

## **DETERRENCE THROUGH CRIMINAL CONFISCATION? SOME EXPLORATORY FINDINGS FROM FEDERATION OF BOSNIA AND HERZEGOVINA**

**Original scientific paper**

Primljeno/Received: 12.11.2020.  
Prihvaćeno/Accepted: 21.11.2020.

**Darko DATZER**  
**Eldan MUJANOVIĆ**

### **Abstract**

**Reason(s) for writing and research problem(s):** Large bulk of crime has pecuniary motives. From the criminal justice perspective, logical consequence would be to remove the profit out of crime, which would make crime pointless and reduce or remove the motivation of would-be wrongdoers to commit crime. Prior empirical research, especially in Bosnia and Herzegovina, did not sufficiently address deterrence through criminal confiscation.

**Aims of the paper (scientific and/or social):** This paper has sought to explore deterrent effect of criminal confiscation by examining prerequisites for deterrence using aggregate data from Federation of Bosnia and Herzegovina.

**Methodology/Design:** The study is exploratory and aims to provide not a definitive, thorough and comprehensive picture of confiscation landscape in Federation of Bosnia and Herzegovina, but to sketch an overall state of affairs. Data from 284 final court rulings were obtained covering years 2003-2016.

**Research/paper limitations:** Since the clear data on number of judicial cases containing confiscation order is largely unknown, the study relies completely on one source of data and is uncertain on representativeness. Furthermore, aggregate level of data in studying deterrence properties (certainty, severity and celerity) are often contested and abundant with missing values, which was indeed the case with this study.

**Results/Findings:** Findings suggest that confiscation amounts in Federation of Bosnia and Herzegovina are rather low, do not remotely match the values actually gained through crime and are far below European average for confiscation cases. It is also found that confiscation is rarely used relative to total number of typical acquisitive crimes reported each year and when used, it is in lengthy procedures for predominantly low value cases for high volume crimes such as theft, robbery and drug offences.

**General conclusion:** With non-existent prerequisites for effective deterrence, confiscation cannot reasonably be expected to have significant impact on general levels of offending.

**Research/paper validity:** Measures of certainty, severity and celerity were developed for this study. Similar research methods and measures were utilized in previous research on deterrence. Utilized methods and measures seem reasonable to examine concepts above, ensuring appropriate level of face validity.

### Keywords

illegal gain, criminal confiscation, deterrence

## 1. INTRODUCTION

It comes as no surprise that large portion of crime is motivated by economic benefit. Data from European Sourcebook of Crime and Criminal Justice Statistics (Aebi, i dr., 2014) suggest that annual crime rate per European country is in average over four thousand crimes, of which two thirds are property and drug related crimes. Property crime usually includes (legally defined) intention to directly or indirectly obtain economic advantage from the wrongdoing. In the field of drug related crimes, the bulk of committed crimes refer to illicit production and distribution of narcotic drugs and psychotropic substances, whose legal definition usually does not include an intention to obtain economic advantage, nevertheless are in practice overwhelmingly motivated by it (Reuter, 2014; Schneider, 2013). Additionally, other crime types, such as organized, economic, and corruption, although not as frequent as aforementioned types, are motivated by illegal gain and undoubtedly lead to the conclusion that vast majority of crime is indeed financially driven. United Nations Office on Drugs and Crime (UNODC, 2011) argues the value of illegally obtained proceeds to be vast. Depending on methodology, estimates suggest it ranges from between 2,0 % and 6,4 % of world's GDP -using the estimates from previous studies UNODC refers to, to 2,3 % to 5,5 % of world's GDP -using the UNODC's own estimates. It amounts in average to 3,6 % of world's GDP, or little below two trillion euro.<sup>1</sup> Two fifths of this amount refer to proceeds obtained by transnational organized crime, usually laundered and used in future criminal activities. Europol (2016) reports that portion as small as two percent

---

<sup>1</sup> Estimates are from year 2009. For comparison reasons, one should take notice that such amounts of economic value equal to GDPs of some of the most developed economies, such as Italy or United Kingdom (IMF, 2019). Only a handful of world's economies are bigger than two trillion euro.

of the criminally generated sums were provisionally seized or frozen, which, unfortunately, is not the whole story: only about half of that is ultimately confiscated.

Albeit imperfect,<sup>2</sup> these estimates can serve as reasonable approximation of criminally generated profit. It is clear that potential economic benefit attracts offenders and that from criminal policy point of view everything needs to be done to deprive them from that benefit. The urge to confiscate criminal benefits Bačić (1998) summarizes by stating that it is legally inadmissible, immoral and not in the spirit of justice for offender to keep the benefit obtained through crime, including the property obtained as a reward for crime. This ideological standpoint may be characterized as **restitutive**, meaning criminal law and state endorsed activities aim at restoring the *status quo ante*. This standpoint advocates deprivation of benefits from the offender in form or value he has gained them. It further implies that only net benefit, with offender's expenses deducted, can be confiscated. There are, however, some proponents of restitutive justification of criminal confiscation that find gross approach to identification and quantification of illegal gain more appropriate, otherwise the risk to legitimize crime (it could be seen as a business activity, with the possibility to confiscate economic benefit obtained through unlawful conduct as a risk, no different than any other business risk) and to linger evidentiary procedures (offender could effectively prove the costs incurred during the commission of the crime only if he admits the crime, nevertheless leaving unspecified which exactly the costs could be deducted) would be immense (Boucht, 2017; Bowles, Faure, & Garoupa, 2005).<sup>3</sup> Deprivation of economic benefit obtained illegally serves another purpose: reducing or removing the potential to use those benefits in future crimes. For instance, United Nations Office on Drugs and Crime (UNODC, 2011) estimates that about 70% of the illegally obtained benefits may eventually have been laundered. Another study (Savona & Riccardi, 2015) estimates that, looking at the revenues from heroin illegal market, between 25% and

---

<sup>2</sup> Calderoni (2014) is of opinion that criminal proceeds estimates abound with exaggerations, and labels them as „mythical numbers“. Taking Italy as an example, author argues that typical figures related to mafia proceeds are overblown and that real figures- ranging from eight to thirteen billion euro- are well below the mythical numbers of 150 billion. However, Calderoni's research proposes an estimation generated by nine criminal activities (sexual exploitation of women, illicit firearms trafficking, drug trafficking, counterfeiting, the illicit cigarette trade, illicit gambling, illicit waste disposal, loan sharking, and extortion racketeering) committed by mafia type organizations. It cannot be seen as an ultimate estimate of all crime generated profit in Italy, so the author himself labels his research as exploratory attempt and calls for caution in interpretations.

<sup>3</sup> On net and gross approach in determining the value of benefit obtained through crime, see Ivičević Karas (2010).

42% of the revenues in seven European countries may be available for money laundering. It could therefore be argued that criminal confiscation has also a **neutralizing objective** in the sense that it could deprive criminals of the assets needed to continue to be (criminally) active. Those assets can be used in different ways. One is operational costs, such as the purchase of wholesale drugs and transportation costs; another is bribe of public officials in order to facilitate future offenses; additional is investment in licit activities (purchase of various property, securities, etc.).<sup>4</sup> Finally, victims can be **compensated** for the harm done by criminal offenses, usually through special funds to resource the means for victim reimbursement. Costs of law enforcement and criminal justice agencies are in some countries (such as England and Wales) also compensated through confiscated means. In other, costs of tackling social problems (crime, prostitution, drug addiction), as well as crime prevention programmes and similar projects are directly or indirectly supported via assets confiscated in criminal proceedings (Boucht, 2017; Ligeti & Simonato, 2017; Lusty, 2002; Ryder, 2013; Smellie, 2004 ).

Beside restitution, neutralization and compensation, a straightforward reasoning on criminal confiscation suggest **deterrent (preventive)** effect on actual and potential offenders. Through deprivation of illegally obtained benefits, offenders should be persuaded crime doesn't pay, which should serve the wider purpose of disincentivising the commission of crimes making them pointless: in effective criminal justice system, criminal benefits are to be confiscated and the motivation to commit the crime would be removed (Thornton, 1990). If offenders behave rationally by weighing the potential benefits of the crime against punishment and the prospect of being deprived of any (with no deductions whatsoever) gain obtained through unlawful conduct, the decision to engage in criminal behaviour will depend on the effectiveness of the state to detect the crimes and identify offenders, swiftly proceed them and to properly punish them/discharge them of any gains. Any financial benefits the offenders might gain through crime are in this perspective annulled, which should hurt criminals the most and deter them from future crimes (Fried, 1988; Nelen, 2004). Such deterrent effect of criminal confiscation is aimed at both actual offenders (special prevention) and potential offenders (general prevention). Given that effective criminal confiscation serves the thesis that crime doesn't pay, both negative (discourage future crimes

---

<sup>4</sup> Neutralizing effect of asset confiscation is argued in case *Raimondo v Italy* (App no 12954/87) before European Court of Human Rights. The Court is of opinion that the aim of confiscation is to block movements of suspect capital (para. 30). In *Phillips v. The United Kingdom* (App no 41087/98) Court justifies the need to confiscate assets in order to deprive offenders of profits and to remove the value of the proceeds from possible future use (para. 52).

through criminal law mechanisms) and positive (impact on moral sense and self-discipline of population, and strengthening its trust in legal order) general prevention aims are endorsed (Fazekas & Nanopoulos, 2016; Mrčela, 1999; Perron, 1993; Schmidt, 2019).<sup>5</sup>

Preventive (deterrent) effect of criminal sanctions and measures have long been studied. Beccaria ([1764]1995) wrote 250 years ago that sanctions need to be prompt, certain and proportionate to crimes committed. Beccaria brilliantly observed that “promptness of punishment is more useful [than severity] because the smaller the lapse of time between the misdeed and the punishment, the stronger and more lasting the association in the human mind between the two ideas *crime* and *punishment*” (p. 49), and “one of the most effective brakes on crime is not the harshness of its punishment, but the unerringness of punishment” (p. 63). Similar thoughts can be found in work of Bentham ([1781]2000), who wrote that intensity and duration (magnitude), certainty and proximity of punishment “must not less in any case than what is sufficient to outweigh that of the profit of the offense” (p. 141). In second half of twentieth century deterrence doctrine saw a revival foremost in the seminal work of Becker (1968). Becker took an economic approach to deterrence and argued that decision to offend is based on the costs and benefits of both crime and non-crime.<sup>6</sup> Deterrent line of reasoning is somewhat empirically verified by a study from Levi and Osofsky (1995). They found that some of the offenders, which was established through interviews with offenders themselves, „view the proceeds of crime as their ‘entitlement’, and removing this presumed entitlement would naturally cause resentment“ (p. 12). The study does not, however, suggest that confiscation is a panacea for fighting acquisitive crime, especially having in mind that many of habitual offenders spend their gains before arrest, leaving nothing to be confiscated, or that successful confiscation can indeed motivate them to continue with crime because that

---

<sup>5</sup> Deterrent justification of criminal confiscation is explicitly stated in famous judgment from European Court of Human Rights in case *Phillips v. The United Kingdom* (see prev. footnote). The judgment reads that confiscation operates „as a weapon in the fight against the scourge of drug trafficking... in the way of a deterrent to those considering engaging in drug trafficking“ (para 52).

<sup>6</sup> Becker famously wrote that „the approach taken here follows the economists' usual analysis of choice and assumes that a person commits an offense if the expected utility to him exceeds the utility he could get by using his time and other resources at other activities. Some persons become "criminals," therefore, not because their basic motivation differs from that of other persons, but because their benefits and costs differ“ (1968, p. 178).

is the way they get their entitlement.<sup>7</sup> Pessimism on possible deterrence effect of confiscation share Freiberg and Fox (2000). They found that „the confiscation laws appear to have had a negligible effect upon the amount of serious profitable crime in the community“ (p. 260). Following reasoning of great Enlightenment era writers, modern criminological and criminal policy theory argues that several prerequisites need to be present for state-imposed repression through criminal law to be reasonably deterrent. First refers to the knowledge of potential offenders of legal rules and understanding the law’s implication for them. Second relates to thinking and behavioural pattern of offenders. In order for criminal law to have deterrent effect, offenders need to behave rationally and think about possible consequences of their deeds. Third deals with cost-benefit analysis of potential offenders: what are perceived gains and how do they relate to perceived costs of doing crime? Perceived costs are of especially interesting and complex to study. Usually “the costs” component of cost-benefit analysis is further broken into three aspects, corresponding with properties of sanctioning elaborated in works of Beccaria and Bentham: certainty, severity and celerity (Robinson & Darley, 2004). Certainty refers to chance of being detected and caught; severity to type and amount of punishment imposed; and, celerity refers to swiftness in criminal proceedings. These three dimensions can be differently measured: on individual level or on aggregate level. First usually includes survey methods to question respondents, and the latter official crime statistics (Kleck, Sever, Lee, & Gertz, 2005). While deterrence doctrine assumes perceptual effects which could be affected by a number of factors different from actual levels of punishment,<sup>8</sup> empirical studies of crime very often use aggregate data and are based on official records (Bun et al., 2020). Bowles et al. (2005) argue that properly implemented, criminal confiscation can serve important complementary role to incarceration and fines. If the offender knows *ex ante* that if caught, the benefit will be forfeited, confiscation regime can provide additional and powerful incentive to avoid crime.

---

<sup>7</sup> Perron (1993) also doubts direct effects of criminal confiscation on crime reduction. Referring to an older study from the beginning of the nineties, he argues that offenders feel less deterrent by the prospect of deprivation of gains obtained unlawfully than by the prospect of detection and sanctioning through more conventional state-imposed mechanisms and consequences. He is of opinion that effective confiscation works indirectly through consolidation of social values rather than directly on individual criminal behaviour.

<sup>8</sup> There is indeed vast body of work regarding objective and subjective measures of deterrence which contest their linkage (for review, see eg. Nagin, 2013; Paternoster, 2010), but individual level data based largely on self-report are also affected by significant measurement error (Bun, Kelaher, Sarafidis, & Weatherburn, 2020).

Prior studies have sought to examine theoretical aspects of deterrent effect of criminal law and punishment in general (eg. Nagin, 2013; Paternoster, 2010; Robinson & Darley, 2004), perceived and objective levels of deterrence (eg. Bun et al., 2020; Kleck et al., 2005; Kleck & Barnes, 2013), economic, philosophical and other rationale of deterrence through confiscation (eg. Boucht, 2017; Bowles et al., 2005; Thornton, 1990), or to discuss the confiscation process and the amounts confiscated, including attrition (eg. Bullock, Mann, Street, & Coxon, 2009; Freiberg & Fox, 2000; Kilchling, 2002; Kruisbergen, Kleemans, & Kouwenberg, 2016; Levi & Osofsky, 1995; Vettori, 2006). Beside being scarce altogether (Boucht, 2017), prior empirical research, especially in Bosnia and Herzegovina, did not sufficiently address deterrence through criminal confiscation. This paper seeks to explore objective costs of crime and requirements to make offenders refrain from crime. It will do so by examining traditional aspects (certainty, severity and celerity) of specific form of criminal repression- criminal confiscation.

## 2. METHODOLOGY

The study aims to explore aggregate levels of certainty, severity and celerity of criminal confiscation proceedings. Jurisdiction on which the study is focused on is Federation of Bosnia and Herzegovina. Federation of Bosnia and Herzegovina, as an administrative entity within Bosnia and Herzegovina, shares its overall complexities: intricate constitutional, administrative and judicial composition,<sup>9</sup> growth of organised and economic crime and widespread high-level political and commercial linkages between criminals and public officials (UNODC, 2008). Additionally, recent legislative developments to tackle the issue of ill-gotten gains<sup>10</sup> make Federation of Bosnia and Herzegovina an important and interesting case-study material.

---

<sup>9</sup> Federation of Bosnia and Herzegovina was established through Washington Agreement, signed in 1994 by Bosnian Government and representatives of Bosnian Croats. Federation is composed of federal units (cantons), which include lower levels of government (towns and municipalities). Municipalities have the right to establish courts, and each canton has court competent to hear appeals from municipal courts, as well as first instance jurisdiction in cases of serious crimes. There is also federal Supreme Court, which has selective appellate jurisdiction from the courts of the cantons. As a result, there are 41 (30 municipal and 10 cantonal courts, and the Supreme Court) courts in Federation of Bosnia and Herzegovina (Law on the Courts in FBiH, Official Gazette of Federation of Bosnia and Herzegovina No. 38/05, 22/06, 63/10, 52/14).

<sup>10</sup> In 2010, extended criminal confiscation was adopted in Penal code (Official Gazette of Federation of Bosnia and Herzegovina No. 42/10) and then in 2014, *lex specialis* Law on

The data for the study originate from newly established Federal agency for the management of seized property. According to the art. 30 of Law on Confiscation of Proceeds of Crime in Federation of Bosnia and Herzegovina, the Agency “conducts analyses in the field of criminal confiscation”, which includes collection of various data from competent authorities. The Agency regularly requests data on confiscation proceedings from all courts in Federation of Bosnia and Herzegovina.<sup>11</sup> This paper utilizes secondary analysis of existing data, that is reanalysis of data compiled for purposes of having an official picture on confiscation proceedings. The data of usual importance for this particular purpose were being collected, such as the date of beginning and the end of the confiscation proceedings, type and value of seized/confiscated assets, what crimes were offenders found guilty of, and offenders’ demographics (age, education, previous criminal records). Besides using as an excellent economizer of researcher time in data gathering (Hagan, 2014), any other data gathering strategy than secondary analysis would be linked with immense difficulties in time, financial resources and readiness of court officials to provide data. The study aims to provide not a definitive, thorough and comprehensive picture of confiscation landscape in Federation of Bosnia and Herzegovina, but to sketch an overall state of affairs. Since the clear data on number of judicial cases containing confiscation order is largely unknown, the study relies completely on one source of data and is uncertain on representativeness, a main feature of exploratory studies (Babbie, 2013).

Since the data originate from all courts in Federation of Bosnia and Herzegovina, the research is based on census of all final court rulings containing confiscation order, as provided by courts. Federal agency for the management of seized property contacted all courts in Federation of Bosnia and Herzegovina and asked them to manually/electronically review all final court rulings ordering confiscation. This proved to be very cumbersome, since the electronic case management system in courts was not fully functional until 2011. Even after, there was no designated module for data entry on confiscation, which was put into function just in January 2020.<sup>12</sup> First the population of cases needed to be established, and then the information for the

---

Confiscation of Proceeds of Crime in Federation of Bosnia and Herzegovina (Official Gazette of Federation of Bosnia and Herzegovina No. 71/14).

<sup>11</sup> First wave of data, on which this study relies on, were gathered during 2017. Municipal court in Čitluk officially began with work later in 2017, and municipal court in Srebrenik in January 2019, respectively, so the data from these particular courts could not be requested.

<sup>12</sup> Data on functionality of special electronic module on confiscation available at <https://www.pravosudje.ba/vstv/faces/vijesti.jsp?id=89716>.



individual court on variables briefly described above needed to be compiled. The review period was from 2003 to 2016.<sup>13</sup>

Certainty of criminal confiscation was measured via proportion of cases ordering criminal confiscation in total cases where criminal confiscation could have been expected. The latter will be determined by examining the number of criminal proceedings before the courts in Federation of Bosnia and Herzegovina for the crimes in which confiscation was predominantly ordered. As addressed briefly previously, large number of offenses (eg. theft, robbery) prescribe criminal intent to obtain property or other economic gain unlawfully, so this criminal intent is part of legal definition and needs to be proven in criminal proceedings. Any benefit is liable to mandatory confiscation. Furthermore, benefit could be a powerful motivator outside the formal definition of criminal offense, so it is almost impossible to exclude it as a variable in any wrongdoing. Some crimes nevertheless carry a much larger potential to be motivated by economic gain and can be seen as typical acquisitive crimes. Identification of them through final court rulings where confiscation was imposed serves as a logical pattern to look into the data for the entire population of typical acquisitive crimes. Additional dimension of certainty will address proportion of cases in which criminal confiscation was *enforced* in total number of cases where confiscation was *imposed* by the courts, supplemented by the data on attrition amounts.<sup>14</sup> It cannot be said that criminal confiscation serves deterrent effect if confiscation orders are not implemented. Although it could reasonably be argued that this particular part of certainty aspect could also be seen through the lens of the subsequent “costs” dimension- confiscation amount, it fits more to the discussion on certainty.

Severity was measured by monetary value of assets ordered to be confiscated. Effective confiscation scheme should hit offenders analogous to criminal sanctions: just as harsh sanctions should deter from crime, higher level of confiscation sums should make crime pointless and demonstrate state’s determination to discharge

---

<sup>13</sup> The baseline year was chosen because massive criminal law interventions took place in 2003 (Sijerčić-Čolić, 2019), and end year because that was full year before data were requested. In order to observe trends, in social sciences is common to cover longer, multiple-year period (Zelenika, 2000). To process a particular aspect of certainty (number of confiscation proceedings relative to total number of typical acquisitive crimes), period of analysis covered years 2013-2016, largely because of convenience related to large amounts of data.

<sup>14</sup> Attrition is the gap between estimated criminal profits and the actually recovered amount of money (Kruisbergen et al., 2016).

wrongdoers from any illegally obtained benefit. Severity aspect of “costs” calculation is difficult to measure. Criminal confiscation is in Federation of Bosnia and Herzegovina a penal measure, not a sanction, meaning its amount cannot be set by courts discretionary, but is determined by the benefit obtained through commission of a crime. One way to measure severity via this aspect would be to review court rulings and to determine whether net or gross approach was utilized. In Federation of Bosnia and Herzegovina, namely, both could be utilized, contingent on application of either penal code or *lex specialis* Law on Confiscation of Proceeds of Crime in Federation of Bosnia and Herzegovina (see footnote 10). Another would include study of whether extended criminal confiscation was utilized, which rests on a number of propositions vaguely legally defined.<sup>15</sup> Since this is exploratory study relying entirely on data from Federal agency for the management of seized property, which did not address neither of alternatives, the remaining option was to examine plain monetary value of assets ordered to be confiscated, for which the data were existent.

Celerity of confiscation proceedings was measured by: 1) range of years<sup>16</sup> from the offense commission until the beginning of criminal proceedings resulting in criminal confiscation, 2) range in months and years from the beginning of the proceedings until the passing of final court ruling. Since it is validated that the effects of punishment drop off to the great extent as the delay increases between the wrongdoing and the administration of punishment (Robinson & Darley, 2004), the greater the delay between crime commission and proceeding’s start, and consequently proceeding’s end, the lesser the deterrent effect of criminal law repressive measures.

### 3. FINDINGS

Data from 284 final court rulings from 30 courts were obtained. Nine courts reported either no criminal proceedings in which criminal confiscation was ordered or the manual examination of court archives would be too cumbersome. It makes over nine confiscation orders per court, or less than one confiscation case per court annually. Timely distribution of cases containing confiscation order, showed in figure 1, suggests

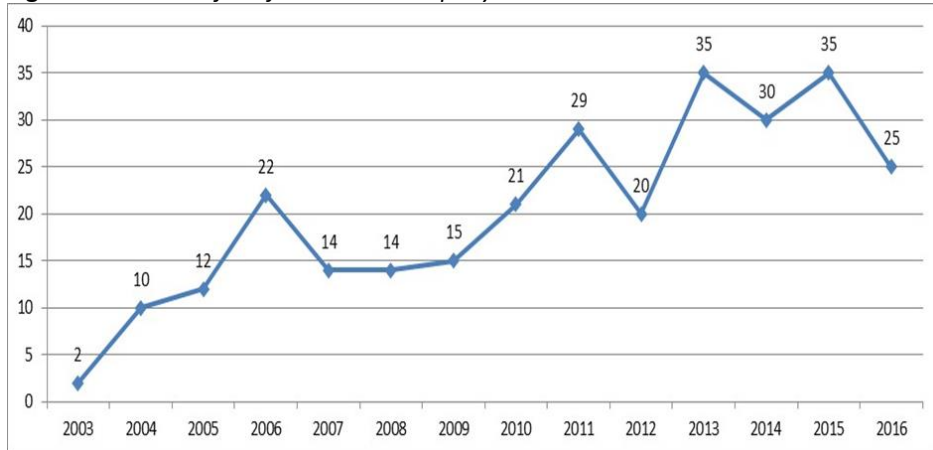
---

<sup>15</sup> For criminal law review of extended confiscation regime in Federation of Bosnia and Herzegovina, see eg. Datzer & Mujanović (2020).

<sup>16</sup> Many courts data contained information only on year when crime was committed, not the exact day. Therefore, only years could be calculated.

there was consistent increase of cases containing confiscation orders, with only two years (2012 and 2016) where numbers declined to a higher degree.

**Figure 1.** Number of confiscation orders per year

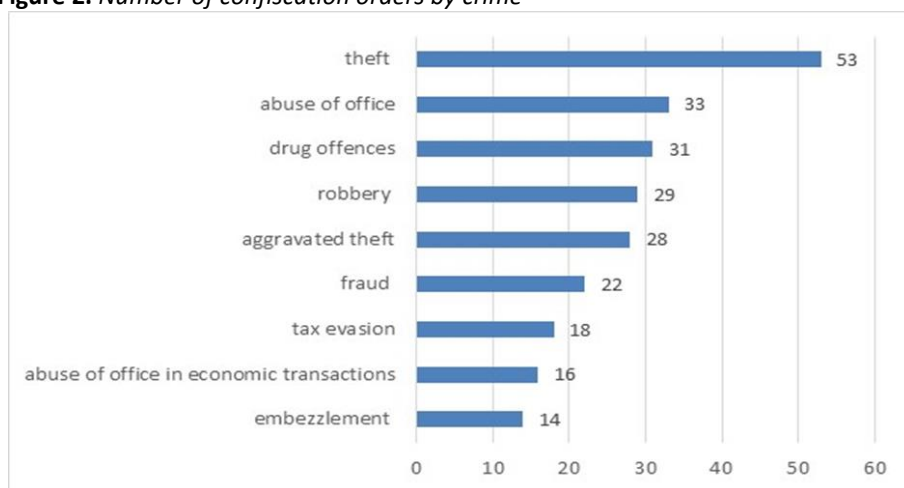


The vast majority of court rulings ordering confiscation dealt with small scope of crimes. These are: drug offences, abuse of functions in economic transactions, tax evasion, theft, aggravated theft, robbery, fraud, abuse of office by a public official and embezzlement, amounting to c. 90 % of all cases. They can be classified into four categories: corruption (abuse of office by a public official, embezzlement), economic crime (abuse of functions in economic transactions, tax evasion), property crime (theft, aggravated theft, robbery, fraud,) and drug offences. Detailed distribution, shown in figure 2, suggests close to half of all cases referring to property crimes. It is somewhat expected, since their legal definition usually contains intention to derive an unlawful benefit. Similar logic is valid for corruption and economic crime. Drug offences, as briefly discussed previously, are not legally defined by an acquisitive intent, nevertheless are frequently motivated by illegal economic gains. It is no surprise that more than one in ten cases in which confiscation was imposed refers to drug offences.

It is uncertain how representative the data are of the whole picture of criminal assets that are identified and ordered to be confiscated. There are lots of missing data across whole dataset, which is not surprising: there is a general paucity of data available on even the most essential aspects of asset confiscation even in the European Union, including total amount of confiscated assets (Fazekas & Nanopoulos, 2016). Missing data are ubiquitous challenge for criminology and criminal justice researchers (Brame, Turner, & Paternoster, 2010) and are of great importance if inferences are to be made,

including identification of relations between variables. This paper, however, relies completely on official judicial data and reflects an effort to census-wise cover data from all courts; there was no intent to examine relationships (at least using statistical tools) between variables. Despite missing data, its exploratory nature and scarcity of data alternatives makes it informative piece of research based on empirical data on a given topic.

**Figure 2.** Number of confiscation orders by crime



### Certainty of criminal confiscation

As described previously, one way of examining certainty of criminal confiscation would be to calculate the proportion of cases ordering criminal confiscation of total cases where criminal confiscation could have been ordered.<sup>17</sup> Previous finding indicates on handful of criminal offenses for which courts predominantly order confiscation, which are both in theory and in practice typical acquisitive crimes. Some of them are high volume crimes, so it would be of great interest to relate those two (the number of cases for which criminal confiscation could have been ordered and the actual number of confiscation orders) and to study how general criminal law principle prescribing that no one should benefit from his/her wrongdoing has been put into practice.<sup>18</sup> The data

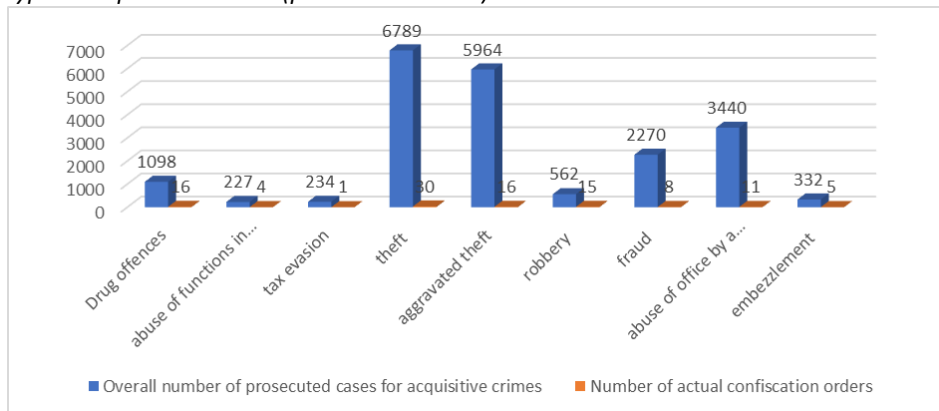
<sup>17</sup> Similar approach took Levi & Osofsky (1995).

<sup>18</sup> Criminal confiscation is in Federation of Bosnia and Herzegovina mandatory. It can be used to compensate victims.

on overall number of cases was drawn from summary report on prosecution offices' flow of cases in Federation of Bosnia and Herzegovina, gathered by Federal prosecution office.<sup>19</sup>

Figure 3 shows that in only a small portion of overall number of individual crimes susceptible by its legal definition or its nature to issuing a confiscation order, was indeed subjected to confiscation. Only 106 of 20.916 of all cases for nine typical acquisitive crimes handled by prosecutors in Federation of Bosnia and Herzegovina (less than one percent) for the period 2013-2016 resulted in ordering confiscation by courts. Put differently, only one in almost 200 crimes liable to be subject of criminal confiscation contained confiscation order. The smallest chance (relative to overall number of cases) to be subject of criminal confiscation had aggravated theft (one in 372 crimes), followed by abuse of office by a public official (one in 312 crimes) and fraud (one in 284 crimes). The greatest probability had embezzlement (one in 66 crimes) and abuse of functions in economic transactions (one in 57 crimes). Although great number of reasons and situations could be in place opposing, hindering or complicating confiscation, such great disproportion is impressive.

**Figure 3.** Comparison of overall and procedures in which confiscation was ordered for typical acquisitive crimes (period 2013-2016)



Even more somber is deduction that can be drawn if the number of overall cases (for all crimes, not just typical acquisitive ones) handled by prosecutors is put into relation with the number of actually imposed confiscations. Total number of all cases handled

<sup>19</sup> Reports are available at <https://ft-fbih.pravosudje.ba/>.

by prosecutors in Federation of Bosnia and Herzegovina for four-year period was 62.930, approximately half of which refers to property, economic and drug offences, and corruption (crime types most susceptible to confiscation). Having in mind that in covered time span in total 125 cases (not just nine individual, typical acquisitive crimes described previously) confiscation was ordered, it amounts to about two fifths of one percentage point of the number of cases which had the potential to impose confiscation.

Reliable data on recovery of assets pursuant to confiscation orders (enforcement stage of confiscation procedures) was obtained only from 72 cases. Although not explicitly defined by law, every criminal case file should also have information on the actual execution of sanctions and measures. However technical and minor may seem, this informal rule is extremely important for analytical and other purposes. Case law is unfortunately still quite uneven in this regard, so not all criminal case files contain updated information on the outcome of sanctions and measures imposed in court judgment. Since courts compiled data entirely from case files, the bulk of data were missing. In approx. half of that number the confiscation orders were indeed enforced either through voluntary or forced payment, and for 30 cases enforcement procedures were pending.<sup>20</sup> The enforcement ratio of one in eight cases in which confiscation order was imposed in not particularly convincing one, especially having in mind that the number of cases where confiscation could have been imposed is many times higher. When put together, the data suggest that merely a fifth of a percentage point of all criminal cases tried for acquisitive crimes were indeed resulting in depriving the offender of unlawfully obtained assets.

Additional concern on effectiveness of criminal justice system suggest data on financial value of orders that were enforced. Although the reliable data on actual recovery are largely missing and findings need to be examined with caution, it is highly interesting to briefly discuss what is available. Total value of assets actually recovered was 299.915 BAM, just a fraction (1, 5 %) of assets value ordered to be confiscated (see next section). For seven cases no data on assets value were recorded. The lowest amount actually recovered via confiscation order was 37 BAM, and the largest 100.000 BAM. Mean value per case was close to 10.000 BAM (9.997 BAM), with half of cases with less or just little over 1.000 BAM (1.030 BAM). Those 50 per cent of cases amount collectively to value of just 4.104 BAM, suggesting very asymmetric distribution in favour of very low value cases. Confiscation orders were most likely to be enforced for

---

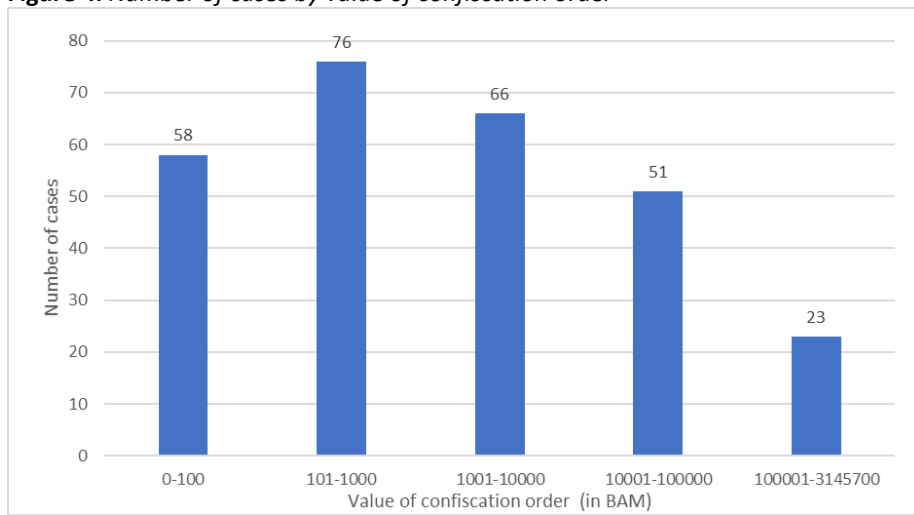
<sup>20</sup> Enforcement procedures have been pending for quite a while, ranging from one to fourteen years. Both mean and median are eight years.

drug offences (14 cases) and abuse of office by a public official (7 cases). The highest value of 100.000 BAM had one case dealing with abuse of office by a public official, which was enforced through voluntary payment, followed by two cases for criminal conspiracy (first of value of 50.000 BAM, and second of 70.000 BAM), both voluntary paid upon final court ruling ordering so. Although frequent in successful recovery numbers, drug offences had little overall value (31.302 BAM), which is mainly permanently kept following seizure of assets in previous stages of criminal procedure.

### Severity of criminal confiscation

Amount of assets to be confiscated varied hugely. The lowest amount was 10 BAM, and the highest 3.145.700 BAM. Average value of confiscation order was 69.112 BAM. Most frequent single value was 100 BAM, subject of 10 confiscation orders, followed by 50 BAM (in 8 cases). The distribution was, however, largely right skewed, suggesting larger frequency of low value cases. Almost half of cases refers to values less than 1.000 BAM, and almost three quarters less than 10.000 BAM. Approx. ten percent of cases referred to orders with a value greater than 100.000 BAM, and with five cases with value greater than 1.000.000 BAM. Figure 4 shows distribution of cases by value of confiscation order.

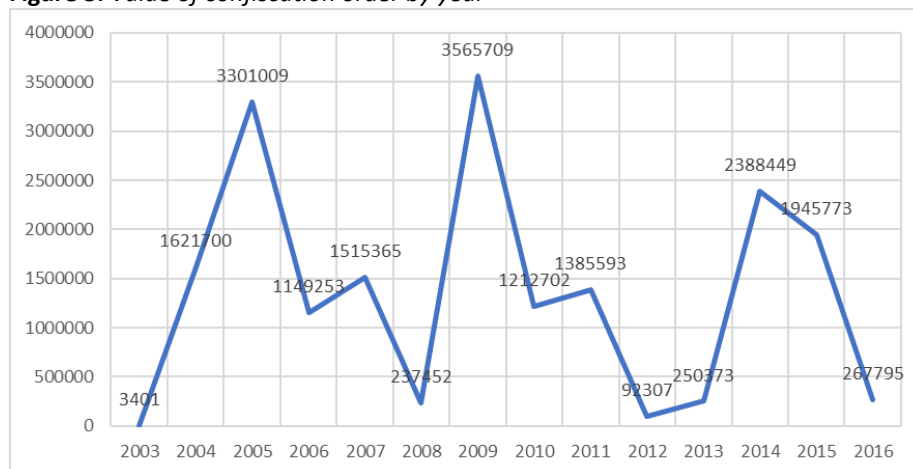
**Figure 4.** Number of cases by value of confiscation order



When examining confiscation amount annually (see figure 5), the year with highest confiscation amount ordered was 2009 (over three and a half million), followed by 2005 (3.301.009 BAM) and 2014 (2.388.449 BAM). The smallest amounts ordered to

be confiscated are from year 2012 (92.307 BAM) and one extreme case of year 2003 (just 3.401 BAM). Average value of confiscation order per year was 1.352.634 BAM. No particular pattern could be observed based on the data.

**Figure 5.** Value of confiscation order by year



Total value of assets ordered to be confiscated was 18.936.886 BAM. Half of that value (9.970.864 BAM) referred to just five cases with unusually high amounts (greater than 1.000.000 BAM). In contrast, almost half (134) of all cases with lowest values (less than 1.000 BAM) made up in total 33.941 BAM, which is less than one per cent (two tenths of a percentage point) of the total value of assets ordered to be confiscated. It is therefore safe to say that confiscation landscape in Federation of Bosnia and Herzegovina is dominated by small value cases. Most profitable individual crimes are abuse of office by a public official, with total value of confiscation orders of over six million BAM, abuse of functions in economic transactions, with the sum of assets to be confiscated amounting to 5.716.765 BAM, and tax evasion with total sum of 4.354.272. BAM. Least profitable appear to be theft, with total value of 26.815 BAM and robbery (23.367 BAM). If the mean value for every crime is taken into consideration, order changes a bit. Thus, abuse of functions in economic transactions has the highest mean value of confiscation orders (over 380.000 BAM), followed by tax evasion (close to 300.000 BAM) and abuse of office by a public official (mean close to 200.000 BAM). The lowest mean values have robbery (865 BAM) and theft (525 BAM). In general, it can be argued that high volume property crimes, such as theft and robbery, do not generate particularly high economic benefit, and that, except for abuse of office by a public official, crimes that are low in volume but committed by offenders who have the



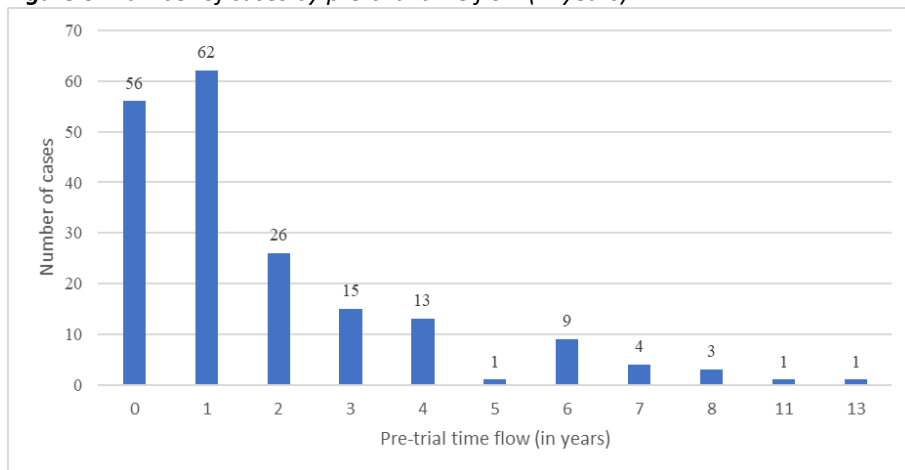
access to much greater assets than conventional offenders generate much larger profit.

### **Celerity of confiscation proceedings**

Final aspect of cost-benefit analysis of potential offenders in calculating whether crime pays refers to celerity of confiscation proceedings. As elaborated previously, it will be analysed through time range from the offense commission until the beginning of criminal proceedings resulting in criminal confiscation (pre-trial time flow), and through time range from the beginning of the proceedings until the passing of final court ruling ordering confiscation (trial time flow).

Time distribution (measured in years) of the period between the offense commission and the beginning of criminal proceedings is based on data from 191 cases (others were not reported from the courts). From the available data, it can be deduced that the range in question varied from 0 to 13 years, with the mean value of 1. 81 years (approx. 22 months). Almost two thirds of cases began within one year after the offense was committed, and almost three quarters within two years. Most frequent value of the period between offense commission and the beginning of criminal procedure was one year (see figure 6).

**Figure 6.** *Number of cases by pre-trial time flow (in years)*

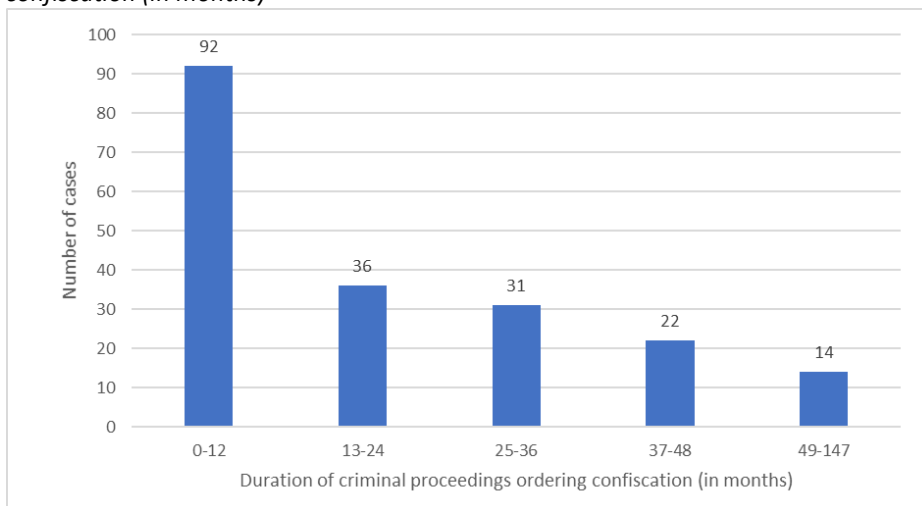


When examining the data on swiftness of criminal procedure measured via period between crime commission and the beginning of the formal procedure broken by type

of crime, it can be deduced that offenses that generate larger economic benefit, such as abuse of functions in economic transactions (mean of 6.7 years), tax evasion (5.3 years) and abuse of office by a public official (3.5 years) take rather prolonged period to be prosecuted, while low economic value/high volume offenses, such as drug offences (mean of 0.42 years), robbery (mean of 0.74), aggravated theft (mean of 0.91 years), theft (mean of 0.98 years) get investigated quite quick and criminal proceedings for vast majority of these cases begins within one year after the offense came to realisation.

The duration of formal criminal proceedings in which confiscation was ordered is shown in figure 7. Again are the data for all cases not provided, so the analysis rests on 195 cases for which data were available. Average duration of criminal proceedings is 21.3 months, almost equal to the time range, analysed previously, dealing with the period between the offense commission and the beginning of criminal proceedings. Half of cases were finalized within 15 months, and three quarters in less than three years. Taken together, the data suggest that after committing a crime, in average it takes longer three and a half years for offender to face a deprivation of whatever benefit he obtained unlawfully.

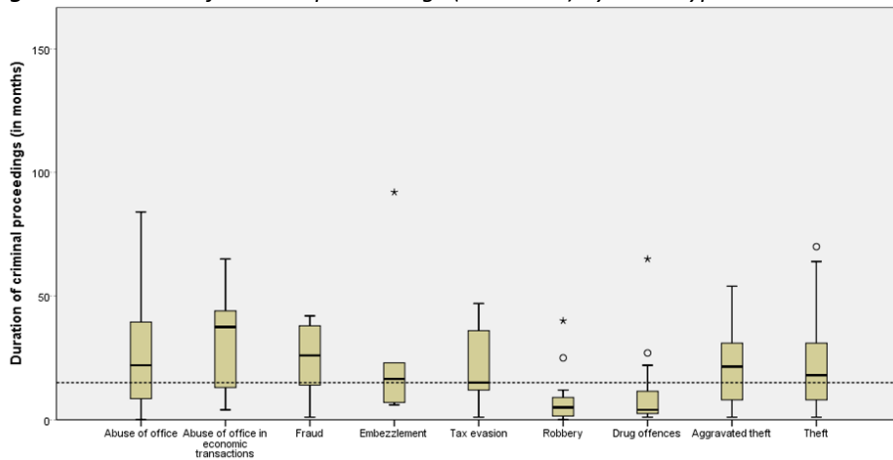
**Figure 7.** *Number of cases by duration of formal criminal proceedings ordering confiscation (in months)*



As in previous findings, the picture on duration of criminal confiscation changes when elaborated by crime type (see figure 8, with dotted line representing median for the

whole dataset). Once reaching the formal procedure, low value crimes, such as robbery and drug offences, were swiftly processed, typically in four or five months. High value crimes, such as abuse of office (both in economic transactions and in public institutions), were typically processed in two or three years. Other low value crimes, such as common or aggravated theft, had median above the value for the whole dataset, suggesting the swiftness they are investigated is not followed through the rest of formal proceedings.

**Figure 8.** Duration of criminal proceedings (in months) by crime type



#### 4. DISCUSSION

If criminals behave rationally, costs of crime make an important element in their calculation whether or not to engage in crime. “Costs” element in criminal reasoning would include three main prerequisites, addressed even hundreds of years ago in works of Enlightenment era writers: certainty, severity and celerity. Criminal confiscation is a penal measure (not a sanction) in Federation of Bosnia and Herzegovina, nevertheless serves preventive role of criminal law in general: to deter potential offenders not to engage in crime and to influence decision of those who already engaged in crime to refrain from it in future. Its deterrent potential depends on fulfilment of those prerequisites, whereby 1) certainty refers to chance of being detected and caught, and, consequently, to deprivation of any benefit gained unlawfully, and also to invariable, full enforcement of confiscation orders; 2) severity refers to confiscation amount imposed by courts; and, 3) celerity refers to swiftness in both detecting the offenders and beginning of the criminal proceedings and conducting procedure as fast as possible.

Although all crimes could be motivated by illegal benefit, some are more acquisitive than others. Brown, Esbensen and Geis (2013) are of opinion that there are typical crimes which have financial considerations at their root, such as theft, burglary, robbery and white-collar crime, but in essence many others can have them too (eg. murder can be committed to get an inheritance). This study showed that indeed corruption (abuse of office by a public official, embezzlement), economic crime (abuse of functions in economic transactions, tax evasion), property crime (theft, aggravated theft, robbery, fraud, etc.), complemented by drug offences, make vast majority of cases in which confiscation was ordered. Beside compensation claims by injured parties which are optional,<sup>21</sup> criminal confiscation is main and obligatory manner in which economic benefit generated through crime is taken out of it.<sup>22</sup> Very important aspect of criminal confiscation is its compulsory nature, rooted in an old law principle *commodum ex injuria sua non habere debet* ("no man ought to derive any benefit of his own wrong").<sup>23</sup> It is surprising to establish that in Federation of Bosnia and Herzegovina very small percentage (less than one percent) of cases susceptible to confiscation actually resulted with confiscation. One should keep in mind that these are not cases established by data gathering alternative to official statistics which implies questions of methodological nature, but relation of total number of officially recorded cases to number of (officially reported) actual confiscation proceedings. Looking at the first measure of certainty - proportion of cases ordering criminal confiscation in total cases where criminal confiscation could have been ordered - it is safe to say that criminal law cannot exert any deterrent function. Similar findings on effectiveness in identification and in criminal confiscation in Bosnia and Herzegovina can be found in an analysis conducted by the USAID Justice Project (USAID-ov Projekat pravosuđa u Bosni i Hercegovini, 2017 [a]), but in research abroad as well (Levi & Osofsky, 1995).<sup>24</sup> USAID Justice Project report reads that although authorities have

---

<sup>21</sup> There are no comprehensive and reliable data on number of criminal cases in which compensation claims by injured parties have been petitioned in proceedings in Federation of Bosnia and Herzegovina. Some findings at the level of whole Bosnia and Herzegovina, however, suggest that compensation claims are regularly diverted to civil procedures (USAID-ov Projekat pravosuđa u Bosni i Hercegovini, 2017 [a]).

<sup>22</sup> Levi (1997) asserts that situation under English law was very similar, confiscation being „a more powerful technical tool than compensation for extracting payment from offender“ (p. 232).

<sup>23</sup> It is indeed explicitly stated in art. 114 of Penal code of Federation of Bosnia and Herzegovina. Furthermore, pursuant to art. 413 of the Criminal procedure code, the existence of proceeds of a criminal offence shall be established in a criminal procedure *ex officio*.

<sup>24</sup> Levi and Osofsky (1995) found that from at least £ 650 million from property and drug

invested enormous legislative effort in regulating confiscation system, there are considerable difficulties in its application, while effects of the relevant policies are at the beginning. The study suggests there are number of reasons why is confiscation system largely inefficient: inappropriate legislative norms, lack of awareness of confiscation importance and its obligatory nature, administrative (such as proper rewards for difficult prosecutors` work in high value confiscation cases) and difficulties akin to them in conducting financial investigations, lack of specialization and training for police, prosecutors and judges. With regard to pronounced role of prosecutors in identifying illegal benefit and gathering the evidence in criminal procedure, it is worth to briefly examine their capacities. There were approx. 9 prosecutors per 100 000 inhabitants in Federation of Bosnia and Herzegovina,<sup>25</sup> which is below national and European average, but far higher compared to some developed European countries (England and Wales have only approx. 4, Germany 6,5, etc.). Looking at the number of cases handled by prosecutors, it is 1,3 per 100 inhabitants in year 2016 for Federation of Bosnia and Herzegovina, while European average was 3,1 (CEPEJ, 2018). It is safe to say that at face value overall workload conditions for prosecutors in Federation of Bosnia and Herzegovina are not unfavourable or less manageable compared to those for their European colleagues. It is likely that not lower number of prosecutors *per se* was the main factor of inadequate performance in taking the profit out of crime in greater volume, but some other features of prosecutorial work. Lack of specialization, mentioned previously, could be one. Dealing with the effectiveness of criminal justice system in processing corruption offences, Organization for Security and Co-operation in Europe -Mission to Bosnia and Herzegovina (2018) identified some inadequacies in capacities of prosecutors in the gathering of evidence supporting the charges. In its report, it states that “in great number of cases, the evidence submitted for the purpose of quantifying the economic damage or gain...was poor” (p. 38-39). Lack of capacities in specialized financial investigation units is also one of the reasons recognised by the European Commission, who argues they are not systematically launched in cases of corruption and organised crime and there is no overall policy for financial investigations on a systematic basis (European Commission, 2015; 2016).

Second dimension of certainty refers to enforcement of confiscation orders. Although based on largely incomplete data, exploratory findings suggest that the enforcement ratio of one in eight cases in which confiscation order was imposed in not particularly deterrent, along with the finding that only small part (1, 5 %) of the ordered

---

offences open to confiscation in 1993, only £ 14 million (two percent) was indeed confiscated.

<sup>25</sup> The rate was calculated based on data from Federal prosecution offices annual reports. See footnote 19.

confiscation sum was indeed recovered. Greater chance to be enforced had low value cases, a finding in concordance with the data from the study of Bullock et al. (2009).<sup>26</sup> There are three paths to recover illegally obtained assets judicially ordered to be permanently deprived from an offender: voluntary payment, legal and factual transfer of (previously) temporarily seized assets into public funds, and forced execution of court rulings. In Federation of Bosnia and Herzegovina, all are more precarious than certain. Since criminal confiscation in Federation of Bosnia and Herzegovina is a penal measure, it rests on willingness of the offender to follow court ruling, with no possibility of applying other coercive measures (eg. default imprisonment as in case of monetary fines) as an alternative if court orders are not carried through. Courts tend to order unusually prolonged time span for voluntary payment (within one year),<sup>27</sup> which offenders can use to conceal or otherwise make their assets untraceable and unavailable. Another way to permanently deprive offenders of their ill-gotten gains is to temporarily seize the assets and upon verdict to transfer them to state budget. Freezing of assets is in Federation of Bosnia and Herzegovina rarely applied, because of administrative issues concerning prosecutors' workload evaluation, vague legal norms governing seizure and scarce resources for seized asset management (European Commission, 2016; USAID-ov Projekat pravosuđa u Bosni i Hercegovini, 2017 [a]). Forced execution of criminal court rulings different to prison sentences is especially complex matter. In order for enforcement to start, the court judgments need to satisfy conditions of an enforceable title, meaning, *inter alia*, clear obligation and due of fulfilment, which judgments often fails to define. Forced execution is initialized by state attorneys, which are in Federation of Bosnia and Herzegovina understaffed and overwhelmed by the number of duties before them. There are also problems with clear chain of steps needed to be taken in order for forced execution to take place, as well with regular checks on offenders' assets in cases where the property is out of reach or insufficient for enforcement to be performed. It is not surprising that in another country-wide study the proportion of successful forced executions of court rulings in

---

<sup>26</sup>The percentage of successful recovery are much higher in the study of Bullock et al. (2009), with close to 90 % of cases, but 38 % of value; share of cases successfully closed in the study Kruisbergen et al. (2016) was almost three quarters, but total amount paid was 41 % of the overall value. Problems with attrition during enforcement stage of confiscation proceedings are documented elsewhere (eg. Nelen, 2004; Levi & Osofsky, 1995).

<sup>27</sup> Bullock et al. (2009) report that almost 90 % of confiscation orders were paid in United Kingdom, usually by six months after court order. However, orders with greater values do not follow overall trend, so orders between £100,000 and £1 million are paid by just a third.

Bosnia and Herzegovina is only one tenth of a percentage point (USAID-ov Projekat pravosuđa u Bosni i Hercegovini, 2017 [a]).

As stated previously, effective confiscation scheme should hit offenders similar to criminal sanctions: higher level of confiscation sums should make crime pointless and demonstrate state's determination to discharge wrongdoers from any illegally obtained benefit. The study found that total value of assets ordered to be confiscated is 18.936.886 BAM, or 1.352.634 BAM per year. Half of cases made up in total 33.941 BAM, which is less than one per cent (two tenths of a percentage point) of the total value of assets ordered to be confiscated, and approx. ten percent of cases referred to orders with a value greater than 100.000 BAM. Asymmetry in favour of low value cases has been reported elsewhere (Bullock et al., 2009; Kruisbergen et al., 2016). Annual value of recovered assets is 0.31 euro for each citizen of Federation of Bosnia and Herzegovina, or 0.007 % of national GDP.<sup>28</sup> Annual confiscation amount is many times below European average, which in absolute numbers is 38.8 million euro. European average is 1.7 euro for each citizen across the EU each year, or on average 0.009% of the national GDP of each EU country (Europol, 2016).

Calculating costs of crime is enormously complex. There are no known studies in Federation of Bosnia and Herzegovina which comprehensively estimate costs of crime. Nevertheless, even when looking skin-deep at the data from the study dealing with a bribery in the country (which is considered to be all-pervasive), previously elaborated data on confiscated assets suggest little deterrent effect. In a large sample of citizens of Bosnia and Herzegovina (5.000), UNODC (2011) found substantial proportion of respondents having personal experience with bribery- over 20 %, paying bribe in average five times. Translated into absolute numbers, it means that thousands of citizens had bribery experience in average five times during one year.<sup>29</sup> Adding the average bribe value of 220 BAM into calculation, one can easily come to hundreds of millions of BAM payed only in bribes by ordinary citizens. Another study from UNODC (2013), dealing with corruption within private sector, found that 13.2 % businesses in Federation of Bosnia and Herzegovina payed bribe in average 7 times with mean value of 318 BAM, amounting to close to 15 million BAM annually. These numbers can be contested from a number of points, nevertheless suggest that the value of assets obtained through just one type of crime vastly surpass identified and confiscated monetary sums in judicial proceedings. Study based on analysis of more than 600 legal

---

<sup>28</sup> Numbers calculated using data from the Federal Institute for Development Programming (Federalni zavod za programiranje razvoja, 2015; 2016).

<sup>29</sup> Numbers calculated using data from the Institute for Statistics of FBiH (2017).

cases tried in two-year period across whole Bosnia and Herzegovina found that even when economic harm is established in criminal proceedings for corruption offenses, just minor sums are ordered to be confiscated, about 5 % (USAID-ov Projekat pravosuđa u Bosni i Hercegovini, 2017 [b]). Altogether, data suggest that amounts ordered to be confiscated in criminal proceedings are far below those obtained through illegal activities and that criminal justice system struggles to exert a convincing deterrent effect.

This study found that after committing a crime, it takes in average longer than three and a half years for offender to face a deprivation of whatever benefit he obtained unlawfully. Almost equal distribution of time refers to pre-trial and formal criminal procedure period. Compared to national average reported in judicial effectiveness index (USAID-ov Projekat podrške monitoringu i evaluaciji u Bosni i Hercegovini, 2019), pre-trial activities in confiscation cases took approximately the same amount of time as for the general crime and corruption cases.<sup>30</sup> Looking at the trial phase of confiscation procedure, the duration is almost double compared to national average (639 to 342 days). Compared to data from CEPEJ (2018) report<sup>31</sup> dealing with European justice statistics, confiscation cases in Federation of Bosnia and Herzegovina take more than four times than criminal proceedings in Europe (639 to 142 days). In sum, confiscation proceedings seem to consume discernibly higher amount of time measured by duration of criminal procedure compared to average duration of criminal proceedings. Such findings are no anomaly, and other researchers (eg. Kruisbergen et al., 2016) report similar results as well.

For a criminal law tool to have deterrent impact on potential offenders, it needs to outbalance profits from crime, possibly by a low cost of enforcement. Confiscation of proceeds of crime could have such deterrent effect by removal of illegal gains making the crime pointless: if the offenders weigh benefit against costs, and costs are increased by the prospect of obligatory deprivation of all economic benefits if caught, this may *ex ante* provide additional incentives to avoid crime (Bowles et al., 2005). Confiscation represents a credible deterrent only if it is highly certain to be utilized, if

---

<sup>30</sup> The data do not necessarily measure the same concept. In our study the average duration of pre-trial activities before formal trial procedure was examined, while the data from judicial effectiveness index come from the cases received by prosecutors' offices, which could be dealing with crimes committed long before they were formally reported.

<sup>31</sup> Data from CEPEJ (2018) study are „not a calculation of the average time needed to process a case but a theoretical estimate of the time needed to process pending cases“ (p. 239), but provide valuable information on case duration.



it is severe enough to send a message that crime would not be tolerated and that criminals would be stripped of any profits from crime, and if it is implemented without much delay. Based on presented aggregated data, none of these properties of credible deterrence seem to be existent in Federation of Bosnia and Herzegovina. If confiscation is sporadically operated and typically in low value cases, it cannot exert any substantial effect on deterring individual offenders, let alone criminal organisations. With non-existent prerequisites for effective deterrence, confiscation cannot reasonably be expected to have significant impact on general levels of offending.

## 5. CONCLUSION

This article has given insight into praxis of criminal confiscation in Federation of Bosnia and Herzegovina. In order to have deterrent effect, criminal confiscation, as a criminal law instrument complementary to prison and fines, needs to share same features. Namely, if offenders tend to behave calculated and rational, the criminal law policies and activities which provide high probability of detection of wrongdoing, proper amount of “repressive bite” and reaction without much delay would make future crime pointless and exert deterrent effect. Prerequisites of successful deterrence are therefore certainty, severity and celerity. Despite enormous benefits from economic and organised crime, corruption and drug trafficking, confiscation amounts in Federation of Bosnia and Herzegovina are rather low, do not remotely match the values actually gained through crime and are far below European average for confiscation cases. Findings suggest that confiscation is rarely used relative to total number of typical acquisitive crimes reported each year and when used, it is highly skewed in favour of low value cases for high volume crimes such as theft, robbery and drug offences. Enforcement of confiscation orders appears to be Achilles’ heel in confiscation proceedings already burdened with substantial shortcomings, since only a trivial portion of total assets ordered to be confiscated were actually recovered. Even successful confiscation proceedings are lengthy, thus average time needed to issue an order for criminal confiscation exceeds the average duration of criminal proceedings.

Exploratory nature of this study, with a good deal of missing data, does not provide perfect and definitive depiction of confiscation proceedings. The data are, however, one of the rare attempts in Federation of Bosnia and Herzegovina or in whole Bosnia and Herzegovina to examine confiscation proceedings and recovery of illegally obtained gains in more detail. Despite missing data issues, the findings are not completely uninformative, though have to be interpreted with great caution. Nevertheless, some implications can be drawn, especially having in mind general concurrence of findings with other studies home and abroad.

Mandatory nature of criminal confiscation appears to be ignored in practice, failing to achieve both pedagogic (symbolic) and deterrent effect. Confiscation of benefits gained through crime should therefore be put higher on criminal justice system agenda. Staffing and specialization of criminal justice practitioners involved in criminal confiscation cases is quintessential. Financial investigations need to become indispensable part of major criminal cases, and the prosecutors and investigators need to be properly rewarded for their efforts for trying to take the profit out of crime. Cooperation in financial investigations between police, prosecutors and other experts is crucial and could secure location and timely restraining of assets, substantially raising the likeliness of its future permanent deprivation. Whenever possible, assets need to be seized and properly managed, so the value stays intact irrelevant of the outcome of the proceedings, increasing the probability of successful permanent deprivation upon final court rulings. Legitimacy of legal and social order cannot be gained if the high value cases are rarely successfully processed and the illegal profit stays out of state's reach. Therefore, better targeting of major criminal cases across all phases of criminal confiscation proceedings is required. Sincere discussion needs to take place in order to analyse all feasible and proper options on legal incentives to make offenders perceive enforcement of confiscation orders more seriously than previously. In case of non-payment or fulfilment of confiscation orders on time, these could include default imprisonment, restriction of some offenders' rights (such as the right to register a property or similar) or other incentives to comply with court's orders. Finally, in line with deterrence theory, policies and activities in the area of criminal sanctions and complementary measures need to be publicized and targeted at those who are at higher risk to commit highly acquisitive crimes.

## REFERENCES

1. Aebi, M., Akdeniz, G., Barclay, G., Campistol, C., Caneppele, S., Gruszczynska, B., . . . Killias, M. (2014). *European Sourcebook of Crime and Criminal Justice Statistics 2014*. European Institute for Crime Prevention and Control, affiliated with the United Nations (HEUNI).
2. Babbie, E. (2013). *The Practice of Social Research*. Wadsworth, Cengage Learning.
3. Bačić, F. (1998). *Kazneno pravo: opći dio*. Informator.
4. Beccaria, C. ([1764]1995). *On Crimes and Punishments and Other Writings*. University Press.
5. Becker, G. S. (1968). Crime and punishment: an economic approach. *Journal of Political Economy*, 76 (2), 169–217.
6. Bentham, J. ([1781]2000). *An Introduction to the Principles of Morals and Legislation*. Batoche Books.

7. Boucht, J. (2017). *The Limits of Asset Confiscation: On the Legitimacy of Extended Appropriation of Criminal Proceeds*. Hart Publishing.
8. Bowles, R. A., Faure, M. G., & Garoupa, N. (2005). Forfeiture of Illegal Gain: An Economic Perspective. *Oxford Journal of Legal Studies*, 25 (2), 275-295.
9. Brame, R., Turner, M. G., & Paternoster, R. (2010). Missing Data Problems in Criminological Research. In A. R. Piquero, & D. Weisburd, *Handbook of Quantitative Criminology* (pp. 273-288). Springer.
10. Brown, S. E., Esbensen, F.-A., & Geis, G. (2013). *Criminology: Explaining Crime and Its Context*. Anderson Publishing.
11. Bullock, K., Mann, D., Street, R., & Coxon, C. (2009). *Examining attrition in confiscating the proceeds of crime. Research Report 17 Key Implications*. Home Office Research, Development and Statistics Directorate.
12. Bun, M. J., Kelaher, R., Sarafidis, V., & Weatherburn, D. (2020). Crime, deterrence and punishment revisited. *Empirical Economics*, 59, pp. 2303–2333.
13. Calderoni, F. (2014). Mythical numbers and the proceeds of organised crime: estimating mafia proceeds in Italy. *Global Crime*, 15 (1-2), 138-163.
14. Datzer, D., & Mujanović, E. (2020). *In rem contra culpam?*- Prošireno oduzimanje imovinske koristi u međunarodnom i bosanskohercegovačkom krivičnom pravu. *Crimen*, XI (2), 145-164.
15. European Commission. (2015). *Bosnia and Herzegovina 2015 Report. Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions*. European Commission.
16. European Commission. (2016). *Bosnia and Herzegovina 2016 Report. Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions*. European Commission.
17. European Commission for the efficiency of justice (CEPEJ). (2018). *European judicial systems. Efficiency and quality of justice CEPEJ Studies No. 26*. European Commission for the efficiency of justice.
18. European Police Office (Europol). (2016). *Does crime still pay? Criminal Asset Recovery in the EU*. Autor.
19. Fazekas, M., & Nanopoulos, E. (2016). The Effectiveness of EU Law: Insights from the EU Legal Framework on Asset Confiscation. *European Journal of Crime Criminal Law and Criminal Justice*, 24(1), 39-64.
20. Federalni zavod za programiranje razvoja. (2015). *Izveštaj o razvoju Federacije BiH 2015*. Federalni zavod za programiranje razvoja.
21. Federalni zavod za programiranje razvoja. (2016). *Izveštaj o razvoju Federacije BiH 2016*. Federalni zavod za programiranje razvoja.

22. Freiberg, A., & Fox, R. (2000). Evaluating the effectiveness of Australia's confiscation laws. *Australian and New Zealand Journal of Criminology* 33(3), 239–265.
23. Fried, D. J. (1988). Rationalizing Criminal Forfeiture. *The Journal of Criminal Law and Criminology*, 79 (2), 328–436.
24. Hagan, F. E. (2014). *Research Methods in Criminal Justice and Criminology (Ninth Edition)*. Pearson Education Limited.
25. Institute for Statistics of FBiH. (2017). *Federation of Bosnia and Herzegovina in figures*. Institute for Statistics of FBiH.
26. International Monetary Fund (IMF). (2019). *World Economic Outlook Database*. <https://www.imf.org/external/pubs/ft/weo/2016/02/weodata/weoselgr.aspx>.
27. Ivičević Karas, E. (2010). Utvrđivanje imovinske koristi stečene kaznenim djelom primjenom bruto ili neto načela s obzirom na pravnu prirodu mjere (proširenog) oduzimanja imovinske koristi. *Hrvatski ljetopis za kazneno pravo i praksu*, 17 (1), pp. 181-210.
28. Kilchling, M. (ed.) (2002). *Die Praxis der Gewinnabschöpfung in Europa*. Max-Planck- Institut für ausländisches und internationales Strafrecht.
29. Kleck, G., & Barnes, J. C. (2013). Deterrence and Macro-Level Perceptions of Punishment Risks. Is There a “Collective Wisdom”? *Crime & Delinquency*, 59 (7), 1006-1035.
30. Kleck, G., Sever, B., Lee, S., & Gertz, M. (2005). The Missing Link in General Deterrence Research. *Criminology*, 43 (3), 623-660.
31. Kruisbergen, E. W., Kleemans, E. R., & Kouwenberg, R. F. (2016). Explaining attrition: Investigating and confiscating the profits of organized crime. *European Journal of Criminology*, 13 (6), 1-19.
32. Levi, M. (1997). Taking the Profit Out of Crime: The UK Experience. *European Journal of Crime, Criminal Law and Criminal Justice*, 5 (3), 228- 239.
33. Levi, M., & Osofsky, L. (1995). *Investigating, seizing and confiscating the proceeds of crime*. *Crime detection and prevention series: Paper No 61*. Home Office Police Research Group .
34. Ligeti, K., & Simonato, M. (2017). Asset Recovery in the EU: Towards a Comprehensive Enforcement Model beyond Confiscation? An Introduction. In K. Ligeti, & M. Simonato, *Chasing Criminal Money: Challenges and Perspectives on Asset Recovery in the EU* (pp. 1-23). Hart Publishing.
35. Lusty, D. (2002). Civil forfeiture of proceeds of crime in Australia. *Journal of Money Laundering Control*, 11 (1), 345-359.
36. Mrčela, M. (1999). Pravni i praktički aspekti oduzimanja imovinske koristi u kaznenom postupku . *Policija i sigurnost*, 8 (3-4), pp. 287-303.
37. Nagin, D. S. (2013). Deterrence in the Twenty-First Century. *Crime and Justice*, 42 (1), 199-263.

38. Nelen, H. (2004). Hit them where it hurts most? The proceeds-of-crime approach in the Netherlands. *Crime, Law & Social Change*, 41, 517–534.
39. Organization for Security and Co-operation in Europe (OSCE) Mission to Bosnia and Herzegovina. (2018). *Project Report: Assessing Needs of Judicial Response to Corruption through Monitoring of Criminal Cases*. Organization for Security and Co-operation in Europe.
40. Paternoster, R. (2010). How Much Do We Really Know about Criminal Deterrence. *The Journal of Criminal Law and Criminology*, 100 (3), 765-824.
41. Perron, W. (1993). Vermögensstrafe und Erweiterter Verfall: Im Spannungsfeld zwischen öffentlichen Strafverfolgungsinteressen und privaten Eigentumsrechten. *Juristen Zeitung*, 48 (19), 918-925.
42. Reuter, P. (2014). Drug Markets and Organized Crime. In L. Paoli, *The Oxford Handbook of Organized Crime* (pp. 359-380). Oxford University Press.
43. Robinson, P. H., & Darley, J. M. (2004). Does Criminal Law Deter? A Behavioural Science Investigation. *Oxford Journal of Legal Studies*, 24, 173–205.
44. Ryder, N. (2013). To Confiscate or not to Confiscate? A Comparative Analysis of the Confiscation of the Proceeds of Crime Legislation in the United States and the United Kingdom. *Journal of Business Law*, 8, 784-786.
45. Savona, E., & Riccardi, M. (2015). *From illegal markets to legitimate businesses: the portfolio of organised crime in Europe*. Transcrime – Università degli Studi di Trento.
46. Schmidt, W. (2019). *Vermögensabschöpfung. Handbuch für das Straf- und Ordnungswidrigkeitenverfahren*. C. H. Beck.
47. Schneider, F. (2013). The Financial Proceeds of Transnational Organized Crime All Over the World: Some New Empirical Facts. *SAIS Review*, 33 (1), 91-121.
48. Sijerčić-Čolić, H. (2019). *Krivično procesno pravo I (Knjiga I: krivičnoprocesni subjekti i krivičnoprocesne radnje)*. SUniverzitet u Sarajevu-Pravni fakultet.
49. Smellie, A. (2004). Prosecutorial challenges in freezing and forfeiting proceeds of transnational crime and the use of international asset sharing to promote international cooperation. *Journal of Money Laundering Control*, 8 (2), 104 - 114.
50. Thornton, J. (1990). Confiscating Criminal Assets the New Deterrent. *Current Issues in Criminal Justice*, 2 (2), 72-89.
51. United Nations Office on Drugs and Crime (UNODC). (2008). *Crime and its impact on the Balkans and affected countries*. UNODC.
52. United Nations Office on Drugs and Crime (UNODC). (2011). *Estimating illicit financial flows resulting from drug trafficking and other transnational organized crimes*. UNODC.
53. United Nations Office on Drugs and Crime (UNODC). (2013). *Business, Corruption and Crime in Bosnia and Herzegovina: The impact of bribery and other crime on private enterprise*. UNODC.

54. USAID-ov Projekat pravosuđa u Bosni i Hercegovini. (2017 [a]). *Analiza sistema oduzimanja imovine pribavljene vršenjem krivičnih djela u Bosni i Hercegovini*. USAID.
55. USAID-ov Projekat pravosuđa u Bosni i Hercegovini. (2017 [b]). *Analiza procesuiranja koruptivnih krivičnih djela u Bosni i Hercegovini kroz prikaz odabrane sudske*. USAID.
56. USAID-ov Projekt podrške monitoringu i evaluaciji u Bosni i Hercegovini. (2019). *Indeks efektivnosti pravosuđa Bosne i Hercegovine: Izvještaj za 2018. godinu*. USAID.
57. Vettori, B. (2006). *Tough on Criminal Wealth*. Springer.
58. Zelenika, R. (2000). *Metodologija i tehnologija izrade znanstvenog i stručnog djela*. Ekonomski fakultet.

#### About the Authors

**Darko Datzer, PhD**, Associate Professor at Faculty of Criminal Justice, Criminology and Security Studies, University of Sarajevo. Frequent author and researcher in scientific and expert projects on crime, corruption and criminal asset confiscation. E-mail: ddatzer@fkn.unsa.ba.

**Eldan Mujanović, PhD**, Associate Professor at Faculty of Criminal Justice, Criminology and Security Studies, University of Sarajevo. Active researcher in the fields of asset recovery, international cooperation in the fight against crime, strategic planning in the field of combating trafficking in human beings, and corruption. E-mail: emujanovic@fkn.unsa.ba