
AN INSTITUTIONAL PERSPECTIVE ON CORRUPTION IN TRANSITION ECONOMIES
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ABSTRACT

Manuscript Type: Empirical

Research Question/Issue: Companies operating in transition economies encounter a broad range of potential challenges. In the area of tax, firms make direct tax payments but may also encounter unofficial tax costs in the form of bribery or extortion. We focus on institutional determinants, including formal rules, informal rules, and enforcement, to examine conditions under which firms are more likely to encounter these transactions. We operationalize formal rules as rule-based trust and informal rules as dispositional trust.

Research Findings/Insights: Based on a sample of over 5,000 firms representing 20 transition economies, we show that when rule-based trust is high, the presence of tax enforcement activities in the form of visits and inspections by tax officials does not change the relationship between rule-based trust and unofficial payments. However, when dispositional trust is low, unofficial payments are more likely if verification activities occur.

Theoretical/Academic Implications: We adopt a more holistic view and focus on the joint consideration of different institutional determinants and firm outcomes. In doing so, the article demonstrates the complexity of firms’ tax environments where enforcement mechanisms can have unwelcome consequences, and, under certain conditions, create conditions for the persistence of corruption.

Practitioner/Policy Implications: This paper highlights the importance of the institutional landscape, especially considering the history of institutional voids in many transition economies. The results have implications for corporate governance and caution regulators and practitioners to consider institutional complexities when implementing reforms or establishing businesses in transition economies.

Keywords: Corporate Governance, Corruption, Institutional Theory, Transition Economies, Tax Compliance
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INTRODUCTION

In transition economies of the former Soviet Bloc, a transformation of national institutions has occurred over the past 25 years. Until the late 1980s, these countries functioned as centrally-planned economies where state ownership and control were omnipresent. At the same time, many transactions were handled through informal networks where connections allowed access to services not broadly available. Since then, some transition economies have moved to join the EU while others have not made significant economic progress. National institutions have been widely recognized as critical components in explaining why some transition economies were able to make a successful transition and others continue to flounder. One explanation is that existing structures contribute to path-dependency in business practices even amid a push toward internationally-accepted corporate governance practices (e.g., Filatotchev & Boyd, 2009; Kumar & Zattoni, 2013; Yoshikawa & Rasheed, 2009).

North (1990) classified institutional determinants into three general categories: formal rules, informal rules1, and the enforcement characteristics of each. Formal rules, specifically laws and regulations, have been extensively examined in the context of corporate governance. Studies evaluating institutional determinants tend to focus on a specific feature of institutional frameworks but overlook the combined effect of different factors. Informal rules, such as social norms and conventions, under certain conditions, become the basis for business exchanges. Informal rules have been gaining recognition as an important component in shaping corporate governance and regulatory outcomes but remain under-researched (Boytsun, Deloot, & Matthyssens, 2011). Therefore, the study of institutional context in transition economies presents an opportunity to enrich the corporate governance literature by exploring the combination of specific institutional and firm-level factors.

The current literature examining transition economies tends to highlight the importance of formal rules or recognize informally-established structures (Puffer, McCarthy, & Boisot, 2010; Zheng, Ghoul, Guedhami, & Kwok, 2013). The impact of informal rules is less understood due to the challenge of identifying, measuring, and interpreting the impact of relevant concepts. Enforcement has been typically viewed as a necessary factor to ensure compliance with a country’s legal rules (Berkowitz, Pistor, & Richard, 2003; Pistor, 2000). Thus, prior studies lack focus on how formal rules, informal rules, and the manner in which they are enforced work together to drive outcomes (North, 2005).

In the current paper, we investigate this theoretical concept by examining the relationship between institutional determinants and unofficial payments incurred by firms in tax transactions. Many transition economies continue to struggle with corruption in business transactions where firms pay to obtain services and contracts (e.g., bribes, extortion) (Roth & Kostova, 2003). We use the term “unofficial payments” to cover both of these actions, as elements of corruption (such as bribery and extortion) can be difficult to disengage (Alon & Hageman, 2013). Unofficial transactions add to the total tax compliance cost. The enforcement component of tax administration is developed with the intention of fostering tax compliance. We define verification as “activities typically undertaken by revenue bodies to check whether taxpayers have properly reported their tax liabilities,” including audits and inspections (OECD, 2011). The influence of enforcement is shaped by the complementarity of the enforcement style with other institutional determinants, including formal and informal rules.
In order to differentiate between formal and informal rules, we rely on Kramer’s (1999) conceptualization of distinct bases of trust at the societal level to distinguish the influence of dispositional trust, considered culturally-based, from rule-based trust, which refers to the predictability of institutional action, including regulatory institutions (Muethel & Bond, 2013). Trust has been long recognized as an important factor influencing business transactions. In prior studies, trust is seen as a necessary component to lower transaction costs and constrain opportunistic behavior (Chiles & McMackin, 1996). Uslaner (2013) argued that certain types of trust can contribute to corruption and the resulting inequality can further undermine trust. We recognize different dimensions of trust to examine conditions under which trust can constrain or contribute to opportunistic behavior in transition economies.

We test the proposed relationships based on a comprehensive dataset from the 2009 Business Environment and Enterprise Performance Survey (BEEPS); the data for our sample comes from the survey and contains responses from over 5,000 firms in 20 transition economies of the former Soviet Bloc. Results show that rule-based trust is associated with a lower prevalence of unofficial payments. When rule-based trust is high, the presence of tax enforcement activities in the form of visits and inspections by tax officials does not change the relationship. Alternatively, higher dispositional trust can contribute to more extensive unofficial payments. When dispositional trust is low, verification activities allow both parties a venue to evaluate possible transactions and are associated with a higher likelihood of unofficial payments. The results also reveal the influence of the ownership structure on unofficial payments where higher ownership concentration is associated with a greater prevalence of unofficial payments.

The study makes a contribution in two areas, theoretical and thematic. Theoretically, we contribute to the literature on firms and institutions by focusing on how certain institutions affect businesses (e.g., Boytsun et al., 2011; North, 1990), and also contribute to the literature on corruption, specifically, unofficial payments in transition economies (e.g., Grosman, Okhmatovskiy, & Wright, 2016; Puffer & McCarthy, 2011). Our study extends these themes by highlighting that institutions should be examined in concert to gain insight into potential firm choices. Moreover, enforcement is not treated as exogenous and taken for granted, but rather as an endogenous component which interacts with other institutional determinants. In this particular case, it helps to settle the debate about the effectiveness of laws by highlighting the needed alignment of institutional determinants, including formal and informal rules and their enforcement. Enforcement of formal rules may have unexpected consequences, given self-enforcement of informal rules.

Further, our study provides much-needed empirical evidence on tax enforcement efforts in the transition economies of the Soviet Bloc (e.g., Torgler, 2008). The extent to which firms pay their share of taxes has become increasingly important and highly debated. Prior studies of organizational tax behavior have tended to focus on tax compliance issues (e.g., Alon & Hageman, 2013; Bayer & Cowell, 2009). Building our arguments based on an institutional perspective, we propose that some formal and informal determinants are reflected in the levels of trust toward formal institutions and among people and explain tax-related unofficial payments encountered by the firms in transition economies.

The study proceeds as follows. The following section presents a review of the literature and develops hypotheses investigating tax-related unofficial payments, and how those are influenced by the institutional determinants. The subsequent sections discuss the study’s research method and results. The final section provides a summary and a discussion of the theoretical and managerial implications.
LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Tax Compliance and Hidden Costs

Tax policy influences a wide range of business decisions, including foreign direct investment (Fung, Yau, & Zhang, 2011), import/export activities (Rabino, 1980), and a firm’s location (Laamanen, Simula, & Torstila, 2012). Furthermore, all financial transactions that businesses encounter have tax implications. A wide range of factors, including historical, political, and economic developments, influence the functioning of tax systems. The tax system of planned economies differs significantly from a market-based model. In centrally-planned environments, corporate tax compliance is achieved through a close monitoring of firms by the state. Under those conditions, collection efforts and administrative costs associated with the tax collection are low. The collapse of the socialist system in the former Soviet bloc triggered the introduction of unfamiliar market-oriented reforms of the taxation system (Schaffer & Turley, 2000).

Due to the distinctive profile of the political system characterized by high discretion and low accountability, corrupt practices became extensive across post-communist countries (Karklins, 2002). Tax compliance costs that firms encounter include direct remissions but may also have an implicit component when firms have to make additional payments to public officials. Typically, two parties are involved in these transactions and one of the participants holds a public post (Venard, 2009). Bribery payments (Leff, 1964: 8) have been defined as “a practice of buying favors from the bureaucrats responsible for formulating and administering the government’s economic policies.” On the other hand, extortion refers to making payments “in order to obtain essential services from government where government is the key or sole provider of these services” (Sajo, 2003: 189). Unofficial payments can be offered proactively by the firm as a bribe (supply-side driven) or extorted by the civil servants (demand-side driven) (Beets, 2005; Mele’, 2009). Jain (2001) describes the process as bureaucratic corruption where unofficial payments are required in order to receive services to which parties are entitled, to speed up a bureaucratic procedure, or to obtain a service that is not readily available. In the case of taxation, making unofficial payments may assist in lowering the tax bill or avoiding a fine. From an economic perspective, unofficial payments become a tax on economic activity (Leff, 1964) and divert funds from the treasury (Cleveland, Favo, Frecka, & Owens, 2009).

Tax-related corruption in transition economies has been identified as a serious problem complicating how firms do business (Alon & Hageman, 2013; Jouffaian, 2009). Miller (2006: 371), based on an extensive survey of transition economies, observed that the use of bribes was an institutionalized practice as “many confess to giving or taking them, and still more confess that they would give them if necessary, or would take them if the opportunity occurred”. In an environment where the government budget lacks transparency, there are no incentives to refrain from paying or demanding bribes (Torgler & Schneider, 2009). Martinez-Vazquez and McNab (2000: 287) argue that the lack of effective tax administration and enforcement has been a significant problem in the transition from centrally-planned to market-based systems, leading to significantly high rates of tax evasion, as “compliance rates of 50 percent or lower are not uncommon” in some nations. Overall, understanding the hidden costs of tax compliance, including tax-related corruption, remains an important issue in transition economies.

Institutions and Unofficial Payments

Institutions shape how firms manage tax transactions. Instead of a single institutional component, we are interested in the joint consideration of institutional determinants described by North (1990) as formal rules, informal rules and enforcement. Formal rules, specifically laws
and regulations, have been extensively examined in the context of corporate governance. However, the effectiveness of the legal system depends on the functioning of related enforcement mechanisms. Further, as highlighted by Greif and Kingston (2011: 13) “while a ‘rule’ may serve as a coordination device, it is fundamentally the expected behavior of others, rather than the rule itself, which motivates people’s behavior”. Thus, informal rules, such as social norms and conventions, have been gaining recognition as an important element in shaping business outcomes, but remain under-researched (Boytson et al., 2011). We focus on how these institutional components reinforce or undermine each other.

**Formal Rules and Unofficial Payments.** Institutions set the tone for how businesses operate. In transition economies, inherited institutional deficits have shaped the functioning of formal institutions (Grzymala-Busse, 2010). The weaknesses in the legal system and inconsistent enforcement practices contribute to the prevalence of corruption (Segon & Booth, 2010). The inability to implement effective policies and enforce penalties is one of the factors that propagate the shadow economy of unofficial payments (Jain, 2001; Torgler & Schneider, 2009). On the other hand, a number of cross-national studies found less corruption in counties with higher institutional quality (Li, Moy, Lam, & Chu, 2008; Schaffer & Turley, 2000). Sound institutional structures provide guidelines of what to expect in a particular situation (Alon, 2013; Greenwood et al., 2011) and decrease the dominance of unofficial payments in business transactions (Aguilera & Vadera, 2008; Cleveland et al., 2009).

Formal rules are of particular importance, including intentionally-created regulatory and legal structures. As summarized by Boytsun, Deloof and Matthyssens (2013), those are frequently operationalized as legal families and explain differences in how companies organize and obtain financing. However, belonging to a certain legal family does not reflect whether a national legal system functions as intended and facilitates transactions. Potentially more important is whether the public believes that rules are fairly made and efficiently enforced.

The ability to depend on a country’s legal infrastructure allows firms to rely on laws and government regulation to resolve disputes and enforce contracts (Li, 2009). These institutional cues contribute to the formation of the rule-based trust (McKnight, Cummings, & Chervany, 1998). Kramer (1999) defined rule-based trust as depersonalized and driven by the predictability of institutional action. “At the country-level, rule-based trust is mirrored by the confidence a country’s citizens have in their country’s law system” (Lin & Wang, 2008; Muethel & Bond, 2013: 316). Rule-based trust is expected to contribute to the reduction of transaction costs and to shape organizational strategic choices (Li et al., 2008; Meyer, 2001). In the case of taxation, rule-based trust would indicate that tax code is expected to be enforced uniformly and fairly. Thus, we anticipate a lower prevalence of tax-related unofficial payments for firms in transition economies with higher rule-based trust.

**Hypothesis 1.** Rule-based trust is expected to have a negative association with the prevalence of unofficial tax-related payments in transition economies.

Enforcement mechanisms influence how and whether formal rules function or achieve anticipated outcomes. For example, if traffic rules are regularly enforced through fines and courts, there is complementarity that is expected to reinforce the rules. On the other hand, if traffic stops end with bribes to the police, the effect of the rules is undermined. In the case of tax regulation, enforcement is required in order to improve compliance and convey the consequences of non-compliance. In transition economies, the issue of tax enforcement has been complicated by the lack of these activities during the previous era of central planning, as taxation was not
visible and most taxpayers never encountered a tax official (Tanzi, 2001). As part of tax reform efforts, significant verification audits and inspections had to be established to aid tax compliance, as taxation that relies purely on self-reporting could not be readily administered in transition economies (Slemrod & Yitzhaki, 2002). Regulatory enforcement is a multidimensional concept that includes strategy undertaken by the agency and actions of an inspector (May & Burby, 1998). Further, different styles of enforcement may have diverse social effects (McAllister, 2010). Thus, although a governmental agency can craft a worthwhile enforcement strategy, its implementation may not reflect it or fails to achieve the intended objectives.

Effective institutional structure requires complementarity between enforcement and regulation. Verification activities may have a complimentary effect in rule-based environments. Regulatory and legal institutions can make tax enforcement more effective by curbing the discretionary power of tax administrators and incorporating sanctions for parties involved in corrupt transactions (Li et al., 2008). If firms perceive that tax inspectors are generally focused on fulfilling their responsibilities and tend to rely on the established legal system, their participation in the shadow economy would decrease. Thus, in such a setting, verification activities are expected to strengthen the negative relationship between rule-based trust and unofficial payments that firms incur.

Hypothesis 2. Verification activities moderate the relationship between rule-based trust and unofficial payments such that with the presence of verification activities, the negative relationship between rule-based trust and the prevalence of unofficial payments will be strengthened.

Informal Rules and Unofficial Payments. In addition to formal rules, informal rules, which include norms, conventions, and internally devised codes of conduct, are a critical component of institutional environments (North, 1990). These unwritten conventions build shared expectations for shareholders, directors, and managers. The informal rules impact the effectiveness of other institutional determinants, including formal rules and enforcement. Even when laws and regulations are formalized, informal rules can undermine or strengthen their impact. For example, nepotism and favoritism may undermine largely functional employment rules (Grzymala-Busse, 2010).

While numerous informal rules exist and are shaped through social interactions, dispositional trust is broadly recognized as an important component impacting corporate governance and economic outcomes. Dispositional trust has been found to influence agency relationships (Child & Rodrigues, 2004), economic growth (Zak & Knack, 2001), and corruption (Uslaner, 2002). This culturally-based component of trust is shaped by trust-related experiences which mold beliefs about other people (Kramer, 1999). Zak and Knack (2001) proposed that a well-functioning rule of law may act as a trust-enhancing mechanism and contribute to higher dispositional trust. Bjørnskov (2007) empirically examined determinants of dispositional trust but did not find support for the expectation that a country’s legal system can create dispositional trust. In contrast to the origins of rule-based trust described above, the origins of dispositional trust are based on early trust-related experiences which become the basis of general beliefs about people (Rotter, 1971).

As trust levels vary among members of different cultural groups, researchers have examined cross-cultural factors that contribute to those differences. As highlighted by Kramer (1999), there are considerable differences in individuals’ predisposition to trust or distrust others. The conditions which impact trust levels have also been debated. Muethel and Bond (2013)
provide an example of contradictory findings, where some authors found that members of collectivist countries tend to have higher levels of trust, while others reached the opposite conclusion. For transition economies, trust played an important role during the Soviet era. As a result, business transactions were accomplished through reliance on relationships. For example, in Russia, individuals relied on trust-based informal networks and exchanged favors to get better jobs, acquire financing at privileged terms, and obtain access to high-level decision-makers who award business contracts and licenses (Alon & Dwyer, 2012).

Continuing reliance on informal connections can contribute to the pervasiveness of unofficial payments (Puffer & McCarthy, 2007; 2011). Li (2009) and Luo (2005) describe how higher levels of dispositional trust can make it easier for unofficial payments to occur. As bribery and the extortion of payments are illegal in most countries, firms that are paying and officials who are receiving these payments desire to avoid being caught or cheated. The exchange of resources between these parties relates to the levels of trust. Where generalized trust is higher, officials and the paying firms are more comfortable making unofficial payments, as the chance of being turned in is lower (Li, 2009). Thus, higher dispositional trust can provide both parties with the comfort that the payment and delivery of promised goods or services would occur (Li, 2009, Li & Wu, 2010). As it relates to taxation, higher levels of dispositional trust are expected to be associated with a greater prevalence of unofficial payments. We propose the following hypothesis that reflects the expected relationship between dispositional trust and tax-related unofficial payments.

*Hypothesis 3. Dispositional trust is expected to have a positive association with the prevalence of unofficial payments in transition economies.*

Giving consideration to the enforcement of formal rules is important but insufficient as outcomes are driven by the mixture of formal rules, informal rules, and the manner in which they are enforced. Although enforcement is expected to improve compliance with formal rules, given established informal norms, enforcement may have other consequences. Next, we consider the impact of enforcement on the association between informal rules in the form of dispositional trust and tax-related unofficial payments. The enforcement of policies depends on the discretionary power of tax administrators who may have the authority to enforce regulation in a discretionary manner (Jain, 2001). For example, the personal aim of tax agents may diverge from institutional purposes of tax collection and contribute to collusion with taxpayers (Franzoni, 2000). As discussed earlier, in an environment of higher dispositional trust where a governmental official and the party making unofficial payments are more likely to trust each other, “the temporal and spatial separation of payment and delivery” is not expected to lower the likelihood of unofficial exchanges (Li, 2009: 102). On the other hand, where dispositional trust is low, verification activities may provide a more secure opportunity to request and make payments. Thus, verification inspections may provide a venue to solicit unofficial payments. We expect the relationship between dispositional trust and unofficial payments to be strengthened when dispositional trust is lower.

*Hypothesis 4. When dispositional trust is lower, unofficial payments are more likely if verification activities occur.*

**RESEARCH METHOD**

**Data**

The data for this study was attained from a number of sources; our independent and
dependent variables originate from the 2009 Business Environment and Enterprise Performance Survey (BEEPS) dataset, the 2005-2008 waves of the World Values Survey, and the 2009 Worldwide Governance Indicators (WGI) project. Tax-related firm-level data was obtained from the 2009 BEEPS dataset; this survey is a project conducted by the World Bank and the European Bank for Reconstruction and Development. The overall objective of the survey was to obtain information on the environment for business development and private enterprise in transition economies of the former Soviet Bloc. Earlier administrations of this survey have been used in studies of corruption in transition economies (e.g., Alon & Hageman, 2013; Venard, 2009; Venard & Hanafi, 2008).

The BEEPS 2009 survey was administered in 2008 and 2009. Information on the administration of the BEEPS 2009 survey indicates that this survey was conducted using stratified random sampling among industry (manufacturing, retail trade, and other service), establishment size (fewer than five employees, five to 19 employees, 20 to 99 employees, and more than 99 employees), and region. When possible within the stratification criteria, priority was given to firms that had participated in the previous BEEPS 2005 survey. The survey itself contained over 200 items focusing on the firms’ business environment. As with prior administrations, the survey was conducted with face-to-face, locally-trained interviewers; furthermore, while smaller firms typically used only one respondent in the interview, larger institutions typically needed several respondents in order to address all of the specific topics of the interview. Interviewees were frequently assured that their responses would be completely anonymous and confidential. To minimize survey non-response, up to four attempts were made to contact an establishment to interview for the survey before moving on to a replacement establishment that met the same stratification requirements. To ensure the accuracy of responses and to reduce the potential sensitive nature of some of the questions, many of the questions asked participants to assess the actions of “establishments like this one.”

The 2009 BEEPS survey was administered to 11,998 business establishments in 30 transition countries. For the purposes of this study, responses from establishments in ten countries (Estonia, FYR Macedonia, Kazakhstan, Kosovo, Mongolia, Montenegro, Serbia, Tajikistan, Turkey, and Uzbekistan, with an aggregate of 3,727 responses) were eliminated because data were not available for these countries for some of the study’s variables or they were not a transition economy of the former Soviet Bloc. Other business establishments were eliminated if they failed to respond to any of the measures used in the study (2,836 responses). The final data set for the study included the responses from 5,435 establishments representing 20 transition countries. Table 1 contains information regarding the number of establishments from each of the 20 countries included in the sample. [Insert Table 1 here]

Because the BEEPS dataset does not include individual measures for dispositional trust and rule-based trust, our measures for these constructs arise from aggregated country-wide measures found in the World Values Survey and the WGI project, respectively. The World Values Survey is a global research survey carried out by the World Values Survey Association at regular intervals since 1981; researchers interview a representative sample of individuals in nations identified for the survey on a wide range of questions related to the social values. The WGI project has been carried out and sponsored by the World Bank since 1996; the project reports on aggregate measures of six dimensions of governance in both developing and developed nations. These WGI indicators are based on several hundred variables obtained from 31 different data sources (Kaufmann et al., 2010: 2).³
Model

We employ the following model in examining the effect of governance and verification activities on unofficial payments:

\[ UNOFFICIALPAY = a + bX + dC + e \]

where \( UNOFFICIALPAY \) is a measure of tax compliance by firms in transition economies; \( X \) is a set of test variables pertaining to institutional determinants; \( C \) is a set of control variables representing other factors that could be related to unofficial payments in transition economies; and \( e \) represents the traditional error term. We describe each of the variables and their measures in the subsequent sub-section.

Due to the fact that our data is measured at two hierarchical levels (i.e., both firm level and country level), we follow Alon and Hageman (2013) and Young and Makhija (2014) and use a multi-level, mixed-effects, restricted maximum likelihood (REML) regression (also known as HLM) in testing our study’s hypotheses to account for the fact that variables are measured at both the organization level and the country level. We employ REML linear regression in assessing the influences on unofficial payments for tax purposes (the dependent variable); we use REML rather than maximum likelihood estimation because REML takes the number of parameters into account (i.e., the 20 countries). According to Hox and Keft (1994: 285-286) and as cited by Young and Makhija (2014), “Multilevel models assume a hierarchically structured population with random sampling of groups and individuals within groups. Consequently, multilevel analysis models must incorporate random effects.” Thus, in our model, “Country” is included as a random effect to control for the potential differences at the country-level of analysis, which helps to control for country-specific differences and addresses the use of the two hierarchical levels of data in the analysis.

Measures

**Dependent Variable.** Our study’s dependent variable is the level of unofficial payments for tax purposes, \( UNOFFICIALPAY \). This variable is measured as the response to the following item from the BEEPS survey: “Thinking now of unofficial payments/gifts that establishments like this one would make in a given year, please tell me how often they make payments/gifts” to deal with taxes and tax collection. \( UNOFFICIALPAY \) is measured on a 6-point Likert scale (with 1=never and 6=always).

**Independent Variables.** Rule-based trust reflects the confidence a country’s citizens have in their law system (Lin & Wang, 2008). Following Muethel and Bond (2013), as a proxy for rule-based trust (RULE_TRUST) we use the WGI “rule of law” indicator. This indicator measures “the extent to which agents have confidence and abide by the rules of society, and in particular the quality of contract enforcement, and police and courts, as well as the likelihood of crime or violence” (Kaufmann et al., 2010: 4). It captures perceptions as reported by “survey respondents, nongovernmental organizations, commercial business information providers, and public sector organizations worldwide” (Kaufmann et al., 2010: 2). According to the World Bank researchers, perceptions-based data have particular value in providing insight into perceptions and views that drive actions (Kaufmann et al., 2010). Possible scores range from -2.50 to 2.50, and higher levels of RULE_TRUST are indicative of higher levels of rule-based trust within a country.

To measure DISPOSITIONAL_TRUST, a country-level measure from the World Values Survey was obtained. Based on prior studies examining trust, responses to the question: "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?" were utilized (e.g., Alon & Hageman, 2013; Muethel & Bond,
2013). As noted by Li and Wu (2010), this question is widely used to examine respondents’ trust in people they meet randomly. Consistent with these studies, we use the World Values Survey measures of the proportion of individuals in each country answering “most people can be trusted” out of total respondents (as opposed to whether people “need to be very careful”) is our measure of DISPOSITIONAL TRUST. Higher levels of DISPOSITIONAL TRUST indicate that a higher proportion of people believe that most people can be trusted.

We also measure verification activities so that we can assess whether verification activities moderate the relationship between dispositional trust and unofficial payments, and between rule-based trust and unofficial payments. This variable, VERIFY, originates from the BEEPS 2009 survey, and is the response to the question, “Over the last year, was this establishment visited or inspected by tax officials?” VERIFY is therefore coded as an indicator variable assessing inspection (“1”) or no inspection (“0”).

**Control Variables.** We also include six additional control variables in our analyses. Following both Uslaner (2010) and Alon and Hageman (2013), we include controls for the size and ownership structure of the business establishments in our sample. First, the variable SIZE originates from the BEEPS survey and captures the size of the establishment. It is coded into four levels: very small establishments (fewer than five employees, coded as “0”), small establishments (five to 19 employees, coded as “1”), medium-sized establishments (20 to 99 employees, coded as “2”) and large establishments (more than 99 employees, coded as “3”). Second, the variable FOREIGN OWNER also originates from the BEEPS survey and reflects the percentage of foreign ownership (i.e., the percentage of ownership held by a foreign shareholder, which may be in the form of individuals, companies, or organizations). In their review of the tax literature, Hanlon and Heitzman (2010) suggest that ownership structure often affects the tax behavior of corporations.

Third, we control for a country’s tax burden, as proxied by the measure of a country’s total taxes as a percentage of profit, which arises from the Doing Business Indicators from the World Bank Group (TAX_PERCENT_PROFIT). This measure provides a control for the formal tax rules in place within a country and the degree of tax burden, which could be connected to the level of unofficial payments for tax purposes. Fourth, we include a control for ownership concentration from the BEEPS survey (OWNER_CONCENTRATION), with a measure of the ownership percentage held by the largest owner of the firm. Ownership concentration affects how firms utilize their resources. The opaqueness related to concentrated ownership creates conditions where firm transactions are less transparent.

We also include several additional country-level controls which may affect unofficial payments. We control for government size, measured as government expenditure as a percent of GDP, provided by the World Bank (GOVT_SIZE). Results of the studies examining government size and corruption have reached conflicting conclusions. Some have identified a positive relationship (Arvate et al., 2010) while a study focused on transition economies found larger government to be associated with lower levels of corruption (Goel & Budak, 2006). Finally, religion is another factor that can affect levels of corruption through its influence on cultural attitudes toward hierarchy and power distance (La Porta, Lopez de-Silanes, Shleifer, & Vishny, 1999). To control for the potential influence of religion, we include a measure of the percentage of the population that is affiliated with Christianity (RELIGION).

**RESULTS**

**Descriptive Statistics**

Table 2 contains the descriptive statistics for all of the dependent, independent, and
control variables included in the study’s analysis: the means, standard deviations, minimum values, and maximum values for all study variables are presented. This table indicates that unofficial payments to deal with taxes and tax collections are relatively infrequent (weighted average of 1.70 on a 6-point Likert scale). The average level of dispositional trust in the countries of respondent establishments is fairly low, with a mean level of 25% indicating that “most people” (i.e., strangers) could be trusted. Finally, the average level of rule-based trust is -0.16 (out of a possible range from -2.50 to 2.50), showing that on average, levels of rule-based trust were somewhat neutral.

[Insert Table 2 here]

As shown in Table 3, unofficial payments to deal with taxes and tax collection were, on average, the most frequent in the Kyrgyz Republic (2.65 average), Azerbaijan (2.18 average), and Ukraine (2.16 average), and the least frequent in Slovenia (1.07 average). Table 3 also contains a summary of the average levels by country for DISPOSITIONAL_TRUST and RULE_TRUST. Dispositional trust levels are the highest in Hungary (0.30), Ukraine (0.30) and the lowest in the Kyrgyz Republic (0.17) and Slovenia (0.17). Rule-based trust levels are rated as the highest among countries in the sample in Slovenia (1.09), and as the lowest in the Kyrgyz Republic (-1.32).

[Insert Table 3 here]

**Correlation Analysis**

Table 4 displays a correlation matrix with the correlations among all of the study’s dependent, independent, and control variables. The largest absolute values of any correlation between the independent or control variables are between TAX_PERCENT_PROFIT and RULE_TRUST (correlation coefficient -0.37); the relatively small magnitude of this correlation indicate that multicollinearity is unlikely to pose a problem. The dependent variable, UNOFFICIALPAY, is positively associated with VERIFY, DISPOSITIONAL_TRUST, and TAX_PERCENT_PROFIT, and is negatively associated with SIZE, RULE_TRUST, FOREIGN_OWNER, GOVT_SIZE, and RELIGION. DISPOSITIONAL_TRUST is negatively associated with RULE_TRUST (correlation coefficient -0.15). 

[Insert Table 4 here]

**Mixed Effect Regression Results**

We estimate a model to test our hypotheses by regressing the dependent variable UNOFFICIALPAY onto the independent variables (RULE_TRUST and DISPOSITIONAL_TRUST), interaction terms (between VERIFY and RULE_TRUST and between VERIFY and DISPOSITIONAL_TRUST), and the control variables; we also control for baseline levels of VERIFY. Random effects are included for the country grouping. Table 6 presents the results of this regression analysis. The overall model is strongly statistically significant (p < .01).

[Insert Table 5 here]

First, Hypothesis 1 posits that higher levels of rule-based trust in a society will be related to lower levels of unofficial payments. The coefficient on RULE_TRUST is negative and statistically significant at p < .01. Thus, Hypothesis 1 is supported and it appears that establishments located in countries with stronger rule-based trust are less likely to make unofficial payments for tax purposes.

Hypothesis 2 predicts an interaction between verification activities and rule-based trust in terms of their effect on unofficial payments. Specifically, we expect to find that verification activities will moderate the relationship between rule-based trust and unofficial payments such that with the presence of verification activities, the negative relationship between rule-based trust
and unofficial payments will be strengthened. The coefficient on the interaction term between \textit{VERIFY} and \textit{RULE\_TRUST} is negative and statistically significant ($p < .01$).

Hypothesis 3 predicts that dispositional trust will have a positive relationship with the level of unofficial payments. Inspection of the coefficient in Table 4 indicates that this relationship was supported, as the coefficient on \textit{DISPOSITIONAL\_TRUST} was positive and statistically significant at the $p < .05$ level. The level of dispositional trust is thus positively related to tax-related unofficial payments.

The final hypothesis, Hypothesis 4, posits that when dispositional trust is lower, unofficial payments are more likely if verification activities occur. Thus, we expect to find an interaction effect between \textit{VERIFY} and \textit{DISPOSITIONAL\_TRUST} in their influence on unofficial payments. The coefficient on this interaction term is negative and statistically significant at $p < .01$.

To further investigate both of the significant interaction effects we observed, we graph the joint effect of the variables in the interactions (\textit{VERIFY} and \textit{RULE\_TRUST} and \textit{VERIFY} and \textit{DISPOSITIONAL\_TRUST}) on unofficial payments. First, we graph the joint effect of verification activities (present or not in the prior 12-month period) and rule-based trust on unofficial payments; we dichotomize rule-based trust into “high” (median or higher) and “low” (below the median). While Hypothesis 2 predicted that enforcement would strengthen the negative effect of rule-based trust on unofficial payments, the actual relationship observed is more complex. When rule-based trust levels are high, unofficial payments are relatively low and there is little difference between whether or not verification activities are present. When rule-based trust is lower, unofficial payments are higher when verification activities are present than when they are absent. This suggests that rule-based trust (i.e., to the extent that individuals have confidence in the rules of society and the judicial process) is an important safeguard which lowers the likelihood of unofficial payments as a part of the tax verification process. See Figure 1.

[Insert Figure 1 here]

We also further investigate the joint effect of verification activities and dispositional trust on unofficial payments. We dichotomize the variable \textit{DISPOSITIONAL\_TRUST} and treat responses at or below the median response as “low dispositional trust” and responses above the median as “high dispositional trust.” For lower levels of dispositional trust, unofficial payments occur more frequently when verification activities are present than when they are absent. Thus, Hypothesis 4 is supported. That is consistent with the arguments of Li (2009) that in low dispositional trust environments, officials take bribes from a narrower circle of people and may not feel safe accepting unofficial payments from all parties. In these circumstances, officials may be more comfortable obtaining payments as part of the verification visits and inspections where both parties interact in person and evaluate possible transactions. See Figure 2.

[Insert Figure 2 here]

Two of our control variables included in the model in Table 6 are statistically significantly related to unofficial payments. First, the coefficient on \textit{TAX\_PERCENT\_PROFIT} is negative and significant ($p < .10$), indicating that in our model, unofficial payments are less frequent in countries where taxes constitute a higher percentage of total profit. This result is consistent with Friedman, Johnson, Kaufmann, and Zoido-Lobaton (2000), who also document that higher tax rates are associated with less unofficial activity and that unofficial activity is linked not to higher taxes but to a desire to reduce bureaucracy. Second, the coefficient on \textit{OWNER\_CONCENTRATION} is positive and significant ($p < .10$), signifying that unofficial payments are more frequent among firms who have a higher concentration of ownership. This
finding is consistent with the notion that the opaqueness related to concentrated ownership creates conditions where transactions are less transparent and unofficial payments are more frequent. We do not find that SIZE, FOREIGN_OWNER, RELIGION, or GOVT_SIZE are related to unofficial payments in our model.

**DISCUSSION AND IMPLICATIONS**

Our study is a part of a growing literature that recognizes that corporate governance is socially constructed; thus, its study requires “a broader attention to societal norms, cultural attributes, and ethical values” (Aguilera, Florackis, & Kim, 2016: 172). Cross-national governance research aims to consider national governance factors when assessing firm-level practices. Country-level informal and formal rules provide guidelines “for individuals and organizations to deal with uncertainty, decode the environment, and take appropriate actions” (Schiehll & Martins, 2016: 182). Enforcement of institutionalized practices is an important but understudied component. Based on the institutional perspective, we theorize how enforcement of formal rules interacts with embedded informal practices and influences organizational processes. Previously, enforcement has been examined in the context of legal rule compliance, but recognition of informal rules allows us to gain insight into additional dimensions of enforcement.

Overall, our results provide strong support for the hypothesized relationships. Controlling for firm and country characteristics, we find that unofficial payments are lower in environments with higher rule-based trust, regardless of whether verification activities occur. Dispositional trust has a positive relationship with unofficial payments. Verification activities have a much stronger influence on unofficial payments when dispositional trust is low as opposed to high dispositional trust environments. As anticipated, under those conditions, officials may be more comfortable obtaining payments as part of the verification activities where both parties interact and evaluate possible transactions. The findings help to settle the debate about the effectiveness of laws by highlighting the needed alignment of institutional determinants, including formal and informal rules and their enforcement. Enforcement of formal rules may have unexpected consequences, given the self-enforcement of informal rules.

Our work highlights several avenues for future research. Continuing focus on multi-level relationships will provide a more in-depth understanding of the interactions between the firm-level variables and national institutions. Particularly of interest are factors contributing to the persistence of the informal structures and to path dependency, even amid attempts to dismantle them. Kumar and Zattoni (2016) highlight the importance of recognizing additional aspects of national institutional environment that influence firms’ behavior. In addition to the national legal frameworks, other regulated practices, including tax and accounting regulation, can deter or encourage opportunistic behavior and influence corporate governance practices.

With greater diffusion of corporate governance codes across different parts of the world, overstatement of compliance and factors that contribute to it are important to study. As highlighted by our study and Sobhan (2016), examining compliance can be insufficient, as resistance to change and embeddedness of informal institutionalized practices impact the implementation of corporate governance codes and organizational change. Future studies of the differences between the reported compliance and actual practices will need to identify factors that contribute to gaps in compliance or to misapplication of corporate governance codes.

The state plays a crucial role in shaping organizational strategy. Grosman, Okhatovskiy, and Wright (2016) reviewed literature on state control and how this control influences and shapes firms’ corporate governance. Besides direct control, the state is also responsible for creating and enforcing policies and regulations. There is a need for more fine-grained insight into
enforcement and why certain enforcement approaches, including reporting, verification activities, audits, and fines, do not function as intended and the unintended firm-level consequences that arise.

Our study’s results should be interpreted in light of its limitations. We use both firm-level (2009 BEEPS survey data) and country-level (World Values Survey, Worldwide Governance Indicators) data. The typical limitations when using survey data also apply (e.g., non-response bias, social desirability bias, single-item measurement), but the BEEPS survey is a rigorous, well-established survey that has gone through multiple iterations of development and has also been relied upon by prior researchers (e.g., Alon & Hageman, 2013; Venard 2009). Another potential limitation is that while our analysis examines the frequency of unofficial payments, it does not assess the amount of unofficial payments actually made. Future research could assess the amount of unofficial payments made in transition economies and provide more nuanced insight into the economic significance of these transactions.

Firms operating or entering transition economies need a deep awareness of institutional peculiarities and their impact on various business transactions. In the past twenty-five years, transition economies have undergone extensive institutional transformation. It is necessary to recognize the unique attributes of transition economies as expectations based on practices of developed countries are not necessarily transferable to a setting with distinct institutional characteristics. Firms should also be mindful of the complexity inherent within tax environments. This study highlights unintended consequences that can occur in conjunction with policies aimed at improving tax compliance. Policymakers should thus be careful to heed the features of the institutional environment when developing administrative policies and procedures.

---

1 As previously noted by Boytsun, Deloof, and Matthyssens (2011), North (1990) used “rules” and “constraints” interchangeably. Following their approach, we use the term “rules” to avoid confusion.
2 This type of trust has also been referred to as generalized trust (Dincer & Uslaner, 2010; Li, 2009).
3 Our study uses multiple data sources, which has the potential to compound error (Kiecolt & Nathan, 1985). However, using multiple data sources enables analysis with a richer data set and allows for the examination of more complex issues than may be investigated when using a single data set.
4 Bjørnskov, C. (2012) found that social trust (similar to DISPOSITIONAL TRUST) and the rule of law (RULE TRUST) had a positive relationship. However, Bjørnskov (2012) examines a wider array of countries; our study has a narrower focus on transition economies.
REFERENCES


TABLE 1
Sample Characteristics by Country

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of Business Establishments in Final Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>125</td>
</tr>
<tr>
<td>Armenia</td>
<td>308</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>228</td>
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<td>Belarus</td>
<td>180</td>
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<td>Bosnia/ Herzegovina</td>
<td>250</td>
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<td>Bulgaria</td>
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<td>Croatia</td>
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<td>Czech Republic</td>
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<td>Georgia</td>
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<td>Hungary</td>
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<td>Kyrgyz Republic</td>
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<td>Latvia</td>
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<td>Lithuania</td>
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<td>Moldova</td>
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<td>Poland</td>
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<td>Romania</td>
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<td>Russia</td>
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<td>Slovak Republic</td>
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<td>Slovenia</td>
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<tr>
<td>Ukraine</td>
<td>542</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>5,435</strong></td>
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TABLE 2
Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
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<td>1.15</td>
<td>1.00</td>
<td>6.00</td>
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<td>-1.32</td>
<td>1.09</td>
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<tr>
<td>VERIFY</td>
<td>0.60</td>
<td>0.49</td>
<td>0.00</td>
<td>1.00</td>
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<td>SIZE</td>
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<td>0.00</td>
<td>3.00</td>
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<tr>
<td>FOREIGN OWNER</td>
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<td>0.00</td>
<td>100.00</td>
</tr>
<tr>
<td>TAX_PERCENT PROFIT</td>
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<td>19.17</td>
<td>32.50</td>
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</tr>
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<td>OWNER CONCENTRATION</td>
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<td>26.72</td>
<td>1.00</td>
<td>100.00</td>
</tr>
<tr>
<td>GOVT SIZE</td>
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<td>3.59</td>
<td>8.50</td>
<td>25.88</td>
</tr>
<tr>
<td>RELIGION</td>
<td>72.60</td>
<td>26.84</td>
<td>3.00</td>
<td>99.50</td>
</tr>
</tbody>
</table>

Variable Definitions:

UNOFFICIALPAY arises from the 2009 BEEPS survey and assesses the frequency of unofficial gifts or payments that are made to deal with taxes and tax collection (on a 6-point Likert-type scale); higher numbers indicate higher frequency of unofficial payments.

DISPOSITIONAL TRUST arises from the 2005-2008 waves of the World Values Survey and is a country-level measure indicating the percentage of people who believe that most people can be trusted.

RULE TRUST arises from the 2009 WGI project and is a measure for a country’s regulatory quality; possible values range from -2.50 to 2.50.

VERIFY arises from the 2009 BEEPS survey and assesses whether establishments have been visited or inspected by tax officials in the last year (“yes” is coded as “1” and “no” is coded as “0”).

SIZE arises from the 2009 BEEPS survey and assesses whether the firms are very small (coded as “0,” with fewer than 5 employees) small (coded as “1,” with between five and 19 employees), medium-sized (coded as “2,” with 20-99 employees), or large (coded as “3,” with more than 99 employees).

FOREIGN OWNER arises from the 2009 BEEPS survey and is the percentage of ownership by private (non-public or governmental), foreign (non-domestic) individuals or organizations.

TAX_PERCENT PROFIT arises from Doing Business Indicators’ (World Bank Group) measure of total taxes as a percentage of profit.

OWNER CONCENTRATION arises from the 2009 BEEPS survey and represents the ownership
percentage of the largest owner.

$GOVT\_SIZE$ arises from the World Bank’s 2008 measure of general government final consumption expenditures as a percentage of GDP.

$RELIGION$ arises from 2010 Global Religious Landscape (Pew Forum on Religion & Public Life) measures of the percentage of the population that ascribes to Christianity.

*Descriptive statistics are based on 5,435 observations.*
## TABLE 3
Descriptive Statistics by Country

<table>
<thead>
<tr>
<th>Country</th>
<th>Average Level of DISPOSITIONAL_TRUST</th>
<th>Average Level of RULE_TRUST</th>
<th>Average Frequency of UNOFFICIALPAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>0.26</td>
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<td>Slovenia</td>
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<td>1.07</td>
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<td>Ukraine</td>
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<td><strong>Weighted Average</strong></td>
<td><strong>0.25</strong></td>
<td><strong>-0.16</strong></td>
<td><strong>1.72</strong></td>
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</table>

See Table 2 for variable definitions.
## TABLE 4
Correlation Table

<table>
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<th>Variable</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>10.</th>
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</thead>
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<td>1. UNOFFICIALPAY</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. DISPOSITIONAL TRUST</td>
<td>0.09***</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3. RULE TRUST</td>
<td>-0.28***</td>
<td>-0.15***</td>
<td>1.00</td>
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</tr>
<tr>
<td>4. VERIFY</td>
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<td>-0.16***</td>
<td>1.00</td>
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</tr>
<tr>
<td>5. SIZE</td>
<td>-0.03**</td>
<td>0.05***</td>
<td>0.03**</td>
<td>0.16***</td>
<td>1.00</td>
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<td>6. FOREIGN OWNER</td>
<td>-0.02*</td>
<td>-0.01</td>
<td>0.10***</td>
<td>0.05***</td>
<td>0.19***</td>
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<td>7. TAX PERCENT PROFIT</td>
<td>0.03**</td>
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<td>-0.37***</td>
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<td>9. GOVT SIZE</td>
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<td>-0.05***</td>
<td>0.36***</td>
<td>-0.18***</td>
<td>0.05***</td>
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<td>1.00</td>
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<td>10. RELIGION</td>
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<td>0.07***</td>
<td>0.22***</td>
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<td>0.01</td>
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<td>-0.08***</td>
<td>-0.07***</td>
<td>0.31***</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*p < .10  
**p < .05  
***p < .01

Correlation table is based on 5,435 observations. All presented p-values are two-tailed.

*See Table 2 for variable definitions.*
### TABLE 5
Mixed Effect Regression Results

**Dependent Variable: Unofficial Payments**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Test Variables</strong></td>
<td></td>
</tr>
<tr>
<td>RULE_TRUST(H1)</td>
<td>-0.34 (0.10)***</td>
</tr>
<tr>
<td>VERIFY x RULE_TRUST(H2)</td>
<td>-0.20 (0.05)***</td>
</tr>
<tr>
<td>DISPOSITIONAL_TRUST (H3)</td>
<td>2.78 (1.51)**</td>
</tr>
<tr>
<td>VERIFY x DISPOSITIONAL_TRUST (H4)</td>
<td>-1.72 (0.73)***</td>
</tr>
<tr>
<td><strong>Control and Other Variables</strong></td>
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<tr>
<td>VERIFY</td>
<td>0.44 (0.18)**</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.02 (0.02)</td>
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<tr>
<td>FOREIGN_OWNER</td>
<td>-0.00 (0.00)</td>
</tr>
<tr>
<td>TAX_PERCENT_PROFIT</td>
<td>-0.01 (0.00)*</td>
</tr>
<tr>
<td>OWNER_CONCENTRATION</td>
<td>0.00 (0.00)*</td>
</tr>
<tr>
<td>GOVT_SIZE</td>
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<tr>
<td>RELIGION</td>
<td>-0.00 (.002)</td>
</tr>
<tr>
<td>Constant</td>
<td>1.29 (0.50)***</td>
</tr>
</tbody>
</table>

**Model**
- Country (Group) Random Effects: Included
- Wald $\chi^2$: 61.40
- Prob $> \chi^2$: <.0001

**Note:** Values in parentheses denote the standard errors of the estimates; mixed-effect regression results use restricted maximum likelihood (REML). The mixed-effect regression model is based on 5,435 observations. Test variables are one-tailed p-values; remaining variables are two-tailed p-values.

* $p < .10$
** $p < .05$
*** $p < .01$

*See Table 2 for variable definitions.*
FIGURE 1
Interaction of Verification Activities and Rule-Based Trust

Estimated Marginal Means of Unofficial Payments

---

No Verification Activities
 Verification Activities
FIGURE 2
Interaction of Verification Activities and Dispositional Trust

Estimated Marginal Means of Unofficial Payments

---

No Verification Activities
Verification Activities

---