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Corruption and Microenterprises in Russia

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Abstract

In Russia, compliance with the rules and regulations that govern almost all aspects of economic life has created an extremely hostile environment for microenterprises. More serious than the regulations *per se*, however, is the potential niche they create for opportunistic behavior by the regulatory authorities. In Russia, the regulatory state has created a corrupt cadre of government bureaucrats who frequently engage in rent-seeking behavior while enforcing regulations. Firms are not uniformly impacted by corruption, however. This paper shows empirical evidence of differential incidence of extortion, based on certain firm and entrepreneurial characteristics. Corruption in Russia is similar to a regressive tax, and acts as a disincentive to innovation and growth, it may induce technologically inefficient production decisions, and can dilute economies of scale and scope.

Keywords: Corruption, Microenterprises, Russia.

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Introduction

Micro and small enterprises (MSEs) are prolific in developing countries, and their contribution to employment generation, household welfare, and the alleviation of poverty are well documented (Liedholm and Mead, 1999). Microenterprises serve as both a haven for those who are unable to find work in the formal sector, as well as an opportunity for entrepreneurs who prefer self-employment (Levenson and Maloney, 1998). Many studies of MSEs in developing countries have identified the diversity of services, products, locations, and degrees of technological sophistication of these firms. There is, however, at least one commonality that generally links this echelon of entrepreneurs. They usually operate outside, or on the fringe of the formal economic sector, having little interchange with regulatory institutions.

It is this last characteristic which distinguishes MSEs in traditional developing countries from those in transition economies, where the ubiquity of the regulatory environment makes working completely outside the formal economy a virtual impossibility. Perhaps in no other transition economy is the degree of regulatory penetration as pronounced as in Russia, which has the most extensive history of bureaucracy, dating back to the 18th Century, combined with the longest period under central planning in the 20th Century.

Compliance with the overly burdensome rules and regulations governing almost all aspects of economic life has created an extremely hostile environment for MSEs in Russia. Enterprises are forced to set aside a disproportionate amount of scarce resources dedicated to fulfilling a minimum number of regulatory obligations, or persistently trying to evade others. More serious than the regulations *per se*, however, is the potential niche

they create for opportunistic behavior by the regulatory authorities. In Russia, the regulatory state, with its elaborate system of permits and licenses, combined with bureaucratic discretion in enforcement and monitoring, has created a corrupt cadre of government bureaucrats who frequently engage in rent-seeking behavior while monitoring and enforcing regulations.

Regulation-induced corruption, and the high transaction costs that inevitably accompany it, is unavoidable for even the smallest, least formal microenterprise in Russia. The regulatory environment does not, however, impact firms uniformly. In this paper we show empirical evidence of differential incidence and persistence of enforcement and extortion, based on specific firm and entrepreneurial characteristics. We demonstrate that not only does corruption affect microenterprises at a rate disproportional to their size, but that certain types of microenterprises are more vulnerable to regulatory scrutiny, demands for bribes, and inspections by regulators.

Regulation and Corruption for MSEs in Transition

Within the economics literature, microenterprises in transition countries have received a great deal less attention than MSEs in traditional developing countries. In part, the paucity of information on them stems from their historical absence under central planning, which lasted until the early part of the decade. However, the unique historical evolution and the institutional environment in which they operate suggests that important differences and characteristics exist distinguishing them from micro and small enterprises in more traditional developing countries. Prominent among these differences are the

pervasive regulatory obstacles that are uncharacteristic for microenterprises in the developing world (Safavian and Graham, 1999).¹

Regulatory intrusion into enterprise activities is manifested in a variety of forms, such as (i) obstacles to entry in the form of registration permits and licenses, (ii) repressive, unpredictable, and arbitrary taxation, (iii) required compliance with a wide range of superfluous statutes and regulations, and (iv) significant discretionary power given to regulatory officials charged with monitoring and enforcing compliance amongst firms (European Bank for Reconstruction and Development (EBRD), 1999; Economist Intelligence Unit, 1999; Buckberg, 1994). In addition to barriers of entry and taxation, the level of state intervention when monitoring or enforcing compliance places substantial demands on the time of entrepreneurs in transition countries. Management in transition countries spend between six and fourteen percent of their total work hours dealing with government officials. Furthermore, numerous regulatory agencies have overlapping jurisdictions and become involved to the point of interference, which often leads to unethical actions by inspectors (Buckburg).

Because of the control rights that regulators enjoy over firms, they are able to elicit direct private payments in the form of bribes. These may be paid for a variety of purposes, such as to obtain public services, either to avoid or alter existing regulations and taxes, to gain government contracts, to obtain subsidies, or to appease predatory officials (Rose-Ackerman, 1978). While larger firms consider bribes as a cost to be paid for obtaining advantages from government, for microenterprises, bribes act as an unofficial tax on their business resulting from weaknesses in the system of governance.

¹ For example, in Liedholm and Mead's 1998 study on the constraints facing microentrepreneurs in Africa and Latin America, less than 1% of all respondents reported operational problems related to taxes,

Bribe taxes tend to be regressive, affecting smaller firms at a much higher rate than large firms.² Furthermore, there is also no evidence that paying bribes decreases the amount of time spent with officials or that it precludes state intervention. On the contrary, there is a strong link between the level of bribes paid by the firm and the time spent with officials. In general, the more a firm pays in bribes, the more time it spends dealing with officials (Kauffman and Wei, 1999, EBRD, and Safavian and Graham, 2000).

While anecdotal accounts and a few empirical studies indicate that regulation-induced corruption is problematic for firms in Russia, most of these studies reference small and medium sized firms, which usually range in size between two and five hundred employees. No studies to date have examined the existence or the impact of corruption on microenterprises. Yet the presence or absence of microenterprises in Russia has important social and economic consequences, as do the policies that affect them.

In Russia, extended households and other social insurance mechanisms to deal with unanticipated income shocks, such as sudden unemployment, are not prevalent (Barberia, 1997). In the absence of traditional state-sponsored employment or other social safety nets that have gradually disappeared over the past decade, the income-generating opportunities provided by micro and small enterprises play an important role

licensing, or zoning, while less than 4% reported problems related to other governmental regulations.

² In a study done on enterprises in Moldova, small firms report paying an average bribe tax in the size of four times the level as large firms. Similarly, small firms in Armenia, Ukraine and Uzbekistan report bribe levels nearing 8 percent. In addition, the high frequency of bribe payments for small firms in these countries contributes to the extremely high level of management time. For small firms in particular, the combination of the bribe tax and the time tax has had a severe impact on the development of the new private sector companies. (EBRD, 1999).

in poverty alleviation and household risk reduction.³ However, the microenterprise sector in Russia is, by most accounts, relatively small and underdeveloped. Whereas in other countries, MSEs usually make up between twenty and forty percent of total employment, in Russia this sector only accounts for ten percent of all businesses and less than ten percent of employment (Liedholm and Mead; Business Central Europe, 2000).

Corruption Literature

The literature on corruption has, of late, undergone a boom, and is fairly broad in its topical coverage. Corruption has been linked to the loss of foreign investment (Wei, 1997; 1998), the sustained existence of inefficient state-owned enterprises (Schleifer and Vishny, 1993; Claessons and Djankov, 1997), wage differentials of public employees (Banerjee, 1997; Besley and McLaren, 1993; Schleifer and Vishny, 1994), poverty and income distribution (Van Rijckeghem and Weder, 1997), and market structure (Bliss and Di Tella, 1997). Modern research into the economics of graft began with Rose-Ackerman, but despite the topic's practical importance, empirical studies of corruption have remained rare in the profession until very recently, because the secretive and illicit nature of corruption presents challenges to data collection. This difficulty is reflected in the prevailing literature, most of which is either theoretical, relies only on parsimonious cases studies, or uses cross country comparisons of corruption based on ratings of foreigners living in the countries. Few empirical studies have been conducted at the firm level.⁴

³ The decline of the traditional social safety net began in 1992, with the launch of reforms by the Russian government privatizing state enterprises where these safety nets largely were operating. These reforms put a great strain on the existing system of social protection and state-subsidized institutions.

⁴ For an excellent paper on firm level corruption, see Svensson, 1999.

Kaufman (1997) and Svenson (1999), however, argue that firm-level data on graft can be collected with the proper survey techniques. This paper employs such a data set on Russian microenterprises and shows that (i) corruption is indeed endemic to the microenterprise sector, and (ii) that firms vary in the degree to which they are vulnerable to rent-extracting officials. We maintain that the variance across firms with respect to being targeted for bribes stems from regulators' ability to use their monopoly position to both influence and to extract information on an individual firm's ability and willingness to pay for a bribe. In this sense, regulators act as first-degree price discriminators and extract all surplus associated with bribe payments.

The concept of modeling the government (or agents of the government) as a monopolist is not new. In fact, Klitgaard (1989) defines corruption to be a combination of monopoly power and discretion in regulatory enforcement. Lal (1989) models the state as a predatory monopolist who charges for the provision of 'protection' and 'justice' at high enough prices to maximize profit while maintaining barriers to entry. More recently, Schleiffer and Vishny (1993) model the market structure of the supply of government goods as a determinant of the level and consequences of corruption. In a similar manner, Kauffman and Wei model corrupt bureaucrats in a Stackelberg equilibrium, where the regulator customizes the nature of harassment so that firms are more willing to pay for bribes. Integral to these models is that that bribe payments for firms do not increase economic efficiency, but are instead analogous to Bhagwati's (1982) "directly unproductive" activities (DUPs).

The Data

Data were collected during the summer of 1999 in Samara, Russia, and was part of the FINCA/Ohio State Policy Initiative in Russia.⁵ The survey was designed to collect information on firm-specific characteristics, legal and regulatory compliance, corruption, financial flows, access to public goods, as well as barriers to start-up, survival, and expansion. Interviews were conducted with 304 microenterprises located in and around Samara City.

While firms chosen for the survey ranged in size from zero to thirty employees, more than sixty percent of the sample employed fewer than five workers and a quarter of the sample employed no hired labor. All firms that participated in the survey were legally registered private enterprises, rather than those involved in the underground economy. In Russia, this is an important defining criterion, because illicit status usually implies serious economic distortions or illegal activities (Aslund, 1997).

The principal components of the questionnaire were designed to investigate specific legal and regulatory obstacles, the activities of government regulators, financial constraints and transactions of enterprises, the business environment, and enterprise characteristics. Many of the questions were designed in the form of non-continuous variables, either binary choices or ordinal rankings on a scale of one to four. Furthermore, the most sensitive questions (corruption, mafia, finance, and tax compliance) were carefully tested and built around existing surveys on regulatory

⁵ This USAID-supported project was designed to foster the development of sustainable microfinance institutions (MFIs) in Russia. One of the most prominent constraints to the expansion of microfinance has been an inhospitable policy and regulatory environment, characterized by confusing regulations and repressive taxation (Safavian and Graham, 2000). While this policy environment has had an adverse impact on MFIs, little is known about the impact on their traditional client base.

constraints. Most of the questions on corruption, for example, were phrased in an indirect fashion to avoid implicating the respondent of wrongdoing.

Descriptive statistics from the survey indicate that regulation and corruption are indeed problematic for firms. Firms were asked to assign a ranking indicating the degree to which corruption is problematic for their firms, to identify various public services that they feel necessitated bribes, and were asked the degree to which regulators change compliance standards for regulations without their prior knowledge. The results are shown in *Table 1* and *Table 2* below.

Table 1: Government Services that Require Bribes

| Government Services Perceived to Necessitate Bribes | Percent of Respondents |
|--|-------------------------------|
| Issue Permits or Licenses | 60 (19) |
| Secure Premises | 61 (19) |
| Access Loans | 54 (25) |
| Facilitate or Lower Tax Obligations | 39 (26) |
| Protect Business | 60 (21) |

*Numbers in parentheses indicate the percentage of respondents who declined to answer.

Table 2: Perceptions of Corruption and Arbitrary Enforcement

| Corruption and Arbitrary Enforcement | Percent of Respondents |
|--|-------------------------------|
| Corruption Problematic or Highly Problematic to Enterprise | 36 |
| Regulators Have Discretion in Interpreting Regulations | 65 |
| Regulators Have Changed Regulation without Prior Warning | 40 |

Furthermore, the transactions costs associated with regulatory inspections were estimated by asking for the number of annual regulatory inspections per regulatory authority (See *Table 3*). These inspections are an important indicator of both the high degree of regulatory interface, as well as an indication of the vulnerability of microenterprises to extortion by corrupt inspectors.

Table 3: Regulatory Inspections Experienced by Firms*

| Inspecting Body | Percent of Firms | Mean Visits per Year | Standard Deviation |
|------------------------|-------------------------|-----------------------------|---------------------------|
| Tax | 72 | 12 | 28 |
| Fire | 47 | 3 | 22 |
| Sanitation | 46 | 14 | 55 |
| Trade | 36 | 7 | 31 |
| Militia | 48 | 46 | 102 |
| Total | 89 | 82 | 147 |

*The maximum and minimum number of visits reported across all inspectors was 365 and 0, respectively.

The results of the questionnaire are revealing. Over one-third of firms in the sample identified bureaucratic corruption as being either problematic or highly problematic for enterprise survival (*Table 2*). Furthermore, more than sixty percent of enterprises felt that bribes were necessary in order to secure licenses, protect business property, and to secure premises for the enterprise, and more than fifty percent of respondents indicated that it was necessary to pay bribes in order to lower tax obligations and to access loans (*Table 1*). More than forty percent of the sample indicated that tax inspectors, in particular, frequently changed their tax obligations without their prior knowledge (*Table 2*). This is an important statistic because it gives an indication of the

degree to which regulators alter enforcement standards, making the solicitation of bribes easier.

In addition, regulatory inspections are frequent, with firms being inspected eighty-two times per year, on average (*Table 3*). There is, however, a wide range associated with both bribes and regulatory inspections, indicating that the number of these inspections vary significantly across firms.

It is also interesting to note that firms that reported high incidences of corruption had systematic differences in firm-level characteristics. *Table 4* shows that firms more likely to be targeted for bribes tend to be higher growth enterprises, are more predominant in the production sector than in retail trade or services, have longer operating hours, are more constrained by finance, are less diversified, and experience regulatory inspections more frequently. Many of these characteristics make sense if one considers both the manner in which bribes are extracted and the price-setting mechanism for them.

Table 4: Comparison of Firms Reporting High Incidences of Corruption to Those Reporting Minimal Regulatory Interference

| Firm Characteristics | Unit of Measurement | Low Bribe Firms | High Bribe Firms | Comments on Firms Targeted for Bribes |
|------------------------|--|-----------------|------------------|---|
| Firm Size | No. of employees | 8.46 | 9.87 | Larger firms |
| Operating Hours | Hours/Day | 9.19 | 10.75 | Open longer hrs** |
| Operating Days | Days/Week | 5.59 | 5.94 | Open more days per week** |
| Income Diversification | Percent of Household Revenue from Microenterprise | 67 | 78 | Entrepreneurs are less diversified** |
| Annual Growth | Employees Added | 0.28 | 1.16 | Higher growth firms** |
| Tax-Change | Percentage responded "yes" to arbitrary tax question | 61 | 78 | More vulnerable to arbitrary tax collection** |
| Monitoring | Visits by All Regulatory Authorities/Yr | 72 | 100 | Monitored more frequently** |
| Female-Owned | Percent Owned by Females | 37 | 26 | Female Owner less likely** |
| Working Capital | Ranking of Finance as Constraint (1...4) | 2.04 | 2.28 | More constrained by finance |
| Sector | Percent of Manufacturing Firms | 21 | 29 | More dominated by the manufacturing sector** |

* **indicates mean differences are significant at the $\alpha=.10$ level

In Russia, regulators have unlimited inspection power. They can enter unannounced into a firm at any time under the auspices of monitoring compliance with regulatory statutes. These visits can be used to observe how profitable an enterprise is (*i.e.* an indication of a firm's ability to pay a bribe), as well as a means of exerting pressure on firms to pay the bribe. This pressure comes from both the threat of reporting

(or mis-reporting) non-compliance with regulatory standards, or by threatening to increase the number of inspections that the enterprise will undergo in the future.

Corrupt regulators are upwardly constrained in the bribe they can charge only by the possibility that a firm might report them to the authorities or that the firm would simply exit the sector. Under the former scenario, the penalty would be the loss of their job, and with it future opportunities to extract rents. However, in Russia the risk of being turned in is low because officials often go unpunished for corrupt activities, as their superiors share in the proceeds and because public pressure to stop corruption is weak (Schleifer and Vishny, 1993). Under the latter situation, exit by the firm would entail the loss of a low-cost source of revenue. It is possible, then, that the only leverage that a firm may have in minimizing the bribe amount is the threat of exiting the sector, which would deprive the regulator of a regular income source.

The regulator's problem, therefore, is to extort from the enterprise as high of a sum as possible without inducing exit from the sector. Under this scenario, the higher a firm's *ability* to pay a bribe, the more likely it is to be a target for high graft payments. Conversely, the higher the firm's reservation profit, *i.e.* the minimum profit acceptable to the enterprise without inducing exit, the less likely it is that the firm will be charged excessive bribe payments. Because regulatory inspections are the vehicle used to evaluate profit and reservation profit, we also would expect regulatory inspections to appear in conjunction with incidences of graft payments.

The Empirical Specification

The scenario above provides a structural framework to study the incidence and level of bribes across firms. The level of bribe payments that a firm must undertake depends on what the firm is able to pay, *i.e.* some signal of profitability. Conversely, firms that are more likely to exit the sector, *i.e.* those firms with a higher reservation profit, will be less likely to be charged excessive bribes. It should also be noted that profits are linked to entrepreneurial ability, in the level and sophistication of negotiation skills and/or regulatory avoidance opportunities available to the entrepreneur. These elements are not observable, and we therefore capture them with the random variable, ε .

The survey did not directly ask for magnitudes of bribe payments made by the respondent. Instead, the respondents were asked to rate the level of corruption, on a one to four scale, in terms of problems of irregular payments or unprofessional behavior of local government officials. For the empirical work, we make the assumption that an individual firm's rating is correlated with its individual experience in bribery payment. Under this specification, firms that register a higher rating on their perceived incidence of bribe payments find themselves paying more bribes in their business operations.

Additionally, gathering specific information on costs, revenues, or assets of Russian microenterprises proved to be difficult, due to the reluctance of most entrepreneurs to participate in the survey when questions of this nature become too specific. Instead, average employment growth was used as a proxy for profitability, with the assumption that it is a lower bound estimate.

To capture the likelihood of a firm exiting the sector, information was collected on the level of diversification of the entrepreneur's income portfolio. The proxy was

calculated as the percent of the entrepreneur's total household income portfolio contributed by the enterprise's profits. In this sense, entrepreneurs with a single income source are more constrained to stay in the market, because exit would be very costly, if not catastrophic. Conversely, entrepreneurs with more diverse holdings will have higher reservation profit levels, because exit is a more viable option. Thus entrepreneurs with multiple sources of income will be less likely to experience severe graft because any threat of exit would be credible.

Respondents were asked for the mean number of inspections they experienced over the course of a year, by a variety of inspectors. Firms in certain industries are more likely to be inspected than others, *e.g.* a restaurant owner by a sanitation inspector. Therefore, the number of inspections by tax authorities and the militia are used, which in theory apply to all firms equally.

Changes in the probability that a firm reports higher incidences of bribe payments is econometrically specified using an ordinal logit model. Following Greene (1990), let y^* be the degree to which corruption is problematic for an enterprise, then:

$$(1) \quad y^* = \sum_{k=1}^K \beta_k \chi_k + v,$$

where the probability that y falls into the category j , is denoted by:

$$(2) \quad \text{Prob}(y = j) = F\left(\mu_j - \sum_{k=1}^K \beta_k \chi_k\right) - F\left(\mu_{j-1} - \sum_{k=1}^K \beta_k \chi_k\right),$$

where F is a general cumulative distribution function, x is the independent variable, β is the coefficient, and j is the rank of the bribe index from one to four. For simplification, μ is normalized to zero.

The resulting specification is:

$$(3) B_i = \beta_1 * ProfSig + \beta_2 * ResProf + \beta_3 * Size + \beta_4 * LegForm + \beta_5 * Sector + \varepsilon,$$

where B_k are coefficients and *ProfSig* and *ResProf* represent a signal of firm profits and reservation profits for firm i , respectively. We also controlled for firm size, legal form of registration, and sector as denoted by *Size*, *LegForm*, and *Sector*. In keeping with the descriptive model above, the expected signs of the coefficient on *Profit* is positive, while the converse is true for the coefficient on *ResProf*. The results of the empirical specification are consistent with the model. The coefficient estimates and summary statistics are shown in *Table 5*.

Table 5: Standardized Coefficients for the Ordered Logit Model: Dependant Variable is the Firm's Ranking of Corruption as a Problem

| Independent Variable | β | β^S | β^{sy*} | Mean | Maximum | Standard Deviation |
|---|---------|-----------|---------------|------|---------|--------------------|
| Profit (Firm Growth) | .11* | 0.20 | 0.06 | 0.60 | 16 | 3.35 |
| ResProfit (Income Diversification) | -.73** | -0.11 | -0.38 | 0.28 | 1.00 | 0.30 |
| Size | .02 | 0.10 | 0.01 | 6.4 | 30 | 8.26 |
| LegForm | -.56* | -0.15 | -2.05 | * | * | * |
| Sector | .23 | 0.04 | 0.12 | * | * | * |

Note: β is an unstandardized coefficient; β^{sy*} is a y^* standardized coefficient; β^S is a fully standardized coefficient. β^{sy*} can be interpreted as for a unit increase in x , y is expected to increase by β^{sy*} standard deviations, holding all other variables constant. β^S can be interpreted as for a standard deviation increase in x , y is expected to increase by β^S standard deviations, holding other variables constant.

Table 5 shows that the degree to which corruption is problematic for firms is positively and significantly related to firm growth, the proxy variable for signaling profitability. However, entrepreneurs with other sources of household income, in addition to the firm investigated, are less vulnerable to extortion. Additionally, the model incorporated dummy variables to control for size, legal form and sector.

It was important to control for firm size, in order to avoid mistakenly attributing demands for bribes to firms that were high growth, rather than firms that were larger. The legal form is also an important variable because firms that are registered as private entities are generally subject to a greater number of inspections, due to the perception that they are more skilled at regulatory avoidance (Nadolynak and Hartarska, 1999). In our specification, firms registered as companies were assigned a value of one, while firms that were registered as private entrepreneurs were assigned a value of zero. We can see from *Table 5* that companies are less likely to be targeted for bribe payments. There are social consequences associated with this form of registration, however, because registering as a company is much more expensive and time-consuming, often requiring the use of a lawyer or other professional.

The dummy variable on sector took on the value of zero for retail or service firms, and one for manufacturing firms. The rationale for including the sector dummy is that more visible production technologies contribute to a firm's vulnerability to regulatory authorities. Manufacturing firms may have a more difficult time hiding output and sales, and so corrupt authorities can more easily assess their bribe payment capacity.

With the ordinal logit technique, however, one can draw only vague conclusions from the coefficients regarding the impact of firm characteristics on the probability of an

enterprise being targeted for rent-seeking activities. Standardized coefficients tell little beyond the sign and the significance of the coefficient. In *Table 6*, however, we show the marginal effects of a change in probability with a change in one unit around the mean, a change in probability with a change in one standard deviation of the independent variable, and the change in probability resulting from a change over the entire range of the independent variable.

Table 6 shows how unit changes in the independent variable alter the probability that a firm will experience higher levels of regulatory extortion. For example, the overall probability that a firm will experience extreme regulatory difficulties *i.e.* a ranking of 4 for corruption is 15 percent. However, with the addition of one unit of employment, the entrepreneur will increase her probability by 1.4 percent. With an addition of the full range of employment, the probability that the firm will experience extreme regulatory difficulties will jump to 90 percent.

One can go through this exercise for changes in probability of regulatory targeting with changes in the levels of the all independent variables. For example, entrepreneurs with more diverse sources of income will be less likely to become a target for regulatory inspectors.

The results of the empirical estimation show an interesting trend. It is clear that a growing firm will attract additional regulatory attention, while having multiple income sources will mitigate these affects. It is also interesting to note that while firm growth has a strong and significant impact on corruption levels, firm size is more benign in increasing regulatory attention. This result suggests that it is the level of entrepreneurial

ability rather than merely the number of inputs of the firm that attracts dishonest regulators.

Table 6: Effect Of Changes (Around the Mean) of Firm Characteristics on Categorical Ranking of Corruption

| Independent Variable | Change | $\bar{\chi}$ | Marginal Effects: $\partial P / \partial \bar{x}$ | | | |
|---|-----------------------------|--------------|---|-----------|-----------|-----------|
| | | | Prob(y=1) | Prob(y=2) | Prob(y=3) | Prob(y=4) |
| Overall | Probability | | 0.41 | 0.29 | 0.14 | 0.15 |
| ProfSignal (Firm Growth) | $\Delta 1$ | 0.60 | -0.018 | 0.003 | 0.006 | 0.009 |
| | Δ Standard Deviation | | -0.044 | 0.006 | 0.015 | 0.023 |
| | Δ Range | | -0.189 | -0.062 | 0.006 | 0.51 |
| ResProf (Income Diversification) | $\Delta 1$ | 0.28 | 0.15 | -0.02 | -0.051 | -0.081 |
| | Δ Standard Deviation | | 0.045 | -0.006 | -0.015 | -0.024 |
| | Δ Range | | 0.18 | -0.04 | -0.049 | -0.07 |
| Size | $\Delta 1$ | 6.4 | -0.005 | 0.001 | 0.002 | 0.003 |
| | Δ Standard Deviation | | -0.089 | 0.012 | 0.03 | 0.058 |
| | Δ Range | | -0.33 | -0.10 | 0.07 | 0.36 |
| LegForm | 0 \rightarrow 1 | Na | 0.227 | -0.02 | -0.045 | -0.12 |
| Sector | 0 \rightarrow 1 | Na | -0.043 | 0.284 | 0.148 | 0.152 |

Conclusion

The purpose of this paper has been to highlight the manner in which regulatory-induced corruption affects microenterprises in Russia. Survey data reveal the breadth and depth of regulatory intrusion for these businesses. The findings suggest that even the lowest echelon of entrepreneurs, those who would generally operate outside or on the

boundaries of the formal sector in other countries, are penetrated and subjected to the same levels of bureaucracy, inspections, and penalization, as one would expect for much larger firms in such an environment. High degrees of regulation and their corollary, rent-seeking practices, have emerged as a major impediment to business growth.

Rent-seeking, particularly in the form of bribery, is ubiquitous in the business environment of Russia. It plays a significant role in the business dealings of enterprises, and it is a requirement to secure many government services. The paper shows that incidences of bribery appear in conjunction with regulatory inspections, suggesting that bureaucrats use their office to exploit and harass enterprise owners rather than offer them a legitimate service of avoiding red tape.

The empirical results demonstrate that microenterprises consider regulatory harassment and extortion as among the most severe obstacles to the long-term success of their enterprises. Furthermore, these problems do not appear to impact firms uniformly. We find evidence that certain firm-specific characteristics appear to attract the attention of government officials. Larger, more successful firms are more likely to endure bribery and extortion than slow-growth firms. Firms that are more “entrepreneurial”, and who are in the manufacturing sector are more vulnerable to a higher degree of regulatory enforcement. It appears that a firm’s best, and perhaps only, protection against regulatory harassment is to have diverse sources of income, so that the threat of exit to the regulator is always credible.

The welfare consequences of these findings are important. The results suggest that the most innovative firms are penalized with bribes at the highest rate. This form of corruption is analogous to an extremely regressive tax, and acts as a disincentive to

innovation and growth. It may induce technologically inefficient production decisions, and can dilute economies of scale and scope by discouraging firm growth. Furthermore, corruption may encourage microenterprise start-ups in sectors that are less likely to be targeted, having a distortionary overall affect on sectoral growth in economy. Finally, corruption consumes valuable social resources by diverting the attention of entrepreneurs towards innovative ways of avoiding regulators, rather than innovations of the firm.

The policy implications of this study suggest that significant reforms need to be implemented regarding the degree of regulation and regulatory enforcement, as well as the design of proper incentives and standards of accountability for the regulatory and supervisory authorities. In the short or medium term, however, this scenario is unlikely to emerge. A second best, though less satisfactory strategy would be to design policies and programs for micro and small enterprises that take into account and help mitigate existing regulatory constraints.

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