



# Ownership, voting, and job creation in Russia

Timothy Frye \*

*Department of Political Science, the Mershon Center, Ohio State University,  
2140 Derby Hall Columbus, OH 43210, USA*

Received 1 December 2003; received in revised form 27 February 2005; accepted 26 September 2005  
Available online 10 November 2005

---

## Abstract

Job creation has had important economic and political consequences for countries in transition. Evidence from a survey of 500 firms in Russia finds that new private firms are more likely to increase employment, while worker-owned and worker-managed firms are less likely to create jobs. In addition, firm managers who expand employment appear to be a constituency for market-oriented parties. Managers whose firms added workers were significantly more likely to vote for market-oriented parties in parliamentary elections in Russia in 1999. This result suggests a micro-level link between enterprise restructuring and support for liberal parties at the ballot box.

© 2005 Elsevier B.V. All rights reserved.

*JEL classification:* J23; P16; P26

*Keywords:* Political economy; Voting behavior; Property rights; Job creation

---

## 1. Introduction

There is little doubt that job creation has had important economic consequences for countries undergoing transition from communist rule. Because all countries in the region began the 1990s with overstuffed bureaucracies and inefficient state-owned firms, moving workers from the state to the private sector has been a central task for transition economies. For many observers, it is the creation of jobs in the new private sector that has distinguished the more advanced economies in the region (Boeri and Terrell, 2002a; Aslund and Johnson, 2003).<sup>1</sup>

Job creation, however, also has had important political consequences. It was widely expected that managers and workers facing the threat of unemployment would vent their opposition to

---

\* Tel.: +1 614 292 9182; fax: +1 614 292 1146.

E-mail address: [Frye.51@osu.edu](mailto:Frye.51@osu.edu).

<sup>1</sup> Boeri and Terrell (2002b, p. 1) note: “The success of transition in a given country can be assessed in part by how well it has addressed the problem of reallocating labor.”

reform at the ballot box (Lipton and Sachs, 1990; Przeworski, 1991). It was also widely hoped that those employed in firms benefiting from economic liberalization would support reform-oriented parties. Despite the great interest in how economic reforms affect political constituencies, few studies have examined the individual vote-choice of company managers.

Using an original survey of 500 firms in Russia conducted in November 2000, this essay begins by examining the determinants of job creation. It finds that ownership is related to employment growth. New private firms—firms created after 1989 that have never had any state ownership—are particularly likely to experience a significant increase in jobs. Perhaps more important, worker-owned and worker-managed firms are less likely to create new jobs than are other firms in the sample, even controlling for property type. The nature of the data makes it difficult to alleviate concerns about the possible endogeneity of worker ownership and job creation. That is, firms that are less likely to restructure may be more likely to become worker-owned in the first place. Thus, some caution is necessary when interpreting this result. However, several aspects of privatization that are specific to the Russian case suggest that this concern may be less severe than in other settings.

In addition, this essay examines the vote choices of firm managers in parliamentary elections in Russia in 1999. Managers whose firms added workers were significantly more likely to cast their ballots for market-oriented parties than were other managers in the sample. Firm managers who restructure their firms by hiring workers appear to have strong incentives to support market-oriented parties at the ballot box. The evidence suggests quite strongly that they did so in parliamentary elections in 1999.

This essay makes several contributions. First, it examines how worker ownership and worker management influences job creation and confirms two central findings in the literature (Djankov and Murrell, 2002). New private firms are especially likely to create new jobs, and worker-owned or worker-managed firms are less likely to significantly increase employment. In addition, this study examines the conditional effects of worker ownership in profitable and privatized firms. The negative effects of worker ownership are especially pronounced in privatized (as opposed to new private) firms.

Second, it analyzes the political consequences of job creation. It identifies company managers in firms that expand their workforce as an important constituency in support of future reform. During the initial stages of the postcommunist transformation, many observers expressed concerns that initial gains in economic liberalization were likely to be threatened at the ballot box because social groups that generally back market-oriented reforms were weak or absent at the start of the transition (Przeworski, 1991; Hellman, 1998; Eyal et al., 1999). This essay finds that job creation in the private sector can generate constituencies in support of reform and reinforce economic liberalization at the ballot box (Frye, 2003; Jackson et al., 2003).

Third, the timing of the survey offers a window on Russia's economic rebound of the last several years. Most studies of firm behavior use data obtained prior to the financial crash of August 1998, but this essay examines job creation in Russia in the 2 years following devaluation. In addition, it examines job creation at least 5 years after the completion of large-scale privatization in Russia. Thus, the process of privatization itself should not be strongly influencing the results.

## **2. The determinants of job creation**

Explanations for enterprise restructuring, including job creation, in transition economies generally fall into three broad categories: ownership rights, the quality of institutions, and the availability of credit (Johnson et al., 1998). Early in the transition many observers focused on ownership rights as central to job creation and destruction. Many expected privatized firms to shed labor as budget constraints hardened. After an initial adjustment period, they also expected viable

privatized firms to then add workers. In addition, many expected new private firms to add labor as they sought to occupy profitable niches poorly served by the command economy (Murrell, 1992; Krueger, 1992). Thus, job creation was seen as an important element of restructuring.

Scholars have also focused on the consequences of state and private ownership for various forms of restructuring. Earle et al. (1996) provide a good example of the conventional wisdom of the relationship between private ownership and firm restructuring. They note (1996, p. 203) that new private firms—firms created after 1989 that did not undergo privatization—have particularly strong incentives to restructure as they typically have little chance for state support should they make losses: “To the extent that the new owners are entrepreneurs, they will be less a part of the old order, and perhaps have more restricted access to the flow of subsidies.” By contrast, state-owned firms are thought to have the weakest incentives to restructure given the greater likelihood that they will be bailed out should losses occur. Privatized firms offer a middle category. Earle et al. (1996, p. 209) argue that by virtue of being privatized, owners receive strong incentives to earn and retain profits, but also may “have closer ties to the state bureaucracy and greater opportunities to pursue special concessions than outsiders or new entrepreneurs”.

Empirically, these arguments have largely been borne out. One of the more common findings from transition economies is that ownership shapes incentives to restructure and to hire new workers (Konings et al., 1996; Frydman et al., 1999). In particular, new private firms are widely credited as being “engines of job creation” in transition economies (EBRD, 1999). In addition, there is considerable evidence that privatization is associated with more restructuring, particularly in Eastern Europe (Djankov and Murrell, 2002). The impact of state ownership on restructuring is generally negative, although Djankov and Murrell (2002) note several exceptions to this general rule.<sup>2</sup>

Scholars have also explored the impact of different types of private ownership on restructuring. Frydman et al. (1999) argue most forcefully that privatization has different effects depending on to whom it transfers control. Most observers agree that privatization to outside owners generates high-powered incentives for restructuring. Earle et al. (1996) note: “given their profit orientation outside owners will take the most dispassionate view of existing production and in principle they suffer the least from agency problems in dealing with external capital markets”. Similarly, Djankov and Murrell (2002) argue that outside owners are most likely to restructure their firms.

It is generally thought that manager-owned firms have stronger motives to restructure than do worker-owned firms. Managers have generally more homogenous interests than workers. This makes it easier to make decisions about restructuring that often impose considerable costs. Earle et al. (1996, p. 210) therefore note: “ownership by managers is also likely to dominate that of non-managerial employees in redefining the boundaries of the firm.”<sup>3</sup> In addition, manager owners are likely to have fewer qualms about shedding excess labor or hiring additional labor when necessary.<sup>4</sup> Earle et al. (1996, p. 212) observe that “worker controlled firms. . . are more likely than managerially owned enterprises to perpetuate inefficiencies in the allocation of labor”.

<sup>2</sup> In particular, they note: (2002, p. 759) “if corporate governance laws are weak, share trading is sluggish, and the state is focused on solving economic problems, state ownership could easily be superior to some types of ownership”.

<sup>3</sup> Outside of transition economies, studies suggest that liquid secondary markets may mitigate some of the supposed deleterious effects of worker ownership (Bonin et al., 1993). Worker-owned firms may provide weak incentives to invest in long-term projects if the shares are non-transferable and the median worker owner expects to leave the firm before the investment produces its full return. If secondary markets are liquid, these concerns are mitigated as any member can sell her share at any time at the prevailing market price. However, given the thin secondary markets that characterize postcommunist countries, concerns that worker owners may underinvest are present.

<sup>4</sup> Earle et al. (1996) also argue, however, argue that worker ownership may have advantages over manager-ownership in other types of restructuring, such as fostering a secondary market in shares.

In the case at hand, recognition of the potential problematic effects of worker ownership was clearly reflected in the design of the privatization program. Advisors to the Russian government expressed considerable concern that worker-owned and worker-managed firms would have significantly weaker incentives to expand employment and undertake restructuring. Shleifer and Boycko (1993, p. 56) observe that “worker control is inconsistent with efficient corporate restructuring.” These policymakers reasoned that bringing new workers onto the payroll would threaten to depress the wages of workers currently employed in the firm and blunt incentives to restructure more generally. In addition, workers generally have more heterogeneous interests and therefore may have greater difficulty making difficult decisions about restructuring than do managers (Earle et al., 1996, p. 211). Thus, firms in which workers hold large ownership stakes or exercise influence over decision making would be especially unlikely to expand the workforce.

Empirical studies over the last decade give credence to these arguments. Summarizing over 100 studies of enterprise restructuring, Djankov and Murrell (2002, p. 759) note: “privatization to workers is detrimental; . . . and privatization to investment funds or foreigners has a large positive effect.” They also find (2002, p. 763) that privatization to managers is positively associated with restructuring in Eastern Europe, but not in countries of the former Soviet Union.

Ownership is not the only factor likely to influence job creation in the cases at hand. Studies have also found that the quality of institutions shapes the probability of gaining a return on restructuring (Broadman and Recanatini, 2001; Johnson et al., 2003; Frye, 2004). Firm managers operating in markets characterized by strong institutions, such as well-functioning courts, are likely to gain a higher return on their restructuring efforts than are counterparts in markets with weak institutions. Thus, managers who express satisfaction with the performance of formal state institutions may hire new workers at a faster rate than do other managers.

Informal institutions may also shape incentives to hire new workers (Raiser, 1999; Stiglitz, 2000). For example, high levels of social trust may reduce search costs in finding and evaluating new workers and thereby promote job creation. These informal institutions may be particularly important in the rather undeveloped labor markets that mark the region. Indeed, Gimpelson and Lippoldt (2001) find that worker recruitment in Russia occurs primarily through informal and personal networks.

Many observers argue that access to credit shaped the expansion of firms, particularly in transition economies where needs for capital are high (Holmstrom, 1996). Firms may have strong incentives to hire new workers, but lack the short-term finance necessary to hire workers before reaping the benefits of their labor. Thus, efficient credit markets may spur job creation. The European Bank for Reconstruction and Development (1996, p. 15–16) noted: “The private investment, entrepreneurship and innovation that drive growth cannot be sustained without well-functioning credit institutions and markets.” Firms facing severe credit constraints may be less likely to hire new workers.

### 3. Data

To assess the impact of these and other factors on one type of enterprise restructuring, employment growth, I conducted a survey of 500 firms in 8 regions in Russia.<sup>5</sup> From October–November, researchers from VTsIOM, the All-Russian Central for Study of Public Opinion,

---

<sup>5</sup> This essay focuses on job creation and makes no claims about the relationship of worker ownership to other types of restructuring. See Frydman et al. (1999) and Djankov and Murrell (2002) for a review of studies that use other indicators of restructuring.

interviewed high-level business managers in eight Russian cities: Moscow, Nizhnii Novgorod, Novgorod, Smolensk, Ufa, Tula, Voronezh, and Ekaterinburg.<sup>6</sup> Regions were selected to include firms in rich and poor, left and right dominated, and urban and rural regions. To select the firms the research team used a stratified random sampling technique. After obtaining data from the state statistical agency (Goskomstat) on the number of employees and the types of firms in each region, researchers then stratified the sample by size and type of firm. Because the quality of Goskomstat data on small firms is thought to be weak, researchers supplemented the population with firms drawn from regional business directories that typically include more data (Yakovlev, 2001). Researchers then selected firms at random from within these two strata using a common list of Goskomstat data and regional business directories. Each firm within each stratum had an equal possibility of being included in the survey.

The fluidity of Russia's transition economy makes it difficult to determine how closely the sample of firms reflects the true population of firms at any given moment.<sup>7</sup> However, the distribution of firms in the sample across sectors, size, and profit rates is similar to a national sample.<sup>8</sup>

To keep costs down, the researchers included only firms in the capital city in these regions. This cost restriction is reasonable because the majority of firms in these regions are located in the capital city. Interviewers spoke face to face with the chief executive officer, the chief financial officer, or the chief manager of at least 60 firms in each region. The response rate for the sample as a whole was 56%.<sup>9</sup>

The research team conducted pilot surveys that included debriefings with some respondents to assess the reliability of the questions. The team also received feedback on the survey instrument from representatives of several business organizations and from businesspeople known to the researchers. Interviewers asked some potentially sensitive financial questions using coarse categories to reduce respondent discomfort. Previous research and pilot surveys indicated that managers are generally unwilling to reveal rates of profit or turnover given the potential public and private costs of disclosing financial information. For example, instead of asking how much profit a firm made in the last year, interviewers asked respondents whether they made a profit, took a loss, or broke even in the last year.

The sampling frame included firms from Goskomstat categories of ten economic sectors and excluded firms in the agricultural, communal services, health, social services, educational, and cultural sectors. It excluded firms that had fewer than 4 workers. Most firms (55%) were in heavy or light industry; 20% were in retail trade; and 25% were in either the construction, transport, or communication sectors. Firms ranged in size from 4 to 53,000 employees with a mean of 840. Dropping the largest firm from the sample reduces the mean to 733. 15% of

<sup>6</sup> The survey was conducted by VTsIOM, which at the time was headed by Yuri Levada. In 2003, the research team at VTsIOM left the firm to create the Levada Center. It has no ties to the firm currently known as VTsIOM.

<sup>7</sup> Most significantly, reporting by Goskomstat on small firms, that is, those with less than 50 employees, are thought to be particularly inadequate (Yakovlev, 2001).

<sup>8</sup> In comparison to the national population of firms, industrial firms are slightly overrepresented (42% vs. 54%) and retail firms are slightly underrepresented (27% vs. 15%) in this sample. Firms in the 8 other sectors are included in the sample at roughly the same percentages as the national population according to Goskomstat. Similarly, 65% of firms in the sample reported a profit in 2000. National surveys from Goskomstat find that 68% of firms reported making a profit in 2000.

<sup>9</sup> As a point of comparison the response rate for the U.S. National Election Survey was 60% in 2000. In 4 of the 8 regions in this survey the response rate was over 70% and in 3 other regions it was above the mean. In Smolensk, the response rate was 44%. Dropping observations from Smolensk produces no substantive change in the results. Given the length of these elite-level interviews, this response rate is reasonable.

firms were majority owned by the state. 20% were new private firms; that is, firms created after 1989 that never had any state ownership. 65% of the firms were formerly state-owned but had undergone privatization. 68% of firms claimed to have made a profit in 1999, 20% came out even, and 12% claimed to have lost money. 2% of the firms were formal members of financial industrial groups, but just under a third (28%) were members of production associations of some kind, such as a trust, holding company, concern, or financial industrial groups. Finally, 30% of firms were members of business or professional associations, such as the Russian Union of Industrialists and Entrepreneurs or the Association of Small Businesses. Table 1 provides descriptive statistics of the firms in the sample.

Two caveats are in order, both of which are common to firm-level survey research. The data presented here may suffer from survivor bias because researchers only obtained information from firms that are currently in operation. This is likely to be a greater problem for samples dependent on small rather than large firms. In addition, the data provide only a snapshot of a very fluid economy in Russia.

Two questions from the survey relate to job creation. Firm managers were asked whether they had increased the size of their workforce by at least 10% in the last 2 years. 40% of managers responded yes. Given the buoyancy of the Russian economy at the time of the survey due to a currency devaluation in August 1998 and high oil prices, such a figure seems reasonable. *AddWorkers* is a dummy variable that equals 1 for firms that increased workers by at least 10% in the last 2 years, and 0 otherwise.

Firm managers were also asked whether they cut their workforce by at least 10% in the last 2 years. 26% of managers had reduced employment by at least 10% in the last year and 4% of managers had both increased and decreased their workforce by at least 10% in the last 2 years. To gain a measure of the net change in jobs in the firm, I created a simple ordered variable that equals  $-1$  for firms that cut their workforce by at least 10% over the last 2 years; 0 for firms that neither decreased nor increased their workforce by 10% over the last 2 years or for firms that both added and cut their workforce by at least 10% in the last 2 years; and 1 for firms that only increased the size of their workforce by at least 10% over the last 2 years. *JobNetGrowth* has a mean value of 0.16. The respective figures are 20%, 44% and

Table 1  
Descriptive statistics of firms in the sample

Variable	Mean
Average number of employees	840
Industrial firms	55%
Retail and wholesale trading firms	20%
Construction/Transport/Communications firms	25%
Own their building	61%
Members of business organization	31%
Average age of the manager (years)	46
Average years as director of the firm	6–10
Privatized firm	65%
State-owned firm	15%
De novo private firm	20%
Monopoly status	10%
Competition from foreign firms	14%
Member financial industrial group	2%
Member of production association	28%

Table 2  
Descriptive statistics by region

Region	<i>WorkerOwnership</i>	<i>AddWorkers</i>	Vote for market-oriented parties
Moscow ( <i>N</i> =60)	0.45	0.33	0.60
Ekaterinburg ( <i>N</i> =67)	0.58	0.39	0.67
Novgorod ( <i>N</i> =60)	0.48	0.53	0.67
Nizhnii Novgorod ( <i>N</i> =62)	0.53	0.39	0.74
Smolensk ( <i>N</i> =62)	0.56	0.47	0.58
Tula ( <i>N</i> =61)	0.46	0.51	0.67
Ufa ( <i>N</i> =63)	0.49	0.27	0.65
Voronezh ( <i>N</i> =60)	0.75	0.33	0.47
Sample mean ( <i>N</i> =495)	0.54	0.40	0.63

Table reports whether firms had a significant level of worker ownership, had increased their workforce by at least 10% in the last 2 years, and whether they had voted for a market-oriented party in parliamentary elections in December 1999.

36%.<sup>10</sup> These questions create rather crude indicators that lack the precision of continuous measures of employment growth. However, they are easy for respondents to answer, generate few incentives to dissemble, and provide sufficient variation to analyze patterns of job creation. Table 2 provides a regional breakdown and Table 3 provides a sectoral breakdown of job creation in the firms under study.

Most studies of firm behavior in transition economies focus on differences among state-owned, privatized, and new private firms. This study does so as well. However, it also examines the effect of worker ownership and worker management on job creation. As noted previously, worker-owned and worked-managed firms may have weak incentives to hire new workers. Interviewers asked managers which of the following groups were major shareholders in the firm: the state, the managers of the firm, members of the workers' collective (excluding managers), private citizens outside of the firm (including former workers), other Russian corporate entities, foreigners, and others. More than half of the respondents (54%) indicated that the workers' collective was a major shareholder of the firm. *WorkerOwners* is a dummy variable for this response.<sup>11</sup>

Numerous studies, however, argue that managers in firms in Russia exercise considerable control even in firms in which workers hold a large portion of the shares (Blasi and Shleifer, 1996; Commander et al., 1996). Formal measures of shareholding may be misleading if workers are unable to translate their shares into influence on decision making within the firm. Such concerns were particularly evident early in the transition. To mitigate this potential problem, this study also includes a more subjective measure of the influence of workers on enterprise decision making.<sup>12</sup>

<sup>10</sup> The difference between the figures for *AddWorkers* and *JobNetGrowth* arises due to different treatments of firms who both added and cut their workforce by at least 10% in the last 2 years. *AddWorkers* treats all firms that increased their workforce by at least 10% as 1, and all other firms as 0. Thus, it counts as 1 firms that both increased and decreased their workforce by at least 10%. *JobNetGrowth* treats as 1 all firms that increased their workforce by at least 10% and did not also cut their workforce by at least 10%. Thus, the latter is a more restrictive measure. The results are unchanged if *AddWorkers* treats firms that both increased and decreased their workforce by at least 10% as 0.

<sup>11</sup> Managers are generally reluctant to reveal precise information on ownership, in part due to fears of reprisal by predatory bureaucrats and/or organized crime (Frye, 2002). In addition, company managers are often reluctant to provide detailed information about the influence of various groups on decision making in firms. This study tries to minimize this problem by asking questions in the survey that generate some rough measures of the ownership structures and management practices of firms within the limits of respondents' reluctance to reveal potentially sensitive information.

<sup>12</sup> Earle et al. (1996) adopt a similar strategy.

Table 3  
Descriptive statistics by sector

Sector	<i>WorkerOwnership</i>	<i>AddWorkers</i>	Vote for market-oriented party
Fuel ( <i>N</i> =12)	0.50	0.33	0.75
Machine tool ( <i>N</i> =90)	0.68	0.48	0.59
Metals/chemicals ( <i>N</i> =48)	0.73	0.44	0.56
Light industry ( <i>N</i> =68)	0.57	0.43	0.63
Food processing ( <i>N</i> =52)	0.54	0.40	0.60
Construction ( <i>N</i> =83)	0.54	0.39	0.67
Transport ( <i>N</i> =28)	0.29	0.25	0.68
Communications ( <i>N</i> =18)	0.22	0.44	0.67
Financial sector ( <i>N</i> =17)	0.47	0.18	0.88
Trade ( <i>N</i> =72)	0.43	0.36	0.60
Sample mean	0.54	0.40	0.63

Table reports whether firms had a significant level of worker ownership, had increased their workforce by at least 10% in the last 2 years, and whether managers had voted for a market-oriented party in parliamentary elections in December 1999.

Interviewers asked the respondents to rate the extent of influence exercised by each group of shareholders on a four-point scale with 0 equal to no influence, 1 some influence, 2 significant influence, and 3 very significant influence. Just over half said that the workers had no influence in their firm; 28% said that workers had some influence; 14% said that workers had significant influence; and 4% said that workers had very significant influence. *WorkerInfluence* is an ordered variable with a mean of 0.69.

The correlation between worker ownership and worker influence is fairly high (0.74), suggesting that formal ownership rights generally translate into influence on decision making within the firm, but that the two are not synonymous. These variables are not without limitations and are fairly crude. They do, however, provide somewhat finer measures of ownership than are commonly gathered by state statistical agencies. Moreover, they provide some insight into the relative influence of different groups on decision making within the firm. It is important to bear in mind that more probing questions may have been counterproductive given strong incentives to conceal information on ownership stakes and the patterns of economic decision making within the firm in Russia.

The quality of institutions is often argued to have a significant impact on firm behavior in transition economies (Johnson et al., 1998). To measure institutional performance, we asked respondents to rate the performance of state arbitration courts on a scale of 1–5 (with 1 being very poor, and 5 being very good). State arbitration courts are the main formal fora for resolving economic disputes among businesses in Russia. Company managers gave the arbitration courts a score of 3.1 on the five-point scale.<sup>13</sup> These findings are in line with results from other surveys of company managers that also tend to give the arbitration courts fairly high ratings, particularly relative to other state bodies (Hendley et al., 2000, 2001; Solomon, 2002).

Previous studies have shown that the ability of courts to constrain state agents is a reliable predictor of firm restructuring (Frye, 2004). Where managers do not believe that courts can protect their rights in disputes with the local or regional government, they invest at lower levels, even controlling for the perceived quality of judicial institutions more generally. To assess this argument, we asked managers: “In the case of an economic dispute with the local or regional

<sup>13</sup> Only the tax police received higher performance scores than did state arbitration courts. This may be damning with faint praise given the relatively low scores for all bureaucracies. It does, however, suggest that in relative terms company managers give state arbitration courts fairly high marks.



government, do you believe that the courts could protect your legal interests?" Only 39% of respondents answered yes. When we repeated the question, but replaced the *local or regional government* with a *business partner*, we found that 76% of respondents believed that the courts could protect their interest in a dispute with another private entity. *GovernmentToCourt* is a dummy variable that equals 1 for managers who believe that they can take the government to court and 0 otherwise.

Informal institutions, such as levels of general trust, may also shape incentives to add more workers. Given that workers are often hired based on personal networks, informal institutions may be particularly important in the case at hand. We asked managers: "What do you think, can one trust businesspeople in your region to fulfill their contractual obligations with business partners?" 2% said almost never; 15% said usually no; 59% said usually yes; and 14% said almost always. *Trust* is a four-category variable based on these responses ranging from 0 (almost never trust) to 3 (almost always trust). The mean value for this variable was 2.0.

Lack of external finance is a common explanation for the failure of firms to expand. To measure the severity of the credit constraint, we asked managers to rate the problem of access to credit for their firm on a scale of 1–5 (1 being no problem, and 5 being a very big problem). The mean response was 2.75. Most interesting, 38% of managers said that access to finance was not at all a problem. It is unlikely that strong banking institutions in Russia led respondents to believe that credit markets were not an obstacle to business. More likely, managers for whom access to credit is not a problem rely on retained earnings for investment rather than on credit markets. Given the strong performance of the Russian economy at the time of the survey credit constraints may not have been significant for cash-rich firms.<sup>14</sup>

Other factors may also drive decisions to hire more workers. Because firm size may influence employment, I include a variable that measures the log of the number of employees in the firm (Konings et al., 1996; Faggio and Konings, 2001). I add a dummy variable for firms that claim to have made a profit in the year 2000 and another dummy variable for firms that were members in a business organization or professional association. I also add dummy variables for 10 different economic sectors as defined by Goskomstat and for the 8 regions in which the firms are located. The latter are thought to capture hard to measure aspects of the environment that are associated with the region and may influence firm behavior. Finally, I include a measure for the highest level of formal education of the manager, which may serve as rough proxy for entrepreneurial skill.

#### 4. Quantitative analysis

To assess these results, I begin by estimating the following equation:

$$\begin{aligned} AddWorkers = & WorkerInfluence + NewPrivate + State + GovernmentToCourt + Courts \\ & + Trust + CreditObstacle + Profit + BusinessOrganization + Education \\ & + SectorDummies + RegionDummies + e. \end{aligned}$$

I run a probit model that predicts the probability that a firm reports a 10% increase in the size of its workforce during the last 2 years. I report the results in Model 1 in Table 4. I then repeat the

<sup>14</sup> Firms that reported a profit in the year 2000 rated access to credit as a problem at 2.5, while firms that did not make a profit rated it a 3.1. A *t*-test indicates that these differences are statistically significant at the 0.05 level.

Table 4  
Estimation relating property type to probability of job creation

	<i>AddWorkers</i> (1)	<i>AddWorkers</i> (2)	<i>JobNet</i> (3)	<i>JobNet</i> (4)
<i>WorkerInfluence</i>	−0.23*** (0.08)	–	−0.11* (0.06)	–
<i>WorkerOwnership</i>	–	−0.43*** (0.15)	–	−0.25* (0.14)
<i>NewPrivate</i>	0.47** (0.19)	0.41** (0.19)	0.48*** (0.18)	0.44*** (0.18)
<i>State-Owned</i>	−0.67** (0.28)	−0.78*** (0.29)	−0.51** (0.21)	−0.59*** (0.23)
<i>GovernmentToCourt</i>	0.03 (0.14)	0.01 (0.14)	−0.02 (0.13)	−0.02 (0.13)
<i>Courts</i>	−0.05 (0.09)	−0.06 (0.09)	−0.03 (0.08)	−0.04 (0.08)
<i>Trust</i>	0.29*** (0.11)	0.29*** (0.11)	0.30*** (0.10)	0.31*** (0.10)
<i>CreditObstacle</i>	−0.08* (0.04)	−0.08* (0.04)	−0.04 (0.04)	−0.04 (0.04)
<i>Profit</i>	0.28** (0.14)	0.28** (0.14)	0.33*** (0.13)	0.33*** (0.13)
<i>BusinessOrganization</i>	0.26** (0.14)	0.29** (0.14)	0.22* (0.13)	0.25* (0.13)
Log <sub>emp</sub>	0.02 (0.05)	0.03 (0.05)	0.03 (0.05)	0.04 (0.05)
Constant	−0.13 (0.61)	−0.16 (0.61)	−0.15 (0.24)	−0.15 (0.24)
Prob> $\chi^2$	0.0001	0.0001	0.0000	0.0000
Log likelihood	−260.80	−261.13	−384.19	−384.02

$N=435$ . Robust standard errors in parentheses below coefficient estimates. Results for city and sector of the firm and education of manager are not reported. Columns 1 and 2=probit estimation. Columns 3 and 4=ordered probit estimation.

\* Significant at .10.

\*\* Significant at .05.

\*\*\* Significant at .01.

analysis in Model 2 using *WorkerOwnership*, rather than *WorkerInfluence*, as an independent variable. Both models use robust standard errors. The excluded ownership category is privatized firms.

Model 1 in Table 4 finds that ownership has a strong influence on job growth controlling for a range of factors. Most important, firms in which workers exercise greater influence over decision making hire fewer workers as indicated by the negative and significant coefficient on *WorkerInfluence*.<sup>15</sup> As other studies have shown, new private firms are more likely to experience higher levels of job growth than are privatized firms (Johnson et al., 1998). In addition, state-owned firms are significantly less likely to experience a large increase in new workers than are privatized firms.

Proxies for the quality of formal institutions seem to have little relationship to the decision to hire more workers as indicated by the insignificant coefficients on *GovernmentToCourt* and *Courts*. However, managers who exhibit high levels of trust in businesspeople in their region are more likely to increase their workforce than are other managers.

Finally, credit constraints have a marginally significant impact on employment growth at the firm level. The sign of the coefficient on *CreditObstacle* is negative and significant at the 0.10 level indicating that the more difficulty firms have gaining access to credit, the less likely they are to experience large increases in the workforce.

In Model 2, I use a proxy for worker ownership rather than for worker influence. Again, the results are consistent with the preceding analysis. The coefficient on *WorkerOwnership* is negative and significant. The results for other variables are essentially unchanged.

<sup>15</sup> There is some evidence that moderate levels of worker influence may particularly hinder job creation. Treating each of the four levels of *WorkerInfluence* as dummy variables reveals that moderate levels of worker influence are associated with the lowest rates of job creation. Caution is necessary in interpreting this result, however, as it relies heavily on the perhaps tenuous assumption that managers make consistent distinctions between firms where worker influence is significant and very significant.

In Models 3 and 4, I rely on an ordered probit model and use *JobNetGrowth* as a dependent variable. As before, the independent variables of interest are proxies for worker influence and worker ownership. The results are consistent with previous analyses. The coefficients on variables related to worker influence in Model 3 and worker ownership in Model 4 retain their statistical significance, while the coefficients on variables related to institutions remain insignificant. The variable proxying for credit constraints retains its sign, but loses its statistical significance in this specification of the model.

The substantive impact of worker influence on the probability of increasing the size of the workforce is quite large. I compute the predicted probabilities based on the results from Model 1 holding dummy variables at their mode and continuous variables at the means. Doing so indicates that a one-unit increase in the index of worker influence on decision making in a hypothetical retail trade firm in Nizhnii Novgorod depresses the probability of a firm significantly increasing its workforce from 0.49 to 0.44.

The findings are robust to different measures of the impact of workers on job creation. Indeed, the findings indicate that the more objective measure of worker possession of shares and the more subjective measure of worker influence have similar effects on decisions to expand the workforce. The results are also robust to alternative specifications of the dependent variable. In addition, dropping regional dummy variables has little substantive effect on the main results of interest.

Thus far the analysis has examined how worker ownership and worker management influenced the probability of job creation. However, worker ownership may work differently in different types of firms. For example, the effects of worker ownership may depend on the property type of the firm. Worker owners in privatized firms likely have worked together for longer than worker owners in new private firms. The former may therefore have greater solidarity than the latter and find it easier to collude against hiring new workers who may depress the wages of current workers. To assess the possibility that the effects of worker ownership are especially pronounced in privatized firms, I create an interaction term *WorkerOwnership\*Privatized*.<sup>16</sup>

Worker ownership in profitable firms may be less problematic for job creation than in unprofitable firms. Model 1 in Table 5 therefore also includes the interaction term, *WorkerOwnership\*Profit2000*, which assesses whether the effect of worker ownership differs in profitable and unprofitable firms. The results reveal that worker ownership reduces the probability of job creation in privatized firms as indicated by the negative and significant coefficient on *WorkerOwnership\*Privatized*. The effects of worker ownership on job creation appear to be conditional on the property type of the firm. In addition, the coefficient on *WorkerOwnership\*Profit2000* indicates that worker-owned firms that reported a profit in 2000 were likely to have increased their workforce. Worker-owned firms that turn a profit do not appear to suffer from lower rates of job creation. These results suggest that the effects of worker ownership are conditional on property type and profitability.

Studies of the effects of ownership and shareholder influence on firm behavior often raise concerns about endogeneity. For example, in the case at hand firms that are poor performers may be both more likely to have been privatized to the workers *and* to be less likely to expand their workforce. Because firms do not choose their ownership structure at random, it may be difficult to determine whether poor performance or worker ownership is influencing the decision not to increase the workforce. In their review of essays on enterprise restructuring in transition

<sup>16</sup> Previous analyses used privatized firms as the excluded category. Here I use new private firms as the excluded category. I do not use state-owned firms as the excluded category because they have no worker ownership.

Table 5

Probit estimation of property-type and profitability on probability of job creation

	<i>AddWorkers</i>
<i>WorkerOwnership</i>	−0.39 (0.34)
<i>Privatized</i>	0.08 (0.22)
<i>WorkerOwnership*Privatized</i>	−0.64** (0.33)
<i>Profit2000</i>	−0.01 (0.21)
<i>WorkerOwnership*Profit2000</i>	0.57** (0.28)
<i>State-Owned</i>	−0.85** (0.30)
<i>Courts</i>	−0.06 (0.09)
<i>GovernmentToCourt</i>	0.02 (0.14)
<i>Trust</i>	0.28** (0.12)
<i>CreditObstacle</i>	−0.08* (0.04)
<i>BusinessOrganization</i>	0.32** (0.14)
$\text{Log}_{\text{emp}}$	0.04 (0.05)
Constant	0.03 (0.63)
$\text{Prob} > \chi^2$	0.0002
Log likelihood	−260.66

$N=435$ . \*Significant at .10. \*\*Significance at .05. \*\*\*Significant at .01. Robust standard errors in parentheses below coefficient estimates. Results for city and sector of the firm and education of manager are not reported.

economies, Djankov and Murrell (2002, p. 744) note that these “problems have been thoroughly recognized in the literature, but solutions are not easy to obtain.”

Frydman et al. (1999) argue that the effects of privatization on changes in enterprise behavior introduce three types of possible selection biases. First, better-performing firms may be selected for privatization. Second, firms may be kept state-owned to keep them from closing if they are expected to be uncompetitive. Third, governments may restructure firms prior to privatization. The specific features of the privatization process in Russia suggest that these potential endogeneity biases may be less severe in this case than elsewhere. The massive speed and broad scope of privatization in Russia imply that the Yeltsin administration paid little heed to the performance of different types of firms in the privatization program. Between June 1992 and June 1994, the Russian government privatized more than 15,000 medium and large sized enterprises at breakneck speed. The State Property Committee chose firms to be included in the program by industrial sector rather than by individual firm and excluded relatively few firms from the list.<sup>17</sup> Indeed, after the passage of the Law on Privatization in June 1992—a law that made managers and workers the main beneficiaries of privatization—enterprise insiders had little incentive to resist privatization (Shleifer and Boycko, 1993). Frydman et al. (1999) convey these points well.

Generally speaking privatization programs that convey property rights to enterprise insiders are much easier to execute from a political point of view, and nearly all postcommunist countries have tried to make their programs politically more acceptable by giving preferential treatment to the managers and workers of the privatized enterprises. Despite certain misgivings, the Russian reformers went the furthest in this respect, conferring on enterprise the control of about 70 percent of privatized firms. . . The assumption behind many of these such programs was the belief that, in

<sup>17</sup> Firms excluded from privatization were concentrated in strategically important defense and raw materials sectors.

the environment of the postcommunist transition, the fact of privatization, with its concomitant depoliticization and greater efficiency, is more important than any particular way in which firms are privatized.

Thus, the manner of privatization in Russia suggests that firms were not selected into the privatization program based on their performance. There is also little reason to believe that specific state-owned firms were kept out of privatization due to concerns for their competitiveness. In addition, there is scant evidence that the Russian government conducted any significant restructuring of enterprises prior to privatization. As the [Frydman et al. \(1999\)](#) quote cited above indicates, privatization in Russia was conducted primarily to encourage restructuring rather than vice versa. Russia's extremely rapid and broad-based privatization therefore may mitigate some concerns about selection bias.

Another potential source of endogeneity is, however, more troubling. It may be that in the post-privatization process worker ownership became predominant in poor performing firms that were therefore less likely to expand ownership. This concern is more severe, but depends in part on assumptions about how quickly ownership structures respond to changes in incentives. For example, the financial crisis of August 1998 and subsequent devaluation of the ruble drastically changed the economic environment for firms in Russia and turned many loss-making firms into profitable ones. As this shock occurred about 15 months prior to the survey, it may be that some firms did not have time to change their ownership structures to suit the new environment. If true, this would mitigate somewhat concerns that ownership type is wholly endogenous to firm quality. Nonetheless, it is difficult to minimize possible problems of endogeneity between ownership type and firm behavior, particularly using cross-sectional data. The possibility of this type of endogeneity is the most important limitation of this study.

In sum, controlling for a range of factors, worker ownership and worker influence on decision making are associated with a lower probability that a firm increases its workforce in the case at hand. This finding suggests that concerns expressed about the impact of worker ownership on job creation during the design of the privatization program in Russia were well founded.

## 5. Voting and job creation

Job creation has important economic consequences, but it also may have substantial effects on politics as well. Firms that create jobs may be prominent constituencies in support of further reform. The next section addresses how job creation affects political support for parties advocating economic liberalization.

Models of economic transformation emphasize that to be sustained over time reforms must create their own constituencies ([Przeworski, 1991](#)). This is particularly problematic in the postcommunist region because command economies generally lacked private sector business groups that are often seen as the social base for liberal economic policies ([Eyal et al., 1999](#); [Jackson et al., 2003](#)). Most countries began the transformation with the primary constituencies for liberal economic reforms either weak or absent.

To date, most empirical research on the political bases of economic reform has focused on the creation of new enterprises. Studies using data aggregated at the regional level have found a positive relationship between support for economically liberal parties and the number of new private firms created in the region. [Warner \(2001\)](#) finds that regions within Russia

that registered many new private firms experienced significantly higher vote shares for reform-oriented parties in the parliamentary elections of 1995. Jackson et al. (2003) find that regions in Poland that created more new private firms exhibited higher levels of support for pro-market parties in parliamentary elections in 1993. These studies suggest that new private firms use the ballot box to protect their economic interests.

In a similar vein, one might expect that managers in dynamic firms have created jobs to support market-oriented parties at the ballot booth. Managers of firms expanding their workforce may do so for at least two reasons. First, having hired and presumably trained workers, managers may vote for market-oriented parties as a means to protect their expenditure on new human capital. Moreover, the costs of dismissing workers embedded in the Russian legal code may heighten managers' commitments to newly hired employees. Managers in firms that are increasing their workforce may fear the rise of political parties that threaten to put that their new human capital at risk by raising tax rates, increasing regulations, or passing other less business-friendly policies. Managers in growing firms may also not want to risk a return to soft budget constraints for declining firms. Second, managers of firms that hire new workers may generally be more dynamic and therefore be more sympathetic to liberal, pro-private sector parties. In this argument, employment growth is a proxy for firm expansion more generally. In sum, managers of firms creating new jobs may be especially likely to back market-oriented parties.<sup>18</sup>

I assess how job creation influences vote choice using the survey cited above. Interviewers asked respondents whether they voted in parliamentary elections in Russia in 1999, and if so, for which party. The most economically liberal party in Russia, the Union of Right Forces, received 19% of managers' votes. *Yabloko*, a pro-market party with a social democratic bent headed by Grigory Yavlinsky, received 14% of managers' votes. Unity, a centrist, but market-oriented party created to back then Prime Minister Vladimir Putin, won 18% of managers' votes, while another centrist, pro-market party, Fatherland–All-Russia, received 12% of managers' votes. Taken together, 63% of managers voted for pro-market parties.

In contrast, the Communist Party of the Russian Federation received 14% of votes cast by managers, while the Liberal Democratic Party of Russia headed by virulent nationalist Vladimir Zhirinovskiy received 2% of such ballots. Just under 5% of managers voted for minor parties and just over 5% of managers claim to have voted against all parties, a form of protest vote that is allowed under Russian law. 13% of managers did not vote. In total, more than a third of managers in Russia did not support pro-market parties in the most recent parliamentary elections.<sup>19</sup>

These results are somewhat different from the total popular vote in the parliamentary elections. Not surprisingly, liberal parties, such as the Union of Right Forces, which received 9% of the popular vote, and *Yabloko*, which received 6% of the popular vote, fared better among the managers in the sample than among the populace. Unity scored slightly higher in the popular vote than it did among the managers and received 18% of ballots cast. Fatherland–All-Russia received 13% of popular votes, a level roughly equivalent to 12% of votes from managers in the

---

<sup>18</sup> In spirit this study is closer to works that examine how economic reforms affect the propensity of different groups to support economic reform at the polls. For example, Fidrmuc (2000) demonstrates that regions dominated by groups gaining from economic liberalization were significantly more likely to vote for pro-market parties in parliamentary elections in the Czech Republic, Poland, and Slovakia.

<sup>19</sup> The statistical results are essentially unchanged if the non-voters are dropped from the sample.

sample. The Communist Party received 24% of the popular vote, but only 13% of the vote among managers in the survey. Table 6 reports how company managers and the general public voted in the 1999 parliamentary elections.

To assess the impact of job creation on vote choice more precisely, I run a probit model that predicts the probability that a company manager will vote for one of the four market-oriented parties identified above. I estimate the following equation:

$$\begin{aligned} \text{Vote for Market Oriented Party} = & \text{AddWorkers} + \text{WorkerInfluence} + \text{NewPrivate} \\ & + \text{State} + \text{PresidentRating} + \text{Profit} \\ & + \text{BusinessOrganization} + \text{Age} + \text{Education} \\ & + \text{SectorDummies} + \text{RegionDummies} + e. \end{aligned}$$

The main variable of interest in this analysis is *AddWorkers*, a dummy variable for firms that increased their workforce by at least 10% in the last 2 years. Including this variable permits a test of the argument that managers who expand their workforce are more likely to vote for market-oriented parties.

As in the preceding analysis, I include variables that measure the impact of firm ownership on voting behavior. One study has shown that managers of new private firms are especially likely to vote for pro-market parties (Frye, 2003). Managers of state-owned firms may be less likely to vote for pro-market parties as an electoral victory for such parties may expose them to greater market competition and a more liberal economic environment.

I also add *WorkerInfluence*, a variable that measures the extent of influence exercised by the workers' collective on decision making. Because pro-market parties are likely to pursue policies that are less friendly to labor, managers of such firms may be especially likely to vote against market-oriented parties.

To measure the impact of support for President Putin on vote choice, interviewers asked managers to rate the performance of then Prime Minister Vladimir Putin on a scale of 1–5. Managers took a fairly non-committal stance towards Putin and accorded him a score of 3.0. It is important to control for respondents' assessments of Mr. Putin because one of the market-oriented parties, Unity, was created primarily as a Pro-Putin movement without a strong ideology. Votes for a market-oriented party may be reflecting an assessment of President Putin.

Table 6  
Percentage of votes for each party list votes in parliamentary elections, 1999

Party name	Percent of votes cast by managers in the survey	Percent of votes cast by public
Union of Right Forces	19	9
<i>Yabloko</i>	14	6
Unity	18	23
Fatherland–All-Russia	12	13
Communist Party of the Russian Federation	14	24
Liberal Democratic Party	2	6
Against all parties	5	4
Minor parties	5	15
Did not vote	13	39

*PresidentRating* takes the value of the respondent's evaluation of President Putin's performance in his first year in office on a scale of 1–5.

I include controls for different economic sectors as the assets held by managers may shape their voting preferences. Similarly, I include a dummy variable for the region in which the firm is located because studies have shown that regional economic considerations influence voting behavior in the aggregate (Bell, 1997; Fidrmuc, 2000; Tucker, 2001; Jackson et al., 2003). In addition, I control for the size of the firm using the log of the number of employees. I also add dummy variables for profitable firms and for members of business organizations. I include two demographic variables that measure the managers' age and highest level of formal education. Both variables are commonly found to influence voting behavior and support for market-reforms (Gibson et al., 1992; Colton, 2000).

The results reported in Model 1 in Table 7 find that company managers whose firms increase the size of their workforce by at least 10% are significantly more likely to support market-oriented parties at the ballot box. Computing predicted probabilities by holding dummy variables at their mode and continuous variables at their means, reveals that these results are also substantively important. The probability of a manager of a hypothetical retail trade firm in Nizhnii Novgorod who did not increase their workforce voting for market parties was 0.72, while for similarly situated managers who increased their workforce this figure was 0.78.

Managers of new private firms are significantly more likely than managers of privatized firms to vote for market-oriented parties. Similarly, managers who give President Putin a high approval rating are likely to vote for market-oriented parties. This is not surprising as Mr. Putin was most closely associated with Unity, a centrist, but still pro-market party. Members of business organizations are more likely to vote for market-oriented parties, as are company managers working in the financial sector. Other sectoral variables provide little leverage. These findings hold

Table 7  
Probit estimates relating job creation to probability of voting for pro-market party

	Vote for pro-market party
<i>AddWorker</i>	0.30** (0.15)
<i>WorkerInfluence</i>	0.03 (0.09)
<i>NewPrivate</i>	0.60** (0.23)
<i>State</i>	−0.24 (0.25)
<i>PresidentRating</i>	0.16*** (0.07)
<i>Profit</i>	0.24* (0.14)
<i>BusinessOrganization</i>	0.16 (0.16)
Log Employment	0.02 (0.05)
Age	−0.03** (0.01)
Education	0.05 (0.10)
Constant	0.63 (0.72)
Prob> $\chi^2$	0.0004
Log likelihood	−233.42

$N=434$ . Robust standard errors in parentheses below coefficient estimates. Results for city and sector of the firm and education of the manager are not reported. Managers in the financial sector are more likely to vote for market-oriented parties compared to managers in the food sector. Other sector dummies have no effect. Managers in Nizhnii Novgorod and Ufa are significantly more likely to vote for market-oriented parties than managers in Voronezh.

\* Significant at .10.

\*\* Significant at .05.

\*\*\* Significant at .01.



Table 8  
Multinomial logit estimate relating job creation to vote choice

	Vote for Communist Party of Russian Federation (1)	Vote for Unity or Fatherland–All-Russia (2)	All other votes (save for Union of Right Forces and <i>Yabloko</i> ) (3)
<i>AddWorkers</i>	−0.69** (0.36)	0.28 (0.25)	−0.03 (0.34)
<i>WorkerInfluence</i>	0.25 (0.20)	0.16 (0.16)	−0.28 (0.19)
<i>NewPrivate</i>	−1.22* (0.71)	−0.12 (0.33)	−1.22** (0.48)
<i>State</i>	1.08** (0.52)	0.78* (0.44)	−1.11 (0.82)
<i>PresidentRating</i>	−0.21 (0.16)	0.24** (0.12)	−0.04 (0.16)
<i>Age</i>	0.10*** (0.01)	0.05*** (0.01)	0.03* (0.02)
<i>Education</i>	0.23 (0.26)	0.13 (0.22)	−0.13 (0.26)
<i>Profit</i>	−0.73** (0.33)	−0.16 (0.26)	−0.21 (0.34)
<i>BusinessOrganization</i>	−0.38 (0.38)	0.16 (0.27)	−0.06 (0.35)
Log <sub>emp</sub>	0.02 (0.10)	0.03 (0.09)	−0.08 (0.10)
Constant	−5.58*** (1.35)	−3.71*** (0.99)	−0.75 (1.27)

$N=434$ . Multinomial logit estimation. Robust standard errors in parentheses below coefficient estimates. Results for city and sector of the firm and education of the manager are not reported. Excluded category is a vote for “liberal” market-oriented party, including *Yabloko* and the Union of Right Forces.

Wald  $\chi^2$  (30)=96.71.

Pseudo  $R^2=0.10$ .

Probability  $> \chi^2=0.0000$ .

Log Pseudo-likelihood = −507.30.

\* Significant at .10.

\*\* Significant at .05.

\*\*\* Significant at .01.

controlling for regional-level variables as well. Compared to managers in Voronezh, managers in Ufa and Nizhnii Novgorod were significantly more likely to vote for pro-market parties. Dropping the regional dummy variables has little substantive effect on the results.

To provide a slightly more nuanced analysis, I placed voters’ choices into one of four broad groups. I then estimated a multinomial logit model that predicts whether managers will vote for the Communist Party of the Russian Federation; a liberal pro-market party, like the Union of Right Forces or *Yabloko*; a centrist pro-market party, like Unity or Fatherland–All-Russia; or any other party. 16% of managers cast their ballot for the Communist Party, 33% for Unity or Fatherland–All-Russia; 37% for either *Yabloko* or the Union of Right Forces, and 13% of managers cast their ballots for other parties or against all parties.<sup>20</sup>

This analysis reported in Table 8 produces two findings of note. First, it shows that the results are not strongly influenced by the categorization of “pro-market” parties.<sup>21</sup> The excluded category in Table 8 includes votes for the most liberal pro-market parties, the Union of Right Forces and *Yabloko*. The coefficients on the independent variables depict whether the probability of voting for a particular type of party is significantly different when compared to the excluded category. The insignificant coefficient on *AddWorkers* in Column 2 reveals that managers who significantly increase their workforce are no more likely to vote for a liberal pro market party, like the Union of Right Forces or *Yabloko*, than they are to vote for a more centrist pro-market party, such as Unity or Fatherland–All-Russia. This suggests that the results depicted in Table 7

<sup>20</sup> The ballot in Russia includes the intriguing possibility of voting against all parties. 5.2% of managers claimed to have chosen this option. The small number of voters choosing this option makes it difficult to analyze.

<sup>21</sup> I drop the dummy variables for region and sector in the multinomial logit analysis to preserve degrees of freedom.

are not driven by the categorization of pro-market parties. Second, managers who increased their workforce were significantly less likely to vote for the Communist Party of the Russian Federation than for the most liberal pro-market parties, The Union of Right Forces and *Yabloko*. Thus, in the parliamentary elections of 1999 in Russia, job creation had important and predictable political consequences.

## 6. Conclusions

Several studies have found that the creation of new private firms can generate momentum in support of economic reform (Warner, 2001; Jackson et al., 2003; Frye, 2003). This essay finds that job creation can have a similar effect. Managers who significantly expand their labor force tend to vote for market-oriented parties. This result holds controlling for a range of factors. Thus, economic reforms that create incentives for managers to hire new workers may generate their own constituencies in support of further economic reform.<sup>22</sup>

In addition, the results presented here suggest that worker ownership and worker influence are significantly and negatively correlated with increases in employment. Firms in which workers were identified as major owners or decision-makers within the firm were less likely than other firms to increase their workforce by at least 10% in the years 1998–2000.

Further research could refine these results in several ways. First, continuous measures of job creation may offer more precise estimates. Second, finding better solutions to the possible endogeneity of ownership and restructuring merits greater attention. Third, further research could explore precisely why worker ownership and worker influence are associated with a lower probability of job creation. Is it due primarily to concerns that adding new workers will depress the wages of existing workers, or to a reluctance to fire workers out of a sense of solidarity?

Similarly, future research may identify more specifically why managers in expanding firms are especially likely to vote for market-oriented parties. Do they cast their ballots for market-oriented parties to further their economic expansion or to express symbolic support for parties that they would vote for in any case? Answering these questions should help deepen our understanding of the economic and political consequences of job creation.

## Acknowledgments

I thank Guido Friebel, Kira Sanbonmatsu, two anonymous reviewers, and participants in the conference on *The Political Economy of Transition: Job Creation and Destruction* for comments. I also thank Jan Fidrmuc and John E. Jackson for organizing the conference and for their valuable comments. Finally, I thank the Mershon Center of the Ohio State University, the Olin Foundation, and the Social Science Research Council for generous financial assistance in conducting this project.

## References

- Aslund, A., Johnson, S., 2003. Small enterprises and economic policy. Carnegie Paper, vol. 43. Carnegie Endowment, Washington, D.C.

<sup>22</sup> There is little evidence, however, that politicians and enterprise managers trade political support for job creation. Managers who significantly expand their workforce are no more likely to vote for the incumbent governor or incumbent mayor, or to give the sitting governor or sitting mayor a high approval rating.

- Bell, S., 1997. Unemployment matters: voting patterns during the economic transition in Poland. *Europe-Asia Studies* 49, 1263–1291.
- Blasi, J., Shleifer, A., 1996. Corporate governance in Russia: an initial look. In: Frydman, R., Gray, C., Rapaczynski, A. (Eds.), *Corporate Governance in Central Europe and Russia*, vol. 2. Central European Press, Budapest, pp. 78–108.
- Boeri, T., Terrell, K., 2002a. Institutional determinants of labor reallocation in transition countries. *Journal of Economic Perspectives* 16, 51–76.
- Boeri, T., Terrell, K., 2002b. Institutional Determinants of Labor Reallocation in Transition Countries. *Transition Newsletter* World Bank, Washington, D.C. May/June.
- Bonin, J.P., Jones, D., Putterman, L., 1993. Theoretical and empirical studies of producer cooperatives: will ever the twain meet? *Journal of Economic Literature* 1, 1290–1320.
- Broadman, H.G., Recanatini, F., 2001. Is Russia restructuring: new evidence on job creation and destruction. *Policy Research Working Paper*, vol. 2641. World Bank, Washington, D.C.
- Colton, T.J., 2000. *Transitional Citizens: Voters and What Influences Them in the New Russia*. Harvard University Press, Cambridge, MA.
- Commander, S., Dhar, S., Yemtsov, R., 1996. How Russian firms make their wage and employment decisions. In: Commander, S., Fan, Q., Schaffer, M.S. (Eds.), *Enterprise Restructuring and Economic Policy in Russia*. World Bank, Washington, D.C., pp. 15–51.
- Djankov, S., Murrell, P., 2002. Enterprise restructuring in transition. *Journal of Economic Literature* 40, 739–792.
- Earle, J., Estrin, S., Leshchenko, L., 1996. Ownership structures, patterns of control and enterprise behavior in Russia. In: Commander, S., Fan, Q., Schaffer, M.S. (Eds.), *Enterprise Restructuring and Economic Policy in Russia*. World Bank, Washington, D.C., pp. 205–252.
- European Bank for Reconstruction and Development, 1996. *Transition Report 1996*. European Bank for Reconstruction and Development, London, UK.
- Eyal, G., Szelenyi, I., Townsley, E., 1999. *Making Capitalism Without Capitalists: The New Ruling Elite in Eastern Europe*. Verso Books, London.
- Faggio, G., Konings, K., 2001. Job Creation, Job Destruction, and Employment Growth in Transition Economies. Discussion Paper IZA, Bonn.
- Fidrmuc, J., 2000. Economics of voting in postcommunist countries. *Electoral Studies* 19, 199–217.
- Frydman, R., Gray, C., Hessel, M., Rapaczynski, A., 1999. When does privatization work? The impact of private ownership on corporate performance in the transition economies. *Quarterly Journal of Economics* 114, 1153–1191.
- Frye, T., 2002. Private protection in Russia and Poland. *American Journal of Political Science* 46, 572–584.
- Frye, T., 2003. Markets, democracy and new private business in Russia. *Post-Soviet Affairs* 19, 24–45.
- Frye, T., 2004. Credible commitment and property rights in Russia. *American Political Science Review* 98, 453–466.
- Gibson, J.L., Duch, R.M., Tedin, K.L., 1992. Democratic values and the transformation of the Soviet Union. *Journal of Politics* 54, 329–371.
- Gimpelson, V., Lippoldt, D., 2001. *The Russian Labor Market*. Rowman and Littlefield, New York.
- Hellman, J., 1998. Winners take all: the pitfalls of partial reform. *World Politics* 50, 203–234.
- Hendley, K., Murrell, P., Ryterman, R., 2000. Law, relationships, and private enforcement: transactional strategies of Russian enterprises. *Europe-Asia Studies* 52, 627–656.
- Hendley, K., Murrell, P., Ryterman, R., 2001. Law works in Russia: the role of legal institutions in the transactions of Russian enterprises. In: Murrell, P., Hendley, K. (Eds.), *Assessing the Value of the Rule of Law in Transition Economies*. University of Michigan Press, Ann Arbor, pp. 56–93.
- Holmstrom, B., 1996. Financing of investments in Eastern Europe: a theoretical perspective. *Industrial and Corporate Change* 5, 205–237.
- Jackson, J.E., Klich, J., Poznanska, K., 2003. Economic transition and elections in Poland. *British Journal of Political Science* 11, 41–66.
- Johnson, S., McMillan, J., Woodruff, C., 1998. Job creation in the private sector: Poland, Romania, Russia, Slovakia, and Ukraine compared. Manuscript. European Bank for Reconstruction and Development, London, pp. 1–30.
- Johnson, S., McMillan, J., Woodruff, C., 2003. Property rights and finance. *American Economic Review* 92, 1336–1356.
- Konings, J., Lehman, H., Schaffer, M., 1996. Job creation and job destruction in a transition economy: ownership, firm size and gross job flows in Polish manufacturing 1988–1991. *Labor Economics* 3, 299–317.
- Krueger, A., 1992. Institutions for a new market economy. In: Clague, C., Rausser, G. (Eds.), *The Emergence of Market Economies in Eastern Europe*. Blackwell, Cambridge, MA, pp. 219–226.
- Lipton, D., Sachs, J., 1990. Creating a market economy in Eastern Europe: the case of Poland. *Brookings Papers on Economic Activity* 1, 75–133.

- Murrell, P., 1992. Evolution in economics and in the economic reform of the centrally planned economies. In: Clague, C., Rausser, G. (Eds.), *The Emergence of Market Economies in Eastern Europe*. Blackwell, Cambridge, MA, pp. 35–54.
- Przeworski, A., 1991. *Democracy and the Market: Political and Economic Reforms in Eastern Europe and Latin America*. Cambridge University Press, New York.
- Raiser, Martin, 1999. *Social Capital in Transition: a First Look at the Evidence*. European Bank for Reconstruction and Development, Working Paper, vol. 61. EBRD, London.
- Shleifer, A., Boycko, M., 1993. *The Politics of Russian Privatization. Post-Communist Reform: Pain and Progress*. MIT Press, Cambridge, MA.
- Solomon, P., 2002. Putin's judicial reforms: making judges accountable as well as independent. *East European Constitutional Review* 11, 117–124.
- Stiglitz, J., 2000. Whither reform? Ten Years of Transition. In: Pleskovic, B., Stiglitz, J. (Eds.), *Annual Bank Conference on Development Economics*. World Bank, Washington, D.C., pp. 27–56.
- Tucker, J., 2001. Economic conditions and the vote for incumbent parties in Russia, Poland, Hungary, Slovakia, and the Czech Republic from 1990–1996. *Post-Soviet Affairs* 17, 309–331.
- Warner, A., 2001. Is economic reform popular at the polls: Russia 1995. *Journal of Comparative Economics* 29, 448–465.
- Yakovlev, A., 2001. Black cash: disincentives to invest in the formal economy. *Europe-Asia Studies* 53, 33–56.