

Reputation and the Rule of Law in Russia

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Abstract

Do private or public institutions provide stronger incentives to trade? Are private and public institutions that support trade complements or substitutes? These questions have implications for economic development, but also inform debates on state/society relations. Some scholars argue that trust-based social networks that rely on reputation sap the ability of state agents to provide public goods, while others argue that strong social network are the keys to improving state governance. A survey-based experiment conducted in Russia in 2005 that manipulates the reputation of business partners and the ability of firms to use courts indicates that reputation has a powerful impact on the propensity to trade in the case at hand. Courts also influence the decision to trade, but their impact appears to be modest. In addition, good courts and a good reputation are best seen as substitutes rather than complements. By using a survey-based experiment to manipulate reputation and the quality of courts, this essays helps to identify the independent impact of private and public institutions and avoids endogeneity problems that plague many studies of institutions.

The capacity of state institutions to protect property and promote trade is central to economic development. But states are far from the only organizations that perform these tasks. Societies typically boast a rich array of private means to support exchange that rely on reputation and other forms of social sanctions. The interplay of private and public institutions that support trade raises a host of questions for political scientists and economists.¹ What role do private institutions, such as reputation, and public institutions, such as courts, play in promoting exchange?² Does a concern for reputation or confidence in the courts provide stronger incentives to trade? Do private institutions that promote trade undermine or underpin state institutions?

Answers to these questions have important implications for transition and developing countries where many have cited weak institutions - both private and public - as a primary obstacle to economic development and political stability. They also inform a central debate on state/society relations. Some argue that trust-based social networks that rely on reputation sap the ability of state agents to collect taxes, deliver justice, and provide public goods, while others claim that strong networks based on social trust are the key to improving the quality of governance by state officials (Migdal 1988; Putnam 1994). Finally, they have policy relevance by giving advisors some insight into the relative importance of public and private institutions for supporting trade.

¹ Less benignly, private protection organizations that use threats of violence to enforce trade contracts also a staple of life in many countries. There is a rich literature on private third-party enforcement by mafia-like organizations in Russia. I deal with these issues only tangentially here. See Hendley et al (2000); Frye and Zhuravskaya (2000) Varese (2002); Volkov (2002); and Frye (2002).

² I borrow (North's 1990: 3) commonly used definition of institutions here as the "humanly devised constraints that shape human interaction." More colloquially, institutions are akin to the rules of the game and organizations are the players of the game. See also Knight (1992).

The postcommunist world offers an excellent opportunity to study these issues in real time. Developed economies are typically marked by strong public institutions and robust private institutions. This makes it difficult to identify how public and private institutions influenced each other in the formative stages of building markets and states. By analyzing efforts to construct public and private institutions to support trade in the postcommunist world, we can study the interaction of these institutions before they reach a steady state. This research strategy offers the possibility to gain insights into institutions that are hard to come by in other settings.

To explore the interplay of public and private institutions to support trade, I commissioned a survey of 660 business elites in 11 regions across Russia. A survey-based experiment that manipulates the reputation of business partners and the ability of firms to use courts indicates that reputation has a powerful impact on the decision to trade. In contrast, courts had only a modest impact. In addition, the experiment finds that good courts and good reputations are better seen as substitutes rather than complements.

Having established the importance of reputation for trade, the survey explores how reputation works in practice. A majority of respondents expected that other firms would punish violators, but expressed far less confidence that other firms would learn about a dispute between firms in the first place. Moreover these expectations influenced firm behavior. Managers who expected other firms to both learn about a dispute and sanction disreputable parties were more likely to give credit to other firms.

Finally, the essay confirms these findings in an analysis of the decision to give credit to buyers and suppliers. Regression analysis finds that reputation has a strong and positive impact on the decision to give credit when courts are seen as very weak.

However, strong courts mitigate the effect of reputation. This suggests that reputation and courts are substitutes rather than complements. This analysis of inter-firm credit provides behavioral evidence consistent with the experimental findings and thereby gives greater credence to the argument.

In addition to addressing a central debate in comparative political economy, this essay seeks to make a methodological contribution to studies of institutions more generally by using a survey-based experiment. Studies of institutions often face an endogeneity problem. To identify the effect of an institution, the institution should be uncorrelated with other factors that may influence the outcome. For example, the strength of private institutions that promote trade, like reputation, should be uncorrelated with good public institutions that promote trade, like courts. However, the two factors may be strongly related.³ By using a survey-based experiment to manipulate reputation and the quality of courts, this essay identifies the independent impact of each of these factors on the propensity to trade.

1. Public and Private Institutions

³ Multivariate regression is one potential solution, but measurement issues and model specification invariably provoke debate. Instrumental variable regression is another potential answer, but finding valid instruments, that is, variables that are correlated with the independent, but not the dependent, variable, is typically very difficult (Greene and Gerber 2002: 809).

The exchange of goods and money invariably creates a problem.⁴ Unless goods are exchanged simultaneously and quality can be determined on the spot, the party who gives up control of their assets first becomes vulnerable to breach. Sellers who receive payment may abscond with the funds without delivering the good, while buyers who receive the good before payment, may decline to send the money. As each party can anticipate the other's behavior, both sides are likely to decline to trade and miss an opportunity for potential gains.⁵ To capture these gains societies have developed a rich variety of private and public institutions that sharpen incentives to trade. Countries that create institutions to prevent disputes and promote trade most efficiently have typically been at the frontier of economic development (North 1990; Knack and Keefer 1995; Acemoglu, Johnson, and Robinson 2001).

All societies rely on a mix of private and public institutions to promote these types of exchange and scholars debate the relative importance of each. Public institutions have the advantage of economies of scope and scale in organizing the coercion necessary to sanction violators of property rights. Few dispute that the development of capable public institutions such as the state is central to economic development (North 1981).

In recent years, however, scholars have paid increasing attention to the role that private institutions play in governing a wide range of trading relationships. Williamson (1985) argues that private firms have considerable scope in designing bilateral private institutions to support trade without recourse to state institutions. Geertz (1978)

⁴ These problems are hardly unique to the economy. Congressional representatives exchanging support for bills introduced sequentially or parents organizing car pools for their children face similar incentives.

⁵ The famous debate over the timing of the payment and receipt of the chair in Ilf and Petrov's classic *Twelve Chairs* highlights this problem. "Den'gi utrom i stulya vecherom?"

identifies information relayed through gossip and social sanctions as critical to promoting trade in the bazaars of Morocco. Others point to social networks, business organizations, professional associations, and ethnic networks that provide means to sanction non-compliance and thereby promote cooperation without relying on the state for enforcement (Granovetter 1985; Milgrom, North and Weingast 1990; Ellcikson, 1991; Ostrom 1992; Bernstein 1992; McMillan and Woodruff 1999).⁶ Because even the best-governed state lacks the resources to resolve every potential dispute, private solutions to problems of intertemporal trade are widespread (c.f. Macauley 1963).

Such private mechanisms may have advantages over public institutions, particularly where the latter function poorly. Market participants may have more expertise than judges and they can take advantage of information that cannot be used in court (Charny 1990; Johnson, McMillan and Woodruff 2002b: 229). Which method of promoting exchange is a more potent stimulus to trade in a given setting is not immediately clear.

Observers of Russia have begun to contribute to this debate by studying private and public institutions that shape trading relations. Some have identified trading networks based on long-standing social ties and a concern for reputation as key factors in maintaining production and trade (Gerber and Kharkhodin 1994; Sedaitis 1994; Raiser 1999; Ledeneva 1998; Hendley et al .2000; 2001; Frye 2000; Gaddy and Ickes 2003; Pyle 2005). Others have found that state courts in Russia are used more frequently and are more effective than is commonly appreciated (Hendley et al. 2000; 2001; Shvets 2003; 2005; Simachev 2003; Hendley 2004; Frye 2004, but see Hellman et al. 2003; and Berger

⁶ Elsewhere in Eastern Europe, Stark (1998) and McDermott emphasize the role of social networks in supporting trade.

2004). As in other settings, however, there is considerable debate about which is more important in protecting rights to trade.

Institutions as Substitutes

Another important debate examines the interrelationship between private and public mechanisms for preventing disputes and promoting trade. One view argues that private and public institutions serve as substitutes. Reliance on private institutions “crowds out” demand for state institutions and thereby limits the resources available to state agents (Frey 1997). When businesspeople in the private sector can overcome the problems that plague trade using private means, like reputation or trust, they express less demand for capable state institutions.⁷ Rather than devoting resources to develop the state, businesspeople will invest in the creation of powerful private organizations to support trade. Bernstein (1992) finds that the traders in the tight-knit community of Orthodox Jewish diamond traders in New York City opposed state regulation even when offered and instead preferred to rely on informal means to resolve disputes. Ellickson (1991) argues that ranchers and farmers in Shasta County California used informal understandings of the law rather than formal institutions to resolve disputes. On this view, powerful social networks reduce demand for strengthening state institutions that resolve disputes.

On a macro-level, countries with strong social institutions that provide many forms of public goods often have difficulty developing capable states. Most prominently,

⁷ This is a common assumption in formal models that require economic agents to invest in either the formal or informal economy. Investing in the formal economy typically generates a good equilibrium where firms pay taxes and use courts to resolve disputes, while investing in the informal economy leads firms to avoid taxes and use private protection rackets to enforce contracts. See for example, Johnson, Kaufmann and Shleifer (1997).

Migdal (1988) characterizes these polities as having “strong societies and weak states.” States and social organizations consistently compete for the authority to make rules for society and where social organizations are imbued with dense networks of trust they may have advantages over the state. Thus, the micro-level decision studied here may have implications for larger processes at the level of the state and society.⁸ The substitution argument suggests that strong private institutions that support trade should be associated with weak state institutions and vice-versa.

Institutions as Complements

A competing argument suggests that private and public institutions are complements. That is, strengthening one increases demand for the other. Strong private institutions and strong formal institutions go hand in hand. North (1990: 46) argues that “formal rules can complement and increase the effectiveness of informal constraints.” More broadly, capable state institutions may make reputation and social trust more effective by sharing information about other social actors (Levi 1998; Frye 2000). Moreover, strong social institutions that rely on reputation may help private agents overcome collective action problems and hold public officials accountable and thereby increase the effectiveness of state institutions (Putnam 1994). Finally, capable private institutions that support trade may ease the burden on state officials by reducing the number of disputes than actually end up in court. This view, which lies at the core of

⁸ Moreover, development of state institutions may undermine the development of strong private institutions within society. The impersonal nature of governance by the state may reduce demand for high levels of trust within society as bureaucracy provides a functional equivalent. Rather than investing in building dense social networks to underpin trade, businesspeople pay taxes to the state.

Putnam's *Making Democracy Work*, suggests that the development of private and public institutions should be mutually reinforcing (Putnam 1994).

The relationship between private and public institutions has important ramifications for understanding the development of state capacity. If the use of reputation to promote social cooperation underpins state capacity, then it may be worthwhile to use scarce foreign aid to develop social organizations that promote trust and transmit information about the reputation of social actors. If, however, a reliance on networks of reputation to support trade undermines state capacity, then such strategies are called into question.⁹

Given the importance of the issue and the advantages of studying it in a transition setting, it is not surprising that scholars have begun to explore this topic. Hendley, Murrell and Ryterman (2000) conducted an innovative study of 328 business managers in six cities in Russia in 1997. Respondents were asked to rate the "importance of each of the following methods for your firm" for resolving disputes on a scale of 1-10 where the rating should "reflect both the frequency of use and effectiveness" of the different mechanisms. Respondents rated negotiations as a 7.39 and arbitration courts as a 5.40 on this ten-point scale. The authors found that three-quarters (76.4%) of firms facing disputes with suppliers used negotiations to help resolve the dispute, and about one-quarter (25.5%) turned to state arbitration courts. In addition, they found little evidence of complementarities among negotiations, informal meetings between firm representatives, and the use of courts. Hendley and Murrell (2003) repeated this question in a study of 254 companies in Romania in 2001, and again, found little evidence of

⁹ There is a growing literature on laboratory experiments that assess the impact of public and private institutions on the propensity to trade. For a good example, see Lazzarini et al. 2004.

complementarities among formal and informal institutions. Johnson, McMillan and Woodruff (2002) in a 1997 study of 1500 medium-size manufacturing firms in five countries find that private institutions, such as personal relationships are a predominant form of contracting, but that courts play a critical role in promoting trade as well. In a related work based on the same survey, McMillan and Woodruff (2000) found that social networks and gossip substitute for formal legal institutions, but that business networks and trade associations complement formal legal institutions. Pyle (2005) uses data from the Johnson, McMillan and Woodruff survey to find that business organizations help resolve contracting problems, particularly when trading partners are located in other regions. In a study of five markets in Moscow in the 1990s, Frye (2000) finds that when state policy lowered the costs of sharing information sufficiently, brokers created organizations that relied on reputation to support exchange and served as substitutes for state courts.

A Methodological Concern

Institutional analyses have made important advances in recent years, but often confront endogeneity problems.¹⁰ If private and public institutions that support trade are jointly determined, then it is often difficult to draw clear inferences about the extent to which each factor is shaping behavior. For example, a researcher may witness that social trust is high, that courts work well, and that individuals comply with contracts. The covariance of public and private institutions makes it difficult to identify the relative effects of each factor in supporting trade. This may be problematic in standard types of cross-sectional survey analyses. In addition, cross-section analyses can identify

¹⁰ See Acemoglu, Johnson, and Robinson (2001) for more on this point.

correlations between variables controlling for other factors, but are less useful for making causal claims (Kramer 1983).

This work differs from much existing literature by using a survey-based experiment to identify relationships among reputation, courts, and the propensity to trade. Survey-based experiments can alleviate the endogeneity problem by ensuring that public and private institutions do not co-vary. Moreover, survey-based experiments that randomly assign respondents to different versions of the question also provide greater confidence in making causal claims, in part because they require far less stringent assumptions about the data than do standard multivariate analyses.¹¹ Through random assignment and the manipulation of the variables of interest, survey-based experiments can pinpoint the impact of specific variables on outcomes without specifying a complete empirical model with proper controls as is necessary in standard multivariate regression.

2. Survey Description

I commissioned a survey of 660 company managers in a diverse group of 11 of Russia's 89 regions to address these and other questions. At least one region from each of Russia's 7 "super-regions" was included in the sample with most firms coming from the more heavily populated European part of Russia. The survey included firms from 23 different economic sectors as categorized by the State Statistical Agency and ranged from industrial giants in metals and energy to retail trading firms and light industry. The

¹¹ Survey-based experiments on the other hand raise issues of internal and external validity. Concerns about internal validity arise "when the treatment does not exactly correspond to the construct that is envisioned as the independent variable" (Green and Gerber 2002: 811). Internally valid experiments capture the true causal process claimed by the researcher. External validity generates concerns about whether the results produced in an experiment travel outside the setting in which the experiment is conducted. This is a greater threat to the validity of experiments conducted in a laboratory setting, but is also present in field experiments.

sample excluded firms in agriculture, communal services, and health and social services. Firms were chosen using a stratified random sampling technique. Researchers from the Levada Center stratified the sample by size and sector to mirror the population of firms in each region and firms were selected at random from within each of the strata. Each firm within each stratum had an equal probability of being included in the sample. Interviewers from the Levada Center spoke face to face with managers in January and February 2005. Chief executive officers, chief financial officers, and chief legal officers were included in the sample as potential respondents and interviewers spoke with only one person per firm. The distribution of firms in the sample roughly mirrors the national population.¹²

Most managers (79 percent) were male and more than 90 percent had college-level degrees. The age of the average respondent was 47. The average (mean) firm included 727 works and ranged from a minimum of 4 to a maximum of 70,000. Half the respondents headed firms with fewer than 125 workers and one quarter headed firms with fewer than 50 workers. Twelve percent of the firms in the sample were majority state-owned and 59 percent had undergone some form of privatization. Levels of ownership concentration were fairly high. In 49 percent of the firms more than half of the shares were owned by a single stakeholder. Only five percent of firms had foreign ownership.

Focusing on reputation and courts in Russia is important as the survey suggests that business people rely heavily on both bilateral negotiations and courts to help resolve disputes. Seventy-one percent (265 of 372) of respondents that had at least one dispute with a business partner in the last two years turned to a court to help resolve it.

¹² See Appendix I for more details on the survey.

Moreover, firms were relatively successful in recouping their losses when they used courts. In almost seventy percent of the cases, the victors in court cases recouped at least half of their losses.¹³ Contrary to popular wisdom, courts are commonly used in Russia (c.f., Hendley et al. 2000; 2001). In addition, negotiations are common. Eighty-eight percent of respondents (329 of 372) that had at least one such dispute engaged in negotiations with the other side. As reputation is an important element of negotiations there is much to be gained in understanding the role of the former in the latter. Only 19, 16, and 15 percent of respondents turned to influential businesspeople, the security forces, or the executive branch, respectively, to resolve a conflict in the last two years. When asked how often do “firms like theirs” use criminal organizations to resolve disputes, only ten percent of firms said that this happened in more than half of conflicts. Courts and negotiations are by far the most common means of resolving disputes in Russia and merit further examination.

3. Experimental Evidence

I explored the relative impact of reputation and the use of courts on the propensity to trade by including an experiment in the survey that randomly assigned one of four different versions of a question to the respondents. In this experiment, I manipulated the reputation of the buyer and the ability of the seller to use the courts. Because the four versions of the questions are randomly assigned to the respondents, no other factor specific to the respondent or the respondent’s firm should be influencing the mean response to the question. That is, the impact of reputation and courts on the propensity to

¹³ See Appendix 6.

trade should not be influenced by any other factor.¹⁴ Interviewers asked each respondent one of the versions of the following experiment included in the survey.

¹⁴ See Green and Gerber (2002) for a discussion of experimental research designs.

An Experiment

Let's say that a retail trading company is planning to place a large order at a large manufacturing company at a good price. The retail trading company has a **[good reputation in the region in that it always fulfills its contracts/a bad reputation in that doesn't always fulfill its contracts]**.

What do you think, will the manufacturing firm accept this order bearing in mind that it has almost **[always/never]** been able to use the state courts of arbitration to protect its interests? If yes, then with what conditions?

- 1 Refuse the order
2. Accept the order with conditions, such as 100 percent prepayment
3. Accept the order without conditions

Table 3 reports the responses for each of the four different versions of the question. On balance, respondents were most likely to accept the offer with conditions. About three-quarters of respondents were only willing to accept the offer with rather strict conditions, such as 100% prepayment a condition that is not very attractive for the seller. This figure highlights the difficulty of doing business in contemporary Russia.

Sizable groups, however, were also willing to reject or accept the deal outright. For example, in the best-case scenario reported in Section 1 at the top of Table 4 in which the buyer has a good reputation and the seller has almost always used the courts successfully in the past, only four percent of respondents rejected the offer outright, while most of the respondents (76%) accepted the offer with conditions and 20 percent accepted the offer without conditions. In the worst-case scenario reported in Section 4 in the bottom of Table 4 in which the buyer has a bad reputation and the seller has not used courts successfully in the past almost one quarter of respondents (22.5 percent) rejected

the offer outright; 75 percent agreed conditionally, and only 2.5 percent of respondents agreed without conditions.

Table 3. Propensity to Trade

	(Percent)	N
1. Good Reputation/Can Use Courts		
Refuse	(3.6)	6
Accept with conditions	(76.4)	125
Accept without conditions	(20.0)	33
N=165		
2. Good Reputation/Cannot Use Courts		
Refuse	(4.7)	8
Accept with conditions	(76.7)	132
Accept without conditions	(18.6)	32
N= 172		
3. Bad Reputation/Can Use Courts		
Refuse	(20.5)	34
Accept with conditions	(72.9)	121
Accept without conditions	(6.6)	11
N= 166		
4. Bad Reputation/Cannot Use Courts		
Refuse	(22.1)	36
Accept with conditions	(75.4)	123
Accept without conditions	(2.5)	4
N=163		
5. ANOVA F(3, 666 obs) = 25.88 , p<.001		

Table 4 provides a different perspective on the same data. Here I code the responses as follows: reject the offer equals -1, accept with conditions equals 0, and accept without conditions as +1 and calculate the mean of the responses in each of the four versions of the question.¹⁵ Higher scores indicate a greater propensity to trade. Comparing responses across the conditions provides a test of the substitution and complement arguments. If the substitution argument is correct, then the additive effects

¹⁵ The responses are not strictly ordinal, but are treated as such for presentation.

of reputation and confidence in the courts should be negative and respondents should be able to rely either on reputation or on courts by themselves to promote trade. If reputation and courts are complements, then the additive effects of a good reputation and capable courts should be positive. That is, the presence of strong courts should make reputation more effective and vice versa.

Table 4. Courts and Reputation

	Can Use Courts (1)	Cannot Use Courts (2)
Good Reputation (1)	.16	.14
Bad Reputation (2)	-.14	-.20

Table reports mean responses where the propensity to trade is coded as follows:

Refuse = -1

Accept with Conditions = 0

Accept without Conditions = +1

The results provide strong evidence that reputation by itself influences the propensity to trade. Comparing the responses in Column 1 indicates that where the seller has used the courts successfully in the past, moving from the condition where the buyer has a bad reputation to a good reputation increases the score from -.14 to .16 -- an increase of .30 points. Column 2 indicates that reputation also has a strong effect when courts are weak. When the seller has been unable to use the courts in the past, a buyer with a good reputation increases the propensity to trade by .34 (-.20 to .14). This large

increase in the propensity to trade indicates that reputation is a potent stimulus to trade in the cases at hand regardless of the quality of the courts.

Next, consider courts. Comparing responses in the upper row indicates that when the buyer has a good reputation, the ability of the seller to use courts increases the propensity to trade from .14 to .16. Courts play a slightly more prominent role when the buyer has a bad reputation. In the lower row, where the buyer has a bad reputation, being unable to use courts decreases the propensity to trade from -.14 to -.20. In neither case are these differences statistically significant ($t = .38, 1.13$ respectively). Moreover, their substantive effects are much smaller than the impact of reputation on trade.

The survey experiment also helps determine whether reputation and courts are substitutes or complements. The evidence for the complementarity of institutions here is weak. The additive effect of reputation and confidence in the courts depicted in the upper left corner is only slightly better (.16 versus .14) than the effect depicted in the upper right corner when the buyer has a good reputation and the seller cannot use courts. Similarly, courts work only slightly better when the seller has a good than a bad reputation (-.20 versus -.14) as depicted in the lower two rows. Instead, reputation on its own seems to be doing much of the work in the experiment as suggested by the view that institutions are substitutes rather than complements.

In the case at hand, a good reputation is a strong stimulus to trade, while courts provide only marginal benefits. Moreover, there is greater support for viewing reputation and courts institutions as substitutes. The next section explores the use of reputation in more detail by focusing on the process by which reputation works.

5. Reputation: A Problem of Incentives and Information

Scholars have identified two fundamental problems in using a concern for reputation to promote trade (c.f., Kreps 1990; Milgrom, North and Weingast 1990). Reputation is often a weak reed to support exchange because members of a trading community have little incentive to punish violators because delivering sanctions is costly. Businesspeople in a trading community recognize that all would be better off collectively by sanctioning those who violate contracts, but each businessperson would prefer that someone else bear the cost of sanctioning. As each can see this logic, concerns for reputation by themselves are often insufficient to promote intertemporal trade.

In addition, members of a trading community must have reliable information that a violation has occurred before they decide to deliver a sanction. Because gathering information is often costly individual members of a trading community have little incentives to do so (Milgrom, North and Weingast 1990). Communities must overcome problems of incentives and information when using reputation to support trade.

The survey included three questions which shed some light on the operation of reputation as a means of supporting exchange. The first question examined the respondent's willingness to punish violators.¹⁶ Interviewers asked:

¹⁶ This question is borrowed from McMillan and Woodruff (1999).

Table 5. Do You Sanction Violators?

Q. What steps would you take if you learned that a firm in your region with which you have business relations violated its obligations toward another firm?

	Yes (%)
Do Nothing	16.3
Change terms of relationship, e.g., 100% prepayment	56.7
Gradually unwind the relationship	21.5
Immediately stop the relationship	5.5

N= 637

Most company managers (83.7%) indicated that they were willing to sanction firms that renege on their obligations to another firm in their region. Few (5.5%) were willing to immediately end the relationship, but the vast majority of managers were willing to take steps to raise the costs to a trading party with a sullied reputation. It is difficult to put great stock in this response as the question generates incentives to present oneself in a good light. The theoretically more interesting question is whether managers expect other businesspeople in their region to deliver sanctions. Thus interviewers asked:

Table 6. Do Others Sanction Violators?

Q. What do you think, what steps will other businesses in your region take if it became known that a firm has violated its obligations toward other firms in your region?

	Yes (%)
Do Nothing	27.5
Change terms of relationship, e.g., 100% prepayment	51.4
Gradually unwind the relationship	19.5
Immediately stop the relationship	1.7
N = 590	

Somewhat surprisingly, most managers (72.5%) expected other firms to change their behavior upon learning that other businesses that had violated a contract with a firm in their region. Only a handful of respondents expected another businessperson to end the relationship immediately, but most expected their counterparts to change the terms on which they traded with a known offender. Just over half the respondents (51.4%) said that other firms were likely to insist on 100% prepayment, among other means. In the case at hand businesspeople expressed greater confidence that others will raise the costs of trading with firms that have a bad reputation than is commonly appreciated.

If managers expect others to raise the costs of trading with violators, then why is reputation not more effective in supporting to trade? To probe one possible answer, interviewers asked:

Table 7. Will Others Learn About Disputes?

Q. What do you think, if your firm had its rights violated by another firm, will this dispute become widely known among other firms in your region?

	Yes (%)
Yes	7.9
More or Less Yes	23.7
More or Less No	52.3
No	16.2
N= 637	

Most respondents (68.5%) did not expect other firm managers to learn about a violation against their firm. A small minority of firms (7%) expressed a strong expectation that other firms in the region would learn about a dispute and only about a quarter (23.7%) were reasonably certain that others would learn of a violation. On balance, managers expect others to sanction a violator, but do not expect them to know that a violation took place. Taken together, these responses indicate that reputation is at least as much a problem of information as of incentives.

6. Reputation and Giving Credit

In the next section I examine how expectations that other managers will learn about and punish violators influence the probability of giving credit. In addition, I explore whether reputation and perceptions of strong courts are better seen as substitutes or complements. Whereas the previous analyses examined how managers responded to hypothetical situations, the next analyses consider how reputation and perceptions of strong courts have shaped the behavior of managers.

Examining the decision to give credit has important theoretical implications (McMillan and Woodruff 1999; Johnson, Macmillan, and Woodruff 2002b). Whether or not firms give credit to other firms is an important indicator of confidence that their rights

will be protected. The giver of credit suffers an up-front loss for the prospect of a greater return in the future and is vulnerable to violation of breach by the debtor. In addition, by promoting exchanges that otherwise would not take place, the creation of institutions to support the expansion of credit plays a critical role in economic development (North 1990; Grief 2004).

To explore the determinants of giving credit, I turn to multivariate statistical analysis. The dependent variable here is the probability that a manager had given credit to a customer or supplier in the last two years. Forty-three percent of respondents said that they had done so.¹⁷ To measure reputation, I created a variable, *Reputation*, by multiplying responses to the questions in Tables 6 and 7. This variable represents the likelihood that a respondent expected other managers both to learn about a violation and to sanction the violator. The mean value for this variable is 6.7 with a standard deviation of 2.9. This measure offers a fairly specific treatment of the extent to which a businessperson can rely on reputation by focusing on the respondent's expectations about the behavior of other businesspeople in the region.

I include a variable, *Courts*, which measures whether a respondent rated the quality of the state arbitration court in their region as satisfactory based on a scale of 1-5. The mean value here is 3.2 with a standard deviation of .83. I also create an interaction term by multiplying *Reputation***Courts*. This variable should help determine whether the reputation and courts are substitutes or complements.

¹⁷ The results are robust to a number of other codings of the dependent variable. I estimated the model using the probability that the manager had (a) given credit to a supplier and whether they had given credit to a buyer. I also created a three category variables for firms that had given credit to neither buyers nor sellers, buyers or sellers, both buyers and sellers. The results are essentially unchanged.

Other factors may also influence decisions to give credit. I add a dummy variable for members of business organizations because they may be more likely to give credit, if only to other members of the organization. I add dummy variables for state-owned and privatized firms; dummy variables for each of 8 different economic sectors and each of 10 regions in which a firm is located; and a continuous variable (logged) for the number of employees in a firm. To control for the personal characteristics of the manager I also add variables for the age and education level of the respondent. I also added a dummy variable for firms who sell outside most of their goods outside the region to account for geographic distance as a predictor of giving credit (Pyle 2005). Finally, to capture the performance of the firm, I included a variable measuring the percentage change in sales over the last two years. I estimated a probit model with robust standard errors to account for heteroskedasticity in the data.

Table 8. Reputation and Giving Credit

Gave Credit to Supplier or Buyer

Reputation	.215* (.809)
Courts	.413** (.195)
Reputation*Courts	-.062** (.026)
State-Owned	-.739** (.286)
Privatized	-.239 (.160)
Age	-.013* (.008)
Education	.227* (.126)
Employees, logged (000)	.184*** (.056)
Business Organization	.220 (.147)
Concentration of Sales in Region	-.055 (.368)
%Change in Sales	-.000 (.000)
Wald Chi2	106.8
Prob >chi2	.0000
Pseudo R2	.200
N	443

The excluded property category is new private firms. Eight sectoral dummies and 10 regional dummy variables are included, but not reported. *p<.10, ** p<.05, ***p<.01

The results from Table 8 indicate that firm managers who expect other managers to know about and to punish a violation are more likely give credit when courts are weak as indicated by the positive and significant coefficient on *Reputation*. Thus, when courts are perceived to be very ineffectual, reputation has a positive impact on giving credit. In contrast, when courts are perceived to be capable, having confidence that others will learn about and punish violators is associated with lower levels of credit giving as indicated by the negative coefficient on *Reputation*Courts*. By itself, *Courts* has a positive impact on the probability of trading when reputation equals zero. These results suggest that reputation and courts are substitutes rather than complements.

Older managers were less likely to give credit while better-educated managers were more likely to do so. Managers of larger firms were more likely to extend credit to other firms as well. Compared to the managers of new private firms, managers of state-owned firms were significantly less likely to give credit.

To give some sense of the substantive effects of the analysis depicted in Table 8, I simulated the impact of reputation on the probability of giving credit conditional on the perceived capacity of the courts. Holding other variables constant, I varied the level of reputation when courts were perceived to be weak (a value of 1), strong (a value of 5) and were held at their mean value (3.2). Figure 1 presents the results. When *Reputation* is at its lowest value of 2 and *Courts* is at its lowest value of 1 the probability of giving credit is just .26. Increasing *Reputation* to its mean value of 6.7, while holding *Courts* constant at its lowest value raises the probability of giving credit to .52.

In contrast, when courts are strong, reputation is associated with a lower probability of giving credit. When *Courts* is held constant at its highest value, and *Reputation* moves from its lowest value of 2 to its mean value of 6.8, the probability of giving credit falls from .67 to .50. The conditional nature of the impact of reputation on giving credit suggests that it is best to view state courts and reputation as substitutes rather than complements. That is, when courts are weak, the effect of reputation grows, but when courts are strong the impact of reputation declines.

Figure 1 here

These results are subject to a number of caveats. Like all surveys, the data provide only a snapshot of a fairly dynamic environment. In addition, not all private institutions are alike. Here I focus on reputation as a much-studied phenomenon, but other types of private institutions may interact differently with public institutions. Moreover, while courts do not appear to be especially powerful in shaping decisions to provide credit, they may be more effective in protecting property rights in other ways. For example, courts may play a greater role in more complex disputes or in conflicts over sizeable, asset-specific investments. In addition, the generality of the results merit greater attention. Russia is hardly unique among transition and developing countries in having rather weak public and private institutions, but further study is needed to determine how well these empirical findings generalize to other settings.

6. Conclusion

Scholars have developed a rich literature on the significance of public institutions, such as courts and bureaucracies for the creation of markets and states. They have also created an impressive body of scholarship on the role that private institutions, such as

reputation and trust, play in these processes. However, we know less about the relative importance of public and private institutions or about how these institutions interact in different settings (but see c.f., Kohli and Shue eds. 1994). This drawback is unfortunate as the quality of institutions is a critical issue for transition and developing countries in general and Russia in particular.

Evidence from a 2005 survey of businesspeople in Russia contributes to these debates. Experimental and cross-section analyses of survey responses indicate that a good reputation is potent stimulus to trade, while courts have less impact on decision to engage in exchange. There is also evidence that good reputations and capable courts are substitutes rather than complements. That is, the impact of reputation is conditional on the perceived quality of courts. Reputation has a powerful and positive effect when courts are weak, but a powerful and negative effect when courts are strong. That reputation and courts are not mutually supporting is broadly consistent with Migdal (1988), but not with Putnam (1994).

In addition, the responses indicate the critical role that information plays in the use of reputation to support trade. Respondents were fairly confident that other firms would raise the costs of trading with a firm that had a bad reputation. However, they expressed much less confidence that other managers would learn about a dispute in the first place. These results suggest that the Russian government's attempts to exert greater control over private organizations and to restrict the free press will likely undercut its stated desire to strengthen the rule of law.

Future research would do well to analyze precisely how reputations travel among business people. How do business elites obtain information about contract violations if

the disputes do not end up in court? Why are some business elites better informed about the reputations of potential trading partners than others? How do managers verify information about a particular dispute absent an impartial third-party arbiter? These are questions that merit greater attention.

Finally, this study makes a case for the use of survey-based experiments to help unravel the difficult endogeneity problems that are inherent in institutional analysis. Non-experimental studies that examine the impact of private and public mechanisms for resolving disputes may have difficulty identifying the relative importance of these factors because the two are often highly correlated. The experimental design employed here provides a particularly potent way of identifying the impact of institutions on behavior by manipulating the quality of reputations and courts to ensure that they do not co-vary. This design provides an especially clean test of the impact of institutions on the propensity to trade.

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APPENDIX: Survey Details

The overall response was rate 53 percent for firms contacted by the interviewer. As is not uncommon in business elite surveys conducted in Russia the city with the lowest response rate was Moscow (28 percent). Fully one-third of all refusals came from the capital city. Absent Moscow the response rate increases to 62 percent. The analyses are unchanged if responses from Moscow are dropped from the sample. Twenty percent of respondents were called back to ensure quality control. Respondents were asked a range of questions about the legal and business environment. Many questions have been used in previous surveys and all surveys were pre-tested in pilot surveys.

Cities in the Sample

- Moscow
- Nizhnii Nivgorod
- Volgograd
- Smolensk
- Novgorod
- Ekaterinburg
- Voronezh
- Rostov
- Ufa
- Khabarovsk
- Tula
- Omsk

Appendix 1. Descriptive Statistics

Table A1. Businesses by Sector

Sector	Number of Businesses	Percentage of All Firms in Survey
Construction	120	18
Machinery	120	18
Retail	67	10
Food Processing	64	9.6
Transportation	47	7.1
Light Industry	45	6.8
Wholesale	33	5
Communications	26	3.9
Forestry	26	3.9
Publishing	19	2.9
Metallurgy	16	2.4
Chemical	14	2.1
Electric	15	2
Bank	12	1.8
Bldg. Materials	11	1.7
Insurance	10	1.5
Medical	6	.9
Real Estate	5	.8
Grain	3	.5
Investment	2	.3
Commercial firm	2	.3
Fuel	2	.3
Glass	1	.2
Total	666	100%

Table A2. Mean Employment by Sector

Sector	Full-time	Part-time
Electric N=15	6427	7205
Fuel N=2	4375	4550
Machinery N=120	708	731
Metallurgy N=16	954	1415
Chemical N=14	504	533
Forestry N=26	173	173
Bldg. Materials N=11	391	435
Glass N=1	270	270
Light Industry N=45	237	250
Medical N=6	596	584
Food Processing N=64	253	269
Grain N=3	74	90
Publishing N=19	217	188
Construction N=120	204	183
Transportation N=47	3533	2159
Communications N=26	820	302
Wholesale N=33	114	98
Retail N=33	127	110
Bank N=12	207	159
Insurance N=10	87	51
Investment N=2	9	9
Real Estate N=5	55	51
Commercial Firm N=2	24	20

Table A3. Legal Organization of the Firms

	Percent (raw numbers)
State Owned (gup)	11% (69)
Company (ooo)	33% (219)
Open Joint Stock (oao)	33% (223)
Closed Joint Stock (zao)	18% (122)
Municipal ownership	2% (16)
Private Company without legal person (pbyul)	2% (16)
Other	1% (5)

Table A4. Descriptive Statistics of Firms in the Samples

Firm Characteristics	Responses
Average number of employees	727
Median number of employee	125
Industrial firms	58%
Retail and wholesale trading firms	15%
Construction/Transport/ Communications firms	29%
Members of business organization	37%
Average age of the manager (yrs)	47
College Degree	90%
Privatized firm	59%
State-owned firm	12%
<i>Denovo</i> private firm	29%
No competitors	7%
Competition from foreign firms	7%
Member of production Association, trust, holding	24%
Profit in preceding year	69%

Appendix 5. Disputes Resolution Strategies

Table A5. What steps has your firm taken in the last two years to defend your legal interests and recover losses during disputes with other firms?

	Percent Yes
Negotiations	88
Used Courts	71
Business Organization	10
Federal Government	15
Regional Government	11
Mayor	12
Siloviki (State security Forces)	16
Influential Business Person	19
Other	02
Did Nothing	05

Question posed to the 372 respondents who experienced at least one economic conflict in the last two years.

Appendix 6. Effectiveness of Dispute Resolution

When you have had a conflict with a business partner what steps did you take and how effective were these steps?

The scale measures the amount of damages returned where 1 = 0 and 5 = 100

Percent of damages returned on average	Method Used in the Dispute Percent Reporting			
	Negotiations N=360	Court N=324	Turned to Siloviki N= 218	Turned to Influential businessperson N=210
Almost nothing 0 %	21	14	67	46
About 25%	16	13	16	24
About 50%	19	25	9	17
About 75 %	19	22	6	8
Almost everything 100%	24	27	3	6

Figure 1.

