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**DO VARIOUS FORMS OF CORRUPTION EXERT DIFFERENT EFFECTS ON ENTREPRENEURSHIP: EVIDENCE FROM CEE (POST)TRANSITION COUNTRIES**

**Valentina VUČKOVIĆ**

Associate Professor, University of Zagreb, Faculty of Economics and Business, Zagreb, Croatia  
E-mail: [vvuckovic@net.efzg.hr](mailto:vvuckovic@net.efzg.hr)

**Abel POLESE**

Associate Professor, School of Law and Government, Dublin City University, Dublin, Ireland; Visiting Professor (grant 1548), Faculty of Business and Administration, University of Bucharest, Bucharest, Romania  
E-mail: [abel.polese@dcu.ie](mailto:abel.polese@dcu.ie)

**Ružica ŠIMIĆ BANOVIĆ**

Full Professor, University of Zagreb, Faculty of Law, Zagreb, Croatia  
CERGE-EI Foundation Fellow  
E-mail: [ruzica.simic@pravo.unizg.hr](mailto:ruzica.simic@pravo.unizg.hr)

**Abstract**

The paper analyses the effect of different forms of corruption on entrepreneurship in a sample of Central and Eastern European countries: Albania, Bulgaria, Croatia, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Montenegro, North Macedonia, Serbia, Romania, Slovakia and Slovenia. The contribution of this paper is twofold. The paper contributes to the existing literature through panel data analysis of the effect of various forms of corruption on new business density rates in the 2006-2020 period. The types of corruption included in the analysis cover judicial, legislative, executive, and public sector corruption, and political corruption index as the aggregate measure. The results show that not all corruption types have the same effect on entrepreneurship. Aggregate measure of political corruption adversely affects formal entrepreneurship. However, three particular types of corruption – public sector corruption, legislative corrupt activities and judicial corruption – have opposite effects. While public sector corruption and legislative corrupt activities harm the new business density rate, it is shown that larger judicial corruption is positively related to the number of newly registered firms.

**Keywords:** *corruption, entrepreneurship, post-transition, Eastern Europe*

JEL codes: D73, L26, P2

## 1. Introduction

The existing literature on corruption and entrepreneurship is not concord with respect to their correlation so to suggest the existence of a complex multidimensional relation. On the one hand, corruption can be an obstacle to entrepreneurship and general development (Harrison, 1999; Laffont, 2006; Mauro, 1995; Palmier, 1983; Papava and Khaduri, 1997) by increasing business costs, reducing access to financial resources, diminishing institutional trust and creating an uneven playing field where only those with access to closed networks or resources can succeed (Acemoglu and Verdier, 2000; Anokhin and Schulze, 2009; Cheung, 1996; Kiltgaard, 1988; Rose-Ackerman, 1999, 2010; The World Bank, 1997). On the other hand, moral and ethical considerations apart (Kordonsky, 2012), corruption may be regarded as creating opportunities for entrepreneurship by enabling entrepreneurs to avoid burdensome regulations and bureaucratic processes (Morris and Polese, 2016), gain access to valuable resources and contracts, and build informal networks (e.g. Dreher and Gassebner, 2013; Leff, 1964; Mauro, 1995; Simic Banovic, 2015).

Embedded in the above debates, this paper relies on Aidt's (2009) approach, which suggests that different types of corruption may have different effects on entrepreneurship. In particular, he highlights the *grease the wheels* hypothesis, where corruption may be seen as boosting some economic performance, but which could apply only to isolated instances of corruption, and not to systemic corruption. Analysing the impact of corruption, or any other aspect related to the institutional environment, on entrepreneurship thus poses a challenge since the conceptual framework linking individual choices on becoming entrepreneurs with the institutional environment remains relatively underdeveloped (Aidis, Estrin and Mickiewicz, 2012). Corruption is a multidimensional phenomenon that surpasses mere economic incentives (Muramatsu et al., 2021; Rose-Ackerman and Palifka, 2016). Moreover, multidimensionality is reflected in both the definition and measurement of corruption. The most common definition of corruption found in literature is the one of the World Bank (1997), according to which corruption is the abuse of public office for private gain, and as such, covers a wide range of behaviour.

The starting research question (RQ) in this paper is what is the impact of different types of corruption (executive, legislative and judicial) on entrepreneurship, proxied by the new business density rates in Central and Eastern Europe (CEE) (post)transition countries. Realizing the above considerations, the main contribution of this research is two-fold. First, empirically, the paper analyses a number of post-socialist countries, some of

which are now EU members, but still record high corruption levels. The countries included in the analysis illustrate a diverse set of post socialist countries, which share common history, but have diverged due to following different paths of political and economic liberalization. The countries included in the analysis are Albania, Bulgaria, Croatia, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Montenegro, North Macedonia, Serbia, Romania, Slovakia and Slovenia. The data for corruption are retrieved from the Varieties of Democracy (V-Dem) database of the University of Gothenburg (Coppedge et al., 2023). Very often, micro and macro data portray different pictures, implying that various types of corruption could play different roles. Second, theoretically, this paper seeks to detangle the different forms of corruption to test the effects of each on entrepreneurship. We engage with the existing literature through panel data analysis of the effect of various forms of corruption on new business density rates in the 2006-2020 period. The results show that aggregate political corruption, as well as public sector corruption, adversely affect entrepreneurship. However, legislative corruption and judicial corruption have opposite effects. While legislative corruption also harms the new business density rate, it is shown that larger judicial corruption is positively related to the number of newly registered firms.

The outline of the paper is as follows. After the Introduction, Section 2 offers an overview of the existing literature on the relationship between corruption and entrepreneurship. Further, Section 3 delivers methodological considerations and descriptive analysis of the main variables - various types of corruption and entrepreneurship, and control variables. Section 4 discusses the obtained results. Finally, Section 5 offers some concluding remarks and ideas for further research.

## **2. Literature review and hypothesis development**

There is no firm and one-way agreement on the effect of corruption on entrepreneurial activity. Indeed, diverging results show that it can both positively and negatively affect entrepreneurial activity, depending on the specific context and circumstances. Some cases demonstrate the negative effect of corruption on entrepreneurship, and they prevail in the literature. In this line of research, while analysing nascent entrepreneurship and entry rate, Park and Shin (2022) suggest that the higher control of corruption is linked with more entrepreneurial endeavours. Further, Lepojević, Đukić and Stefanović (2019) analyse the impact of corruption on establishing new businesses through the analysis of the Western Balkan and the EU countries. The authors' results show that corruption negatively affects the establishment of new businesses, increasing the cost of starting a business and reducing the income that could be used for start-ups. This adverse effect is higher in countries with an insufficiently stable and underdeveloped macroeconomic environment, such as the Western Balkans, than in developed European countries. Further, Dempster and Isaacs (2017) examine the relationship between entrepreneurship, perceptions of corruption, and economic freedom. They show that, where

economic freedom is present, lower corruption positively affects entrepreneurship. However, some aspects of economic freedom, such as legal enforcement and property rights, may negatively impact entrepreneurial activity. Vorley and Willimas (2016) further examined the impact of corruption on entrepreneurship in transition economies (i.e. Romania and Bulgaria) and showed that corruption has adverse effects in terms of negative perception towards entrepreneurship, especially in a group of entrepreneurs with growth potential. They highlight that corruption weakens the dominant institutional framework and institutional reforms, which aim to develop entrepreneurship. Similar results were also obtained by Pathak, Xavier-Oliveira and Laplume (2015), who examined the moderating effect of corruption on entrepreneurial intentions. Specifically, the authors showed that corruption hampers individual entrepreneurial traits (self-efficacy, fear of failure and opportunity recognition) but strengthens the role of networks. Khyareh and Amini (2021) show that overall governance quality, including better control of corruption, has a significant positive impact on opportunity-driven entrepreneurship and an opposite impact on necessity-driven entrepreneurship. Avnimelech, Zelekha and Sharabi (2014) discovered that countries with high levels of corruption usually face low levels of productive entrepreneurship, with the results being more significant in developed than in developing countries.

Berdiev and Saunoris (2018), using cross-section data for more than 60 countries in the 2001–2010 period, found that corruption deters entrepreneurship in the formal sector and promotes informal entrepreneurship. Similarly, Aidis, Estrin and Mickiewicz (2012) found that freedom from corruption positively affects entrepreneurship. Dejardin and Laurent (2023) also show that corruption hinders the opportunity-based entrepreneurship, i.e. while corruption could have a positive effect on entrepreneurship by greasing the wheels of ineffective administrative machinery, the marginal effect of corruption is negative within the group of developed countries.

Following these findings, the main research hypotheses in this paper are the following:

*H<sub>1</sub>: Higher political corruption is negatively associated with new business density rate in CEE (post)transition countries.*

*H<sub>2</sub>: Higher public sector corruption is negatively associated with new business density rate in CEE (post)transition countries.*

However, some works suggest the opposite. Liu et al. (2018), analysing the effects of corruption on entrepreneurship in emerging countries based on microdata from 2002 to 2009, show that corruption has a nonlinear impact on entrepreneurship. They conclude that corruption promotes entrepreneurship when corruption levels are low, while high levels hinder entrepreneurship. Thus, according to them, corruption can have a diminishing effect on entrepreneurship. Similarly, Chowdhury, Audretsch and Belitski (2019)

showed that corruption acts as a grease the wheel of business, with the effect being stronger for developing countries, while in developed countries with higher-quality institutions it has a negative effect. Szyliowicz and Wadhvani (2007), when analysing the data on a sample of 175 countries, found that corruption has a positive effect on entrepreneurship. Vučković, Basarac Sertić and Šimić Banović (2016), on a sample of 23 EU countries for a 2001-2015 period obtained that higher corruption relates to increased entrepreneurial activity as measured by TEA index.

Since there is little attention given in the literature to the fact that the correlation is determined by definition and specific type of corruption, through an in-depth examination of the available data we fill this research gap and delve into the extent to which different types of corruption impact entrepreneurship. Thus, we analyse effects of different types of corruption, with additional three hypotheses (H3, H4 and H5) being formed.

H3 is related to executive corruption. Rullo (2021), for example, points out that executive leaders hold considerable decision-making power and oversee significant financial resources. Consequently, they become increasingly vulnerable to the pressures of various interest groups trying to influence public policy. This scenario reveals a partnership between executives and corporations. Additionally, it is evident that new executive leaders, utilising their substantial leadership influence, can secure concrete advantages, such as favourable policy choices or prioritised access to government contracts.

*H3: Higher executive corruption is negatively associated with new business density rate in CEE (post)transition countries.*

The hypotheses H4 and H5 focus on the judiciary and legislative corruption. Ippoliti, Melcarne, and Ramello (2015) identify two ways the judiciary influences entrepreneurship. First, a well-functioning judicial system is crucial for creating a healthy environment for entrepreneurs, particularly regarding property rights, since an inefficient judiciary can undermine economic agents' willingness to respect previous agreements. Second, an ineffective judiciary raises the costs of accessing the legal system, favouring those with stronger legal bargaining power and resulting in limiting access to credit. A corrupt judiciary is particularly concerning because as long as the judicial system remains corrupt, efforts to tackle corruption in other areas will also be impeded (Palifka, 2006).

Regarding legislative corruption, corrupt legislators may for example introduce tax exemptions or other loopholes in exchange for bribes, reducing revenue potential. And the more complex and opaque the tax system, the easier it is for officials to exercise discretion in its administration and demand bribes or kickbacks in return for a favourable outcome (Mauro, Medas & Fournier, 2016).

*H4: Higher judicial corruption is negatively associated with new business density rate in CEE (post)transition countries.*

*H5: Higher legislative' corruption is negatively associated with new business density rate in CEE (post)transition countries.*

As this analysis seeks to shed light on how corruption can affect businesses and whether certain forms of corruption have a more detrimental impact than others, it also provides policy inputs for the primacy of institutional quality over the number of entrepreneurial ventures. Audretsch et al. (2022) stress that different types of entrepreneurship require different, context-adjusted policies. They point out that the impact of corruption on necessity- and opportunity-entrepreneurship is not the same and that the size of the effect depends on the types of government expenditure. Corruption is also recognised as an important determinant influencing (pathological) learning and weak economic performance in the policy reform process (Freitag and Renaud, 2007). While distinguishing between entrepreneurial ecosystems in developed and developing and transitional countries, Belitski, Grigore and Bratu (2021) offered a list of policy recommendations aimed at diminishing political entrepreneurship in developing and transitional societies. In a similar vein, based on the comparative studies, Wegner (2019) warned that anti-corruption policies aimed at stabilizing new democracies are likely to fail despite their intrinsic value mostly because they are insufficiently linked to the local circumstances actors.

### **3. Data and Methodology**

#### *3.1 Data and variables*

##### *Dependent variable*

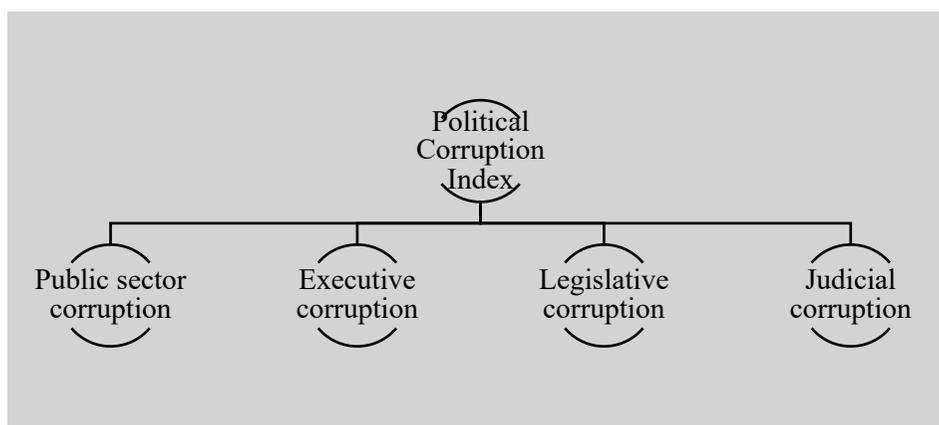
Defining and measuring the phenomenon of entrepreneurship is a complex task, as it involves various elements related to starting and running a business. It usually involves a combination of both quantitative and qualitative data to capture entrepreneurship's complex and dynamic nature. This paper uses an indicator of the new business density rate of the World Bank Entrepreneurship Database (World Bank, 2024), defined as the number of newly registered firms with limited liability per 1,000 working-age people (ages 15-64) per calendar year, a proxy for formal entrepreneurship. This is also a limitation of our study since this data could be combined with the informal entrepreneurship data. Still, as suggested in Polese (2022), the number of unregistered companies is extremely limited in countries where registration is relatively uncomplicated, and there are understandable taxation rules, as is the case in our target countries. As a result, we can assume that the unobserved economy is not that relevant and therefore focus only on formal entrepreneurship.

*Independent variables*

Corruption is a widespread issue in CEE countries, as evidenced by various corruption measures on macro (e.g. Control of Corruption (World Bank Worldwide Governance Indicators) and Corruption Perception Index (Transparency International), and also on the level of individual enterprises that recognise corruption as one of the biggest obstacles to doing business (e.g. Enterprise Survey database of EBRD and World Bank). Regarding the firm (micro) level, in the latest regular Enterprise Survey (WBES), firms from the region identify corruption as one of the major obstacles to doing business (along with the tax rates and inadequately educated workforce). Based on available data, e.g. in Albania, around 35% of firms were asked for bribe payments and this is significantly higher than the average for the region, which is around 8%. As a result, entrepreneurs face many uncertainties in all phases of doing business while for those entrepreneurs with connections, corruption can lead to an unfair advantage. Consequently, small and medium-sized firms may find it challenging to compete with larger, more established enterprises with greater access to resources. For example, Bartlett (2023) analysed the impact of political connections on business performance in SEE and his results showed that political connections negatively impact firm performance, especially in the services sector.

Although the primary corruption variables used in the prevailing literature are the above-mentioned Corruption Perception Index of Transparency International and the World Bank Governance Indicators, i.e. the Control of Corruption, which measures the perceptions of corruption, defined as the exercise of public power for private gain (Kaufmann et al., 2016), we employ a novel approach by the use of the political corruption index. This index measures corruption covering different levels of the polity realm (executive, legislative and judicial corruption), which, combined with public sector corruption, taps into several distinguished types of corruption: 'petty' and 'grand'; bribery and theft; both types of corruption aimed at influencing law-making with the one affecting implementation (Coppedge et al., 2023). The results of the V-Dem corruption measures assessment (McMann et al., 2016) suggest that these measures are particularly useful when conducting substantive research in which the theory is most salient in non-Western societies or researchers expect heterogeneous effects across contexts. The structure of the aggregate Political Corruption Index, as published by V-Dem (Coppedge et al., 2023), is presented in Figure 1.

Figure 1. Political Corruption Index

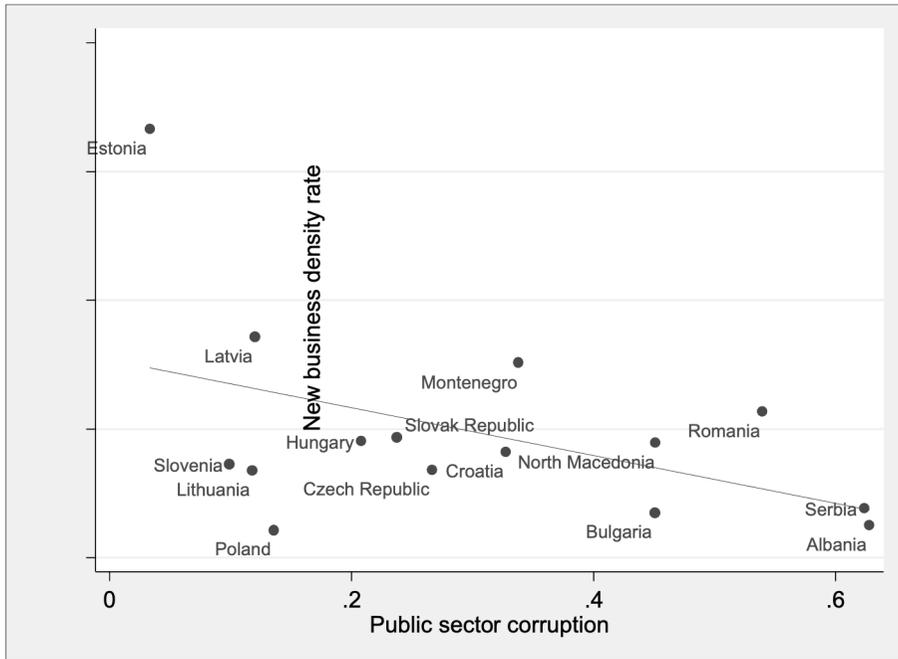


Source: Authors compilation based on V-dem database

The public sector corruption index measures to what extent public sector employees grant favours in exchange for bribes, kickbacks, or other material inducements and how often they steal, embezzle, or misappropriate public funds or other state resources for personal or family use. It takes values 0-1, from low to high corruption. This variable serves as a proxy for petty corruption. Next, executive corruption measures how routinely members of the executive or their agents grant favours in exchange for bribes, kickbacks, or other material inducements and how often they steal, embezzle, or misappropriate public funds or other state resources for personal or family use. It uses values 0-1 for low to high corruption. Judicial corruption measures how often individuals or businesses make undocumented extra payments or bribes to speed up or delay the process or obtain a favourable judicial decision. It takes values 0-4 to indicate high to low corruption. Finally, legislative corruption include accepting bribes, helping to obtain government contracts for firms that the legislator, or his family, friends, political supporters, own, doing favours for firms in exchange for the opportunity of employment after leaving the legislature, stealing money from the state or from campaign donations for personal use. This scale uses values 0-4 to indicate high to low corruption (Coppedge et al., 2023). Political corruption is calculated as the average of the four types described above, with each type being given the same weight. The advantage of using these data is that the V-Dem indexes of corruption have not been used to shed light on the relationship between corruption and entrepreneurship.

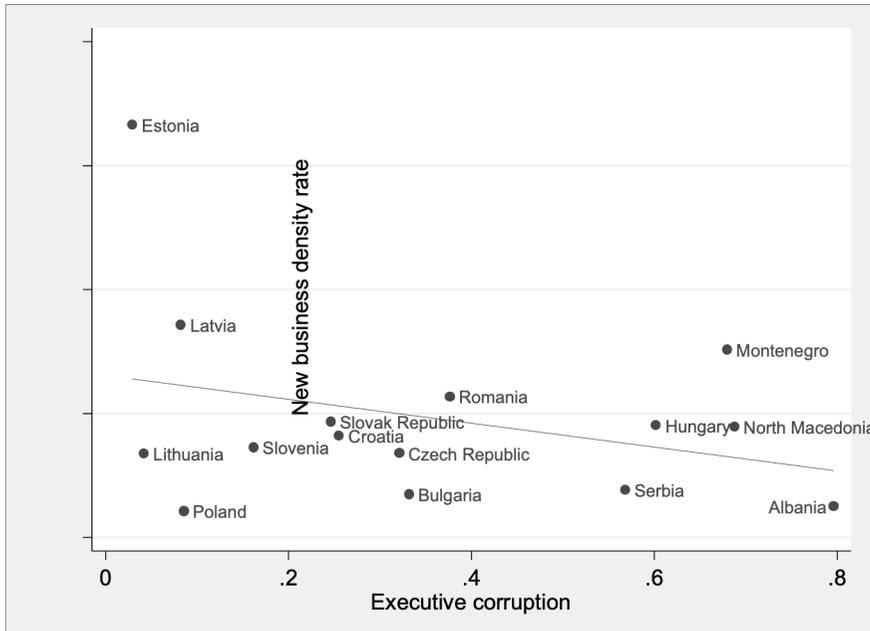
Figures below show the correlation between different types of corruption and formal entrepreneurship rates (we calculated average values for the 2006-2020 period in all included countries).

Figure 2. Relation between public sector corruption and formal entrepreneurship



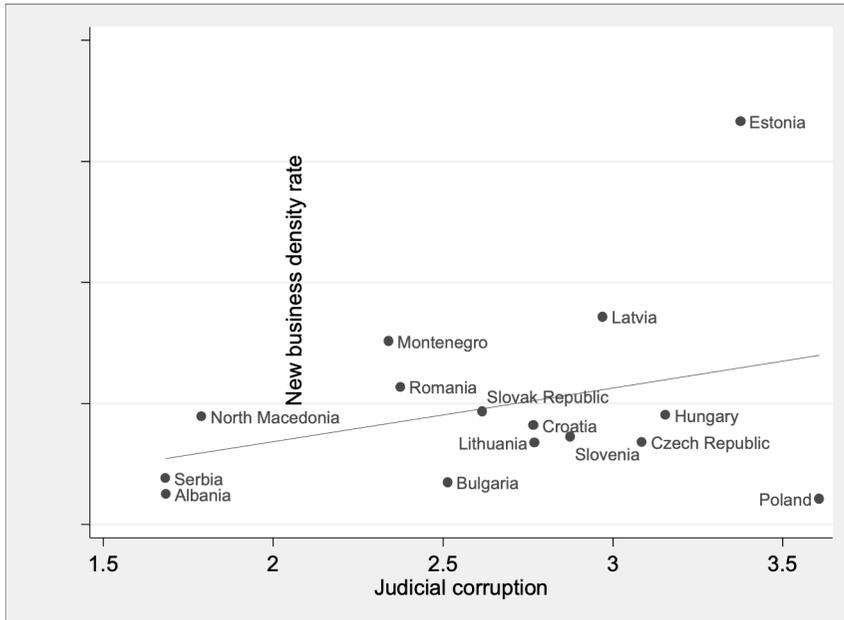
Source: Authors' calculation

Figure 3. Relation between executive corruption and formal entrepreneurship



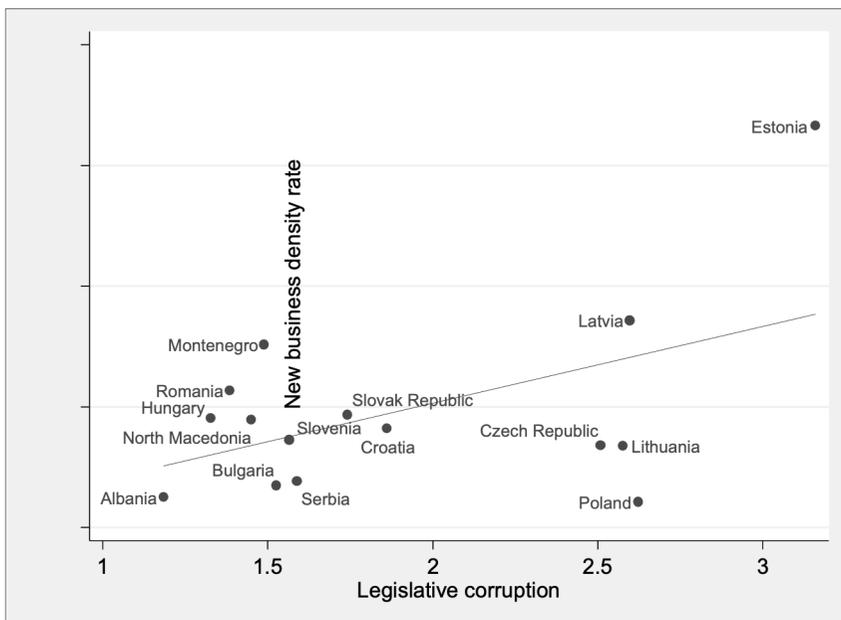
Source: Authors' calculation

Figure 4. Relation between judicial corruption and formal entrepreneurship



Source: Authors' calculation

Figure 5. Relation between legislative corruption and formal entrepreneurship



Source: Authors' calculation.

The trend line through all four graphs implies that corruption hinders entrepreneurship. Precisely, with the public sector (Figure 2) and executive corruption index (Figure 3) whose larger values imply an increase in corruption, the correlation is negative – higher corruption means lower entrepreneurship rates. On the other side, with judicial (Figure 4) and legislative corruption (Figure 5), where lower values imply larger corruption, the correlation is positive meaning that higher (lower) values of the index mean higher (lower) entrepreneurship rates.

It can therefore be suggested that generally higher corruption may be related to the lower number of registered firms. As this is only the intuitive conclusion in this phase based on descriptive statistics, in the next section, we proceed with the econometric investigation of corruption effects on new business density rates, including a larger number of control variables.

#### *Control variables*

We included several control variables in the model. First, the GDP per capita variable is included since economic development strongly affects entrepreneurship and unemployment in a country, as unemployment can motivate some individuals to seek entrepreneurial activity (see Audretsch et al., 2022). Additionally, the measure for human capital as the percentage of the population enrolled in tertiary education was added (the data for both variables are retrieved from World Bank WDI database). Next, we include the control variable for the business environment quality for which the data from Fraser's Economic Freedom of the World database was used, i.e. precisely the business regulation component capturing the extent to which regulations and bureaucratic procedures restrain entry and reduce competition (Gwartney et al., 2023). Since some of the countries in the sample are EU members, a dummy variable reflecting the EU membership is also included as the control variable. Finally, we include the share of the population aged 15-64 years (retrieved from World Bank WDI database).

Table 1 provides an overview of descriptive statistics of all variables used in the analysis. We can see that for most variables, both standard deviation and a wide range between minimum and maximum values could suggest considerable variability or heterogeneity in the data.

Table 1. Descriptive statistics of variables

<b>VARIABLES</b>	<b>(1) N</b>	<b>(2) mean</b>	<b>(3) sd</b>	<b>(4) min</b>	<b>(5) max</b>
New business density rate	223	4.868	4.132	0.467	24.79
Executive corruption	225	0.351	0.259	0.0150	0.844
Legislative corruption	225	1.905	0.624	0.709	3.159
Political corruption	225	0.381	0.222	0.0350	0.781
Judicial corruption	225	2.640	0.594	1.314	3.626
Public sector corruption	225	0.305	0.194	0.0300	0.675

VARIABLES	(1) N	(2) mean	(3) sd	(4) min	(5) max
Business environment quality	225	6.956	0.844	4.888	8.969
GDP pc	225	12,778	6,010	2,973	27,596
EU	225	0.693	0.462	0	1
Pop 15-64	225	67.58	2.030	62.95	72.12

Source: Authors' calculation.

### 3.2 Methodology

The main research question (RQ) explored in this paper relates to the effects of different forms of corruption on entrepreneurship. Thus, we estimated the base model, i.e. Model 1 with aggregate political corruption index as the main independent variable of systemic corruption, and four models with corruption sub-components as main independent variables: public sector corruption (Model 2), executive corruption (Model 3), judicial corruption (Model 4) and legislative corruption (Model 5).

As the sample includes countries with different characteristics (e.g. economic, social, and political) which increases the likelihood of heterogeneity in panel data (Wooldridge, 2012), in order to deal with unobserved heterogeneity associated with panel data, fixed-effect estimators can be employed. We employ panel data regression with Driscoll-Kraay standard errors for coefficients estimated by the fixed-effects estimator. Cross-sectional dependence is one of the challenges in panel data settings, thus, yielding inconsistent estimates. Unlike standard techniques, the Driscoll and Kraay (1998) algorithm accounts for cross-sectional dependence, which results in consistent and robust estimated standard errors. The Driscoll-Kraay algorithm assumes that the error structure is heteroscedastic, autocorrelated up to some lag and correlated between the groups in the panel (Hoechle, 2007)<sup>1</sup>. We use fixed effects panel data estimation. The following model was estimated:

$$y_{i,t} = \alpha_i + \beta X_{i,t} + u_{i,t} \quad (1)$$

where  $y_{i,t}$  is the dependent variable (new business density rate) and  $x_{i,t}$  denotes the independent and control variables described above (corruption variables, business environment quality, GDP per capita, or population aged 15-64). Two of the corruption variables, legislative and judicial, are adjusted for the analysis so that the increase in the value implies larger corruption.

<sup>1</sup> Autocorrelation was tested with Wooldridge Test for Autocorrelation (p-value=0.0000); and cross-sectional dependency with Breusch-Pagan test of independence (p-value=0.0000).

#### 4. Results and Discussion

The obtained results are presented in Table 2. The three hypotheses are confirmed (H<sub>1</sub>, H<sub>2</sub>, and H<sub>5</sub>, the two are rejected (H<sub>4</sub> as the coefficient obtained is opposite of the one expected, and H<sub>3</sub> as the result with the corruption variable is not statistically significant). The results show that political (aggregate) corruption and public sector corruption hinder entrepreneurship, as measured by the new business density rate. Next, while executive corruption is not statistically significant, legislative and judicial corruption have diverse direction of effects. Legislative corruption adversely affects the new business density rate, while judicial corruption is positively associated with our entrepreneurship variable, drawing attention to the shortcomings in the judicial system. It is a well-established viewpoint that the judiciary is most likely to be linked to corruption in transition countries. The latest Corruption Perception Index (Transparency International, 2023) specifically reflects on the corruption in the justice system in Europe, as it erodes trust and public confidence in both the administration and application of justice.

Table 2. Results of estimation

VARIABLES	Model 1 H <sub>1</sub>	Model 2 H <sub>2</sub>	Model 3 H <sub>3</sub>	Model 4 H <sub>4</sub>	Model 5 H <sub>5</sub>
Political corruption	-0.166** (.0731)				
Public sector corruption		-0.242*** (.0764)			
Executive corruption			0.0011 (.0383)		
Judicial corruption				0.183** (.0846)	
Legislator corruption					-0.582*** (0.1434)
Regulatory environment	0.453** (.2009)	0.403** (.1832)	0.478** (.2164)	0.485** (.2236)	0.548*** (0.1936)
GDP p/c	0.204** (.0586)	0.224*** (.0636)	0.198*** (.0692)	0.214*** (.0449)	0.198*** (0.0538)
Population 15-64	-1.995*** (.6423)	-2.093*** (.6708)	-2.235*** (.6517)	-2.509*** (0.7896)	-1.9334** (0.6327)
EU dummy	0.262*** (.1601)	0.228 (.1594)	0.283* (.1490)	0.269* (.1341)	0.257 (0.1599)
Constant	6.542 (3.2819)	6.738 (3.4128)	7.751** (3.210)	8.713** (2.7035)	6.759 (3.1758)
Observations	223	223	223	223	223
Number of groups	15	15	15	15	15
Within Rsq	0.18	0.18	0.17	0.17	0.21

Notes: Standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Authors' calculation

The obtained results have justified the main motivation behind the research, i. e., that we have to detangle different forms of corruption and test the effects of each on entrepreneurship. According to the findings, there appears to be a complex relation between various types of corruption and their impact on entrepreneurship. Two types of corruption appear to be particularly important – legislative and judicial corruption. Specifically, it seems that higher levels of corruption among legislators have a negative impact on entrepreneurship. This is expected because legislators are responsible for designing laws, regulations, and policies that directly affect the business environment, which may result in unfavourable business regulatory framework or in a lack of transparency. Conversely, the positive correlation between judicial corruption and entrepreneurship suggests that higher levels of judicial corruption are linked to higher levels of entrepreneurship, which seems counterintuitive. However, some research touches upon this aspect, such as Belitski, Chowdhury and Desai (2016), Belitski, Grigore and Bratu (2021), Riaz and Cantner (2021). Entrepreneurs may sometimes view (or anticipate) a certain degree of judicial corruption as a means to speed up legal procedures, which may incentivize entrepreneurship. Additionally, it is possible that a corrupt judiciary may not necessarily discourage entrepreneurship, especially in a case when entrepreneurs believe that they can express their influence through informal channels.

Thus, revisiting the links between entrepreneurship and corruption may seem redundant. Yet, the findings of this research deepen the analysis of the reflections of political entrepreneurship in a post-transitional entrepreneurial environment. They provide empirical evidence of the relationship between corruption and entrepreneurship that could be named the entrepreneurial ‘phone justice’ (the ‘phone justice’ phenomenon is named and presented by Ledeneva, 2008). At the policy level, the findings pinpoint the necessary domains to be targeted when developing policy recommendations aimed at an increase of new businesses. Most studies so far have emphasised the hindering effects on entrepreneurship, not necessarily highlighting the type of corruption that needs to be addressed first in order to (most likely) result in ‘invisible foot’ effects (Lambsdorff, 2007) in post-transitional entrepreneurial ecosystems. The “invisible foot” disentangles how corruption punishes honesty, it is therefore proposed to use the inherent risk of betrayal in corrupt dealings to shift incentives toward honest behaviour. Thus, this study provides compatible policy inputs to the previous studies questioning the policy aspect of corruption and entrepreneurship at the various stages of country’s development (Audretsch et al, 2022; Belitski, Grigore and Bratu, 2021; Khyareh and Amini, 2021). The afore-stated policy implication is in line with Audretsch et al. (2022), who claim that different types of entrepreneurship require different, context-adjusted policies, and with Belitski, Grigore and Bratu (2021) who provided a list of policy recommendations aimed at diminishing political entrepreneurship in developing and transitional societies.

## 5. Conclusion

This paper analysed the effects of corruption on entrepreneurship rates in CEE post-transition countries. The performed analysis expands previous research in terms of exploring different forms of corruption on the new business density rates. We performed an econometric analysis using a fixed-effect panel model for the 2006-2020 period. Countries analysed include Albania, Bulgaria, Croatia, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Montenegro, North Macedonia, Serbia, Romania, Slovakia and Slovenia. Findings support the main motivation of the research, i.e., that different types of corruption exacerbate different effects on entrepreneurship rates.

The results showed that political corruption in general, as well as public sector corruption hinder entrepreneurship measured by the new business density rate. Moreover, while executive corruption effect is not statistically significant, legislative and judicial corruption have divergent effects. Legislative corruption adversely affects the new business density rate, while judicial corruption is positively associated with entrepreneurship variables, drawing attention to the shortcomings in the judicial system. The findings, from a policy aspect, underline the importance of efficient anti-corruption reforms that need to be context-specific, particularly within legislative and judicial systems. Overall, the findings suggest the need to focus primarily on increasing the institutional quality rather than a number of entrepreneurial ventures.

Finally, as a future research avenue, it would be worthwhile to explore the short- and long-term effects of anti-corruption policies, taking into account the distinction between opportunity and necessity driven entrepreneurship within an institutional context that features resistance (inherited characteristics). Additionally, stemming from the primary limitation of this research, which is the utilisation of new business density rate as a proxy for entrepreneurship, another potential direction for research could involve examining entrepreneurship development and measuring the success of new businesses over time as a crucial dependent variable.

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