Abstract

The aim of economic analysis of law is to analyze the legal system by applying economic theories and methods. Economic analysis of law can greatly contribute to the efficiency and effectiveness of the legal system. The points of contact between law and economics, the impact of economics on the legal system and the brief historical review of the origins of interdisciplinary economics and law are presented in the introduction of this paper. Furthermore, economic methods applied in the analysis of law will be listed and presented indirectly through the analysis of crime offenses against property - larceny and aggravated larceny. The analysis will be based on statistical data and a theoretical example, and finally the theory of compensation of total damage caused will be presented as economization of sanctions imposed.

**JEL classification:** K11, K14

**Key words:** economic analysis of law, criminal offenses against property, larceny, aggravated larceny, compensation of total damage incurred, sanctions

1. Introduction

Close connection of social sciences of law and economics is reflected in the fact that the legal standards that govern different areas of labour (labour law), property (Law on Ownership and Other Property Rights), agreements (Civil Obligations Act), offenses (Criminal Code) very often have an impact on the distribution of goods. In the same way, the economic science by applying its methods can positively influence and contribute to solving legal problems and institutions. Interdisciplinary cooperation of law and economics can greatly affect the economic security and efficiency and rationality of the judicial system and law enforcement. An example...
of the impact of the economy in the legal system is reflected in Article 10 paragraph 1 of the Civil Procedure Act: “The court is obliged to conduct the proceedings without causing any delays, within a reasonable time, and with the minimum of costs, and prevent any form of abuse of rights in the proceedings“ (Principle of efficiency)¹

As early as in the 18th century British philosopher and reformer judicial system Jeremy Bentham developed a philosophical idea and moral system based on the idea that man is a rational and selfish creature, and aims to achieve maximum benefits. His ideas are based on the fact that the legal sentences should be such as to prevent individuals from committing illegal acts. Long after Jeremy Bentham, in the 20th century, new authors emerged who continued to develop interdisciplinary collaboration of legal and economic sciences (Ronald Coase, Guido Calabresi...). Economic analysis of law can greatly contribute to faster operation of the judicial system in terms of reducing the number of old cases, the efficiency of judicial processes (reducing costs), faster resolution of cases (abandonment of certain archaic formalities), reducing the number of criminal offenses committed. In this paper I will focus my attention on criminal offenses against property, and will analyze them theoretically.

2. Methods

Economics tries, with the help of its methods, to predict the impact of various changes (in this case, I think of the impact of legal sanctions) on the behaviour of people. Different types of court proceedings can also be analyzed in terms of economics. In the analysis various economic theories and methods are used (maximization, balance and efficiency, the theory of choices and benefits, the theory and curve of supply and demand, the price elasticity of supply and demand, the price theory, the game theory, statistics, Pareto efficiency). The interdisciplinarity of law and economics aims to predict the impact of legal sanctions on behaviour.

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¹ Official Gazette no.: OG53/91, 91/92, 58/93, 112/99, 88/01, 117/03, 88/05, 02/07, 84/08, 123/08, 57/11, 148/11, 25/13
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“Coase examines the efficiency as an expected and realized impact of a particular
legal system, law or legal institution. Efficiency is described as the ratio between the
total beneficial effects (cost), changes in law and the total cost. \(^2\)“(Coase’s theorem).

3. Criminal offenses against property (Larceny and aggravated larceny)

Criminal offenses against property are listed in Chapter XXIII of the Criminal
Code\(^3\) and they involve: larceny, aggravated larceny, robbery, larceny by coercion,
embezzlement, unauthorized use of other person’s movables, malicious mischief
other person’s property, fraud, unauthorized game of chance, misuse of insurance,
misuse of a check and a credit card, misuse of trust, violation of other person’s
rights, usurios contract, extortion and concealing.

According to statistics, the share of criminal offenses against property in relation
to all other criminal offenses in the period of 2002 – 2011 amounts to 56.5\(^4\),
of which larceny accounts for 17\% and 29.1\% to aggravated larceny, respectively.
As criminal offenses and aggravated offenses (46.1\%) account for a large portion
of total criminal offenses committed in the Republic of Croatia during the above
9-years period, it is interesting to analyze these criminal offenses.

4. Legal description of criminal offenses and stipulated sanctions

4.1. Larceny

Whoever takes away the movable property of another with an aim to unlawfully
appropriate it commits the larceny\(^5\) and shall be punished by a fine or by imprison-
ment for six months to five years. If the stolen property is of small value and the
perpetrator acts with an aim to appropriate the property of such value, he shall be
punished by imprisonment up to one year.

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\(^2\) Deša Milkotin Tomić, Ana Šega: Ekonomска analiza prava: razvoj i aktualnost, page 369

\(^3\) Official Gazette125/11 and 144/12

\(^4\) Pregled osnovnih pokazatelja javne sigurnosti u Republici Hrvatskoj 2002.-2011. Ministry of Inte-
rior of RoC

\(^5\) Article 228 of the Criminal Code, Official Gazette 125/11 i 144/12
4.2. Aggravated larceny

Aggravated larceny\(^6\) includes the larcenies committed:

a) by breaking in, entering by force or otherwise overcoming great obstacles in order to come to property within closed buildings, rooms, safes, wardrobes or other closed rooms or enclosed areas;

b) in a particularly dangerous or particularly brazen manner;

c) by taking advantage of conditions caused by a fire, flood, earthquake or another calamity;

d) by taking advantage of the helplessness or some other particularly difficult situation of another;

e) if the stolen property is of great value;

f) if weapons, ammunition, missiles, mines and explosive devices, combat unit or parts of combat unit that serve the needs of defence are stolen;

g) if the stolen property is used for religious purposes or if the property is stolen from a church or other building or room serving for the practice of religion;

h) if a piece of cultural heritage, or an object of scientific, artistic, historical or technical significance is stolen, or the stolen property is included in a public collection, a protected private collection, or is exhibited to the public;

i) if the perpetrator has in his possession a weapon or dangerous instrument for the purpose of attack or defense;

j) as an official when performing his duty or public powers;

Imprisonment for one to eight years shall be inflicted on a perpetrator who commits an aggravated larceny.

5. Statistics

Despite the amount of prescribed punishment stipulated for offenses of larceny and aggravated larceny which became even stricter in the observed period (2002 to 2012), statistical data show that number of these offenses has not decreased.

\(^6\) Article 229 of the Criminal Code, Official Gazette 125/11 i 144/12
Table 1 Criminal offenses reported from 2002 to 2012

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</tr>
</thead>
<tbody>
<tr>
<td>Larceny</td>
<td>12,867</td>
<td>14,421</td>
<td>15,085</td>
<td>13,807</td>
<td>14,231</td>
<td>13,400</td>
<td>13,069</td>
<td>12,378</td>
<td>13,296</td>
<td>15,208</td>
<td>16,090</td>
</tr>
<tr>
<td>Aggravated larceny</td>
<td>24,922</td>
<td>26,089</td>
<td>28,665</td>
<td>23,532</td>
<td>22,546</td>
<td>21,181</td>
<td>19,303</td>
<td>18,777</td>
<td>20,128</td>
<td>21,282</td>
<td>21,527</td>
</tr>
</tbody>
</table>


According to statistical data of the Croatian Bureau of Statistics, Statistical Yearbook, in 2010 total of 4,024 (1754+2270) persons were convicted for larceny and aggravated larceny, of which 3,967 (1730+2237) were sentenced to imprisonment, a conditional sentence was applied to 2731 (1348+1383). It shows that conditional sentences account for 68.8%.

Table 2 Convicted perpetrators of criminal offenses – larceny/aggravated larceny and pronounced sentences

<table>
<thead>
<tr>
<th></th>
<th>Total convicted</th>
<th>Imprisonment</th>
<th>Conditional sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Larceny</td>
<td>1,754</td>
<td>1,730</td>
<td>1,348</td>
</tr>
<tr>
<td>Aggravated larceny</td>
<td>2,270</td>
<td>2,237</td>
<td>1,383</td>
</tr>
<tr>
<td>Total</td>
<td>4,024</td>
<td>3,967</td>
<td>2,731</td>
</tr>
</tbody>
</table>

Source: State Bureau of Statistics of the Republic of Croatia: Adult perpetrators of criminal offenses reports, accusations and convictions in 2010

6. Analysis

A perpetrator of criminal offense – larceny/aggravated larceny acts with the aim of unlawfully appropriation of other person’s property. This reflects the perpetrator’s intention to increase own benefit at the expense of someone else. The stated aim of the perpetrator, in most cases, is preceded by his state of scarcity and the need for certain goods. The situation of scarcity of an individual is reflected as a consequence of the post-war crisis in the Republic of Croatia as well as the current international crisis, which has additionally affected the economy of the Republic of Croatia.

Taking into account that each individual is trying to think rationally, it can be said that the perpetrator of the criminal offenses also thinks rationally and makes efforts to maximize his benefit through realization of a criminal offense. Namely, the collected statistical data show that the number of criminal offenses did not decrease through the observed period 2002 to 2012 despite stricter criminal sanctions available by amendments to the Criminal Code. It can be concluded that amendments of the Criminal Code relating to punishing the perpetrators were not successful. If the penal/legal sentence (imprisonment) is considered as the price for the committed criminal offense, it can be said that the price increase has not led to reduced demand (did not influence on the reduction in the number of offenses of larceny/aggravated larceny). From the point of view of perpetrators of criminal offenses larceny/aggravated larceny (taking into account that they think rationally), larceny is the easiest way to get money and valuable material resources. According to the presented statistical data, they are not exposed to great risk because almost 70% of detected perpetrators are punished only by suspended sentence. Such punishment to perpetrators is not effective in educational terms because the number of recidivists is increasing. From the above it can be concluded that the sanctions imposed are inefficient.

In commission of a petty larceny (value of a stolen item to kn 1,000.00) the prosecution is left to a private plaintiff. From the point of view of a private plaintiff, a private claim is not payable (the plaintiff has costs that rarely can be collected, and he fails to return the stolen item, especially if it is in the form of money).

6.1. Example analysis

If an example of aggravated larceny is analyzed which is committed by a perpetrator with no job and no property who broke the door and broke into a safe and took kn 150.00 repeating similar offense several times, it can be finally concluded that commitment the criminal offense is profitable for him. Such perpetrator will never compensate for the damage caused to victims. In addition to stolen money, he also caused a material damage to the victims by breaking, and he also caused high costs of legal proceedings and other proceedings to find him, and finally, when he is imprisoned the burden will fall on the state budget. Sending the perpetrator to jail will not indemnify the victims nor will compensate the costs of his prosecution, the perpetrator will represent an additional cost to the state budget. Because the perpetrator has no property or income, either damage could not be collected
from him or the proceeds of the criminal offense could be taken from him (money is spent immediately or it is difficult to be found)

Pursuant to the Execution Of Prison Sentence Act (Article 7) Inmates shall not bear costs of the execution of prison sentence, and they shall not have to pay the fees for submissions, official actions and decisions related to the application of this Act (Official Gazette no.: 128/99, 55/00, 59/00, 129/00, 59/01, 67/01, 11/02, 190/03, 76/07, 27/08, 83/09, 18/11, 48/11).

The Report of the Ministry of Justice on the work and the condition of penitentiaries, prisons and correctional institutions in 2011\(^8\) shows that, the average cost per prisoner is kn 283.16 per day compared to total expenses. The same Report shows that the largest proportion of inmates is those who have committed criminal offense against property (33.7%).

If we compare the data from the Report of the Ministry of Justice on the work and condition penitentiaries, prisons and correctional institutions for the 2010\(^9\) and data presented in section 3 it can be concluded that the largest share of the prison population consists of perpetrators of criminal offenses of larceny and aggravated larceny.

7. Theory of compensation of total caused damage

Pursuant to Article 54 of the Criminal Act, the court may at the same time decide that such punishment, with the consent of the convict, be replaced with community service. In this manner the purpose of punishment can be achieved and other “more useful” way. Community service shall be at freedom is determined for a minimum of ten to a maximum of sixty working days depending on the imposed imprisonment. By community service the perpetrator of the criminal offense will not indemnify the affected persons but he will replace the pronounced sentence of imprisonment, however, the issue of the damage he caused to affected persons remains and the question arises regarding the level of usefulness of such work.

Theory of compensation of total committed damage would be based on performance of public works by a convict, and thus the convict would not work his imprisonment, but he would have to work for total damage he caused by the criminal offense of larceny or aggravated larceny. In this way, the purpose of punishment

\(^8\) http://www.mprh.hr/izvjesce-o-stanju-i-radu-kaznionica-zatvora-i-odgo

would be raised to a higher level since the convict would pay off the damage by money (he would return the stolen money or the monetary equivalent of stolen property to the affected persons, and settle the court and other costs). The convict would be actually employed in public works for which he would receive a salary from which the affected persons would be indemnified as well as the costs of the proceedings.

This way of compensation of damage would have much stronger effect on the re-socialization and reintegration of the convict than imprisonment, and purpose of punishment stipulated by Article 41\textsuperscript{10} of the Criminal Cod would be fully achieved.

According to this theory, the guilt and the total damage made would be established in the criminal proceedings, and not the sentence of imprisonment and the convict would be sent to work instead to the prison.

It opens a possibility of co-financing of local and regional self-governments by the state through labour force for public works. For example, instead of engaging expensive working machines in public works, these works can be performed by convicts who would receive for their work from local or regional governments certain (symbolic) remuneration that would be paid to his victims and for other costs of proceeding. In this manner both local and regional governments would benefit as the price of public works would decrease significantly. In this manner the maximization of efficiency and legal norm would be achieved, and the price of committing the criminal offense of larceny/ aggravated larceny would be high which would surely significantly influence on reduction of committing these offenses and the efficiency of the legal system would be significantly increased.

According to the theory of games the risk for potential perpetrators of a criminal offense of larceny would be much higher than it is now. If convicted for the criminal offense, he invests what he does not want to invest to get a profit (earning) at all costs i.e. his personal work. Thinking rationally, a potential perpetrator would rather choose honest work than to commit a criminal offense.

\footnote{\textsuperscript{10} “The purpose of punishment is to express social condemnation for a criminal offense, to strengthen the public confidence in the legal system based on the rule of law, influence the perpetrator and all others not to commit crimes through raising awareness of the danger of committing criminal offenses and justice of punishing and allow the perpetrator reintegration into the society”. Official Gazette 125/11 and 144/12.}
8. Conclusion

According to statistics presented for the observed 10-year period it is obvious that in the Republic of Croatia criminal offenses committed against property, i.e. larceny and aggravated larceny are the most committed offenses.

It is clear that the perpetrators of criminal offenses are rational and want to maximize their benefits by selecting to commit the offenses of larceny or aggravated larceny. The above criminal offenses are the most suitable to get money or other material benefits in easy and quick manner. At the same time, perpetrators - recidivists, having the experience regarding the ineffectiveness of legal protection (sanctions) reduce the risk of committing a criminal offense to imposing a suspended sentence. Although the Criminal Code enables that the judge replaces the imprisonment with community service, it does not compensate the damage to affected persons or other expenses (of investigations, arresting, criminal proceedings). On the contrary, if the convict is sentenced to imprisonment the damage resulting from committing a criminal damage offense is increased by the costs of prison accommodation.

In order increase the efficiency of legal protection and to reduce the number of perpetrators of larceny and aggravated larceny it is necessary to make the sanction more stringent. Tightening up the sanction should not be based on raising their imprisonment sentence since the imprisonment represents a financial burden to the society. Instead of its the model of compensation of total compensation damages caused by the convict through the execution of public works should be applied. Perpetrators of criminal offenses- larceny and aggravated larceny should experience a public condemnation which should be based on the re-socialization and overall compensation for damage caused by a criminal offense.

References:

a) Books and trade journals
b) Laws and regulations
1. Kazneni zakon: Narodne novine 125/11 i 144/12
2. Zakonu o izvršavanju kazne zatvora: Narodne novine broj: 128/99, 55/00, 59/00, 129/00, 59/01, 67/01, 11/02, 190/03, 76/07, 27/08, 83/09, 18/11, 48/11
3. Zakon o parničnom postupku: Narodne novine broj 53/91, 91/92, 58/93, 112/99, 88/01, 117/03, 88/05, 02/07, 84/08, 123/08, 57/11, 148/11, 25/13

c) Internet sources