

Combatting corruption in higher education in Ukraine

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Combatting corruption in higher education in Ukraine

Anna Vasylyeva and Ortrun Merkle

Maastricht Economic and social Research institute on Innovation and Technology (UNU-MERIT)

email: info@merit.unu.edu | website: <http://www.merit.unu.edu>

Maastricht Graduate School of Governance (MGSoG)

email: info-governance@maastrichtuniversity.nl | website: <http://www.maastrichtuniversity.nl/governance>

Boschstraat 24, 6211 AX Maastricht, The Netherlands

Tel: (31) (43) 388 44 00

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Combatting corruption in higher education in Ukraine

Anna Vasylyeva ^a and Ortrun Merkle ^b

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Abstract

Corruption is a widespread phenomenon at Ukrainian higher education institutions (HEIs), with more than a quarter of students reporting participation in corrupt activities. This paper explores the dominant forms of corruption in Ukrainian public universities and proposes ways to combat corruption at the HEI level. For this, we analyse data from national authorities and civil society on corruption in the education sector. A subsequent corruption mapping identifies three of the most common corruption schemes: entrance examinations, grade attainment throughout university education, as well as administrative corruption. The paper closes with a set of policy recommendations to a) collect more data and conduct further research; b) increase transparency in the Ukrainian HEIs; c) conduct information campaigns and encourage participation of the civil society; d) increase oversight of HEIs; e) create a better reward and punishment mechanism system for HEI employees; f) standardise exams in the written form; and g) encourage academic freedom.

Keywords: corruption, higher education, Ukraine, universities

JEL: D73, I23

^a Maastricht University, University College Maastricht, Zwingelput 4, 6211 KH Maastricht, The Netherlands; *Email address:* anna.vasylyeva@maastrichtuniversity.nl

^b Maastricht University, Maastricht Graduate School of Governance / UNU-MERIT, Boschstraat 24, 6211 AX Maastricht, The Netherlands; *E-mail address:* merkle@merit.unu.edu

1. Introduction

Corruption is frequently referred to as a cancer of society which hampers economic and human development due to theft and misallocation of resources from people who need it the most (Meier, 2004). Arguably, one of the worst effects is found in the education sector, where corruption inhibits opportunities for knowledge acquisition and training, which is an essential factor for social mobility and the economic development of a country (Altbach, 2013). Although there has been a wide body of research on different aspects of corruption, especially in developing countries, only little analysis is available on the causes and corruption in higher education.

According to Hallack and Poisson (2002) corruption in education is defined as “the systematic use of public office for private benefits, whose impact is significant on the availability and quality of educational goods and services, and, as a consequence on access, quality or equity in education” (p. 35). Corruption can happen at all education levels, yet at Higher Education Institutions (HEIs), corruption has an additional harmful effect: it often constitutes a first encounter of a young person with the need to pay a bribe to achieve their goal, as in primary/secondary education this activity is usually carried out by parents (Heyneman, 2004). In cases where such practice becomes normalised at a young age, a person may start perceiving corruption as a societal norm, making it harder to eradicate this ‘cancer’ from a country’s affairs (de Waal, 2016). Hence, there is a need for research on ways of HEI corruption occurs in order to better understand and mitigate its effects on society.

This paper looks at the very specific case of HEI corruption in transition economies, where as a result of the history of communism and a lack of transparent market payment mechanisms, the practice of corruption became deeply engrained until today (Ledeneva, 2009). Ukraine has been chosen as a case as it is not only one of the most corrupt countries in Europe but also fifth in the world in terms of number of people with higher education¹ (British Council, 2015; World Bank, 2016). Yet, at the same time it is also one of the most successful cases of introduction of external assessment to combat corruption at the university entrance level (Mendel, 2016).

This paper examines the question: *How does corruption occur in Ukrainian public higher educational institutions and what are ways to combat it?* For the purposes of the paper an HEI is defined as “an institution that is a legal entity of private or public law operating in accordance with granted license for education activity at particular levels of higher education, carries out scientific inquiry, research

¹ Relative to the population size

and development, innovation and/or methodological activity, ensures organisation of education process and attainment of higher education and post-higher education correspondent to their calling, interests and abilities" (Article 1.1.7 of the Law of Ukraine on Higher Education). The focus of this paper is on public HEIs as they constitute the majority in Ukraine. They also have direct reporting and control mechanisms, unlike the private HEI and hence government policies to mitigate corruption could be implemented swiftly. The paper focuses on the 2013-2017 inventory of corruption, as the political climate in Ukraine and the leaderships of both the Ministry of Education and Science and university administrations have changed since the Maidan Revolution in 2013 (Ukraine reform team, 2017).

This research has significant theoretical and practical importance. Firstly, the topic of corruption in higher education is researched less than that of primary or secondary level, because it plays a smaller role for many developing countries with low levels of tertiary education enrolment. In the context of Ukraine, there is an additional knowledge gap, because most of the analysis focuses on corruption only at the university entrance level and widely ignores administrative corruption and corruption during exams at universities. Even with entrance level exams, most of the research is outdated, as it focuses on the period before the introduction of the Independent External Assessment in 2008, which managed to combat most of the entrance level corruption (Klein, 2012; Shaw *et al.*, 2015). There is also an added value in corruption mapping analysis as a novel approach to the subject in Ukraine, as it helps to present the corruption schemes in a structured manner, making them easier to tackle. The research is also important for policymakers because of the current window of opportunity, associated with the 2016 appointment of a new pro-reform Minister of Education and Science. Considering the similar context of corruption in HEIs in other post-Soviet countries, this research is also highly relevant beyond Ukrainian borders.

In order to answer the research question and provide policy recommendations for combatting HEI corruption this paper discusses the specificities of corruption in the sector and then maps out dominant corruption schemes. Firstly, the literature review addresses the problem of corruption in higher education. The next section discusses methodology, as well as limitations of the research. The fourth part provides a theoretical framework, which is later used to categorise and map corruption cases. In the fifth part, the paper presents the case of Ukraine and the specifics of HEIs and corruption culture in the country. After presenting the data and analysis three of the most prevalent corruption schemes are mapped out. The paper closes with a discussion of policy recommendations.

2. Corruption in higher education

Corruption is a culturally specific concept which is mostly defined through societal consensus (Gillespie & Okruhlik, 1991; Gupta, 1995; Scheppele, 1999). For instance, in some countries it is a norm to give a gift to teachers, while in others, this would be considered a textbook example of corruption (Orkodashvili, 2010). However, other authors criticise such leniency and relativism towards defining corruption and argue that people are able to distinguish between gifts and bribes due to the difference in their value (Philip, 1997, p. 442). The major definitions of the types of corruption are best presented in Appendix A.

Due to the vagueness of the concept of corruption, it can be interpreted differently by stakeholders, making it harder to come up with policy solutions, due to a lack of a common understanding of the problem in the society. For instance, a study in Bosnia and Herzegovina has shown that students tend to have a limited vision of the concept of corruption, narrowing it down to bribes during the exam period or being forced to purchase textbooks written by their professors (Transparency International, 2013). Faculty and staff, however, tend to have a broader view on the issue, linking it primarily to managerial, hiring and administrative aspects of corruption. Sixty-four percent of people in Bosnia and Herzegovina view education system as corrupt (Transparency International, 2013). Yet, even for students, corruption is ranked as the third largest problem after lack of workspace and neglect of practical knowledge and skills in the curriculum as more pressing issues. Staff ranked corruption problem as 8th among the issues of concern (Transparency International, 2013). This statistic can be an indicator of the fact that misunderstanding of corruption in HE and its effects can lead to underestimation of the seriousness of the problem. For instance, while students rarely focus on administrative corruption, it often leads to the biggest losses of universities' budgets (Teferra & Altbachl, 2004). Consequently, there is a need for a unified understanding of corruption in general as well as a systematisation of the existing knowledge of the corruption schemes among key stakeholders in order to foster efforts to combat this phenomenon.

2.1. Reasons for corruption in higher education

One danger with corruption is that the higher the perception of corruption, the harder it is to reverse its pervasiveness in the society (Heyneman, 2013b). As an example, in the study on Russia and Azerbaijan, Temple and Petrov (2004) argue that there is a routinisation of bribery in the education sector. Although bribery is hated as a phenomenon by the citizens of the two countries, it is also accepted as a social norm.

There are many causes of corruption in higher education. One, which has been widely identified is the appointment process for academic staff. Research conducted in Nigeria (Omotola, 2007), Italy (Durante, Labartino & Perotti, 2011), Romania (Omotola, 2013), and China (Yang, 2005) point to a severe problem with nepotism, or favouritism based on personal relations, in academic hiring. One can assume that faculty members, appointed in this manner, are less likely to be honest and are more inclined to create corruption-prone environment (Omotola, 2007).

Additional context for HEI corruption have been identified in transitional economies. After the breakdown of the USSR, post-communist countries saw the reduction of HEI budgets (Osipian, 2007). Yet, the number of HEIs remained the same and in some instances, even increased. This created a need to find other budget sources to finance education and corruption became one of them (Osipian, 2007). This lack of funding for education from the government is also a cause for low salaries in academia (Mendel, 2016), which in return makes staff more likely to turn to corruption in order to cover their living expenses. This is further aggravated by the creation of corruption-tolerant culture within academic institutions and peer pressure to accept bribes (Zaloznaya, 2012). Transition economies have also experienced a need to decentralise in the post-communist times. However, the process has been inefficient and often involved illegal activities (Lieberman, Ewing, Mejstrik, Mukherjee & Fidler, 1995). According to Prud'Homme (1995) and Shah (2004), uncontrolled decentralisation led to the lack of regulations and a clear identification of responsible parties, which created a corruption-tolerant culture. A growing gap between salaries and costs of living as well as uncontrolled decentralisation became additional factors fostering corruption in transitional economies (Osipian, 2007) and their higher education institutions.

2.2. Effects of corruption in HE

The fundamental problem with corruption is that it often is vicious cycle: when people perceive an institution to be corrupt, they are more likely to participate in corrupt acts themselves (Shaw, Katsaiti & Pecoraro, 2015), which in return makes institutions even more corrupt. High levels of corruption at HEIs have also been linked to the formation and reinforcement of a culture of corruption culture among young professionals, who, used to this illegal practice at HEIs, treat bribery as a normal and easy way to achieve a desired outcome at the workplace (Rumyantseva, 2005). Corruption can also have direct effects on society. According to the World Bank study (2002), unequal distribution of resources, created by corruption in Kazakhstan has led to deterioration of the quality of education. Furthermore, corruption in HEIs leads to an increase in social inequality, as people from poor families are often unable to pay bribes to get to prestigious universities or pass exams and,

hence, lose their chance of using a social lift through education (Hallack and Poisson, 2007, p. 55). For countries, this means a forgone opportunity to reduce inequality and alleviate poverty, and misallocation of talent as a result of illegal admission fees. Having obtained degrees by paying bribes, corrupt graduates get better positions in the job market. This leads to the loss of talent due to the limited number of places at the universities, which can result in emigration of talented people, who can acquire similar degrees abroad without paying bribes (Cooray & Schneider, 2013). Such phenomena inhibit domestic development and innovation (Hallack & Poisson, 2007, p. 56). In some HE programs like medicine, corruption can be particularly dangerous, as having a surgeon who passed their exam by bribery can lead to lethal outcomes.

Corruption in the hiring process of academic staff is likely to reduce quality of research output and teaching, as faculty members get these positions based on connections, rather than on merit (Omotola, 2013). One of the biggest problems with widespread corruption at public institutions is that it negatively impacts the education image of the country as a whole (Heyneman, 2013a, p. 39). This, in turn, is likely to lead to less international students coming to the country and bringing new perspectives (Heyneman, 2009). More importantly, graduates from such countries are likely to be disadvantaged on the international labour market, with potential employers looking at their diplomas with suspicion (Heyneman, Anderson & Nuraliyeva, 2008). All these factors reduce the educational standing of the country on the global arena.

3. Methodology

For the purposes of this paper, Ukraine is chosen as case study. Firstly, it is one of the most corrupt countries in Europe, making it a rich case for analysing HEI corruption schemes (Transparency International, 2016). However, after the 2013 Revolution, there is a dynamic reformation process, which makes it a fairly recent and under-analysed case (Ukraine Reform team, 2017; Vox Ukraine, 2017). What distinguishes Ukraine from other post-Soviet countries is that it is the fifth country according to the number of citizens with HE diplomas/capita in the world (World Bank, 2016). According to the British Council Report (2015), over 70% of Ukrainians aged 18 or higher have attended or are currently enrolled in HEIs. As a consequence, Ukraine has over 287 operating universities for the population of around 45 million people (Mendel, 2016).

The system of financial control, however, remains centralised from the communist times (Dowle, Vasylyuk & Lotten, 2015). In the absence of market competition for students, there is little incentive for university management to seek for financial sustainability and higher quality of education. There is a big problem of high corruption rates in the HEIs, but also an opportunity both for Ukraine and

the world in terms of advancing the knowledge economy: despite the corrupt education system and lack of resources, Ukraine already became the number one Information Technologies outsourcing country for the EU, as well as one of the leaders for innovations in green technology (Belton, 2014). Furthermore, the strong STEM² focus in post-USSR countries still brings its fruits, with innovations continuing to prosper in engineering and physics despite the underfunding of the laboratories. Consequently, increase in funds that remain at universities due to mitigation of corruption, can allow for more inventions that would benefit the world. Lastly, Ukraine had one of the most successful reforms of introduction of independent assessment on the university entrance level in the world, which illustrates the potential of changemaking in the sector (Klein, 2012).

The advantages and deficits of different measurements of corruption data have been thoroughly discussed in the literature (Kis-Katos & Schulze, 2013; Olken & Pande, 2012; Sequeira, 2012). This study focuses on reported cases rather than perceptions or convictions, which have been the most prominent measures thus far. While all these measures add important insights to understanding corruption in higher education, for the purpose of studying the most prevalent schemes, reported incidences of corruption are the most useful data available. In order to obtain data, official requests for access to information on the registered cases of corruption in Ukrainian HEIs were filed to the Ukrainian authorities, including the Security Service of Ukraine, the Prosecutor General's Office, the National Anti-Corruption Bureau, the National Registry of the Court Cases and the Ministry of Internal Affairs. Unfortunately, as indicated in the responses, the Ukrainian government does not have disaggregated data for corruption in the Ukrainian HEIs (Ministry of the Internal Affairs, 2017). However, both the National Police of Ukraine and the Security Service of Ukraine have provided data on the registered cases of corruption in the education sector overall, which are presented in the Data section. The core of the data for this research is collected from the website Profrights.org³, where any

² STEM disciplines include science, technology, engineering and mathematics

³ Profrights.org is established by independent Ukrainian analytical centres, CEDOS and National Endowment for Democracy, both of which are reputable agencies with a number of respected international partners. The website employs the following methodology. Firstly, the complainant registers the report by filling in a simple form. Secondly, lawyers check whether the reported case constitutes a violation of the law. Thirdly, the report is categorized, added into the violations database and made available to the public. Most of the references in the database include direct links to national authorities, such as the Ministry of the Interior, National Police of Ukraine, Security Services of Ukraine, National Court Proceedings Registry and the Prosecutor General's office. Others include references to newspaper articles, through which the information was further searched and traced back to the websites of the national authorities, making the data highly reliable.

person can register a complaint against a university both in the field of corruption and other categories, such as plagiarism. In order to obtain information, all relevant non-corruption reports were first excluded. Next, 18 cases without clear sources were excluded from the sample in the preliminary stage of analysis, as presented in Table 1. After the process of elimination, obtained data was translated into English and sorted into a table (Appendix C). Having obtained and categorised the data, as presented in Appendix C, three of the most prevalent corruption schemes were identified based on Rumyantseva's (2005) framework of corruption (Section 4), as well as number of their specific occurrences. Next, these schemes were mapped based on the qualitative descriptions of the cases on the Profrights website, in line with Klein's (2012) framework, presented below.

Table 1: Excluded cases

Characteristic	Reason	Amount
corruption in private universities	beyond the scope of the research question	5
corruption in colleges and vocational schools		9
Earlier than first half of 2013	Due to the radical changes in political power, most of the people who were higher up in the university management were replaced by new employees (Popova & Post, 2014).	4

The major limitation of this research is access to data. Since most of the data was obtained from Porfright.org, it lacks representation, as only a limited number of people know about this website. Furthermore, even in cases where there is both the knowledge of corruption cases and of the website as a mechanism of reporting, only a small proportion of students are inclined to report corruption abuse, because of being threatened by the university faculty or administration to fail exams or be expelled from university (Osipian, 2007). In addition, many believe that reporting on corruption cases will not yield results, because of deeply flawed nature of justice systems and a very small number of cases that reaches courts (Transparency International, 2013). This issue is pertinent in the field of corruption research, and little can be done to deal with it. Although the data obtained through a website is limited in scope, it is one of the closest approximations, in the absence of access to the National Database for Pre-trial cases. The sources presented on the Profrights.org website were traced to the Security Service of Ukraine, Ministry of the Interior or the Prosecutor General's office websites and, hence, were checked for validity by being referred to the national authorities.

In addition, the research is definition-dependent. In this case, taken the definition of Hallack and Poisson (2002), corruption is perceived in the broad term of the word. However, other researchers may question the inclusion of analysis on, for instance, private tutoring by professors before exams as a corrupt practice, due to a narrower definition of the word. There is also a lack of available reliable data, as most of the Ukrainian research on the subject is highly politicised and framed around blaming previous administrations. Lastly, having a Ukrainian researcher on a team provides good insights, but may also lead to a bias, as her understanding of the problem is linked to personal experiences. However, using desk-based research method and having a second researcher with the Western background helps to balance the internal and external perspectives.

4. Theoretical framework

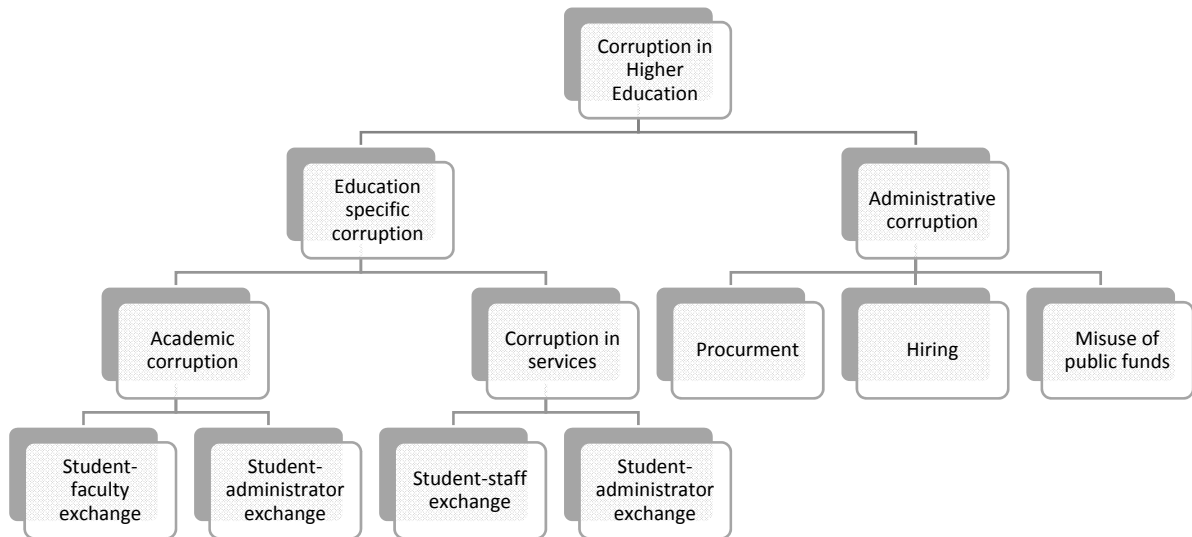
In order to map corruption occurrences, it is important to provide a framework, which helps to detect, categorise and analyse corruption. Such classification assists in understanding causes and consequences of corruption, as well identifying situations at HEIs which makes their occurrences more likely. For instance, stakeholders and methodology to fight corruption would be different in the situations of administrative corruption when compared to cases of bribery, initiated by professors (Rumyantseva, 2005). Hallack and Posisson (2007) provide a literature review of the corruption classification frameworks based on the works of Chapman (2002), Heyneman, (2004), Tanaka (2001) and Rumyantseva (2005). They argue that corruption can occur on the Ministry of Education, regional/district, university or classroom levels. Identifying the level of occurrence helps to locate actors involved in the corruption schemes in order to apply legal measures to prevent their activities.

This paper will make use of a combination of three frameworks, to identify and map corruption in the HEI in Ukraine. Firstly, Rumnyantseva's framework (2005) is used to identify and organise the different types of corruption, which have been reported. Secondly, a framework by Klein (2012) is employed to map at what levels corruption happens. Lastly, the Fraud Triangle model looks into the incentive structures for engaging in corrupt activities, which need to be addressed to provide policy recommendations to tackle corruption at HEIs.

As a starting point this paper employs Rumyantseva's framework (2005), which accentuates the fundamental distinction between administrative and education-specific corruption as two parts of corruption in higher education, as shown in Figure 1. Administrative corruption is a common trend in public sector that leads to financial waste and misallocation of resources (Kurer, 1993). This type of corruption does not involve students and can be further split into corruption in procurement, hiring

and misuse of public funds for personal purposes. Education-specific corruption is related to a particular context, wherein students are agents.

Figure 1: Taxonomy of corruption in HE (*adapted from Rumyantseva, 2005, p. 90*)



Rumyantseva (2005) further breaks down education-specific corruption into the one that is pertinent to academic situations and that of service provisions. Academic corruption is related to teaching directly and includes such examples as a demand of a bribe from a professor to obtain a high grade. Corruption in services relates to the non-academic side of education – e.g. corruption when acquiring scholarship or securing accommodation at a dormitory. For all categories, the forms of payment include money, gifts and favours. The categories are subsequently divided into student-faculty, student-staff and student-administrator exchange. Student-faculty exchange includes classroom, admissions, examinations and test settings, with a student or professor driven nature of exchange. For instance, a student who does not perform well on a university entrance exam can approach a professor conducting the examination with a bribe in exchange for admission (Goode, 1957; Braxton & Bayer, 1999). Alternatively, a professor can demand a certain amount of money from a group of students to pass a final exam.

The student-staff exchange occurs in settings of libraries, dormitories, transcript acquisition and scholarships. Here, an exchange can be student or staff driven. For instance, a student may offer a bribe to a manager of the dormitory to get a better room, or a department’s secretary may request a non-formal payment from a student to speed up the process of transcript acquisition. Lastly, the object of student-administrator exchange includes “academic achievements and privileges in using

student services and receiving favourable treatment from the administration” (Rumyantseva, 2005, p. 88). It can occur both in the academic and service context (Waite & Allen, 2003). For instance, a student can offer a bribe to a rector of a university to obtain a guarantee of passing all exams or ensure accommodation at a dormitory with limited space. Rumyantseva’s framework is used to categorise data into four different types of corruption according to their nature (education-specific and administrative) and by actors involved in exchange: student-staff, student-administrator or student-faculty.

While Rumyantseva’s (2005) framework is useful for systematisation of corruption cases, it does not touch upon specific situations and broader contexts in which corruption occurs. In order to fulfil this gap, Klein’s (2012) prior research is used to accentuate in which relationships and processes the most prevalent corruption schemes in Ukrainian HEIs occur. These include: a) entrance examinations to gain admissions; b) corruption in grade attainment throughout university education; c) corruption at the end of studies to gain a degree or doctorate and d) corruption at the administrative level – e.g. procurement (Klein, 2012, p. 175). This classification is used in order to do corruption mapping in the data analysis section. The context relevant to these schemes is presented in the Ukrainian background section.

However, none of the two aforementioned models touches upon the psychology of corrupt behaviour. Consequently, there is a need for a third framework to understand why people commit corrupt activities and how to mitigate potential risk factors. When discussing rationalisation of corrupt activities, one of the best models to explain their causes is the fraud triangle developed by Cressey (1950), as presented in Figure 2. When applying the fraud triangle to the education sector Kranacher (2013) notes that conditions for committing fraud are similar in the academic institutions when compared to other organisations. They include perceived pressure, rationalisation and opportunity. In terms of the context, university structures with little oversight and budget cuts which lead to low salaries of employees, are among the biggest potential contributors to the risk of committing fraud (Sabirianova & Gorodnichenko, 2006).

Figure 2: Fraud triangle (Albrecht, Albrecht, Albrecht & Zimbelman, 2011, p. 360)



Pressure is a motivator to engage in fraud, which can involve factors such as lack of money, personal debt etc. (Dorminey, Fleming, Kranacher & Riley, 2012). Opportunity relates to access to corruption-enabling tools, such as access to distribution of university budget. This part requires that the opportunity of the control over an institution's finances is weak and that the potential perpetrator has a low chance of being caught. These two factors create a temptation of committing fraud. Yet, rationalisation is often required to move to action (Dorminey *et al.*, 2012). This involves a step of justification for oneself, for instance by feeling entitled to the money due to low salary or belief that one's fraud is victimless. The framework of the fraud triangle is used in the corruption mapping section as an explanation for what pushes faculty member or a head of the admissions committee to get involved in the corrupt activity. This discussion is further elaborated upon in the Recommendations section, offering suggestions of how several pre-requisites of the fraud triangle can be tackled by the Ministry of Education and Science of Ukraine, university administrations and civil society.

4. The case of Ukraine

4.1. Background and extent of corruption at the Ukrainian HEIs

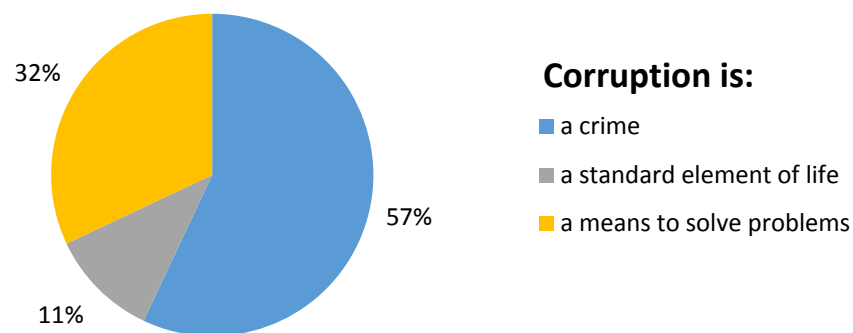
Most of the HEIs in Ukraine are public (Polese, 2006). According to Article 53 of the Constitution of Ukraine and Article 4 of the 2002 Law on Higher education, Higher education is free on competitive bases, with at least 51% of places in public institutions having to be state-funded (Belyakov, Cremonini, Mfusi & Rippner, 2009). Consequently, students are split into two groups: 'budget', who have their tuition fees covered by the government and get a small scholarship and 'contract', who pay for their tuition fees (Williams & Onoshchenko, 2014). This status is determined by scores students get on the Independent External Assessment that they have to take when

graduating from high school, amount of 'budget' places distributed by the government to the university of student's choice and the competition for entering that particular HEI.

The mandatory Independent External Assessment, introduced in 2008, has helped to drastically reduce corruption during the admission process (Osipian, 2012). However, additional exams at universities need to be taken by students applying for programs in art, architecture, physical training and journalism, as well as for Master degrees. These examinations at universities remain prone to corruption (Polese, 2006).

According to the study of the United States Agency for International Development (USAID), conducted in 2007, 47.3% of Ukrainian students were approached for bribes and 29% confessed to becoming initiators of the corruption process (Round & Rodgers, 2009). A later study claims that 33% of Ukrainian students have had personal experience with corruption and 29% have heard about educational corruption from fellow students (Democratic Initiatives Foundation, 2011). Kovalchuk and Koroliuk (2012) found that in 2009, more than 67% of Ukrainian students and 79% of parents regarded corruption to be prevalent in Ukrainian HEIs. Furthermore, in a poll by Razumkov Center (2013) 75% of respondents have identified the problem of corruption in Ukraine as either pervasive or widespread. The IAHR report (2011) refers to two other sociological studies by Kyiv International Institute of Sociology (2009), the results of which are summarised in Figures 3 and 4.

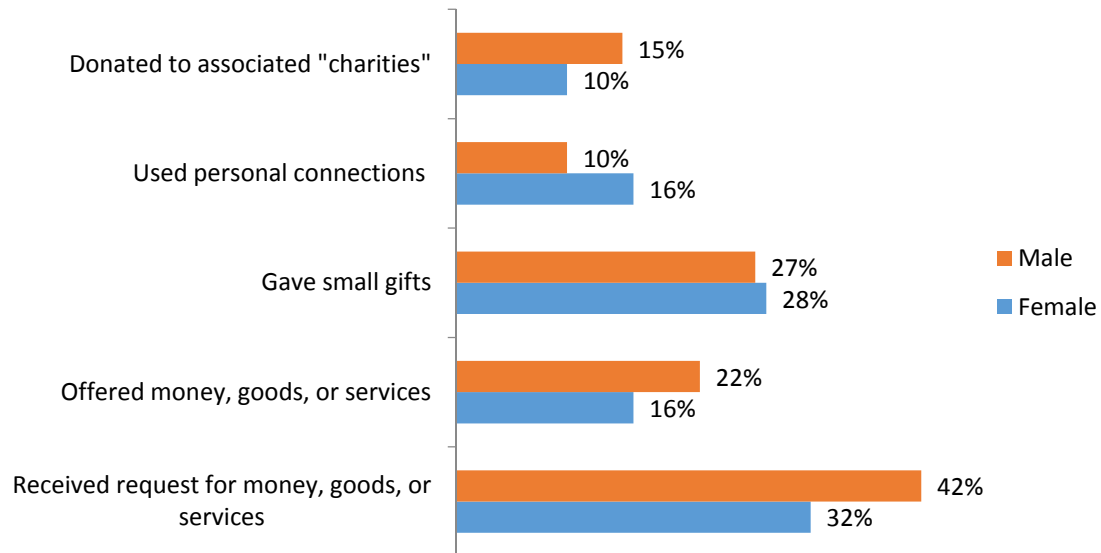
Figure 3: Perceptions of the nature of corruption in HEIs by university students (*adapted from IAHR, 2011, p. 6*)



From Figure 3 it becomes evident that even among students who are usually seen as victims of corruption, 32% perceive corruption as an opportunity to solve problems and 11% have a fatalist perception of it being a societal norm. Figure 4 depicts the most common types of corruption, with

requests for money, goods and services, ranking the highest among both male and female students. Overall, due to low prices, corruption is often appealing to students who do not care about knowledge attainment and see it as an opportunity to get an easy 'pass' (Klein, 2012).

Figure 4: Types of corruption experienced in the education sector (IAHR, 2011, p. 16)⁴



As discussed above, the perception studies presented above are problematic, because of people tending to overestimate the real extent of corruption in a specific sector, based on the general feeling of the corruptness of the country (Sampford, Shacklock, Connors & Galtung, 2006). On the other hand, studies, where respondents had to report their participation in the corrupt activities, are likely to underrepresent their involvement due to unwillingness to identify themselves with an illegal or morally problematic phenomenon (Klein, 2012). Hence, the truth is likely to be closer towards the middle. Yet, all of the studies consistently report over 25% rate of the involvement of HEI students with corruption, which shows the grave extent of the problem.

4.2. Known causes of corruption in Ukrainian HEIs

One of the key reasons for corruption in Ukrainian HEIs is a lack of funding. While in the USSR, the government had spent 16% of the GDP on overall education in 1990, in Ukraine 2016 this expenditure amounted to 5.43% of the GDP (Teichmann, 2004; State Treasury of Ukraine, 2017). At the same time, new universities have emerged after gaining independence. As the admissions process

⁴ Respondents were asked to select all options that applied

was simplified, the country also saw an increase in student intake and hence, in the number of people obtaining higher education (Polese, 2006). Although the Ukrainian government funds 51% of university spots, compared to 100% in the USSR this governmental funding is not enough to cover university budget deficits (Klein, 2012). Hence, HEIs had to develop alternative sources of funding to stay afloat. This included legal activities of leasing educational buildings and other facilities to private entrepreneurs, but even with this, universities only had 14-40% of the actual required funding (Waite & Allen, 2003; Klein, 2012).

According to de Waal (2016), Ukraine is characterised by a corruption-tolerant culture, whereby most of the transactions, ranging from a visit to a doctor, to the admission of a child to kindergarten, require a payment of rent. Ukrainians often do not perceive giving gifts to the governmental service providers, nepotism and the use of connections to speed up procedures as corruption (Williams & Onoshchenko, 2014). This perception stems from the Soviet culture of *blat* – a practice of overcoming formal procedures in order to achieve personal favours (Ledeneva, 2009). In the non-market Soviet system, where money could not get you much, connections became a real commodity (Arnstberg & Boren, 2003). This practice was seen as a norm, rather than unethical or corrupt behaviour (Bova & Valliere, 1999). With the Ukrainian independence and monetarisation of the economy, *blat* slowly transformed to include money exchange. The more distant the connection, the higher the likelihood of a ‘helper’ to ask you for money, rather than ‘thank you’ or ‘quid-pro-quo’ in return (Ledeneva, 2009). However, this transition has been gradual and built on the same platform of *blat* connections. Hence, the tolerance to *blat* slowly transcended to include tolerance to corruption (Williams & Onoshchenko, 2014).

In the context of HEIs, students often perceive giving bribe as a mutually beneficial agreement (Zaloznaya, 2012), and, hence, many of them do not condemn such behaviour. Reporting on corruption instances with an intent of stopping corrupt behaviour and seeking justice is also a low occurrence due to the risk of being expelled from a university. Consequently, punishments for corruption and the number of convicted people are very low (Klein, 2012). Often, first time corruption practice does not come from the initiative of a professor or staff member but rather stems from a pressure of higher management (Osipian, 2008). Under such schemes, employees have to pay rent to people higher up in the pyramid to maintain their jobs (de Waal, 2016). In some cases, such pyramids go up all the way to the Ministerial level.

4.3. The cost of corruption in Ukrainian HEIs

According to the Transparency international 2015 campaign, 'They won't keep silent', bribe prices vary across the country. Due to the higher costs of living, professors are more likely to demand higher bribes in big cities, especially in Kyiv and prestigious universities are more likely to demand higher bribes for more prestigious degrees. Although the sums of the bribes, shown in Table 2, may seem to be quite small, they constitute a significant amount in a country where the government sets the minimum salary at 109.59€⁵ (State Treasury of Ukraine, 2017).

Table 2: Prices for activities in Ukrainian HEIs based on a Transparency International Report (2015)

Activity	Cost
university entrance exams	205.5€ and up
passing one module in a regional university	5.14-12€
passing college semester	68.5€
buying a thesis	34.25€
admission to a Master's program of a high-ranking university, which trains lawyers	893.20-1339.80€

4.4. The 2015 Law on Higher Education

The new Law on Higher Education, adopted in 2015, calls for major changes in the HE system in Ukraine in an attempt to increase its quality and make it more internationally competitive, yet corruption remains a potential inhibitor on the way to achieving these governmental objectives, as shown in Table 3.

⁵ Here and further, UAH is converted into EUR according to the official exchange rate of the National Bank of Ukraine as of 12.06.2017 (NBU, 2017)

Table 3: The need to combat corruption in order to achieve the set objectives in Higher Education in Ukraine⁶

Relevant principles of the Law	Corruption as an inhibitor of the achievement of the objectives
Promoting sustainable development of society by productive competitive human capital and creating conditions for life-long learning	Offering places at universities based on the ability to pay bribes, rather than merit makes it harder for the government to develop its country's human capital
Ensuring access to higher education	HE becomes less accessible to the poorest members of the society, who are unable to pay bribes, but would benefit most from education as a social lift
Independence of higher education from political parties and civil or religious organisations	University rectors who are appointed by the Ministry of Education and Science of Ukraine are often politically linked to the ruling party and are more likely to follow its agenda

Provisions of the 2015 Law on Education also added rules to combat corruption in the sector. Firstly, the Law establishes a dual system of quality assurance, whereby the internal controls are established within HEIs and the external quality control process is monitored by the National Quality Assurance Agency for Higher Education, which aims to guarantee transparent and effective governance of universities (British Council, 2015). Secondly, HEIs receive more autonomous rights, which allows for more accountability on the spot, as faculties and students are now able to question management for their decisions directly, rather than by sending requests to the Ministry of Education and Science. However, there is also a risk, as more autonomy implies less accountability to the Ministry and hence, less centralised control mechanisms for combatting corruption.

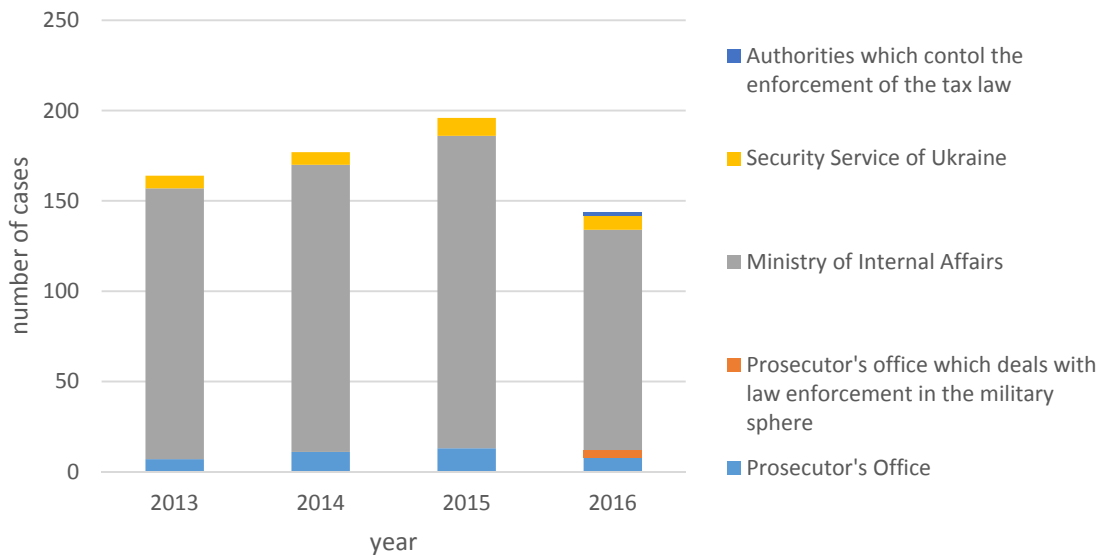
⁶based on British Councils report (2015) and Ukrainian Law on Higher Education (2015)

Lastly, the law increases democratisation of the governance process at universities, which provides for new structures, such as Academic Councils, Supervisory Boards, working and advisory bodies and General Assemblies to ensure accountability and public oversight. Elected student representatives now get direct opportunity to participate in the managerial decisions of universities and request information from the higher-level stakeholders. However, when selected in a wrong manner, student representatives can become facilitators in corruption schemes by serving as intermediaries for passing bribes between students and faculty members (Round & Rodgers, 2008).

5. Data and data analysis

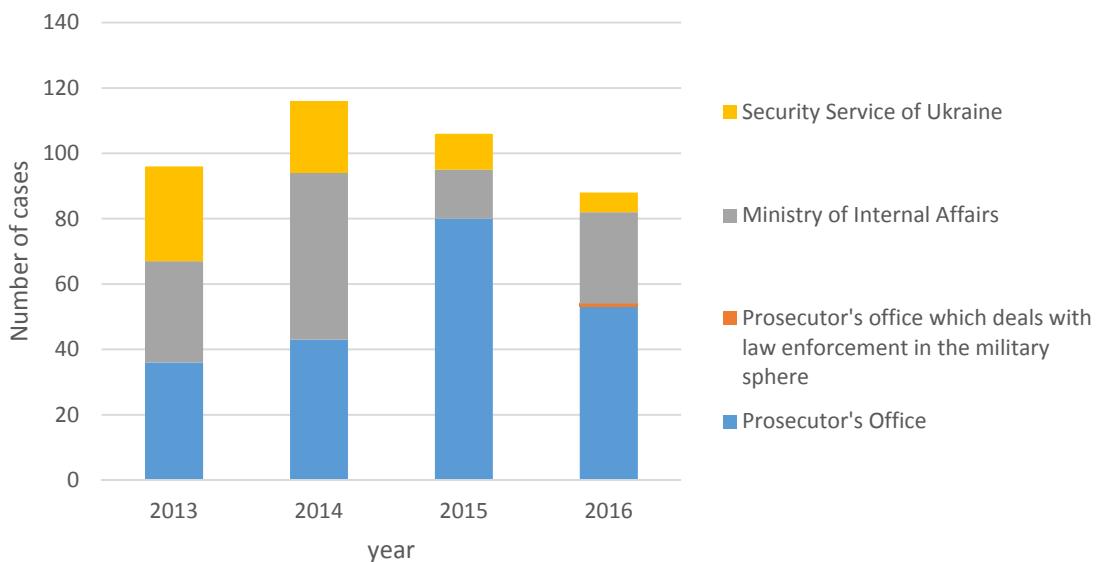
As mentioned in the methodology section, the dataset consists of two parts: quantitative aggregate data from the Ukrainian authorities on the registered and trialled cases of corruption in 2013-2016 (Ministry of the Internal Affairs, 2017) and qualitative data collected by civil society (Profrights.org, 2017) on the content of the corruption cases in HE. It is important to emphasise that the data from governmental authorities, as reported both on the website of the National Police of Ukraine and obtained as a response to the request of public information, also includes cases for primary and secondary education. However, it is still useful for getting the general picture of the status of corruption and prosecution of education corruption cases in order to see the extent of official reporting of the problem and analyse how the government tackles them. On average, 171.25 cases of corruption in education were discovered per year in 2013-2016. Most of them were registered under the Ministry of Internal Affairs, with Prosecutor General's Office and Security Service of Ukraine being close in sharing the remote second place, as shown in Figure 5.

Figure 5: Discovery of cases by governmental agencies



101.5 protocols were filed on average each year, as depicted in Figure 6, with 2014 being the most productive year. An interesting observation is that these cases can be filed through different agencies, suggesting that there is an overlap in terms of the jurisdiction of different governmental bodies, which can lead to inter-agency conflicts and confusion of citizens.

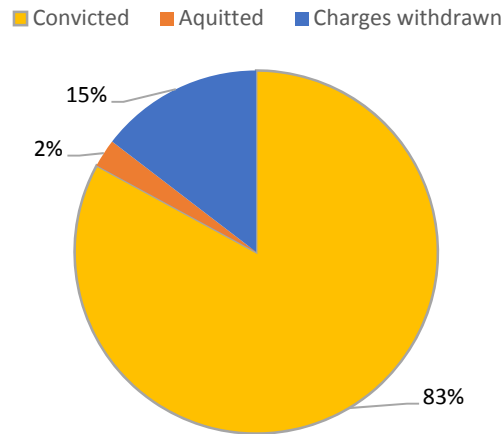
Figure 6: Protocols filed by government authorities on the education corruption



The investigation into educational corruption in 2013-2016 has resulted in 240 court rulings, outcomes of which are presented in Figure 7. Here, 2014 was again the most productive year, leading to 73 court rulings and 2016 being the least fruitful one with 46 cases. This can be associated with the

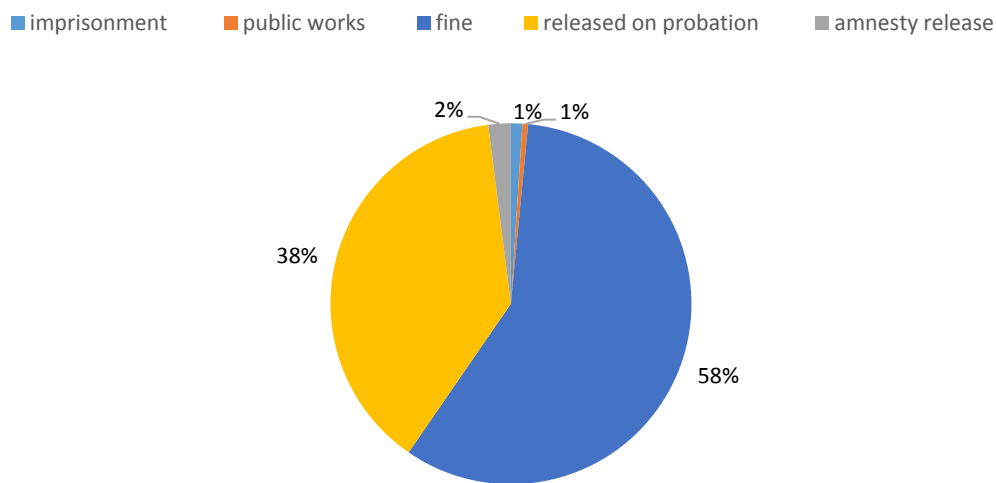
change of the government and desire from people to see a more effective functioning of the judicial system, for which the number of rulings may be seen as the most tangible indicator.

Figure 7: Results of court rulings, coming into effect in 2013-2016



Overall, 83% of cases have resulted in conviction. This is a high percentage for a country where people view the judicial system to be corrupt. With such surprising results, a follow-up descriptive analysis was conducted to see the outcomes of 199 cases which resulted in conviction. Here, the outcomes were not so positive, with only 1% of cases resulting in imprisonment and most cases resulting in fines (58%) and releases on probation (38%), as shown in Figure 8. Appendices D and E show the Articles of the Criminal Code of Ukraine which were used in these proceedings and the punishments for violating them, respectively. A simple juxtaposition of the two leads to the realisation that most of the convicted cases were supposed to result in imprisonment, which shows that in this specific context, the judicial system responded weakly to the instances of corruption.

Figure 8: Outcomes of court rulings that resulted in conviction in 2013-2016



Overall, there are three major observations to be drawn from the quantitative data. Firstly, 240 court rulings over four years in the aggregate education sector of a 45 million population country is simply too little when matching it with the extent of corruption in HEIs alone, as reported in the background section. This points to either an inefficient law enforcement system, or corruption tolerance by Ukrainian authorities and courts. Secondly, despite the high conviction rate, very few people end up getting actual sentences of imprisonment. Thirdly, there is a troubling downward trend since 2014 in the amount of discovered cases and filed protocols. It is unlikely that the actual amount of corruption in the education sector has decreased, as reported by OECD (2015). With 2014 being a year of a ‘clean start’ after the Revolution (Ukraine reform team, 2015), one would rightfully hope that more cases would be discovered. Yet, reality suggests the opposite, highlighting the possibility that 2014 has been a unique case, rather than the actual positive policy change in the work of law enforcement agencies.

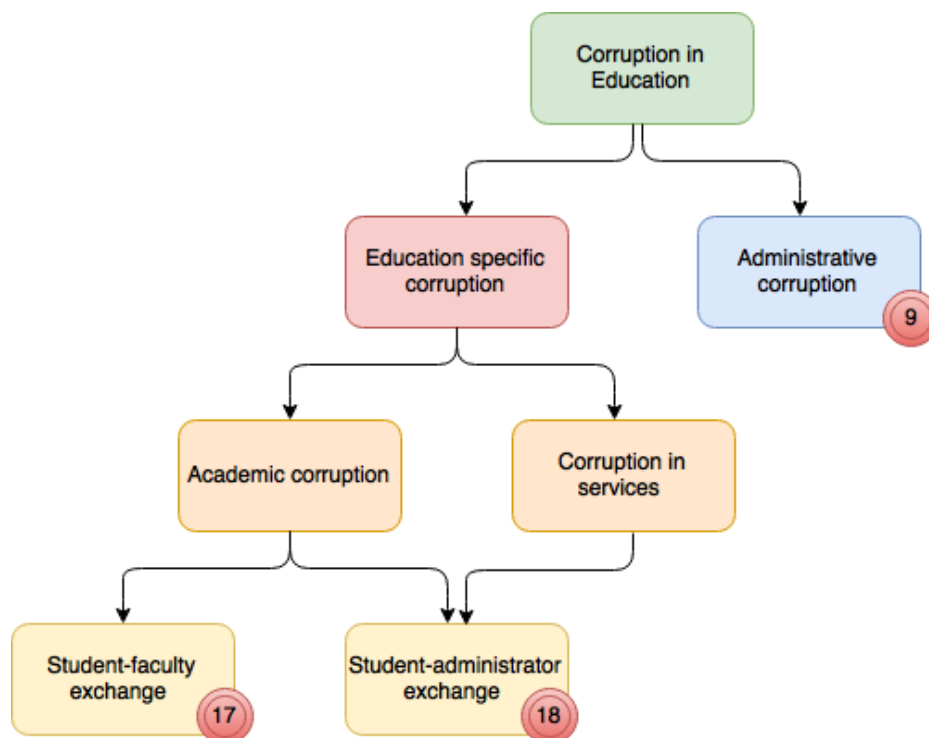
The second data set, aggregated from Profrights.org (Appendix C) provides a closer snapshot of corruption by university, year of occurrence, type of corruption (classified according to Rumyantseva (2005)), sum of money involved, relevant provision of the Criminal Code and a qualitative summary of a case at hand. It is important to note that many of these cases are still in the trial stage. This data helps to understand the prevalent schemes of corruption includes 44 cases, with a broad geographical representation of the universities depicted in Appendix B. The reported cases came both from the top

Ukrainian universities and those at the bottom of the list⁷, suggesting that corruption is likely to be spread across most HEIs, irrespective of their quality. For instance, Ivan Franko National University of Lviv, Odesa National Mechnikov University and Chernivtsy National University were in top 10 Ukrainian universities in 2016, while Dnipropetrovsk State University of Internal Affairs and Luhansk National University of Internal Affairs of Ivan Didorenko lagged behind with the rankings of 209 and 225 respectively. Most of the HEIs were in the middle of the list.

In terms of the nature of the cases, they were divided according to typology presented in Rumyantseva's theoretical framework, as shown in Figure 9. This division is based on qualitative description of the cases on Profrights website. Notably, there was not a single case of student-staff corruption reported. The reasons for it may be normalisation of such type of corruption in a society overall. Moreover, student-staff corruption is not linked to unfair assessment of person's knowledge, as in the case of student-administrator corruption in the admission cases, or professor-student bribes. Hence, it is less likely to cause an outrage of a student, as opposed to cases where their knowledge becomes a subject of sale, as in the case of student-faculty corruption. Furthermore, in all education-specific cases, corruption was initiated by figures of authority, such as professors or administrators, rather than students, which does not match the statistics covered in the background section. This phenomenon can be related to the nature of reporting: there is little gain for professors and administrators to report on students approaching them with bribes, because society is less likely to believe them, and their reputation may suffer from even a mention of potential link with corruption. Moreover, it is more difficult to prove an intention of a student to pay a bribe in court. Hence, the cases of dismissal of bribe offers are more likely to result in damaged relations between students and figures of authority, along with anger from the latter.

⁷ based consolidated ranking of Ukrainian universities (Osvita.ua, 2016)

Figure 9: Separation of cases according to Rumyantseva’s framework



When looking at Figure 9, it is important to mention that in some cases, corruption could be defined as both administrator-student and faculty-student one. This is due to the nature of the employment of corruption initiators, such as Deans. Hence, in cases where the Dean was acting as a lecturer of a specific course, corrupt activity was classified as ‘professor-student’. However, when a corruption pertained to the position of power, activity was classified as ‘administrator student’. This could, for instance, include a package offer by a Dean to pass all courses, taught by different professors ‘well’. Administrative corruption included three cases of corruption in procurement, one in building, four in employment and one by fraudulent reporting of the number of students to the government, in an attempt to obtain more ‘scholarship’ money by a university.

In terms of the amount of money, grand administrative corruption, as expected, had the largest sums involved. National Aviation University had the highest reported sum of 987289.58€ in assets taken out illegally from the government in the form of land, dormitories and other buildings, as well as the rights for some unfinished building objects. The highest reported bribe in academic corruption was found in the admission to the Dnipropetrovsk State University of internal Affairs and amounted to 2240€. As previously presented in the data by Transparency International (2015), the lowest bribes were linked to passing individual exams to make it ‘affordable for students’: professors from

Mykolaiv National University after Sukhomlynsky and from Zaporizhzhya National Technical University have collected 8.56€/student for passing exams.

6. Corruption mapping

This section maps out three of the most common corruption schemes from the ones identified in the Data section. Figure 9 shows the spread of corruption across different relationships in the education sector. To further understand where corruption can occur within these relationships we turn to Klein's (2012) categorisation of corruption, which includes a) entrance examinations to gain admissions; b) corrupt activities related to obtaining high grades throughout the university career; c) corruption at the end of studies to gain a degree or doctorate and d) corruption at the administrative level – e.g. procurement (Klein, 2012, p. 175). Considering the fact that the schemes for obtaining degrees or doctorates are similar in nature of exchange to receiving high grades throughout the university career⁸, this scheme was left out of the mapping. Hence, the section presents three maps of corruption associated with admissions, grade achievements during the course of studies and administrative corruption.

6.1. University entrance

As mentioned in the background section, most of the corruption at university entrance level was combatted through the Independent External Assessment. However, some room for it remains in the entrance to creative specialisations, such for as art, architecture, physical training and journalism, as well as to Master and PhD programs. According to Osipian (2007), there are existing 'price lists' for entry to prestigious courses, which are often communicated to applicants either by representatives of a university, or upon an inquiry of applicants or their parents, to current students in those programs. Usually, for Bachelor level programs, parents are involved in the corruption processes in admissions due to the lack of disposable income among students. For Masters and PhD programs, students are involved in the process themselves. The general scheme of corruption is depicted in Figure 10.

Firstly, it is important to mention the motivation of parties for participating in corrupt activities, as shown in Table 4. The justifications behind involvement in corruption from the side of the admissions committee can be broadly phrased in terms of fraud triangle, presented above. In such context, low salaries, perception that 'everyone does it' and belief that students do not study

⁸ major differences include different objects of corruption and the sum of money involved

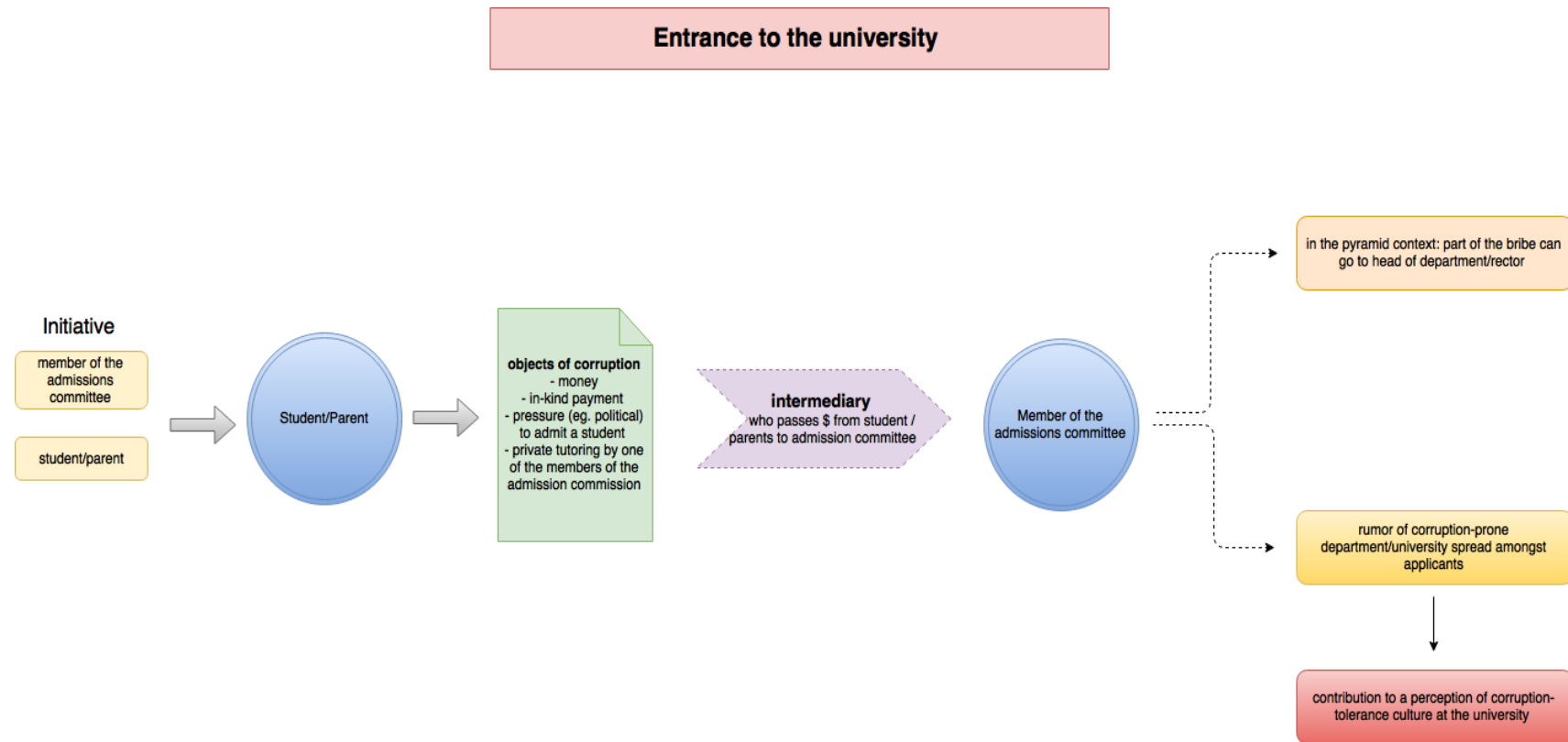
anyways, serve as a rationalisation to engage in corrupt activities. Perceived opportunity includes ability to get easy money, in the context of weak law enforcement and punishment mechanisms. Pressure pertains to corruption-tolerant culture at the university and influence from colleagues, as well as the widely spread context of the corruption pyramid and a threat to lose one's job when refusing to pay the share into a pyramid.

Table 4: Summary of the motivation behind initiation of corruption in admissions⁹

Members of an admission committee	Students/Parents
low salaries resulting in the need to engage in corrupt activities to provide for their families	low motivation to prepare for entrance exams or belief in the ability to perform well on them
eagerness to get easy money, facilitated by the lack of law enforcement and punishment mechanisms; corruption-prone culture, belief that students do not study anyways; experience with being involved in such activities before	seeking for reassurance, due to the belief, that one cannot be admitted without a bribe
pressure from colleagues to participate in such culture	
corruption pyramid: pressure from a person in higher up position (eg. rector) to pay rent to keep their job	

⁹ Based on the Fraud triangle and information from previous sections

Figure 10: Map of the corruption associated with admissions



As shown in Figure 10, after the initiation from either side, a student or parent has to pass the object of corruption to a member of the Admissions committee. Usually, the object of corruption involves money. However, in some instances, it can be an in-kind payment in gifts, food or pressure from a family of an applicant to admit a student (e.g. by being a child of a politician). Moreover, in some instances, monetary bribes are often disguised as transactions for private tutoring, which members of the admission committees offer at prices above market ones. They do not explicitly state that such sessions would guarantee admissions, yet these students end up being enrolled in universities of their choices (Zaloznaya, 2012). The objects of corruption can be given either directly to a member of the admissions committee, or passed through the intermediary, such as a staff member at the university. Lastly, under the conditions of the corruption pyramid, part of the money goes to a person at the next level – e.g. a rector, as a share for a permit to conduct bribery. In many cases, the information about the possibility of bribing the admission committee is spread to the next-year applicants, contributing to the corruption-tolerant culture.

6.2. Corruption during the course of studies

The second corruption scheme involves grade achievement while studying at a university, as depicted in Figure 11. Here, the process is very similar to that of admissions corruption. Hence, only minor differences are explained, instead of repeating the whole model.

Firstly, the initiators of corruption under such model change into students and faculty members, as explained by Rumyantseva (2005). Although the motivation of faculty members is identical to that of admission officers, student motivation broadens, as depicted in Table 5. In Ukrainian HEIs, students have to take close to a dozen of exams every semester. In the conditions of a lack of academic freedom, these exams are often in mandatory subjects that have nothing to do with the student's specialisation (Round & Rodgers, 2008). For instance, engineers often have to pass exams in the History of Ukraine in their first year. Hence, students often feel overwhelmed and, with little motivation in the subject, they prefer to pay small amount of money as a bribe to achieve high grades. Some also feel that there is too much work and decide to pay a bribe under a fear of failing exams and losing 'budget' spots.

Table 5: Summary of the motivation behind initiation of corruption in grade achievement¹²

Faculty members	Students
low salaries resulting in the need to engage in corrupt activities to provide for their families	low motivation to study, desire to take an 'easier' path
eagerness to get easy money, facilitated by the lack of law enforcement and punishment mechanisms; corruption-prone culture, belief that students do not study anyways; experience with being involved in such activities before	collective pressure from group-mates/mentor to participate when a group mentor communicates a demand from faculty member to pay a certain sum as a group
pressure from colleagues to participate in such culture	seeking for reassurance, due to the belief, that it is impossible to pass an exam without bribe
corruption pyramid: pressure from a person in higher up position (eg. rector) to pay rent to keep their job	General students' fear of failing an exam

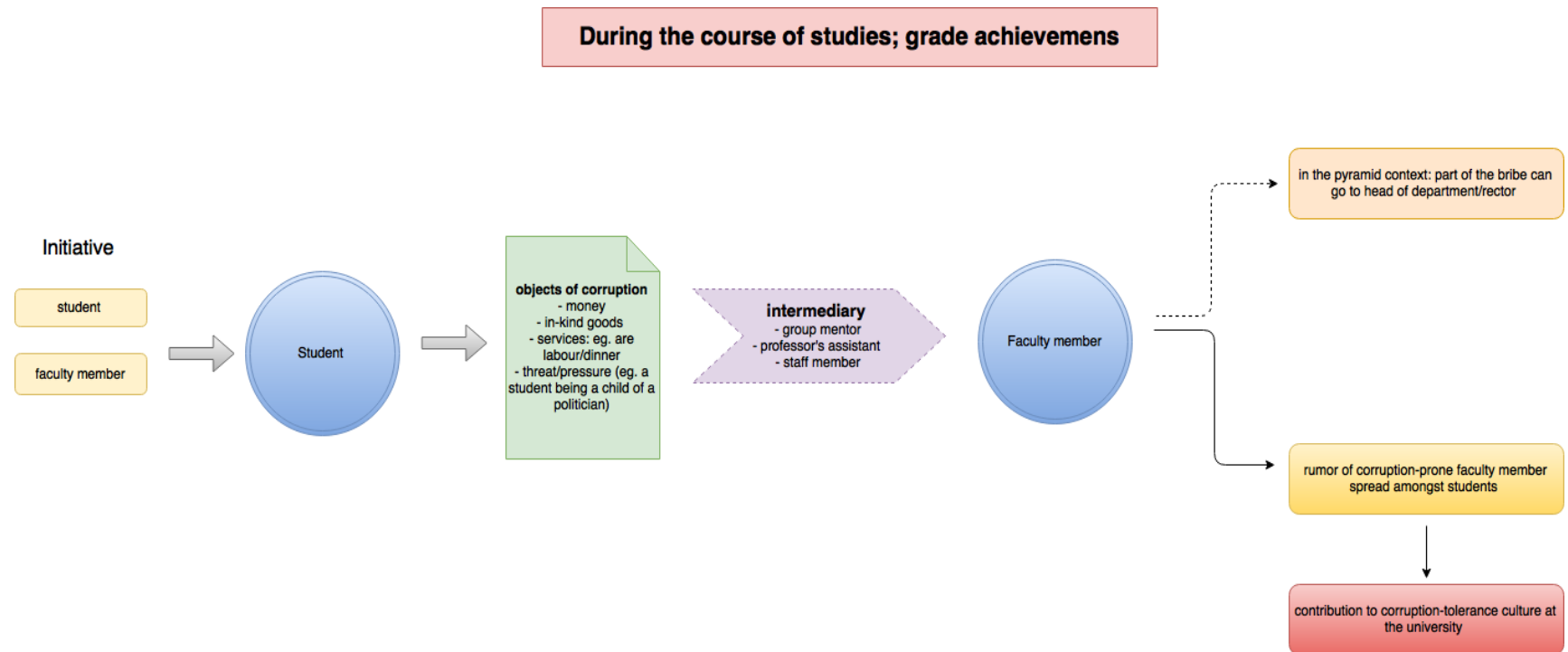
At the start of the Bachelor studies, students are usually divided into groups of twenty people with a student group mentor, who often serves as a go-between among students and faculty members (Bondarchuk, 2008). Often, faculty members would simply communicate to a group mentor that everyone in the group must pay a small amount of money around 4\$ in order to 'avoid problems' (Round & Rodgers, 2008). In such conditions, it becomes hard for a student to abstain from participating in corruption, as they are likely to experience pressure from fellow group-mates, who would end up paying higher share if someone from a group would drop out from the scheme (IAHR, 2011). Sometimes, the intermediaries would also include one of the staff members or professor's

¹² Based on the Fraud triangle and information from previous sections

assistants, as shown in Figure 11. Here, everything is done to make corruption 'comfortable' and minimise unpleasant experience of a student having to pay for their grades directly to a professor, with go-betweens, or bribes in envelopes used to facilitate the process (Klein, 2012).

In this scheme, the objects of corruption are also broader and include labour and services. For instance, a common practice involves helping out a professor in their summer house or arranging expensive dinners for them in the restaurants (Round and Rodgers, 2008). In close university communities, rumours concerning corruption-prone faculty members get spread much easier than in the case of admissions, thereby contributing to the culture of corruption at universities.

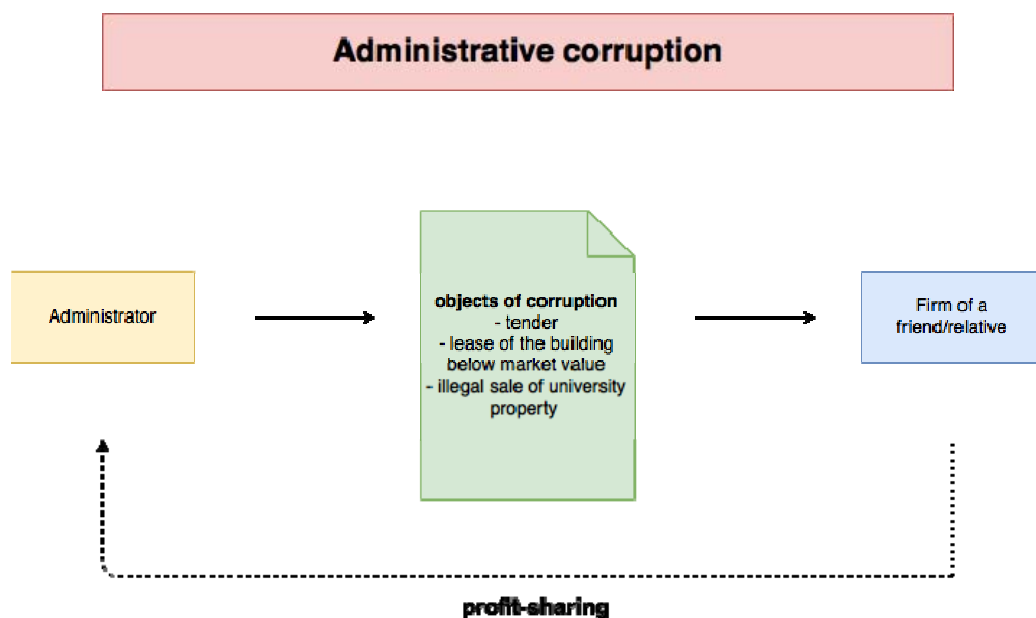
Figure 11: Map of the corruption associated with the course of studies, grade achievement



6.3. Administrative corruption

The last scheme includes administrative corruption, which occurs in the manner shown in Figure 14. Here, an administrator usually serves as an initiator of corruption due to the reasons, explained by the fraud triangle. Such a person is usually in a high position of power and of access to governmental assets. Figure 12 explains grand corruption schemes that happen due to large sums of money involved, rather than those associated with employment. In most instances, an administrator provides preferential treatment to a firm of their friend or relative, by offering better conditions in tendering, leasing the building below market value or illegal sale of university property to them, as shown in the case of National Aviation University (Appendix C). The accomplice would then share profits with administrator.

Figure 12: Map of the administrative corruption



8. Where do we go from here?

The previous sections provide a detailed overview over the problem of corruption in Ukrainian HEI. At the same time, they also emphasise the lack of data and research on the subject until today. Without a doubt there is a need for increased transparency at HEIs, yet the large number of stakeholders involved in corruption schemes, ranging from the Ministry of Education and Science and administrators, to professors and students make it unlikely that a top-down approach alone can lead to positive results. These need to be mixed with civil society oversight and changes in incentives structures within the higher education sector.

Lastly students' involvement in the anti-corruption movement should be encouraged by increasing academic freedom and encouraging interest in learning, combined with better exam procedures.

8.1. Data collection and further research

The first recommendation involves data collection and further research on the subject of corruption in Ukrainian HEIs. Interested parties should conduct analysis and corruption mapping similar to the ones presented in the paper, but with cases from the National Database for Pre-trial cases (rather than an NGO website like Profrights.org) in order to get a holistic overview of corruption cases, as well as performance of the law enforcement agencies and judicial system. Further research conducted in the area should exploit benefits of mixed methods analysis, in order to mitigate problems with qualitative perception indicators and quantitative under-reported cases discussed above. Further research on the topic can help to draw a more comprehensive picture of corruption in Ukrainian HEIs, in order to enable better evidence-based policymaking. This would happen as a result of identification of exact situation-specific causes of corruption, sources of leakages and risk-prone areas (U4, 2006, p. 7). Moreover, further investigation into perceptions of corruption at HEIs is needed in order to better understand the rationale of stakeholders for engaging in such activities (TEMPUS, 2014). The follow-up analysis of corruption perception data from different HEIs can help to identify the most corrupt ones. Based on this, the government can conduct targeted auditing of the worst performing universities in order to act in accordance with the goal of quality of education assurance and the national objective of combatting corruption.

8.2. Increasing transparency at HEIs

According to Heyneman (2013b), there is a possibility for reduction of HEI corruption through increasing decision-making transparency at universities. A Ukrainian Think Tank, CEDOS (2017), has already conducted research on Transparency of the Ukrainian HEIs, with scoring methodology. This data should be used by the Ministry of Education of Ukraine to encourage transparency at universities by offering both a bottom-up approach of appraising the most transparent universities with a reward system and simultaneously lobbying a top-down approach to introduce more transparency requirements into national legislation. Such experience has already proven to be successful in Romania through the effort of the Romanian Academic Society (2013), which published nation-wide ranking of universities in terms of their governance and integrity. The ranking had an impact of boosting civil society by both, 'naming and shaming' poorly performing universities and providing examples of good practices from the better performing ones.

Overall, transparency is also a prerequisite to the next recommendation of encouraging participation of civil society. In order to act upon corruption, civil society must have access to budget, information on allocation of positions at a university, clear regulations regarding the courses and examinations, as well as effective appeal procedures (Meier, 2004). Since public HEIs are financed through taxpayers' money there is a legitimate claim to be made for most of the information to be publically available. Private information, such as records of employees should be excluded. Furthermore, transparency is needed to ensure fair procurement process in order to combat grand political and administrative corruption. Ukraine has already launched one of the most successful transparent public procurement systems – ProZorro (Starodubtsev, 2017) which can be put to a greater use in the HEIs to combat corruption.

8.3. Information campaigns and encouragement of participation of civil society

The context of decentralisation, presented in the new Law of higher education (2015) calls for less intervention from the Ministry of Education and Science. Although it is a common trend to argue that decentralisation helps to resolve corruption, this claim is not supported by the empirical evidence (U4, 2006, p. 8). Decentralisation may lead to less oversight and centralised control and hence, more opportunities for corruption. In order to avoid this problem, it is essential to match decentralisation with ensuring sufficient training on local level and with a strong audit system. According to Spector, Winbourne, O'Brien and Rudenshiold (2006, p. 33), centralised financing with little oversight from the civil society is likely to result in misappropriation, misallocation of money and shortfall of funding for the educational activities as a result of corruption. However, there is currently a passive interest in such activities from the civil society, with an exception of such initiatives as Ukrainian student union – 'Clean Universities', with an aim to fight against HEI corruption (Studway, 2017). The reason behind this, as presented by Heyneman, Anderson and Nuraliyeva (2008), is that most of the students feel like little can be done to fight corruption, as it became such an indispensable part of the education process. This feeling of fatalism is further supported by Teodorescu and Tudorel (2008) in their study on Romania. Three stage approach is offered below to combat this feeling and encourage civil activism.

Firstly, there is a need to raise awareness among students on what constitutes corruption and the illegality of such activities. For instance, it is often thought that gifts, which create an undue influence, do not constitute corruption (de Waal, 2016). Moreover, even if students are aware that corruption is illegal, many believe that a faculty, staff member or administrator, who accepts a bribe is responsible. In reality, however, according to the Criminal Code of Ukraine, both the person who

offers and the person who accepts a bribe are held liable for such activities (2001). The realisation of the fact that by giving a bribe in the amount close to ten euros, you are committing a criminal offence, may deter a number of students from participating in such activities. According to OECD ACN (2015, p, 74), successful awareness raising campaigns are focused on targeting specific audience, rather than raising generic point of the illegality of corruption. An example of it is the campaign 'For education through Integrity' in Moldova, which distributed buttons to students titled "I do not give a bribe" and to professors titled "I do not take a bribe", alongside with bookmarks with printed rights and obligations of all of the involved parties on them (OECD ACN, 2015, p, 74).

The second action point pertains to the presentation of information in the media. Currently, most of the media reports which deal with the topic highlight the grave extent of the problem of corruption in Ukrainian HEIs. However, such campaigns are more likely to cause harm than do good, as they encourage the thinking that the problem is so big, that nothing can be done and that participation in the process of corruption is inevitable. According to Björkman and Svensson (2007), in order to evoke action, it is important to not only present information in a clear and accessible form, but also to offer direct ways in which such knowledge can be used. Hence, a better way to report on HEI corruption is by focusing on the successful trials and civic society initiatives with the concrete recipes of the achievement of success in the fight against corruption on case-by-case basis.

Lastly, NGOs need to realise that an effective anti-corruption campaign or training should first focus on educating citizens who are ready to question the authority and stand up for their rights (Marquette, 2007). The evaluation of such anti-corruption training programs by USAID showed that course design and quality of instruction are very important and that poorly designed programs have no effect on democratic behaviours, attitudes and willingness to fight corruption (USAID, 2002). Hence, it is important to assure high quality of such programs in order to avoid the loss of funding, which could be used more efficiently by other programs, as well as the perception that the problem will be resolved after some trainings are conducted, which discourages action from other initiatives.

8.4. Increasing oversight over HEIs

Although the involvement of civil society is commendable, it is essential to ensure central level control in the form of auditing in order to mitigate corruption. The current system requires the government to announce the audit in advance to the university administration (Transparency International, 2015). This allows the latter to have time to prepare for audit and hide the traces of corrupt activities. Hence, a new mechanism that would allow to conduct audits without warning should be introduced (Di Tella & Schargrodsky, 2003).

Secondly, there is a need for more oversight of HEIs by civil society representatives. This requires two conditions: a system should be easy and should not impose additional burdens on a person who wants to give an anonymous tip on a witnessed corrupt activity, and a whistleblower should not be afraid of the possibility of retaliation from the HEI administration, such as expulsion from the university (U4, 2006, p. 9). There are already some secure channels which use complicated encryption procedures to eliminate the risk of the whistleblower getting caught, such as Habardox (n. d.). However, such anonymous reporting channels should be facilitated by the government in order to ensure that reported information will be acted upon. The civil society Initiative 11 (2017) is already working on lobbying for the whistleblower law that would, among other things, allow HEI corruption reporters to protect their identities. Such countries as Bosnia and Herzegovina have already experienced the benefits of similar legislations (Devine & Walden, 2013). The government should also consider the possibilities of encouraging bottom-up initiatives for safe reporting within universities themselves in order to bring more immediate positive impact. However, this step would only be possible with a strong leadership of the university administration in the fight against corruption (Meier, 2004).

8.5. Creating a better reward and punishment mechanism for HEI employees

Currently there is very little reason, apart for moral stands, for HEI employees to be involved in corrupt activities, as explained throughout the paper and summarised by the fraud triangle. Faculty, staff and administrative members are not very afraid to lose their positions, due to low salaries (Meier, 2004). With heavy workload and little space for creativity, the jobs themselves are not the most rewarding in nature. In normal conditions, employees would be deterred from engaging in corrupt activities due to the fear of punishment. However, as analysed in the data provided by national authorities there is a very low likelihood of being caught. Even if a person is caught and convicted, there is only 1% chance of imprisonment. Most likely, the case would result in a fine, which is normally lower than the profit from corruption.

The first component of this recommendation involves raising salaries of employees to a competitive level in order to mitigate financial pressure to engage in corruption. This will have a positive externality of helping the national goal of quality assurance in education, because higher salaries will encourage applications from more talented faculty members. Such recruitment of new employees should also be done with strict criteria, which would include evaluation of teaching and research capabilities of prospective staff members, rather than the current selection process that is often based on nepotism (Cahn, 1992). The funding can come from decentralisation reform which is

likely to result in increased competition among universities for attracting students by offering better quality education, internship opportunities, more course flexibility, research opportunities etc. (Samniashvili, 2007). With this, well-performing universities can gain opportunities to increase their budgets.¹³

However, as shown by Ades and Di Tella (1999) and Svensson (2005), for public officials, there is no correlation between having a higher salary and being less corrupt. The reason behind this is that successful reform comes alongside with more effective punishment mechanisms. In addition to the external Ministerial Audits, suggested above, there is a need for more internal audits, when, for example, a university rector comes to check up on a lecture of a professor who was previously reported to not show up, without warning him. On the governmental level, there is a need to increase efficiency of law enforcement agencies and fairness of the judicial system, in order to create a real deterrent factor to engagement in corrupt activities. Perhaps, clear identification of the types of cases that fall under each of the aforementioned law enforcement agencies can help to reduce overlap in their activities and help to establish a more efficient system.

8.6. Standardisation of exams in written form

When analysing academic-specific corruption throughout both, admissions and obtainment of high grades throughout the curriculum, it is logical to derive upon the success of the Independent External Assessment on the Bachelor level entrance. Based on Klein's paper (2012), the factors that contributed to its success include written forms of examination and minimisation of contact with corruption-prone parties. Such system can be replicated on the Masters level. The government has already conducted a test run in 2016 with the common Master level examination for a graduate degree in Law, as reported by the Ministry of Education and Science of Ukraine (2016). It would be interesting to conduct a survey on admission corruption experiences of applicants to such programs in 2015, as compared to 2016.

A similar approach should be introduced throughout university examinations themselves. The current most widespread format is that of oral exams and is the most prone to corruption, as it is difficult to appeal to the results of such examinations, with no recorded answers. This gives examiners almost unlimited power over students. A logical suggestion would be to introduce written exams, which is a common practice employed in Western universities. However, Round and Rodgers

¹³ up to the extent of filling in the campus capacity, assuming there is no intention to enlarge the campus

(2009) argue that written exams are subject to similar practices, as students often put money in between their exam papers, for an examiner to 'consider it', when determining a grade. A way to circumvent this would be to introduce a coding system, whereby an independent person would code all exams, in order to ensure that the examiner does not know the identity of the person whose work they are checking. However, the infrastructure for the coding system, as well as an assurance of the independence of the coders, would need to be established. This policy will lead to additional costs to HEIs. These, however, would be marginal when compared to the amount of money that is taken out each year from their budgets due to corruption-prone culture.

Standardisation and basing grades solely on test scores also has its drawbacks. For instance, the Ukrainian Standardized External Testing Initiative report, conducted by USAID in 2008, concluded that test scores on the external assessment better predict student's academic performance at a university when compared to high school GPA. However, the correlation with academic performance is stronger when high school grades are factored in as well. Hence, an introduction of standardised exams and the exclusion of more subjective forms of assessment, such as participation grade or oral presentations, may lead to reduction of corruption, but also to less indicative assessment. Here, a tradeoff should be made between the two. If the benefits associated with the reduction of corruption outweigh the costs of having a lower predictor of academic performance, then standardised testing for exams should be accepted.

8.7. Academic freedom and corruption-prone culture

The last recommendation includes the encouragement of academic freedom of students in an effort to increase their motivation to learn, instead of searching for easier ways of getting diplomas in exchange for bribes. This would include allowing students to choose more courses on their own and reducing the number of courses to be taken, in accordance with the ECTS criteria.¹⁴ This, coupled with the competition of universities for students in the conditions of decentralisation is likely to result in more interest for education itself and less desire to engage in corrupt activities.

One of the issues that remains unaddressed in recommendations relates to the reduction of pressure from colleagues to participate in the corruption culture, which serves as one of the motivations to engage in corrupt activities. There is hardly a viable solution to combat such pressure, with an exception of the proposition that it will be mitigated over time. Implementation of other

¹⁴ Ukraine is a part of Bologna process, but the changes in HE are slow to come (Kovalchuk & Koroliuk, 2012)

recommendations is likely to result in the decrease of corruption activities overall and hence, less pressure on staff or faculty members to participate in such illegal acts.

9. Conclusion

Corruption in HEIs has negative effects on society through creating misallocation of talent and diverting funding from universities. Several perception and self-reported corruption participation surveys in Ukraine have shown the grave extent of the phenomenon, with more than 25% of university students consistently reporting participation in corrupt activities. By using the data from Profrights.org website this paper identified three of the most prevalent corruption schemes, which were consistent with prior literature. The schemes included corruption at university entrance, corruption in grade attainment throughout university education and administrative corruption. Corruption mapping of these three instances has helped to identify underlying motivations of participants of the process to engage in corrupt activities. These included low motivation of students to prepare for exams and pressure on faculty members to engage in such activities.

The mapping process has accentuated important role of intermediaries, such as group mentors in the process, as well as the danger of creation of the corruption-prone culture at the universities. As a result, in order to mitigate corruption in Ukrainian HEIs the paper recommends to a) collect more data and conduct further research; b) increase transparency in the Ukrainian HEIs; c) conduct information campaigns and encourage participation of the civil society; d) increase oversight of HEIs; e) create a better reward and punishment mechanism system for HEI employees; f) standardise exams in the written form; and g) encourage academic freedom.

Although these recommendations can help to mitigate corruption, important structural changes are needed both in HE and judicial systems. When using the Fraud triangle model, it becomes evident that successful reform includes mitigation of pressure, opportunity and rationalisation. For this, a combination of more academic freedom for both students and faculty can create more interest in studying, teaching and research and decrease the current prevailing opinion that a university diploma is just a piece of paper, which opens doors on the job market. Higher salaries are an essential component for mitigating faculty-driven corruption. Together with a reform of judicial system and audits, which focus both on prevention and punishment, they can help to alleviate current situation. Naturally, there is no universal solution and while the government can take steps on a national level, a lot has to be left to the university administrators to include local contexts. However, enabling such decentralisation efforts requires better legislation and introduction of effective HEI market mechanisms in order to ensure the competition for 'budget spots'. This will create an incentive to

make universities better. As in any case of prevalent corruption, there is no easy solution. Combatting the 'cancer of society' requires a balance between reward and punishment mechanisms, as well as control versus academic freedom and decentralisation. Such reforms require unity and desire for change all stakeholders.

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11. Appendices

A. Definitions of the types of corruption in the education sector (Hallack & Poisson, 2007, p. 58)

Form of corruption	Embezzlement	Bribery	Fraud	Extortion	Favouritism
Definition	Theft of public resources by public officials	Payment (in money or in kind) given or taken in a corrupt relationship	Economic crime that involves some kind of trickery, swindle or deceit	Money and other resources extracted by the use of coercion, violence or threats to use force	Mechanism of power abuse implying 'privatization' and a highly biased distribution of state resources
Family of terms	Misappropriation, diversion, leakage, capture of funds	Kickbacks, gratuities, baksheesh, pay-offs, speed and grease money	Forgery, smuggling, counterfeit	Blackmail, informal taxation	Nepotism, cronyism, clientelism, bias
Examples from the education sector	Educational funds used for political campaigns School funds diverted for private interest	Bribes paid to be recruited as a teacher Bribes paid to be admitted to university	Ghost teachers Paper mills and diploma mills	Illegal fees collected to be admitted to school Sexual harassment for promotion	Recruitment of administrators based on their membership of a political party Good marks obtained due to favouritism

Source: Adapted from Amundsen, 2000.

B. Geographic representation of the universities, involved in corruption cases



C. Data on corruption from Profrights.org (2015)¹⁵

City	University	Year	Type of corruption	Description	Sum (in euros)	relevant Article of the Criminal Code
Kyiv	National Aviation University	2008-2015	administrative	using the mechanisms of common investment into building on terms, which were not favorable to the government. As a result of realisation of these schemes to benefit the firms, controlled by the managers of the national Aviation University at the time, the assets of the government (land, dormitories and other buildings, as well as the rights for the unfinished building objects) have been taken out illegally	987,289.58	Article 364: 2 and Article 367: 2 of the Ukrainian Criminal Code
Kyiv	National Aviation University	2012	administrative	Purchase of 7 airplanes, used for academic purposes from the Austrian Firm Diamond Finance Services GmbH, which costed 1.5 times more than the market value	950,000	Article 364: 2 of the Ukrainian Criminal Code; Article 39:2 of the Public Procurement Law of Ukraine

¹⁵ All relevant information was retrieved from (Profrights, 2015). All links with proves have been checked, before placing the cases into the table. Links to the websites of the national authorities can be provided on demand.

Kyiv	National Aviation University	Until 2014	administrative	Mandatory uniform for students, which could only be purchased through one firm - "Astra lux", the owner of which was a vice-head of the regional branch of the 'Party of Regions' (in power at the time), which was headed by the former provost of the university	- - -	Article 364: 2 of the Ukrainian Criminal Code
Ivano-Frankivsk	The Ivano-Frankivsk National Medical University	2015	academic: professor-student	Professor demanded a bribe from a foreign student (national of India) for passing exams to get into the third year of the university	2688	Art. 368: 3 of Ukrainian Criminal Code
Kyiv	Bogomolets National Medical University	2015	administrative	Lack of proper reporting (eg. financial statements), which resulted in the overstatement of the expenses for buildings and roads repairs	516,494.17	Article 6.3U of the Law "Managing public property"
Kherson	Kherson State University	2015	academic: administrator-student	The administration of the faculty of nature, human health and tourism demanded money from students for "charity", if they wanted to avoid doing the 'internship' (usually, this involves gardening, cleaning, paperwork which is supposed to be done by university staff	13.70/student	Article 365:1 of the Ukrainian Criminal Code
Kherson	Kherson State University	2015	academic: administrator-student	The administration of the faculty of philology and journalism demanded each of the students to give money to them.	5.14/student	Article 384: 1 of the Ukrainian Criminal Code

Lviv	Lviv National Academy of Finance	2015	administrative	Rector demanded a bribe from professor for appointing him for a position and 'advancing' his career at the university	2,240	Article 368: 1 of the Ukrainian Criminal Code
Dniprodzerzhynsk	Dniprodzerzhynsk national technical University	2015	administrative	In 2015, the governmentally financed university spots were filled by students, who have not attended classes, but received governmental scholarship, while faculty received money for the teaching work they have not done	over 34,246.58	Article 367: 1 of the Ukrainian Criminal Code
Rivne	National University of Water Management and Natural Resources	2015	academic: administrator-student	Admissions officer demanded a bribe to accept transfer student to year 5 of the university education	336	Article 367: 1 of the Ukrainian Criminal Code
Odesa	Odesa national academy of food technologies	2015	academic: professor-student	head of the University's Department demanded a bribe for the acceptance to the PhD program	11,200	Article 368:3 of the Ukrainian Criminal Code
Lviv	Lviv Commercial academy	2015	academic: administrator-student	Dean of the faculty demanded a bribe from a student for university admissions	300	Article 368:3 of the Ukrainian Criminal Code
Kamyanets	Kamyanets-	2015	academic:	The Dean promised a man to accept his niece to the	1,680	Article 15:1, 190:1 and 368:1

-Podilskiy	Podilsky Ivan Ohienko National University		administrator-student	university for a bribe and then took a bribe to appoint the niece a student head of the group		of the Criminal Code of Ukraine
Chernivtsy	Chernivtsy National University	2015	academic: administrator-student	The Dean of the faculty promised the university admission to a student for a bribe	1,120	Article 368:3 of the Ukrainian Criminal Code
Dnipropetrovsk	Dnipropetrovsk State University of internal Affairs	2015	academic: administrator-student	Head of the Institute promised the university admission to a student for a bribe	2,240	Article 369-2:2 of the Ukrainian Criminal Code
Mukachiv	Mukachiv National University	2015	academic: professor-student	professor demanded bribes from students for passing final exams	5,152	Article 368:3 of the Ukrainian Criminal Code
Ivano-Frankivsk	National University: Odesa Judicial Academy (their institute in Ivano-Frankivsk)	2015	academic: administrator-student	Director of the Institute demanded bribes from two students for them to get a permission to access the exams	592.85	Article 368:3 of the Ukrainian Criminal Code
Luhansk	Luhansk national University of Internal Affairs of	2015	academic: professor-	Professor demanded a bribe from student to pass exams and tests well during the session	85.62	Article 369-2:2 of the Ukrainian Criminal Code

	Ivan Didorenko		student			
Nizhin	Nizhyn Gogol State University	2015	academic: professor- student	Dean demanded a bribe form a student to pass exam	51.37	---
Uzhgorod	Uzhorod National University	2015	academic: professor- student	Professor demanded a bribe from student to pass exams well	---	Article 368:3, Article 366:1 of the Criminal Code of Ukraine
Mykolaiv	Admiral Makarov National University of Shipbuilding	2015	academic: professor- student	Professor demanded a bribe from student to pass exams well	---	Article 368:3 of the Ukrainian Criminal Code
Mykolaiv	Mykolaiv National University after Sukhomlynsky	2015	academic: professor- student	Head of the Department demanded bribes from students to pass the exams well, with the help of the student leader of the group as an intermediary	8.56/student	Article 368-4:4 of the Ukrainian Criminal Code
Kharkiv	Kharkiv State Academy of Physical Culture	2016	academic: professor- student	Professor demanded a bribe from an international student for PhD thesis defense	6,272	Art. 368:3 of Ukrainian Criminal Code
Kyiv	National Aviation University	2016	administrative	Rector demanded a bribe from professor for appointing him for a position at the university	170,000	Art. 368:3 of Ukrainian Criminal Code

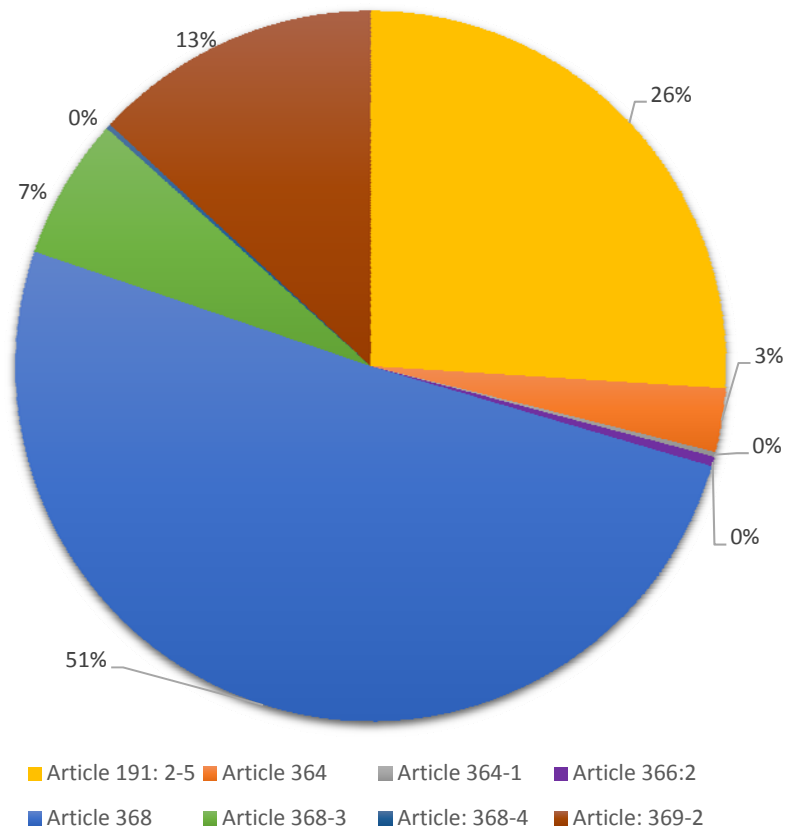
Lviv	Ivan Franko National University of Lviv	2016	administrative	Head of Department demanded a bribe from an employee to avoid firing	20.55	Article 368:3 of the Ukrainian Criminal Code
Ternopil	Ternopil State Medical University	2016	administrative	Docent of the university requested a bribe for assisting a person to get a job at the local medical institution	1,120	Article 369-2:2 of the Ukrainian Criminal Code
Kyiv	Institute of Screen Arts	2016	academic: administrator- student	Rector demanded a bribe from the previously expelled student to re-admit him to the university	650.68	Article 208 of the Criminal Procedural Code of Ukraine, Article 368-3:4 of the Criminal Code of Ukraine
Odesa	Odesa national marine academy	2016	academic: professor- student	Director of the Dunay Institute demanded money from applicants for admissions and from current students for passing exams	6.85-51.37	Article 368:3 of the Ukrainian Criminal Code
Odesa	Odesa National Mechnikov University	2016	academic: administrator- student	Vice Dean systematically demanded bribes form students	684.93	Article 368:3 of the Ukrainian Criminal Code
Kharkiv	Ukrainian engineering-pedagogics academy	2016	academic: administrator- student	Vice Dean demanded a bribe to allow a student to defend his thesis	1,712.33	Article 368:1 of the Ukrainian Criminal Code

Lviv	Lviv national agrarian university	2016	academic: professor- student	head of the Department demanded a bribe from student to prepare and receive a good grade for defending his thesis	672	Articles 368:3 and Article 14:1 of the Ukrainian Criminal Code
Odesa	Odesa national academy of technical regulation and governance	2016	academic: administrator- student	Head of the Department made professors in her department create artificial problems for students before passing the thesis, so that she could demand bribes for fixing them	342.47	Article 368:3 of the Ukrainian Criminal Code
Kyiv	Kyiv State Maritime Academy	2016	academic: professor- student	professor systematically demanded bribes from students for passing exams, threatening to fail them in case of non-compliance	1,344	Article 368:3 of the Ukrainian Criminal Code
Cherkasy	Cherkasy Institute of Fire Safety named after Chernobyl Heroes	2016	academic: administrator- student	Head of department demanded money from students to pass the exams well. Those who refused to pay were threatened to be expelled from the institute	2,088.16	Article 368:3 of the Ukrainian Criminal Code
Uzhgorod	Uzhgorod national university	2016	academic: administrator- student	Dean and vice dean offered a student to pay a bribe in order to avoid expulsion from the university	171.23	Article 368:3 of the Ukrainian Criminal Code
Kherson	Kherson National technical University	2016	academic: professor-	Professor has demanded a bribe from student to be allowed to pass exam	41.1	Article 368:3 of the Ukrainian Criminal Code

			student			
Odesa	Odesa National Academy of Food Technologies	2016	academic: administrator-student	Dean demanded a bribe in order to let the student pass the exams	342.46	Article 368:3 of the Ukrainian Criminal Code
Zaporizha	Zaporizha National Technical university	2016	academic: administrator-student	Head of the Department demanded a bribe form a student for passing exams and papers well	273.97	Article 368:3 of the Ukrainian Criminal Code
Kharkiv	Kharkiv National Agricultural University named after V. V. Dokuchayev	2016	academic: professor-student	Dean demanded a bribe in order to give good grades on the exam to a student	154.11	Article 368:3 of the Ukrainian Criminal Code
Sieverodonets'k	East Ukrainian Volodymyr Dahl National University	2016	academic: administrator-student	Head of the Department demanded a bribe form a student for passing exams and tests well	- - -	Article 368:3 of the Ukrainian Criminal Code
Zaporizha	Zaporizhzhya National Technical University	2017	academic: professor-student	professor demanded bribes from students to pass exams with good grades	8.56	Article 368: 3 of Ukrainian Criminal Code

Odesa	Odesa National Mechnikov University	2017	academic: professor-student	head of Department received money from 3 students for the grades	51.37	Article 368:1;3 and Article 366:1 of the Criminal Code of Ukraine
Kyiv	Kyiv State Maritime Academy	2017	academic: administrator-student	Rector demanded a bribe for the transfer of a student to the second year of the university from another university	856.16	Article 368:3 of the Ukrainian Criminal Code
Zaporizha	Zaporizha national university	2017	academic: professor-student	associate Professor was collecting bribes from students for passing the exams	13.70-34.25	Article 367:1 of the Ukrainian Criminal Code
Slovyansk	Donbas national pedagogical university	2017	academic: professor-student	associate Professor demanded a bribe for the student for receiving good grade on the exam without him being present	95.89	Article 368:3 of the Ukrainian Criminal Code

D. Cases by Articles of the Criminal Code of Ukraine, used by national authorities



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