Bureaucratic Discretion, Business Investment, and Uncertainty

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What determines whether policy environments attract or deter investment? Scholars worried about the vulnerability of market-supporting institutions to political manipulation have identified delegation to independent actors as way to increase policy environments' predictability. Extant arguments, however, risk overgeneralizing from the experience of developed democracies. I argue that investors' response to bureaucratic discretion—agents' leeway to make decisions and act independently of political bodies—depends upon the broader institutional context. Where robust political institutions are lacking, bureaucratic discretion acts as a source of unpredictability that deters investors; conversely, political institutions that share the cost of monitoring help to mitigate uncertainty about how bureaucrats will use discretion in applying regulatory rules. Using survey data from over 600 enterprises in Russia, I find that perceptions of bureaucratic discretion are negatively associated with firm managers' willingness to invest; this effect is particularly pronounced in regions where the institutional environment discourages political competition.

What determines whether policy environments attract or deter investment? For investors who seek predictable environments, the state is a double-edged sword. On one hand, states' involvement in economic affairs is commonly justified as a way to increase the predictability of markets and market activity. Businesses and consumers look to the state to help correct market failures, supply necessary infrastructure, and reduce the transaction costs of measurement and enforcement. On the other hand, the state is controlled by leaders who respond to political incentives, which can make it hard for economic actors to predict changes that might affect their business interests. Consequently, political scientists and economists have looked to bureaucratic discretion—bureaucrats' leeway to make decisions and act independently of political bodies—as a potential mechanism for stabilizing expectations about the regulatory environment and encouraging investment. In a variety of circumstances, however, we might question whether greater independence from politicians will make regulation more predictable.

The literature on the state's role in economic development identifies bureaucracy as a factor that encourages growth, emphasizing bureaucracy's technocratic role in nurturing new markets and uniting business groups together with government in the pursuit of common economic goals (Brown, Searle, and Gehlbach 2009; Kohli 2010; Rauch and Evans 1999). One prominent mechanism for enhancing credibility relies upon delegating the details of policies' implementation to independent actors, particularly autonomous bureaucrats, with preferences that remain distinct from political leaders' (Bendor, Glazer, and Hammond 2001). Implicitly, such arguments rely upon bureaucratic agents who perform their delegated duties in a manner that investors can anticipate. Predictable bureaucracy, however, is scarce in some locations. Surprisingly, the improbability that the predictability assumption holds for the wide variety of developing and transition economies has prompted little investigation into another question: how does the broader institutional context shape bureaucratic discretion's effect on investment?

To preview the argument, this article identifies bureaucratic discretion as a primary source of uncertainty that deters long-term investors by undermining the predictability with which regulatory policies are

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interpreted and applied.[1] Where bureaucratic agents exercise greater discretion in interpreting and applying laws, investors shy away from the resulting increased uncertainty over how those applied regulatory policies will affect their business interests. Particularly in locations where surrounding political and legal institutions do not provide decentralized mechanisms for monitoring discretionary bureaucrats' behavior or supply effective channels for resolving disputes with agencies, uncertainty about policy application has a direct negative effect on investment.

The next section examines prominent arguments in the broader literature about the economic effects of bureaucracy, identifying where underappreciation of developing world's institutional challenges has led scholars to suspend healthy skepticism about the independent agents charged with managing regulatory policies. The article then details the logic connecting regulatory bureaucrats' policy discretion, the broader political environment, and economic actors' investment decisions. The empirical section that follows employs survey data from over 600 enterprises in Russia to test the argument's microlevel predictions. The data show that discretionary bureaucratic behavior has a robust negative relationship with firm managers' willingness to invest; additional analyses show that this association is particularly strong for firms in politically uncompetitive regions. The article concludes by discussing the research's implications and contributions.

Bureaucracy and Investment

The term investor encompasses actors such as firms, venture capital groups, and private individuals with resources that could potentially be plowed into entrepreneurial ventures. Examples of investment include expanding or starting new operations, conducting research and development, and buying new machinery—long-term projects that require that investors pay extensive costs initially but then wait for returns to materialize several time periods in the future. Because they need to make costly decisions based upon forecasts, investors seek predictable environments and avoid situations characterized by high uncertainty (Aizenmann and Marion 1999). In this regard, politicians' control over the creation and implementation of economic policy can present a problem because frequent turnover and fickle electorates make it harder for investors to anticipate changes in how politicians choose to regulate the economy. Indeed, empirical studies showing that investment responds negatively to volatility and the threat of unpredictable changes emphasize the premium that investors place on predictable policy environments (Aizenmann and Marion 1993; Nooruddin 2011). Bureaucratic discretion has been suggested by existing research as one viable solution to this problem; by insulating the state apparatus from political decisions, bureaucratic discretion may help stabilize policy expectations and encourage investment.

Various theoretical arguments associate bureaucratic discretion with improved economic outcomes. For some, discretion is a way to harness technocratic expertise. Proponents claim that independence allows agencies to recruit and retain career-minded professionals, ostensibly improving the economic climate through higher-quality governance and fewer officials that use their authority irresponsibly (Rauch and Evans 1999). Arguments of this sort cast bureaucracy as the state's ''neutral competence,'' portraying bureaucratic discretion as a way to prevent elected officials from derailing effective public policy in their pursuit of particularistic goals (Rauch 1995).

In addition to harnessing expertise, broad delegation of authority to bureaucrats might make the policy environment more predictable by providing continuity and insulating government programs against major political changes (Lewis 2003; Miller 2000). This view informs the ''Bureaucratic Quality'' measure of the *International Country Risk Guide* (ICRG), a set of cross-national risk ratings that is prominent in the economic development literature.[2] Consider the ICRG's reasoning: ''Bureaucracy is another shock absorber that tends to minimize revisions of policy when governments change . . . .[High-quality] bureaucracy has the strength and expertise to govern without drastic changes in policy or interruptions in government services. In these low-risk countries, the bureaucracy tends to be somewhat autonomous from political pressure'' (ICRG 2010). According to this logic, discretionary bureaucrats have the ability to uncouple policy implementation from the instabilities associated with political competition.

[1]An online appendix with supplementary material for this article will be available at http://journals.cambridge.org/jop. Upon publication, data and supporting materials necessary to reproduce numerical results will be made available at http://dvn.iq.harvard.edu/dvn/dv/ghb.

[2]Studies use this measure both explicitly, beginning with Knack and Keefer (1995) as well as implicitly, since the World Bank uses ICRG data to build its own governance indicators (Kaufmann, Kraay, and Mastruzzi 2009).

Finally, delegation to independent bureaucrats has been proposed to solve commitment problems that can deter investors. Recognizing politicians' incentive to make opportunistic changes to business-friendly policies once firms have sunk immobile capital, businesses may curtail their investment plans unless political leaders can credibly commit to their decisions by making policies difficult to reverse (Jensen 2006; Levy and Spiller 1994). Commitment at the policy implementation stage ceases to be a problem, the logic goes, if political leaders can "lock-in" policies by handing the management of policies to autonomous bureaucratic actors who have different preferences. Delegation-as-commitment arguments appear regularly in political economy, such as ceding control of monetary policy to independent central bankers (Cukierman, Web, and Neyapti 1992; Rogoff 1985), committing to property rights by establishing independent judiciaries (Levy and Spiller 1994), or removing the oversight of regulatory rules from the political arena to independent agencies (Bertelli and Whitford 2009). Again, independence from politicians provides the key to credibility—granting discretion to bureaucratic agencies helps to stabilize investors' expectations about the policy environment.

Such explanations contribute greatly to our understanding of the political dynamics that shape investment, but applying them too broadly can skew our picture of how investors react to policy environments. Specifically, arguments that link bureaucratic discretion to beneficial economic outcomes risk overgeneralizing from countries with robust political and administrative institutions. Like the institutional design literature, these theories rely heavily on the experience of developed countries (Levitsky and Murillo 2009).[3] Without evidence that bureaucracies in other institutional environments behave similarly, however, we should exercise extreme caution in generalizing conclusions about the economic benefits of bureaucratic discretion to the developing world.

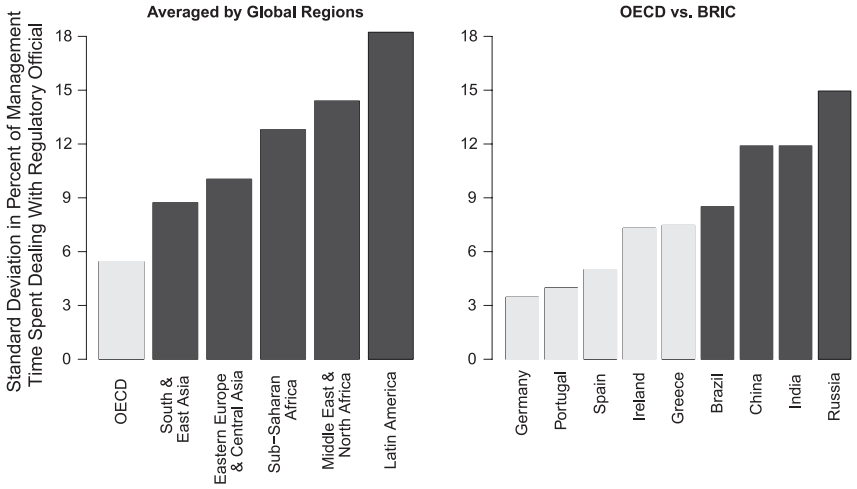
Figure 1 emphasizes the uniqueness of the OECD's regulatory environment relative to other countries. Plotting the within-country standard deviations to a global survey on the percentage of firm managers' time spent on dealing with officials and meeting regulatory requirements, Figure 1 makes two points. First, within many countries of the developing world, there is surprisingly little uniformity in how entrepreneurs experience their regulatory environment. Second, company managers in developing economies appear to face greater uncertainty than their counterparts in the OECD in doing what it takes to meet regulatory requirements. To the extent that the within-country variation reflects officials' discretion in the interpreting and applying the very same legal codes, the figures suggests that scholarly discussions about bureaucratic discretion within developed democratic countries may not be very informative for the rest of the world.[4] Later on, the analysis addresses potential explanations for the group differences; for the time being, Figure 1 underscores the point that relying too heavily on the experience of developed countries could bias our inferences about the economic consequences of bureaucratic discretion.

We gain valuable insights into the relationship between investment and bureaucratic discretion by looking beyond developed democracies' well-structured and predictable regulatory environments. For example, touting insulated bureaucracies as a solution to commitment problems obscures the fact that delegation does not *eliminate* moral hazard so much as *relocate* it from politicians to bureaucrats. Bureaucratic control only aids investors as long as they can anticipate the outcome from bureaucrats' involvement; where this is not the case—and that may be frequently in some locations—discretion merely increases uncertainty about the application and interpretation of laws at the hands of unelected officials. Similarly, because many governments struggle to recruit and train technocrats of the "Weberian" sort, greater bureaucratic independence can backfire when agencies do not possess sufficient human or financial resources to implement policies effectively (Huber and McCarty 2004). Accounting for the challenges to governments and businesses in developing economies reminds us that, as a strategy for improving the investment climate, substituting bureaucratic control for political control depends heavily upon the bureaucrats themselves. Borrowing from the principal-agent framework, the theoretical analysis in the next section explains the potential pitfalls of bureaucratic discretion.

[3]With its championing of bureaucratic autonomy as a key contributor to the economic success of developmental states in East Asia, the literature on state-led development stands out as an exception (Amsden 1989; Johnson 1982).

[4]The full World Bank sample of OECD countries appears in the figure: Ireland, Germany, Greece, Portugal, and Spain. As some of the lowest-performing economies in Europe, the inclusion of the latter three countries make the comparisons even more stark than if the sample focused only on the economic leaders of the European Union. A full list of countries is available in the appendix.

FIGURE 1 Firm Managers in Developing Countries Have Less Uniform Experiences with Regulators



Note: Data from World Bank Business Environment Surveys, collected between 2002 and 2006. Figures show the standard deviation within the same country (or average within-country s.d. by global region) to the following question asked of enterprise managers: "In a typical week, what percentage of senior management's time is spent in dealing with requirements imposed by government regulations [e.g. taxes, customs, labor regulations, licensing and registration] including dealings with officials, completing forms, etc.?" A list of countries included in the surveys appears in the appendix.

Bureaucratic Discretion and Uncertainty

A principal-agent approach to bureaucracy stresses both the practical necessity that gives rise to delegation as well as the pitfalls that accompany it. Delegation to bureaucrats by lawmakers is ubiquitous because government leaders cannot hope to enforce and implement laws themselves (Shipan 2004). As politicians' agents, bureaucrats have informational advantages over their political principals (Weingast and Moran 1983). They generally stay in their offices longer than politicians, they have specialized knowledge and training that politicians lack, and they have hidden information about how they have fulfilled their assigned duties. These informational advantages create opportunities for bureaucrats to act contrary to politicians' expectations, such as providing more zealous enforcement or, alternatively, applying rules too laxly (McNollgast 1987).

Imperfect control within hierarchical relationships creates a gap between principals' directives and agents' execution. Politicians recognize that granting discretion only increases the risk of divergent outcomes, but eliminating discretion completely would require the impossible task of assigning procedures for every contingency and specifying the appropriate behavior for every imaginable circumstance (Huber and Shipan 2002). Even knowing that it may weaken their control, sometimes government leaders may expand bureaucrats' discretion because it allows bureaucrats to execute their duties in complex cases and encourages specialization (Bawn 1997; Gailmard and Party 2007).

Scholars rarely consider the consequences of principal-agent dynamics for individuals outside the hierarchical relationship, but leaders' imperfect control over their bureaucratic agents has important implications for entrepreneurial activity. Considering that every law must go through their hands before it goes into effect, bureaucrats play a critical part in determining how laws govern both society and economy (Lipsky 1980). As authorized agents of the state, inspectors and regulators refer to some guiding principles or overarching policy, then make subjective decisions about how businesses' current circumstances map onto those criteria (Brehm and Gates 1997). The trouble is that for business actors contemplating long-term investments, any uncertainty about how regulatory rules will affect their business poses an obstacle.

By easing constraints on bureaucrats, greater discretion only exacerbates the problem that agents' implementation can differ significantly from politicians' legislated policy.[5] Increased discretion widens

[5]To the extent that insufficiently articulated legislative policies themselves may frustrate investors in the developing world, the predictability with which bureaucrats implement those laws is likely to play an even more pivotal role for economic actors in those locations.

the range of potential outcomes that bureaucrats may produce, making the policy environment even less predictable. Thus, the same information asymmetry that troubles the principal-agent relationship also impedes investors' ability to forecast regulatory conditions, and this uncertainty increases with regulatory agents' discretion. This observation provides the testable empirical prediction that bureaucratic discretion should depress investment:

- "*Dangerous Discretion*" *Hypothesis*: Holding other factors constant, bureaucratic discretion should be *negatively* correlated with investment.

In contrast, existing research predicts that any negative side-effects that discretion has on the regulatory environment are overshadowed by the economic benefits to investors from increased bureaucratic expertise or more insulation against political control:

- "*Benevolent Bureaucrat*" *Hypothesis*: Holding other factors constant, bureaucratic discretion should be *positively* correlated with investment.

Institutional Constraints on Regulatory Uncertainty

The claim that bureaucratic discretion deters investment rests upon two arguments. First, studies of investment unambiguously point to uncertainty as a deterrent for investors. Second, the principal-agent framework implies that uncertainty about policy implementation should increase with the amount of discretion delegated to agents.[6] Yet, predictions that discretion deters investment fit better for developing economies than they do with scholarly accounts of bureaucratic discretion in the developed world. This incongruity suggests that we need further theorizing to understand why investors' response to bureaucratic discretion might differ across institutional settings.

Several plausible mechanisms could make uncertainty about bureaucratic discretion higher in developing economies. At first blush, differences in bureaucratic corruption present one possible explanation. Observers of developing countries regularly equate greater discretion with increased opportunities for bureaucrats to take or extort bribes. Unfortunately, a mixed empirical record makes it difficult to draw conclusions about whether corruption hurts or helps investment (Treisman 2007).[7] In fact, several promising studies suggest that corruption's predictability matters more to investors than its costs (Malesky and Samphantharak 2008; Wei 1997), implying that those who wish to use corruption to predict differences across the two groups must also supply a theoretical argument for why discretion should lead to corruption that is more predictable in developed countries than in developing countries.[8]

Variation in state capacity represents another plausible alternative, positing that bureaucratic management produces unanticipated outcomes when agencies lack sufficient resources to carry out their assignments. Such an explanation highlights the tension in many developing countries between states' ambitious economic policies and the challenges of translating them into practice. In locations such as sub-Saharan Africa, India, and the postcommunist states of Eastern Europe, scholars have identified inadequate local cadres and tight resource constraints as main contributors to the inconsistent implementation of national policies (Kohli 2010; Varese 2001). If greater discretion widens the range of outcomes that bureaucrats may produce while attempting to manage burdensome obligations, the combination of resource-poor agencies and high discretion may present an especially unattractive option for economic actors who are seeking predictable environments.

This study concentrates on a third explanation, that developed democracies' supporting institutions provide additional oversight of government agents, thereby reducing investors' uncertainty about bureaucrats' discretionary behavior. The principal-agent literature shows that, although discretionary agents are hardly predictable automatons, politicians can still take costly actions to influence how bureaucrats interpret and apply delegated policies. In particular, politicians increase the likelihood that bureaucrats will implement policies in a predictable manner by monitoring agents closely, but the resource-intensive

[6]This claim finds support in empirical evidence from both global and country-specific enterprise surveys. For analyses showing that bureaucratic discretion correlates with greater unpredictability in the policy environment, please see the appendix.

[7]Scholars have taken both sides of the theoretical debate. Bribe payments may act as "unofficial" taxes that allocate resources inefficiently and crowd out beneficial economic institutions (Mauro 1995); alternatively, corruption may make some investments possible by helping firms bypass regulatory demands or obtain preferential treatment (Leff 1964; Slinko, Yakovlev, and Zhuravskaya 2005).

[8]The question of how bureaucratic discretion relates to the predictability of corruption is theoretically interesting, at least partly because predictions are not obvious *a priori*. Addressing this question in a rigorous theoretical and empirical manner, however, falls outside the scope of this article.

nature of monitoring often makes it unattractive to leaders. Conveniently, lawmakers can keep bureaucrats in check without directly paying all the costs themselves by allowing interested constituents and other institutional actors to help in the monitoring process.

The literature on ''fire-alarm'' oversight provides a specific example of how such decentralized monitoring of bureaucrats can take place. In studies of American bureaucracy, fire-alarm oversight refers to a system of rules and administrative processes that create opportunities for the public to examine administrative practices, question agency decisions, and identify actions that violate legislative goals (McCubbins and Schwartz 1984). Such arrangements allow politicians to reduce their own monitoring and rely instead on self-interested constituents to report troubling bureaucratic behavior. In addition, by providing dissatisfied actors with clear, formalized channels for seeking recourse, politicians can further shift enforcement costs off onto supporting institutions, such as courts (McNollgast 1987). Generalizing the logic of diffuse monitoring beyond the specific example of fire-alarms and the American Congress, we see that broader political institutional arrangements wield this same mechanism and often do so in a way that makes the regulatory environment more predictable for investors.

In this article, I call attention to the beneficial role of political competition in mitigating the uncertainty that businesses associate with bureaucratic discretion. Institutions that encourage political competition make policy implementation more predictable in at least two ways. First, competitive environments increase the number of politically active groups and enhance their access to the policy-making process. By giving economic actors direct and indirect opportunities to influence regulatory policy or complain about administrative practices, political competition helps to spread the costs of monitoring bureaucrats across actors and stabilize expectations about how bureaucrats will use their discretion to interpret and apply regulations. In a related manner, politically competitive environments give rise to a wide array of institutional watchdogs, such as political parties and independent courts, that can provide formal, predictable channels for settling disputes that arise from agencies' actions. Second, competitive politics help to keep politicians attentive, effectively raising the costs to principals associated with *not* monitoring their agents. Politicians worried about losing office have a pressing electoral incentive to monitor the bureaucracy in order to avoid scandal or prevent political opposition from capitalizing on constituents' dissatisfaction with inconsistent legal requirements or aggravating treatment by state officials. Likewise, electorally sensitive leaders should be more responsive in handling regulatory disputes associated with agents' discretion.

With their robust institutions and vibrant political competition, developed democracies are in the best position to foster an effective, polity-wide realization of fire-alarm oversight. In developed democracies, the institutional environment actively encourages organized political opposition, free media, and politically savvy interest groups to help monitor the behavior of state agents. Moreover, from courts to political parties, a wide array of effective institutional watchdogs stand ready in these countries to help settle disputes that arise from agencies' actions. It is hardly surprising, then, that studies of investment based upon developed democracies have a sanguine attitude about bureaucratic discretion. In such environments, the surrounding institutional context plays a critical role in reducing the uncertainty that investors associate with bureaucratic discretion.

In marked contrast to developed democracies, regulatory oversight in many developing countries is typically characterized by limited political competition and inaccessible political institutions. Given unstable and toothless institutions in many parts of the world (Levitsky and Murillo 2009), political and legal institutions in developing countries often cannot play the supporting role required to make bureaucratic discretion more predictable. For example, the diffuse monitoring of state agents cannot work well if institutions restrict citizens' ability to participate in political life or shut organized societal groups out of the policy process. Furthermore, without intense political competition, leaders face little electoral pressure to respond to constituents' complaints. Thus, in addition to reducing the channels for the effective monitoring of discretionary bureaucrats, institutions that discourage political competition also weaken politicians' incentives to respond to concerns when they are raised. In contrast to the dynamics within politically competitive environments, low-competition settings do little to alleviate businesses' uncertainty about the way in which discretionary bureaucrats choose to implement policy, nor do they provide economic actors with many viable options to handle disputes should they arise.

This discussion helps us understand why bureaucratic discretion in some regulatory environments presents a particularly sharp problem for economic actors. The political institutional context of economic regulation affects the level of uncertainty that

bureaucratic discretion creates for investors. Businesses should more readily invest where political institutions spread monitoring costs across multiple nongovernment and institutional actors and then allow those same parties to be involved in the policy process. Under such circumstances, investors should have clearer expectations about what regulators want and how agencies' discretion will affect their business interests. But, where political institutions restrict political participation or give leaders' few incentives to check regulatory agencies, bureaucratic discretion remains a stumbling block for investors since they cannot rely on institutional constraints to enhance the predictability of the regulatory environment. Thus, the following empirical prediction that institutional context conditions the relationship between bureaucratic discretion and investment:

- *The "Conditional Constraints" Hypothesis*: Holding other factors constant, the relationship between bureaucratic discretion and investment should be more negative in regions characterized by low political competition than in regions with high amounts of political competition.

As political scientists, we should consider more carefully how the discretionary actions of bureaucratic agents determine policy environments' predictability and, consequently, their attractiveness to business. When bureaucrats apply statutes consistently and predictably, business actors can treat regulation as a known parameter in their investment formula. As bureaucrats' discretion grows, investors experience greater uncertainty about how regulation will affect their business interests now and in the future. This uncertainty is especially problematic within regulatory environments that lack diffuse monitoring mechanisms; without supporting institutions to encourage fire-alarm oversight and stabilize investors' expectations, investors shrink from committing their assets to unpredictable rule enforcement.

Empirical Analysis: Evidence from Russia

I test the empirical predictions generated above in the context of the regions of the Russian Federation.[9] Several factors make postcommunist Russia an excellent location for examining investors' response to bureaucratic discretion. For starters, bureaucratic authority in Russia's regional economies has considerable scope. Regional bureaucratic agencies interpret and apply an array of statutes, including registration laws, zoning ordinances, tax codes, and safety regulations. Given the impact of these policy areas on expected profitability, how regional bureaucrats carry out these duties matters greatly for investors. Furthermore, scholars have noted that vague laws with extensive delegation to executive agencies are common in Russian legislation, and evidence suggests that agents exercise this discretion regularly (Solomon 2008). Remington elaborates: "Many legislative acts in Russia have been so vague that the bureaucracy has been able to eviscerate, reinterpret, or ignore them freely" (2006, 278). Cross-regional studies of regulatory reforms indicate that regional bureaucrats guard this autonomy, providing evidence that regulators in many regions have resisted enforcing federal reforms that would standardize small business regulations (Yakovlev and Zhuravskaya 2008). Methodologically, Russia's federal structure also helps to mitigate some of the challenges posed by studying bureaucracy and regulation in a cross-national setting, where measurement problems and unobserved heterogeneity in countries' legal or administrative factors are often difficult to address. In this regard, regions' shared administrative legacies and the overarching sovereignty of Russia's federal law help to hold constant many institutional and policy factors that might vary cross-nationally.[10]

Modeling Businesses' Response to Bureaucratic Discretion

I conduct statistical analyses using data from a survey of Russian enterprise managers conducted in 2005 by Timothy Frye (see Fyre 2006). Given growing skepticism about the validity and biases of popular cross-national governance indicators (Kurtz and Shrank 2007), enterprise surveys offer an effective alternative for studying how specific regulatory factors affect individuals' behavior. Commissioned specifically for studying how firms respond to their institutional environment, this survey features items on firm investment and, importantly, about managers' perceptions of institutional actors, including regulatory bureaucrats.

[9]Rather than refer to Russia's 83 subnational units by their formal (and unwieldy) constitutional title, "Subjects of the Federation," I use the more colloquial term—regions.

[10]Admittedly, the decision to use subnational data is not without costs. In this case, however, any trade-off in terms of results' generalizability are likely to be small relative to the associated gains in precision.

Thus, the individual-level data on how firms perceive their regulatory environment make a natural fit for testing the argument's microeconomic predictions about individual actors' subjective investment decisions.

The survey was conducted by a well-respected Moscow polling firm, the Levada Center, polling 666 firm managers in 11 different regions.[11] In regards to size and sector, the sample distribution of firms approximates the national population of enterprises.[12] With only 12% majority state-owned and 5% foreign-owned, the modal firm is a domestic, private enterprise.[13]

The dependent variable is investment by firms. Following Frye (2006), I operationalize it using firm managers' response to the following item: "Do you plan to make any large investment in the next twelve months for the development of your firm (i.e., construction, reconstruction, capital renovation of the building or surroundings, equipment updates, etc.)?" I collapse answers on the question's original 4-point scale ("yes," "likely yes," "likely no," and "no") into a dichotomous variable that gives a value of 1 for the two affirmative answers and assigns a 0 to the remaining, negative answers.[14] Firms in the sample lean towards no investment plans, with 60% of respondents answering negatively.[15]

To test the prediction that firms' investment decisions correlate negatively with their perceptions of bureaucratic discretion, I operationalize the independent variable using an item about the independence of regional bureaucrats' decision making: "To what degree is independent decision making, separate from other government bodies, characteristic of bureaucrats, administrators, and various inspectors in your region?"[16] Respondents' answers range on a 4-point scale that evaluates regional bureaucrats' autonomy as characteristic "to a high degree," "essentially to a high degree," "to a lesser degree," or "completely uncharacteristic."[17] For ease of interpretation, I invert the original scale so that higher scores reflect perceptions of greater bureaucratic discretion.[18]

Contrary to prevailing explanations, my argument predicts that this variable should correlate negatively with firms' plans to invest, and a basic comparison of means in the raw data shows that it does. Among respondents that see little independence for regional regulatory bureaucrats, 44% indicate that they will invest in their firms soon; in contrast, among managers that identify regulatory bureaucrats as independent in their decision making, just 32% of firms plan to invest ($p = 0.015$). To ensure that this result, which contradicts conventional expectations, is not spurious, I add a battery of control variables identified in existing research.

Controlling for certain regulatory-related variables is of particular interest in order to ensure that my measure of bureaucratic discretion does not tap other policy concerns beyond investors' worries about how regulations are interpreted and applied. Other features of the policy environment may also drive investment, such as the actual policies of regulatory regimes or the frequency with which laws change. In terms of policy content, scholars have paid special attention to the idea that high tax rates discourage investment (Jensen 2006; Li 2006). Accordingly, I include respondents' evaluations about the degree to which high tax rates hinder their firm's development. Frequent legislative changes could deter investors with uncertainty about the regulatory environment

[11]For more detail on the strategy behind the stratified sampling design, see Frye (2006). Including at least one region from each of the seven federal districts, survey sampled firm in the following cities: Ekaterinburg, Khabarovsk, Moscow, Nizhniy Novgorod, Novgorod, Omsk, Rostov, Smolensk, Tula, Voronezh, and Ufa.

[12]Like most enterprise surveys, the sample is truncated because it contains no data for potential firms who were deterred from initial investment or those short-timers who entered the market but then closed their doors. This survivor bias implies that respondents are firms who have higher tolerance for risk or have managed to cope with existing barriers. Any bias of this type works against my hypotheses, making it harder to find a negative relationship between bureaucratic discretion and firm investment.

[13]The online appendix provides descriptive statistics on the basic characteristics of the sample.

[14]The results do not depend on this coding choice; all the relationships hold with the original coding.

[15]The online appendix provides descriptive statistics for this variable and all others included in the analyses.

[16]Because Russia's regions have different titles, such as oblast, territory, republic, and district, the item's wording changes slightly to fit the appropriate regional designation, but the character trait and actors in question do not change.

[17]Because this key question relies upon respondents' *perceptions* of bureaucratic discretion, I provide evidence in the appendix supporting this measure's internal and external validity. A extensive set of additional analyses show that the article's findings are robust to controlling for a host of outside factors that might shape respondents' answer to the prompt, such as respondents' political knowledge, optimism, experience interacting with the government, familiarity with the region, or sectoral/legal characteristics. Furthermore, empirical analyses demonstrate that, in aggregate, respondents' perceptions correlate as expected with external measures of bureaucratic discretion and private investment at the region level.

[18]Recoding this measure into an dichotomous indicator of low versus high bureaucratic discretion creates no substantive change for the results.

much in the same way that bureaucratic discretion does over the application of those policies. To control for policy volatility's potential relationship to both bureaucratic discretion and firm investment decisions, I include managers' response regarding the extent to which frequent changes in legislative and statutory acts are an obstacle to their firms. Conventional arguments would anticipate that both these variables should associate negatively with the dependent variable. As a check for whether my measure merely reflects investors' antipathy towards corruption, I include in one model a dummy indicator for company managers' perceptions that regional bureaucrats are corrupt. As noted earlier, the literature disagrees on this variable's expected sign, but if corruption truly represents the heart of investors' concerns about discretion, then we should expect its inclusion into the model to overshadow the bureaucratic discretion variable.

Since models rely on respondents' subjective perceptions of bureaucratic discretion, we might worry that such perceptions may be colored heavily by general attitudes towards the region or its government in a way that also correlates with firms' disposition towards future investment. As a precaution, I include variables that measure separately firms' assessments of the regional political institutions to help account for regional "halo effects" that might vary with both perceptions of bureaucratic discretion and plans to invest. These controls capture respondents ratings of the regional administration, regional arbitration courts, and governor; we would expect more favorable assessments of these institutions to correlate positively with firm investment. I also add controls for key economic factors that might similarly influence firms' decisions to invest. I control for difficulties in getting access to finance with a measure of firms' problems obtaining credit. High levels of economic competition may pressure firms to invest in innovative processes and products when they might not otherwise want to do so; accordingly, I control for respondents' views about competition as a problem for their business growth. Similarly, managers may refrain from investment projects that they think will be hobbled by a poor labor pool. Thus, I include a measure for managers' view about the shortage of skilled labor as a hindrance to business.

In addition to the perception-based measures, I control also for firm-specific characteristics that might affect both firms' investment plans as well as their regulatory experience. Declining sales might stall investment plans, so I include a control variable for whether firm sales have increased, decreased, or stayed the same over the past three years. Small firms might have less need or ability to invest; as such, I control for firm size with the (logged) number of employees. Finally, to control for potentially higher investment among private and start-up enterprises, I include dummy variables for private firms (as opposed to state-owned) as well as a dummy for firms that were privatized following the collapse of communism.

I estimate the model predicting intentions to invest using logistic regression. To account for unobserved region-specific factors that may influence the relationship between firms' perceptions of bureaucratic discretion and their investment plans, I estimate random-intercept, random-coefficient models that allow coefficient estimates on the intercept and bureaucratic discretion variable to vary with a region-specific error.[19] Results from these analyses appear in Table 1.

Results

To demonstrate that estimated relationships hold across various model specifications, Table 1 reports the results from multiple models. Model 1 estimates a baseline specification that includes only the independent variable and a few controls for the investment environment and firm-specific factors. Next, Model 2 tests the results' robustness in a full set of controls, followed by Model 3, which examines discretion's relationship with investment once we control for firm managers' perceptions of bureaucratic corruption. Model 4 adds a control for recent past investment as well as dummies for firms' sector and legal form in order to control for a wider range of firm-level characteristics that might determine firms' contact with regulatory agencies as well as shape their investment plans.

From a substantive standpoint, the statistics in the first two rows display the most important empirical result: perceived decision-making independence for regulatory bureaucrats correlates with a lower probability that firms plan to make any large investment over the coming year. Whether in sparse models or controlling for a large number of potentially confounding factors, the coefficient estimates on the bureaucratic discretion variable in all models are negative and statistically significant from zero at conventional levels. This leads us to reject the null hypothesis that perceived

[19]Results do not change substantively if models drop the random effects and use standard errors that are clustered by region instead. Similarly, results hold using a standard logit model. Results available in the appendix.

TABLE 1 Discretion Associated with Lower Probability of Investment

Firm Investment	(1)	(2)	(3)	(4)
Bureaucratic Discretion	-0.458***	-0.612***	-0.573***	-0.606***
1 = no discretion, 4 = high discretion	(0.145)	(0.161)	(0.174)	(0.191)
Frequent Changes to Laws		0.101	0.066	0.139
1 = no obstacle, 5 = very serious obstacle		(0.112)	(0.118)	(0.125)
High Tax Rates		-0.392***	-0.437***	-0.404***
1 = no obstacle, 5 = very serious obstacle		(0.123)	(0.131)	(0.147)
Regional Administration		0.509***	0.447**	0.477**
1 = poor job, 5 = excellent job		(0.195)	(0.210)	(0.229)
Regional Courts		-0.150	-0.181	-0.041
1 = poor job, 5 = excellent job		(0.147)	(0.152)	(0.173)
Regional Governor	0.037	-0.324*	-0.284	-0.437**
1 = poor job, 5 = excellent job	(0.106)	(0.184)	(0.197)	(0.222)
Access to Finance	-0.087	-0.034	-0.026	0.035
1 = no obstacle, 5 = very serious obstacle	(0.067)	(0.082)	(0.086)	(0.096)
Labor Shortages		-0.028	0.001	0.066
1 = no obstacle, 5 = very serious obstacle		(0.086)	(0.091)	(0.103)
Competitive Pressures		0.107	0.127	0.050
1 = no obstacle, 5 = very serious obstacle		(0.085)	(0.089)	(0.101)
Privatized Firm		0.043	0.044	0.209
dummy, 1 = privatized, former SOE		(0.273)	(0.282)	(0.346)
Annual Sales	0.476***	0.442**	0.330*	0.258
-1 = decreasing, 1 = increasing	(0.166)	(0.182)	(0.190)	(0.217)
Firm Size	0.335***	0.298***	0.284***	0.337***
number of employees (logged)	(0.073)	(0.084)	(0.088)	(0.117)
Private Firm	0.721**	0.694	0.542	
dummy, 1 = private ownership	(0.337)	(0.439)	(0.443)	
Bureaucratic Corruption			-0.015	
dummy, 1 = perceived as corrupt			(0.254)	
Past Investment				2.086***
dummy, 1 = invested in last 3 yrs.				(0.294)
Constant	-1.940***	-0.594	-0.023	-2.523
	(0.674)	(1.031)	(1.151)	(1.712)
Dummies for Sector & Legal Form	No	No	No	Yes
Log-likelihood	-290.198	-240.182	-220.298	-201.094
AIC	600.396	514.363	476.595	472.188
No. of Cases	470	403		402

Note: Survey data from Frye (2006). Firm investment is a dummy variable where 1 indicates the firm plans to invest during the coming year. Coefficients represent estimates from multilevel logistic regressions with a random coefficient for the bureaucratic discretion variable and random intercepts at the region level; standard errors in parentheses. Out of space concerns, region-specific effects and sector/legal-form variables not reported. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

bureaucratic autonomy has no relationship to firms' investment plans. Substantively, the relative size of this estimated effect is large as well. Using the estimates from Model 2 and holding other variables at their sample median, a firm manager who perceives that regulatory agents have very high independence in decision making has a predicted probability of investing that is 27% lower than a identical respondent who reports that regional bureaucrats have a moderately low degree of independence. Not only do these findings support the claim that increased bureaucratic discretion is associated with reduced incentives for firms to invest for future returns, but they also suggest that, averaged across the sampled regions, the negative estimated effects are potentially quite substantial.

Among the other variables directly related to the policy environment, firm problems with high tax rates are also a strong predictor of firm investment decisions. Supporting arguments that stress the economic incentives of specific policy content, the coefficients on

all tax rate variables are statistically significant and negative, suggesting that high tax rates provide disincentives to managers to sink capital into new investments. Together, the strong performance of both the bureaucratic discretion and tax rate variables suggests that policy environments can affect investment via multiple channels and that investors' concerns about content and application might reinforce each other. In contrast, neither frequent changes to laws nor bureaucratic corruption (Model 3) bear statistically significant relationships to firm investment in these data, countering the expectations of conventional explanations.

The models reveal a nuanced relationship between government institutions and the investment climate. The probability of firms' intent to invest has a significant, positive association with expressed support for the regional administration, while Models 2 and 4 suggest that, ceteris paribus, supportive views of the regional governor and investment plans correlate negatively. Such findings could arise if firms' noninvestment relates to frustrations that a poor-quality regional bureaucracy is hampering the governor's good policies.[20] In regards to economic courts, however, the analyses reveal no significant association between respondents' assessments of regional economic courts and decisions to invest.

The economic variables have mixed success in predicting investment. Problems with finance, competitive pressures, labor shortages, and status as a privatized firm have no statistically significant relationship with investment in any model. Private ownership and increasing sales trends, on the other hand, do have significant, positive relationships with investment in earlier models, although uncertainty about this relationship grows as more controls are added. Of the main economic variables, only larger firm size is consistently estimated to have a significant, positive association with firms' plans to invest, reflecting perhaps smaller firms' difficulties with funding the expansion of their business operations.

To test the sensitivity of these findings to modeling assumptions and specifications, I conduct a number of robustness checks. Investigating whether the estimated relationship between perceived discretion and firms' intent to invest is spurious due to unobserved sector- or firm-specific factors, Model 4 controls for economic sector or firms' legal form. Model 4 also adds a dichotomous indicator for past investment out of concerns that past investment gives occasion for encounters with regional bureaucracy and affects investment strategies for the future. The inclusion of these controls do not change the results meaningfully. Results are also robust to alternate modeling strategies, such as basic logistic regression, as well as to the inclusion of additional substantive controls. These additional robustness checks are reported in the appendix.

A Conditional Model of Bureaucratic Discretion & Investment

In support of my hypothesis, the previous analyses have demonstrated that a robust association between firm managers' perception of regulatory bureaucrats' discretion and lower probabilities of firm investment. Since this finding within a developing country such as Russia appears to contradict existing research that has drawn heavily from the experience of developed economies, it is worth investigating why these results depart from prominent arguments. To what extent does the relationship between discretion and investment depend on the broader institutional context? In making the case that uncertainty over the application of laws deters investors who seek predictable environments, I have claimed that uncertainty surrounding bureaucratic discretion is a particularly acute problem for economic actors in environments where supporting institutions do not provide effective fire-alarm oversight.

In this section, I investigate the proposition that the absence of certain institutional checks makes bureaucratic discretion especially problematic for investors. Using a multilevel modeling strategy, I combine the previous firm-level survey data with information on the 11 sampled regions to examine how the relationship between bureaucratic discretion and firm investment is affected by the degree to which regional institutions allow for open and active political competition.[21] Critically, variation in the competitiveness of regional politics presents a direct test of the delegation-as-commitment logic. Conventional credible commitment arguments suggest that

[20]Additional analyses support this interpretation. Regressing the dependent variable on a measure for the difference between two ratings shows that higher ratings for the governors relative to the regional administration correlate negatively with firms' investment plans ($p = 0.06$).

[21]Multilevel models provide flexibility in modeling hierarchical relationships, helping us to make inferences about variables that we observe at different levels of analysis (Gelman and Hill 2007). The nested relationship of firms within regions makes this a natural modeling choice here.

political leaders' moral hazard problem is high where politicians face few constraints on ex-post behavior (Jensen 2006; Miller 2000). This logic implies that, by providing an autonomous counterbalance to relatively unconstrained leaders, delegation to independent agents should encourage firm investment in those places where political leaders lack organized political opposition or have little threat of losing office. In contrast, my argument predicts that, because closed political processes and unaccountable government inhibit the effectiveness of diffuse monitoring of state agents, more discretion to regulatory bureaucrats will deter investors by increasing policy uncertainty.

To measure political competition in firms' regions, I use a regional democracy index created for use in the Moscow Carnegie Center's Regional Monitoring project. The original measures expert assessment of Russia's regions along 10 different dimensions at four time periods between the years 1991–2006. For this analysis, I use the time period immediately prior to the survey (2000–2004), constructing an additive index of regional political competition that captures three dimensions of the political environment: representative elections (existence of free and fair elections, few limitations on political rights), the openness of political life (the extent of transparency and public involvement in the political sphere), and pluralism (participation by stable parties or legislative factions before and after elections). Each of these three scores can range from 1 to 5 (ordered worst to best); when combined and mean-centered for ease of interpreting results, the lowest score is a -3 (Khabarovsk Krai and the Republic of Bashkortostan) and the highest is 5 (Sverdlovsk Oblast). Summary statistics appear in the appendix.[22]

Results

Is there evidence that bureaucratic discretion presents a particular problem for economic actors in settings with less democratic institutions? Even before introducing statistical controls, a basic comparison of firm investment in high- versus low-competition regions indicates that this is, in fact, the case. In highly competitive regions, there is no statistically significant difference between managers with differing perceptions of bureaucratic discretion ($p = 0.658$). In regions with little political competition, however, only 25.8% of firm managers that perceive bureaucrats to have high discretion report to have investment plans for next year, as compared to 42.8% of managers who see bureaucrats as having low discretion ($\chi^2(1) = 8.281, p = 0.004$). Although firms in high-competition regions seem less concerned about bureaucrats' discretion over policy, firms' perceptions of regional bureaucrats' discretion in applying and interpreting laws appear to be strongly related to investment decisions in low-competition regions.

The models in Table 2 extend the analysis to a multilevel logistic regression model of firm investment. The new interactive model adopts the same random-intercept, random-coefficient specification as earlier and includes all variables as specified in Table 1, plus three additional region-level variables: the measure of regional political competition, its cross-level interaction with managers' perceptions of bureaucratic discretion, and a (logged) variable for average regional GDP per capita (2002–2004) to help control for the level of regional economic development.

Beginning first with the control variables, the negative coefficient estimates on high tax rates and governor approval in this new model are statistically significant, as are the positive coefficients on firms' rating of the regional administration and firm size. Sales trends, private ownership, and regional GDP per capita also display positive relationships with firms' intent to invest, although the statistical uncertainty around these estimates increases as more controls enter the analyses.

Figure 2 uses a predicted probability graph to discuss the estimated relationship between perceived regulatory discretion, institutional constraints, and firms' willingness to invest. Holding all variables at their sample medians, I manipulate whether a hypothetical firm perceives that regional bureaucrats have high or low discretion and then predict the probability of firm investment for different levels of regional political competition. In the sample's least politically competitive environment, a hypothetical firm manager who perceives regional bureaucrats to have high discretion has a predicted probability of investment that is more than 50 percentage points lower than an identical counterpart who reports regional bureaucrats as having no discretion. As the level of regional political competition increases, however, this gap diminishes as firms'

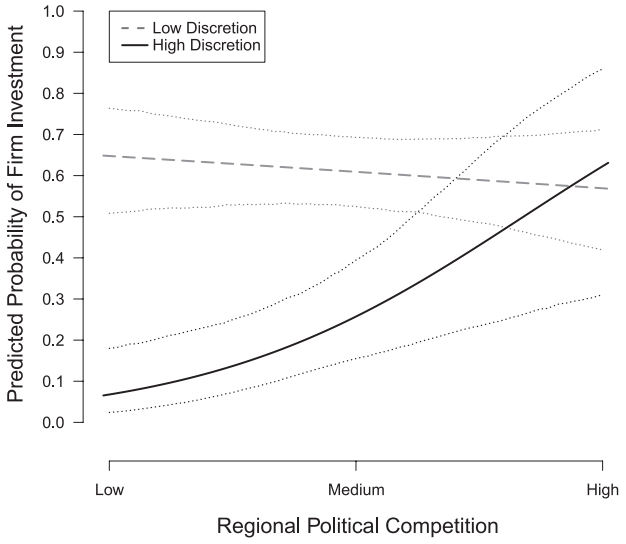
[22]The original Petrov and Titkov measure also includes component scores for economic liberalization, corruption, civil society, elite recruitment and coordination, municipal governance, media freedom, and "regional political structure." To maintain conceptual focus on electoral accountability and political participation, I leave these components out of the analysis. Results are robust, however, to using the full set of measures. For an English-language discussion of data collection and basic descriptions, albeit regarding earlier versions of the dataset, see McMann and Petrov (2000).

TABLE 2 Political Context Conditions Investors' Response to Discretion

Firm Investment	(5)	(6)	(7)	(8)
Bureaucratic Discretion	-0.474***	-0.645***	-0.614***	-0.672***
1 = no discretion, 4 = high discretion	(0.135)	(0.157)	(0.168)	(0.184)
Frequent Changes to Laws		0.115	0.082	0.149
1 = no obstacle, 5 = very serious obstacle		(0.112)	(0.118)	(0.125)
High Tax Rates		-0.385***	-0.417***	-0.379***
1 = no obstacle, 5 = very serious obstacle		(0.122)	(0.130)	(0.144)
Regional Administration		0.508***	0.433**	0.450*
1 = poor job, 5 = excellent job		(0.196)	(0.210)	(0.230)
Regional Courts		-0.149	-0.169	-0.022
1 = poor job, 5 = excellent job		(0.148)	(0.152)	(0.174)
Regional Governor	0.003	-0.372**	-0.328*	-0.441**
1 = poor job, 5 = excellent job	(0.104)	(0.185)	(0.198)	(0.222)
Access to Finance	-0.087	-0.027	-0.023	0.039
1 = no obstacle, 5 = very serious obstacle	(0.067)	(0.083)	(0.086)	(0.096)
Labor Shortages		-0.046	-0.007	0.042
1 = no obstacle, 5 = very serious obstacle		(0.086)	(0.091)	(0.103)
Competitive Pressures		0.089	0.109	0.027
1 = no obstacle, 5 = very serious obstacle		(0.085)	(0.089)	(0.100)
Privatized Firm		0.078	0.081	0.206
dummy, 1 = privatized, former SOE		(0.275)	(0.283)	(0.346)
Annual Sales	0.469***	0.459**	0.357*	0.275
-1 = decreasing, 1 = increasing	(0.165)	(0.182)	(0.191)	(0.219)
Firm Size	0.338***	0.306***	0.294***	0.333***
number of employees (logged)	(0.072)	(0.083)	(0.087)	(0.115)
Private Firm	0.766**	0.774*	0.620	
dummy, 1 = private ownership	(0.336)	(0.441)	(0.444)	
Bureaucratic Corruption			-0.071	
dummy, 1 = perceived as corrupt			(0.252)	
Past Investment				2.049***
dummy, 1 = invested in last 3 yrs.				(0.295)
Constant	-3.081***	-2.149	-1.577	-3.920*
	(1.155)	(1.436)	(1.565)	(2.133)
GDP per capita	0.330	0.440*	0.421	0.445
in constant 2000 rubles per 1000 persons (logged)	(0.245)	(0.252)	(0.268)	(0.308)
Regional Political Competition	-0.139	-0.185	-0.148	-0.188
mean-centered index, -3 = uncompetitive, 5 = highly competitive	(0.111)	(0.127)	(0.130)	(0.149)
Political Competition × Bureaucratic Discretion	0.124**	0.144**	0.124*	0.172**
interaction	(0.059)	(0.066)	(0.066)	(0.080)
Dummies for Sector & Legal Form	No	No	No	Yes
Log-likelihood	-286.738	-235.432	-216.731	-195.699
AIC	599.477	510.864	475.463	467.399
No. of Cases	470	403	365	402

Note: Survey data from Frye (2006). Firm investment is a dummy variable where 1 indicates the firm plans to invest during the coming year. Models also include region-level political data from the Moscow Carnegie Center and economic data from *Rosstat*. Coefficients represent estimates from multilevel logistic regressions with a random coefficient for the bureaucratic discretion variable and random intercepts at the region level; standard errors in parentheses. Out of space concerns, region-specific effects and sector/legal-form variables not reported. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

FIGURE 2 Investors' Response to Bureaucratic Discretion Shaped by Institutional Context (Predicted Probabilities)



Note: Firm-level survey data from Frye (2006), region-level political variables for the 11 sampled regions come from the Moscow Carnegie Center and economic data from *Rosstat*. Bold lines represent the predicted probability that a hypothetical firm would invest given the level of regional political competition; discretion is manipulated from minimum (1) to maximum (4) while holding all variables at their median value. Small dashed lines represent 90% confidence intervals obtained via simulation in R.

predicted probability of investing converges steadily towards that of the low-discretion profile. In fact, where regional institutions foster open and competitive politics, the overlapping confidence intervals suggest the difference between a high-discretion (the solid line) and low-discretion scenario (the dotted line) is negligible from a statistical viewpoint.

These results support the empirical predictions of my argument, but run directly counter to conventional logic that, given unconstrained political leaders, investors should welcome greater independence for executive agents as a type of substitute for political constraints on leaders' ex-post behavior. Quite the opposite appears true in these data—the good that substitutes for desirable political institutions is *less* discretion rather than more. This finding puts scholars' seemingly sanguine attitude towards bureaucratic discretion into perspective. In the developed democracies that inform a majority of studies, high-quality institutions attenuate investors' uncertainty about independent bureaucrats' behavior. On the spectrum's other end where much of the world lives, economic actors in the low-democracy, high-discretion scenario find themselves in the worst of all worlds—high uncertainty over the application of regulatory rules coupled with low-quality regional institutions that offer limited political channels for resolving investors' difficulties.

The results in Table 2 are robust to a variety of estimation strategies and model specifications. Additional analyses show that using alternate variables that should be related to political competition, such as measures of civil society's strength or proportional representation rules that increase the voice of minority groups, produce qualitatively similar results. Using the index's three components separately instead of the entire index creates no substantive changes in the outcomes, although the estimate on the interaction term is associated with higher statistical uncertainty in models using the index's election component only. Following Brown, Searle, and Gehlbach (2009), I control for regional bureaucrats per capita to check the possibility that bureaucracy size may influence investors' opinion of both bureaucratic discretion and regional investment climate, but neither this variable nor additional region-level controls, such as population or regional infrastructure (measured by railway density) change the results. The empirical relationships do not depend on the chosen modeling strategy, either, producing similar results in both nonmultilevel logistic regression with region covariates or, alternatively, multilevel analysis via Bayesian estimation with diffuse priors. Results for robustness checks appear in the appendix.

Conclusion

This article argues that bureaucratic discretion constrains many localities' ability to attract investment. As policymakers' agents, bureaucrats interpret and apply regulations, but not always in a way that is consistent with politicians' legislative intent. Therefore, even knowing the content of a particular policy, investors may have little information about how discretionary bureaucrats will choose to implement and enforce that policy, either today or in the future. In institutional environments where the absence of diffuse monitoring makes this uncertainty acute, private market actors will invest less because they cannot form stable forecasts over their long-term investments.

Using survey responses from over 600 enterprises operating across Russia, I have shown that firms are less likely to invest in fixed capital assets when they perceive that regulatory bureaucrats in their region take decisions independently of other government bodies. Furthermore, I find this negative relationship to be

especially pronounced for firms in regions with limited political competition, suggesting that greater independence for agents in such circumstances only heightens investors' uncertainty about the policy environment.

This article makes several useful contributions. First, to the general political economy literature, it reintroduces a group of oft-overlooked government actors—rank-and-file bureaucrats—and highlights potential benefits to considering more frequently their role in shaping economic outcomes. For instance, in a conventional treatment of noncredible commitments, the theoretical emphasis lies on politicians' time-inconsistent preferences and their inability to commit credibly not to reverse policy after investors have sunk their quasi-irreversible investments. Rather than focus on politicians' intertemporal dilemma, my argument makes a separate point rooted in the division between the negotiating parties and those charged with implementing the deal: even without the time-inconsistency problem, political promises may not yield predictable results if principals have weak control over the agents charged with carrying out those promises. To the extent such commitments are also "noncredible," it suggests that there are gains to be had from conceptualizing a broader family of credibility problems that would include a role for agency issues.

Second, for research programs where bureaucracy already plays a central role, this article adds nuance to our understanding of how bureaucracy influences economic behavior. I offer post-Soviet studies of bureaucracy as an example. Within the literature on postcommunist development, bureaucratic institutions have been criticized as "grabbing hands" that drive entrepreneurs into the unofficial economy (Fyre and Zhuravskaya 2000) and force businesses to pool resources in common defense (Duvanova 2007). At the same time, others have defended bureaucrats as "helping hands" that provide infrastructure and support to companies making their way in a new economic system (Brown, Searle, and Gehlbach 2009). This article highlights a unifying framework for the opposing camps—bureaucrats' ability to shape the predictability of firms' regulatory environment—and encourages us look for variation in the broader institutional context that will help explain when bureaucratic discretion should mitigate or magnify economic uncertainty.

Finally, in finding that the negative relationship between discretion and investment is strongest in regions where leaders are least constrained by political competition, this research produces a result that is somewhat counterintuitive from the standpoint of conventional arguments: delegation to independent agents may be counterproductive in precisely those places where the literature expects it to help most. Rather, the findings suggest the benefits of extensive delegation may only begin to outweigh the negatives where surrounding institutions can help reduce investors' uncertainty about how regulatory bureaucrats will use their discretion. While this study has focused on the diffuse monitoring encouraged by political competition, future research can build upon these findings by elaborating additional mechanisms by which supporting political institutions can affect the predictability of policy implementation.

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