

CARD FRAUD EVOLUTION REGULATION AND PREVENTION MEASURES

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ABSTRACT: In this paper I presented the most frequently appeared card frauds, useful tips and indications to fight against this type of frauds. Due to its great utility and effectiveness, debit and credit cards have a big impact on entire economical and social activity. They became the most profitable and the most common used of all costumers' financial products.

Key words: Card, ATM – automated teller machine, POS – point of sale

JEL codes: D18, G21, K4

Introduction

The card is an instrument of reimbursement granting the authorized card holder to purchase goods and services without the as-such presence of the cash. Thus, the card facilitates the intrinsic financial connection between the trader and consumer it being one simple access key to a bank account. Possessing the general characteristics of an instrument of paying, the card also grants unconditional obtaining of cash thus being removed the functional barrier of utilization.

1. Cards using advantages

The advent and development of the card is –first of all- due to the advantages for the card holders and - last but not least – to the traders, too. In the developed countries such a benefit is real. The advantages of cards to the card holder are referring to the following:

- They grant an easy utilization and enhanced safety;
- Offer the possibility of monitoring and control of payments done;
- The range of products and services acquirable by means of cards is extremely wide and the holder is enabled to carry out the most advantageous acquisition;
- The customers need not to withdraw cash and have upon them large sums of money to pay for the valuable goods ousting in such way the risks of theft, discomfort triggered by the cash on the bearer;
- By detaining a credit card, the buyer has the possibility of choosing the time of developing certain acquisitions as he or she has the credit within close reach;
- The transactions are carried out instantly or –not really so – much faster than *via* checks;
- The possessor of a card is able to pay debts entirely on receiving the balance situation or, to pay it off in monthly installments;

In so far as the advantages of the tradesman are concerned, these are: transactions done smoothly, as cash is ousted from the circuit; increased security degree; increased sales volume. Of the banks' advantages:

- Allowing for increased degree of operations' automation meaning reduction in the manually performed operations;
- Decide the decrease of operations with cash;

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- Payments performed by means of credit cards are granted;
- High control degree over customers' transactions in proportion to available funds in the account and uncovered credit in this;
- Banks' costs to cover card operation are lower in comparison with the expenditures regarding the utilization of checks and cash;
- Interests collected from merchants who accept payments by card for goods or services offered by them represent a source of income for the bank;

With all operations by cards there come up risks of financial losses, frauds or disputes over the transactions. Therefore, it is necessary to be some kind of rules and strict mechanisms of diminishing these kinds of risks as none of them cannot be eliminated altogether. With the utilization of cards in a habitual manner as means of payment, the numbers of frauds have since increased to a disquieting level due to the possibility of obtaining important sums of money in a relatively simple manner.

Types of cards fraud

The risk of financial losses may come up with all those implied in a card-based transaction: the card holder; the tradesman; the card-issuing bank and the accepting bank. Frauds and disputes appear, as a rule, at the level of a transaction.

To be sure, the temptation of causing fraud and fraudulently use a card represent one negative phenomenon generating multiple losses to the world's system of banks. The overall trend, modern technology and the strictly banking comportment of the modern user will secure covering the deleterious fraud effects as well as the trust in the functions of this instrument of payment.

There are several ways of carrying out frauds by means of banking cards; however, in most of the cases those falling victims are the issuing banks.

The most widely spread methods of fraud are classed by Association of Visa International [9] as follows:

- frauds carried out by means of lost cards
- frauds achieved with stolen cards
- frauds by stolen cards while they are sent (NRI)
- cards' forgery and counterfeit
- frauds in the transaction cards when the card is not present (card-not-present)
- fraudulent utilization of PIN number or identification data
- identity theft of card holders (card ID theft).

Due to the fact that the above mentioned ones are the most frequent types of fraud we are of the opinion that it is necessary to introduce a detailed presentation of these:

1. Fraud by lost-or-stolen cards

Frauds achieved by means of lost- or stolen cards cover the entirety of frauds in which cards declared by their lawful holders as lost or stolen are used. The bulk of frauds in this category take place in shops not asking for PIN, anterior to announcing the theft or loss by the card possessor.

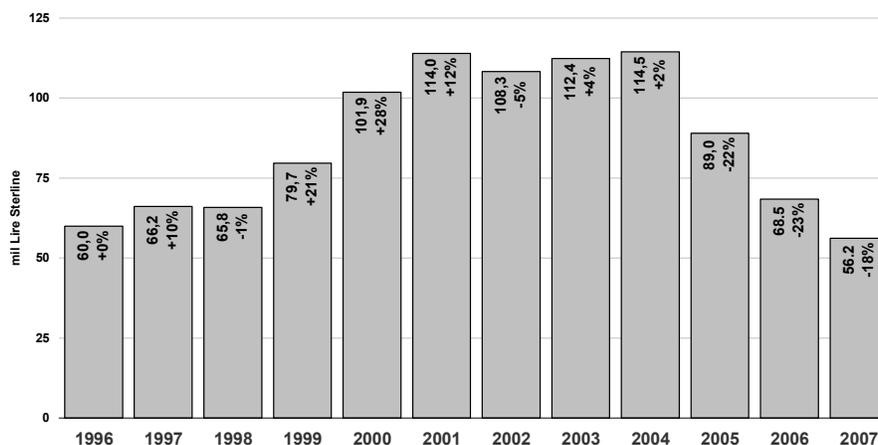


Fig. no. 1 Lost and stolen fraud on UK –issued cards 1996-2007

Source: Report APACS – Fraud the facts 2008

One encounters two situations, i.e.,: first, when individuals possessing cards do fraud or not; second, when the holder loses the card and notices only when he wishes to use it again or, on receiving the bank statement and notices that some unknown transactions were implemented.

According to some APACS [10] statistics losses due to cards lost or stolen in UK went up from 60 mil £, in 1995, to maximum value of 114,4 mil £ in 2004. After the introduction on PIN and Chips cards, the value went down to 56,2 mil £ in 2007. In 1999 this modality of fraud represented 72% of the total losses, going down to 11% of losses in 2007[10].

2. Mail Non Receipt Cards Fraud

This type of fraud implies cards stolen or lost during their being sent, after the card issuers have sent them and before the lawful holders received them. There has been found that generally those who are exposed to such a risk dwell in the suburbs in flats having common letter box or hostels. Also, there can be involved post personnel, persons who transmit cards by mistake into letter boxes; then, cases of changed address of the legal addressees, or last but not least, stealing the transportation means of the post. At world level the weight of this type of fraud situates itself around 3% of the overall frauds declared - on its way down as to preceding years, however.

Values recorded by this type of fraud in UK – according to APACS- amount to 10,2 mil £ in 2007 as to 72.9 mil £ in 2004 (meaning a diminution by 86%). Such a diminution is owing to the introduction of chip- and PIN-cards. As for now, losses due to this type of fraud go for 2% of the total volume of losses generated by card frauds [10].

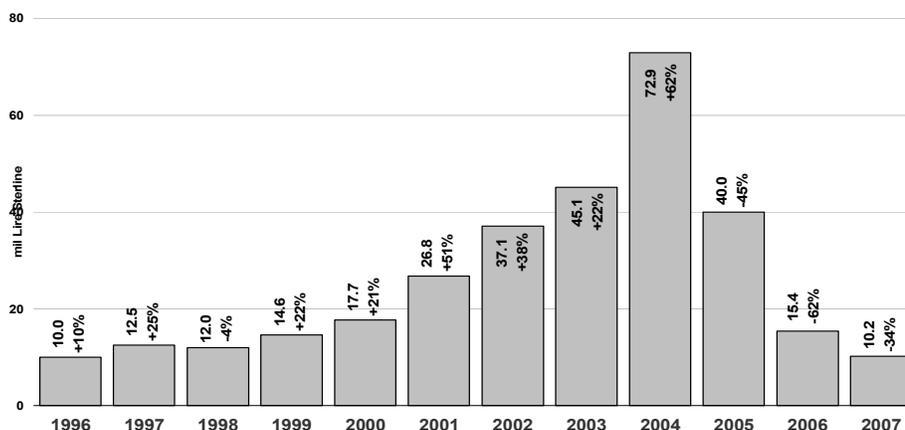


Fig no. 2 Mail non-receipt fraud losses on UK-issued card 1996-2007

Source: Report APACS – Fraud the facts 2008

3. Card-not-present fraud

One of the most widely spread types of fraud is that during transaction when the card is not present; Internet, telephone, or postal transactions. Tradesmen assume a great risk when transactions go on in the absence of both card and its holder, as:

- the security elements of the card cannot be checked for authenticity and validity;
- lack of signature and that of introducing the PIN-code greatly increase the risk that the card holder be not the legal possessor of it;
- The card-issuing companies cannot guarantee that the information asked by transactions developed in the absence of card, are transmitted by the legal holder. Steps have been taken in order that such transactions are protected from fraud.

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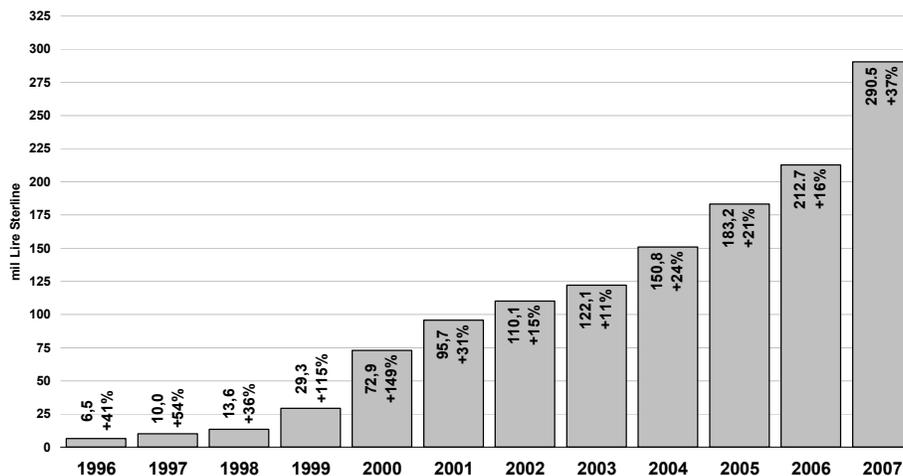


Fig. no. 3 Card not present fraud losses on UK – issued cards 1996-2007

Source: Report of APACS Fraud the facts 2008

In 2007, this was the most widely spread type of fraud in UK, totaling 54% of the overall losses due to money-card frauds (compared to 6% in 1995). If in 1995 losses due to this type of fraud amounted to 6.5 mil £, in 2007 it soared to 290,5 mil £ [10].

4. Counterfeit or forged cards fraud

Counterfeit-or forged cards represent cards manufactured illegally and containing information and data in the card legally issued.

Frauds by counterfeit implies the skimming, a procedure through which the information on the magnetic band of the legal, authentic card, are copied electronically on another card without the legal possessor knowing anything about it. The forged card is identical to a real one and the volume of prejudice is rather high. Generally, the skimmer (the gadget meant to stealing information) was located in a place where corrupt tradesmen copied the cards presented by the customers before the former gave these back to the latter. Later, these were selling the information to the forgers who, at their turn, followed to use them in counterfeiting. In most of the cases, the legal owners of cards never knew anything about these frauds until they received the bank statement containing the transactions they never contracted.

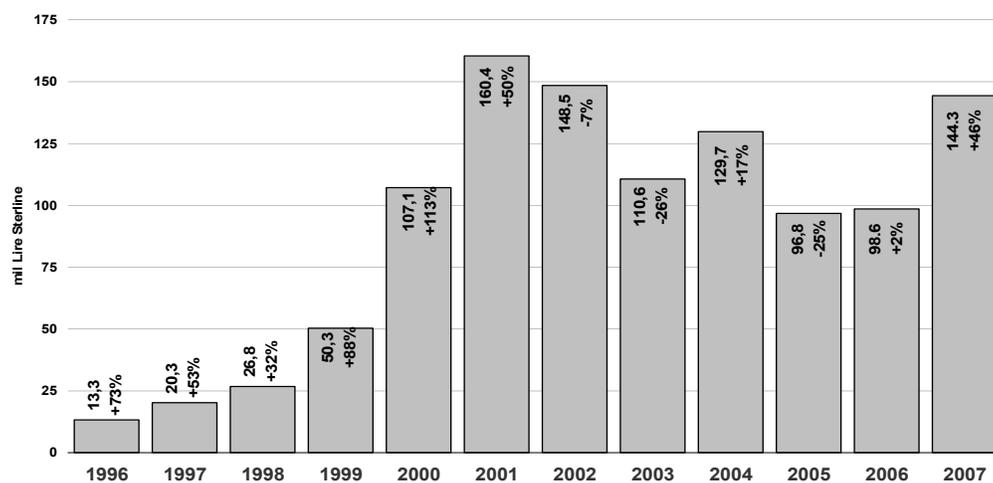


Fig. no. 4 Counterfeit card fraud losses on UK – issued cards 1996-2007

Source: Report of APACS Fraud the facts 2008

Beginning in 2003, skimmers were adapted also to the automated teller machines (ATMs).

The value of frauds owed to stolen - or lost cards in UK, in 2007, was as high as 144,3 mil £ compared with 129.7 mil £ recorded in 2004. This type of fraud is increasing overall because criminals continue to carry out old style fraud by targeting the magnetic stripe.

5. Identity theft cards fraud

Identity theft happens when an infringer fraudulently obtains information regarding the card or the card together with the personal data of the holder which gives him/her the possibility of accessing a card account in the name of another person.

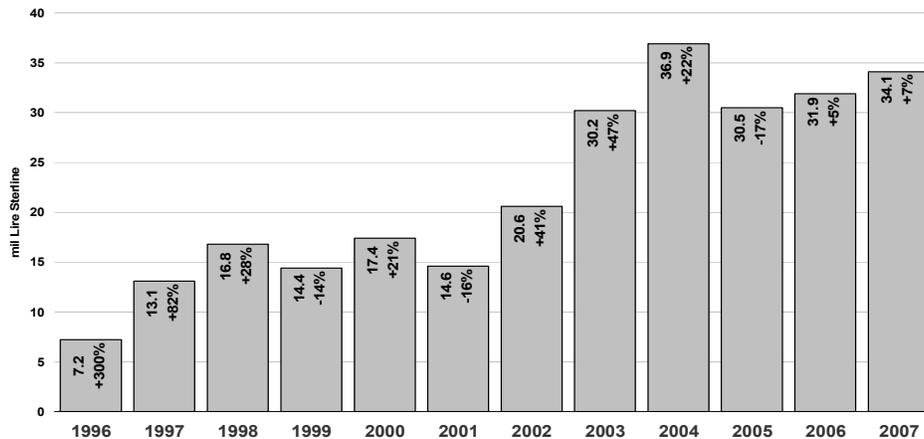


Fig. no. 5 Card ID Theft fraud losses on UK – issued cards 1996-2007

Source: Report of APACS Fraud the facts 2008

There can be identified two types of theft of the identity of the card holder:

- Fraudulent perpetrating at the bank (11,7 mil £ in 2007). In such case the perpetrator is using stolen documents (invoices issued by utilities or, bank statements) or forged, to open accounts in the name of another person;
- Account overtaking (22,4 mil £ in 2007), i.e., the perpetrator fraudulently obtains personal financial data as well as information on the card (we shall come back to this method of identity theft, accompanied by details, in what follows). The forgers access the accounts and, on many occasions, alter the address in the accounts of the legal card possessors in view of obtaining new cards and checks. When in 1995 losses due to identity theft were reaching 2% of the overall losses generated by card frauds, in 2007 this percentage situated to 6% of the total losses [10].

Fighting against cards fraud

At world level, with the evolution of electronic means of communications and payments, new means of security have come up meant to reduce fraud and make social-economic activities smoother. Thus, the electronic identity of the individual have become reality, necessity and priority and, at global level there begin the study and implementation of electronic cards of identity and of EMV bank cards. This measure was taken – first of all – to eliminate counterfeiting cards based on magnetic band as well as of other means of fraud that have made havoc on world level these last years.

EMV specifications describe the central attributes, including material- and technical characteristics, ways of accessing card information and functions of it; also, what is the card's security structure; however, it leaves with the international card organizations the details of defining the individual financial applications.

The essence of the functionality of payments carried out by means of smart cards is to be found with interaction between the image integrated in the card and the integrated image in the terminal. Such interaction is defined by the EMV standard.

The main advantages offered by smart cards in comparison with the technology of cards bearing magnetic band are as follows:

- Higher safety than in utilization of cards with magnetic band. Due to the impossibility of forging the active elements of cards, as well as to the ability of the card to verify the authenticity of implements communicating with;

- much larger capacity of storing information than with the conventional technology of the magnetic band
- Convenience of securing services without server connection.

Conclusions

Technology is a key weapon in fighting fraud, being considered as priority. Now, many organizations are introducing anti-skimming systems and improve the security of the ATM terminals. As for now, the innovating modalities of data analysis are being revised and bettered. The analysis of the links accessed on Internet, for example, can offer the banks a common outlook on frauds within the organization, whereas the multifactor authentication promises to lessen the utilization of the statistical forms of authentication. Banks should weigh the costs of implementation of the new technology both from the perspective of financial losses caused by frauds and by that of the impact on customers' trust.

Regarding the European Union, we can see a continue harmonization of legislation on card payment fraud. The European Commission's Fraud Action Plan was created by Fraud Prevention Expert Group (FPEG).

The FPEG was established by the Commission under its action plans to prevent fraud in non-cash means of payment. It is an experts' group at EU level which includes representatives of different parties involved in fraud prevention: i.e. national and EU payment schemes, banks, national public authorities, European and international law enforcement agencies (e.g. Europol, Interpol) retailers, consumer groups, network operators etc. The FPEG provides for a platform where stakeholders can effectively exchange information and best practice to prevent fraud. It contributes to intensify cooperation between interested parties, especially at cross-border level. It provides advice to the Commission.

The European Payments Council set up several new frauds prevention policies with the applicability around European Union with the help of law enforcement agencies and each national juridical authority.

The Single Euro Payments Area (SEPA) is an initiative of the European banking industry that will make all electronic payments across the euro area – e.g. by credit card, debit card, bank transfer or direct debit – as easy as domestic payments within one country are now.

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