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Corruption and Organised Crime Signalling Indicators for Foreign Investors as Applied to Eastern European Countries

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Abstract

The former communist countries in Central and Eastern Europe and, implicitly, their economies, went through specific and sometimes asymmetric developments since the fall of the "iron curtain" at the end of the 1980s. During those years, they faced many challenges to create a secure and predictable economic environment for individuals and businesses, local or foreign. We propose a framework that considers legal, social, and economic indicators which can be used by foreign investors to make wise and efficient business decisions. Our main purpose is to expand the traditional economic analysis framework and enrich it with new institutional and societal indicators from the social, quality of life and legal layers of research. This new landscape could offer relevant information on vulnerabilities that could favour organized crime and corruption in some Central and Eastern European countries, a factor that foreign investors may need to address before deciding to invest in the region.

Keywords: foreign direct investments, organised crime, corruption, economic vulnerabilities, GDP

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1. Introduction

Since the democratic transitions that begun at the end of the 1980s, the post-communist countries in Central and Eastern Europe (CEE) have passed through many transformations on many societal layers. There were different approaches, different speeds and they consisted in the appearance of certain vulnerabilities which favoured organised crime and corruption, before and after joining the European Union (EU). When started negotiations for joining the EU, all countries in CEE agreed on initiating many reforms, most of them interconnected. Regarding the EU accession process, scholars seem to agree that several features were important in the reforming process of countries in the region: a) imitative transformations, copying successful institutions from existing Western models; b) high adaptation pressure, given by the simultaneity of transformation – copying with EU requirements and the accelerated diffusion of innovation; c) the active and strong position of the EU in shaping procedures and norms [1, 2].

Foreign Direct Investments (FDI) have played a fundamental role in reshaping the business environment in CEE countries the last 20 years and helped in the development of a well-functioning market economy. At the beginning of the transition period, all countries in CEE had uncompetitive economies with low productivity, but they have managed to build over time competitive sectors and industries at regional and global level, integrated into international supply chains (Horobet and Popovici, 2017). However, foreign direct investment (FDI) flows and stocks into the CEE region have different patterns across countries. Thus, Romania's FDI stock increased at an average annual rate of 15.6% between 1999 and 2015 - approximately 12 times -, but the country has only the second lowest FDI stock in CEE, after Bulgaria. The Czech Republic, Poland and Hungary enjoyed over time significantly higher FDI stocks than Romania and Bulgaria – 101.9 billion EUR, 192.1 billion EUR and 83.1 billion EUR, respectively -, despite lower average annual growth rates. A possible explanation is that the latter countries privatised their economies at a faster pace in the early nineties, which offered foreign investors more opportunities to expand their businesses [3, 4].

FDI is the single most important instrument for the globalization of the international economy. Defined, FDI is the investment of real assets in a foreign country; it is acquiring assets such as land and equipment in another, host country, but operating the facility from the home country. FDI is viewed by many as necessary to stimulate the economies of both developed and underdeveloped countries. It is widely accepted that FDI flows offer economic benefits, such as increased competition, technological influences and innovations, and increased employment. However, the impact of foreign investment far outweighs economic growth. Sometimes FDI can be a catalyst for change in society as a whole, so we need to think in terms of economic, political, social, technological, cultural, and environmental factors and examine all the effects of FDI to decipher the real long-term impact. As foreign investment and globalization continue to grow, developing countries desperately seeking to attract foreign investment may have undesirable results [5].

The development of multinational companies' activities and the creation of their international production networks have stimulated the interest of academia in understanding and explaining the decision-making process of the company when expanding abroad through FDI, to the detriment of other ways of entering foreign markets - export, granting of licenses, franchises, etc. The most well-known and comprehensive explanation of this decision-making process that takes place within multinational companies belongs to John Dunning, through "The Eclectic Paradigm of international production" (OLI Paradigm), developed in Dunning [6-9]. The paradigm proposes the fulfilment of four conditions that lead to a certain level and structure of value-added creative activities abroad by a company, as follows: (i) The extent to which the firm has ownership advantages (O) compared to companies of other nationalities in the markets where they are located or intends to expand into; (ii) Assuming condition 1 satisfied, the extent to which the firm observes to be in its interest to add value to property advantages, instead of selling them, or to sells the right to use them to foreign companies, materialized in advantages of internalization (I); (iii) Assuming conditions 1 and 2 satisfied, the extent to which the company's overall benefits are served by creating

or using O-type advantages in a foreign location that enjoys localization advantages (L) from the perspective of resource-possessing countries and the capabilities sought by the multinational company; (iv) Given the configuration of OLI benefits for a company, the extent to which it considers that production abroad is consistent with its long-term strategy.

Although the OLI paradigm is fully capable of explaining the creation of multinational companies' global production networks, it is also flexible enough to allow for other factors in the investment-making process of multinational companies. One example of addition to the OLI paradigm are the institutional factors and the institutional environment, considered even by Dunning [10, 11]. The introduction of institutional factors that refer both to formal and informal institutions was one of the areas of research development in the last decades in the field of international business and multinational company activity.

With the rapid growth in FDI flows, there is now a consensus that inward FDI has been a key factor for economic development of many emerging countries. Not unexpectedly, a large part of the literature on economic development has been focused on the determinants of FDI inflows to developing countries, and highlights the importance of institutional quality to attract FDI. Consequently, many systematic links between institutional quality and FDI inflows and/or between inward FDI and economic development through productivity growth have been uncovered. There has been abundant empirical evidence showing a positive and significant relationship between institutional quality and FDI inflows. A broad set of institutional variables has been tested and emphasized. For instance, it was shown a significantly negative impact of corruption on FDI inflows [12]. In addition to the positive impact of good institutional quality on FDI inflow levels, other authors have also shown that good institutional quality reduces FDI volatility [13]. On the other hand, some researchers focused on the institutional distance between the source country and the host country and showed that institutional distance tends to reduce bilateral FDI [14].

The dominant view is that countries with good governance can attract more FDI, whereas an environment of weak governance cannot protect the investments [15-18]. Institutional variables, specifically corruption, political restrictions, and protection of property rights, are some important determinants of multinational investments and FDI inflows [19-21]. Furthermore, Dunning [22] argued that institutional factors, such as good governance and economic freedom, are becoming highly popular determinants of FDI as the priorities of multinational companies (MNCs) are shifting from market and resource seeking to efficiency seeking. Traditional FDI determinants, such as natural resources and low labour costs, are relatively becoming less important, while less traditional factors, such as governance and economic freedom, are becoming more popular [23-24].

Law and order become a serious issue for MNCs when courts fail to enforce contracts and when governments influence court decisions for political motives [25]. Law and order instability lead to corruption [26]. Many investor surveys also suggest that one of the most important institutional factors that deter FDI inflows is corruption [27, 28]. Good

institutions reduce production and transaction costs, and as a result, increase profitability and economic activity, whereas poor and weak institutions increase uncertainty and costs of production [29, 30].

As set out by Acemoglu et al. [31] and more recently by Flachaire et al. [32], institutions essentially determine the growth regime countries belong to, therefore acting as an indirect determinant of economic growth. Institutions are more likely to determine macroeconomic stability, which in turn enhances growth determinants. In this vein, we consider institutional quality to be a sample-splitting variable.

In this framework, our main goal is to provide some relevant and justified answers to the following questions**:** Can institutional and societal indicators (economic, social-quality of life and legal layers) provide additional information to foreign investors when deciding to penetrate CEE markets? Can these indicators diagnose the state of economic health and signal significant vulnerabilities or risks in a society which could influence their business? We look forward finding some justified and relevant answers and shaping a framework that contains legal, social, and economic indicators which can bring some extra information to foreign investors, useful for a wise and efficient business decision. Our paper thus aims at contributing to the existing literature regarding FDI, but it also has an exploratory character that advances an interdisciplinary approach related to FDI interaction with the social and legal conditions (de jure and/or de facto) existing in host countries.

The paper is structured as follows: Section 2 contains a brief perspective on the main sociological theories regarding social normativity, individual alienation, and differential association based on existing literature, that support our research questions. In the same section we mention the accepted definitions on organised crime at global level, which offer a better fundament and understanding of the research. Section 3 presents the idea and the method of the research, as well as some explanatory notes regarding the limits of our research. Section 4 presents the main results and Section 5 concludes.

2. Social Norms and Organised Crime

For our research based on an interdisciplinary approach, we raised few main theoretical questions. First, what is the difference between a normal and a socially desirable behaviour, including an economic one? Consequently, under what circumstances the individual or collective behaviour, including an economic one, is considered as being inside of what is desirable, socially accepted or exceeding this threshold? Another category of questions raises the problem of the social–economic conditions: do they create favourable premises on the appearance of the individual or collective deviance from the norm? If yes, under what general and/or specific circumstances does this occur? These questions are even more important in conditions in which the experience showed that the anticorruption campaigns have been approached cautiously, mainly because it “should not disrupt efficient and functional social networks or eradicate the informal economy, especially where the formal economy is characterized by large scale market failures and inefficiencies.” [33]. We will try to provide some potential answers by using the classical theorists in Sociology of Deviance.

Emile Durkheim's relevant contribution for our research is operating the distinction between norms, normativity, and anomy. He starts by defining the normal social phenomenon as one "which is exactly as it should be" and the pathological one is the one "which should be different than it is" [34]. This relative principle is completed by some additional remarks: first, the norm represents an imperative and coercive form of pressure which prescribes and evaluate the actions and behaviours within a society; second, the norms stimulate moral solidarity and expanding the behaviours; third, the normality is related both to norms but also to statistics: "crime is a normal phenomenon" (because it happens regularly) [35]. Having these tools, we can understand the social anomy. It intervenes in periods of transitions for different societies and can be synthesized as the crisis of a regulatory action. Its main traits are: a) disorder of the functionality of the social system (functions are not coordinated with each other); b) the absence of limits imposed on human behaviour and action, which, in the absence of rationalizing rules, no longer have a precise object and purpose; c) inadequacy of existing rules to human requirements (there are rules, but they are not appropriate to existing realities); d) the contradiction between norms with different content (once the society starts a transformation process, some of the old norms have no longer an object, but continue to work, and others contradict the new trends of social life) [35]. Apart from Durkheim's theory, which states that anomy represents the inability of the rules to regulate the action of members of society, Robert K. Merton concluded that anomy represents a personal disorganization of the alienated individual, dominated by the feeling of lack of power, lack of meaning and inability to achieve their goals by legitimate means. Its main source refers to the fact that the American society imposes two contradictory constraints: to choose only desirable purposes, accepted by the entire society and to use only institutionalized instruments for reaching their purposes but do not offer the same access to these instruments [35]. Another American sociologist, Edwin R. Sutherland, has as his main statement that any criminal activity is learned as well as the conventional behaviour and the individual is forced to choose between contradictory norms: in favour of criminal behaviours or the opposite ones. Sutherland and Cressey [36] formulated some statements which, together, represent a theory of differential association. Briefly, few of these statements are: a) criminal behaviour is learned, not inherited, and is the product of education; b) this behaviour is learned in interaction with other people through a process of communication (verbal or effective operations); c) the main content of learning criminal behaviour is the result of influences exerted by intimate and personal groups (mass-media play a secondary role); d) a person becomes delinquent due to excessive exposure to pro-infringement definitions, to the detriment of counter- infringement definitions. This is, in fact, the principle of differential association.

Organised crime is an extended phenomenon, and it represents a threat for any society that passes through a transition process. The Western societies have clearly defined this phenomenon. In the United States, "organized crime refers to those self-perpetuating associations of individuals who operate internationally for the purpose of obtaining power, influence, monetary and/or commercial gains, wholly or in part by illegal means, while protecting their activities through a pattern of corruption and /or violence" [37]. For the Europeans, with few partial exceptions (The Netherlands and Spain), "organized crime constitutes the planned commission of criminal offenses to

acquire profit or power. Such criminal offenses must be, each or in their entirety, of a major significance and be carried out by more than two participants who cooperate within a division of labour for a long or undetermined time-span using a) commercial or commercial-like structures, b) violence or other means of intimidation, or c) influence on politics, media, public administration, justice, and legitimate economy"[38]. The activities generally accepted as being part of the organized crime, according to United Nations Office on Drugs and Crime (UNODC), are money laundering, fraud, human trafficking, smuggling of migrants, firearms trafficking, drug production / trafficking, trafficking of goods, counterfeiting. This wide area of activities included in organised crime offers a good understanding of the diversity and complexity of behaviours that foreign investors need to consider when deciding to invest abroad.

3. Data and Research Methodology

Our main purpose is to find some institutional and societal indicators from the areas of social - quality of life and legal layers that could diagnose the state of economic health and reveal risks or vulnerabilities in some Central Eastern Europe countries, which may correlate significantly with the main economic indicators (GDP - per capita and Foreign Direct Investments). These correlations will be relevant in at least several aspects: (i) economic behaviour may generate specific legal and social consequences; (ii) legal and social conditions favour economic behaviour; (iii) social - quality of life and legal indicators could signal risks, vulnerabilities, or a healthy proper environment for foreign investments.

These hypotheses and the findings will consider the following explanatory notes regarding our research: (1) It takes time for an economic decision to produce an impact, also for a social and legal policy. These delays and the rather small period we analysed can affect the accuracy of measurement. Hence, we will follow the phenomenon in order to get an extensive and more accurate understanding; (2) The findings of this research do not necessarily represent definitive explanations, but can provide a certain dynamic of some indicators for the given period and countries; (3) The numbers that compose all these indicators are official data provided by the official organisations; (4) A correlation does not necessarily explain causally the relation between two variables but the large amount of significant correlations we found encourages us to work on finding some valid and valuable explanations; (5) The interpretation process of these correlations requires a cautious approach (slightly insufficient amount of data - e.g. - we wanted to include other indicators but we did not find sufficient information). They can facilitate an opening to deepen the subject.

The data set used in this study comprises indicators in four Central Eastern European countries, all members of European Union – Bulgaria, Hungary, Poland, and Romania during the period January 2009 – December 2019, with annual frequency. We have selected these countries mainly because of data availability. We have also selected this time span being aware of the global financial crisis (2008 - 2009) and trying to avoid the global healthcare crisis provoked by the coronavirus. The indicators we have selected come from the economic field (GDP per capita and EU direct investments), the field of

education (Population by educational attainment level, Early leavers), economic security (Labour transitions by employment status, Arrears), and the legal field (Legal cases first instance/ Criminal court, Legal cases first instance Civil – commercial court, Recorded offences assault, Corruption perception index).

The most common difficulties we faced on researching organized crime were that some countries do not have statistical systems in place to record organized crime and data on various organized crime activities are not reported because of confidentiality or secrecy clauses. Finally, some EU countries do not report completely their records on some organized crime activities to the organizations in charge with collecting and processing such data (Eurostat, UNODC). Given this lack of available information, we have chosen to take a look at the judicial systems in all analysed countries and verify if they are prepared to identify and manage the criminal, civil, commercial and administrative situations in their societies.

We defined three main categories of indicators: Economic, Legal and Social – quality of life. We considered the values and intensity of the correlations (positive, negative, close to zero) on each indicator and categories of indicators, as well as on the comparisons between countries. Also, we assessed the statistical significance of correlations, which gives us an objective measure of the reliability of the indicators. The definitions are presented in Table 1.

TABLE 1: Indicators used in research

Category	Indicator	Definition	Source
Economic	GDP (per capita)	GDP is equal to the sum of the gross value added of all resident institutional units engaged in production, plus any taxes on products and minus any subsidies on products.	Eurostat
	EU FDI	It measures the total value of direct investment at a given point in time. For the current research we have chosen the aggregate statistical observations which indicate the investments that come from the EU countries.	Eurostat
Legal	Legal cases first instance - Criminal	Any cases processed by legal status of the court process. Crimes are classified by the International Classification of Crime for Statistical Purposes (ICCS). Legal status is classified according to United Nations Office on Drugs and Crime definitions.	Eurostat
	Legal cases first instance - Civil - Commercial	Any cases processed under national civil/commercial law, both litigious and non-litigious.	Eurostat
	Convicted persons brought before criminal courts	It counts persons brought before criminal courts by legal status of the court process.	Eurostat
	Acquitted persons	It counts the number of persons brought before criminal courts by legal status of the court process.	Eurostat
	Recorded offences assault	It counts only the “assault” category recorded by the police. Eurostat defines other few categories (Intentional homicide, Sexual violence, Rape, Sexual assault, and theft) but we considered for our research only the “assault” category.	Eurostat

Category	Indicator	Definition	Source
	Corruption perception index	The CPI scores and ranks countries/territories based on how corrupt a country's public sector is perceived to be by experts and business executives. It is a composite index, a combination of 13 surveys and assessments of corruption, collected by a variety of reputable institutions. The CPI is the most widely used indicator of corruption worldwide.	Transparency International
Social - quality of life	Severe material deprivation	Material deprivation refers to a state of economic strain and durables, defined as the enforced inability (rather than the choice not to do so) to pay unexpected expenses, afford a one-week annual holiday away from home, a meal involving meat, chicken or fish every second day, the adequate heating of a dwelling, durable goods like a washing machine, colour television, telephone or car, being confronted with payment arrears (mortgage or rent, utility bills, hire purchase instalments or other loan payments).	Eurostat
	Income - Consumption per capita	Actual individual consumption, abbreviated as AIC, refers to all goods and services consumed by households. It encompasses consumer goods and services purchased directly by households, as well as services provided by non-profit institutions and the government for individual consumption (e.g., health and education services). In international comparisons, the term is usually preferred over the narrower concept of household consumption, because the latter is influenced by the extent to which non-profit institutions and general government act as service providers.	Eurostat
	Income - Unemployment rate	An unemployed person is someone aged 15 to 74 (in Italy, Spain, the United Kingdom, Iceland, Norway: 16 to 74 years) without work during the reference week, available to start work within the next two weeks (or has already found a job to start within the next three months) and actively having sought employment at some time during the last four weeks.	Eurostat
	Health - life expectancy	It is the mean additional number of years that a person can expect to live, if subjected throughout the rest of his or her life given the current mortality conditions (age-specific probabilities of dying, i.e. the death rates observed for the current period).	Eurostat
	Education – Population by educational attainment	It counts levels of education by country, age group and sex of the population.	Eurostat
	Education - Early leavers	An early leaver is a person aged 18 to 24 who has completed at most lower secondary education and is not involved in further education or training. The indicator 'early leavers from education and training' is expressed as a percentage of the people aged 18 to 24 with such criteria out of the total population aged 18 to 24.	Eurostat

Category	Indicator	Definition	Source
	Economic security - Arrears	Include housing (mortgages or rental) utility bills or purchase payments which are typically paid as monthly instalments. Excludes overdrafts, credit cards, or informal loans from friends and/or relatives.	Eurostat
	Economic security - Labour transitions by employment status	It shows the movements of individuals between employment, unemployment and economic inactivity.	Eurostat

Source: The authors

4. Results

We present our results in two stages: first, we examine correlations between legal indicators, social indicators, and GDP per capita for all four countries included in the analysis; second, we consider each country and detail the analysis conducted in the first stage.

4.1. Results for all countries

Table 2 shows the correlations between Severe material deprivation and legal indicators for the four countries considered in our research. The only significant correlation when Severe material deprivation is related to Legal cases first instance (Criminal court) is for Romania -0.875. Apparently, this correlation signals a contradiction, in the sense that a decrease in severe material deprivation (from 29.5 in 2011 to 14.5 in 2019) should normally contribute to a decline in criminal activities. But we should consider an additional information: the acceleration of the justice reform process in Romania. This explains the constant increase of the number legal cases (from 167,770 in 2009 to 383,576) and, consequently, in this specific case of Romania, the increase of legal cases first instance (criminal court) does not mean that criminal activities increased but most probably that criminal prosecutors have become more effective in bringing the cases to the court, which is a positive development. According to results, Hungary and Poland find themselves in similar situations (increase legal cases criminal first instance and a decrease of severe deprivation) but not as significant as Romania. Bulgaria also recorded a decrease of severe material deprivation but, simultaneously, a fluctuation of the number of increase legal cases criminal first instance.

For Legal cases first instance Civil/Commercial there are two significant correlations, for Poland and Romania (-0.862 and -0.718). Besides, all four countries reported a constant and significant increase of the Legal cases first instance Civil / commercial over the analysed period. The reasonable interpretation is similar with the previous one, in the sense that civil and commercial prosecutors have become more effective in bringing the cases to the court, but with different levels of intensity and significance in each analysed country.

Table 2: Correlations between Severe material deprivation and Legal indicators

	Bulgaria	Hungary	Poland	Romania
Legal cases first instance/ Criminal	-0.132	-0.204	0.660	-0.875**
Legal cases first instance Civil /Commercial	0.313	-0.132	-0.862**	-0.718*
Legal cases first instance / administrative	-0.339	-0.062	0.103	0.745*
Convicted Persons brought before criminal courts	0.907**	0.559	0.894**	0.889**
Acquitted Persons brought before criminal courts	0.880**	0.855**	0.966**	-0.323
Recorded offences assault	-0.461	0.572	0.920**	0.865**
Corruption Perceptions Index	-0.616	0.960**	-0.053	-0.447

Notes. ** - Correlation is significant at the 0.01 level (2-tailed). * - Correlation is significant at the 0.05 level (2-tailed).
Source: Authors' calculations

Regarding the administrative cases, it is worth mentioning that the only significant correlation is in the Romanian case (0.745), despite many ups and downs in the raw data. Other significant correlations of Severe material deprivation indicator were found with Legal solutions - Convicted Persons brought before criminal courts (Bulgaria – 0.907; Poland – 0.894; Romania – 0.889), and Acquitted persons brought before criminal courts (Bulgaria – 0.880, Hungary – 0.855, Poland - 0.966). These can be reasonably interpreted as efforts of the analysed societies to adjust their normative systems by helping them become more effective. All these efforts are also organically connected, in different manners, with this social indicator - Severe deprivation of individuals.

Table 3 presents the correlations between legal indicators and Economic Security – Arrears. This interpretation of results should start by mentioning that in all four countries the raw data shows a descending trend of the (Economic security) Arrears indicator. This comparison shows many similarities between Poland and Romania: four significant pairs of correlations with Legal cases first instance /Criminal (0.793 and -0.843), Legal cases first instance Civil/commercial (-0.645 and -0.843), Convicted Persons brought before criminal courts (0.737 and 0.792) and Recorded offences assault (0.716 and 0.960**). At the same time, the correlation with Legal cases first instance Civil / commercial is significant for three out of four countries, which may prove that in all these countries one of the main challenges for decreasing the individual arrears is the commercial field and/or the civil/commercial trials help clarifying litigious situations both for individuals and society.

Even though the "Population by educational attainment" indicator correlates significantly and negatively with many indicators from the "Legal" category of indicators – see Table 4, we must take into account that, normally, many policies reflected in the "Education" category of indicators need time to produce effects or to reflect the influence that comes from the "economic" or "legal" categories of indicators. Any interpretation of the correlations within Table 4 should be made precautious. Ideally, we would also need a significantly longer time horizon to monitor the indicators and the respective correlations (preferably more than years).

Table 3: Correlations between Economic security - Arrears and Legal indicators

	Bulgaria	Hungary	Poland	Romania
Legal cases first instance / Criminal	-0.573	-0.260	0.793**	-0.843**
Legal cases first instance Civil / commercial	-0.807*	-0.169	-0.645*	-0.843**
Legal cases first instance / administrative	-0.620	-0.143	0.087	0.535
Convicted Persons brought before criminal courts	-0.060	0.513	0.737*	0.792**
Acquitted persons brought before criminal courts	-0.164	0.831**	0.801**	-0.240
Recorded offences assault	0.271	0.575	0.716*	0.960**
Corruption Perceptions Index	-0.286	0.971**	0.048	-0.617

Notes. ** - Correlation is significant at the 0.01 level (2-tailed). * - Correlation is significant at the 0.05 level (2-tailed).
Source: Authors' calculations

Table 4: Correlations between Population by educational attainment and Legal indicators

	Bulgaria	Hungary	Poland	Romania
Legal cases first instance / Criminal	0.009	0.631	-0.589	0.880**
Legal cases first instance Civil / commercial	-0.592	0.444	0.883**	0.717*
Legal cases first instance / administrative	0.061	0.474	0.000	-0.652
Convicted Persons brought before criminal courts	-0.977**	-0.854**	-0.917**	-0.893**
Acquitted Persons brought before criminal courts	-0.961**	-0.838**	-0.982**	0.103
Recorded offences assault	0.530	-0.924*	-0.949**	-0.843**
Corruption Perceptions Index	0.500	-0.880**	-0.064	0.558

Notes. ** - Correlation is significant at the 0.01 level (2-tailed). * - Correlation is significant at the 0.05 level (2-tailed).
Source: Authors' calculations

Going further to the correlations between GDP per capita and Legal indicators, evidenced in Table 5, two observations are noteworthy: first, in all four analysed countries the raw data shows an ascending trend for GDP (per capita), as the CEE countries included in the analysis have exhibited significant levels of growth over the past decade, particularly after joining the EU; second, GDP (per capita) seems to correlate consistently with many indicators from the "Legal" category. In all four countries GDP and "Convicted persons brought before criminal courts" display significant negative correlations. Hence, the higher the GDP per capita is, the smaller number of convictions in criminal courts becomes. This conclusion should be considered precautious by considering the specific differences in each society and the delays between the decisions and the effect). Moreover, in three out of four countries (except Romania) the correlation between GDP and Acquitted persons is significant and negative. Romania is the only case out of four in which GDP and EU FDI correlate significantly. The reasonable conclusion is that

both layers (legal and economic) of the four societies relate to each other in different manners. Further research will reveal some specific connections between them.

Table 5: Correlations between GDP per capita, EU FDI and Legal indicators

	Bulgaria	Hungary	Poland	Romania
GDP - EU FDI	-0.447	0.009	-0.092	0.871**
GDP - Legal cases. first instance. / Criminal	0.324	0.499	-0.606	00.962**
GDP - Legal cases first instance. Civil - commercial	-0.165	0.319	0.893**	.637*
GDP - Convicted persons brought before criminal courts	-0.954**	-0.778**	-0.874**	-0.653*
GDP - Acquitted persons	-0.788**	-0.851**	-0.966**	0.186
GDP - Recorded offences assault	-0.359	-0.579	-0.928**	-0.765**
GDP - Corruption perception index	0.560	-0.952**	-0.280	0.213

Notes. ** - Correlation is significant at the 0.01 level (2-tailed). * - Correlation is significant at the 0.05 level (2-tailed).
Source: Authors' calculations

For what concerns the correlations between GDP per capita and (Social) Quality of life indicators – see Table 6 - most probably, the increase in GDP per capita seems to have consistent logical consequences in all four analysed countries: it helped increasing the individual consumption, decreasing unemployment, decreasing individual arrears, eased employment transitions, and supported higher educational attainment levels. In other words, the economic layer within the four societies seems to have had a very consistent impact on individual income, education, and health.

Table 6: Correlations between GDP per capita and Social – Quality of life indicators

	Bulgaria	Hungary	Poland	Romania
(Income) consumption per capita	0.982**	0.963**	0.930**	0.989**
(Income) Unemployment rates	-0.716*	-0.942**	-0.879**	-0.955**
(Health) Life expectancy	0.838**	0.741*	-0.879**	0.807**
Population by educational attainment level	0.818**	0.941**	0.971**	0.941**
(Education) Early leavers	0.150	0.630*	-0.678*	-0.555
(Economic security) Arrears	-0.491	-0.945**	-0.891**	-0.898**
(Economic security) Labour transitions by employment status	-0.751**	-0.857**	-0.881**	-0.838**

Notes. ** - Correlation is significant at the 0.01 level (2-tailed). * - Correlation is significant at the 0.05 level (2-tailed).
Source: Authors' calculations

At the same, some slightly unusual correlations are presented in Table 6. First, the GDP per capita – (Health) Life expectancy is -0.879 in Poland, which might be signal that the increase in GDP per capita contributes to the decrease of (Health) Life expectancy. Looking at the raw data, we can easily notice three slight points of decrease in Life expectancy in Poland (77.5 years in 2015 against 77.8 in 2014, 77.8 in 2017 and 77.7 in 2018 against 78.0 in 2016), which may be the cause of this unusual correlation. However,

the big picture reveals that life expectancy has constantly increased from 75.4 years in 2007 to 77.7 years in 2018, hence the unusual negative correlation is most likely due to the time horizon selected, i.e., over a longer period we would have obtained a positive correlation, which is supported by the data. Second, GDP per capita and (Education) Early leavers show a positive correlation of 0.630 in Hungary. At first sight one may interpret this result as indicating that the increase in GDP per capita contributes to the increase of (Education) Early leavers. However, looking at the raw data, we notice that (Education) Early leavers has constantly but slightly increased during the analysed period, from 11.7 in 2008 to 11.8 in 2019 with an increasing trend (12.4 in 2016, 12.5 in 2017 and 2018). However, in this case, a social policy and its related decisions take time to produce an effect. At the same time, most probably, the GDP per capita is not the only factor that correlates with the (Education) Early leavers indicator.

4.2. Results for individual countries

For *Bulgaria*, Table 7 shows the correlations between GDP per capita, EU FDI and Legal indicators. The correlation between GDP per capita and EU FDI is -0.447, negative but statistically insignificant, which can be reasonably interpreted by examining the raw data: within the analysed period, GDP has risen slightly but steadily in Bulgaria, while the EU FDI has decreased constantly and some sudden decline values of EU FDI have been recorded. Since the period under consideration encompassed the follow-up of the Global financial crisis in 2007-2009 and the European sovereign debt crises (2010-2012), it is natural that the increase of uncertainty has led to declines in FDI flows towards Bulgaria (and not only). In such conditions, these two indicators could not have chances to be significantly correlated. GDP per capita correlates significantly with only two indicators: Convicted persons brought before criminal courts (-0.954) and Acquitted persons brought before criminal courts (-0.788). Both these correlations deal with the final act of the judicial processes and the trend of both indicators is decreasing, while the trends of Recorded offences assault and the Legal cases first instance/criminal remained constant for the analysed period. Two reasonable interpretations of all this data could be drawn: (i) the judicial processes tended to face difficulties in giving solutions, which is especially true in the case of emerging economies with evolving (and often incomplete) legal frameworks; and (ii) we can imply a desynchronization between the economic and the judicial layers of the Bulgarian society. This desynchronisation represents a possible cause of the fluctuations of the EU FDI that can manifest itself beyond the period considered.

EU FDI correlates significantly with other two indicators: Legal cases first instance Civil – commercial (0.755, significant at the 0.05 level) and Recorded offences assault (0.658 - significant at the 0.05). It is noticeable that in the case of Legal cases first instance Civil – commercial indicator the trend of raw data remains constant. We do not have raw data regarding the decisions of commercial courts so we cannot draw any conclusion about a desynchronisation with the economic layer in the Bulgarian society. We do not have any further information that would help us gain a reasonable understanding of the second significant correlation.

Table 7: Bulgaria: Correlations between GDP per capita, FDI and Legal indicators

	Gross Domestic Product per capita	EU direct investment flows
EU direct investment flows	-0.447	1
Legal cases First instance / Criminal	0.324	0.626
Legal cases first instance Civil - commercial	-0.165	0.755*
Convicted persons brought before criminal courts	-0.954**	0.446
Acquitted persons brought before criminal courts	-0.788**	0.154
Recorded offences - Assault	-0.359	0.658*
Corruption Perceptions Index	0.560	-0.263

Notes. ** - Correlation is significant at the 0.01 level (2-tailed). * - Correlation is significant at the 0.05 level (2-tailed).
Source: Authors' calculations

GDP (per capita) correlates significantly with many indicators in the Income, Health and Education categories (see Table 8): Income consumption per capita - 0.982), Income unemployment – 0.718, (Health) Life expectancy – 0.838, and Population by educational attainment – 0.818. Hence, it is reasonable to imply that GDP evolution over time has significantly contributed to these indicators' evolution. It is also remarkable that the GDP per capita and no other indicator does not correlate significantly with Economic security - arrears. We do not have enough data to identify some possible explanations, but it remains a distinct direction of future research on the topic. As expected, the EU FDI does not correlate significantly with any of the Social – quality of life indicators, most probably because foreign direct investments are not directly and immediately reflected in the quality of life.

Another indicator that correlates significantly with many others is Population by educational attainment level: with GDP per capita – 0.818. with (Income) - consumption per capita – 0.825, with (Income) - Unemployment rates - -0.786, with (Health) life expectancy – 0.789, and with Early leavers – 0.746. The last one is apparently contradictory with the others, but we do not have yet relevant information that would help us understand it.

In the case of *Hungary*, Table 9 presents the correlations between GDP per capita, EU FDI flows and Legal indicators. The GDP per capita – EU FDI correlation is 0.009 and is statistically insignificant correlation, a result that can be reasonably interpreted by the small but steady GDP per capita growth in Hungary between 2009 and 2019, while the EU FDI values were negative due to higher investment outflows - investments made by Hungary in other countries – than FDI inflows. GDP per capita corelates insignificantly with Legal cases first instance (criminal) and Legal cases first instance civil / commercial but correlates significantly with the indicators that signal the final of the trials (Convicted persons brought before criminal courts – -0.778 and Acquitted persons brought before criminal courts - -0.851). Looking at the raw data, we notice that the number of legal cases first instance both criminal and civil-commercial has slightly

Table 8: Bulgaria: Correlations between GDP per capita, FDI and Social – Quality of life indicators

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
EU direct investment flows (1)	-0.447	1							
Income - Severe material deprivation (2)	-0.943**	0.364	1						
Income consumption per capita (3)	0.982**	-0.537	-0.951**	1					
Income Unemployment rates (4)	-0.716*	-0.153	0.926**	-0.630*	1				
Health - Life expectancy (5)	0.838**	-0.546	-0.651	0.853**	-0.157	1			
Population by educational attainment level (6)	0.818**	-0.341	-0.877**	0.825**	-0.786*	0.789*	1		
(Education) Early leavers (7)	0.150	0.351	-0.612	0.090	-0.571	-0.211	0.746*	1	
Economic security -Arrears (8)	-0.491	0.124	0.316	-0.509	0.403	0.030	0.101	0.134	1
Economic security - Labour transitions by employment status (9)	-0.751**	0.385	0.560	-0.787**	0.407	-0.794**	-0.610	-0.309	0.270

Notes. ** - Correlation is significant at the 0.01 level (2-tailed). * - Correlation is significant at the 0.05 level (2-tailed).
Source: Authors' calculations

increased during the analysed period. So, the trials that started had longer terms to be solved or they ended by not being solved at all. Hence, as in the case of Bulgaria, we notice a desynchronisation between the economic and judicial layers of the Hungarian society.

Another significant correlation is between GDP per capita and the Corruption Perceptions Index: -0.952. This correlation reflects a quite high sensitiveness of the Hungarian social perception towards the activity of the central administration and the way in which the public spending is made. A reasonable interpretation is that the higher GDP is (and consequently, higher individual income and consumption) the better social perception is and the lower suspicion towards corruption is. This is only a perception and does not exclude the probability of corruption in society at large. As in the case of Bulgaria, the EU FDI does not correlate significantly with any of the "legal" indicators.

Table 10 shows the correlations between EU FDI, GDP per capita and Social (Quality of life) indicators. The most noticeable aspect of this matrix of correlations is that GDP per capita correlates significantly with all the Social – quality of life indicators. Thus, the Hungarian GDP seems to have a positive influence on increasing individual consumption (correlation of 0.963), on reducing unemployment (correlations -0.942), on increasing life expectancy (correlation 0.741), and on reducing the individual arrears (0.945). As in the Bulgaria's case we notice a significant correlation with (Education) early leavers

TABLE 9: Hungary: Correlations between GDP per capita, FDI and Legal indicators

	Gross Domestic Product per capita	EU direct investment flows
EU direct investment flows	0.009	1
Legal cases first instance / Criminal	0.499	-0.055
Legal cases first instance Civil - commercial	0.319	0.050
Legal cases first instance / administrative	0.374	0.228
Convicted Persons brought before criminal courts	-0.778**	0.187
Acquitted Persons brought before criminal courts	-0.851**	0.404
Recorded offences assault	-0.579	0.228
Corruption Perceptions Index	-0.952**	-0.234

Notes. ** - Correlation is significant at the 0.01 level (2-tailed). * - Correlation is significant at the 0.05 level (2-tailed).
Source: Authors' calculations

(0.630), which seems somehow contradictory with the entire logic of the matrix. We do not have yet enough information to provide an accurate interpretation of this result.

TABLE 10: Hungary: Correlations between GDP per capita, FDI and Social – Quality of life indicators

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
EU direct investment flows (1)	0.009	1							
Income - Severe material deprivation (2)	-0.953**	0.104	1						
Income consumption per capita (3)	0.963**	0.076	-0.954**	1					
Income Unemployment rates (4)	-0.942**	0.197	0.934**	-0.900**	1				
Health - Life expectancy (5)	0.741*	-0.421	-0.637	0.869**	-0.778**	1			
Population by educational attainment level (6)	0.941**	-0.056	-0.853**	0.923**	-0.927**	0.870**	1		
(Education) Early leavers (7)	0.630*	-0.213	-0.564	0.631*	-0.712*	0.736*	0.463	1	
Economic security -Arrears (8)	-0.945**	0.033	0.992**	-0.862**	0.909**	-0.488	-0.859**	-0.582	1
Economic security - Labour transitions by employment status (9)	-0.857**	0.203	0.856**	-0.900**	0.900**	-0.904**	-0.914**	-0.799**	0.723*

Notes. ** - Correlation is significant at the 0.01 level (2-tailed). * - Correlation is significant at the 0.05 level (2-tailed).
Source: Authors' calculations

For *Poland,* the correlations between GDP per capita, EU FDI flows and Legal indicators are presented in Table 11. First, it worth mentioning that the Polish GDP per capita has constantly increased during the analysed period. The GDP per capita - EU FDI correlation is -0.092 and is statistically insignificant, which may indicate that EU FDI flows into Poland are rather disconnected from economic growth and multinational companies that invest in Poland seek other advantages than an increasing output market. Legal cases first instance (criminal) and GDP per capita correlation is -0.606 and the correlation between Legal cases first instance (criminal) and EU FDI is -0,194, both insignificant. This may mean that the legal activity regarding individual criminality does not influence directly or does not affect the local or foreign investments and public and/or private wealth levels. In exchange, the correlation between Legal cases first instance Civil (commercial) and GDP per capita is 0.893, which may be interpreted as a recurrent signal that justice works encourage investments, either local or from the EU countries. Furthermore, we can imply that the citizens in Poland are mostly interested in justice activities, most probably because the latter are perceived as activities that are highly connected with their direct interest.

Table 11: Poland: Correlations between GDP per capita, FDI and Legal indicators

	Growth Domestic Product per capita	EU direct investment flows
EU direct investment flows	-0.092	1
Legal cases first instance / Criminal	-0.606	-0.195
Legal cases first instance Civil - commercial	0.893**	-0.140
Legal cases first instance / administrative	0.289	-0.172
Convicted Persons brought before criminal courts	-0.874**	-0.118
Acquitted Persons brought before criminal courts	-0.966**	-0.188
Recorded offences assault	-.928**	-0.137
Corruption Perceptions Index	-0.280	0.716*

Notes. ** - Correlation is significant at the 0.01 level (2-tailed). * - Correlation is significant at the 0.05 level (2-tailed).
Source: Authors' calculations

The 0.874 correlation between GDP per capita and Convicted persons before criminal court should be interpreted together with another significant correlation, between GDP per capita and Recorded offences assault (0.928). The convictions pronounced by the criminal courts do not involve assaults only, but the fact that both legal indicators, part of the same activity within the justice system, correlate significantly negatively with the GDP per capita goes in the same direction. Furthermore, looking at the raw data, we notice a quite high and constant difference during the analysed period between the number of convicted persons brought before criminal courts in comparison with the number of acquitted persons before criminal courts (440,225 persons convicted versus 11,931 acquitted in 2009, 372,343 convicted versus 10,594 acquitted in 2013, and 285,522 convicted versus 8,424 acquitted in 2018). This shows that the Polish justice system works in the direction of punishing and discouraging criminal activities.

The results for Poland presented above encourage us to imply that the GDP per capita and the indicators that signals the activity of the mentioned indicators influence each other and they contribute for the benefit of the Polish society. Concluding, for the specific case of Poland, there is at least one reasonable conclusion that can be drawn: the economy and this feature of the justice system work together and help each other.

Table 12 shows the other correlation matrix for Poland, which encompasses EU FDI, GDP per capita and Social – Quality of Life indicators. We already know for Poland the GDP per capita is insignificantly correlated with EU FDI and, consequently no significant interdependence between the two variables exists. For the matrix in Table 12, the first and important observation is that all the Social - Quality of life indicators selected are significantly correlated with the GDP per capita and none of them are significantly corelated with the EU FDI. This means that EU FDI may influence the social indicators but not directly.

Table 12: Poland: Correlations between GDP per capita, FDI and Social – Quality of life indicators

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
EU direct investment flows (1)	-0.092	1							
Income - Severe material deprivation (2)	-0.944**	-0.163	1						
Income consumption per capita (3)	0.930**	-0.106	-0.930**	1					
Income Unemployment rates (4)	-0.879**	-0.131	0.978**	-0.876**	1				
Health - Life expectancy (5)	0.829**	0.178	-0.838**	0.873**	-0.572	1			
Population by educational attainment level (6)	0.971**	0.006	-0.977**	0.981**	-0.947**	0.859**	1		
(Education) Early leavers (7)	-0.678*	-0.267	0.899**	-0.826**	0.877**	-0.460	-0.865**	1	
Economic security -Arrears (8)	-0.891**	-0.187	0.944**	-0.796*	0.965**	-0.573	-0.890**	0.813**	1
Economic security – Labour transitions by employment status (9)	-0.881**	-0.257	0.958**	-0.890**	0.933**	-0.753*	-0.938**	0.815**	0.903**

Notes. ** - Correlation is significant at the 0.01 level (2-tailed). * - Correlation is significant at the 0.05 level (2-tailed).
Source: Authors' calculations

Discussing the GDP per capita corelations, it is easy to notice that its GDP per capita comes together with the increase of consumption per capita (correlation 0.930) and the increase of population by educational attainment (0.971). At the same time, it comes together with the decrease of unemployment rate (0.879), the decrease of Education – early leavers (-0.678), the decrease of Economic Security – Arrears, and the decrease of Economic security – Labour transitions by employment status. According to these

correlations, the economic and social policies in Poland seem to be well synchronised. The public and private investments and consumption pay a significant attention to the individual and its needs.

In Poland, economy and justice work together and help each other and, even more important, justice works, it is quite efficient (a trial that starts has a clear verdict in a reasonable period. Thus, the Polish economy seems to be synchronised both with the justice and the social fields. Consequently, we can affirm that in these conditions the risks that are associated with the organised crime and corruption are quite low.

When Romania is analysed, the correlations between GDP per capita, FDI and Legal indicators are presented in Table 13, while correlations between GDP per capita, FDI and Social – Quality of life indicators are shown in Table 14. The GDP per capita – EU FDI correlation is 0.871, indicating a strong interdependence between the two variables. This could reasonably mean that the foreign direct investments had an important contribution to the Romanian economic growth and, regularly, the EU investors are both interested in the structure of the GDP with an emphasis on private and public consumption. Legal cases first instance (criminal) and GDP per capita also show very high and positive correlation (0.962), also statistically significant at the 0.01 level). A reasonable interpretation of this correlation could be that for the Romanian society, a higher efficiency of the legal system, which brings before the court a large amount of criminal cases, is reflected positively in economic growth.

Table 13: Romania: Correlations between GDP per capita, FDI and Legal indicators

	Growth Domestic Product per capita	EU direct investment flows
EU direct investment flows	0.871**	1
Legal cases first instance / Criminal	0.962**	0.903**
Legal cases first instance Civil - commercial	0.637*	0.680*
Legal cases first instance / administrative	-0.233	-0.366
Convicted Persons brought before criminal courts	-0.653*	-0.831**
Acquitted Persons brought before criminal courts	0.186	-0.102
Recorded offences assault	-0.765**	-0.758*
Corruption Perceptions Index	0.213	0.832*

Notes. ** - Correlation is significant at the 0.01 level (2-tailed). * - Correlation is significant at the 0.05 level (2-tailed).
Source: Authors' calculations

The correlation between Legal cases first instance (criminal) and EU FDI is 0.903, which supports the previous conclusion that the more action of the justice is perceived, the bigger EU FDI in Romania was. The correlations between Legal cases first instance (commercial) and GDP and between Legal cases first instance (commercial) and FDI are also high and statistically significant at 0.05 level – 0.637 and 0.680, respectively – and they also back up the idea that a justice that works encourages investments, either local or from the EU countries. In this context, it is worthy to be mentioned that

starting with 2014 the number of commercial trials (first instance) in Romania has doubled (from 605,608 to 1,261,328) while the EU FDI remained constant until 2016, when the level reached 4,383.4 million euros (from 2,942.6 in 2015). Thus, the main economic indicators of interest in this research (GDP and FDI - as they were defined previously) correlate significantly and positively with the main legal indicators. In other words, the economic environment and actions, on the one hand, and the legal system, on the other hand, rely on each other. Moreover, the cleaner and predictable the environment is, the healthier foreign and local investments will appear. An important role is played by the social context and the social perception that the Romanian justice has started to work in an efficient manner, after quite a long period of inefficiency. It is also worthy to be mentioned that Legal cases first instance (criminal) and Legal cases first instance (commercial) were constantly increasing during the analysed period.

The correlation between Convicted persons (criminal) and GDP is in the negative area (-0.653), as well as the one between Convicted persons (criminal) and EU FDI (-0.831), between Convicted persons (criminal) and Legal cases first instance (criminal) (-0.664), and between Convicted persons (criminal) and Legal cases first instance administrative (0.728), all significant at 0.05 or 0.01 level. These appear somehow contradictory with the previous group of correlations. Apparently, the investors are happy with a working justice, as more trials (on criminal and commercial) mean growing investments, but they are not happy with final act of justice (conviction). Consequently, too many convictions could mean instability and unpredictability, so the decision to invest may be seen as too risky. But this type of explanation is a consequence of comparing data on a contemporaneous basis and does not take into account that many economic decisions are based on some previous amount of data and information and produce their effects after a period of time (they need time to be implemented). A more interesting, in our opinion, explanation is the following: if we take a closer look at the Convicted persons (criminal) variable we notice a sharp increase from 2009 to 2010, a plateau until 2015 (included) and a sharp decrease at the end of 2016. At the same time, the FDI values were constantly increasing followed by a consistent increase in 2016. Hence, there are two inflection points, one for each variable. In addition, as we already mentioned, the variables regarding the trials were constantly increasing during the analysed period. A reasonable conclusion is that the increase of the EU FDI is partially due to the progress of the judicial system and the sudden brake of the justice system was not anticipated by the foreign investors at the beginning of 2017.

When we observe the correlations between Recorded offences assault and GDP, on the one hand, and FDI, on the other hand, they are both statistically significant at 0.01 and 0.05 levels and are quite high - 0.765 and 0.758, respectively. Moreover, the correlation between Recorded offences assault and legal cases first instance (criminal) is 0.725, and between Recorded offences assault and Legal cases first instance (commercial) is -0.937. They also represent a group of significant correlations from which we can extract a conclusion which is convergent with the previous ones: the less recorded offences are, the more substantial investments are in terms of GDP and FDI. In other words, the business environment is quite sensitive to the general normative environment of the Romanian society. This conclusion could be completed with the idea that this result of

EU FDI is also the result of economic growth: as GDP increases, so does the degree of economic inclusion.

Table 14: Romania: Correlations between GDP per capita, FDI and Social – Quality of life indicators

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
EU direct investment flows (1)	1								
Income - Severe material deprivation (2)	0.871**	1							
Income consumption per capita (3)	-0.975**	-0.855*	1						
Income Unemployment rates (4)	0.989**	0.844**	-0.961**	1					
Health - Life expectancy (5)	-0.955**	-0.875**	0.925**	-0.975**	1				
Population by educational attainment level (6)	0.807**	0.624	-0.745*	0.750*	-0.586	1			
(Education) Early leavers (7)	0.941**	0.883**	-0.940**	0.911**	-0.856**	0.838**	1		
Economic security -Arrears (8)	-0.555	-0.328	0.543	-0.540	0.613*	-0.109	-0.411	1	
Economic security – Labour transitions by employment status (9)	-0.898**	-0.842**	0.953**	-0.874**	0.841**	-0.606	-0.948**	0.301	1
EU direct investment flows (1)	-0.838**	-0.633	0.816**	-0.813**	0.709*	-0.931**	0-.921**	0.224	0.726*

Notes. ** - Correlation is significant at the 0.01 level (2-tailed). * - Correlation is significant at the 0.05 level (2-tailed).
Source: Authors' calculations

The first important remark related to results in Table 14 for Romania is many social indicators correlates both with GDP per capita and with EU FDI. As we already know from the raw data, GDP per capita is on an ascending trend during the analysed period and had the ability to significantly influence the decrease of material severe deprivation (-0.975 correlation), unemployment (-0.955), arrears (-0.898) and labour transitions by employment status (-0.838) and the increase of individual consumption and population by educational attainment (0.941). Unlike the other analysed countries, most of the Social - Quality of life indicators correlate significantly with EU FDI, most probably because the foreign direct investments play an important role for Romanian economic growth. It contributed significantly to the decrease of severe material deprivation (-0.855), unemployment rate (-0.875) and arrears. Simultaneously, it contributed to the increase of consumption per capita (0.844) and population by educational attainment (0.941).

The Romanian economy is strongly connected with EU foreign investments and, regularly, the EU investors are both interested in the structure of the GDP with an

emphasis on private and public consumption. At the same time, both the legal and social layers seem to create some unpredictability for the economic environment, and therefore Romania's economy vulnerability to corruption and organised crime is still significant.

5. Conclusions

Our research aimed at providing relevant and reasonable to the question of whether institutional and societal indicators may provide signals for foreign investors when deciding to enter CEE markets, building on indicators' ability to diagnose economic health and to indicate significant vulnerabilities and risks in the society that may, in the end, impact foreign investors' businesses. Our approach is exploratory and interdisciplinary in nature, as it examines the interaction between FDI and social and legal conditions in host countries from the CEE region.

As detailed described above, the economic indicators, FDI included, are correlated in many specific ways with the social and legal indicators. We found many statistically significant correlations between the economic, social and legal indicators for the four countries included in our analysis – Bulgaria, Hungary, Poland and Romania - which support the following main conclusions: (1) In all countries, some certain economic behaviours that are significantly correlated with the FDI generate some significant legal and social consequences; (2) In all countries, legal and social conditions favour some specific economic behaviours, including the decisions to invest in these given countries; (3) Several specific social and legal indicators signal some vulnerabilities that could encourage organised crime and corruption activities and consequently discourage the foreign investments; (4) In three out of four analysed countries (Bulgaria, Hungary, and Romania) various social and legal indicators signal some vulnerabilities that could encourages organised crime and corruption; of them, Poland seems to be more prepared than the three others in order to face corruption and organised crime.

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