage



Source: Bank Negara Malaysia

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

National Electronic Cheque Information Clearing System (eSPICK)

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

Operational risk and business continuity

In its effort to mitigate operational risk to ensure minimal disruption in its operations, MyClear and its RENTAS and eSPICK members continued to undertake business continuity testing throughout the year taking into consideration the possibility of facing a wide range of contingencies. The regular testing of infrastructure and readiness using plausible scenarios seeks to ensure that the likelihood of operational risk events is low and to enable users to undertake the preparations necessary to address the likely impact should the event occur. MyClear had also successfully conducted an industry-wide Disaster Recovery (DR) live run in December 2009, on a coordinated basis, in which, all participants were required to operate from their respective DRCs and connect to RENTAS and eSPICK host system at the Bank's DR site. The exercise completed smoothly, without any problems pertaining to the readiness of MyClear and RENTAS and eSPICK

participants' DR sites. RENTAS system live run was also successfully conducted for the PvP link in conjunction with the Hong Kong Interbank Clearing Limited's (HKICL) annual clearing contingency drill in October 2009. This exercise was to ensure the readiness of the connectivity between MYR Cross Currency Payment Matching Processor (CCPMP) client at the Bank's DR site and the MYR CCPMP server at HKICL's DR site.

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

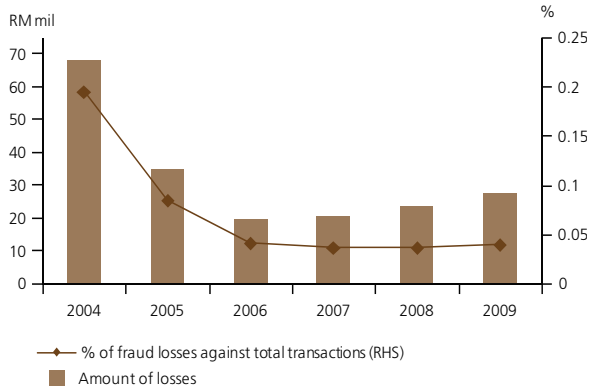
Public confidence in retail payment systems

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

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

Chart 4.3
Credit Card Fraud



Source: Bank Negara Malaysia

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

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

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

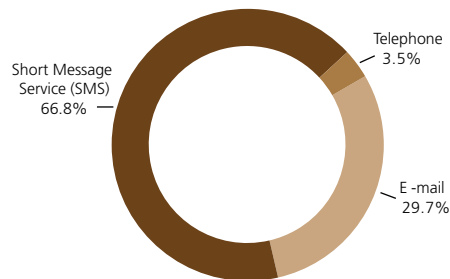
Similar fraud trends were observed across the globe, particularly within the Asia Pacific region. In this regard, collaborative efforts have

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

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

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

Chart 4.4
Channels Used in Phishing Cases



Source: Bank Negara Malaysia

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

Oversight over remittance service providers

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

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

The focus of the Bank's oversight over the remittance industry was directed towards ensuring the reliability and integrity of the remittance service providers and that these services are not used as a conduit for money laundering and terrorism financing. In this regard, the Bank conducts oversight and on-site examination to ensure compliance with the prudential requirements, which among

others, include the governance structure, financial strength, remittance system reliability, daily transaction limit, disclosure of underlying information related to the services provided, management of customers' accounts and 'fit and proper' criteria for shareholders and directors.

Migration to electronic payments

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

Study on payment preferences and usage in Malaysia

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

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

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

Government sector

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

The Bank will continue to actively participate in the various working groups established by the Government to support its efforts towards having more Government agencies to offer e-payments. This includes facilitating the provision of online services and e-payment facility that offers higher value proposition to the public than undertaking transactions via the traditional paper-based way. In creating awareness and encouraging change of payment habits, the offering of online services and e-payments is complemented by awareness and promotional campaigns participated by

the banking institutions under the "myBayar" banner. Based on the feedback received from the public, Internet banking is the preferred channel in making payments to the Government. The preference for Internet banking is understandable as it offers a secure, convenient, easy-to-use channel for banking and payment transactions. Thus, intensifying promotional activities for this channel would offer significant potential towards adoption of higher online payments to the Government sector. In addition, the public found television and radio advertisements more effective than the print media.

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

Securities sector

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

Recognising the enormous benefits for both stockbroking companies and investors and the operational efficiency gains for the capital market, the mandatory requirement for stockbroking companies to provide e-Share Payment options for clients to receive and make payments on share transactions and for all

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

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

Transit sector

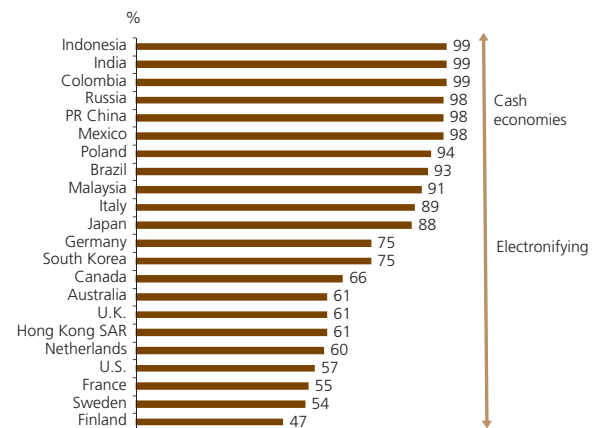
Apart from the Government sector and securities industry, the Bank also collaborated with the Department of Railways Malaysia, TnG and the railway operators to increase the efficiency of making payments at the rail transit sector. Measures taken to provide greater convenience to commuters to adopt the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

Trends in retail payments

Cash and cheques

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

Chart 4.5
Share of Cash Transactions



Source: McKinsey Global Payments Map 2009

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

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

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

Mobile Payments in Malaysia

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

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

Payment cards and e-money

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

E-money accounts for about 51% of non-cash transactions in the economy. 717.2 million

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

E-channels and other electronic funds transfer systems

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

Banking and payment transactions performed through the mobile phone channel remained low. Mobile banking subscribers increased marginally from 0.5 million to 0.6 million in 2009, accounting for only 2.1% of total mobile phone subscribers as at the end of 2009. Transactions conducted were mainly business-to-business payments by corporate subscribers, which amounted to RM78.2 million or 56% of the total mobile banking transaction value. In terms of payments using the mobile phone, 3.9 million transactions amounting to RM78.2 million were recorded in 2009. The penetration rate for mobile payment subscribers remained low at 1.6% of

total mobile phone subscribers in 2009. Mobile contactless payments using the NFC technology was introduced in 2009, which allow users to make payments by waving the mobile phone on the contactless readers. While this is an attractive proposition, its usage is highly dependent on the availability of mobile phones with NFC capability. A working group to be chaired by the Bank and participated by MCMC, mobile network operators, MEPS and financial institutions would be established to develop a successful mobile ecosystem to provide the necessary impetus for mobile payments in Malaysia.

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

Moving forward

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

It is also timely that the central banks in the region work collectively in enhancing liquidity crisis management. Among the many lessons learned from the credit crisis in 2007 was the significant importance of having an effective

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

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

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