**Corruption, Political Discretion and Cross-Country Entrepreneurship**

**Abstract**

*Purpose:* While common sense suggests that corruption will likely have a negative impact on the economy as it raises the cost of doing business, research on the topic showed inconsistent results (positive, negative and neutral). This paper aims to verify whether corruption has a “grease” or “sand effect on the wheels” of entrepreneurial rates and under which conditions corruption will have stronger or weaker effects.

*Design/methodology/approach*: Using institutional theory as the basis for the hypotheses, Generalized Least Squares estimation is conducted to empirically examine the role of corruption and political discretion in entrepreneurship in a sample of 93 countries.

*Findings:* Countries with higher levels of corruption are associated with lower levels of firm creation. However, this negative effect of corruption is weaker when there are higher levels of political discretion.

*Originality/value:* This is the first evaluation of the moderating effect of political discretion on the negative impact of corruption on entrepreneurship.

**Keywords**

Entrepreneurship; Corruption: Political Discretion: Institutional Theory: Moderating Effect.

**Introduction**

To say that corruption has a negative impact on the economy is almost oxymoronic. Corruption can be defined as the abuse of official power for private gain, and includes the payment of bribes, favoritism or improper use of influence, or irregular payments in public contracts (World Bank, 2000). Corruption raises the transaction costs of doing business and, thus, limits opportunities for value creating entrepreneurs. This, in turn, should have a negative impact on economic growth, new business creation, tax collection and general competitiveness of a region or a country. Despite the logic of these arguments, the literature on the role of corruption in economic growth is less than clear cut, with some authors who found a negative relation (e.g., Mauro, 1995; Myrdal, 1989; Hall and Jones, 1999), some who found a positive relation (Meon and Weill, 2010; Vial and Hanoteau, 2010; Méndez and Sepúlveda, 2006), and yet, others, who found conditional relations (Alon et al., 2016).

Entrepreneurship connects the micro economy with the macro economy through the creation of value and the reconstitution of resources (Schumpeter, 1951). Our dependent variable is entrepreneurship at the macro level and is, thus, the outcome of the entrepreneurial dynamic process at the aggregate level. Entrepreneurship is essential to the creation of ideas, companies, and innovation and is the basis for economic renewal and development (Zacharakis et al., 2000; Verbeke et al., 2003; Baumol, 2004; Agarwal et al., 2007; Baumol and Strom, 2007). Given the positive impact of entrepreneurship on economic development, many politicians have encouraged this activity, and many countries have both developed economic development agencies to promote entrepreneurship and enacted laws that are friendly to small businesses. The result is a proliferation of small businesses around the world (Moya, 2008).

Anokhin and Schulze (2009) and Dreher and Gassebner (2013) suggested that more cross-country studies on entrepreneurship rates at the national level are needed. At the national level, much of the variation in entrepreneurial activity remains unexplained using only economic predictors (Freytag and Thurik, 2007; Uhlaner and Thurik, 2007). Baumol (1990), Acs et al. (2008), Sobel (2008), Urbano and Alvarez (2014) emphasized that institutions play a major role in cross-country entrepreneurship. This article contributes to this literature by empirically examining the link between two types of institutions (corruption and political discretion) and entrepreneurship. We ask why can entrepreneurship thrive in some corrupt countries and, relatedly, why do rates of entrepreneurship vary across equally corrupt nations?

Entrepreneurial behavior is a response to both economic necessity and opportunity that is shaped by the rules of conduct, political desirability, legality, and acceptable behavior (La Rosa et al., 2018). As entrepreneurs interact with a variety of stakeholders, including governmental and social actors, they are the dependent on the institutional environment in which they operate (Bjerregaard and Lauring, 2012; Bjørnskov and Foss, 2016). That institutions define the “rules of the game” has been long established in the literature (North, 1990; Scott, 1995). Regulatory, normative and cognitive pressures (Scott, 1995) create the business environment and signal to individuals, organizations and entrepreneurs appropriate and allowable courses of action (North, 1990; Peng and Heath, 1996; Moro et al., 2018).

Previous research linking institutions to entrepreneurship included government stability, political party affiliation, predictability of the judicial system, enforcement of contracts, protection of property rights, and the existence of legal restrictions (Aidis et al., 2010; Dutta et al., 2013). Institutions of private property are particularly important to entrepreneurship. When the institutions of private property are lacking, absent or concentrated in the hands of a small elite, they become extractive, rather than facilitative, and discourage investment with detrimental impact on aggregate performance (Acemoglu et al., 2001, 2002). Jimenez et al. (2017) suggested that as part of the institutional environment corruption and political restraint have negative impacts on entrepreneurship. The authors, however, did not examine the important interactive relations which may moderate the relation between corruption and entrepreneurship.

We contribute to the body of literature that focuses on the impact of institutions on entrepreneurship (Baughn et al., 2006; Acs et al., 2008; Anokhin and Schulze, 2009; Estrin et al., 2013; Yu et al., 2013; Moore et al., 2015) by investigating the impact of corruption, political discretion and their interaction on entrepreneurial rates. Using institutional theory (North, 1990; Scott, 1995; Li, 2009) as the overarching theoretical paradigm, we propose that corruption leads to suboptimal economic decisions based on political and power considerations which distort market mechanisms and increase the transaction costs. In corrupt environments, free enterprise will face various challenges including extortion, bribery, and discrimination. We also hypothesize that political discretion, i.e. the ability of the government to unilaterally modify the ‘rules of the game’ governing the firms (Jimenez et al., 2017), weakens the negative impact of corruption on entrepreneurship. In other words, we explain that under conditions of strong political discretion, the effect of corruption is less destructive. This finding, in line with Bjørnskov and Foss (2016) idea that institutions may have different effects depending on the quality of other institutions, partly explains why entrepreneurship may thrive despite corruption. Besides, by doing so we respond to recent calls in the literature for not only more studies on the consequences of corruption, but also a finer-grained analysis of the factors conditioning corruption (Cuervo-Cazurra, 2016).

The remainder of this paper is structured as follows: in the next section, review the literature and set out our hypotheses. We then describe our sample, variables and estimation technique. Subsequently, we present our results and robustness tests. Finally, we discuss the implication of our findings and conclude.

**Literature Review and Hypotheses**

Institutions affect the governance system which ultimately determines oversight, transparency, monitoring and enforcement of rules. Scott (1995) suggested that institutions are the resilient social structures, transmitted through symbolic systems, relational systems, routines, and artifacts, composed of cultural-cognitive, normative, and regulative elements that, together with associated activities and resources, provide social order. Institutions operate at different levels of aggregation and are subject to both incremental and discontinuous change. Both corruption and political discretion are part of the societal soft institutional fabric which form the institutions of a country and affect the business activity. While regulatory restrictions on corruption are almost always present, the practice of corruption continues to be widespread and socially accepted in many parts of the world. In a similar fashion, while courts, government officials, regulators and enforcers are supposed to follow the law, in many countries the rules are bent based on the discretion of the political decision maker.

*The Role of Corruption*

Economic growth tends to happen, especially in developing countries, through personal networks and the basis for the growth of these networks is trading on private information (Li and Wu, 2010). These types of relation-based countries are prone to corruption because public information is not available and trading on favors is difficult to enforce through official means. Rule-based societies, in contrast, are based on public rules, formal contracts, legal courts, lawyers and accountants. Government regulation is transparent and enforced and information is public. The democratic developed countries of the West tend to be more rule based and, thus, have less endemic corruption. Corruption varies across countries and tends to be more endemic in relation-based countries as the institutions are built on particularized and covert relations which require reciprocity. The separation of time and space in corrupted transactions requires an enforcement mechanism. Either trust (a societal value, such as the presence of *guanxi* networks) or the presence of a mafia (public or private) can provide this enforcement mechanism (Li, 2009; Alon et al., 2016).

Corruption whereby public officials sell a public good for private gain manifests itself in different ways (bribes, red tape, organized crime, unproductive behavior) and leads to reduced investment, distorted public expenditures, social and economic failures, economic instability and stagnation and squandered entrepreneurial development (Park, 2003; Alon et al., 2016; Cuervo-Cazurra, 2016). Corrupt officials are motivated by projects that maximize their personal opportunities for wealth gains rather than maximizing public welfare gain, distorting the efficient allocation of resources in the free market (Gupta et al., 2001). Many studies found a negative relationship between corruption and economic development (e.g., Myrdal, 1989; Mauro, 1995; Hall and Jones, 1999).

Corruption is an element of the institutional quality that affects entrepreneurship (Dreher and Gassebner, 2013: Estrin et al., 2013). Anokhin and Schulze (2009) suggested that corruption negatively impacts rates of entrepreneurship, innovation and, thus, economic prosperity. Various studies suggest that corruption increases the costs and uncertainty for companies (Mauro, 1995; Wei, 2000a, 2000b; Brouthers et al., 2008), reduces investments in fixed assets (Birhanu et al., 2016), levies an informal tax for the entrepreneur, decreases government efficiency and effectiveness (Mauro, 1998), and, as a result, decreases economic growth, especially in those countries where governance quality is poor (Méon and Sekkat, 2005).

Besides, corruption is detrimental to entrepreneurship because it increases the risk that entrepreneurs will not get paid (Anokhin and Schulze, 2009), reduces growth aspirations (Vorley and Williams, 2016) and discourages potential honest entrepreneurs (Aidis et al., 2010). As a shared informal social norm, corruption works to the disadvantage of the new business developers as their contacts and connections may not match those of the established economic and political elites operating in the same economic space (Estrin et al., 2013). The above arguments lead to our first hypothesis, which parallels that one proposed by Jiménez et al. (2017) and which we take as a “baseline” expectation to set the stage for the main focus of the paper – the moderating effect of political discretion on the impact of corruption on entrepreneurship.

H1: Corruption will lower the rates of entrepreneurship across countries.

*The Role of Political Discretion*

Hypothesis 1 begs a dual question: why some corrupt countries still have entrepreneurship and, relatedly, why do rates of entrepreneurship vary across equally corrupt nations? Entrepreneurship happens even in countries heavily endowed with corruption. One can argue that corruption makes some entrepreneurship possible. That is, corrupt officials provide opportunities for entrepreneurs in return for financial and other favors. Political actors in these countries can learn how to extract rents from economic opportunities via entrepreneurs. How can political “entrepreneurs” extract income from the market-based entrepreneurs? This can be done through their ability to have discretion in the application of rules and use of official power to “pave the way” for the entrepreneur.

Consider a “fire inspector” who sees security violations in a restaurant, but will sign off the fire security approval for some free meals for him and family and some credit in a branded store of his choice under an anonymous name and creditor. The cost to the entrepreneur might be lower, paying the fire inspector, rather than having to follow the strict regulation as interpreted by the inspector. This school of thought suggests that corruption “greases the wheels” of entrepreneurship (Meon and Weill, 2010; Vial and Hanoteau, 2010; Méndez and Sepúlveda, 2006). Leff (1964), Olson (1993), Egger and Winner (2005) and Cuervo-Cazurra (2008) suggested that corruption may have a “greasing” effect, particularly in developing countries, by allowing entrepreneurs to avoid some costs, skip some procedures, and speed up the business creation and monetization. Méndez and Sepúlveda (2006), for example, suggested that there might be an optimal level corruption particularly in emerging markets as graft provides an alternative way for investment to occur.

The use of bribes does not guarantee protection or results for those who pay (Yim et al., 2017). Given that this is an illegal activity in most countries, official enforcement is difficult (Méon and Weill 2010). With no enforcement mechanism, opportunistic behavior by the bribe taker is possible. Bardhan (1997) suggested that the existence of corruption does not necessarily void required procedures to start or grow a business. Corrupt officials who may not have an opportunity to advance an entrepreneurial venture may, still, have an opportunity to stall it and extract resources through extortion.

The inconsistency of results linking corruption to entrepreneurship and economic development, both at the macro level and at the micro level, can be attributed to third factor moderating influences (Alon et al., 2016). Li and Wu (2010), for example, suggested that in some developing economies corruption can be efficient, as it ensures the delivery of government goods in return. Alon et al. (2016) argued that corruption is more productive under a dictatorship rather than under an anocracy because the bribe giver is more likely to receive the services acquired from the bribe taker. Leff (1968) showed that military dictatorships are better able to modernize when corruption is endemic. These studies collectively suggest that there is a need to examine the context of corruption and to determine which variables moderate its effect. Different types of institutions affect the link between corruption and entrepreneurship formation.

Considering the fire inspector of the example above. If another independent fire inspector was to audit the outcome of the first one, she would find out that the first inspector “cheated” and will report this. This will result in a likely punishment of the violation of the inspector as well as the occurrence of the additional costs for the entrepreneur, fixing the problem, hiring legal help, etc., in addition to the bribe paid. Under these conditions, the first fire inspector in our example loses his discretion and the effect of the bribe diminish.

We argue that the level of political discretion can mitigate the adverse impact of corruption by reducing the uncertainty associated with it. Political discretion has to do with the regulators ability to change the rules of the game, realign the power structures, change the status quo, and reset political priorities and government policies (Henisz, 2000). Politicians can take advantage of political discretion to earn extra funds. They can use ambiguities in the law and lack of public enforcement as a way to maximize their bribes. In order to maximize the returns of bribes over time, these politicians need to have “repeat business.” How can a bribe giver trust that a bribe taker will deliver the “goods”? A regulator or politician with political discretion needs to develop trust through a reputation of delivery. Since taking a bribe is normally illegal, the concerned official must keep this information private and only available to a particularized group of trusted “customers” who are part of the protected and entrusted network. While political discretion does not need to be discrete, the taking of a bribe must be for this practice to continue. “Repeat business” depends on the ability of the public official to “sell” the public good, and deliver on his/her promise. Political discretion is the “grease” that allows the entrepreneurial wheel to turn under the conditions of corruption. When political discretion is high, economic activity can be facilitated. While political corruption requires will on behalf of the official, political discretion provides the ability. Political discretion makes corruption more efficient in economic development and entrepreneurial formation. Therefore, entrepreneurs know that if they pay they will get what they want, reducing uncertainty and increasing the creation of new firms. In this sense, the lack of political discretion affects constitutes a control of corruption that reduces the incentives to engage in corruption (Cuervo-Cazurra, 2016).We, thus, hypothesize that:

H2: Political discretion will weaken the negative impact of corruption on entrepreneurship.

**Methods**

*Dependent Variables*

We use the entry density rate from the World Bank Group Entrepreneurship Snapshots (WBGES) as the dependent variable for formal entrepreneurship. This measure is calculated for 93 countries as the number of newly registered firms as a percentage of the population of a working-age in thousands and it is available from 2002 to 2007. The list of countries included in the sample is shown in Table 1.

Insert Table 1 here

Furthermore, we show the results when using the entry per capita rate as an alternate dependent variable as a robustness test. This measure is calculated as the percentage of new companies registered over the total population in thousands, but is only available for a subset of 77countries. Data for both variables is collected by the World Bank through surveys of company registers as well as other governmental sources in each country. Data from the World Bank has been frequently employed in empirical research about corruption (Iriyama et al., 2016) as these measures are specifically designed to capture formal entrepreneurship by recording “any unit from the formal sector incorporated as a legal entity in a public register” (Klapper et al., 2007, p.4).

*Independent and control variables*

The Corruption Perceptions Index prepared by Transparency International (www.transparency.org) is used to measure the level of corruption in a country. This index measures corruption perceived by experts from each country, and ranges between 0, representing an absolutely corrupt state, and 10 for a corruption-free state (Pournarakis and Varsakelis, 2004; DiRienzo et al., 2007). For an easier interpretation of the coefficients, we reversed the index by subtracting 10-Corruption score so that higher scores of the measure represent higher levels of corruption.

The Political Constraint Index (POLCONV) devised by Henisz (1998) is used to measure the degree of political discretion. This index measures regulatory discretion by taking into account the number of independent authorities with veto power in each country (for example executive, legislative, judiciary, and administrative). The score is later modified depending on possible alignments between powers, such that the model approaches the actual restrictions to which the government is subject to. As the number of veto points increases, the likelihood of changing the status quo decreases since there is a drop in the range of public policies to implement that the different powers can agree upon. Conversely, where the authorities face lower constraints as a result of the absence, insufficiency or ineffectiveness of other independent political institutions, public policies are easily modified in the event of changes in political preferences. The index, which oscillates between values of 0 and 1, is designed so that higher scores imply greater regulatory stability and lower scores reflect greater discretion. We also reversed this measure by subtracting 1-POLCONV score so that higher scores of the measure represent higher levels of political discretion.

 Following Dau and Cuervo-Cazurra (2014) we complement these two independent variables with three macroeconomic indicators as control variables, although in the robustness tests we include additional control variables. Drawing on their model, and also previous works on entrepreneurship (Klapper and Love, 2011; Dutta et al., 2013), we control for the logarithm of GDP per capita, the growth of GDP and the logarithm of inward foreign direct investment. These variables were obtained from the World Banck and UNCTAD. A series of year dummy values are also included to control for the impact of historical events. Finally, unobserved country-specific factors are controlled by using panel models that account for the country (Dau and Cuervo-Cazurra, 2014). Table 2 shows descriptive statistics for the variables in the study.

Insert Table 2 here

*Model*

Given the longitudinal nature of our sample, and following Greene (2000) and Dau and Cuervo-Cazurra (2014), we employ cross-sectional time series as our estimation technique. Specifically, we rely on a *Generalized Least Squares* (GLS) estimation with corrections for heteroscedasticity and panel-specific autocorrelation PSAR(1).

We lagged all explanatory variables one year to minimize problems of simultaneity and ensure causality, and also to account for the time that institutions take to affect entrepreneurship (Anokhin and Schulze, 2009).

**Results**

Table 3 shows the matrix of correlation and the Variance Inflation Factors (VIFs). Correlation coefficients are relatively low and all Variance Inflation Factor values are below the limit of 10 proposed by Neter et al. (1985), Kennedy (1992) and Studenmund (1992), and also below the limit of 5.3 proposed by Hair et al. (1999). Therefore, no serious problems of multicollinearity affect the data.

Insert Table 3 here

Table 4 shows the results of our regression analysis. As it can be observed in Models 1-3, corruption has a negative and significant impact on entrepreneurship across models, as expected by theory. This result confirms hypothesis 1 as it indicates that countries with higher levels of corruption are associated with lower levels of entrepreneurship and vice-versa. In other words, corruption represents an obstacle for and undermines entrepreneurship.

Insert Table 4 here

While the direct coefficient of political discretion is also negative and significant, pointing to a negative direct effect of political discretion on entrepreneurship (Jimenez et al., 2017), the interaction between corruption and political discretion is positive, as hypothesized. This result confirms hypothesis 2 as political discretion weakens the negative impact of corruption on entrepreneurship. This means that when political discretion is high in the country and politicians are under fewer checks by other independent authorities, bribe payers feel more confident in the ability of politicians to deliver in return of the bribe. Political discretion works as a signal that partly buffers and reduces the intrinsic uncertainty attached to corruption which, in turn, encourages more entrepreneurial activities. Figure 1 presents a graphic illustration of the effects of this interaction.

Insert Figure 1 here

The graph clearly shows the negative direct effect of corruption on entrepreneurship of H1. It also shows that generally locations with high levels of political discretion show lower levels of entrepreneurship, compared to locations with low levels of political discretion, supporting the negative direct effect of political discretion on entrepreneurship. Finally, the relatively steeper slope of the graph in the case of lower political discretion relative to that of higher discretion supports our predicted moderating effect of political discretion on the impact of corruption on entrepreneurship. Specifically, it shows that the negative impact of corruption on entrepreneurship becomes weaker as political discretion increases, up to a point in which the impact of corruption equalizes and eventually can be more pronounced when political discretion is very high.

Finally, the coefficients of the control variables show that better macroeconomic conditions foster higher levels of entrepreneurship. As robustness test, we tested the models using the entry per capita as dependent variable. The results are shown in Table 5 (models 4-6).

Insert Table 5 here

While this measure is available for a more restricted number of countries (77), the results are consistent with those previously presented. The only notable difference is that the coefficient of the direct effect of political discretion on entrepreneurship is still negative but no longer significant. Yet, the results confirm both hypotheses as they show a direct negative impact of corruption on entrepreneurship and also a positive moderating effect of political discretion. Second, we tested the models correcting for autocorrelation AR(1), instead of panel-specific autocorrelation PSAR(1), but found no significant differences with the results of the models shown above. Finally, we also run a robustness test with additional control variables. Specifically, we control for the potential effect of belonging to a specific region such as the European Union, North America, Latin America, Asia, Africa, or the Middle East, by introducing mutually exclusive dummy variables. We also control with a dummy for whether the country is a developed or developing economy and for additional institutional variables with multiple components of the Economic Index of Freedom. Results, available from the authors upon request, do not present significant changes compared to the main models. We also included the six cultural dimensions[[1]](#footnote-2) identified by Hofstede (1984) and Hofstede et al. (2010) as additional control variables. The results also remain unchanged although these results must be interpreted with caution because the data is available for a more restricted sample of countries (56) and collinearity levels among the explanatory variables are higher.

**Discussion**

In this paper, we investigate how the institutional environment affects entrepreneurship and the interactions between institutional variables. To accomplish this, we analyze the rates of creation of formal firms in 93 countries using data from 2002 to 2007 from the World Bank Group Entrepreneurship Snapshots (WBGES).

Institutional theory suggests that corruption is bad for economic activity as it raises the transaction costs and creates an inhospitable environment for economic agents. We contribute to the literature on entrepreneurship by empirically confirming the adverse impact of corruption on the creation of formal firms, as it raises the transaction costs and creates an inhospitable environment for economic agents. We also make a novel contribution to the literature on institutions and political risk by showing empirical evidence of a significant moderation effect of political discretion which mitigates the negative effect of corruption on entrepreneurship. By doing so we demonstrate that institutional factors, namely corruption and political constraints, are not independent from each other, but instead have mutual repercussions.

Our empirical evidence therefore confirms that institutions may have different effects depending on the quality of other institutions (Bjørnskov and Foss, 2016) and contributes to the literature by showing the lack of political constraints constitutes an effective control for the negative impact of corruption on entrepreneurship (Cuervo-Cazurra, 2016). Furthermore, while we do not intend to derive normative conclusions about whether corruption is good or bad, we believe our moderation analysis is important because it sets out the conditions to explain when corruption is effective and when not so much, depending on the extent officials have power to deliver what the promised in return of bribes, based on the level of political discretion.

Some researchers have argued that the costs of combating corruption have a negligible impact in the developing world and outweigh the benefits (Acemoglu and Verdier, 1998; Klitgaard, 1988; Mishra, 2006). As implications for policy-makers, the study suggests that in order to rid economies of predatory corruptions, governments should improve the rule of law, transparency, monitoring and public enforcement (Singapore being a good example for instance). This will attack corruption at the root and improve economic potential for entrepreneurs. Besides, fostering the existence and effective independence of other political authorities in the country can be a complementary strategy as lower political discretion increases the uncertainty of bribing, making it a less attractive option.

Finally, as managerial contribution this paper emphasizes the need for entrepreneurs to pay attention and understand the institutional environment of the countries in which they start their ventures. As previous literature on non-market strategy has underlined (Doh et al., 2012), entrepreneurs and managers in general should carefully plan and implement actions intended to protect themselves from risks arising from the political and regulatory environment and, if possible, to create opportunities from the interactions with authorities.

We must acknowledge that this paper is subject to some limitations which represent promising avenues for further research. First, we only analyze formal entrepreneurship. However, informal entrepreneurship (Keig et al., 2016) is a critical component of many economies (ILO, 2002; Al-Mataani et al., 2017) and it is determined by different factors than formal entrepreneurship (Webb et al., 2013; Jimenez et al., 2015). Extending our analysis to informal entrepreneurship could enlarge our conclusions about the role of corruption and political discretion. Also, we only take into consideration a single dimension of entrepreneurship, but in addition to firm creation rates, future studies could address others such as the generation of ideas and/or patents. Besides, it would also be interesting to test the role not only of corruption but also corruption distance (Muellner et al., 2017) on the rates of new business creation by foreign investors. Finally, our empirical estimation builds on secondary data sources. Another interesting avenue for future research, for which primary data would be needed, is the analysis of individual-level cultural traits (Levine and Rubinstein, 2017) that might be linked to corruption.

**Conclusion**

Different types of institutions affect entrepreneurship and explain rates of cross-national entrepreneurship beyond traditional economic variables. We find that two types of institutions impact entrepreneurship: corruption and political discretion. While corruption has a negative impact on entrepreneurship, political discretion lowers this impact. Interactive, overlapping, and sometimes opposing forces in the institutional environment create paradoxical outcomes. We explain why some countries’ entrepreneurs thrive despite corruption and suggest that political discretion might be an important factor to consider.

**References**

Acemoglu, D. Johnson, S. and Robinson, J.A. (2001). “The colonial origins of comparative development: an empirical investigation”. *American Economic Review*. Vol. 91, No. 5, pp. 1369-1401.

Acemoglu, D. Johnson, S. and Robinson, J.A. (2002). “Reversal of fortune: geography and institutions in the making of the modern world income distribution”. *Quarterly Journal of Economics*. Vol. 118, pp. 1231-1294.

Acemoglu, D. and Verdier, T. (1998). “Property rights, corruption and the allocation of talent: a general equilibrium approach”. *The Economic Journal*. Vol. 108, No. 450, pp. 1381-1403.

Acs, Z. Desai, S. and Hessels, J. (2008). “Entrepreneurship, economic development and institutions”. *Small Business Economics*. Vol. 31, No. 3, pp. 219-234.

Agarwal, R. Audretsch, D.B. and Sarkar, M.B. (2007). “The process of creative construction: Knowledge spillovers, entrepreneurship, and economic growth”. *Strategic Entrepreneurship Journal.* Vol. 1, No. 3-4, pp. 263-286.

Aidis, R. Estrin, S. and Mickiewicz, T. M. (2010). “Size matters: entrepreneurial entry and government”. *Small Business Economics*. Vol. 39, No. 1, pp. 119-139.

Al‐Mataani, R., Wainwright, T., and Demirel, P. (2017). “Hidden entrepreneurs: Informal practices within the formal economy”. *European Management Review*. Forthcoming.

Alon, I. Li, S. and Wu, J. (2016). “Corruption, Regime Type and Economic Growth,” *Public Finance and Management,* Vol. 16, No. 4, pp. 332-361.

Anokhin, S. and Schulze, W. S. (2009). “Entrepreneurship, innovation, and corruption”. *Journal of Business Venturing*, Vol. 24, No. 5, pp. 465-476.

Bardhan, P. (1997). “Corruption and development: A review of issues”. *Journal of Economic Literature*. Vol. 35, pp. 1320–1346.

Baughn, C. C. Chua, B. L. and Neupert, K. E. (2006). “The Normative Context for Women's Participation in Entrepreneruship: A Multicountry Study*”. Entrepreneurship Theory and Practice.* Vol. 30, No. 5), pp. 687-708.

Baumol, W.J. (1990). “Entrepreneurship: Productive, unproductive and destructive”. *Journal of Political Economy.* Vol. 98, No. 5, pp. 893-921.

Baumol, W.J. (2004). *The free-market innovation machine: Analyzing the growth miracle of capitalism.* Princeton University Press: Princeton.

Baumol, W.J. and Strom, R.J. (2007). “Entrepreneurship and economic growth”. *Strategic Entrepreneurship Journal*. Vol. 1, No. 3-4, pp. 233-237.

Birhanu, A. G. Gambardella, A. and Valentini, G. (2016). “Bribery and investment: Firm‐level evidence from Africa and Latin America”. *Strategic Management Journal*, Vol. 37, No. 9, pp. 1865-1877.

Bjerregaard, T., and Lauring, J. (2012). “Entrepreneurship as institutional change: Strategies of bridging institutional contradictions”. *European Management Review*, Vol. 9, No. 1, pp. 31-43.

Bjørnskov, C. and Foss, N. J. (2016). “Institutions, Entrepreneurship, and Economic Growth: What Do We Know and What Do We Still Need to Know?”. *The Academy of Management Perspectives*, Vol. 30, No. 3, pp. 292-315.

Brouthers, L.E. Gao, Y. and McNicol, J.P. (2008). “Corruption and market attractiveness influences on different types of FDI”. *Strategic Management Journal*. Vol. 29, No. 6, pp. 673-680.

Cuervo-Cazurra, A. (2008). “Better the Devil You Don’t know: Types of Corruption and FDI in Transition Economies”. *Journal of International Management*. Vol. 14, No. 1, pp. 12-27.

Cuervo-Cazurra, A. (2016). “Corruption in international business”. *Journal of World Business,* Vol. 51, No. 1, pp. 35-49.

Dau, L.A. and Cuervo-Cazurra, A. (2014). “To formalize or not to formalize: Entrepreneurship and pro-market institutions”. *Journal of Business Venturing*. Vol. 29, pp. 668-686.

DiRienzo, C.E. Das, J. Cort, K.T. and Burbridge Jr. J. (2007). “Corruption and the role of information”. *Journal of Business International Studies*. Vol. 38, pp. 320-332.

Doh, J. P. Lawton, T. C. and Rajwani, T. (2012). “Advancing nonmarket strategy research: Institutional perspectives in a changing world”. *Academy of Management Perspectives.* Vol. 26, No. 3, pp. 22-39.

Dreher, A. and Gassebner, M. (2013). “Greasing the wheels? The impact of regulations and corruption on firm entry”. *Public Choice*. Vol. 155, pp. 413-432.

Dutta, N. Sobel, R.S. and Roy, S. (2013). “Entrepreneurship and political risk”. *Journal of Entrepreneurship and Public Policy.* Vol. 2, No. 2, pp. 130-143.

Egger, P. and Winner, H. (2005). “Evidence on Corruption as an Incentive For Foreign Direct Investment”. *European Journal of Political Economy*. Vol. 21, No. 4, pp. 932-52.

Estrin, S. Korosteleva, J. and Mickiewicz, T. (2013). “Which institutions encourage entrepreneurial growth aspirations?” *Journal of Business Venturing*. Vol. 28, pp. 564-580.

Freytag, A. and Thurik, A.R. (2007). “Entrepreneurship and its determinants in a cross country setting”. *Journal of Evolutionary Economics*. Vol. 17, No. 2, pp. 117-131.

Greene, WH. (2000). *Econometric Analysis* (4th edition). Upper Saddle River, NJ: Prentice-Hall.

Gupta, S. De Mello, L. and Sharan, R. (2001). “Corruption and military spending”. European *Journal of Political Economy*, Vol. 17, No. 4, pp. 749-777.

Hall, R. E. and Jones, C. I. (1999). “Why do some countries produce so much more output per worker than others?” *The* [*Quarterly Journal of Economics*](http://ideas.repec.org/a/tpr/qjecon/v114y1999i1p83-116.html), Vol. 114, No. 1, pp. 83-116.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., and Tatham, R. L. (1998). *Multivariate data analyses*. Upper Saddle River, NJ: Prentice Hall.

Henisz, W.J. (1998). *The institutional environment for international investment. Doctoral dissertation*, Hass School of Business, University of California. Berkeley.

Henisz, W. J. (2000). “The institutional environment for economic growth”. *Economics & Politics*, Vol. 12, No. 1, pp. 1-31.

Hofstede, G. (1984). C*ulture's consequences: International differences in work-related values.* Sage.

Hofstede, G. Hofstede, G. J. and Minkov, M. (2010). *Cultures and organizations: Software of the mind*. New York: McGraw-Hill.

ILO (2002). *Women and men in the informal economy: a statistical picture*. International Labor Office. Ginebra.

Iriyama, A. Kishore, R. and Talukdar, D. (2016). “Playing dirty or building capability? Corruption and HR training as competitive actions to threats from informal and foreign firm rivals”. *Strategic Management Journal*, Vol. 37, No. 10, pp. 2152-2173.

Jimenez, A. Palmero-Cámara, M.C. González-Santos, M.J. González-Bernal, J. and Jiménez-Eguizábal, J.A. (2015). “The impact of educational levels on formal and informal entrepreneurship”. *Business Research Quarterly*. Vol. 18, No. 3, pp. 204-212.

Jimenez, A., Puche-Regaliza, J. C., Jiménez-Eguizábal, J. A., and Alon, I. (2017). “Political discretion and corruption: the impact of institutional quality on formal and informal entrepreneurship”. *European Journal of International Management*, Vol. 11, No. 3, pp. 280-300.

Keig, D. L. Brouthers, L. E. and Marshall, V. B. (2015). “Formal and informal corruption environments and multinational enterprise social irresponsibility”. *Journal of Management Studies*, Vol. 52, No. 1, pp. 89-116.

Kennedy, P.A. (1992). *Guide to econometrics*. MIT Press: Cambridge, MA.

Klapper, L. Guillén, M.F. and Quesada, J.M. (2007). “Entrepreneurship and firm formation across countries”. The *World Bank, Policy Research Working Paper Series*: 4313.

Klapper, L. and Love, I. (2011). “The impact of the financial crisis on new firm registration”. *Economic Letters*. Vol. 113, No. 1, pp. 1-4.

Klitgaard, R. (1988). *Controlling corruption*. Univ of California Press.

La Rosa, F., Paternostro, S., and Picciotto, L. (2018). “Exploring the determinants of anti-mafia entrepreneurial behaviour: an empirical study on southern Italian SMEs”. *Entrepreneurship & Regional Development*, Vol. 30, No. 1-2, pp. 1-37.

Leff, N. H. (1968). *Economic Policy-Making and Development in Brazil*, 1947–1964. New York: Wiley.

Levine, R. and Rubinstein, Y. (2017). “Smart and Illicit: Who Becomes an Entrepreneur and Do They Earn More?” *Quarterly Journal of Economics*, Vol. 132, No. 2, pp. 963–1018.

Li, S. (2002). “Does east love guanxi more than west? The evolution of relation‐based governance: Contemporary and historical evidences”. *Global Economic Review*, Vol. 31, No. 1, pp. 1-11.

Li, S. (2009). *Managing international business in relation-based versus rule-based countries*. Business Expert Press.

Li, S. and Wu, J. (2010). “Why some countries thrive despite corruption: the role of trust in the corruption–efficiency relationship”. *Review of International Political Economy*, Vol. 17, No. 1, pp. 129-154.

Mauro, P. (1995). “Corruption and growth”. *Quarterly Journal of Economics*. Vol. 110, No. 3, pp. 681–712.

Mauro, P. (1998). “Corruption and the composition of government expenditure”. *Journal of Public Economics*. Vol. 69, pp. 263–279.

Méndez, F. and Sepúlveda, F. (2006). “Corruption, growth and political regimes: Cross country evidence”. *European Journal of Political Economy*, Vol. 22, No. 1, pp. 82-98.

Méon, P.G. and Sekkat, K. (2005). “Does corruption grease or sand the wheels of growth”. *Public Choice*. Vol. 122, No. 1-2, pp. 69-97.

Méon, P.G. and Weill, L. (2010). “Is corruption an efficient grease?”. *World Development*. Vol. 38, No. 3, pp. 244-259.

Mishra, A. (2006). “Persistence of corruption: some theoretical perspectives”. *World Development*, Vol. 34, No. 2, pp. 349-358.

Moore, C.B. Payne, G.T. Bell, R.G. and Davis, J.L. (2015). “Institutional distance and cross-border venture capital investment flows”. *Journal of Small Business Management*. Vol. 53, No. 2, pp. 482-500.

Moro, A., Fink, M., Maresch, D., and Fredriksson, A. (2017). “Loan managers’ decisions and trust in entrepreneurs in different institutional contexts”. *Entrepreneurship & Regional Development,* Vol. 30, No. 1-2, pp. 1-27.

Moya, M. (2008). *Worldwide Business startups*. http://www.moyak.com/researcher/ resume/papers/business\_startups.html.

Muellner, J. Klopf, P. and Nell, P. C. (2017). “Trojan Horses or Local Allies: Host-country National Managers in Developing Market Subsidiaries”. *Journal of International Management.* Forthcoming.

Myrdal, G. (1989). “The equality issue in world development”. *The American Economic Review,* Vol. 79, No. 6, pp. 8-17.

Neter, J. Wasserman, W. and Kutner, M.H. (1985). *Applied linear statistical models: regression, analysis of variance and experimental designs*. 2ª Ed. Irwin, Homewood.

North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge: Cambridge University Press.

Olson, M. (1993). “Dictatorship, democracy, and development”. *American Political Science* Review. Vol. 87, pp. 567– 576.

Park, H. (2003). “Determinants of corruption: A cross-national analysis”. *Multinational Business Review*, Vol. 11, No. 2, pp. 29-48.

Peng, M.W. and Heath, P.S. (1996). “The growth of the firm in planned economies in transition: Institutions, organizations, and strategic choice*”. Academy of Management Review.* Vol. 21, No. 2, pp. 492-528.

Pournarakis, M. and Varsakelis, N.C. (2004). “Institutions, internalization and FDI: the case of economies in transition”. *Transnational Corporations*. Vol. 13, No. 2, pp. 77-94.

Schumpeter, J. A. (1951). *Essays: On entrepreneurs, innovations, business cycles, and the evolution of capitalism*. Transaction Publishers.

Scott, W. R. (1995). *Institutions and organizations. Foundations for organizational science*. London: A Sage Publication Series.

Sobel, R.S. (2008). “Testing Baumol: Institutional quality and the productivity of entrepreneurship”. *Journal of Business Venturing*. Vol. 23, No. 6, pp. 641-655.

Studenmund, A. H. (1992). *Using econometrics: a practical guide*. HarperCollins: New York.

Uhlaner, L. and Thurik, R. (2007). “Postmaterialism influencing total entrepreneurial activity across nations”. *Journal of Evolutionary Economics*. Vol. 17, No. 2, pp. 161-185.

Urbano, D. and Alvarez, C. (2014). “Institutional dimensions and entrepreneurial activity: an international study”. *Small Business Economics*. Vol. 42, No. 4, pp. 703-716.

Verbeke, A., Amin Zargarzadeh, M., and Osiyevskyy, O. (2014). “Internalization theory, entrepreneurship and international new ventures”. *Multinational Business Review,* Vol. 22, No. 3, pp. 246-269.

Vial, V. and Hanoteau, J. (2010). “Corruption, manufacturing plant growth, and the Asian paradox: Indonesian evidence”. *World Development*, Vol. 38, No. 5, pp. 693-705.

Vorley, T., and Williams, N. (2016). Between petty corruption and criminal extortion: How entrepreneurs in Bulgaria and Romania operate within a devil’s circle. International *Small Business Journal*, Vol. 34, No. 6, pp. 797-817.

Webb, J. W. Bruton, G. D. Tihanyi, L. and Ireland, R. D. (2013). “Research on entrepreneurship in the informal economy: Framing a research agenda”. *Journal of Business Venturing*, Vol. 28, No. 5, pp. 598–614.

World Bank (2000). *Helping countries combat corruption: Progress at the World Bank since 1997.* Washington DC.

Wei, S. (2000a). “How Taxing is Corruption on International Investors?” *Review of Economics and Statistics*. Vol. 82, No. 1, pp. 1-11.

Wei, S. (2000b). “Local corruption and global capital flows”. *Brookings Papers on Economic Activity*. Vol. 2, pp. 303–354.

[www.transparency.org](http://www.transparency.org)

Yim, H. R. Lu, J. and Choi, S. J. (2017). “Different role of lobbying and bribery on the firm performance in emerging markets”. *Multinational Business Review*, Vol. 25, No. 3, pp. 222-238.

Yu, J. J. Zhou, X. Wang, Y. and Xi, Y. (2013). “Rural entrepreneurship in an emerging economy: reading institutional perspectives from entrepreneur stories”. *Journal of Small Business Management.* Vol. 51, No. 2, pp. 183-195.

Zacharakis, A.L. Bygrave, W.D. and Shepherd, D.A. (2000). *Global entrepreneurship monitor: National entrepreneurship assessment: United States of America*. Kauffman Center for Entrepreneurial Leadership: Kansas City.

**Table 1 List of countries in the sample**

|  |  |  |
| --- | --- | --- |
| 1. Albania | 2. Algeria | 3. Argentina |
| 4. Armenia | 5. Australia | 6. Austria |
| 7. Azerbaijan | 8. Bangladesh | 9. Belgium |
| 10. Bolivia | 11. Bosnia Herzegovina | 12. Botswana |
| 13. Brazil | 14. Bulgaria | 15. Burkina Fasso |
| 16. Canada | 17. Chile | 18. Colombia |
| 19. Congo | 20. Costa Rica | 21. Croatia |
| 22. Czech Republic | 23. Denmark | 24. Ecuador |
| 25. Egypt | 26. El Salvador | 27. Finland |
| 28. France | 29. Georgia | 31. Germany |
| 32. Ghana | 33. Greece | 34. Guatemala |
| 35. Haiti | 36. Hong Kong | 37. Hungary |
| 38. Iceland | 39. India | 40. Indonesia |
| 41. Ireland | 42. Israel | 43. Italy |
| 44. Jamaica | 45. Japan | 46. Jordan |
| 47. Kazakhstan | 48. Kenya | 49. Kyrgyz Republic |
| 50. Latvia | 51. Lebanon | 52. Lithuania |
| 53. Luxembourg | 54. Madagascar | 55. Malawi |
| 56. Malaysia | 57. Mexico | 58. Moldova |
| 59. Morocco | 60. Netherlands | 61. New Zealand |
| 62. Nicaragua | 63. Norway | 64. Oman |
| 65. Pakistan | 66. Peru | 67. Philippines |
| 68. Poland | 69. Portugal | 70. Romania |
| 71. Russia | 72. Senegal | 73. Serbia |
| 74. Singapur | 75. Slovak Republic | 76. Slovenia |
| 77. South Africa | 78. Spain | 79. Sri Lanka |
| 80. Sweden | 81. Switzerland | 82. Syria |
| 83. Tajikistan | 84. Tanzania | 85. Thailand |
| 86. Tunisia | 87. Turkey | 88. Uganda |
| 89. Ukraine | 90. United Kingdom | 91. United States |
| 92. Uzbekistan | 93. Yemen | 93. Zambia |

**Table 2 Descriptive statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variable** | **Average** | **Standard Deviation** | **Min.** | **Max.** |
| **Entry density** | 2.476 | 3.535 | .001 | 27.033 |
| **POLCONV** | .542 | .284 | 0 | .9 |
| **Corruption** | 4.591 | 2.393 | .4 | 10 |
| **Per Cápita GDP** | 5.55 | .70 | 4.144 | 6.954 |
| **GDP growth** | 4.41 | 3.403 | -18 | 34.5 |
| **Inward FDI** | 6.092 | 29.729 | -15.713 | 564.933 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **1** | **2** | **3** | **4** | **5** | **VIFs** |
| **1. POLCONV** | 1 |  |  |  |  | 1.34 |
| **2. Corruption** | .481 | 1 |  |  |  | 3.98 |
| **3. Per Cápita GDP** | .463 | .454 | 1 |  |  | 3.87 |
| **4. GDP growth** | -.184 | -.220 | -.195 | 1 |  | 1.10 |
| **5. Inward FDI** | .046 | .137 | .133 | .068 | 1 | 1.03 |

**Table 3 Correlation matrix and VIFS**

**Table 4. Table of results (Dependent variable entry density).**

|  |  |  |  |
| --- | --- | --- | --- |
|  | (1) | (2) | (3) |
| Variables | WBGES\_Entry\_Density | WBGES\_Entry\_Density | WBGES\_Entry\_Density |
|  |  |  |  |
| Corruption | -0.469\*\*\* | -0.459\*\*\* | -0.510\*\*\* |
|  | (0.0286) | (0.0286) | (0.0429) |
| POLCONV |  | -0.288\*\*\* | -1.720\*\*\* |
|  |  | (0.0921) | (0.610) |
| POLCONV\*Corruption |  |  | 0.174\*\* |
|  |  |  | (0.0839) |
| GDP\_Capita | 0.826\*\*\* | 0.763\*\*\* | 0.766\*\*\* |
|  | (0.0699) | (0.0709) | (0.0672) |
| GDP\_Growth | 0.0153\*\*\* | 0.0157\*\*\* | 0.0133\*\*\* |
|  | (0.00480) | (0.00475) | (0.00450) |
| Inward FDI | 0.00361 | 0.00381\* | 0.00341 |
|  | (0.00221) | (0.00221) | (0.00212) |
| Year Dummies | Included | Included | Included |
|  |  |  |  |
| Constant | 0.0845 | 0.504 | 0.892 |
|  | (0.509) | (0.519) | (0.553) |
|  |  |  |  |
| Observations | 558 | 558 | 558 |
| Number of countries | 93 | 93 | 93 |

Standard errors in parentheses

\* p < 0.10; \*\* p < 0.05; \*\*\* p < 0.01

Coefficients of the year dummies not included for parsimony reasons.

**Figure 1. The moderating impact of political discretion on corruption**

**Table 5. Table of results (Dependent variable entry per capita).**

|  |  |  |  |
| --- | --- | --- | --- |
|  | (4) | (5) | (6) |
| Variables | WBGES\_Entry\_ Capita | WBGES\_Entry\_ Capita | WBGES\_Entry\_ Capita |
|  |  |  |  |
| Corruption | -2.871\*\*\* | -2.958\*\*\* | -1.953\*\*\* |
|  | (0.173) | (0.151) | (0.371) |
| POLCONV |  | -5.375\*\*\* | -2.668 |
|  |  | (0.585) | (1.678) |
| POLCONV\*Corruption |  |  | 1.345\*\*\* |
|  |  |  | (0.514) |
| GDP\_Capita | 15.86\*\*\* | 14.45\*\*\* | 13.84\*\*\* |
|  | (0.489) | (0.338) | (0.387) |
| GDP\_Growth | -0.000251 | 0.0255 | 0.0348 |
|  | (0.0246) | (0.0234) | (0.0270) |
| Inward FDI | 0.0344\*\*\* | 0.0347\*\*\* | 0.0304\*\*\* |
|  | (0.0115) | (0.0117) | (0.0111) |
| Year Dummies | Included | Included | Included |
|  |  |  |  |
| Constant | -47.01\*\*\* | -36.29\*\*\* | -43.97\*\*\* |
|  | (3.500) | (2.523) | (4.590) |
|  |  |  |  |
| Observations | 462 | 462 | 462 |
| Number of countries | 77 | 77 | 77 |

Standard errors in parentheses

\* p < 0.10; \*\* p < 0.05; \*\*\* p < 0.01

Coefficients of the year dummies not included for parsimony reasons.

1. Power distance, individualism, masculinity, uncertainty avoidance, pragmatism and indulgence. [↑](#footnote-ref-2)