Essays on Informal Practices, Foreign Direct Investment and Economic Development

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This doctoral dissertation is a collection of three essays that study the relationship of informal practices with economic development using both micro- and macro-level approaches. The first essay is solely authored, and the latter two are collaborations.

In the first essay, I study the use of non-monetary exchange between firms in Russia with a unique survey data set from the 2000s. The essay analyses whether the use of barter is based on strategic motives such as profit-seeking or dictated by circumstances and pure survival in a hostile business environment using a new econometric approach to the subject. The results indicate that on average, a larger size, private ownership, increased indebtedness and a decreased profit margin for firms in regions with a higher risk of crime are associated with the use of barter and offsets. However, increase in the use of barter is not related to regional crime risk but only to firm level indicators. Furthermore, larger firms and those that date prior to the demise of the Soviet Union or the 1990s are more likely to use barter and appear to mitigate falling profitability by utilising barter and offsets while these firms are not loss-making on average; implying that non-monetary exchange is used for strategic purposes.

In the second essay, we study the differences between perception and experience based indicators of corruption and their implied effects on attracting foreign direct investment into a given country. In our analysis, we show that while perceptions of corruption are significantly associated with the amount of foreign direct investment (FDI) that a country attracts, the actual experience on the ground is not significantly linked to attraction of FDI. We also find some evidence that greenfield investment is significantly associated with the experience of corruption while mergers and acquisitions are driven by perceptions.

The third essay studies the relationship between corruption and the shadow economy at the sub-national level with firm-level data. In the essay, we ask whether sub-national regions in which more firms say that corruption is a problem for their operations also have more firms claiming that the practices of informal sector competitors are a problem for their operations. Our finding that regions with a high share of firms holding the perception that corruption is a problem tend to have a high share of firms with the view that the shadow economy is a problem, and vice versa, is in line with the existing cross-country literature. Africa seems to be different, however, in that neither of these findings holds when we restrict our sample to sub-Saharan African countries.
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Tiivistelmä

Toinen essee tutkii asiantuntijoiden arvioiden perustuvien ja kokemusperäisten korruptioindikaattoreiden eroa suhteessa maiden investointihoukuttelevuuteen. Tutkimus osoittaa, että asiantuntijoiden arvioihin perustuvat indikaattorit korreloivat tilastollisesti merkitsevästi tietyin maan ulkomaisten investointien virran kanssa, mutta kokemusperäiset indikaattorit taas eivät. Samalla kokemusperäiset indikaattorit taas näiden tulosten mukaan näyttävät vaikuttavan täysin uusiin ulkomaisiin investointeihin (green field investments), mutta asiantuntijoiden arvioihin perustuvat arviot korruptiosta taas korreloivat yritysostoina tai yhdistymisesti (mergers & acquisitions) tapahtuvien investointien kanssa.

Kolmas essee käsittelee korruption ja harmaan talouden suhdetta kansallista tasoa alemmalla aluetasolla yritysaineiston avulla. Maiden sisällä näiden ilmiöiden esiintyvyys voi vaihdella merkittävästi ja tämä tutkimus käättää siten rikkaampaa aineistoa myös eikansallisella tasolla. Tämän tutkimuksen pääasiallisena tuloksena on, että yritykset, jotka kekevat harmaan talouden ilmiöt ongelmaksi, kärsivät myös todennäköisemmin korruptiosta, mikä tulee suurta osaa aikaisemmasta kansallisen tason tutkimuksesta. Poikkeuksena tähän on kuitenkin Saharan eteläpuolinen Afrikkia, johon nämä tulokset eivät päde.

Avainsanat
Epäviralliset käytännöt taloudessa, korruptio, harmaa talous, suorat ulkomaiset investoinnit, vaihtokauppa, Venäjä

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Helsinki, May 2019

Sinikka Parviainen
List of Essays

**Essay 1:** "Barter and Offsets in Russia in the 2000s: A Strategic Choice?" Unpublished manuscript, 2019.


**Essay 3:** "Corruption and the Shadow Economy at the Regional Level". The Review of Development Economics. DOI: 10.1111/rode.12517
Introduction

Poor public institutions can drive firms to resort to informal activities in order to maintain their operations (see for example Friedman et al. 2000). According to a broadly adopted definition by the World Bank, the informal or shadow economy is comprised of informal coping strategies in difficult circumstances for firms and individuals, on the one hand, as well as unofficial or even illegal activities such as corruption on the other. Although traditional economic theory considers informal practices as ineffective, it has been argued that in emerging economies with weak institutional structures, such as the rule of law, informal practices can emerge and expand to compensate for the inadequacies in formal institutions. For example, corruption is generally considered as an impediment for economic growth and attracting foreign direct investment (FDI), but there are countries that thrive despite high levels of corruption, including some East Asian countries (Rock and Bonnett 2004). Similarly, according to economic theory, choosing to diverge from the monetary economy to bartering is ineffective and costly, but in Russia in the 1990s it was a commonly used practice (see for example Commander, Dolinskaya and Mumssen 2002), and according to some researchers it was this divergence from the monetary economy and the enabling historical institutions that saved the entire former Soviet realm from economic collapse (Aukutsionek 1998).

The issue of whether informal practices such as corruption are detrimental to economic development and investment (so-called sand-in-the-wheels-hypothesis) or the best choice in a second-best world (grease-in-the-wheels-hypothesis) remains unresolved (Méon and Sekkat 2005; Méon and Weill 2010; Dreher and Gassebner 2013, Mendoza et al. 2015). Similar to informal practices alleviating inadequacies in formal institutions, the effect of corruption can be either grease or sand depending on the time frame, context or firm attributes, such as the the size of the firm (see for example Mendoza et al. 2015). To contribute to this important stream of literature, this doctoral dissertation provides new information on informal practices and economic development. The first essay provides an interesting example from Russia by analysing non-monetary (barter and offsets) trade between firms in Russian regions in the 2000s, with unique firm-level survey data and a previously unused econometric approach. The second essay evaluates different indicators of corruption based on experts’ perceptions as well as surveys on the experiences of firms and investigates whether it is experiences or perceptions that are associated with higher FDI flows into a given country, which have not been studied before in the same framework. The third essay takes a look at the relationship between corruption and the shadow economy at the regional level and asks whether these phenomena are complements or substitutes through an analysis of firm level survey data.

Corruption and other informal practices are, according to different metrics, deeply rooted in Russian society and business due to centuries-long traditions of patrimonial power structures and informal networking that still coexist alongside modern practices (Ledeneva and
One of the most striking features of Russian economic development during the 1990s was the wide use of non-monetary exchange and non-monetary debt arrangements, which were largely unavoidable for firms operating in Russian industry at the time (Commander and Mumssen 2000). Surprisingly, despite a decade of reforms and unprecedented economic growth, at the end of 2008, barter transactions were reported to have increased again as a by-product of the global credit crunch according to economic research institutions (BOFIT 2009; Oxford Analytica 2009) and reports in the media (see for example Barry 2009 or Popova 2009). However, due to the vast scale of bartering in the 1990s, both empirical and theoretical academic studies on barter in Russia or in the former Communist states have focused on the barter phenomenon in the 1990s. Most studies have concluded that barter at the macro-level is negatively associated with inflation levels while at the micro-level linked to lack of liquidity in some form (see for example Maurel and Brana 1999 or Linz and Krueger 2000). As there are no studies on barter in Russia from the last decade, the first contribution of the first essay to the literature on informal practices in Russia and the role of informal practices in general is to document with unique survey data that barter has also been a relatively common practice during the period of fast economic growth in the 2000s. Second, I will assess the motives behind non-monetary exchange that could contribute to the phenomenon with a discrete choice mixed effects model.

Corruption, which is often defined as dishonest or fraudulent conduct by those in power, is deemed undesirable since high levels of corruption are linked to poor public institutions, which can in turn lead to inequality and lower economic development. On the other hand, FDI that is defined as having a lasting management interest in an enterprise in a foreign country, is an important source of capital and of technological progress, especially for lower income countries. The importance of FDI for developing economics is paramount, and its significance has been increasing in recent years. According to recent statistics from 2017, half of FDI inflows were directed at developing economies while over 70% of outflows came from developed economies (UNCTAD 2018).

Institutional quality in a given country can influence the willingness to engage in FDI or to pursue other means of internationalization. According to Brainard (1997), firms export when there are benefits to concentration (economies of scale) and invest in production in a foreign country when the proximity to local or regional customers is advantageous or when there are factor endowments (low wages, abundance of natural resources) in the host country that make production more profitable there. The self-selection into FDI, exporting or domestic markets as well as the location of the investment is influenced by the expected costs associated with the foreign institutional environment. These costs can be in the form of ill-functioning formal institutions, which can manifest as corruption or other informal practices (for example Bloningen (2005) presents a review of FDI determinants).

There is already a vast amount of empirical literature on the effect of corruption and in-
institutional quality on FDI. Many of the studies find a negative effect with different data specifications but that the relative levels between the recipient country and investor country matter (Wei 2000a; Habib and Zurawicki 2002; Egger and Winner 2006; Hakkala et al. 2008). One factor explaining, the inconsistency in empirical results on informal practices, FDI and economic growth is the difficulty associated with measuring informal practices such as corruption (see for example Knack 2007 and Treisman 2007). Most of the studies, especially those regarding the relationship between corruption and FDI, have used measures based on experts' views (such as the Corruption Perceptions Index (CPI) by Transparency International). These indicators of corruption and institutional quality that are widely used in academic as well as applied research, have been questioned because they can reflect subjective views to a larger degree compared to surveys of actual experiences of firms on the quality of civil service or corruption more specifically (see for example Knack 2009 and Treisman 2007). Only few studies have taken into consideration the differences between perception and survey (experience-based) indicators. For example, Daude and Stein (2007) addressed the issue that survey-based measures might yield different results compared to perception-based measures with regard to FDI. Therefore, in an essay to be included in my dissertation, I will address this discrepancy between perception and experience based indicators of corruption with regard to FDI, which can offer more insights into the directions that global investments take and the underlying reasons that investment decisions are based their on.

Furthermore, whether corruption is a substitute or a complement to informal economy is not clear, and empirical studies on the subject are relatively scarce. Many studies, such as Johnson et al. (2000), Lassen (2007), Torgler and Schneider (2009) and Friedman et al. (2000), find that corruption and the shadow economy feed each other and are thus complements. As a notable exception, Dreher et al. (2009) assert that the presence of a relatively large shadow economy can substitute for corrupt practices, and firms' motive to go underground is to avoid paying bribes to corrupt officials. However, according to their analysis, there might be important differences between poor and rich countries. These studies are based on very limited data sets, and therefore I, together with a co-author, reassess this issue by exploiting sub-regional variation.

Informal practices in the economic sphere are in no way a thing of the past. As long as there are formal institutions that have evolved into something other than they are supposed to be and there are unintended consequences to reforms and the suitable cultural and historical traditions, there will be firms and people who feel they need to operate in the shadows. Furthermore, rapid digitalization will not decrease the prevalence of the informal economy but will rather provide a new more efficient platform for informality, despite the fact that surveillance efforts to control the internet are increasing. New digital possibilities have already made self-organization very popular, which is evolving as response to the perceived burden of bureaucracy that plagues the formal economy in many countries. While the
internet provides a breeding ground for informal practices that can gnaw at the credibility of the rule of law as the regulators struggle to keep up, at the same time it is a source of new innovation and productivity gains that can help viable firms overcome difficulties and shed some light on corrupt practices. Public sector must recognize this phenomenon as a permanent part of economic transactions and learn to be careful in differentiating the negative influences from the positive ones.

1. Overview of the Essays

1.1. Essay 1

The first essay, a solely authored manuscript, studies the use of non-monetary exchange between firms in Russia with a unique survey data set from 2004 to 2011. The essay analyses whether the use of barter is based on strategic motives such as profit-seeking or dictated by circumstances and pure survival in a hostile business environment. Furthermore, this essay outlines the factors that could make barter optimal to economic actors and investigates the underlying institutional mechanisms that can make barter attractive in a relatively modern industrialized economy. The survey data imply that, on average, a relatively large share (38 %) of firms use barter or offsets to some degree. The motives for using non-monetary transactions, namely, whether they are a strategic choice for firms or forced upon them by the circumstances, are investigated with a discrete choice mixed effects model. The methodology implemented in the essay allows for controlling unobservable firm-level heterogeneity in repeated observations, which is important in analysing such a culturally linked phenomenon as non-monetary exchange in Russia.

The first contribution of this essay is to document with a firm-level survey data that barter appears to have been a relatively commonly used practice in Russia during 2004-2011. Second, the results from the binary choice model of barter implies that more debt at the firm level, lower profit margin, private ownership and a higher regional risk of crime are associated with barter. The results on firm indebtedness, private ownership and risk of crime are robust to interaction effects whether the firm is established in the Soviet era, during the 1990s or after 1998, when bartering in the Russian economy started to decline sharply. Furthermore, the effects found are not affected by firm size. However, the effect of firm profitability on barter use differs significantly by firm size, and depending on the period in which the firm was established, which acts as a proxy for whether the firm has upheld bartering traditions. As a third important contribution, the results from the interaction models imply that firms that are established before the Soviet demise or in 1990s (1992-98) use barter more in response to falling profitability than firms established later, which indicates a more strategic use of barter but it is also reflection of the fact that these older firms are more likely to have maintained networks for bartering. Fourth, slightly larger firm, and more specifically
firms with between 251-1,000 workers use barter to mitigate lower profitability, while small and medium sized enterprises’ (SMEs) use of barter is more stable in the face of changes in profitability.

Following the demise of the Soviet Union in 1991, the extensive use of non-monetary transactions in Russia between firms was a phenomenon that puzzled economists and other social scientists. These non-monetary transactions were comprised of either pure barter, where goods are exchanged for goods bilaterally, or in chains or offsets where accrued debts (in money) are paid off in goods or services. During 1992-1998, the use of non-monetary exchange (henceforth barter) was wide-spread and often unavoidable for firms operating in the Russian industry. At its height, barter was estimated to have reached a share of over 50% of all industrial sales (Commander et al. 2002). In the words of Guriev and Ickes (2000, p. 147), barter in such an industrialized economy "challenges the foundations of classical economic theory, according to which exchanging in goods is seen as an inefficient way of trading compared to monetary transactions due to high transaction costs".

After the 1998 Rouble crisis, barter use started to decrease rapidly following due to more favourable economic conditions, such as increasing global oil prices together with a decline in the value of the Rouble. During the decade that followed, the Russian economy seemed to be on the path for sustainable growth, with a yearly average GDP growth of 7%, and by 2008 poverty was nearly halved in Russia. However, when the global credit squeeze reached Russia at the end of 2008, barter transactions were reported to be on the increase again (Kuvalin and Moiseev 2009). The survey data by the Russian Academy of Sciences presented in this essay implies that non-monetary exchange has been a relatively widely used practice, even during the years of unprecedented economic growth in Russia in the 2000s.

Both empirical and theoretical studies on barter in Russia and in the former Soviet states have focused on the 1990s barter phenomenon. Previous literature has found barter to be linked to a lack of liquidity in some form (see for example Krueger and Linz 2002). At the macro level, the incentives to engage in barter were sparked by fiscal and monetary policies (Kim and Pirtilä 2004) and maintained by Russia’s institutional environment (such as inadequacies in financial market institutions), contract enforcing properties of trading in-kind (Marin et al. 2000) as well as historical and cultural traditions of barter and informal networking in Russia (Ledeneva 1998; Ledeneva and Seabright 2000; Ledeneva 2006). Conversely, Gaddy and Ickes (1998) argue that barter in the 1990s was a strategic choice for firm managers to hold on to their status by avoiding restructuring after the collapse of the Soviet Union.

The analysis presented in this essay demonstrates that non-monetary exchange was still a relatively normal course of affairs in Russia in the 2000s despite numerous improvements in the institutional environment compared to the 1990s. Increased knowledge of the phe-
nomenon of barter and offsets in Russia illuminates the effect of the institutional constraints on firm behaviour that is bound or helped by traditions of networking. These traditions of informality in Russia are still pervasive, and the adverse business climate and lack of adequate institutions, such as predictable legislative processes has the potential to induce firms to also engage in non-monetary exchange in the future. Bartering may then become a vicious circle that enforces itself; the lack of change in the structures to incentivise a change in behaviour will make firms resort to opaque non-monetary transactions, often distorting the transparency of the price mechanism, and such practices will spread through supplier networks. While this essay shows that firm-specific attributes are important, perhaps surprising environmental factors can be a breeding ground for barter in Russia. Namely, in the 2010’s, the internet has provided a more efficient platform for non-monetary exchange and may allow for more complex networks to persist. Furthermore, since 2014 Russia has experienced a period of political and economic isolation that is the most serious of its kind since the collapse of the Soviet Bloc. This isolation, which is both self-inflicted and involuntary, is further exacerbated by increasing global political tensions and protectionism, which can induce firms to resort to the old traditions of operating described in this essay.

1.2. Essay 2

The second essay, co-authored with Robert Gillanders, shows that standard measures of corruption based on the perceptions of experts and opinion surveys and measures based on the experiences of firms can in some cases lead to quite different conclusions as to how much of a problem corruption is in a country. We then show that while perceptions of corruption are significantly associated with the amount of FDI that a country attracts, the experience on the ground is not. We also find some evidence that greenfield investment is significantly associated with the experience of corruption while mergers and acquisitions are driven by perceptions. The essay has been published in the Manchester School journal in 2018.

Corruption, the abuse of public power for private gain, can impose an additional cost on many transactions and activities. Fisman and Svensson (2007) point out that corruption could act like a tax or alternately, it may help (some) firms to overcome excessive bureaucracy and red tape. For example, Mendoza et al. (2015) find that in the case of SMEs in the Philippines, corruption greases the wheels of economic activity. Corruption has also been found to be negatively associated with many macroeconomic conditions, the presence of which could discourage foreign investment. In addition, O’Toole and Tarp (2014) demonstrate that corruption lowers the efficiency of capital investment. Foreign investors, like domestic investors, will take these costs into account when making their investment decisions.

This essay contributes to a long-standing branch of literature that has tended to find that corruption, as measured by expert’s perceptions, is detrimental in terms of a country’s FDI.
performance. We include both perceptions of corruption and firms’ experiences of corruption in an empirical FDI model as separate and distinct variables. After illustrating that these variables can tell very different stories about the extent of corruption in a country, we show that perceptions-based measures are strongly associated with FDI while experience-based measures are not, even when perceptions are not included in the model. However, we do find some evidence that experiences trump perceptions when it comes to greenfield investment.

Until relatively recently, corruption has been measured and compared internationally using measures that are, for the most part, based on the perceptions of experts. However, recent years have seen the emergence of large survey-based data sets that contain corruption indicators based on the experiences of firms. While perception based indicators have allowed academics to understand corruption better and helped the media to shine a light on corruption, researchers have long been aware of the shortcomings inherent in such measures. Svensson (2003), Reinikka and Svensson (2006), Treisman (2007) and Fan, Lin and Treisman (2009) all raise concerns that perception indices are likely to suffer from perception biases. Knack (2007) and Kenny (2009) suggest that perception indicators lag reality. On the other hand, experience based measures from appropriately designed surveys can yield “hard evidence on corruption” (Svensson 2005). Knack (2007) stresses that survey-based measures can “place a greater emphasis on experience and less on perceptions” (p. 257) and that “[i]n contrast to most expert assessments, surveys of firms and households generate data likely to be largely independent from other judgments” (p. 266). Razafindrakoto and Roubaud (2010) compare individuals’ experiences of corruption with a survey of experts’ opinions for Sub-Saharan Africa and conclude that there are differences between the two and that there are ideological and cultural biases in the experts’ evaluations of corruption.

There is a significant amount of empirical literature that examines the effect of corruption on FDI, mostly using perceptions-based indicators. Wei (2000a) studies the effect of corruption on FDI using bilateral investment data and finds that corruption reduces FDI significantly and substantially. Wei (2000b) finds that corruption plays a role in shaping both the composition of the FDI that a country receives and the magnitude. Hakkala, Norbäck and Svaleryd (2008) use firm-level data from Sweden to show that higher corruption in a country reduces the probability that a firm will invest there. Habib and Zurawicki (2002) examine the effect of corruption in the host and receiving countries on FDI. They find a negative effect of host country corruption and of the difference between corruption levels between the host and receiving countries on FDI. Egger and Winner (2006) examine outward FDI stocks of Organisation for Economic Co-operation and Development (OECD) countries and find that the overall effect of corruption is negative. Mishra and Daly (2007) find that institutional and bureaucratic quality in host countries are important determinants of FDI. Busse and Hefeker (2007) also find that institutional quality matters for FDI, although they find a weaker relationship between corruption and FDI flows than with other political factors,
such as government stability, conflicts, law and order, ethnic tensions and bureaucratic quality. Atems and Mullen (2016) study US outward FDI and find that corruption in the host country discourages investment, although they also find that money laundering possibilities attract investment.

At the sub-national level, Cole, Elliott and Zhang (2009) find that FDI is more attracted to Chinese provinces that are actively fighting against corruption. Ledyeva, Karhunen and Kosonen (2013) study Russian regions and find that foreign investors tend to pick regions that are similar to their host countries in terms of where they are on the (relative) corruption and democracy spectra. A related contribution is provided by Morrissey and Udomkerdmongkol (2012), who conclude that “increased FDI under political stability and low corruption has the greatest impact on increasing total private investment”.

Not all of the literature has used perception-based measures of corruption. An important and particularly relevant contribution is provided by Javorcik and Wei (2009), who show that their firm-level results regarding the importance of corruption for both the entry mode and level of FDI are robust to using a corruption measure based on a survey of firms. While our findings might seem to be in direct opposition to theirs, it should be borne in mind that they study 262 firms investing in Europe and Central Asia and do not include perceptions and experiences simultaneously. Using survey data of French civil servants, Bénassy-Quéré, Coupet and Mayer (2007) study the impact of institutional quality on bilateral FDI. They find that corruption is important alongside measures of the quality of banking sector and general legal institutions. Daude and Stein (2007) also study the effect of institutional quality on FDI. They point out that indicators based on expert evaluations on one hand and surveys on the other hand might yield different results. They find that a survey-based measure of corruption similar to one that we employ in this essay is insignificant, although they do not include perceptions and this measure at the same time. They also fail to find a significant effect of the standard corruption measures on FDI, which puts them at odds with much of the literature. The weight of evidence suggests that corruption is undesirable in terms of attracting FDI, although there are some essays that fail to find a relationship, such as Daude and Stein (2007), while Egger and Winner (2005) find that corruption is beneficial in terms of FDI in both the short and long run. This essay builds on this literature by asking whether perceptions of corruption, the reality of corruption or both matter for FDI.

When perceptions differ from the experiences of firms, which should matter? Should one matter more than the other? These are empirical questions, but we can think of reasons that each could matter. The experience-based measures are probably the more relevant of the two in that they capture the actual situation faced by firms and are exclusively concerned with firms whereas the other measures may pick up corruption that affects individuals. However, the perceptions measures, particularly the Corruption Perceptions Index (CPI), which has received considerable media attention and is easily accessed in a user friendly way, may be
what foreign investors actually see.

Results from other studies offer little guidance as to which we should expect to matter. Gillanders (2014) finds that both perception-based and experience-based measures individually predict infrastructure quality. However, Aidt (2009) shows that when switching from perception- to experience-based measures the links between corruption and economic growth disappear (although he only has an experience-based measure for 1999-2000 and uses this to explain growth from 1970-2000). It is therefore important to note that the context may be important. Different underlying mechanisms and decision-making processes are likely to result in different conclusions regarding the relative importance of perception- and experience-based measures.

1.3. Essay 3

The third essay, co-authored with Robert Gillanders, studies the relationship between corruption and the shadow economy at the sub-national level using a firm-level data from the World Bank’s Enterprise Surveys (ES). The essay has been published in the Review of Development Economics in 2018. The essay adds value to the existing literature in that we employ data capturing the extent to which the shadow economy and corruption are viewed as problems by firms as opposed to the standard measures of corruption and the size of the shadow economy. This study contributes to an interesting and important strand of literature that has sought to establish the existence and nature of the relationship between corruption and the shadow economy, which has not been previously analyzed in the empirical literature at the sub-national level, as most of the related studies focus on the country level. This offers a new perspective, increases the available sample size and exploits the within-country variation of these important variables. It also considers meaningfully different measures of both corruption and the shadow economy in that we examine the extent to which they are viewed as problematic as opposed to their prevalence. We ask whether sub-national regions in which more firms say that corruption is a problem for their operations also have more firms claiming that the practices of informal sector competitors are a problem for their operations. Our finding that regions with a high share of firms holding the perception that corruption is a problem tend to have a high share of firms with the view that the shadow economy is problem, and vice versa, is in line with the existing cross-country literature. Africa seems to be different, however, in that neither of these findings holds when we restrict our sample to sub-Saharan African countries.

The weight of the existing evidence suggests that corruption and the shadow economy are complements in the sense that countries with a larger shadow economy tend to perform worse on various indices of perceived corruption. Corruption and informal economic activities remain widespread in the world and have been shown to be costly illicit phenomena in a
variety of ways. For example, the seminal works of Mauro (1995) and Wei (2000a) show that corruption has negative implications for economic growth and FDI flows respectively. Gupta et al. (2002) find that corruption increases both inequality and poverty and Breen and Gillanders (2012) argue that corruption leads to more burdensome regulation of firms. Informal economic activity is costly in terms of lost revenue to the state. Recent estimates presented by Schneider et al. (2010) put the weighted average size of the informal economy as a percentage of GDP at nearly 38% in sub-Saharan Africa, 36% in the Europe and Central Asia region and 13% in the OECD (p. 457). Estrin and Mickiewicz (2012) show that the shadow economy may reduce entrepreneurial activity. Schneider and Enste (2000) point out that a large shadow economy also distorts policymaking via the generation of biased statistics on employment, consumption and other such quantities of interest. Dreher et al. (2014) argue and demonstrate that correcting output information to include shadow output can be important for the formulation of policy when the objective is to improve income rather than official income.

Given the influence of these phenomena and the fact that both are illicit and widespread, it is unsurprising that the links between the two are of interest to both scholars and policymakers. Two intuitively appealing hypotheses have been advanced. Corruption and informal activity could be substitutes, as the option of operating as an informal firm and thus avoiding bribe demands means that in order to prevent the firm from operating informally, corruption must be curbed. Alternatively, corruption and informal activity could be complements. In this case, corruption incentivises and enables firms to move to the shadows. As mentioned above and elaborated on below, while there is empirical evidence in favour of both sets of theories, the weight of evidence seems to fall in favour of the complement theories. However, this evidence has been mostly generated from cross-country data, with a necessarily small number of observations. Taking the analysis to the regional level offers a new perspective and means of testing these theories as well as being of interest in its own right. Within-country variation in corruption has been shown to exist in the case of Italy by Golden and Picci (2005) and in the countries covered by the ES by Gillanders (2014). Chaudhuri et al. (2006), Torgler et al. (2010), Jonasson (2011), and Buehn (2012) demonstrate that there is variation in the extent of the shadow economy across Indian states, Swiss cantons, Brazilian regions and German districts, respectively. Tafenau et al. (2010) similarly show that the depth of the shadow economy varies within European countries. The ES allows us to illustrate that this is true for a broad range of countries. Understanding how these two particular types of illicit activity associate with each other is important for regional policy, especially in this age of targeted development interventions. If we target the shadow economy in a region with, say, an incentivised registration scheme, are we likely to improve or worsen the region’s corruption problem?
References


Commander, S., and Mummsen, C. (2000). The growth of non-monetary transactions in Russia: Causes and effects. The Vanishing Ruble: Barter Networks and Non-Monetary


Dreher, A., Méon, P. G., and Schneider, F. (2014). The devil is in the shadow. Do institutions affect income and productivity or only official income and official productivity?. Public Choice, 158(1-2), 121-141.


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Essays on Informal Practices, Foreign Direct Investment and Economic Development

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