

# **THE PAYMENT CARD BUSINESS IN HUNGARY**

**1999**

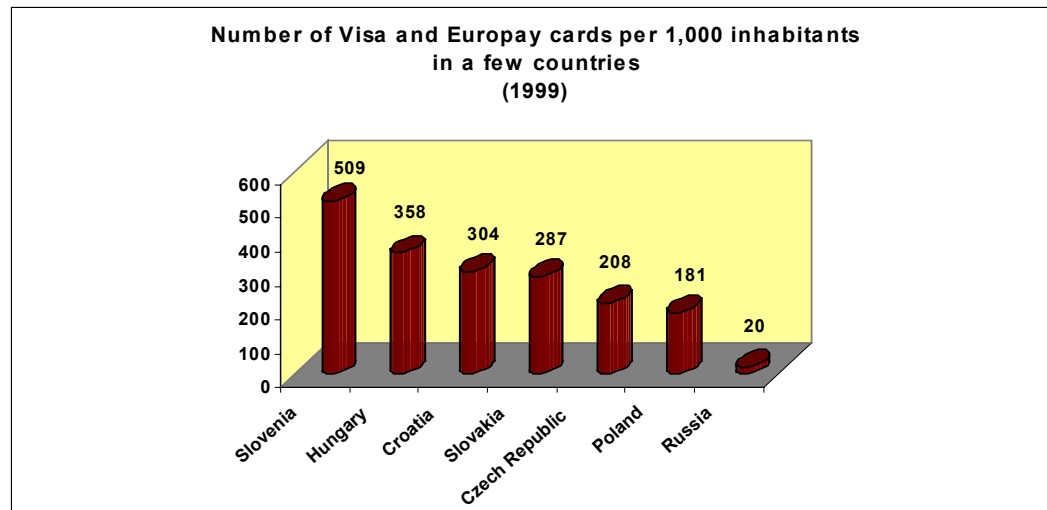
**April 2000**

## I. OVERALL ANALYSIS OF THE BANK ISSUED PAYMENT CARD BUSINESS

### 1. Trends in the Number of Cards

The number of cards issued by banks has been increasing dynamically year by year. At the end of 1999, there were 3.8 million cards in circulation, an increase of 31% on the preceding year. 96% of cards are debit cards, ie. linked to bank accounts. While over the past year the number of bank accounts kept for private customers increased by 50 percent (to 6.6 million), the number of bank accounts opened for businesses and other organisations increased by 30% (to 900,000). Consequently, the number of potential cardholders continues to be significant.

In comparison, at the end of 1999 there were a total of 22 million cards bearing the Europay or Visa logos in the Central-Eastern European region comprising 22 countries - 90% of these cards were issued in seven countries. The following diagram shows these countries ranked by number of cards per 1,000 inhabitants.

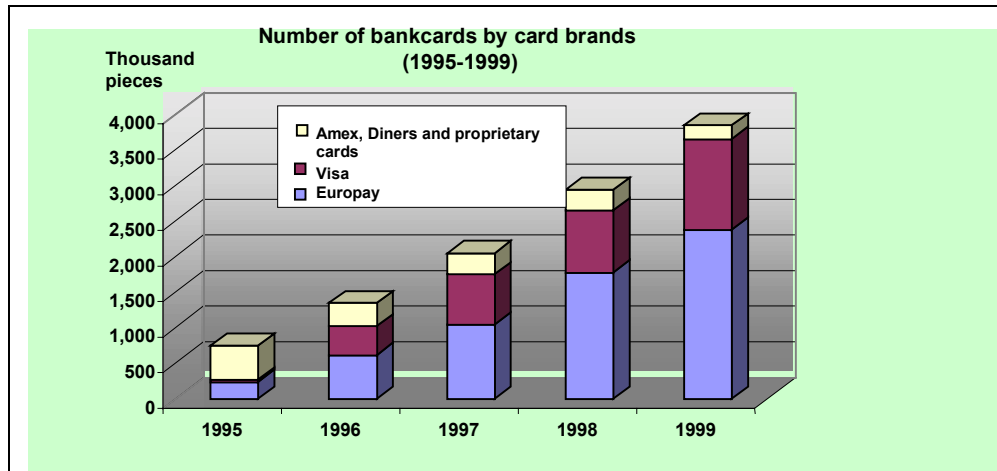


Source: Europay International and Visa International

Hungary ranks second in the region both in respect of number of cards per inhabitants and total number of cards issued (following Poland).

In 1999, legal constraint facilitated the penetration of cashless payment instruments: pursuant to two Acts, starting from January 1, 1999, the wages of civil servants and public employees must be paid by transfer to bank accounts opened with the credit institutions of their choice (or in the absence of such accounts, by postal money order). A Government Decree No. 77/1999, which regulates the issue and use of electronic payment instruments and contains a number of provisions aimed at protecting cardholder interests, has also contributed to the development.

The following diagram shows the change in the number of cards over the past five years, broken down by card brands.



The diagram illustrates the dynamic growth in the number of cards issued, although the growth rate has been declining slightly each year. The decline in the ratio of proprietary cards reflects the changes from January 1, 1996, when the forint became partially convertible. From then on, the share of cards carrying internationally recognised logos, primarily Europay and Visa, increased substantially within the total number of cards. At the end of last year, their share amounted to 95%, while proprietary cards which can only be used in the ATM and POS networks of the issuing banks had a share of about 5%.

Typically payment cards continue to be debit cards (96%), but the share of credit and charge cards grew up to 4% by the end of 1999, quadrupling over one year. This spectacular growth is attributable to the fact that, by purchasing with these kinds of cards, the clients have access to an interest-free overdraft facility up to the end of the billing period. Cardholders exploit the opportunity: while in case of debit cards only about 7% of the value of transactions are purchase transactions (the rest being cash withdrawals), in case of credit and charge cards, this ratio is 42%.

Business cards accounted for 1% of the total number of cards (49,000 at the end of last year), however, private cards can also be used by businesses, so probably expenditure by businesses make up a greater portion of transactions than is indicated by the use of business cards.

While so-called co-branded cards have been present in Hungary for the past few years, their number is still negligible (12,500).

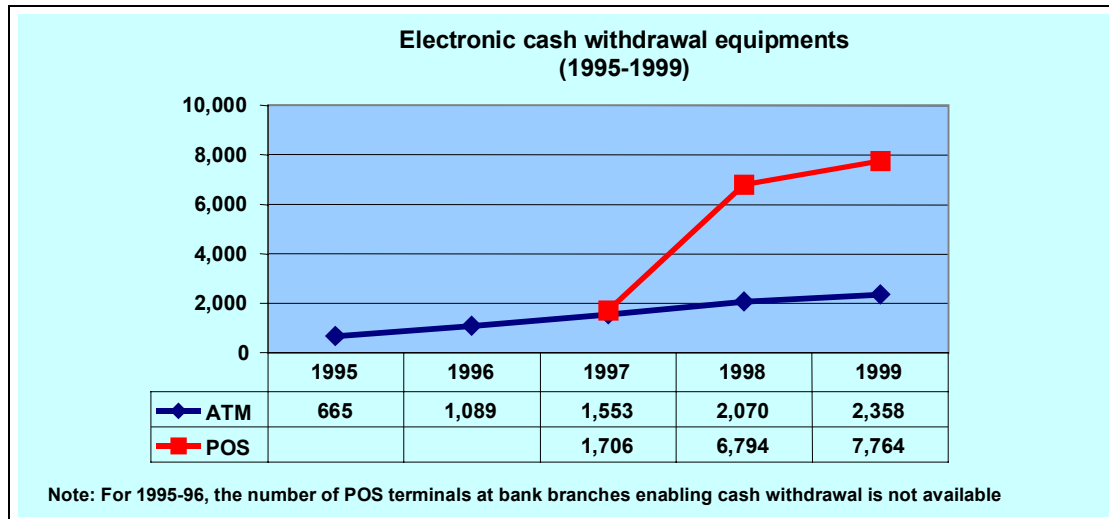
Some 91% of the total number of domestically issued cards can be used internationally, i.e. they can be used both in Hungary and abroad for cash withdrawal and/or to pay for goods or services. The share of cards good only either for cash withdrawal or purchases is negligible - their total number does not even reach 150,000 (3,9%).

## 2. Cash Withdrawal Facilities and Merchant Acceptance Points

### 2.1 Cash Withdrawal Facilities

Domestic cardholders and visiting foreign customers can withdraw cash not only at automated teller machines (ATM), but also at electronic point of sale terminals (POS) installed at bank branches and, from 1998, in post offices as well. The number of ATMs has been growing steadily each year in the last 5 year period; at the end of last year, as a result of the growth of 13%, there were 2,358 ATMs functioning in the country, one third of which are installed in Budapest. Apart from this, the cash withdrawal is available at 3,518 POS terminals (installed in 2,517 bank branches), and at 4,246 electronic terminals operating in post offices.

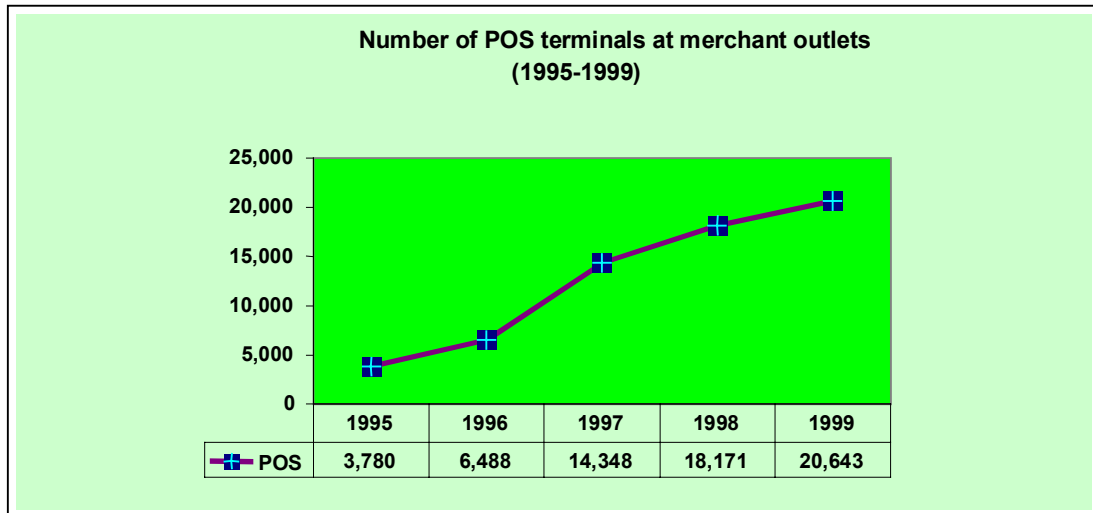
The following diagram illustrates the change in electronic cash withdrawal facilities over the past five years; the entry of the Hungarian Post can be observed in the sudden increase in the number of POS terminals.



### 2.2 Merchant Acceptance Points

The acquirer banks encourage merchants to apply modern electronic card accepting devices, facilitating secure card use. Over the past year, the number of mechanic imprinters decreased by 26% (to 11,908 devices), while the number of POS terminals increased by 14% (to 20,643). Europay cards are accepted in 14,971 shops, while 15,657 retail outlets accept Visa cards. One can use the Diners card at 4,079 locations, while it is possible to pay using Amex card at 7,012 stores. The number of registered JCB card acceptance points is 6,771.

The following diagram shows the change in the number of POS terminals installed at merchant outlet cash desks in the period between 1995 and 1999:

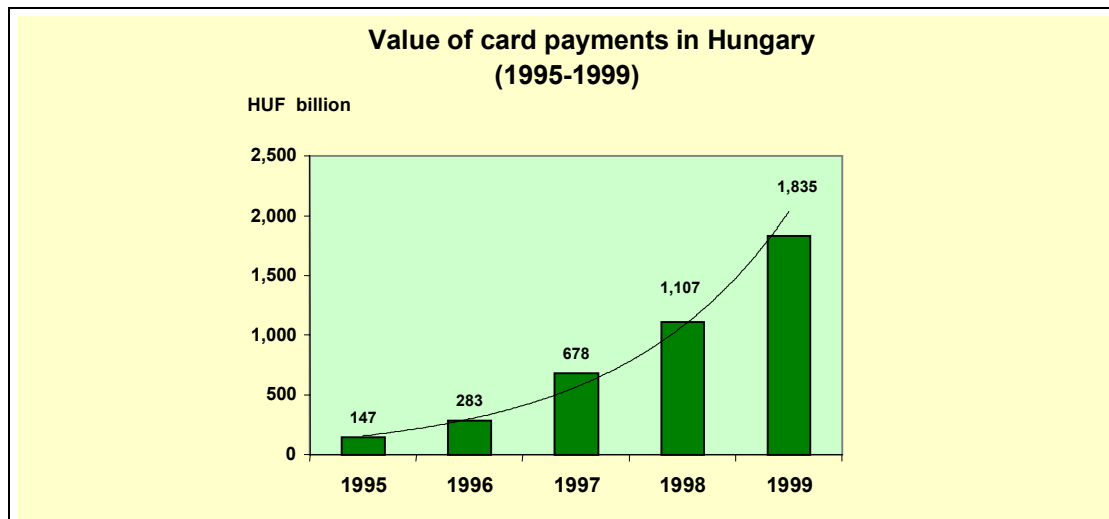


The installation of POS terminals began in Hungary in 1994 with just a few hundred units; their number multiplied over the next three years and then the pace of growth slowed down.

### 3. Payment Turnover

#### 3.1 Payments in Hungary

The total value of cash withdrawals and purchases in Hungary (including cards issued abroad) amounted to HUF 1,835 billion in 1999. As shown by the following diagram, the value of transactions has been growing steadily, in parallel with the gradual expansion of the ATM and POS networks.



Last year, cardholders used their cards on nearly 92 million occasions. The majority of transactions (82%) continued to be cash withdrawal, although there was a slight increase (3%) in the ratio of purchases compared to 1998. With respect to the value of

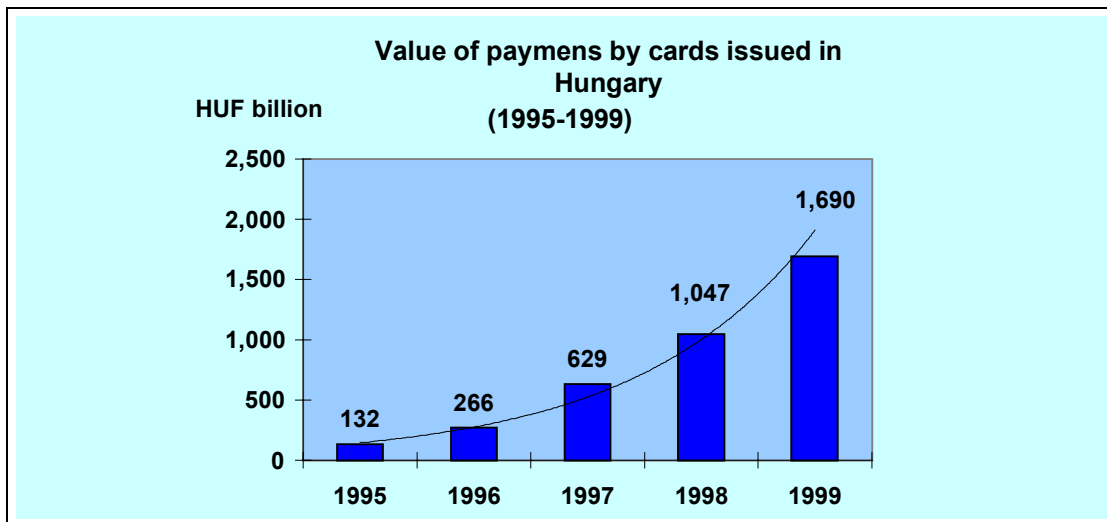
the transactions, however, the share of cash withdrawals increased, even though only slightly (by 1%) up to 91%. Approximately 96% of total card transactions (90% in value terms) were electronic, i.e ATM or POS transactions.

The overwhelming majority, namely 90% of all domestic card payments was made by domestically issued cards. This share is even higher (93%) in terms of the number of transactions. While domestically issued cards are used primarily to withdraw cash within Hungary (accounting for 85% of the number of these transactions), foreigners prefer to use their cards to pay for goods or services (70% of the number of transactions).

Last year, foreigners spent HUF 187 billion using their cards in Hungary; this figure is more than double that of the preceding year (the increase was 42% with respect to the number of transactions). In view of the fact that the number of foreigners visiting Hungary in 1999 decreased by 14% relative to the preceding year and tourism revenues declined by 2% as well, this spectacular growth in card transactions can be attributed partly to the change in payment habits of those visiting the country and partly to the improving quality of the card acceptance in Hungary.

### 3.2 Payments with Cards Issued in Hungary

The following diagram presents the change in the payments effected by Hungarian cardholders over the past five years.



Last year, Hungarian cardholders spent HUF 1,690 billion using their cards (52% growth on the preceding year), 95% of these payments was effected within the country. The number of transactions increased by 29%, which is remained slightly below the rise in the number of cards in circulation, meaning that the frequency of card use has not increased, practically it has remained unchanged overall (two transactions per month), while the average value of transactions rose to HUF 19,424, representing a rise of 26%. In Hungary cardholders use their cards primarily to

withdraw cash (94% of the total value of transactions), while abroad they pay for goods and services (only 37% of the total value is cash withdrawal).

#### **4. Payments Made by Guaranteed Cheques**

The validity of all domestically issued cards, to which a Eurocheque could be linked, expired at the end of 1999, thereby effectively ending Eurocheque issue in Hungary. Last year, clients only redeemed very few cheques (182), with a total value of HUF 8 million. Foreigners cashed 85,000 cheques (half of the preceding year) or used them for purchases (for a value of HUF 3.8 billion).

The number of guaranteed cheques issued in Hungary, which could only be redeemed domestically, more than halved (declining to 43% of the level of the previous year). No more than 42,000 such cheques were used to effect payment transactions last year, for a total value of HUF 692 million, representing a decrease of 43% compared to the preceding year.

This significant decline can basically be attributed to the fact that while cheque has never been a widespread means of payment in Hungary, the appearance and rapid spread of bankcards over the past few years essentially crowded cheques out of the market.

#### **5. Payment Card Fraud**

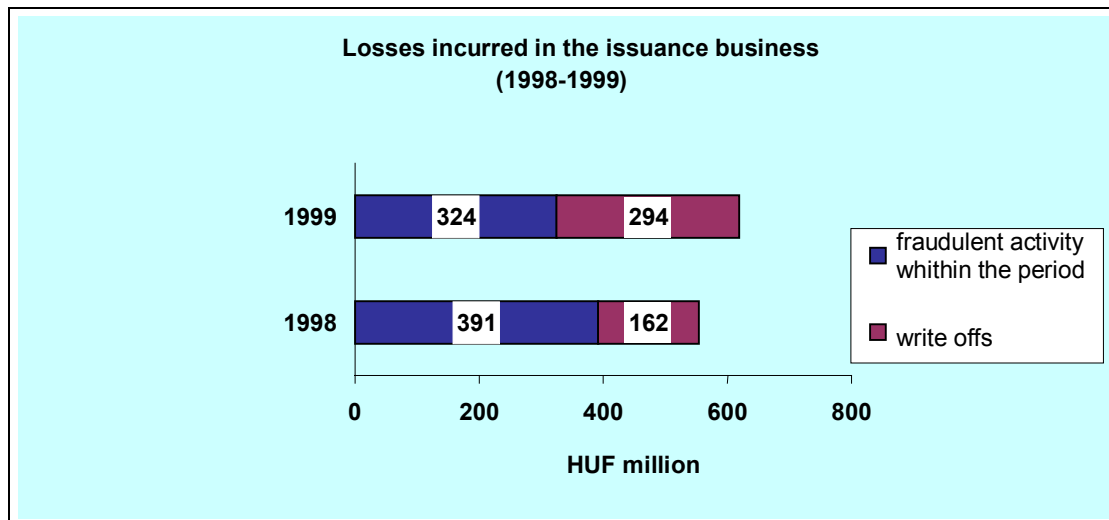
##### **5.1 Losses Incurred in the Issuance Business**

Last year, the card-issuing banks registered 9,300 cases of fraudulent activity, worth HUF 324 million<sup>1</sup>; the write offs accounted for HUF 294 million (this also includes cases deferred from the preceding period). Half of this amount was written off by the issuing banks themselves, 34% was charged on to foreign and Hungarian acquirer banks and 16% to their cardholder clients.

The following diagram illustrates the change in the value of fraudulent cases and losses in the issuance business in 1998-1999.

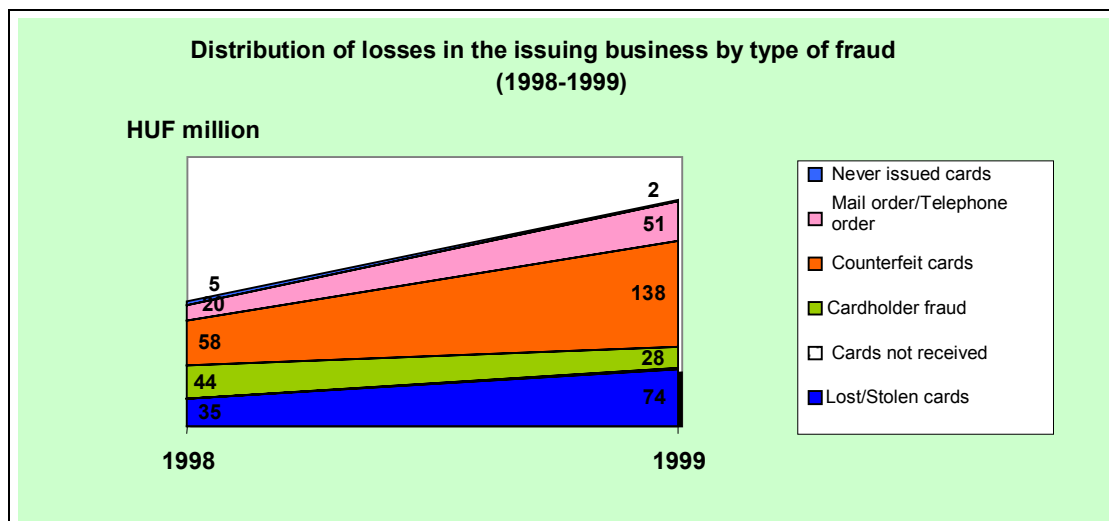
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<sup>1</sup> From the second quarter of 1999, due to operational problems of one of the commercial bank there was a substantial increase in the number and value of fraudulent cases. In view of the fact that this was not characteristic for the entire banking sector and was of a transitory nature, this factor was not taken into account in compiling this chapter owing to its distorting effect. If the abuse appearing at this bank were included, damage in the issuer business is as follows: 22,000 fraudulent cases, with a value of HUF 1.022 billion. The loss written off amounted to HUF 939 million.



The value of fraud cases declined somewhat, but the amount of the losses increased compared to the preceding year. In view of the fact that card payments increased considerably, the ratio of loss on the issuer side was the same as in 1998 (0.02%).

The following diagram shows the distribution of losses incurred per fraud type, also with respect to the past two years:



In comparison to the previous year, there has been a substantial increase in the value of losses due to counterfeiting. The manufacturing and use of the so-called duplicated cards (criminals obtain card data with which they then manufacture counterfeit cards) is a growing concern, not only in Hungary, but all over the world; moving debit and credit functions on chips (planned to be introduced by the two major international card companies by 2005) could be a solution. The damage caused by using lost or stolen cards comes second in value terms. Cases where unauthorised persons obtained the card number and the thief conducted additional transactions by phone, mail or Internet, more than doubled. Hopefully, a broader application of the SET or other electronic payment standard will give rise to a substantial improvement in this field.

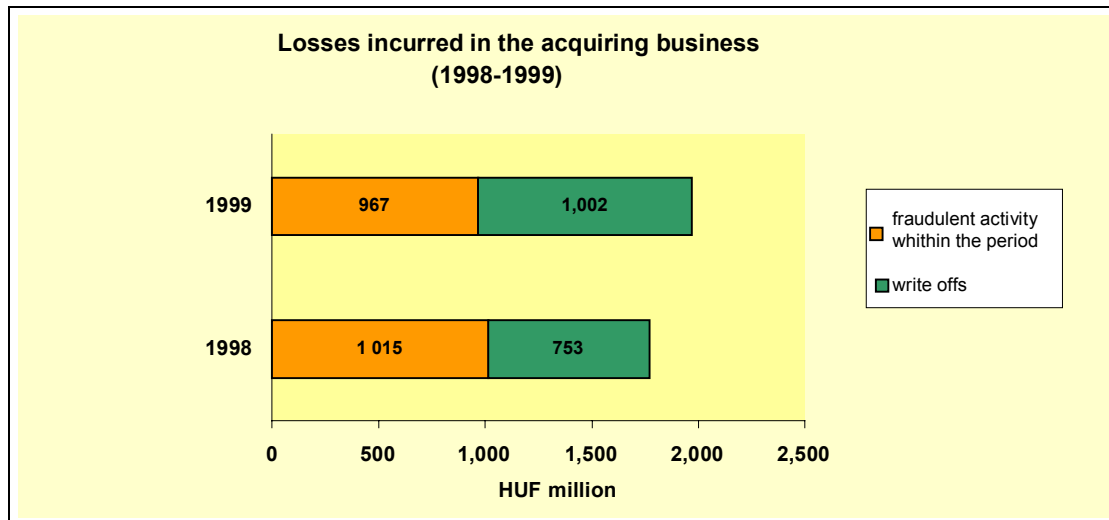


The amount of losses caused by cards not received, which is included in the list of the fraud types, was so negligible over the past two years that it could not be shown on the diagram.

## 5.2 Losses Incurred in the Acquiring Business

Some 14,000 fraud cases were registered by the acquirer banks, amounting to HUF 967 million. The written off loss was HUF 1 billion, 88% of which was charged to foreign and Hungarian issuer banks, 8% was borne by domestic merchants and only 4% was written off by the acquirer bank. Relative to the preceding year, the loss increased in terms of value, but its ratio to the total value of transactions decreased by 0.01 percentage points to 0.05%.

The following diagram shows the change in the value of loss in the acquiring business in 1998-1999.



## II. CARDS ISSUED BY NON-BANKING INSTITUTIONS

### 1. American Express Cards

In addition to the American Express cards issued by banks under franchise agreement, at the end of last year there were 5,000 non bank issued Amex cards in circulation. Hungarian cardholders used these cards to pay for goods and services and withdraw cash in Hungary and abroad with a total value of nearly HUF 5 billion.

Foreigners spent HUF 2.5 billion using Amex cards in Hungary.

### 2. Fuel cards

Seven companies (Agip, Aral, Esso, Mol, OMV, Shell and Total) issue fuel cards in Hungary. At the end of last year, there were a total of 287,000 petrol cards in circulation (44% more than in 1998), which were used to buy HUF 102 billion worth of fuel, primarily within Hungary (91%).

Foreigners used petrol cards in Hungary to pay for fuel amounting to HUF 201 million.

### **III. SUMMARY**

All in all, the payment card business in Hungary continues to be developing fast pace: the number of cards increased by nearly one third (31%), while the value of card transactions increased by two thirds (66%) over a single year. The appearance of credit and charge cards, points to the expansion of the product range, but debit cards continue to play a predominant role (with a 96% market share).

Cardholders characteristically use their cards domestically; last year, the share of payments and cash withdrawals made abroad was no more than 2% in value terms.

Hungary is still a cash-oriented country: 85 out of 100 transactions with domestically issued cards, were cash withdrawals. Nevertheless, while the number of cash withdrawal transactions increased by 25% in 1999 compared to the preceding year, payments for purchases grew by 59%.

Cardholder habits has not changed fundamentally, while cardholders tend to use their cards to withdraw cash within the country, when they are abroad, prefer to use them for payment.

With the enhanced popularity of payment cards and the expansion of ATM and POS networks enabling electronic card acceptance, guaranteed cheques are increasingly losing their *raison d'être*. The issue of internationally used guaranteed cheques came to an end in Hungary last year.

Duplicated cards use a major threat for issuers and customers; filtering out transactions with such cards causes a major difficulty, however, due to continuous efforts against all types of fraud the overall fraud level didn't increase.

Appendix: 8 Tables

**Number of Bank Issued Payment Cards  
31 December 1999**

<b>EUROPAY</b>	EC/MC	Standard	461 103
	EC/MC	Gold	10 558
	EC/MC	Silver	20 251
	Cirrus/Maestro		1 774 963
	Cirrus		27 479
	Maestro		72 119
	ec edc		17 658
	<b>EUROPAY total</b>		
<b>VISA</b>	Classic		149 540
	Business		8 240
	Electron		1 110 626
	Gold		1 638
<b>VISA total</b>			<b>1 270 044</b>
<b>DINERS</b>			<b>3 319</b>
<b>DINERS total</b>			<b>3 319</b>
<b>AMEX</b>			<b>2 673</b>
<b>AMEX total (bank issued only)</b>			<b>2 673</b>
<b>Private label cards</b>	cash only cards		111 338
	cash and purchase cards		56 423
	business cards		11 978
	co-branded cards		3 105
<b>Total of private label cards</b>			<b>182 844</b>
<b>Grand total</b>			<b>3 843 011</b>

Note: Citicards are included among cards bearing the Cirrus logo.

## Geographical Distribution of ATM Machines and Card-accepting Bank Branches in Hungary

**31 December 1999**

County/County Seat	County		of which County Seats	
	No. of ATMs	No. of Bank Branches	No. of ATMs	No. of Bank Branches
Budapest			751	262
Baranya County, Pécs	103	116	64	22
Bács-Kiskun County, Kecskemét	94	159	40	25
Békés County, Békéscsaba	68	113	24	15
Borsod-Abaúj-Zemplén County, Miskolc	95	152	52	28
Csongrád County, Szeged	94	110	53	32
Fejér County, Székesfehérvár	96	118	49	22
Gyor-Moson-Sopron County, Győr	111	144	52	31
Hajdú-Bihar County, Debrecen	97	108	58	26
Heves County, Eger	66	146	25	16
Jász-Nagykun-Szolnok County, Szolnok	72	105	31	14
Komárom County, Tatabánya	57	85	19	13
Nógrád County, Salgótarján	43	70	20	12
Pest County	926	424		
Somogy County, Kaposvár	84	122	32	18
Szabolcs-Szatmár-Bereg County, Nyíregyháza	77	171	40	19
Tolna County, Szekszárd	47	85	18	15
Vas County, Szombathely	80	75	37	20
Veszprém County, Veszprém	79	109	28	21
Zala County, Zalaegerszeg	69	105	24	14
<b>Total</b>	<b>2 358</b>	<b>2 517</b>	<b>1 417</b>	<b>625</b>

**Merchant Acceptance Points and their Distribution by Card Type  
31 December 1999**

	Number of merchant locations	No. of Imprinters	No. of POS Units	No. POS with PIN verification
Number of merchant acceptance points at the end of the reporting period	23 292	11 908	20 650	5 046
Number of points accepting Europay cards	14 971	7 734	16 555	5 032
Number of points accepting Visa cards	15 657	8 461	16 455	5 032
Number of points accepting Diners Club cards	4 079	3 461	3 903	
Number of points accepting Amex cards	7 012	3 840	3 844	
Number of points accepting JCB cards	6 771	6 771	6 044	

## Volume and Value of Bank Issued Card Transactions in Hungary

Q1 and Q2 and Q3 and Q4, 1999

Card Type	Cash Withdrawal		Purchase		Total	
	Volume	Value	Volume	Value	Volume	Value
	pcs	HUF Million	pcs	HUF Million	pcs	HUF Million
<b>Payment cards issued in Hungary</b>						
EUROPAY	44 674 290	1 029 894	7 640 605	58 212	52 314 895	1 088 106
VISA	24 849 001	454 960	4 638 115	33 674	29 487 116	488 634
DINERS	4 614	283	32 967	576	37 581	859
AMEX *	5 680	275	11 204	226	16 884	501
Private label card	3 468 296	66 480	250 381	3 945	3 718 677	70 425
<b>Total</b>	<b>73 001 881</b>	<b>1 551 892</b>	<b>12 573 272</b>	<b>96 633</b>	<b>85 575 153</b>	<b>1 648 525</b>
<b>Payment cards issued outside Hungary</b>						
EUROPAY	1 255 414	88 628	2 182 238	29 735	3 437 652	118 363
VISA	516 417	26 639	2 029 142	35 896	2 545 559	62 535
DINERS	4 023	559	55 224	2 382	59 247	2 941
AMEX *	1 412	55	59 648	1 396	61 060	1 451
JCB			2 693	95	2 693	95
CITI	66 998	1 221			66 998	1 221
<b>Total</b>	<b>1 844 264</b>	<b>117 102</b>	<b>4 328 945</b>	<b>69 504</b>	<b>6 173 209</b>	<b>186 606</b>
<b>Grand Total</b>	<b>74 846 145</b>	<b>1 668 994</b>	<b>16 902 217</b>	<b>166 137</b>	<b>91 748 362</b>	<b>1 835 131</b>

\*Figure includes bank franchise business but excludes the turnover realised by the Amex as non-bank issuer

**Volume and Value of Transactions Outside Hungary by Cards Issued in Hungary**  
Q1 and Q2 and Q3 and Q4, 1999

Card Type	Cash Withdrawal		Purchase		Total	
	Volume pcs	Value HUF Million	Volume pcs	Value HUF Million	Volume pcs	Value HUF Million
EUROPAY	198 254	6 743	548 114	12 797	746 368	19 540
VISA	169 583	8 615	489 157	12 459	658 740	21 074
DINERS	286	16	11 068	454	11 354	470
AMEX *	584	16	13 769	396	14 353	412
<b>Total</b>	<b>368 707</b>	<b>15 390</b>	<b>1 062 108</b>	<b>26 106</b>	<b>1 430 815</b>	<b>41 496</b>

\* Figure includes bank franchise business but excludes the turnover realised by the Amex as non-bank issuer

## Volume and Value of Transactions by Credit, Debit and Charge Cards

Q1 and Q2 and Q3 and Q4, 1999

Card Type		Number of Cards Issued pcs	Cash Withdrawal		Purchase		Total	
			Volume pcs	Value HUF Million	Volume pcs	Value HUF Million	Volume pcs	Value HUF Million
EUROPAY	credit	102 903	292 576	6 582	32 222	305	324 798	6 887
	debit	2 281 228	44 579 968	1 030 055	8 156 497	70 704	52 736 465	1 100 759
<b>EUROPAY total</b>		<b>2 384 131</b>	<b>44 872 544</b>	<b>1 036 637</b>	<b>8 188 719</b>	<b>71 009</b>	<b>53 061 263</b>	<b>1 107 646</b>
VISA	credit	37 262	68 120	1 324	415 010	4 199	483 130	5 523
	debit	1 232 782	24 950 464	462 251	4 712 262	41 934	29 662 726	504 185
<b>VISA total</b>		<b>1 270 044</b>	<b>25 018 584</b>	<b>463 575</b>	<b>5 127 272</b>	<b>46 133</b>	<b>30 145 856</b>	<b>509 708</b>
DINERS	charge	3 319	4 900	299	44 035	1 030	48 935	1 329
<b>DINERS total</b>		<b>3 319</b>	<b>4 900</b>	<b>299</b>	<b>44 035</b>	<b>1 030</b>	<b>48 935</b>	<b>1 329</b>
AMEX	charge	2 673	6 264	291	24 973	622	31 237	913
<b>AMEX total</b>		<b>2 673</b>	<b>6 264</b>	<b>291</b>	<b>24 973</b>	<b>622</b>	<b>31 237</b>	<b>913</b>
	charge	1 459			1 084	106	1 084	106
Private label cards	debit	181 385	3 468 296	66 480	249 297	3 839	3 717 593	70 319
<b>Total of private label cards</b>		<b>182 844</b>	<b>3 468 296</b>	<b>66 480</b>	<b>250 381</b>	<b>3 945</b>	<b>3 718 677</b>	<b>70 425</b>
<b>Grand total</b>		<b>3 843 011</b>	<b>73 370 588</b>	<b>1 567 282</b>	<b>13 635 380</b>	<b>122 739</b>	<b>87 005 968</b>	<b>1 690 021</b>



**Fraud Loss in Issuer Business by Fraud Type**  
**Q1 and Q2 and Q3 and Q4, 1999**

Type of Fraud	Fraudulent activity		Value of Losses Charged to		Value of Losses Booked by Issuing Bank HUF Million	Total Value of Losses HUF Million
	Volume pcs	Value HUF Million	Foreign/Hungarian Acquirer Bank HUF Million	Cardholders HUF Million		
Cards reported lost or stolen	1 278	77,235	33,419	28,501	11,648	73,568
Cards not received	29	1,318	0,120		1,098	1,218
Cardholder fraud	13 856	733,912	5,778	649,169	18,114	673,061
Counterfeit cards	1 365	153,681	17,714	12,959	107,827	138,500
Mail order/Telephone order	5 174	53,214	41,516	2,918	6,802	51,236
Never issued cards	73	2,249	1,361	0,008	0,122	1,491
<b>Total</b>	<b>21 775</b>	<b>1 021,609</b>	<b>99,908</b>	<b>693,555</b>	<b>145,611</b>	<b>939,074</b>

**Fraud Loss in Acquirer Business by Card Type**  
**Q1 and Q2 and Q3 and Q4, 1999**

Card Type	Fraudulent activity		Value of Losses Charged to		Value of Losses Booked by Acquirer Bank HUF Million	Total Value of Losses HUF Million
	Volume pcs	Value HUF Million	Domestic Merchants HUF Million	Domestic/Foreign Issuing Banks HUF Million		
EUROPAY	4 727	387,711	34,487	381,894	12,178	428,559
VISA	8 088	571,862	44,777	504,331	16,657	565,765
DINERS	839	7,412			7,412	7,412
AMEX						
Private label cards						
JCB						
CITI						
<b>Total</b>	<b>13 654</b>	<b>966,985</b>	<b>79,264</b>	<b>886,225</b>	<b>36,247</b>	<b>1 001,736</b>