

# COMPUTER CRIME IN HUNGARY

Mrs. Ilona Pergel

## 1. Introduction

A characteristic feature of the information society is the penetration of modern information technology in almost all areas of life, making possible the more effective administration, office work, commerce, communication. However the new society does not only hold out advantages, its disadvantages are emerging too. Like on any field of life where economic interests come into conflict or it is possible to obtain economic advantages with crime, there appeared such criminal actions in this field too, which use the new technology. The criminal actions connected with computers do not come upon all countries equally. They cause much trouble mainly in those countries, where the technology is developed, and the new means, tools became integral parts of the life of society.

In parallel to the development of the technological conditions of the information society the question of the computer crime touches more and more people in the last years in Hungary too: in the second half of the last decade we had to live together with the computer viruses, and the e-mail viruses began to spread. Soon such popular sites as Yahoo, Amazon or - in Hungary - Elender got into the middle of the attack of the crackers. The moral and material damage caused to the service providers is significant. Not only, the service providers may loose however, but the users too as by joining the net we become potential victims. Therefore, we are in sore need to find a solution of suppressing computer crime.

To be able to take up fight against it we must know what we must mean by computer crime really, and how big is the damage it causes. In this paper, we look over the crime connected with computers, drafting its recent law-regulation frameworks, which at the same time determines their statistical classification too. Then based on the Ministry of Interior we examine the position of the Hungarian computer crime in the mirror of statistics.

## 2. Definitions

Although the first criminal actions connected with computers happened before the end of the fifties, (e.g. embezzlement in USA in 1959, committed with help of punched cards) due to many-coloured nature of the actions, the jurists undertook to a comprehensive definition only at the beginning of the seventies. Mühlen gave the first: computer crime is any criminal action the tool or object of which is computer. Between 1983-85 OECD examined the European situation, and summarised the experiments. In the second half of the eighties the European Council prepared a list of the actions to be penalised especially.

In Hungary the lawmakers became engaged in the computer crime more seriously in the first half of eighties. "Computer may be the tool and the target of the crime" as Peter Polt established 1983.

Most recently Imre Kunos determined it as follows: "Computer crime is the complex of those criminal actions which are directed against information technological tools, system elements or use information technological tools, systems as tools of crime."

Before turning to the examination of the crimes, we characterise the worldwide development we are witnesses in the field of the target and tool of computer crime i.e. the information-technology tools.

### 3. The development of the information-technology tools

Basic conditions to the spread of the information society and at the same time its characterisation is the rapid growth of the number of the computers among them those switched to the Internet. In 1998, the number of PC-s was estimated to 335 million. In 1999, this number grew up with 15% to 387 million. Even bigger is the growth of number of Internet hosts: In 1998 this number was 43 and in 1999 71 million computers were switched to Internet i.e. the growth was 65%.

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#### Internet indicators, 1999

	Internet				Estimated PCs	
	Hosts	Hosts per 10'000 inhab.	Users (‘000s)	Users per 10,000 inhab.	Total (‘000s)	Per 100 inhab.
Africa	184'726	2.1	2'655	34.6	5'877	0.9
Americas	56'005'129	684.6	131'126	1'602.8	169'977	21.3
USA	53'175'956	1'925.1	110'000	3'982.4	141'000	51.1
Asia	4'212'751	11.8	49'234	140.9	86'562	2.5
Japan	2'636'541	208.4	18'300	1'446.6	36'300	28.7
Europe	10'054'738	125.9	70'255	880.0	144'460	14.6
Austria	262'632	321.2	850	1'039.5	2'100	25.7
Czech Republic	122'253	119.1	700	682.1	1'100	10.7
France	1'233'071	209.4	5'660	961.2	13'000	22.1
Poland	171'217	44.2	2'100	542.1	2'400	6.2
<i>Hungary</i>	<i>119'642</i>	<i>117.2</i>	<i>600</i>	<i>587.7</i>	<i>750</i>	<i>7.4</i>
Germany	1'635'067	199.0	15'900	1'934.8	24'400	29.7
Océania	1'368'016	455.1	6'736	2'244.7	10'195	42.7
<b>World</b>	<b>71'825'360</b>	<b>120.1</b>	<b>260'095</b>	<b>439.8</b>	<b>387'071</b>	<b>6.8</b>

Source: ITU

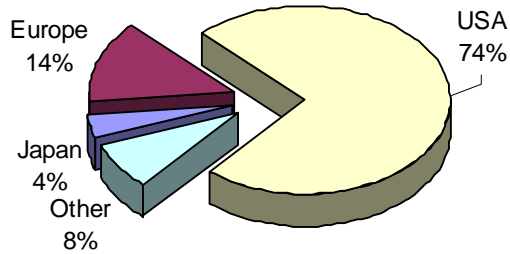
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The number of Internet users in Europe reached 70 million in 1999. That is 27% of the whole number of Internet users. In Hungary the growth is a bit behind the world average: in 1998, there were 660 thousands and in 1999, 750 thousands of computers, that means 14% growth. The situation is worth concerning the Internet hosts: their number increased from 95'931 to 119'642, i.e. by 25%.

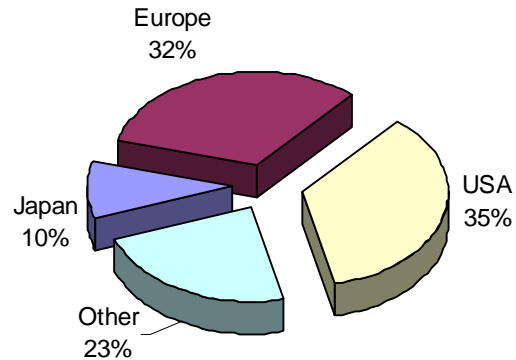
The market of information and telecommunication technology plays increasingly important role in the economy too. Its turnover grows yearly with about 150 billion Euro, and in 2000, it may be expected to reach 1'700 billion Euro. From this market, Europe shares 32%, USA 35% and Japan 10%.

## Internet hosts and incomes of telecommunication market

Proportion of Internet hosts



Share from the turnover of the telecommunication market



Source: ITU

The penetration of the Internet usage created the basis to the development of European e-commerce too, which had the turnover of two billions of Euro in 1999. In 1999, 16 million Europeans joined to Internet, and spent there 40 billions Euro. The income from the e-commerce will reach by 2004 6.3% of the total commerce's. i.e. 1.6 billion of USD. The income from the on-line advertisement which is now 309 millions Euro by 2004 may reach 8.6 billion Euro.

According to market forecasts in 2004 there will be 219 millions mobile Internet users (WAP users) in Europe and m-commerce (mobile e-commerce) will have by 2003 23.6 billions Euro.

It appears from the listed data, that wider and wider strata of society get into connection with the computer networks. "depend", "are on they mercy". One of the most critical issues of our days is to create the conditions the reliable use of these tools.

### 4. Statistical observation of computer crime

It is not easy to observe criminal actions, as the perpetrator does everything for keeping hidden his illegal behaviour and himself. There are some special phenomena in addition to the usual distorting formal factors, making even more difficult to observe criminal actions connected with computer.

- Clearing up and following crime connected with computers is made difficult by the fact that technology gives possibility the perpetrator to hide: the action may be committed using the passwords and identifiers of other people. The electronic networks going through state borders make possible the computer crime so that the perpetrator breaks the Hungarian laws staying in other country. Moreover, some of them are non-punishable youngsters.
- For the maintenance of good reputation, the injured parties (e.g. banks) try to cover up the actions.
- The novelty of the crime makes more difficult to take into consideration statistically it. Some of them got into the Criminal Code in this decade, as new statements of facts. No unified juridical practice was shaped concerning the new criminal actions. Therefore, it is not surprising, that there is a big latency in the field of computer crime.

It makes almost impossible to follow computer crime if it is not distinguished from other crimes committed with different tools. According to the standpoint of law to any question concerning the computer crime – looking for analogies, parallelism between the traditional and new phenomenon, the regulation of the law may be deducted.

Due to the listed motives, any conclusion drawn from the available data must be handled with reservations, however perhaps it is not useless to examine computer crime on the basis of data gathered by the unified police-prosecutor's statistical office working from 1964.

#### *4.1. Fraud committed with Computer*

To switch over to the market economy changed not only the economy but the structure of crime too. New criminal acts appeared, which are very dangerous to the society, not contained in the Criminal Code so the procedure against the perpetrator has legal difficulties. Such type of criminal actions was crime connected with computers.

Today the only criminal actions connected to computer in the Criminal Code is fraud with the help of computer. The crime was entered into the economical crimes by 1994 act IX. in 15 May 1994.

300/C.§ says:

- (1) The person who - for acquiring unlawful profit or causing damage - influences the result of computerized data processing by changing the program, deletion, input of erroneous or deficient data, or by carrying out other unauthorized operations, commits a felony, and shall be punishable with imprisonment of up to three years.
- (2) The punishment shall be
  - a) imprisonment of up to five years, if the computer fraud causes considerable damage;
  - b) imprisonment from two years to eight years, if the computer fraud causes especially great damage;
  - c) imprisonment between five to ten years for computer fraud that causes particularly substantial damage.
- (2) A computer fraud is also committed by the person who commits the act described in subsections (1) and (2) by the utilization of an electronic card used for public telephone service or for public cellular radio-telephone service, or by the alteration of the software of a microcomputer controlling a public cellular telephone.

The paragraph was enacted from 15 May 1994 into the Criminal Code. That time it consisted only from the points (1), (2)(a) and (2)(b). Point (3) was enacted by the act 1996 LII with effect from 15 August 1996. In 1999, the lawmakers considered necessary to render it harder. The point (2)(c) was enacted by the act 1999 CXX, with effect from 1 March 2000. The statistical data cover the adequate time intervals.

#### *4.2. The number of crime which became known*

After the big growth in the 90-ties, the numbers of crimes, which became known, seems to stagnate: it is between 400-600 thousand. An exception was the year 1998, when their numbers exceeded 600 thousands. In 1994, the decrease compared to the previous year was 15.8%.

However, the number of the economical crimes increased in the last years rapidly, although in the middle of the decade its growth was similar to the growth of the number of other criminal actions. The number of the economical crime was in 1999 five times more then in 1994, and

its proportion in the whole number of criminal actions grew up in the same way: in 1994 its proportion was 1.05%, in 1999 it reached 4.02 %.

Computer fraud made only 1% of the total number of economical crimes, it was 5% in 1997. Today computer fraud makes 1.5-1.7% of the economical crimes.

### Economical and computer fraud crime which became known 1993-2000

	1993.	1994.	1995.	1996.	1997.	1998.	1999.	2000.
Crime which becomes known	400'935	389'451	502'036	466'050	514'403	600'621	505'716	450'673
Economical crime	6'146	4'085	5'064	5'409	6'543	13'453	20'318	10'986
Computer fraud	-	1	9	84	320	419	304	183
<i>Felony</i>	-	1	8	73	309	410	279	..
<i>causing considerable damage</i>	-	0	1	7	6	3	10	..
<i>causing especially great damage</i>	-	0	0	4	5	6	15	..

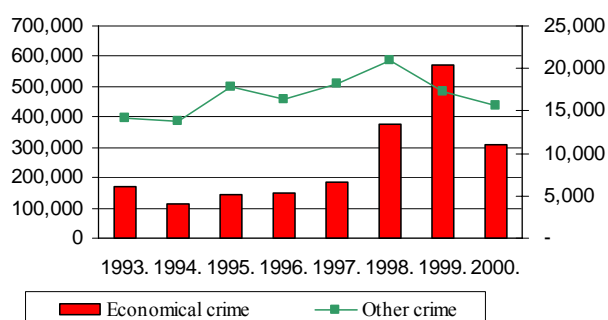
Source: MI Central Office

The biggest number of computer fraud was recorded in 1998. In 1999, this number falls back below the value in 1997, and this decreasing tendency did not change in 2000.

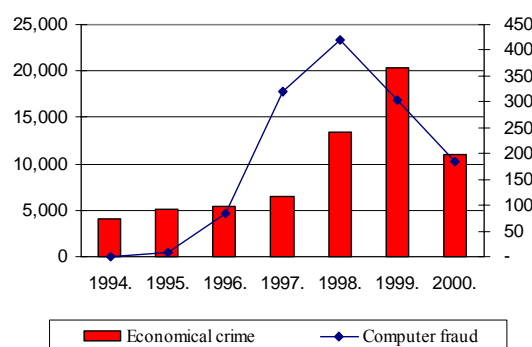
As computer fraud may not be committed practically without the necessary infrastructure, we examined its relation with GDP, the number of telephone main lines and computer density in the organisation of the state administration and the households. Surprisingly GDP show closer relation with the number of economical crimes, or even with the total number of crimes then with the numbers of computer related crimes. This is probably a consequence of the high latency.

### The number of crimes which became known

**Economical and other crimes**



**Economical crimes and computer fraud**



Source: MI Central Office

## Features of the crimes' growth which became known

1994=100%

	1995	1996	1997	1998	1999	2000
The number of crime which became known	129%	120%	132%	154%	130%	116%
Economical crimes	124%	132%	160%	329%	497%	269%
Computer fraud	900%	8'400%	32'000%	41'900%	30'400%	18'300%

Previous year=100%

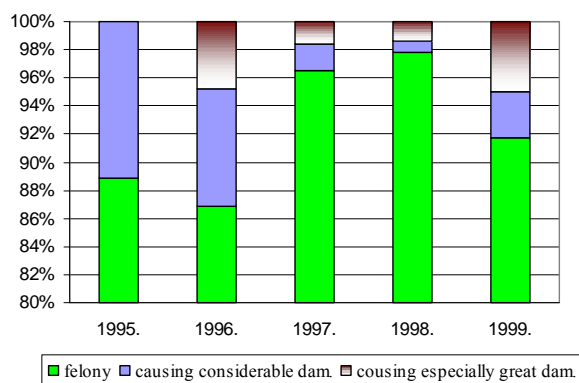
	1995	1996	1997	1998	1999	2000
The number of crime which became known	129%	93%	110%	117%	84%	89%
Economical crimes	124%	107%	121%	206%	151%	54%
Computer fraud	900%	933%	381%	131%	73%	60%

While the total number of the crimes increased by one and a half times, the number of economical crimes increased by 5 times from 1994. In computer fraud, the change is even bigger. The level of increase of computer fraud is very high; its increase rate was decreasing gradually from 1996 and in 1999, it falls below 100%.

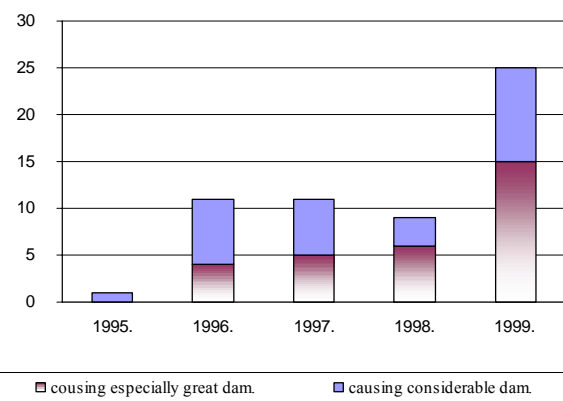
Fortunately, most part of computer fraud, more than 80% does not go together with great damage. This proportion was growing gradually, but this tendency turned back in 1999 so that the number of frauds causing especially big damage increased. Probably this accounts for the modification of the Criminal Code and the introduction of the concept "especially significant damage".

### Computer fraud and damage

Composition of computer fraud by the caused damage (%)



Computer fraud causing damage (piece)



Source: MI Central Office

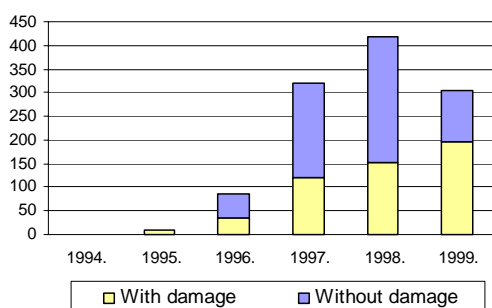
#### 4.3. The volume of the caused damage

Although the number of the crimes decreased in the latest years, but the volume of the caused damage increases monotonically by today it increased to several thousand times more than that was 1994. After the quick jump however, the speed of the growth slowed down, the yearly growth is "only" double triple of the value a year before.

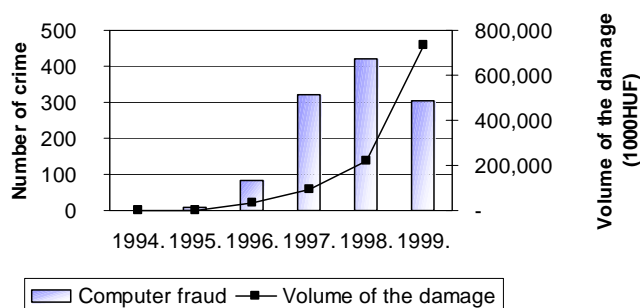
## The number of the discovered crime of computer fraud and value of caused damage

(1000 HUF). 1 USD=295 HUF

Change of the computer fraud



Damage caused by computer fraud



Source: MI Central Office

In 1999, the value of the damage caused by computer fraud exceeded 700 million HUF's. Specialists think that the economical type criminal actions committed on Internet will have value reaching a billion HUF's in a year.

### The damage in period 1994-1999

	1994.	1995.	1996.	1997.	1998.	1999.
Volume of the caused damage (1000 HUF)	200.0	1'635.3	36'298.5	95'160.5	220'522.5	731'630.8
1994=100%	100%	818	18'149	47'580	110'261	365'815
Previous data=100%	-	818	2'220	262	232	332

Source: MI Central Office

Most part of the discovered computer fraud did not make damage: 55% of the crimes committed in last six years did not cause damage.

L. Pusztai summarises the motives of crimes of such type as follows: the perpetrators are not motivated by material goods, but by entertainment, wish to create sensation. Most of them are children or youngsters, not having sense of responsibility, who can not be charged for criminal actions.

The number of crime not causing damage is decreasing, but the number of crimes causing damage is increasing. In 1999, 65% of computer frauds belonged to this category. Most of them were committed using electronic cards serving to use public purpose telephone, or public purpose mobile radiotelephone, or changing the program of microcomputers controlling public use mobile telephone.

#### 4.4. Recovering

The damage caused by computer fraud since 1994 was 1'085'448 million HUF. From this, 256'950 million HUF was recovered i.e. the recovering proportion was 23.7%. In the six years

of the examination, the recovering proportion was the highest in 1998, then 67.5% of damage was recovered.

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**Recovering index. 1994-1999**

	<b>1994.</b>	<b>1995.</b>	<b>1996.</b>	<b>1997.</b>	<b>1998.</b>	<b>1999.</b>
The volume of the caused damage (1000 HUF)	200.0	1635.3	36'298.5	95'160.5	220'522.5	731'630.8
The volume of recovering (1000 HUF)	0.0	136.8	729.2	9'383.0	148'841.2	97'859.4
The proportion of the recovering (%)	0.0	8.4	2.0	9.9	67.5	13.4

Source MI Central Office

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The value in 1999 corresponds to the value insurance rate of the economical crimes, but it exceeds significantly the “usual” 7-8 % index of damage insurance.

*4.5. The number of perpetrators*

With the growth of the number of discovered criminal actions the number of discovered perpetrators increased too, but the number of the criminal actions lately grew less, the number of discovered perpetrators became less too.

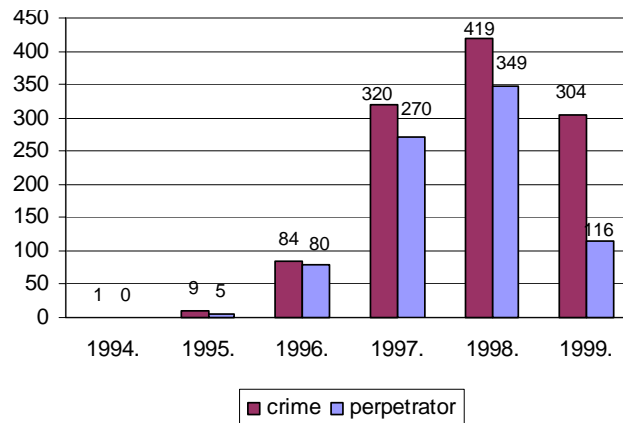
The number of the discovered perpetrators is generally less, then the number of discovered crimes. This has several reasons: one perpetrator may commit several crimes, and a part of the discovered crimes does not have discovered perpetrators at the given moment. Since the nineties the proportion was two discovered crimes to one discovered perpetrator, this proportion changed to 4:1. For example in 1999 505'716 crimes were discovered, and the number of discovered criminals was 131'608 (the rate 3.8:1).

In the case of computer crime, this rate is a bit different: in 1999, 304 crimes became known and 116 perpetrators (the rate 2.6:1).

The increase of the number of the damage causing actions among the computer crimes, at the same time the decrease at the rate of the discovered perpetrators suggests the shift of the computer fraud to “professional” line. Professional swindlers may be caught only rarely, but commit more crime. We could get more exact answer to this question, if we had data about the number of the criminal actions committed by one perpetrator. (See Kovacsicsné [1])



## The number of discovered computer fraud and perpetrators



Source: MI Central Office

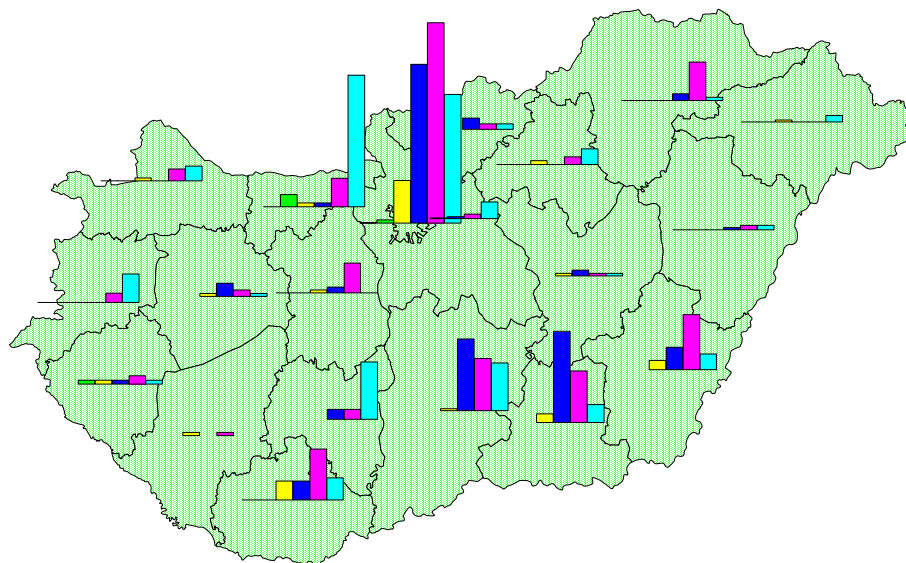
The number of computer swindlers is not big, comparing to whole population it is almost insignificant. The picture does not change much if we compare with the part of the population, which is in the position to be able to commit the crime. This part of the population considering that computer is needed, run to 10% of the whole population.

### 4.6. Geographical features

#### 4.6.1. Locality of the perpetration

## The number of discovered computer fraud criminal actions

according to the locality of the perpetration in 1994-1999



Source: MI Central Office

This crime is centralised in Budapest. While 18% of the population lives in the capital, 67% of the crimes committed during last six years was committed here. The first such crime in 1994 (and the only one in that year) was committed here, since then the dominance of the capital is maintained, although the proportion is decreasing. In 1999, only 60% of the computer frauds were committed here.

In Budapest 761, in the county Bács Kiskun 73, in the county Csongrád 56, in the county Komárom 44 computer frauds were committed during the examined 6 years. While the fraud series in Budapest and in county Csongrád did not continue in 1999, it is disquieting that in Komárom county the number of the crimes increased very quickly this year too.

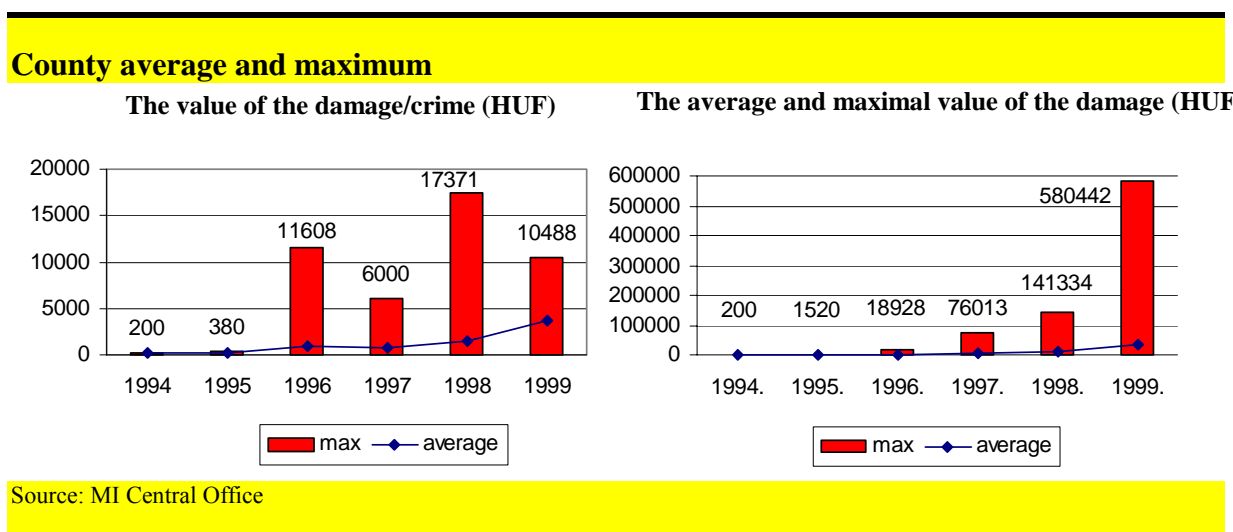
The fewest discovered computer frauds were committed during the last years in the counties Somogy (2), Nógrád (4), Szabolcs-Szatmár (4), Hajdú-Bihar (5) and Jász-Nagykun-Szolnok (5).

Considering more closely the data of the year 1999 we see that Budapest where were committed 183 criminal actions is followed by counties Komárom, Bács-Kiskun, Pest and Tolna with 32, 20, 14 and 11 criminal action receptively. No discovered computer criminal actions were committed in counties Fejér and Somogy in the year 1999.

#### 4.6.2. The caused damage

Except 1998, the caused damage was always in Budapest the biggest. The damage was significant in 1996 in Fejér county, in 1997 Baranya county, and in Hajdú-Bihar county, and in 1999 in Pest county. In 1998 in Csongrád county there was only 17 criminal actions, but the caused damage was over 141 million HUF.

The greatest damage per one crime was in 1996 in Fejér county, in 1997 in Hajdú-Bihar, in 1998 and in 1999, in Pest county. For example in 1998 in Pest county the perpetrators caused damage of 52 million HUF with 4 criminal actions.



The damage was 692 million HUF in Budapest, in Csongrád county 145 million HUF, in Pest county 190 million HUF during the examined six years. In each county, there was some damage with computer fraud. The least damages were in Nógrád county (26 thousand HUF).

#### 4.6.3. Recovery

The damage caused during the examined six years was recovered in Budapest by 16.5%, in Csongrád county by 94 %. In Komárom county the recovery rate was 22%, in Zala 76.3%, in Nógrád by 88.5%, in Békés by 90%. The other counties the recovery rate changes between 0-35% in this period. Pest county was the only where nothing was recovered from the damages of big volume. Although the damage was not so big but recovery could not be achieved in Bács-Kiskun, Borsod, Somogy, Tolna and Vas counties.

70% of the most recovered damage caused during the examined six years was caused in Budapest, and further 23% were caused in Pest county. In other counties, the volume of the not recovered damage did not exceed 1.5%.

#### 4.6.4. The domicile of the perpetrator

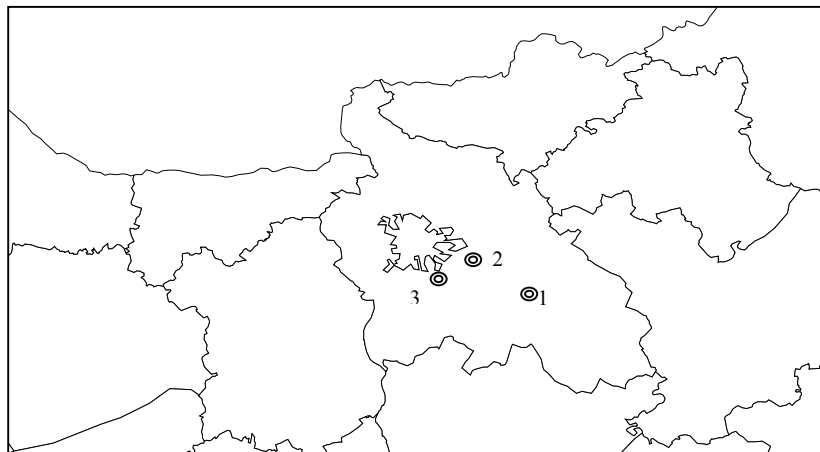
A property of the computer fraud that the domicile of the perpetrator and the place of the perpetration is not necessary the same. (Moreover the place of the perpetrator and the place of the perpetration are not necessary the same in the time of commitment).

The orders of countries according to the two points of view are almost the same: calculating by Spearman formula the rank-correlation is 0.7.

Among the perpetrators, the number of the foreigners is relatively high, it was in 1996 8.8 %, in 1997 4.8 %, in 1998 6.3 % and in 1999 6 %. Foreign authorities proceeded in nine cases: in 1996 in 6 cases, in 1998 3 cases.

#### 4.6.5. Centre point of the crime

Similarly to the population centre (1) the centre point of the crime can be found in Pest county too. The centre point for all crimes (2) can be found to northern-west from (1), near to Budapest the same as the centre point of economical crimes. The centre point of computer crime (3) is to the west from the economical crime's centre point. The centre points for the total computer crimes and the damage causing computer crimes are very near.



### 5. Other computer crime

Comparing the definition of computer crime and computer fraud we can see, that fraud is only a part of computer crime. The remaining new criminal actions got not the headword “computer”, but e.g. “bank card” in Criminal Code. Others were enlisted to existing

headwords, starting from the principle that law owing to its abstract character is applicable to technologically new, but treatable with old rules phenomena.

Next, we describe these crimes, the problems connected with it, but we can not take on analysis, as we have no data distinguishing the computer actions from actions committed by other means.

### *5.1. Infringement of lawful rights in connection with particulars*

In Hungary the act of data-protection gives suitable basis to the problems emerging in connection with the Internet, too at least at the time being. This is proven by several cases, let us think e.g. to the problem of the particulars of children offered to adoption on the Internet.

In these days, however, there is spreading a new, dangerous phenomenon. First, the banks began to collect and rank the particular respectively financial quality of their customers. This was followed by ferreting out the practice of the shoppers, registering the incomes and credit cards data, and then classifying the shoppers. Nets and services on the nets make the data easy to be ferreted out, and the possibility to misuse segmentation and personalisation is so big that it is a great necessity to find means to handle it.

Service providers can get valuable information through the “cookies” placed in the net on the sphere of interest respectively, shopping habits of “surfers on the net”.

The difference between the European and American notion of the data protection causes problems. In USA, the juridical protection of the shoppers is weak comparing with the European, e.g. the regulation makes possible data collecting with “cookie”. Although agreement has been reached in connection with that, the collection of the data of the European customers is permitted only by their previous consent. a solution satisfying everybody is still ahead.

In order to be able to handle more effectively the problems in connection with the new medium Internet, the data protection commissioner in his recommendation in February “On some questions of the data processing connected with Internet “ proposed the modification of the data protection act, and the related sector acts.

### *5.2. Problems connected with E-commerce*

E-commerce means transferring information on goods. Prices, conditions of delivery, in some cases sending the product itself (e.g. software, voice, moving picture, etc.) respectively service (travelling tickets, hotel reserving, insurance. etc.) and money in electronic form through computer network (Internet or now still more typically other nets).

Internet economy due to its special nature needs special forms for regulation, too. The principle of self-regulation is not acceptable in the field of personality protection, consumer protection, intellectual property rights, contract-rights and taxes. The question now is not necessity of regulation, but its way.

Even in the case of contract entered in electronically is very important the identifying of the contracting partners. From the point of view of secrecy of business relations, the recognition of the electronic documents and signatures, and the development of the necessary technological conditions are needed. This very year the Parliament will deal with the law about creating the authenticity of electronic documents and signatures.

In Hungary, the judgements on the e-commerce and other forms of commerce are the same. The activity of the electronic merchant is in fact mail-order service. The customer protection law concerning wares and services (1997. CIV. act) handles the problems raising in practice only partially. The law on the contract between absent parties the government decree 17/1999 based on the directives of EU on this matter. It entered into force in 1. March 1999. Breaking this government decree or the respectively the act 1999. LVIII. on the economical ads is qualified as crime. In addition to the sanctions of Economic Competition Office, more severe criminal law sanctions are needed, too. For the protection of the common interest attached to the pureness of the competition and of the market participants "fraud of the customers" got into 296/A§ of the Criminal Code as facts of case. Beside the relation of the merchant and the customers, VAT and taxation raise additional problems.

Here we mention, that there are actions which are qualified as crime in some countries and in others not. An example for it may be the Internet hazard gambles in USA. The gambles are not crime in the place of its organisation, but the service is available from countries where it is. The problems connected to this have to be solved suitably in Hungary too.

We know from international surveys, that in Hungary the restraint of the population towards e-commerce is extremely high. In order to see whether this suspicion is well founded or not. we should have data. On their bases we could decide whether we should increase the security or change the attitude of the population.

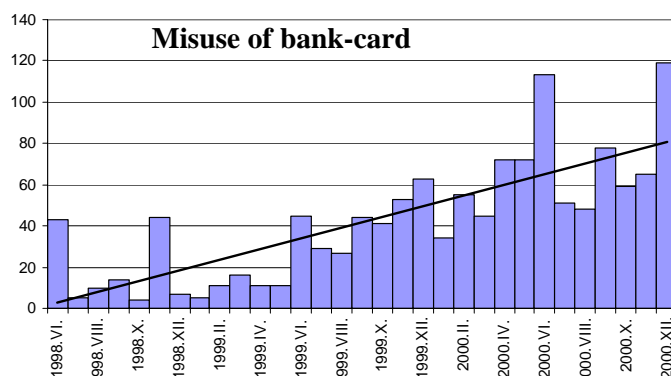
### *5.3. Crime connected with bank and telephone card*

The conditions changed with change of the regime in Hungary produced possibility of committing economical crime type dissimilar to the previous one. The accelerated law making was added new facts of cases by modifying several times of the Criminal Code. The various misuses of bankcards too belong to this category.

The number of economical crime increased by 5 times more from 1994: from 4'085 to 20'318. In 1999, almost half of it (46 %) was bankcard forgery. In 1999, 9'538 crimes participated in a single case, which was committed by a combination of check and card.

## Economic crime and crime connected with bankcard

	1994.	1995.	1996.	1997.	1998.	1999.	2000.
Economic crime	4'085	5'064	5'409	6'543	13'453	20'318	10'986
Misuse of bankcard <sup>1</sup>	0	2	3	30	160	379	793
Bankcard fraud	0	1	1	2	92	9'396	..
Use of dud bankcard <sup>2</sup>			0	5	13	45	..



Source: MI Central Office

Although we have statistical data about all discovered crimes connected with bankcards, we have no statistical data on the crime connected with computer, so we cannot examine it.

### 5.4. Breaking the law of intellectual property

Different types of products having law protection on Internet mostly coincide with types of products on other data medium: they may be written products, music or audio-visual products, and pictures. As a new type of products there appeared software, database, moreover the intellectual property protection law may be extended to menu-structures and icons.

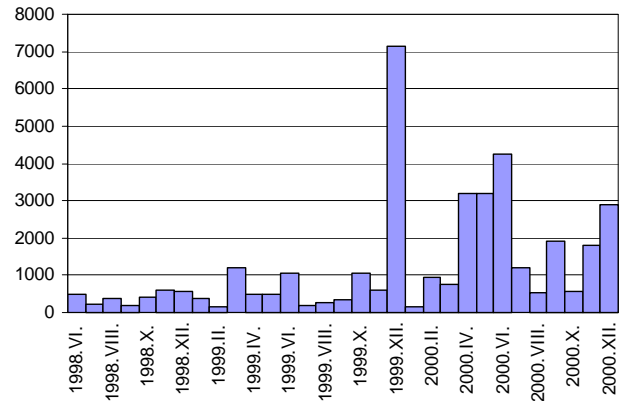
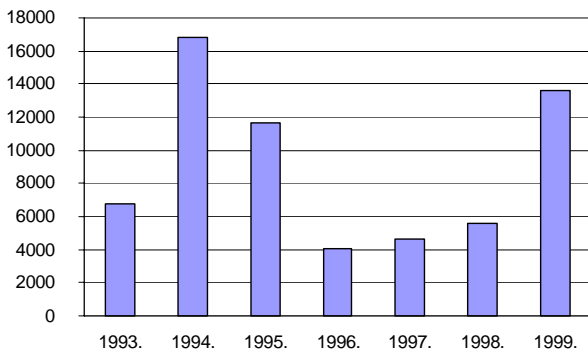
The crime of breaking the intellectual property protection law, the evasion of technological provisions serving the protection of intellectual property protection was entered into Criminal Code as the act 1999.CXX, with force from 1. March 2000. The break of intellectual property protection law draws Civil Code and Criminal Code sanctions.

The number breaking the intellectual property protection law is varying. The type of crime where the target of the crime is software has an increasing rate, while in 1996, 13% of the crimes was of such type, in 1997 and 1998 this rate reached 28%.

<sup>1</sup> Enacted from 15 May 1994.

<sup>2</sup> Enacted from 15 Aug. 1996.

## Breaking intellectual property protection



Source: MI Central Office

The law recently has been a topic of many disputes: the editors, software merchants say, that within the instructions of the free use connected with multiplying, and the responsibility of the Internet service providers is well regulated. According to the users however, the classical intellectual property protection law gave more recognise to the lawfulness of copies, made without material income for teaching purpose and for scientific research then this law which narrowing drastically the scope of the free use forced the users into a disadvantage, putting the teaching, the knowledge of generations into danger.

### 5.5. Problems of the freedom of expression

The European Agreement on Human right guarantees the freedom of expression, the law of self-expression and the freedom of communication. The exception may be divided into two big groups:

- Libel, calling to illegal actions, use of provocative words, exciting hatred, spreading violence and
- pornography.

The act LXXIII modifying the Criminal Code of the year 1997 orders to punish forbidden pornography making pictures, and their distribution. For the time being, it seems that distributors and collectors of pornography can be uncovered only accidentally. In Hungary 5 crimes in 1998, and only two crimes in 1999, were uncovered by criminal organisations.

Change may be expected in this field too: the “Internet policy” working from February, 2000 will be probably effective means of the actions against crime of such types.

## 6. Conclusion

The question of regulating legally the problems raised by information society has been in the middle of attention already for years. Modifications to laws necessary to handle the new life situation are being made one after the other and some new laws are being prepared too. New strategies, expectations are shaped, but less attention is being paid to computer crime then it is necessary compared to the volume of the damage, they cause.

Crime, committed by information technological tools needs more examination even if it may be handled by existing tools of law. Namely, the protection against it demands technological

and organisational means, which are different usually from those for crimes, similar, but committed by different tools. In parallel with the legal regulation, we must find the answer to technological and organisational questions of security first of all for preventing crime.

Due to the high latency, it is not possible now to assess exactly the caused damage (in money and social danger) and take the measures technologically and organisationally, proportionally to the risk. For this, the elimination of latency would be necessary and to make the picture full, it would be necessary to examine the other side, the injured e.g. by the method of interviewing, public opinion poll. The more detailed examination of the discovered crime is unavoidable too, and more detailed study about the motive, and demographically characteristics (e.g. education, sex, age) of discovered perpetrators, the volume of the damage caused by them.

These basic researches accompanied by working out the corresponding statistical characteristics and data collecting would make possible to work out means to prevent respectively discipline this type of crime which is becoming more and more dangerous.

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