

# **THE PAYMENT CARD FRAUD IN HUNGARY**

**2002**

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## 1. Introduction

European banks, retailers and various service providers are all making preparations for introducing chip migration programmes. The final deadlines for migration to chip-based cards are 1 January 2005 and 1 January 2006 for the MasterCard and Visa brands respectively. The aim of the switch from the magnetic stripe to chip technology is to suppress bank card fraud, which, along with fraudulent acts involving the use of cards reported lost or stolen, amounts to three-quarters of the overall loss to the card business. In order that lost and stolen card fraud may be contained, an increasing number of countries are introducing the compulsory use of PIN at POS terminals. In the case of MasterCard Maestro-based shopping, cardholders are only allowed to identify themselves using their PIN. In the case of other cards, checking signatures is still an option.

With the introduction of the simultaneous use of chip and PIN, card-related crimes are likely to target those areas where fraud prevention is still weak, e.g. card-not-present transactions conducted through mail or over the Internet and the fraudulent uses of cards not received. The latter is a problem area in countries where the distribution of new cards by mail is common practice.

The switch from the magnetic stripe to chip technology will also have cross-border implications, with criminal activity cropping up in countries where protection against fraud is weaker, i.e. in countries where ATMs and POS machines are unable to read PIN or where the use of PIN is not compulsory at POS terminals.

## 2. Fraudulent activity and value of losses in the card business in Hungary

Fraudulent activity means fraudulent acts reported by cardholders or otherwise communicated to banks in the period under review, i.e. in 2002. Such fraudulent acts were investigated by the banks affected during the same year. In some cases, however, the completion of such investigations is likely to last well into 2003.

Loss written off means the recording of financial damage as loss by some participant in the card business, i.e. the issuing bank, the cardholder and retailers or the banks of such (acquiring banks). Financial damage forming the basis of losses occurred in either the period under review or the year before; however, the investigations were completed in 2002.

In accordance with earlier practice, fraudulent activity and loss written off are examined separately in two distinct businesses.

- First, we investigate the fraudulent activity and loss written off in the card-issuing business, i.e. deceitful use in Hungary and abroad of cards issued by Hungarian banks. This category includes the frauds and losses incurred in on-us turnover, i.e. those arising in the issuing bank's own network, in transactions conducted with the issuer's cards.
- The second category comprises fraudulent activity and the value of losses arising in the acquiring business, i.e. fraud involving the use of domestically issued cards and foreign-issued cards in Hungary. Fraud and losses incurred in transactions

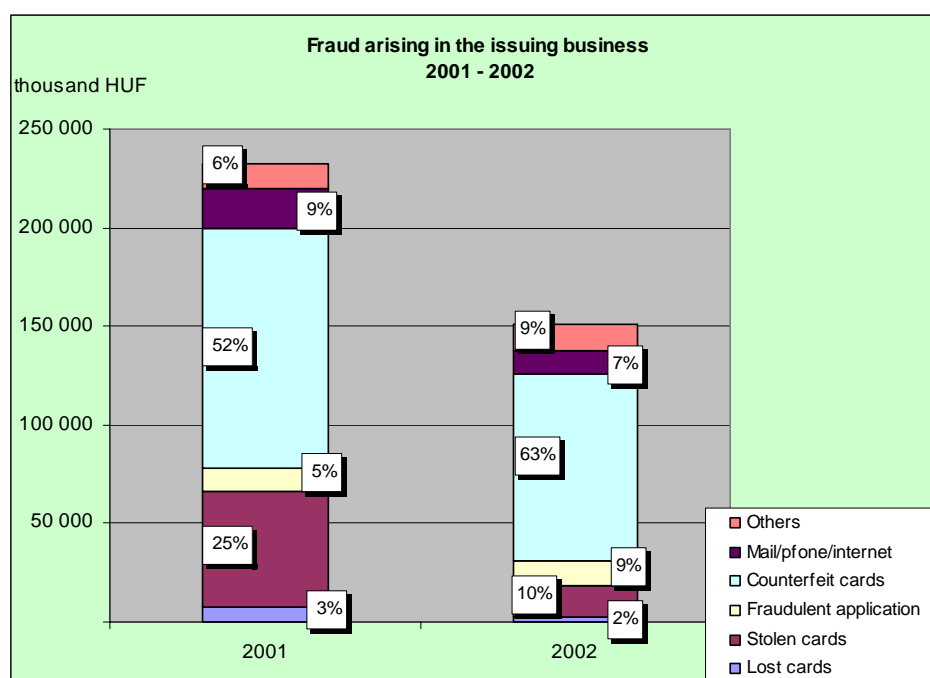
involving the use of the acquiring bank's own cards in its own network are not covered by this point the analysis.

## 2.1 Frauds and losses written off in the card-issuing business

### 2.1.1 Fraudulent activity

Compared with a year earlier, the number of fraudulent acts (3,400 instances), involving the use domestically issued cards fell by nearly 50% in 2002. Their value amounted to HUF 150.7 million, accounting for 0.004% of overall issuing turnover (i.e. cash withdrawals and purchases combined). This ratio halved from a year earlier, with the situation improving not only in terms of ratio, but also in value, attributed to the fact that banks mastered the use of the various monitoring systems already in place at an increasingly great number of banks. This means that trends are analysed on an ongoing basis. Based on the results of such analyses, monitoring systems are upgraded from time to time and new parameters are introduced. Some banks even provide 24/7 surveillance. This reduces reaction time tremendously, curbing any unusual or fraudulent use of cards. Another cause of improvement in statistics is the sending of short text messages of each instance of card use for security reasons, a service recommended by the majority of banks. Some offer it to customers who own mobile phones free of charge. Thus issuers can check whether the card in question is used by its rightful holder or some unauthorised person.

The chart below shows the data of the past two years, also plotting changes in the value and distribution of fraud.



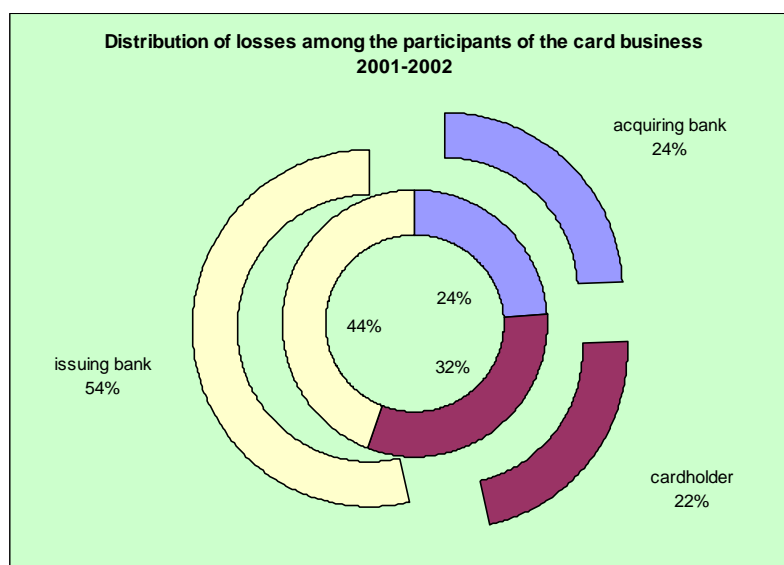
It is easy to infer from the data above that fraudulent acts committed with counterfeit cards account for over 50% of all losses. Although, in quantitative terms, this type of fraud fell by one-fifth (HUF 94.7 million), it grew as a proportion of the total.

Monitoring can help identify suspicious card use after a few transactions. Cards with chips is likely to further reduce counterfeiting. Improvement in respect of stolen and lost cards was spectacular, suggesting that a growing number of customers requested short text messages of card transactions. The three types of fraud described earlier amounted to 75% of all losses. Compared with a year earlier, they fell by 5%. There was only a few per cent difference relative 2001, as regards the losses linked to the other three types of fraudulent use. Both the proportion and value of card fraud through mail and over the telephone or Internet dropped significantly, to HUF 11.4 million. Card not received fraud is uncommon in Hungary (it amounts to a mere HUF 21,000), the reason for this being that most banks insist that customers should receive their cards in person at their branch offices.

### 2.1.2 Loss written off

Total losses written off amounted to HUF 141 million in 2002, representing a 37% decline relative to a year earlier and accounting for 0.004% of turnover. The distribution by types of losses written off practically corresponds with that of the fraud arose.

The chart below shows the distribution of losses among the participants in the card business, with the inner and outer circles representing ratios in 2001 and 2002 respectively.



Compared with a year earlier, issuing banks' losses written off dropped by one-quarter, to HUF 75.8 million, in one year; however, they grew by 10% relative to the respective ratios registered by the other two participants. By contrast, the losses passed on to customers dropped by an equal measure, i.e. by 10%. This was half (HUF 31.4 million) of the amount in 2001 in terms of value.

The losses passed on to acquiring banks declined to 63% (HUF 33.9 million) of the previous year's amount. However, their share in the losses incurred by the card business as a whole remained the same as in 2001.

The table below summarises the distribution of losses incurred by the three participants of the card market, in a breakdown by types of loss:

Losses shared by participants by type of loss 2002				
				HUF millions
Type of loss/Participant	Acquiring banks	Card holders	Issuing banks	Total
Lost cards	0.5	1.3	0.78	2.58
Stolen cards	0.78	13.48	0.74	15.00
Cards not received	0	0	0.02	0.02
Fraudulent application for cards	0.53	0	12.39	12.92
Counterfeit cards	16.24	12.12	58.92	87.28
Mail/telephone/Internet	10.18	0.73	0.44	11.35
Other frauds	5.7	3.78	2.53	12.01
<b>Total</b>	<b>33.93</b>	<b>31.41</b>	<b>75.82</b>	<b>141.16</b>

Banks pass on to card holders 50% and 90% respectively of their losses arising from frauds committed with lost or stolen cards. Losses incurred due to other frauds account for nearly one-third and those incurred due to uses of counterfeit cards for 14% of losses banks pass on to clients.

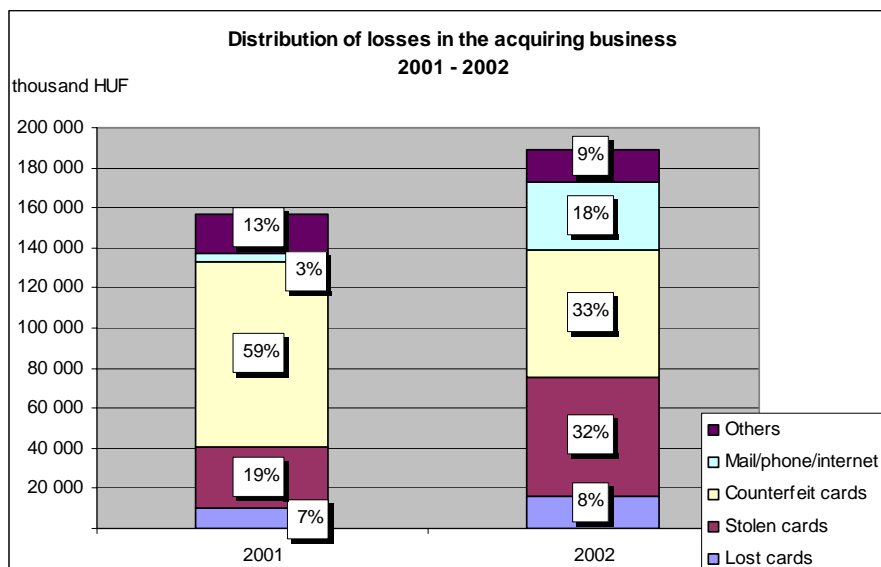
Pursuant to Article 17 (2) of Government Decree No. 232/2001 'On the circulation of payments, payment services and electronic payment instruments', from 1 December 2002 a card holder is only liable for losses incurred prior to notification up to a limit of HUF 45,000, unless a loss has been incurred as a result of proven wilful misconduct or gross negligence by the holder. This Government Decree will only have full effect in 2003 and, as a result, the total amount of losses written off by card holders will likely fall in respect of the two categories noted above as well.

Issuing banks bear any losses incurred due to fraud committed with mailed cards which were used by not their rightful holder, although the amount of such losses is insignificant. Issuing banks bear 96% of losses arising from fraudulent application of cards. This ratio is 68% in the case of counterfeit cards, with the amount of losses incurred being the highest.

## 2.2. Frauds and losses written off in the card acquiring business

In 2002, the total amount of fraud arose increased by 20%, to HUF 189.2 million. This accounted for merely 0.005% of acceptance turnover (i.e. cash withdrawals plus retail purchases). This ratio was 0.006% in 2001, slightly higher than in the year under review.

The distribution of losses saw a significant change relative to the previous year, as shown in the table below:



The sharp decline of 32% to HUF 63.03 million in the amount of financial losses arising from uses of counterfeit cards in 2002 relative to the previous year was the most salient, positive change in this area. This is partly attributable to increasingly more efficient and organised co-operation between bank specialists involved in detecting fraudulent uses of bank cards – they detect those merchant acceptance points where collusion with counterfeiters can be proved. In addition, there is adequate exchange of information between banks and the police. As a result of subsequent investigations, a number of gangs specialised in counterfeiting cards were eliminated in the year under review.

The composition of fraud underwent a shift in 2002, as the value of crimes committed with stolen cards doubled to HUF 59.7 million and that of frauds committed with lost cards rose by 150% to HUF 15.8 million. All this was due to the firm steps taken against counterfeiters. Frauds committed by using stolen cards rose significantly as a proportion of the total. The amount of fraud caused via mail/telephone/Internet saw an eightfold rise to HUF 34 million, its share within total rising sixfold relative to 2001.

Hungarian issuing banks bear the overwhelming majority, 87%, of losses arising from fraudulent card use. Acquiring banks pass 12% of losses on to merchants and write off the remaining 1% against their assets.

### 3. Conclusion

In sum, frauds committed with bank cards fell as a proportion of total turnover in 2002, both in the issuing and the acquiring business, despite an increase in the latter in terms of value.

This improvement can be attributed to a number of factors. First, banks operate their monitoring systems designed to detect unusual, suspicious transactions with cards increasingly more effectively. Second, there is adequate exchange of information between the institutions involved, and between banks and the police authorities,

followed by successful investigative work. Sending SMS messages following transactions, banks are able to detect, even after the first transaction, if the payment instrument has been used by someone else than the rightful holder, or perhaps if a transaction was conducted with a counterfeit card. Consequently, they can take immediate action, in order to prevent further illegal use of cards.

There was a shift mainly in the acquiring business, i.e. the use of cards in Hungary issued domestically or abroad, among the various types of fraud, as frauds committed with counterfeit cards fell in terms of both value and as a proportion of the total, while fraud due to unauthorised uses of stolen cards doubled and those due to lost cards rose by 150%.

However, an opposing trend was observable in uses of domestically issued cards, as banks were able to reduce significantly unauthorised uses of stolen or lost cards by sending out SMS messages, a widely used weapon to protect against fraud. Presumably, therefore, the increase in this type of fraud can be linked to the domestic use of foreign-issued cards in the acquiring business.

Of the various types of fraud, further shifts can be expected following the migration to chip – the final deadlines for this are 1 January 2005 and 1 January 2006 for the MasterCard and Visa brands respectively. This will likely lead to a further decline in the number of counterfeits. Provided that the chip is complemented with the compulsory use of PIN, unauthorised uses of lost or stolen cards will be made even more difficult. Consequently, an increasing portion of losses is expected to be incurred due, for example, to frauds linked to mail/telephone/Internet, or those committed with cards not received, against which neither the chip nor the secret code offers adequate protection.

However, not only the various types of fraud are expected to undergo a shift, but those countries where the chip migration and the introduction of the PIN code suffer a delay will become increasingly more vulnerable.