

# **THE PAYMENT CARD BUSINESS IN HUNGARY**

**(2006)**

**Payments System and Currency Issue**

## **Foreword**

### **Changes in the number of bankcards in circulation**

- In 2006 the rate of increase in the number of bankcards in circulation was 11%. The number of cards in circulation was over eight million (8.2 million), bringing the total including fuel cards issued by entities other than banks to 8.7 million.
- There are twenty-five banks and one financial undertaking engaged in issuing bankcards.
- The ratio of debit cards among all cards is declining continuously and now stands at 80% (down from 86% the previous year), amounting to 6.6 million. The number of credit cards increased by a factor of one and a half since the previous year, reaching 1.6 million, their share went up to 19% (from 14%). Charge cards represent one per cent, amounting only to 20,000.
- In 2006 Hungary saw the introduction of so-called multi-purpose cards, where a single card functions as a debit card, and credit card.
- Co-branded and affinity cards have a share of 13% (up from 5% in 2005), amounting to 1.6 million.
- At the end of 2006, 23% of the cards were issued with EMV chips (up from 18% the previous year).

### **ATM and EFTPOS networks**

- The number of ATMs increased at a steady pace in the past five years; there were 3,810 terminals at the end of 2006. The 10,051 POS terminals installed in bank branches and post offices facilitate the withdrawal of cash by way of electronic means; 2% of these are able to read EMV chips.
- The number of retail outlets accepting Visa and MasterCard increased significantly, by 34% in the past year. There are now 26,712 shops accepting Visa and MasterCard. The number of retail outlets accepting Amex cards almost doubled after a temporary setback due to a change in the accepting bank, amounting to 15,473 at the end of 2006. Diners cards are accepted in 3,652 shops and JCB is accepted in 9,855 shops.
- There are 33,766 electronic POS terminals currently in service at retail acceptance points, where practically all transactions are subject to authorisation, which contributes to the higher safety of card use. 33% of the devices are able to read EMV chips.

### **Turnover realised with bankcards**

#### **Acquiring turnover**

- Last year 232 million transactions were conducted with cards of domestic and foreign issue, in a value of HUF 6,085 billion. The volume rose by 11% in terms of transactions and by 16% in terms of value, in comparison to the previous year.
- The share of cash withdrawal transactions continued to fall; of every one hundred transactions 52 transactions were cash withdrawals (as oppose to 55 in the previous year), with 48 ATM and 4 POS transactions. In respect of purchase transactions, of every one

hundred transactions, there were 45 instances of payment through POS terminals at retail outlets, with 3 mobile top ups at ATMs.

### **Issuing turnover**

- In the past year, Hungarian cardholders used their cards at home and abroad on 230 million occasions, in the value of HUF 5,984 billion. The volume of transactions rose by 13%, with a 15% increase in value.

### **Cards issued by non-banks**

- There are five fuel companies issuing cards for use within their own network: Agip, Esso, Mol, Omv and Shell. The number of cards in circulation had dropped by 12% by the end of 2006, amounting to 460,000 cards with a total value of purchases of HUF 224 billion in Hungary and HUF 69 billion elsewhere during last year.
- Foreigners purchased fuel in Hungary in the value of HUF 6 billion.

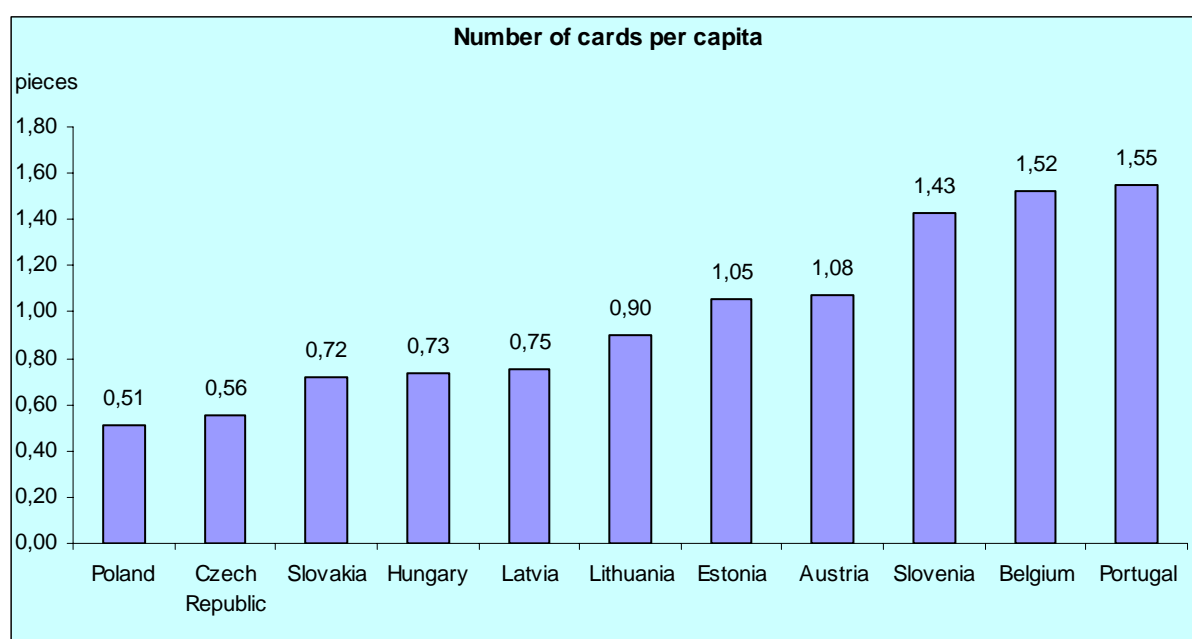
## International overview

In Western Europe the first bankcards were introduced during the 1960s, while in Eastern Europe the bankcard business took off towards the end of the eighties and in the early nineties.

The charts below contain figures concerning the bankcard sector in some Member States of the Communities from Western Europe which are similar to Hungary in terms of population (Austria, Belgium, Portugal), and also in some Member States from Central Eastern Europe who joined the EU at the same time:

- number of bankcards per capita,
- number of ATMs<sup>1</sup> (cash withdrawal facilities) per one million people, and
- number of POS<sup>2</sup> terminals at retail outlets ( payment facilities) per one million people.

Source of figures is the Blue Book published by the European Central Bank for 2005.



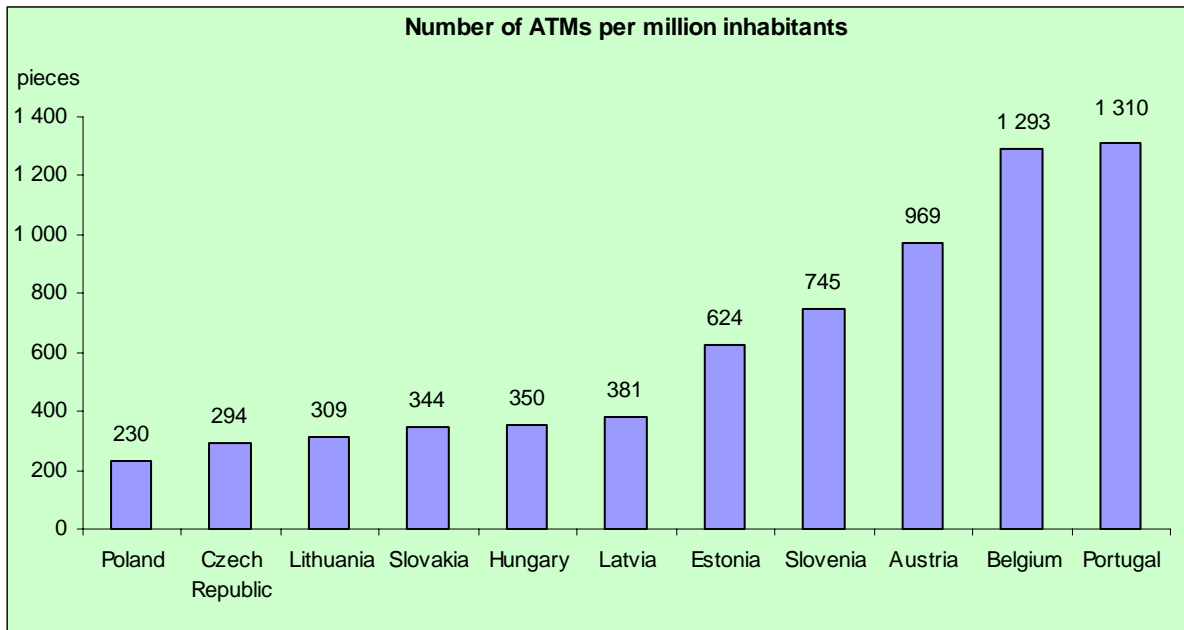
In the CEE Slovenia and the Estonia are the only two countries where some people have more than one card, approaching, and in the case of Slovenia exceeding the average of Austria from among the above-mentioned west European countries.

Hungary is ranked fifth among the eight countries of the CEE region, with close to three-quarters of the population holding a bankcard.

---

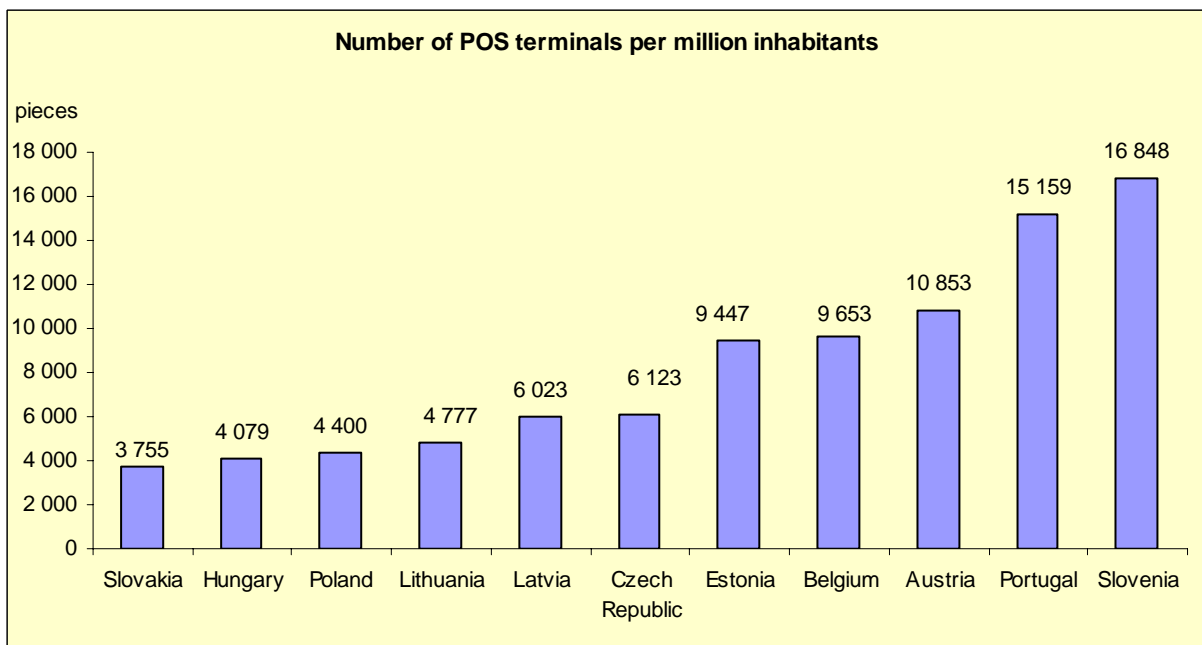
<sup>1</sup> ATM (Automated Teller Machine): a terminal that enables customers holding the appropriate card to make withdrawals from or deposits to their bank accounts, or to make other transactions like credit transfers, or to obtain information concerning their account.

<sup>2</sup> POS (Point of Sale): a terminal that enables customers to make payments (and to withdraw cash where applicable) with the appropriate card for purchases at participating commercial outlets. Transaction information is fixed either by way of electronic means or on paper, known, respectively, as electronic POS (EFTPOS) or imprinter.



As for the number of ATMs per one million people the three west European countries are far ahead of the CEE region, with Slovenia and Estonia rising above the rest. There were no changes to speak of in this ranking during the past five years.

In Hungary one positive occurrence that makes a slight difference in connection with these figures is that cash withdrawal is also available at the POS terminals installed in bank branches and post offices during regular business hours using electronic identification (PIN).



In terms of POS terminals for making payments using bankcards Hungary is the one before last among the countries referred to above. However, it should be noted that in Hungary the

terminals installed in bank branches and post offices, featuring cash withdrawal facilities only for the time being, are also listed in this particular category. The figures indicated above cover the number of imprinters as well for all countries.

## I Overall analysis of the bank issued payment card business

### 1 Characteristics of bank issued payment cards and changes in their number

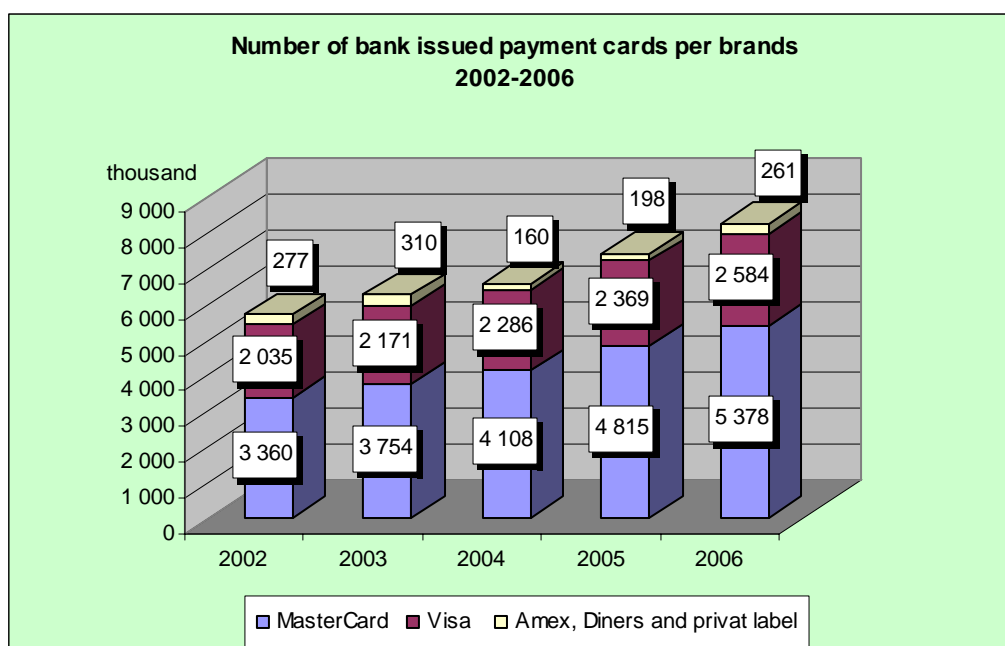
Year by year the number of payment cards is rising steadily in Hungary. At the end of 2006 there was a total of 8.2 million cards issued by 25 banks and one financial undertaking. The table below indicates the figures for the past five years:

year	2002	2003	2004	2005	2006
number of cards/thousand	5 672	6 235	6 554	7 382	8 223
rate of growth	12%	10%	4%	13%	11%
number of cards per capita	0,56	0,61	0,65	0,73	0,82

**Table 1: Changes in the number of cards issued between 2002 and 2006**

After a brief setback in 2004, attributed to re-arrangement of profile, growth regained its momentum showing a rate in excess of ten per cent. On the other hand, the country's population continues to decrease, and as a result of these two factors the number of cards per capita has increased by a factor of one and a half (by 46%) during the last five-year period.

Brand composition remained unchanged. Mutual card acceptance is based on the brands of two international card companies – MasterCard and Visa.



Although to a lesser degree, debit cards<sup>3</sup> continue to dominate the Hungarian bankcard market with a share of 78% (6,447,000 cards), showing a three per cent decline since the previous year. The number of cards which are linked to a credit account but function as debit cards (no interest-free period) dropped by almost half, to 195,000, representing only 2% of the market. Among all cards in circulation the above two products together show a 6% decline since the end of the previous year, due to the fact that the constructions formerly offering no interest-free period are gradually being transformed into credit cards, and also because banks are beginning to turn their attention to and are placing increasingly more emphasis on the credit card business. Currently there are 24 banks involved in issuing debit cards and six banks in issuing cards linked to a credit line but functioning as debit cards.

The number of credit cards<sup>4</sup> increased by a factor of one and a half since the previous year and now stands at over one million (1,560,000), representing a share of 19%. This type of card is offered by fifteen banks.

The share of charge cards<sup>5</sup> is only one per cent (20 thousand); it is offered by four banks and one financial undertaking only.

In 2006 Hungary saw the introduction of the so-called multi-purpose card, where a single card functions as both a debit and a credit card. These cards are not yet shown separately, they are included under credit cards.

Certain types of cards are issued in cooperation with merchants (co-branded cards) or non-profit organisations (affinity cards). The share of these products increased by 13% among all cards, and they also increased slightly in number (by 5%) during the past year, exceeding one million cards (1,560,000). There are twelve banks involved in issuing co-branded and affinity cards.

Compared to the previous year, the number of business cards used to cover business related expenses has increased by a factor of one and a half (429,000); however, there is only a slight increase in terms of market share (5%). The number of issuers is relatively high – twenty-one banks and one financial undertaking.

The essence of traditional business products is that the bank issues cards linked to the employer's account to its employees for covering expenses in connection with official business. Another product rapidly gaining ground is the employee's private bankcard linked to his/her personal account to cover expenses when going about the employer's business, which the employer subsequently reimburses based on the receipts furnished in connection with bankcard transactions. For statistical purposes these cards are treated as personal cards; however, in reality they function as business cards.

The number of cards introduced specifically for e-purchases, also known as virtual cards, increased by over one and a half (62%), to 113,000 by the end of 2006. Five local banks offer cards, or card numbers, that are accepted only by on-line merchants for purchases of goods and services.

---

<sup>3</sup> 'Debit card' means a payment card linked to a bank account, suitable (generally) for both cash withdrawals and purchases. The holder of the card may only withdraw cash or spend money up to the amount of his account balance, and the bank account is automatically debited with the amount of each transaction.

<sup>4</sup> 'Credit card' means a card linked to a credit line fixed earlier in a contract between the cardholder and the bank, which allows the holder to withdraw cash or make purchases up to the amount of the credit line. The credit granted can be settled in full at the end of the month or can be settled in part by the deadline specified in the statement that contains each transaction, with the balance taken as extended credit. If the cardholder opts to pay his debt in full before the specified date, there is no interest charged. For any remaining amount, however, the cardholder has to pay interest for the entire debt or only for the unpaid portion, depending on the bank. Cash withdrawal transactions, however, are not interest free, these are interest bearing from the date of the transaction.

<sup>5</sup> 'Charge card' means a card that is distinguished from a credit card in that there is no credit line fixed necessarily (but may be) and the total debt should be settled by the end of the month.

In reaction to the encouragement of international card companies<sup>6</sup> and also in line with SEPA<sup>7</sup> objectives, among domestic credit institutions, by the end of last year two had commenced chip migration allowing the safer use of cards. By the end of 2006, 23% of all cards were equipped with EMV<sup>8</sup> chips.

## **2 Cash withdrawal facilities and merchant acceptance points**

### **2.1 Cash withdrawal facilities with bank issued payment cards**

POS terminals installed in post offices and branches of the acquiring banks, as well as ATMs, offer the possibility of withdrawing cash electronically.

Of the 3,810 ATMs, 27% of the machines are located in Budapest, 23% in county seats and the rest are operated in other towns around the country. The number of terminals per one million people is 378.

All of these terminals are suitable for cash withdrawal, and 1,607 of them are suitable for processing transactions between bank accounts (for the time being these are only on-us transactions).

In view of the geographical location of ATMs, the role of the 10,051 POS terminals installed in post offices and bank branches is considered significant, since they provide facilities for cash withdrawal by electronic means in places where ATMs are not a feasible option for reasons of profitability.

The chart below illustrates the change in the number of ATMs and cash withdrawal POS terminals over the past five years.

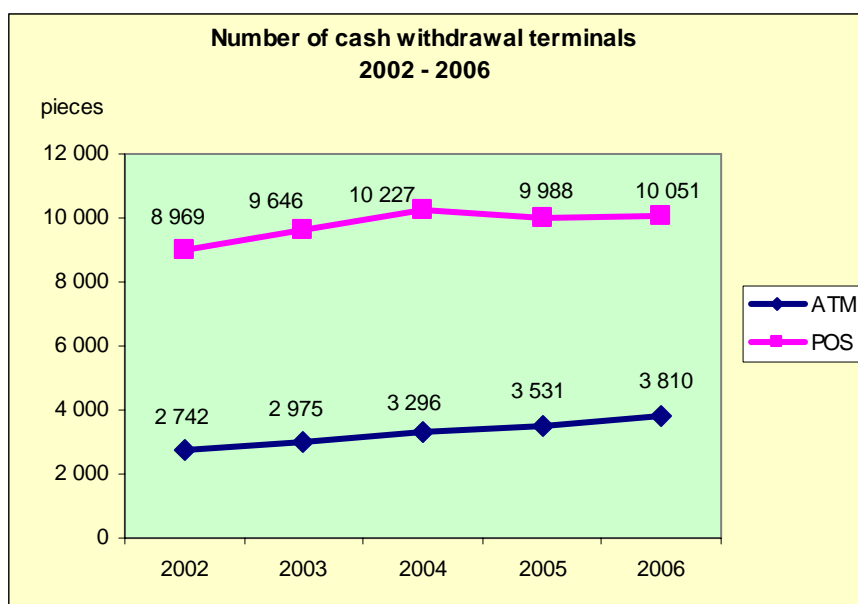
---

<sup>6</sup> According to the regulations adopted by international card companies, losses from fraud in connection with transactions made in Europe shall be borne by the country that did not equip its cards with the chip, or that fails to provide for chip-reading in ATM and POS terminals; regardless of whether there is evidence for the negligence of the other party.

<sup>7</sup> SEPA (Single Euro Payment Area): in connection with bankcards the aim is to enable customers to make payments in the euro area as securely, quickly and efficiently as payments within national borders. To this end, magnetic strips are to be replaced by the safer chips by 2010, or by the date of a country's accession to the euro zone.

<sup>8</sup> EMV: a standard developed for electronic payment transactions by EMVCo, an international consortium, containing technical specifications for the inter-operability of chip cards.





The number of ATMs is constantly growing at a steady pace. Following a slight (2.5%) drop in the number of cash withdrawal POS terminals during 2005 – attributed to the closure of POS terminals in smaller branches of banks – the number of terminals offering cash withdrawal facilities has climbed back up to over ten thousand.

The table below illustrates the number of cash withdrawal facilities per million inhabitants in the past five years.

	2002	2003	2004	2005	2006
number of ATMs per one million people	269	293	326	350	378
number of cash withdrawal POS terminals per one million people	881	951	1011	989	997

**Table 2: Changes in the number of cash withdrawal facilities per million inhabitants between 2002 and 2006**

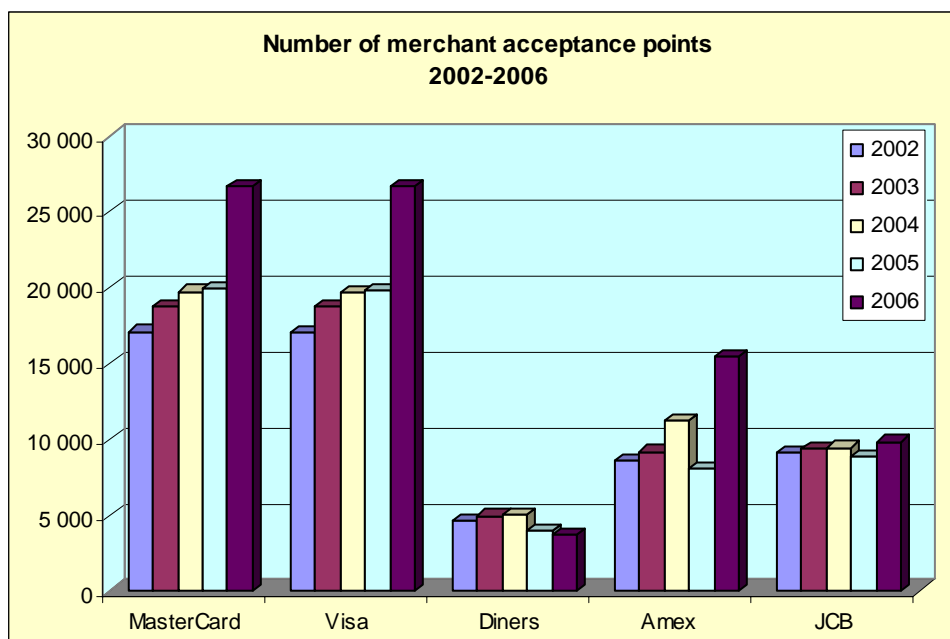
While the number of ATMs featuring 24-hour access to cash withdrawal facilities has increased by 40% in the past five years, the number of terminals with access limited to the regular business hours of banks and post offices grew by 13%.

Regarding the EMV chip migration noted under Section 1, by the end of last year, 2% of POS terminals installed in bank branches were capable to accept chip cards. The appropriate transformation of ATMs has also commenced. However, there was not a single terminal in service that was capable to read EMV chip cards by the end of the last year.

## 2.2 Payment facilities with bank issued payment cards

Six credit institutions and one financial undertaking offer contracts for the acceptance of MasterCard and Visa branded cards. Two banks are acquirers for JCB and one bank for Diners Club cards. As for American Express cards, one bank and one financial undertaking is interested in its acquiring.

The chart below indicates the number of retail outlets where the payments with a card has been possible in the past five years.



The number of retail outlets accepting Visa and MasterCard branded cards increased significantly (by 34%) last year. The cards of these two international associations are now accepted in 26,712 retail establishments. As for the six acquiring banks, the major ones and those entering the market are increasingly focusing on their merchant acquiring activity.

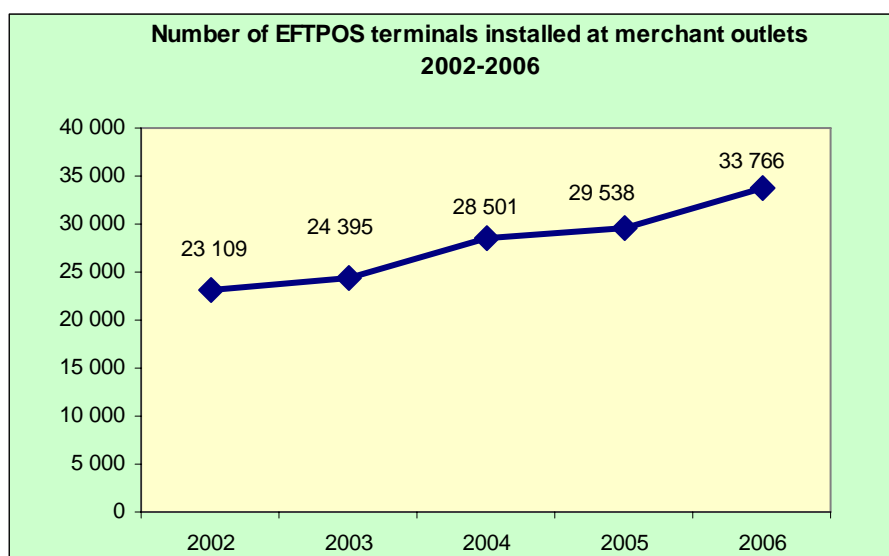
After the temporary decline attributed to the change in the acquiring bank, the number of merchant outlets accepting American Express cards almost doubled in 2006 (by 91%), reaching 15,473. Diners Club cards are accepted in 3,652 shops and JCB is accepted in 9,855 retail outlets.

In addition to physical acceptance points, three credit institutions offer arrangements to merchants in electronic commerce (internet transactions). The number of such merchant outlets for Visa and MasterCard is 685, 72 for American Express and only 40 for JCB. Similarly, three banks are committed to offer arrangements for merchants who accept orders by mail or by phone (MO/TO transactions); payments are accepted at 878 locations if made by Visa or MasterCard branded cards, at 333 locations if made by American Express, and by 503 merchants if made by JCB.

There are 33,766 EFTPOS terminals operating in shops (14% more than in the previous year), all operating with zero floor limit. It means that all of the transactions are subject to authorisation irrespective of any limit, which greatly contributes to the safe use of cards. For the case of necessity, 1,091 imprinters are also installed in addition to the EFTPOS devices. However, they are in the process of being gradually removed from circulation. All of these operate with a zero floor limit.

33% of EFTPOS terminals operating in the merchant outlets were enabled for the reading of EMV chips at the end of last year.

Changes in the number of electronic POS terminals during the past five years are illustrated in the chart below.



In a few smaller retail outlets, where the number of bankcard payments is relatively low, cards are only accepted with imprinters for economic reasons. There are 929 such devices still in service, 3% operating with a zero floor limit.

The table below demonstrates the growth in the number of electronic POS terminals per one million people, installed in the cashiers of merchants, during the past five years.

	2002	2003	2004	2005	2006
number of EFTPOS terminals in retail outlets per one million people	2 271	2 405	2 817	2 925	3 351

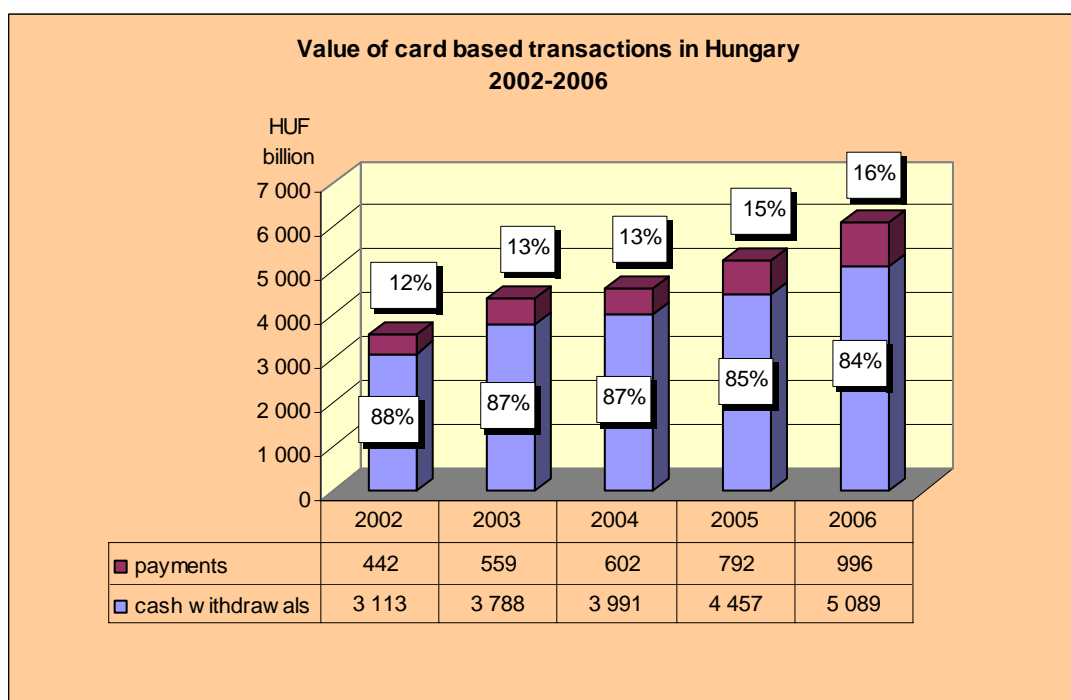
**Table 3: Changes in the number of EFTPOS terminals at merchants between 2002 and 2006**

### **3 Transactions conducted with bank issued payment cards**

#### **3.1 Hungarian and foreign issued card transactions in Hungary (acquiring turnover)**

The number of domestic transactions comprises the aggregate of purchases made at merchant outlets located in Hungary, plus cash withdrawal transactions conducted through domestic ATMs and POS terminals. Domestic and foreign issued cards were used for 232 million transactions in 2006, in the value of HUF 6,085 billion. The rate of growth reached 11% in comparison to the previous year, and the value increased by 16%.

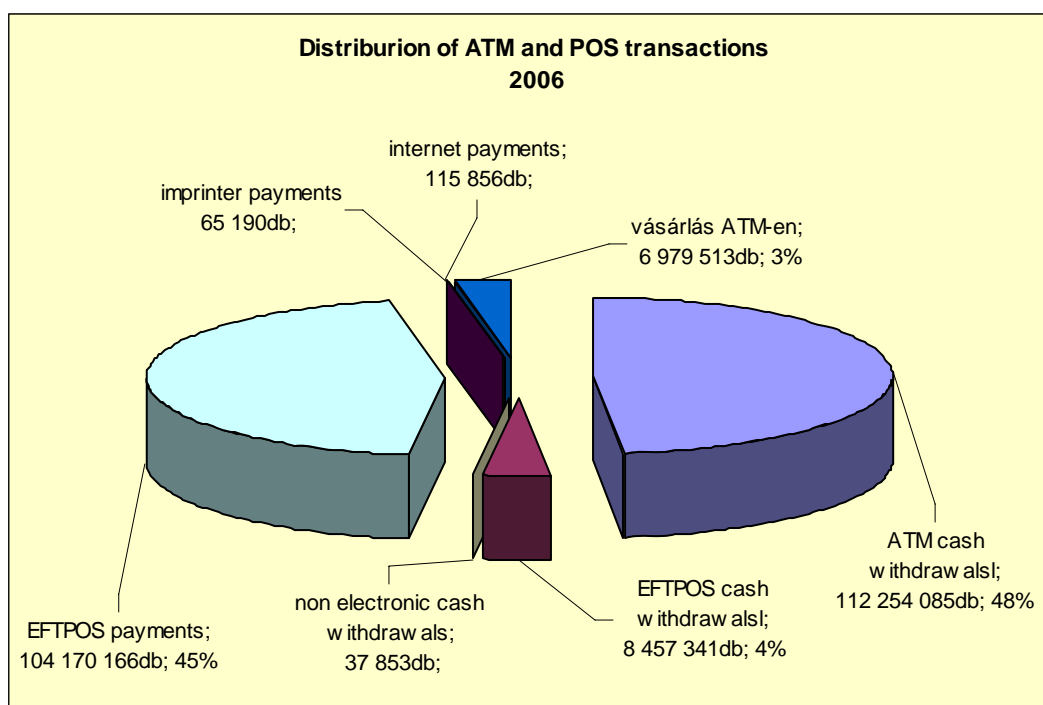
The chart below shows the developments in the value of card-based transactions in Hungary, including cash advances and purchases, in the past five years.



The ratio of purchases within the total turnover is rising continuously, albeit at a moderate pace. Growth is more distinctive in respect of the amount; the total value of purchases made last year was 26% higher (HUF 996 billion) than in the previous year.

The indicators showing the card use habits of foreigners in Hungary indicate that in the same environment foreigners are more inclined to use their cards for purchases than Hungarian cardholders. While the value of transactions (purchases and cash withdrawals) conducted with foreign cards within the entire acquiring turnover in Hungary accounts to only 4%, the same ratio in the value of purchases represents 15%. While only 15% of all local turnover with Hungarian cards was purchases, 52% of all transactions made by foreigners in Hungary was payment transactions.

The spread of purchases and cash withdrawals according to the number of transactions shows a significantly more favourable picture for purchases. The chart below shows how the 232 million domestic purchase and cash withdrawal transaction is divided according to the type of acquiring equipment.



Cash withdrawal transactions continue to dominate, albeit at a gradually declining rate. While in 2005, of every one hundred transactions 55 were cash withdrawals, the same figure was only 52 in 2006 (48 ATM- and 4 POS transactions).

If the analysis is narrowed down to transactions conducted with foreign issued cards – in the same card acceptance network – the rate is 34 cash withdrawals out of every one hundred transactions (two less than in the previous year). The difference is highly remarkable even in light of the fact that one's needs are different when travelling as oppose to everyday life.

Further improvement may be achieved by the continued expansion of the network of merchant acceptance points, which started in 2006 (see the chart entitled “merchant acceptance points” under Section 2.2), and also by building up the confidence of Hungarian cardholders in the payment instrument, which will bring changes in the consumers' habits.

The majority of cash withdrawals were conducted through 3,810 ATMs, the fraction of cash withdrawals through POS terminals was not significant. The number of non-electronic cash withdrawals is also insignificant. The average rate of use of an ATM is 31,295 transactions/year (average of 87 transactions a day, down from 91 the previous year); the same figure equals 841 transactions/year in relation to POS terminals (average of 2 transactions a day, the same as last year).

Most of the purchase transactions was payments through the 33,766 POS terminals installed in retail check-out counters (9 transactions per POS on a daily average). The percentage of payments made through virtual POS terminals (e-commerce) and by way of imprinters remains below one per cent. In contrast with the previously rising trends, in terms of quantity the rate of mobile phone top ups through ATMs dropped by close to half a million, down to 3% from the previous 4% within the entire domestic turnover (six out of every one hundred ATM transactions were mobile phone recharges).

### 3.2 Domestic and foreign transactions conducted with Hungarian issued cards (issuing turnover)

In the past year, Hungarian cardholders used their cards on 230 million occasions in Hungary and abroad, in the value of HUF 5,984 billion.

The table below indicates the increase in the volume of transactions conducted with Hungarian issued cards within and outside of the country (by comparison to the preceding year) and the frequency of card use in the past five years.

year	2002	2003	2004	2005	2006
value of transactions / HUF billion	3 395	4 220	4 769	5 220	5 984
growth rate	25%	24%	13%	9%	15%
number of transactions/thousand	141 998	163 571	182 214	202 951	230 139
growth rate	18%	15%	11%	11%	13%
frequency of card use/month	2,09	2,19	2,32	2,29	2,33

**Table 4: Turnover of Hungarian issued cards and the frequency of their use between 2002 and 2006**

The figures indicate that both the number of transactions and their value is growing at a faster pace following the earlier slowdown.

Improvements in bank facilities and practices designed to enhance the security of card use (chip migration, regular improvements in monitoring systems, transaction confirmation by follow-up SMS) are intended to improve confidence in this particular payment instrument. This confidence is intent to be intensified by a Government Decree<sup>9</sup> valid since 1 March 2007, which includes consumer protection provisions that are stricter than the earlier ones and better guard the interests of cardholders. However, the positive impact of these measures will be felt only if better conveyed to customers. Thus it is very important to keep cardholders informed and prepared at all times.

In terms of the rate of developments in the past five years (Table 4), the figures indicate an increase in the number of cards by a factor of close to one and a half (by 45%), the value and the number of transactions conducted with them increased, respectively, by 76% and 62%. On the other hand, the average monthly card use – after the temporary setback in 2005 – is now showing signs of slow growth.

Looking only the trends in local purchase transactions within the total domestic issuing turnover, the table below reveals the following picture.

---

<sup>9</sup> Government Decree 2207/2006 (XI.20.) on payment services and electronic payment instruments

year	2002	2003	2004	2005	2006
value of purchases/HUF million	316 388	428 192	539 439	658 281	853 413
growth rate	44%	35%	25%	22%	30%
number of transactions/thousand	39 357	53 202	66 760	81 696	105 659
growth rate	44%	35%	26%	22%	30%
average transaction value	8 039	8 048	8 080	8 058	8 077
growth rate	0%	0%	0%	0%	0%
consumer price index (annual average)	5,3%	4,7%	6,8%	3,6%	3,9%
frequency of card use/month	0,58	0,71	0,85	0,92	1,07

**Table 5: Domestic purchase transactions made with Hungarian issued cards and the frequency of their use between 2002 and 2006**

The number and value of purchases is rising at a faster rate than the rate of growth in the overall sector (for the latter, see Table 4. The value and number of purchases increased by a factor of over two and a half in the past five years.

The average use of cards doubled over a five-year period. In 2006 each card of Hungarian issue was used once on a monthly average for purchase transaction within Hungary.

The average transaction value remained roughly similar over the past five years. This leads us to conclude that an increasing number of purchases of small value are conducted with a cashless payment instrument.

## II Cards issued by non-bank institutions

### Fuel cards

In Hungary five fuel companies (Agip, Esso, Mol, OMV and Shell) issue cards for use within their own network (domestic and international) for purchases of fuel and other goods available in their shops.

The table below contains consolidated figures for the past five years.

year	number of cards	transaction conducted with cards of domestic issue				transaction conducted with cards of foreign issue	
		in Hungary		abroad		in Hungary	
		number of transactions	transactions (HUF M)	number of transactions	transactions (HUF M)	number of transactions	transactions (HUF M)
2001	393 450	10 634 853	135 313	637 000	11 000	192 000	2 000
2002	398 893	11 324 270	136 863	750 806	13 682	263 836	8 772
2003	415 925	11 216 265	137 860	748 014	16 403	182 787	2 329
2004	476 836	12 362 179	160 485	1 410 377	31 073	184 718	2 776
2005	520 619	12 531 547	189 669	1 972 030	47 877	306 138	6 264
2006	460 212	14 398 933	223 559	2 525 086	69 241	399 109	6 100

**Table 6: Fuel card issue and turnover between 2001 and 2006**

The number of cards issued had dropped by 12% by the end of 2006 relative to the end of the previous year, attributed on the whole to the decline in the number of cards at one particular fuel

company. Most of these cards are pay-later constructions, only one company maintains pre-paid accounts for personal use.

On average, pay-later cards are used in Hungary 3.04 times per month, whereas pre-paid cards are used 0.04 times a month. Hungarian cardholders used their fuel cards abroad 0.53 times a month on average for purchasing fuel.

The average value of transactions for pay-later cards is HUF 15,548, and HUF 5,970 for pre-paid cards. The average value of fuel purchases made by Hungarian cardholders abroad is HUF 27,421.

The average value of fuel purchases made in Hungary with foreign cards is HUF 15,284.

Although the number of cards decreased, the volume of turnover transacted with these cards exceeded the value for the previous year by 23%. In relation to the 16.9 million fuel purchases, HUF 292.8 billion was spent by cardholders in the past year in Hungary and abroad.

Foreigners fuelled up on 399,000 occasions in Hungary (30% more than in the previous year), in a total value of HUF 6 billion. That is close to the volume of transactions in 2005.

Fuel cards are accepted at 1,021 petrol stations of five different fuel companies, notably at 1,409 electronic POS terminals and 488 imprinters.