T. Frye
SLAPPING THE GRABBING HAND: CREDIBLE COMMITMENT AND PROPERTY RIGHTS IN RUSSIA
Препринт WP1/2003/02
Серия WP1
Институциональные проблемы российской экономики
That secure property rights are essential elements of robust economies and stable governments is hardly a matter of dispute (North 1973; Lindblom 1977; Knack and Keefer 1995; Mauro 1995; Shleifer and Treisman 2000; Acemoglu, Johnson and Robinson 2001). Precisely, what factors produce secure property rights, particularly in developing and transition economies, is a hotly contested issue. Various observers have linked insecure property rights to low levels of social trust, corruption, vacillating political elites, and weak state institutions (Raiser 1999; Stiglitz 1999; World Bank 1997; EBRD 1999; Johnson, McMillan and Woodruff 2003). One argument heard only faintly in this debate is that a lack of credible constraints on state power can also be a source of weak property rights. Economic agents who believe that state officials are not credibly committed to abide by legal rules will be reluctant to engage in productive economic behavior. On this view, the degree to which the “grabbing hand” of the state is constrained by the existing legal regime is an essential determinant of the security of property rights (Frye and Shleifer 1997).

This article uses evidence from original surveys of Russian company managers to present three findings on the individual level determinants of secure property rights. First, there is some evidence that weak legal institutions have a direct impact on the security of property rights as proxied by various types of investment: in some analyses, managers who expressed little confidence in state arbitration courts invested at lower rates than did other managers. There is, however, stronger and more consistent evidence that the capacity of legal institutions to constrain state officials is central to investment decisions, a critical indicator of secure property rights. Managers who said that state arbitration courts could protect their rights in disputes with state officials were significantly more likely to invest in their firms than were other managers. This finding holds regardless of the perceived effectiveness of arbitration in general, indicating that institutions that constrain state officials have an independent impact on investment. This result points to the political foundations of secure property rights and the importance of credible commitment. Second, members of business organizations consistently invested at higher rates than did other managers. They were more likely to have constructed new buildings, extended credits in the last two years, or have planned a new major investment for the coming year. Civic participation in business organizations raised the security of property rights in Russia. In contrast, there is little evidence from this sample that social trust or easy access to credit promoted investment.
Countries that experienced particularly intrusive forms of communist rule are said to have created more atomized societies with lower levels of social trust that are poorly prepared for market economies (Rose 1993). For example, Russia’s experience of 70 years of communist rule with little room for trust-building social organizations compares unfavorably with Poland’s 40 years of communist rule that allowed for the Solidarity labor movement and a politically active Catholic Church (Stiglitz 1999; Hoff and Stiglitz 2002).

Some observers argue that civic participation produces greater economic benefits than does social trust (Raiser 1999). For example, members of encompassing social groups may have greater information about market conditions and more opportunities to lobby state officials and therefore be more likely to invest. Moreover, members may be better placed to punish state officials for violations of property rights, regardless of their general level of social trust (Weingast 1996). In sum, strong property rights should be associated with broad-based trust among business partners and high rates of civic participation.

2

Such arguments have particular relevance in transition economies. First, constituencies in support or secure property rights are often weak or absent early in the transformation. Second, weak property rights may have greater confidence in the security of their property rights than do other managers.

In contrast, Stark (1997) argues that the institutional legacies of the command administrative system – particularly the important role of a second economy – generates social networks based in part on mutual trust - that may increase social trust, this view also suggests that social trust should be associated with more secure property rights.

3

The literature and conceptual confusion on how social ties influence economic behavior is vast. For a good treatment of the relevant issue see Raiser (1999a).

4 Claims of the importance of elite partisanship to particular policies far outnumber the tests of such assertions. The relatively small number of empirical tests of this argument is due in large part to the difficulty of obtaining measures of perceptions of the commitment of state officials to existing rules. The survey instrument described in the next section overcomes this shortcoming.

---

Third, Russia’s reputation for a weak legal system is only partially deserved. On average, managers said that the courts did not work badly in disputes with other businesses. However, they exhibited far less confidence that courts could protect their rights in disputes with the local or regional government. Thus, Russian businesspeople did not view the state so much as organizationally weak, collapsed, or incapable, but as constrained by existing legal institutions. This suggests that the capacity of the state to protect property in Russia lies not in garnering more resources, but, ironically, in creating institutions that constrain state agents.

These findings shed light on theoretical debates on the origins of secure property rights, the roots of credible commitment, and the process of legal reform in transitional economies.

Credible Commitment and Secure Property Rights

Much attention has been focused on the privatization of state-owned assets in the postcommunist world, but it is now recognized that solely transferring legal title from state to private owners is insufficient to create secure property rights (Black et al. 2001). In many countries in the region, the nominal owners of potentially valuable assets have been subject to a variety of threats to their property rights (Frye and Shleifer 1997; EBRD 1999; Johnson, McMillan and Woodruff 1999; 2000; 2003; Hellman et al. 2000; Hendley et al. 2000). Fraud by business partners, creative reinterpretations of regulations by predatory bureaucrats, and nonpayment by customers remain all too frequent occurrences in many economic sectors in many postcommunist countries. Thus, increasing the security of property rights is a pressing issue in the region. There is, however, considerable debate about which factors are most important for making property rights secure.

Social Factors: Trust and Civic Participation. Much recent work on property rights has focused on social factors. For example, high levels of social trust and civic participation are commonly cited as determinants of secure property rights and economic performance (Coleman 1990; North 1990). Dense social ties reduce the transaction costs of exercising property rights, as do widespread norms of reciprocity. Expecting business partners to bear heavy reputational costs for violating their property rights, business managers can invest with confidence that they will reap the full benefits of their efforts (Greif 1994). Similarly, some argue that broad-based participation by social groups can raise the costs to politicians of abusing property rights of individuals (Putnam 1993).

Such a view is common in the postcommunist world (Raiser et al. 1999; Raiser 1999; Johnson, McMillan and Woodruff 1999; Stiglitz 1999). Many attribute variations in the strength of property rights to social ties developed under communist rule (Linz and Stepan 1996; de Melo, Denizer, Gelb and Tenev 1997; Raiser et al. 1999).
Corruption. In recent years many studies have documented that corruption reduces the security of property rights and hurts economic performance (Mauro 1995). Corruption whether through bribery, favoritism, or delay raises the costs of business, increases uncertainty, and distorts investment patterns (Shleifer and Vishny 1993). These effects are readily apparent in the postcommunist world where a variety of studies report that corruption has taken a heavy toll on the economy (Frye and Shleifer 1997; Hellman et al. 2000; Johnson, McMillan and Woodruff 2003).

State Institutions. Other analyses of weak property rights emphasize the performance of state institutions (North 1990; World Bank 1997; EBRD 1999). Secure property rights require low cost means of arbitrating disputes, enforcing agreements, and protecting physical property from theft. Absent effective state institutions to perform these functions, transfers of nominal property rights provide few benefits for recipients in modern economies.

This argument rings true in the postcommunist world as many attribute insecure property rights in the region to weak state institutions (Holmes 1996). Gerard Roland (2002:xix) notes: “If anything, the experience of transition shows that policies of liberalization, stabilization and privatization that are not grounded in adequate institutions may not deliver successful outcomes”. Similarly, observers of Russia have little trouble pointing to examples of weak state institutions that range from poorly trained judges holding court in unheated buildings to outgunned policemen in Russian-made Ladas chasing criminals in German-made Mercedes. If this view were correct, strong property rights should be associated with highly effective courts, police, and bureaucracies.

Without denying the importance of weak state institutions, the arbitrary use of state power by government officials may be an equally important cause of insecure property rights. Even if state officials are honest, well-trained and well-equipped, where politicians and bureaucrats can disregard inconvenient legal decisions, property rights are likely to be seen as vulnerable. If this “grabbing hand” view of the state were correct, then regardless of managers’ views of the performance of legal institutions, they would fear violations of their property rights by state officials.

Credible Commitment. Central to the notion of the “grabbing hand” is the theoretical problem of credible commitment. Property rights are often insecure because many types of economic activities involve time-inconsistent exchanges between state and private agents. The establishment of laws and other normative acts often promise benefits in the future for changes in behavior today. For example, to encourage investment, a government may pass a law promising tax benefits for 5 years for firms that invest in their country. After a firm invests and incurs a sunk cost, however, it is vulnerable to ex post violations of its property rights by state agents. A government may impose confiscatory taxes regardless of legal rules to the contrary. Anticipating this possibility, business managers will be reluctant to invest. Unless economic agents expect the courts to deter or prevent this type of violation, they will view their property rights as insecure and keep their money at home (Diermeier et al. 1997). The lack of investment by productive firms harms economic performance; and, ultimately, the smaller economy lowers the state’s tax revenue. It is often noted that credible commitment problems hurt firms and inhibit economic growth; less often it is noted that these failures of the legal system inflict harm on the state by reducing its tax base.

This problem of credible commitment underpins the irony that state agents with few constraints on their behavior are often unable to commit to secure property rights precisely because economic agents understand that the gains from their property rights may be realized only at the discretion of state agents. Or, to say it more positively, state agents who can develop institutions that compel compliance with judicial decisions will be better able to create secure property rights than those with greater discretion (Kydland and Prescott 1977; North and Weingast 1989; Root 1989; Campos and Root 1994).

Governments recognize this problem, but often find it difficult to overcome. For example, governments have an incentive to cultivate a reputation for being law-abiding if only to encourage investment. In the long run, a government with a reputation for complying with legal rules may convince investors of the government’s good intentions. Yet, reputation alone is rarely sufficient to convince skeptical investors. As North and Weingast (1989:807) note: “we have very seldom observed [reputation as a form of commitment], in good part because the pressures and continual strain of fiscal necessity eventually lead rulers to ‘irresponsible’ behavior”. Faced with immediate pressures to charge course, incumbents often forsake the benefits of having a reputation for being law-abiding and disregard laws that are inconvenient in the short-run, but increase investment in the long-run.

5 In recent years, police in Russia have become better equipped.
6 These views are complementary rather than competing explanations. Sparse social ties and weak state institutions may coexist with officials who view themselves as above the law. However, these factors also may have independent effects on the security of property rights. Moreover, strategies to rectify these problems differ. For example, the state collapse view suggests that strengthening state institutions will make property rights more secure. The “grabbing hand” view suggests that improving the training of judges and rearming the coercive arm of the state will have modest results if state officials remain able to disregard legal decisions.

7 For an early statement see Kydland and Prescott (1977). See also Rodrik (1989). For empirical illustrations see North and Weingast (1989); and in a postcommunist setting, see Wimmer (1997).
8 Examples from Russia abound. For example, the Russian oil industry needs foreign investment and foreign companies would like to invest, but foreign investment has been minimal. A recent New York Times article noted: “Consider the Polar Lights project of ConocoPhilips... From the project’s start in 1994, the company, together with a Russian partner, sought an agreement with the government to set future taxes. It never got one. From 1994—1997 alone, its tax burden shot up more than six fold”. Banerjee and Tavernise (2002: Section 3:1).
An Institutional Solution

A more robust solution is to create institutions that constrain the government from threatening property rights. For example, independent courts can raise the costs to the government of violating the law. During England’s “Glorious Revolution”, Parliament replaced the notoriously corrupt Star Chamber with a far more independent court that could credibly punish both Parliament and the King for violating the security of private property. North and Weingast (1989) argue that this institution was central to the creation of constraints on the British government that made it more difficult for the state to expropriate wealth. This constraint, in turn, increased the security of private capital and encouraged investment, including loans to the government. Existing literature stresses that governments that “tie their own hands” by significantly raising the costs of ignoring inconvenient judicial decisions can convince firms that government commitments will be credible. By doing so, they can reap considerable benefits.¹⁹

The Survey

Much of the literature on credible commitment and property rights relies on historical case studies. Here I assess the individual-level determinants of secure property rights using a survey of 500 company managers in eight Russian cities in late 2000. Between October 10 and November 25th, researchers from VTsIOM, the All Russian Central for Study of Public Opinion interviewed high-level business managers in eight Russian cities: Moscow, Nizhni Novgorod, Novgorod, Smolensk, Tula, Voronezh and Ekaterinburg. Although not a national sample, the survey included firms located in rich and poor, left and right dominated, and urban and rural regions. Firms were selected using a stratified random sampling technique. We obtained data from the state statistical agency on the number of employees and the types of firms in each region from the State Statistical Agency (Goskomstat) and then stratified the sample by size and type. Researchers then selected firms at random from within these two strata using regional business directories. In terms of sector and number of employees the sample roughly mirrors a national sample.²⁰

Due to costs, we included only firms in the capital city in these regions. This problem is less severe than it appears at first glance because the majority of firms are located in the capital city in each of these regions. Interviewers spoke with the chief executive officer, the chief financial officer, or the chief manager of at least 60 firms in each region. The response rate for the sample as a whole was 56%, the same as in the widely cited 2000 American National Election Survey.¹¹

Most questions in the survey were innocuous and generated few incentives for respondents to lie. The survey included a few questions that respondents likely regarded as sensitive. To address concerns about the validity of these responses, we tested all of the questions in a pilot survey that included de-briefings with some respondents. We also received comments on the survey from representatives of several business organizations and from entrepreneurs known to the researchers. Previous research and pilot surveys suggested two strategies for asking sensitive questions. As in similar surveys, some questions were posed in the third-person. For example, in some cases managers were asked to rate levels of corruption or bribery for “firms like theirs”. It is plausible that many respondents answered such questions based on their experience (Johnson, McMillan and Woodruff 2003).

Given the potential public and private costs of revealing precise financial information to outsiders, Russian business managers are often reluctant to reveal rates of profitability.¹² To alleviate some of these concerns, we asked financial questions using crude ordered or binomial categories. For example, rather than asking firms to identify how much profit they made in the last year, we asked whether they made a profit, a loss, or broke even last year. Similarly, to measure investment we asked managers whether they had built a new building or renovated their place of business. These investment measures can be verified by researchers and do not require the revelation of detailed financial data. What we lose in precision, we hope to gain in validity.

Just over half the managers (55%) ran heavy or light industrial firms; 20 percent ran retail trade companies; and 25 percent headed firms in either the construction, transport, or communications sectors. The average firm had 840 workers; while the smallest and largest firms had 4 and 53,000 employees. Most managers (74%) were male, had a college education, and had worked as a director for between 6 and 10 years. Almost two thirds (65%) of the firms were formerly state-owned but had undergone privatization. Twenty percent were created in 1989 as new private firms; 15 percent remained state owned. Sixty-eight percent of

¹¹In 4 of the 8 regions in the survey the response rate was over 70% and in three regions it was above the mean. In Smolensk, the response rate was 33%. Eliminating this case from the sample produces no substantive change in the results.

¹²Previous research suggests that these fears are well founded. Frye (2002) finds that small business managers who renovated their place of business were both more likely to be inspected by the state and to be contacted by protection racketers.

¹⁹For example, Root demonstrates how French Kings lowered their cost of borrowing by creating corporate lending bodies of relatively powerful groups that could credibly punish the sovereign for any reneging on debts (Root 1989). Campos and Root (1994) argue that the creation of corporatist bargaining arrangements among labor, business, and the government prevented the latter from changing policy opportunistically. Similarly, many scholars have noted politicians may create autonomous central banks to “tie their hands” and prevent them from creating surprise inflation for political benefits.

²⁰We included firms from ten Goskomstat categories and excluded firms in the agricultural, communal services, health, social services, educational, and cultural sectors. In comparison to the population of firms in these ten categories, industrial firms are slightly overrepresented (42 versus 54%) and retail firms are slightly underrepresented (27 versus 15%) in this sample.
firms claimed to have made a profit in 1999, 20 percent came out even, and 12 percent claimed to have lost money. Ten percent of the firms claimed to have no serious competitors and are treated as monopolists. Two percent of the firms were formal members of financial industrial groups, but just under a third (28%) were members of production associations of some kind, such as a trust, holding company, concern, or financial industrial groups. These production associations are based on cross-ownership of shares among firms. Finally, thirty percent of firms were members of business or professional associations, such as the Russian Union of Industrialists and Entrepreneurs or the Association of Small Businesses.

The Security of Property Rights

To measure the security of property rights, I use three indicators of investment. We asked managers whether they had constructed a new building in the last two years, extended trade credits to suppliers or buyers in the last two years, or were currently planning to make a significant new capital investment in the coming year. Twenty percent of managers had constructed a new building, 40 percent of managers had extended supplier or customer credits and 31 percent of managers planned to make a new capital investment in the next year. These types of activities are good proxies for secure property rights because each requires significant immediate costs with only the promise of future revenue. Moreover, given the diversity of firms in the sample, it is difficult to find a common measure of the security of property rights suitable for all firms. For each of these three proxies, the variable Investment takes a value of 1 for firms that invested and 0 otherwise in the initial quantitative analysis.

State Institutions

We asked a variety of questions to assess each respondent’s perception of the performance of state arbitration courts in Russia. For example, we examined how frequently business managers turned to state arbitration courts to resolve business disputes. Seventy percent of firms had experienced some violation of property rights over the last two years that they considered sufficiently grave to merit taking to court. Businesses were far less likely to take such a dispute to court if the conflict was with the local or regional government rather than with another private firm. Forty-four percent of firms that had a dispute with the local or regional government over the last two years turned to state arbitration courts to resolve at least one of these conflicts. In contrast, 66 percent of managers who experienced a property rights violation by a business partner in the last two years took at least one dispute to court, thus indicating a greater willingness to use courts in cases involving private rather than state entities. Thus, it is fairly common for economic agents to use the courts in disputes with state and private entities, however, they are more likely to take the latter to court than the former.

These responses reflect only the experience of managers who had a conflict in the last two years. To gain responses from all managers, we asked a series of hypothetical questions that probe their expectations that courts could protect their rights in cases involving state and private entities.

Managers said that state arbitration courts were much less effective in protecting their rights when the state was a party to the case. We asked managers: “In the case of an economic dispute with the local or regional government do you believe that the courts could protect your legal interests?” We then asked: “In the case of an economic dispute with a business partner do you believe that the courts could protect your legal interests?” Similarly, we asked whether the courts could enforce decisions to protect their property rights in disputes with local or regional state officials and private agents.

Table 1. Courts and the State

<table>
<thead>
<tr>
<th>Question</th>
<th>% Responding Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courts can defend interests against local/regional government</td>
<td>49 (50)</td>
</tr>
<tr>
<td>Courts can defend interests against business partner</td>
<td>68 (46)</td>
</tr>
<tr>
<td>Courts can ensure compliance if decision goes against the local/regional government</td>
<td>38 (48)</td>
</tr>
<tr>
<td>Courts can ensure compliance if decision goes against a business partner</td>
<td>84 (36)</td>
</tr>
</tbody>
</table>

Means reported with standard errors in parentheses.

Question

“In the case of an economic dispute with the local or regional government do you believe that the state arbitration courts could protect your legal interests?”

1) yes; 2) no; 3) it is hard to say.

“If you think that a decision of the arbitration court will be enforced if it goes against the local or regional government?”

1) yes; 2) no; 3) it is hard to say.

13 The State Arbitration Courts in Russia (GosArbitrazh) were designed to hear economic disputes between legal entities and between legal entities and state agents. These courts hear civil, administrative, and bankruptcy cases.

14 Win rates of citizens in cases actually brought to court against state officials are in the neighborhood of 80 percent (Solomon 2002). The survey data thus suggest the strong possibility of selection bias in the kinds of cases that citizens bring to court.

15 Using aggregate data from 1992 to 2000 from 8 regions in Russia, Kathryn Hendley (2002) finds that businesses are using arbitration courts at increasing rates in recent years. They are also suing the state at increasing rates, again indicating the importance of courts in Russia. Because the data presented here captures levels at one point in time rather than change over time, the two findings may be entirely consistent.
Table 1 reveals that 68 percent of managers expected arbitration courts to protect their interests in cases involving other private businesses, but only 49 percent of managers said that courts could protect their interests in cases involving the local or regional government. Moreover, managers said that local and regional governments were less likely to abide by judicial decisions than were private businesses. These results underscore that firm managers do not believe that state arbitration courts per se work badly. Instead, managers seem to view the arbitration courts as working fairly well in conflicts with private actors, but working much less well when cases involve the local or regional government.

We also asked firms to rate the performance of state arbitration courts on various dimensions — speed, honesty, independence, lack of corruption, effectiveness — on a scale of 1—5, with 1 very low and 5 very high. Despite widespread criticism of the performance of courts in Russia generally, state arbitration courts — the courts that decide economic disputes — received fairly high ratings. Using a simple index that averages performance ratings across each of these dimensions on a scale of 1—5, managers rated the performance of the courts to be 3.2.

Quantitative Analysis

To assess the determinants of the security of property rights, I begin by estimating the following equation:

\[
Investment = \beta_1 + \beta_2 \text{InstitutionalCommitment} + \beta_3 \text{ArbitrationCourt} + \beta_4 \text{PresidentMarket} + \beta_5 \text{Trust} + \beta_6 \text{LackofCredit} + \beta_7 \text{Corruption} + \beta_8 \text{Competition} + \beta_9 \text{BusinessOrganization} + \sum\beta_{10} \text{ManagerControls} + \sum\beta_{11} \text{FirmControls} + \sum\beta_{12} \text{SectorControls} + e
\]

In the initial quantitative analysis, the dependent variable, \(Investment\), is one of the three indicators of investment described above. More specifically, it measures whether or not firm managers constructed a new building, extended credit, or planned a new investment. Because the dependent variable is dichotomous, I use a probit model. I also employ robust standards errors and clustering on each city to control for heteroskedasticity in the data.

The independent variables include \text{InstitutionalCommitment} which equals 1 for firms that expected the arbitration courts to protect their property rights in a dispute with the regional or city government and 0 otherwise. This question is particularly appropriate for assessing the impact of credible commitment because it captures the possibility that a manager who has never had a conflict with the local or regional government may be deterred from investing by the threat of unconstrained state officials. Other measures, such as whether a business took the state to court or had a conflict with state officials, do not capture this “off the equilibrium path” behavior.\(^{16}\)

\text{InstitutionalCommitment} may be endogenous to the respondents’ perceptions of the courts in general. Thus, it is appropriate to include a variable for the perceived capacity of the courts. Doing so controls for the possibility that respondents’ perceptions of the ability of the courts to constrain state officials merely reflects their expectations about the overall performance of state arbitration courts. I include a variable \text{ArbitrationCourt}, which measures the respondent’s evaluation of the effectiveness of state arbitration courts on a scale of 1—5.\(^{17}\)

A number of variables related to the manager, the firm, and market conditions may influence decisions to invest and should be included in the model to guard against the possibility that omitted variables are driving the findings. For example, characteristics of the individual manager may determine investment behavior. I therefore include variables to account for the age and education level of the manager.

Because managers’ perceptions of the government’s commitment to private property may influence the security of property rights, we asked: “What type of economic system is most appropriate for Russia: One based on state ownership of property and controlled prices or one based on private property and free prices? Please place yourself on a five-point scale where 1 equals command economy and controlled prices and 5 equals an economy based on private property and free prices”. Most managers strongly favored a market economy with free prices for Russia. On average, managers placed themselves at 3.5 on the five-point scale. We then asked the managers how they believed that President Putin would answer the question: managers said Putin was a cautious supporter of the market and placed him at the point 3.1 on the same scale. The variable \text{PresidentMarket}, captures respondents’ perceptions of President’s Putin’s commitment to a market economy on a scale of 1—5.

Variables related to the firm may also determine the propensity to invest. Because the size of firms may shape investment patterns, I add dummy variables for small (employees<150) and medium-sized firms (employees<500).\(^{18}\) There is considerable debate whether property type — private or state-ownership — influences investment. I therefore include a dummy variable that equals 1 for private firms and 0 for state-owned firms. Profitable firms may invest at higher rates than other

\(^{16}\) As we shall see later in the paper, even managers who did not experience any property rights violations and did not have any economic conflict with the local or regional government are deterred from investing if they expect that courts cannot constrain state officials.

\(^{17}\) These two variables are correlated at .16 level, \(p > .01\) I later run the analysis dropping \text{ArbitrationCourt}. Doing so does not change the results.

\(^{18}\) Treating the number of employees with dummy variables follows Hellman et al. (2000).
firms. Thus, I include a dummy variable for firms that claim to have made a profit in the year 2000. I also add a dummy variable for members of a business organization, because such firms have greater lobbying power and access to information about market conditions — factors that may influence their investment decisions (Hellman et al. 2000; Recanatini and Ryterman 2000; Frye 2002; Pyle 2002).

Finally, variables related to market conditions may influence investment patterns. I add a variable, Trust, which measures the extent to which a manager trusts other managers in his region to fulfill their contracts on a scale of 1–4 (McMillan and Woodruff 1999). More precisely, we asked “In general can one trust other businesspeople in your region to fulfill their contractual obligations in dealings with other businesspeople?” Slightly more than two-thirds (70%) of the managers answered yes. I include variables, Corruption, Competition, and LackOfCredit which measure the extent to which corruption, competition, and a lack of credit were obstacles for their business on a scale of 1–5 (Shleifer and Vishny 1993; Frye and Shleifer 1997; Hellman et al. 2000). Finally, I add a variable, Police, which measures the respondent’s perceptions of the performance of the police in their locality on a scale of 1–5.

The sector and city in which a firm is located may shape investment patterns. In particular, firms in different sectors and cities may face different opportunities to invest and different levels of demand for their product. The model includes controls for 10 economic sectors; fuel, machine-tools, metals and chemicals, light industry, construction, transportation, communications, retail trade, and finance. The excluded category is food processing. The model also includes dummy variables for each city. The excluded category is Voronezh. I present the models with dummy variables for sector and for sector and city.

Model 1 in Table 2 examines the impact of these variables on the probability that a firm has constructed a new building in the last two years. Results from this model reveal strong support for the argument. As indicated by the positive and significant coefficient on Institutional Commitment, managers who expect the courts to protect their property rights in a dispute with the local or regional government were significantly more likely to have invested in a new building than were other firms. Managers who had a favorable perception of the performance of the court system were also more likely to invest than other managers.19

### Table 2. The Security of Property Rights: Evidence from Russian Firms

<table>
<thead>
<tr>
<th></th>
<th>Model 1 New Building</th>
<th>Model 2 Supplier or Customer Credit</th>
<th>Model 3 New Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional Commitment</td>
<td>.41*** (.15)</td>
<td>.18** (.09)</td>
<td>.34*** (.10)</td>
</tr>
<tr>
<td>Arbitration Courts</td>
<td>.12** (.06)</td>
<td>.01 (.04)</td>
<td>.14*** (.05)</td>
</tr>
<tr>
<td>President Market</td>
<td>.01 (.08)</td>
<td>.003 (.06)</td>
<td>.17*** (.05)</td>
</tr>
<tr>
<td>Trust</td>
<td>-.05 (.10)</td>
<td>.14** (.07)</td>
<td>.08 (.13)</td>
</tr>
<tr>
<td>Lack of Credit (as obstacle)</td>
<td>.03 (.07)</td>
<td>.02 (.04)</td>
<td>.01 (.04)</td>
</tr>
<tr>
<td>Corruption (as obstacle)</td>
<td>.05 (.05)</td>
<td>.06 (.06)</td>
<td>.01 (.03)</td>
</tr>
<tr>
<td>Competition (as obstacle)</td>
<td>.05 (.06)</td>
<td>.10* (.05)</td>
<td>.03 (.04)</td>
</tr>
<tr>
<td>Small</td>
<td>-.53** (.31)</td>
<td>-.47* (.27)</td>
<td>-.18* (.10)</td>
</tr>
<tr>
<td>Medium</td>
<td>-.22 (.21)</td>
<td>-.44* (.25)</td>
<td>-.11 (.18)</td>
</tr>
<tr>
<td>Age</td>
<td>-.003 (.007)</td>
<td>-.02*** (.006)</td>
<td>.01 (.01)</td>
</tr>
<tr>
<td>Education</td>
<td>.06 (.09)</td>
<td>.12 (.13)</td>
<td>.10 (.11)</td>
</tr>
<tr>
<td>Profitable</td>
<td>.24* (.16)</td>
<td>.20 (.15)</td>
<td>.23** (.11)</td>
</tr>
<tr>
<td>Private</td>
<td>-.41* (.23)</td>
<td>-.31 (.22)</td>
<td>.02 (.21)</td>
</tr>
<tr>
<td>Business Organization</td>
<td>.20* (.12)</td>
<td>.47*** (.11)</td>
<td>.34* (.11)</td>
</tr>
<tr>
<td>Police</td>
<td>-.07 (.09)</td>
<td>.10 (.07)</td>
<td>.03 (.05)</td>
</tr>
<tr>
<td>Constant</td>
<td>-.10 (.00)</td>
<td>.44 (.40)</td>
<td>-1.31* (.75)</td>
</tr>
<tr>
<td>N</td>
<td>435</td>
<td>435</td>
<td>435</td>
</tr>
<tr>
<td>Prob&gt;Chi2</td>
<td>.435</td>
<td>.435</td>
<td>.435</td>
</tr>
<tr>
<td>Dummy Variables</td>
<td>Sector</td>
<td>Sector</td>
<td>Sector</td>
</tr>
</tbody>
</table>

19 Turning a profit in the last year is an imperfect measure of the financial performance of a firm, but given the unwillingness of respondents to provide more detailed or accurate information on their financial conditions of their firm, it is perhaps, the best that can be achieved.

20 As Johnson, McMillan and Woodruff (2003) note the postcommunist world is a good setting to disentangle the effects of access to external finance and institutions on investment. In cross country studies, institutional quality and access to credit are typically highly correlated, but this assumption is much less valid in the economies in transition.

21 This result is sensitive to the coding of perceived performance of the court system. For example, elsewhere in the survey managers were asked to rate the performance of a variety of political institutions, including arbitration courts, on a scale of 1–5. When this measure of the performance of arbitration courts is added to each of the following models it is insignificant. Including this measure does not affect the sign or significance levels of other variables of interest.
Members of business organizations invested at higher rates, while private and small firms invested at lower rates than other firms. Other variables provided little leverage. Proxies for social trust, corruption, competition, and a lack of credit had little impact on investment patterns in this specification of the model.

Model 2 in Table 2 explores extensions of trade and supplier credit. As before, the coefficient on InstitutionalCommitment is significant and positive indicating the managers who believed that courts could constrain state officials were more likely to extend credit to suppliers and buyers than were other managers. Members of business organizations also extended credit at higher rates than did non-members. In this model, competition and social trust promoted the extension of credit to other firms, while other variables did not have a significant impact on credit patterns.

Model 3 assess the probability that firms are planning to make a significant new capital investment in the coming year. Again, the variables InstitutionalCommitment and ArbitrationCourts have a significant impact on the probability of new investment.

In addition, the stronger were managers’ perceptions that President Putin was committed to a market economy, the more likely the firm planned to make a capital investment. This is the cleanest test of this argument. In previous models, we asked managers whether they had invested in the last two years, a period in which Boris Yeltsin and Vladimir Putin served as President. In this model, we explored how current perceptions of President Putin’s commitment to private property influenced future levels of investment.

Profitable firms were also more likely to be planning to make a new investment than were other firms. Members of business organizations also invested at higher rates than nonmembers. Other variables had little impact.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 4 Investment Dummy</th>
<th>Model 5 Investment Index</th>
<th>Model 6 Investment Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional Commitment</td>
<td>.32*** (.15)</td>
<td>.38*** (.06)</td>
<td>.17*** (.06)</td>
</tr>
<tr>
<td>Arbitration Courts</td>
<td>.19** (.07)</td>
<td>.10*** (.05)</td>
<td>.14** (.05)</td>
</tr>
<tr>
<td>President Market</td>
<td>.10 (.06)</td>
<td>.09 (.05)</td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>.06 (.12)</td>
<td>.09 (.07)</td>
<td></td>
</tr>
<tr>
<td>Lack of Credit (as obstacle)</td>
<td>.03 (.04)</td>
<td>.01 (.04)</td>
<td></td>
</tr>
<tr>
<td>Corruption (as obstacle)</td>
<td>.01 (.05)</td>
<td>.04 (.04)</td>
<td></td>
</tr>
<tr>
<td>Competition (as obstacle)</td>
<td>.07 (.05)</td>
<td>.07** (.05)</td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>−.59** (.19)</td>
<td>−.48** (.18)</td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>−.32* (.20)</td>
<td>−.31* (.15)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>−.02* (.01)</td>
<td>−.02* (.01)</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>.06 (.13)</td>
<td>.12 (.16)</td>
<td></td>
</tr>
<tr>
<td>Profitable</td>
<td>.30 (.14)</td>
<td>.27* (.09)</td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>−.53* (.23)</td>
<td>−.31* (.12)</td>
<td></td>
</tr>
<tr>
<td>Business Organization</td>
<td>.59*** (.16)</td>
<td>.50*** (.11)</td>
<td></td>
</tr>
<tr>
<td>Police</td>
<td>−.01 (.06)</td>
<td>.03 (.05)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>.71 (.77)</td>
<td>−.02 (.62)</td>
<td></td>
</tr>
</tbody>
</table>

| N                         | 435 435 495 495          | 435 435 495 495          |                          |
| Prob>Chi2                 | .0000 .0000 .0015 .0000  | .0000 .0000 .0015 .0000  |                          |
| Dummy Variables           | Sector Sector Sector City| Sector Sector Sector City|                          |

### Table 3. Marginal Effects of Institutional Commitment on Investment

<table>
<thead>
<tr>
<th>Probability that firms...</th>
<th>Cannot take government to court</th>
<th>Can take government to court</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct new building</td>
<td>.35</td>
<td>.45</td>
</tr>
<tr>
<td>Extend credit to suppliers or customers</td>
<td>.59</td>
<td>.64</td>
</tr>
<tr>
<td>Plan new investment</td>
<td>.46</td>
<td>.55</td>
</tr>
</tbody>
</table>

22 Firms in Voronezh invest at higher rates than firms in Nizhnii Novgorod, Moscow, Ekaterinburg, Novgorod, Smolensk, and Tula.

23 It is interesting to note that evaluations of President’s Putin’s performance as a president did not have an impact on investment rates, nor did evaluations of the commitment of the respondent’s governor or mayor to a market economy based on private property. These analyses are not reported.
As indicated in Table 3, the substantive impact of the main variable of interest on these three forms of investment is large. Simulations for each model with continuous variables set at their means suggests that for a profitable mid-sized private firm that is a member of business organization having confidence that the courts can protect your rights in a dispute with the local government raises the probability of investing in a new building from .35 to .45; extending customer or supplier credit from .59 to .64; and planning a new capital investment from .46 to .55.

Initial Robustness Checks

I recoded the dependent variable Investment as a dummy variable that equals 1 for any firm that built a new building, or credited a supplier or customer, or planned a new investment, and 0 otherwise. Sixty four percent of firms engaged in at least one of these three forms of investment. I also created an index of investment that ranges from 0—3 depending on the number of investment activities that each firm undertook. Thirty-six percent of firms engaged in none of these investment activities; 40 percent engaged in one; 17 percent engaged in two; and 7 percent engaged in all three types of investment. Using the independent variables from Model 1, I then ran a probit model on the dummy variable measure of investment and an ordered probit model on the index of investment. The results are essentially unchanged as indicated by the positive and significant coefficients on InstitutionalCommitment in models 4 and 5 in Table 2.

I also split the sample into respondents who (a) had and had not experienced a property rights violation and (b) had and had not experienced an economic conflict with the local or regional government and ran the analysis using the index of property rights as the dependent variable. Again, the variable for institutional commitment retains its level of significance in each of these analyses. Thus, even managers who have not experienced a violation of property rights by state officials are deterred from investing if they believe that courts cannot compel state agents to comply with judicial decisions.

Finally, there may be some concern that the variables for corruption and for the effectiveness of arbitration courts may be endogenous to the perceived ability to take the local or regional government to court. I reran the ordered probit model without Corruption and without ArbitrationCourt respectively and the results are largely unchanged. In both cases the coefficient on InstitutionalCommitment retains its sign and significance.

I also conducted the analysis including only the variable InstitutionalCommitment and the dummy variables for city and sector as independent variables. The coefficients reported in Model 6 suggest that doing so produces little change in the results. Thus, these findings are robust to specifications that include both sectoral and city dummy variables, that present different specifications of the model, and that use different codings of the dependent variable.

An Additional Robustness Check

Of course, these results may depend on a particular survey instrument or time period. They also may be a reflection of the Putin era in Russia. To assess these possibilities, I include data from a survey of managers of small businesses in three cities in Russia: Ulyanovsk, Smolensk, and Moscow in 1998. This survey asked a similar set of questions, but focused on only on small businesses. Researchers interviewed 190 managers of retail trading firms that had more than 4, but less than 50 employees. Small groceries, pharmacies, and auto-parts stores were among the types of firms included in the sample.

As in the survey discussed above, we asked small business managers whether they expected the courts to protect their property rights if they were involved in disputes with different types of counter-parties. Firm managers again exhibited greater confidence that the courts could protect their property rights in disputes with other private actors than in disputes with the local government. InstitutionalCommitment equals 1 for managers who expect the courts to protect their property rights in a dispute with a business partner, but only 35 percent of managers expected the courts to protect their property rights in a dispute with the local government. InstructionalCommitment equals 1 for managers who expect the courts to protect their property rights in a dispute with the local government and 0 otherwise.

The measure for investment in this analysis is whether or not firm managers have renovated their place of business. The term in Russian is “kapitalnyi remont”, and indicates a significant investment that usually closes the store for some period of time. A “kapremont” may include replacing pipes, repairing structural damage, resurfacing the floor, or installing new capital equipment. Sixty-three percent of managers renovated their place of businesses.

24 Each firm had a physical storefront. Thus, we excluded street traders and kiosks. The survey was conducted in face-to-face in the native language in late 1998.
25 MASMI, a decade old Moscow-based polling agency conducted the survey in Russia, while sociologists from the Institute of Sociology and Philosophy of the Polish Academy of Sciences conducted the survey in Warsaw. Response rates ranged from 55—75 percent depending on the city. In the absence of reliable data on the entire population of small businesses in each city, shops were chosen at random from business directories. This bias may not be particularly harmful as even shops operating in the informal economy are likely to be registered and to advertise in such directories (Yakovlev 2001).
26 While it is dichotomous, this measure has several advantages as an indicator of investment. It is easy for researchers to verify, represents a significant investment for these firms, and is applicable across all small firms. Given the poor capital stock for small businesses in the region, it is likely that each manager faced a decision to conduct a capital renovation of their place of business.
The coefficient on a variable that captures the respondent’s assessments of the performance of courts more generally, ArbitrationCourt, is statistically insignificant. The direct impact of the performance of courts on the security of property rights is sensitive to differences in samples and types of investment.

Small firms with more employees were more likely to renovate their place of business than were other firms. In contrast to the preceding analysis, managers who perceived corruption to be a greater problem were significantly less likely to renovate their business than were other managers. This difference may be due to the inclusion of only small businesses in this analysis. Corruption is generally thought to be more pervasive and problematic for small businesses than for large businesses in Russia (Hellman et al. 2000). Firms that faced greater competition or had little confidence in the police were no more likely to renovate their place of business than were other managers.

### Conclusion

In sum, quantitative analyses from two surveys in transitional Russia find that creating institutions to constrain the grabbing hand of the state is essential for secure property rights. These findings have implications for positive treatments of the origins of secure property rights, the social bases of property rights, and legal reform in Russia. I treat each in turn.

#### Credible Commitment and the Origins of Secure Property Rights

First, these results add a potentially important caveat to discussions of the emergence of property rights. Neoclassical economists tend to emphasize that property rights emerge based on demand from market participants for scarce goods (Demsetz 1967: Umbeck 1991). For example, Harold Demsetz’ (1967) famous study of the emergence of private ownership of land among Indian hunters in Eastern Canada argued that only when land became scarce – hence valuable – did local populations have an incentive to create secure property rights. This insight is a step forward, but its impact is limited by omitting state agents entirely (Riker and Sened 1991).

Other scholars, generally working in political economy or the new institutional economics, tend to emphasize that secure property rights are the result of rulers seeking to maximize revenue or other forms of political benefits (North 1981; Levi 1988; Olson 1993). For example, Riker and Sened (1991) argue that property rights over scarce airport landing slots in the U.S. in the 1980s became

---

27 It is useful to note that in the preceding analysis the impact of this variable was sensitive to the question wording.

28 I set aside the vast literature on philosophical and normative treatments of the origins of property rights.
secure only when federal bureaucrats saw a benefit in enforcing these rights. When the revenue gains and political benefits from enforcing property rights exceeded the costs of doing so, property rights over landing slots at U.S. airports became secure.

The findings from this essay suggest that demand from market participants and supply from state agents may be insufficient to create secure property rights. Where legal institutions do not compel state officials to abide by legal norms, property rights remain insecure. Expecting state agents who are unconstrained by courts to exercise discretion over the realization of nominal property rights, market participants view their property rights as vulnerable.

**Social Trust, Civic Participation and Property Rights**

A consistent finding from this analysis is that membership in business organizations promotes secure property rights. Members of business organizations were more likely to construct new buildings, extend credit to buyers or suppliers, and plan for new capital investments in the coming year. Precisely how membership in a business organization increases investment is unclear. Members may perceive their property rights as more secure because the organization gives them stronger representation in the halls of state power. Alternatively, business organizations may increase the security of property rights by strengthening social networks.

More research is needed, but some preliminary evidence suggests the merit of both of these arguments. We asked managers to identify what types of benefits, if any, they received from a business organization. Sixteen percent of all firms identified “representation of business interests in the executive and legislative branch” as a benefit of membership. Twenty-three percent of all firms said that “expanding professional contacts” was a benefit of membership. Adding dummy variables for the responses to these questions to Models 1, 2, and 3, reveals that members of business organizations who said that the “representation of business interests” was an important benefit of membership were significantly more likely to extend credit and plan new investments than were other firms. Similarly, a dummy variable for those who said that “expanding professional contacts” was a benefit of membership was significantly associated with an increased likelihood of extending credit and planning new capital investment. Future research should focus on identifying more precisely the mechanisms by which membership in a business organization is associated with strong property rights.

Broad measures of general social trust were weakly associated with the security of property rights. The variable, *Trust*, was associated with higher rates of extending trade credit, but not with other forms of investment. These results suggest that civic participation in business organizations has a greater impact on property rights than does general levels of social trust (Raiser 1999).
APPENDIX

Data Appendix I. 500 Firm Survey

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std.Dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier or Customer Credit</td>
<td>.40</td>
<td>.49</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>New Building</td>
<td>.21</td>
<td>.41</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>New Investment</td>
<td>.34</td>
<td>.47</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Institutional Commitment</td>
<td>.40</td>
<td>.49</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>ArbitrationCourt</td>
<td>3.18</td>
<td>1.20</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>President Market</td>
<td>3.29</td>
<td>.94</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Lack of Credit (as obstacle)</td>
<td>2.75</td>
<td>1.63</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Corruption (as obstacle)</td>
<td>2.43</td>
<td>1.49</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Competition (as obstacle)</td>
<td>2.75</td>
<td>1.36</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Trust</td>
<td>2.04</td>
<td>.60</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Small</td>
<td>.49</td>
<td>.50</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Medium</td>
<td>.22</td>
<td>.41</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Age</td>
<td>45.82</td>
<td>10.06</td>
<td>23</td>
<td>82</td>
</tr>
<tr>
<td>Education 1 = middle school, 5 = Ph.D.</td>
<td>2.81</td>
<td>.54</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Profit</td>
<td>.65</td>
<td>.47</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Private</td>
<td>.90</td>
<td>.30</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Business Organization</td>
<td>.32</td>
<td>.47</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Police</td>
<td>3.31</td>
<td>.11</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

Survey of 500 firms ranging in size from 4 to 53,000 employees conducted in November and December 2000 in 8 cities in Russia.

Data Appendix II. Survey of Small Firms

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std.Dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renovation</td>
<td>.63</td>
<td>.48</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Institutional Commitment</td>
<td>.35</td>
<td>.48</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>ArbitrationCourt</td>
<td>1.17</td>
<td>.58</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Employees</td>
<td>12.05</td>
<td>9.25</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>Age</td>
<td>40.10</td>
<td>9.63</td>
<td>19</td>
<td>68</td>
</tr>
<tr>
<td>Private</td>
<td>.75</td>
<td>.43</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Food</td>
<td>.41</td>
<td>.49</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Police</td>
<td>5.08</td>
<td>3.40</td>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>

Survey of 190 small businesses of between 5 and 50 employees in three cities in Russia conducted in November 1998.

References


Hoff, Karla and Joseph Stiglitz. 2002. “After the Big Bank: Obstacles to the Emergence of the Rule of Law in Russia”. Ms. Washington, D.C.


Тимоти Фрай

Доверие к политике властей и права собственности в России (мнение предпринимателей)
(На английском языке)

Публикуется в авторской редакции
Зав. редакцией Е. В. Попова
Выпускающий редактор А. В. Заиченко
Технический редактор С. Д. Зиновьев

ЛР № 020832 от 15 октября 1993 г.
Формат 60х84/16. Бумага офсетная. Печать трафаретная.
Тираж 150 экз. Уч.-изд. л. 1,9. Усл. печ. л. 1,63. Заказ № 189. Изд. № 408

ГУ ВШЭ, 125319, Москва, Кочновский проезд, 3
Типография ГУ ВШЭ, 125319, Москва, Кочновский проезд, 3