Chapter 11

THE DEVELOPMENT OF E-PAYMENTS AND CHALLENGES IN VIETNAM

by

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1. Overview of E-payment in Vietnam

1.1. A Cash-based Society

The development of Vietnam’s banking system has largely been affected by the dominance of cash. In Vietnam, cash is “king” since the bulk of personal consumption is done through the medium of cash. For corporations in particular, this has resulted in the problems of cost and delay, arising from the counting, bundling, transporting and depositing of large volumes of cash, as well as the risk and inconvenience of dealing with counterfeiting and the treatment of damaged notes.

Of a total population of 84 million, less than 10 percent are estimated to be using bank services regularly and less than 30 percent have savings with banks. The payment system is functional, but technically not very developed due to inadequate payment infrastructure and unavailability of products and services. Cash remains as the main method of payment especially among individuals despite a fall in M2/GDP from 20.3 percent in 2004 to 17.2 percent in 2006. Although the number of individual accounts jumped from 2 million to around 8 million in the last 3 years, the account users are mainly high-income earners in urban areas or in large companies.

The State Bank of Vietnam (SBV) has made efforts to reduce the volume of cash payment transactions. However, a major problem is that less than 10 percent of Vietnam’s population of 84 million has personal bank accounts. One of the reasons is the lack of access to banks. While all the large banks have expanded their networks to most major cities, they have fewer branches in the provinces outside of Ho Chi Minh City and Hanoi, where most of the country’s

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commercial activities are based. Also, traditionally, most average citizens prefer to keep cash and gold at home, or in a form of lending to relatives or close associates, rather than use a bank account. While the number of bank accounts is growing rapidly, it is estimated that as much as US$10bn (22 per cent of the country’s GDP) is in savings outside the banking system. With the dominance of cash, cheques are not popular in Vietnam (only under one percent of total payment instruments).

1.2 E-payment Systems

1.2.1 Inter-bank Payment System (IBPS)

The system became operational in May 2002 and runs in parallel with the current semi-automated clearing system. Transactions can be sent among members within eight seconds. However, this system has not yet reached a 100 percent Straight Through Processing (STP) rate, and its coverage remains limited to only five cities/provinces (Hanoi, Hai Phong, Da Nang, Ho Chi Minh City and Can Tho).

The inter-bank electronic payment system is composed of two sub-systems: High Value Sub-system (HVTS), the RTGS for large-amount remittances on a gross basis, and Low Value Sub-system (LVTS) for small-amount remittances on a net basis. This system is based on the Korean Inter-Bank Payment System (KIPS), and was developed by Hyundai Information Technology. Remittances of 500 million dong (US$33,000) or more are handled by HVTS, while LVTS is for remittances of less than 500 million dong.

If there are sufficient balances in the SBV settlement accounts of member banks, funds are immediately transferred via HVTS. If account balances are insufficient, the remittance instructions are stored in a system queue. They will be sequentially processed when account shortfalls are replenished.

Small-amount payment instructions sent by member banks via LVTS are balanced out on a net basis, and at the end of business hours, SBV executes net balance payments via transfers of settlement accounts.

There are provincial payment centers (PPC) in charge of intra-province payments in rural regions. Individual banks transmit inter-province payments to the National Processing and Settlement Center, through which they are re-sent to member banks.
PPCs have installed the electronic payment system in six locations, to process the remittances of five cities: Hanoi, Ho Chi Minh, Haiphong, Danang, and Can Tho.

Intra-province payments are estimated to account for 75–85 percent of all remittances. The rest are inter-province payments handled by National Payment Processing Center (NPSC). The IBPS was designed to process 4,500 transactions per day but now execute more than 25,000 transactions. In addition, the system was initially set up to link seven member banks but now the number of participants is more than 74.

1.2.2 Electronic Clearing System

The system was designed to replace the legacy paper-based clearing system and has been in operation since 2002. It looks like a semi-automated clearing where each provincial branch of SBV plays the role of regional clearing house for intra-province inter-bank transactions. There are now 58 provincial clearing houses in Vietnam. However, the introduction of the IBPS has reduced the relative importance of electronic clearing system owing to the speed, security and convenience of the IBPS.

1.2.3 Card Payment System

Card payment system was first introduced in 1993, yet remained underdeveloped until recently. There are now 29 card issuers and more than 40 card correspondent banks. As of October 2007, the country has approximately 4,280 ATMs, approximately 23,000 point of sale (POS). Banks have issued 8.3 million domestic and international payment cards with an average annual growth rate of more than 100 percent for the last few years. There are two stand-alone card alliances: Vietcombank and VNBC and one switching company called Banknetvn which provides switching services for card issuers.

1.3 E-payment Products

1.3.1 Credit/Debit cards

Credit cards have been introduced in 1996 by several leading local banks. As of April 2007, around 20,000 merchants, including restaurants, retailers, hotels and supermarkets, accept credits cards. Recent years have witnessed the phenomenal growth of debit cards as local banks are seeking to attract customers via this versatile payment instrument. Although introduced after credit cards,
debit cards still dominate credit cards, accounting for more than 95 percent of total cards. However, the latter is expected to be more popular with the increased income from young population and a change to loan financed consumption.

There are currently about 4,280 ATMs in Vietnam, but there are only about 8.3 million cards because the number of retail bank accounts is still small compared to the population. These numbers show that with nearly 20,000 inhabitants per ATM machine and 8.3 million cards out of population of 84 million, Vietnam has lowest ATM penetration rate as well as huge potential for card service expansion.

Although the establishment of ATM networks in recent years has encouraged more individuals to open and use bank accounts with domestic banks, the ATM networks are all proprietary, not shared networks. This has significantly limited the users’ access.

1.3.2 Credit Transfer/ Direct Debit

Bank credit transfer is the most efficient payment method in Vietnam and is preferred by most corporations. With the semi-automated clearing system of the SBV, the electronic banking systems developed by local banks and the IBPS, transfers can be effected in one or two working days - a marked improvement compared to a few years ago when it took at least two to three working days to effect an inter-provincial payment.

1.3.3 Internet Banking

The past few years have witnessed the early development of Internet banking in Vietnam. The boom of the ICT sector and the introduction of IBPS have accelerated this modern payment method in Vietnam. Foreign banks are understandably active players in this new area but their Internet banking is only offered to corporate customers. Some local banks have developed some simple operations of Internet banking, such as online account query, online bill paying, and intra-bank credit transfer. However, due to underdeveloped payment infrastructure (lack of Automated Clearing House, absence of certification authority), more advanced Internet banking operations, such as online inter-bank credit transfer, online shopping using local bank cards, are non-existent.
1.3.4 Mobile Banking

Although mobile phones are quite popular in Vietnam with more than ten millions users, mobile banking is still at the early stage of development. Seeing the huge potential of mobile banking, some active bankers have teamed up with several largest operators to explore this market segment. For example, Vietcombank’s menu and SMS-based system offers customers the ease of using their mobile phone to pay for telephone bill, Internet bill or even top-up their mobile phone prepaid account.

1.3.6 Phone Banking

This type of banking is not popular in Vietnam. This is understandable given that international standard contact centers are not available at most of the local banks and Vietnamese prefers banking in person with bank officers.

1.3.6 E-Money and Prepaid Card

Up to now, e-money in Vietnam is only in the form of single purpose use card. These cards such as call cards, Internet cards and mobile phone prepaid cards are very popular in the telecommunication sector.

Compared to credit/ debit cards, prepaid cards is still a new concept in Vietnam. Banks are not very interested in the type of card due to small customer base and limited use. Only one of the biggest local banks has offered the so-called Prepaid Visa BOPO card targeted to tourists and travelers.

2. Costs and Benefits of E-payment

The huge benefits to the Vietnam’s economy brought by e-payment are undisputable. Especially, over the past five years, the IBPS has made great contribution to the development of e-payment in Vietnam by creating the backbone for the Vietnam’s payment system. Specifically:

- SBV manages in a timely manner the commercial banks’ reserves via their central account at the central bank, increasing the flows of funds and reducing the amount of floating funds.
- The IBPS provides a secure and reliable clearing and settlement system for stimulation of economic development.
• The IBPS integrates with commercial banks’ internal payment systems for the convenience and speed of payment services.

As in other countries, electronic payments in Vietnam promote economic growth by providing such fundamental benefits as:

• Increasing levels of security and consumer empowerment owing to secured automated payment system and a wide range of payment options.
• Greater economic transparency via channeling the large amount of floating funds in the public and state budget’s financial transactions through the banking system.
• Widened participation in the banking system given that only 10 percent of population has bank accounts.

In the banking sector, electronic payments are found to benefit commercial banks by extending bank customer base; reducing operating costs; enhancing customer service and improving banks’ competitive advantage. For example, some proactive banks have considered cards as the strategic products to broaden their customer base, cut down paper-work, invoices and cashier’s service, and build competitive advantage over other banks without card products.

In Vietnam, the following shortcomings related to e-payment are also found:

• High investment cost of ATM, POS devices for local banks given their small capital base (on average less than US$200 million).
• As of 2007, the majority of the local banks’ ATM/ POS networks are not shared and the card alliances are not linked, resulting in inefficient use of payment infrastructure, high cost of operation for banks and inconvenience for bank clients.
• Inadequate network infrastructure given the increasing customer’s transactions has some time made the ATM network overloaded, especially peak hours and holidays. Since a majority of card transactions via banks’ ATM network are cash withdrawals, the cash replenishment and machine maintenance cause operational difficulties for these card issuers.
• Although the infrastructure for the ATM network has been considerably improved over the past few years, the ATM network is still unreliable due to electricity cut-off and communication failures which are beyond the control of the ATM network operators.
• The ATM network and POS network are only available at the big cities or urban areas whereas the rural area where more than 70 percent of the population resides is still uncovered.
3. The Perceived Attitude of the Public

Since Vietnam is basically a cash-society with cash making up more than 90 percent retail payments, the preference to cash over e-payment is a fact. However, the attitude of the public towards e-payment has been very encouraging over the past few years with the boom of bank cards (ATM/Debit/Credit), the expansion of ATM and POS network. The habit of card usage for payment has been established in some big cities like Hanoi or Ho Chi Minh City. For example, according to Vietcombank estimate, its card payment amount in 2005 is just one percent of the total transaction amount in contrast of 99 percent for cash withdrawals. However, as of July 2007, the number has risen to 15 percent. Although other forms of e-payment like Internet banking or mobile banking are only at primitive stages, these modern payment instruments are expected to boom in the near future given Vietnam’s young population (65 percent population is in the labor force) and the increasing number of Internet and mobile phone users in the up-coming years.

However, the public is still concerned about the security and convenience of e-payments due to card frauds, unreliable and unevenly distributed ATM network and bank staff’s moral hazards.

4. The Existing Structure of E-payments

E-payments in Vietnam can be construed as operating outside the general wholesale payment systems. E-payment systems, excluding the IBPS - the system for high-value inter-bank transactions, are generally working within the framework of each commercial bank’s internal system and are not integrated into the IBPS. For example, as for ATM networks of banks, there are two alliances in Vietnam now, if the buyer and the seller have bank accounts at different banks or alliances, credit transfers using ATMs will not be conducted.

Currently, retail e-payment initiatives most come from individual banks, payment gateway operators and mobile phone operators. However, there are concerted efforts by the State Bank of Vietnam, commercial banks to create a unified national switch for retail payments. For the large-value payments, SBV is implementing Phase II of IBPS with a view to create a solid payment infrastructure for all commercial banks operating in Vietnam and have wider coverage.
5. Contributing Factors to the Promotion of E-payments

Some of the noticeable factors for the development of e-payments in Vietnam are the introduction of the IBPS that lays the foundation for the payment infrastructure and helps commercial banks accelerate the payment speed (from weeks to just intra-day) and improve the customer service and convenience.

The other major factor is the application of modern core banking in commercial banking activities. Eighty percent of local banks have successfully deployed core banking in their day-to-day operations. The remaining banks have also considered the deployment of modern core banking to close the gap with other banks. Based on the core-banking, local banks have offered a range of e-payment products, such as SMS banking, mobile banking, Internet banking, ATM card, credit card, etc.

6. Obstacles to E-payment Innovations

6.1 Legal Framework

Inadequate legal framework in the payment system and payment instrument has long been considered one of the main hindrances for the progress of e-payment innovations. Although some laws and regulations such as Law on Electronic Transactions (2005) and Decree on Banking Electronic Transactions (2007) related to e-payments have been promulgated recently, they are still not enough to regulate the fast-changing e-payment area. Some new areas like e-money, mobile banking and Internet banking, payment gateway are generally loosely regulated. In addition, regulations on the payment system and the standardisation of e-payment instruments, especially on e-money/prepaid cards are not complete.

6.2 Technology Infrastructure

The absence of Certification Authority (C.A) is one of the identified obstacles for the promotion of e-commerce, in general, and e-payment, in particular. However, the State Bank of Vietnam is trying to establish one C.A for the banking sector.

Up to now, ACH (Automated Clearing House) is non-existent in Vietnam. This problem causes a lot of difficulties for the electronic clearing of cheques and other small-value transactions (credit transfers, direct debits, ATM transactions, etc).
6.3 Attitude Towards Payment

As mentioned above, the rooted habits of cash usage have made it difficult for the promotion of e-payments. However, with the expansion of banking branches, ATM/POS network and other forms of convenient e-payments such as internet banking and mobile banking, this situation will be changed for better in the up-coming years.

7. Impact of E-payment on Central Banking Functions

7.1 Effects of Modern Inter-bank Payments on Financial Policy

The introduction of the inter-bank electronic payment system has affected Vietnam’s financial markets. This modern system enables banks to quickly send and receive funds, contributing to the reduction of unnecessary short-term borrowing. Some sources report that the IBPS makes a contribution to slowing the increase of short-term interest rates in Vietnam’s money markets.

According to statistics, from 02/05/2002 to 30/04/2007, the IBPS has completed 14,494,240 transactions with VND 10,742,000 billion. The number of transactions average 25,000, with a total value of VND 23,000 billion per day. The peak number of transactions is 40,000 per day with a total value of approximately VND 44,000 billion. Over the past five years, on yearly basis the IBPS has witnessed phenomenal growth in volume and amount, 54 percent and 67 percent, respectively.

Figure 1
Inter-bank Payment System: Transactions and Volume

<table>
<thead>
<tr>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of Trans</td>
<td>Amount (Billion VND)</td>
<td>No of Trans</td>
<td>Amount (Billion VND)</td>
<td>No of Trans</td>
</tr>
<tr>
<td>514,950</td>
<td>283,100</td>
<td>1,788,252</td>
<td>989,302</td>
<td>2,633,719</td>
</tr>
</tbody>
</table>

7.2 The Degree of Impact of E-payment Innovations

E-payments (debit/credit card, e-money, e-banking, internet payment) for small-value transactions make an insignificant impact on the seigniorage and monetary policy currently in Vietnam. This is because e-payment usage is still in the embryonic stage; their volume and transactional amount are miniscule compared to those of cash.
The following statistics may validate the above suggestion.

However, as e-payments make progress, the importance of cash is on the decline. Over the past three years of e-payment boom, the proportion of cash in circulation has shown marked decline.

### Table 3
#### Cash in Circulation

<table>
<thead>
<tr>
<th>Year</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
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<tr>
<td>M2/GDP (%)</td>
<td>22</td>
<td>20.3</td>
<td>19.1</td>
<td>17.2</td>
</tr>
</tbody>
</table>
7.3 E-payment Risk

Malfunctioning IT systems and telecommunication failures, categorised as operational risk, are the usual source of problems affecting local banks’ ATM network. This is because the local banks have not possessed their own solid IT infrastructure and the telecommunication network, which is owned and operated by Vietnam Post and Telecommunication, does not ensure 100 percent fault-free operation.

Card frauds have occurred in Vietnam for over the past few years. The most popular type of fraud is stealing a card holder’s data to make counterfeit cards and withdraw money from ATMs. The risk of card frauds is bigger since the local banks are not ready for mitigation to EMV chip cards.

Security is another problem for the local banks although they have not been fully exposed to the electronic banking environment. Recent reports from a local security firm shows that 8 out of 26 Vietnam’s commercial bank websites are subject to critical security threats which might allow hackers to change the banks’ website content or take control over the database.

In conclusion, banking security will be the main concern for Vietnam’s financial institutions in the up-coming years given that most of the banks are trying to expand electronic distribution of financial services in the context of banking security expertise shortage.

8. Policy Responses to E-payments

8.1 General View of State Bank of Vietnam Regarding the Development of E-payments

The view of the State Bank of Vietnam on development of e-payments can be implied from the wording of the Masterplan on Banking Sector Development, Period 2006-2010 with Vision to 2020. This document emphasises the promotion of non-cash payment for the replacement of cash, ensuring the safety, convenience and efficiency of payment systems and non-cash payment instruments. This view is also clearly demonstrated in the content of Development of Non-cash Payment Project approved by the Prime Minister where the State Bank of Vietnam is the main co-ordinator in cooperation with other ministries, including the Ministry of Finance, Ministry of Industry and Commerce, and Ministry of Planning and Investment. Some of the main guidelines for the
development of non-cash payment with e-payment as the main driving force are
pointed out as follows:

- Non-cash payment development should be in line with the development of
  the economy, technology infrastructure and payment systems.
- The development should ensure the balance of mutual interest among society,
  payment service users and service providers.
- Measures for e-payment promotion should be incentive-based and state
  budget resource should be used for the strategically important systems as
  the main catalyst.
- Development of retail payment and settlement systems on the principle that
  encourages the involvement of the private sector in these systems through
  capital contribution and/or operational management.

The adoption of the international standards and best practices in the
development of e-payments are also pursued and encouraged by the State Bank
of Vietnam. For the next-generation of e-payments including mobile payment
and Internet payment, the State Bank of Vietnam will play the role of improving
the current legal framework and issuing new regulations for the healthy
development of these instruments.

8.2 Recent Policies Regarding E-payments

The Law on Electronic Transactions (2005) lays a solid legal framework
for electronic transactions in general and electronic payment activities in
particular. This Law has officially recognised the legal proof of electronic
messages, agreements and signatures. On this basis, a Government Decree on
Banking Electronic Transactions has been promulgated in 2007 to accommodate
electronic transactions in the banking sector.

New regulations on the card-issuing business have recently been issued to
meet the requirements of this fast-changing environment.

However, the most significant policy directly related to the e-payment area
should be the masterplan, Development of Non-cash Payment in Vietnam, Period
2006-2010 with vision 2020, approved by the Prime Minister in December 2006.
It set specific goals within five years in terms of number of cards issued, network

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2. (i) Decision No. 20/2007/QD-NHNN dated 15/05/2007 on bank card’s issuance, settlement, usage
and third-party service for bank card business; (ii) Decision No. 38/2007/QD-NHNN dated 14/
coverage, number of bank accounts and proportion of cash out of total payment instruments, etc. Towards these ends, the State Bank of Vietnam considers the improvement of the legal framework as well as the development and consolidation of important payment systems as the top priorities.

9. Future Direction of E-payments

9.1 SBV's Contribution to the Advancement of E-payment Systems

SBV makes contribution in the promotion of e-payments in three aspects. First, by issuing regulations on e-payments in the banking sector, SBV assures commercial banks on the soundness of the legal framework regarding e-payments and future direction of e-payment development. Second, as the reliable operator of the most important IBPS payment system, SBV lays the unified payment system infrastructure for the banking sector, encouraging commercial banks in deploying their own e-payment system based on this backbone system.

And finally, as the catalyst factor in the e-payment promotion, SBV encourages the interconnection among fragmented card alliances and development of modern e-payment such as mobile banking and Internet banking.

9.2 Expected Challenges and Problems

Development of modern e-payments such as mobile banking and Internet banking is expected to accelerate in the upcoming years since the potential users have reached the necessary critical mass and banks themselves are looking for innovative ways to broaden their electronic distribution channels. By mid-2007, Vietnam has around 17 million Internet users, ranked 17th in the world and nearly 20 million mobile phone users. This situation requires SBV to improve the legal framework for e-payment services, especially the rules and regulations on payment instrument security, customer protection and non-bank payment service providers. As the catalyst for e-payment development, SBV also needs to build and consolidate the payment infrastructure for retail e-payments, especially the establishment of the ACH and the consolidation of card alliances.

3. In November 2007, Smartlink and Banknetvn, two card alliances controlling 90 percent card payment’s market share, have signed an agreement on card system integration on the SBV’s suggestion.
9.3 Medium and Long-Term Plans Regarding E-payments

9.3.1 Improvement of IBPS – Phase II

The current IBPS - the most important RTGS payment system in Vietnam - will be upgraded and extended in line with international standards to meet the higher requirements for transactional volume, system reliability and number of participants. In Phase II, the new system will have the nation-wide coverage (64 cities and provinces) from just five cities and provinces currently. On completion by 2009, the new IBPS will be able to process up to two million transactions per day and accommodate for more than 1,000 direct and indirect members. The IBPS will have different settlement modes including RTGS, intra-day net settlement, as well as D.V.P for securities settlement.

9.3.2 The Integration of Other Systems into IBPS

In SBV’s vision, the IBPS will interface with ready-to-integrate important retail payment systems, securities settlement system and foreign exchange settlement system. The securities settlement system will be prioritised for integration in 2008 since payment obligations for securities in Vietnam are currently settled without central bank’s money4 and the requirements for securities settlement in terms of volume, rapidity and reliability will be more demanding.

9.3.3 Establishing the ACH for Retail Transactions

The National Automated Clearing House will be set up for retail payment transactions such as clearing bill of exchange/cheques and credit transfers/direct debits. In addition, in the initial design, this institution will operate as the Bank Giro, which processes transactions for utilities payments, insurance premium and credit cards, and interface with the IBPS. Card payment transactions and e-commerce transactions are expected to be cleared through this clearing house. In SBV’s vision, private sector will be encouraged to participate in the set-up and operation of this institution through capital contribution. The ACH in Vietnam will be fully functional as early as 2010.

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4. Due to legacy, BIDV, one of the big four state-owned commercial banks in Vietnam is currently designated settlement bank for securities settlement on the basis of clearing results from Vietnam Central Depository.
9.3.4 Promoting a Unified Card-payment Switch

A card-payment-switch company with unique brand will be developed, connecting all ATM machines and POS terminals from the currently fragmented card alliances. The unification of card alliances will ensure the effective usage of card payment infrastructure, bringing more convenience for card users and providing access to small banks. This unified card payment switch will be integrated to the fully functional ACH in the future.

10. Vietcombank - Success in E-payment Promotion

10.1 Corporate Profile

Established on April 1, 1963, the Bank for Foreign Trade of Vietnam (Vietcombank) is classified as one of the State’s 23 special corporations. The bank has positioned itself as one of the leading banks in Vietnam’s banking system with its profound strength in wholesale banking, treasury, trade finance, international settlement and application of advanced banking technology. In addition to its solid position in wholesale banking with traditional customers including big corporations and major enterprises, Vietcombank has successfully developed a diversified and widespread distribution network, thereby creating a momentum for expanding retail banking and better serving small and medium-sized enterprises with advanced and high quality products and services. The bank has also participated in other business segments, including securities, fund management, life insurance, real estate, infrastructure development, etc. via its network of subsidiaries and joint ventures.

Vietcombank’s operations have been supported by the largest correspondent network among local banks with more than 1,300 correspondent financial institutions in over 90 countries and territories.

The year 2007 will witness the turning of a new page in Vietcombank’s history, marked by the milestone of the bank’s equitisation. Thorough changes in advanced corporate governance under international best practices, expansion of businesses, development of modern banking products and services and in-depth investment in technologies will help Vietcombank realise its objectives of becoming a leading regional universal financial holdings by 2015 – 2020.
10.1.1 Success in E-payment

Faced with increased competition during the course of integration into the global economy, Vietcombank places information technology as the strategic focus for improving competitiveness, product development and establishment of modern banking service distribution. Towards these ends, Vietcombank has expended great efforts in developing e-payment services, especially internal payment system, e-banking and card services.

10.1.2 Some Notable Achievements

In February 2002, Vietcombank completed its integrated bank-wide network and deployed core banking Vietcombank Vision 2010 at all its branches. With this deployment, Vietcombank became the first local bank equipped with online-internal system enabling the offering of retail banking services and e-payment products.

The core banking system has provided the bank with a reliable platform for the development of IT applications, enabling it to centralise and computerise all information and payment transactions. Vietcombank also offers a range of innovative products and services including VCB Online, VCB Money, VCB Connect 24, Credit Card, VCB Cyber Bill Payment, VCB Global Trade and VCB Treasure.

In April 2002, Vietcombank brought to the market the automated card system VCB Connect 24 with added-value utilities such as bill paying and credit transfer, which is considered a breakthrough service at that time.

The bank’s online payment system connected to 1300 correspondent banks can automatically process up to 95 percent American standard compliant SWIFT money transfers. For the inter-bank operation, Vietcombank has developed an in-house core product of VCB-MONEY. The bank is considered, in some way, an electronic payment processing center for the national banking system, given its transactional volume and customer base. By the end of 2006, VCB-MONEY channel is now capable of processing up to 97 percent of electronic transactions for financial institutions and corporate customers. VCB-MONEY was continuously upgraded with new applications, such as online credit advice, unlimited payroll payments, foreign exchange dealing, credit transfer and OTP authentic security system. The bank’s product innovation efforts resulted in 120 financial institutions and 175 economic entities using payment service via VCB-MONEY channel, with 928,000 transactions and transaction value of
VND332,750 billion (equivalent to USD 20 billion) and USD 21.0 billion in 2006. The service is expected to be rolled out to individual customers at the appropriate time.

Vietcombank also brings more innovative services in the upcoming time including international remittance, online shopping and e-commerce.

### 10.1.3 Card Services in Close-up

In recent years, the bank’s card issuance and card payment have seen rapid growth. By the end of 2006, Vietcombank has attracted 1.8 million individual customers. The card business has become a fundamental modern banking service, a breakthrough for the development of retail banking and creating a low-cost, efficient funding source for Vietcombank. The bank success can be demonstrated by the following facts:

- As of 2006, Vietcombank makes up 33 percent of the card issuance market, including international cards and domestic debit cards. The bank has successfully managed impressive growth in the mainstream debit card, **Connect 24** at triple digits in recent years. In addition, enhancements in billing payment services were made available in alliance with insurance, electricity, telecommunication and mobile telecommunication service providers.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Units</th>
<th>2004</th>
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<td><strong>Outstanding valid cards</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International credit cards</td>
<td>Cards</td>
<td>36,275</td>
<td>51,600</td>
<td>72,448</td>
</tr>
<tr>
<td>Connect 24 debit cards</td>
<td>Cards</td>
<td>480,000</td>
<td>940,000</td>
<td>1,500,000</td>
</tr>
<tr>
<td><strong>Card Payment</strong></td>
<td></td>
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<tr>
<td>Int’l credit card turnover</td>
<td>Million USD</td>
<td>226</td>
<td>315</td>
<td>386</td>
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<td>Connect 24 turnover</td>
<td>Million VND</td>
<td>8,818,354</td>
<td>18,574,653</td>
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*Source: Vietcombank 2007 Prospectus for IPO*
• The bank possesses the country’s largest ATM network, accounting for nearly 30 percent of the total (740/2752 ATMs) by the year 2006. In addition, the bank’s payment system accounts to 5000 POS and its card alliance has 16 member banks.

• VCB is the first local bank in Vietnam that issues and provides card payment for international card brands such as Visa, Master, JCB and Amex. Further developments in card business in 2006 included Vietcombank’s cooperation with other partners on service enhancement and new product launch for Vietcombank MTV MasterCard, Vietcombank SG24 and V-CBP e-commerce service. The year 2006 marked another step forward in the bank’s collaboration with local and foreign partners through a series of strategic partnership with Visa, MasterCard, American Express, Vietnam Airlines, and China Union Pay (CUP).

• The bank has recently developed value-added facilities called VCB-P on Connect-24 bank card, such as purchase of Internet card, phone card Internet, insurance premium payment, mobile phone billing payment, and utilities billing payments.

In conclusion, as the first-mover in the development of e-payment, Vietcombank has created substantial competitive edge over other local banks, pushing forward business performance in other areas, such as retail banking and branding in the context of increased competition in the banking sector. In addition, owing to e-payment promotion, the bank can now offer a range of new products and services in short cycle times, improve service quality, enhance bank’s overall performance through operation cost-saving and improved non-credit revenue.