

# Labor Market Hardships and Preferences for Public Sector Employment and Employers: Evidence from Russia

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## Abstract

A growing literature connects labor market hardships to stronger preferences for government welfare and redistribution programs. Potential preference shifts with respect to other types of state involvement in the economy, however, have gone unexplored. We draw on both longitudinal and pseudo-panel data from Russia to explore how labor market hardships relate to preferences for public sector employment and employers. In fixed effects specifications, we demonstrate that recent feelings of job insecurity, experiences with wage arrears, and spells of unemployment all increase the attractiveness of work in the public sector. Pseudo-panel data provide evidence that labor market hardships, particularly when experienced at times of economic crisis and social upheaval, can shape preferences over the longer run.

Keywords: economic shocks, personal experience, public employment, political preferences

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# 1 Introduction

How do labor market hardships affect individuals' preferences as to the size and scope of government? Recognizing the limitations of cross-sectional analyses, a small but growing literature draws on longitudinal surveys to explore the extent to which experiencing such hardships leads to increased support for public social safety net programs (Margalit, 2013, 2019; Owens and Pedulla, 2014; Marten, 2019; O'Grady, 2019; Wiertz and Rodon, 2019). Whether similar effects surface with respect to other governmental roles, however, remains an open question. Here, we exploit both longitudinal and pseudo-panel data from Russia to investigate how labor market hardships change individual preferences with respect to public sector employment and employers. We present evidence that support for the public sector increases with worsening labor market circumstances in manners consistent with both immediate self-interest and longer-term learning.

In the 1980s and 1990s, a consensus took hold among global policy elites that a robust private sector, in conjunction with a government of limited size and scope, was a necessary condition for growth and development (Williamson, 1993; Kikeri and Nellis, 2004). Despite the ensuing efforts to privatize state enterprises and downsize public bureaucracies, most notably in the former communist bloc, we observe today not only that governments remain important providers of jobs (European Bank for Reconstruction and Development, 2020) but that non-elites remain distinctly ambivalent about the private sector (Stanisevski and French, 2020).<sup>1</sup> The latter, perhaps, should not surprise us. Public sector enterprises, agencies and organizations are relatively shielded from market pressures, allowing them to act as both a channel of redistribution and source of employment security during economic downturns. (Shleifer and Vishny, 1994; Shleifer, 1998; Rodrik, 2000; Dewenter and Malatesta, 2001; Alesina et al., 2000, 2001).<sup>2</sup> To offer but one noteworthy piece of evidence, a recent survey conducted across fourteen countries found that employees of private sector firms were significantly more likely to have been negatively affected by the COVID-induced global economic crisis than employees of state enterprises or other public sector entities (European Bank for Reconstruction and Development, 2020).<sup>3</sup> In the post-communist world, in particular, the view that the public sector serves as a stabilizer, offering workers greater security, particularly in times of macro-economic stress, is not difficult to understand. Under the old regime, after all, employment guarantees at state-owned firms were ironclad (Kornai, 1992).<sup>4</sup>

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<sup>1</sup>Following public opinion across ten countries through successive waves of the World Values Survey between 1989 and 2014, Stanisevski and French (2020) document that attitudes toward privatization, initially skeptical, trended toward even greater skepticism.

<sup>2</sup>In many low-income countries, the share of public sector employees increased in the wake of the global financial crisis of 2008-2009 (European Bank for Reconstruction and Development, 2020). What is more, one recent survey article argues that there has been a global resurgence of government ownership of business across the world over the past fifteen years (Megginson, 2017).

<sup>3</sup>The survey was fielded in Belarus, Egypt, France, Germany, Greece, Hungary, Italy, the Netherlands, Poland, Serbia, Spain, Sweden, Turkey and Ukraine.

<sup>4</sup>Though this is less the case today, research from the region has turned up less gross job reallocation at government enterprises than at their private sector counterparts (Bilsen and Konings, 1998; Telegdy, 2016), including in the wake of macroeconomic crises (International Monetary Fund, 2019).

Inspired by what others have demonstrated with respect to the relationship between labor market hardships and support for government welfare and redistribution programs, we hypothesize that individual-specific economic shocks increase support for public sector employment and employers. Below, both the longitudinal and pseudo-panel data suggest that unemployment does increase the relative attractiveness of the public sector in this regard. Moreover, among the currently employed, public sector preferences similarly shift with feelings of job insecurity and experiences with wage arrears.

To our knowledge, all prior studies of the determinants of support for both public sector employment and employers, draw on cross-sectional surveys, with researchers highlighting static connections between preferences and individuals' employment status, work motivations, education level, health, ideological leanings, and risk aversion, among other variables (Lewis and Frank, 2002; Norris, 2003; Kaltenthaler et al., 2006; Buelens and Broeck, 2007; Battaglio and Legge, 2009; Bonnet et al., 2012; Denisova et al., 2012; Van de Walle et al., 2015; Rosenfeld, 2020). Cross-sectional data, of course, even if rich in covariates, are limited in their ability to support causal claims; relatedly, they cannot shed light on the dynamic relationship between time varying individual circumstances and individual policy preferences. Here, we draw on longitudinal and pseudo-panel data to address these limitations. Although our fixed effects specifications do not eliminate all potential sources of bias (notably, unobserved, time-varying individual factors), by controlling for unobserved, time-invariant individual differences, they do get us closer than the existing literature to identifying the roots of attitudes toward public sector employment and employers.

Our analysis ties into several literatures of note. Recent years have witnessed both an uptick in interest in and new opportunities to study the political implications of economic shocks. One strand of this literature focuses on voting outcomes from exposure to macro-level shocks, such as from financial crises or sudden spikes in imports (Colantone and Stanig, 2018; Autor et al., 2020). A second strand, to which our article contributes more directly, highlights the relationship between personal exposure to shocks and individual preferences and voting behavior (Ahlquist et al., 2020).

A second literature concerns the underpinnings of political preferences, particularly as they relate to the size and scope of government. Some seminal work in this area highlights the importance of narrowly-construed self-interest (Meltzer and Richard, 1981; Iversen and Soskice, 2001), whereas some emphasizes the role of deep-seated ideological dispositions (Campbell et al., 1960). A third strand offers a hybrid perspective, focusing on how learning, potentially through life experience, can alter understandings of either how one's self-interest is best served or how the world can and should operate (Gerber and Green, 1999; Page and Shapiro, 1992). Inspired by this work, and in a manner we spell out more fully below, social scientists have recently begun to exploit the greater availability of longitudinal surveys to connect labor market hardships to support for government welfare programs so as to better distinguish among the competing perspectives on the roots of political preferences (Margalit, 2013, 2019; Owens and Pedulla, 2014; Marten, 2019; O'Grady, 2019;

Wiertz and Rodon, 2019).<sup>5</sup>

A not unrelated literature explores individuals' desire to work in the public as opposed to the private sector. In addition to assessing the potential contribution of a "public service motivation," a great deal of research highlights the role of self-interested, extrinsic incentives, including greater job security.<sup>6</sup> Asking "who wants to work for the government?", Lewis and Frank (2002) use U.S. General Social Survey data to demonstrate that a positive response can be explained by the desire for greater job security. Norris (2003) and Van de Walle et al. (2015) confirm the same with cross-country data from the International Social Survey Program. In a unique survey of Russian college students, Rosenfeld (2020) shows that those from families that became less well off after the collapse of communism, are much more likely to express a preference for government jobs, "perhaps because they ... seek the security of government employment."

Our study here also ties into a multi-faceted literature on the political economy of post-communist reforms, generally, and privatization, specifically. A focus on the public's economic preferences harkens back to a largely theoretical debate on the complementarity of economic and political liberalization. Przeworski (1991), for one, postulated that direct experience with reform-induced disruptions (e.g., layoffs from non-competitive firms) might shift popular support away from economic liberalization. Hellman (1998), however, expressed confidence that post-communist citizens, understanding the long-term benefits of liberalization, would tolerate short-term disruptions and persist in their preference for economic liberalization. A related and more empirically grounded literature assesses whether changing economic conditions drove post-communist electoral outcomes. Synthesizing findings from research on the first decade of post-communist reforms, Tucker (2002) describes a divergence between macro-level analyses that confirm the presence of "economic voting" and survey-based work that conclude that individuals' voting choices, after accounting for other observables, are largely unrelated to their economic circumstances. Drawing on Russian survey data from the mid-1990s, however, Richter (2006) shows that personally experiencing wage arrears diminishes one's electoral support for the pro-liberalization incumbent, Boris Yeltsin. Survey respondents' support for post-communist economic reforms, generally, has been shown to relate to deep historical factors (Grosfeld et al., 2013), years of exposure to communism (Pop-Eleches and Tucker, 2017), post-communist political liberalization (Grosjean and Senik, 2010), the design of post-communist privatization policies (Earle and Gehlbach, 2003), and business cycle effects (Grosjean et al., 2013; De Haas et al., 2016), among other factors. Support for post-communist privatization, specifically, has been linked to deep historical factors (Castañeda Dower and Markevich, 2014), post-communist governance institutions (Denisova et al., 2009) as well as a host of individual characteristics, including age, gender, education, and risk tolerance (Kaltenthaler et al., 2006).

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<sup>5</sup>Noteworthy studies drawing on single or repeated cross-sections include Giuliano and Spilimbergo (2014) and Alesina and Giuliano (2011)

<sup>6</sup>In the public administration literature, a public service motivation refers to a desire to contribute to society and the public good.

Of the two most comprehensive, cross-country analyses of preferences over firm ownership type, one draws on the post-communist experience with privatization. Exploiting a 2006 survey of 28,000 individuals in 28 countries, [Denisova et al. \(2012\)](#) demonstrate that state ownership is preferred by those possessing less human capital and those reporting having suffered greater economic hardship during the transition from communism. Moreover, their research highlights that some opposition to privatization can be understood not as distaste for private ownership per se but rather as displeasure with perceived injustices in the manner privatization had been implemented. In a comparable study, pooling 130,000 respondents between 1998 and 2008 across 17 Latin American countries, [Bonnet et al. \(2012\)](#) explore the correlates of responses to a question that asked whether “privatizations have been beneficial to the country.” Showing that opposition to privatization prevails among public sector employees, the unemployed, and the asset poor, the authors conclude that preferences “respond to a mix of absolute and relative welfare effects. Specific categories that are likely to have suffered directly from privatizations . . . do indeed express more dissatisfaction.”

As noted above, all prior studies of preferences relating to the government as an employer and/or business owner rely exclusively on cross-sectional data. In what follows, we bring longitudinal survey data to bear, allowing us to control for individual-level, time-invariant unobservable characteristics so as to more cleanly identify factors that drive these preferences. In so doing, we aim to contribute to literatures on political preference formation, generally, and preferences over government employment and employers, specifically. Our analysis proceeds as follows. Section 2 lays out our theory of the factors shaping individual preferences with respect to public sector employment and employers. Section 3 reviews Russia’s experience with reforms in the 1990s. Section 4 describes the Russian Longitudinal Monitoring Survey data that we draw on and lays out our empirical approach. Section 5 discusses results and Section 6 lays out our conclusions.

## 2 Hypothesized relationships

Individual preferences on policy matters may be rooted in ideology, self-interest, or some combination of the two ([Margalit, 2013, 2019](#)). Ideological dispositions, almost by definition, are deep-seated and resistant to change in the here and now. Often the product of socialization over an extended period, they underpin a normative worldview that stands independent of, possibly even contrary to, immediate material well-being. Preferences defined by self-interest, however, flow directly from material considerations. As such, they can be ephemeral, shifting along with changing life circumstances. The distinction between the two blurs when considering how preferences might be transformed in a more enduring manner. New information and/or changing life circumstances may occasion either a reassessment of how self-interest is best served or an embrace of a new worldview. In either case, a learning process gives rise to a new perspective that endures beyond the short run.

[Margalit \(2013, 2019\)](#) illustrates how longitudinal data, by tracking within-individual changes, enable distinctions to be drawn among self-interest, learning, and ideology as bases for preferences on

policy matters. Specifically, he studies the strength of individuals' preferences for government-provided unemployment insurance as a function of changes in their employment status. Consider a person who initially becomes unemployed and then subsequently finds a job. If the initial change in her employment status is associated with an increase in her support for government-provided unemployment insurance and the subsequent change occasions a reversion of her support to its original level, her preferences could be said to be governed by self-interest. Her support for the policy, that is, rises and falls as a function of the policy's impact on her immediate well-being. However, if her preference for government-provided unemployment insurance remains elevated even after re-employment, this more enduring change in her preferences, now de-linked from her immediate well-being, could be said to be the product of experience-based learning. Finally, the primacy of deep-seated ideological dispositions to preference formation would be consistent with a finding that neither becoming unemployed nor becoming re-employed bring about a change in her preferences. In this case, that is, changes in her personal circumstances have no bearing on her preference over a policy that would affect her personal material well-being.

Before applying Margalit's framework to preferences over government employment and employers, it bears recognizing that relative to their counterparts in the private sector, government employers, as a general rule, are less sensitive to the economic imperatives of operating under hard budget constraints, avoiding bankruptcy, and maximizing profits (Gregory and Borland, 1999). Whether to carry excess workers, locate in depressed areas, or carry out any number of objectives prioritized by public officials, government organizations and/or firms often sacrifice narrow economic goals for broader political ones. As a consequence, it is not surprising that they often behave differently with respect to labor relations. Across a variety of settings, government employers have been shown to offer greater job security and a more compressed wage structure than the private sector (Gregory, 1990; Kornai, 1992; Lehmann and Wadsworth, 2000).<sup>7</sup> Thus, in much the same way that labor market disruptions have been shown to produce a heightened appreciation for the *income security* provided by public social safety net programs, we would not be surprised to observe that they produce a stronger preference for the *employment security* offered by a public sector agency or enterprise.

Applying Margalit's framework, we describe an individual's preferences *vis à vis* public sector employment and employers as "ideologically" rooted if they remain fixed in the face of changing labor market circumstances. In this context, "ideological" can either be construed narrowly as referencing beliefs about the proper role of the state in society or broadly as applying to preferences over the characteristics that distinguish employment in the two sectors (e.g., job security, wage, required effort level). The important point is that those beliefs or preferences remain stable.

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<sup>7</sup>With respect to average pay differentials, most studies from developed countries have found a positive public sector pay premium (Bender, 1998). In some post-communist countries, including Russia in the 1990s, however, researchers identified a positive private sector pay premium (Brainerd, 2002; Gorodnichenko and Sabirianova Peter, 2007; Jovanovic and Lokshin, 2004; Lausev, 2014), which is partly offset by the public sector's more generous non-wage benefits, such as paid sick leave and medical and retirement benefits (Jovanovic and Lokshin, 2004).

Should preferences respond to self-interest and/or learning, and should public sector employers be perceived as offering greater job security, an individual experiencing a labor market shock may grow more supportive of public sector employment and employers. If such a shift in preferences is short-lived, reverting to baseline once the shock abates, then the influence of self-interest in preference formation can be said to dominate that of learning. However, if the shift in preferences endures after the shock abates, one could conclude that learning had played a role. In other words, observing the degree to which prior experience with employment-related shocks matters can help us more clearly draw a distinction between short-term self-interest and longer-term learning. The more robust the relationship between prior experiences and current preferences, the greater the role of learning. The weaker the evidence that earlier circumstances matter, the greater short-term self-interest can be said to explain preference shifts.

Margalit's (2013) empirical analysis draws on longitudinal data that spans only five years, from 2007 to 2011, limiting his ability to identify any learning effects that endure over a more extended period of time. Below, we supplement our analysis of longitudinal data by drawing on pseudo-panel data – i.e., cross-sectional data that includes a retrospective question about the timing of important life events – to assess whether accumulated experience with involuntary unemployment over a 15-year period can explain attitudes towards the possible re-nationalization of privatized firms. In so doing, we tie into a growing literature in economics that argues that life experience can exert a significant and enduring influence on preferences, beliefs, and behaviors (Malmendier and Nagel, 2011; Giuliano and Spilimbergo, 2014; Malmendier and Nagel, 2016).

Whether due to self-selection or lessons absorbed from personal experience, preferences over the public versus the private sector may depend upon the identity of one's employer. Cross-sectional survey evidence, for example, reveals that relative to private sector employees, employees of government firms and organizations prefer government ownership and fear privatization (Bonnet et al., 2012; Fernandez and Smith, 2006; Nelson et al., 1995; Roznowski et al., 2003). Recognizing this helps clarify that among the employed, preference shifts in response to labor market hardships, such as delayed payment of wages, can differ depending upon to what or to whom workers attribute the shock. If attributed to the employer and by extension to the ownership category to which it belongs, an employee of a government (private) firm or organization may express increased support for private (government) enterprise.<sup>8</sup> Alternatively, if attributed to macroeconomic forces, generally, rather than to the employer, specifically, she might express greater appreciation for government ownership, associated as it is with greater employment security. It is also, of course, possible that she might not express any change in preferences for firms of her employer's ownership type in response to a disruption in pay. This type of "loyalty," for lack of a better word, could be said to reflect

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<sup>8</sup>Individuals are unlikely to be fully informed as to how wages and benefits compare across the two types of firms. Nor are they apt to know with certainty the probabilities of job loss at the two. In estimating these numbers for the purposes of differentiating between government and private firms, they will thus place a great deal of weight on their own personal experiences. Indeed, in the nascent post-communist labor markets, we might expect the impact of personal experience to be especially large.

preferences anchored securely in an “ideological” disposition.

### 3 The Russian Context

In the Soviet Union’s planned socialist economy, shortages, including of labor, were endemic (Kornai, 1992). Jobs were guaranteed. After completing schooling, young people received work assignments directly from the state, and many could reasonably expect to remain employed with the same state enterprise or work unit until retirement. Through one’s employer, one received not just a guaranteed income, but access to a stream of additional benefits and entitlements, including vacations, health care, education, and consumer goods (Clarke, 1993).

In 1992, in the wake of the Soviet Union’s collapse, the administration of President Boris Yeltsin launched a rapid market economic reform program that, for many Russians, brought an abrupt end to this system of labor relations. Soon after liberalizing most prices in one fell swoop, the Russian government began privatizing tens of thousands of state-owned firms – “the largest privatization the world has ever seen” (Aslund, 2007) – in the hope that new profit-oriented owners would curb waste, undertake productive investment, and propel economic growth. The reforms, along with the entry of *de novo* firms, increased the private sector’s share of Russia’s gross domestic product from 5 percent in 1991 to 70 percent in 1999 (Estrin et al., 2009). Correspondingly, over this same period, the share of the workforce employed at state-owned enterprises fell from more than 80 percent to roughly one-third. However, the share of workers in the largely public education and health care sectors actually increased. Public administration employment, moreover, grew by a roughly a million (Gimpelson and Treisman, 2002). By 2005, according to data from the International Social Survey Programme, nearly half of all Russian workers were employed in the public sector: 33.9 and 13.6 percent, respectively, in non-service and service occupations (Houston, 2014).<sup>9</sup>

To the surprise of market liberalization advocates, real per capita GDP declined almost 40 percent between 1991 and 1998. Although unemployment, starting from near zero, climbed to thirteen percent over this period, much of the labor market adjustment to the “transformational recession” occurred through a decline in average real wages, a result of high rates of inflation and frequently delayed wage payments (Gimpelson and Kapeliushnikov, 2011).<sup>10</sup> So-called “wage arrears” increased dramatically in the 1990s.<sup>11</sup> Over half of employed Russians reported suffering from them in 1998, up from roughly a third in 1994 (Desai and Idson, 2000), with the variation across individuals a

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<sup>9</sup>Public services are those that are “vital for human health, safety and welfare,” such as health care and educational professionals.

<sup>10</sup>In additional evidence that price as opposed to quantity became the preferred lever of adjustment, Lehmann et al. (1999) conclude that that involuntary layoffs constituted only a small part of job separations. The duration of work hours, however, for the average worker was cut by about 12 percent between the early and mid-1990s as firms shifted some workers into unpaid or partially paid leaves.

<sup>11</sup>Boeri and Terrell (2002) highlight two distinct patterns of labor market adjustment to the post-liberalization decrease of aggregate demand. In Eastern Europe, increasing unemployment absorbed most of the shock; in the former Soviet Union, including Russia, declining real wages bore the shock’s brunt.



function more of firm-level effects (e.g., ownership, location, size, founding date) than individual characteristics (Earle and Sabirianova, 2002).<sup>12</sup>

Evidence from the latter half of the 1990s points to higher average wages and a lower frequency of wage arrears at private firms.<sup>13</sup> Sharumina (2013) documents a similar relationship for the early 2000s, showing that after controlling for observable characteristics state employees received 30 percent less in income than those in similar positions in the private sector. The public sector, however, offered on balance more generous non-wage benefits and laid off workers at a lower frequency (Gimpelson and Lippoldt, 1999; Brown and Earle, 2002; Earle and Sabirianova, 2002; Jovanovic and Lokshin, 2004; Remington, 2011; Rosenfeld, 2021).<sup>14</sup>

The Yeltsin government’s reform program, including its privatization drive, was quite unpopular in the 1990s (Debardeleben, 1999) and remained so even after growth was restored in 1999, the year Vladimir Putin became President.<sup>15</sup> This was not the reaction that Yeltsin and his advisors had anticipated. They purported, in fact, to have designed privatization to make an ally of the Russian public (Boycko et al., 1995; Blasi et al., 1996). By selling for nominal fees large stakes in government firms to their workers and making additional shares available in exchange for vouchers freely distributed to all citizens, they hoped to create a large pro-reform constituency. But despite their initial intentions, much of privatization, particularly in the popular mind, came to be associated with both the loss of economic security and corrupt deals that enriched a small oligarchic elite (Debardeleben, 1999; Denisova et al., 2012).

## 4 Data and Methodology

### 4.1 Data

We conjecture that individuals who experience labor market hardships are more likely to express a preference for government employment and employers. To test this hypothesis, we draw on Phase II of the Russian Longitudinal Monitoring Survey (RLMS), a series of nationally representative

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<sup>12</sup>Individual characteristics positively correlated with arrears included age, less schooling, longer job tenure, and being male.

<sup>13</sup>This has been explained as the result of the private sector having “poached” the best workers (Boeri, 1998), public sector workers being able to extract payments informally as bribes (Gorodnichenko and Sabirianova Peter, 2007), private sector employees demanding a premium for receiving less social benefits or confronting more risk (Jovanovic and Lokshin, 2004), or managerial rent-sharing strategies (Brainerd, 2002)

<sup>14</sup>The trade-off between the greater earning opportunities in the private sector and the greater security provided by the public sector appears to have persisted. A 2014 report of the Institute of Sociology at the Russian Academy of Sciences shows that having a formal labor contract with explicit social benefit guarantees remains much more common in the public than in the private sector (Institute of Sociology, 2014).

<sup>15</sup>According to a national poll taken in January of 2000, only 8 percent of respondents reported having a positive view of the “Gaidar reforms of 1992;” 77 percent reported having a negative view and the remainder said that it was difficult question to answer.

surveys designed to track the well-being of households and individuals in the Russian Federation.<sup>16</sup> A collaboration of the Carolina Population Center at the University of North Carolina at Chapel Hill, the Russian Academy of Science’s Institute of Sociology, Demoscope, and the National Research University Higher School of Economics, the surveys have been conducted every year but two (1997 and 1999) since 1994. Launched with a target sample of roughly 4,000 households, interviewers initially returned to the same dwellings to construct the panel. Beginning in 1998, however they followed individuals and households if they moved, and they also attempted to find those who had moved in earlier rounds (Kozyreva et al., 2016).

Our analysis of the longitudinal data draws on five rounds between 1994 and 2002 – i.e., 1994, 1996, 1998, 2000, and 2002 – the latter four of which are the only ones in the RLMS to ask the question used to generate our dependent variable: “Do you agree or disagree that it is better to work for a private owner than for the government: more organized and higher pay?” The answers range from 1 to 4: “completely agree,” “agree,” “disagree,” and “completely disagree.” Combining “completely agree” and “agree,” on the one hand, and “disagree” and “completely disagree,” on the other, we create a dichotomous variable capturing preference for government employers that equals 1 for the “disagree” and “completely disagree” responses. So measured, Table 1 shows that just over half of respondent-year observations indicate that it is better to work in the state sector. Generally, older Russians are more supportive of the state sector. And for Russians as a whole, we observe a secular increase over time such that by 2002, over 60 percent of Russians report that it is better to work in the state sector.<sup>17</sup>

Respondents can be categorized as outside the labor force, unemployed (i.e., looking for a job at the time of the survey), or employed. Respectively, these groups represent 42, 8, and 50 percent of respondent-year observations. Because our interest lies in the effect of labor market hardships on preferences for government employment, we restrict analysis to the latter two groups (i.e., those in the labor force) at the time of the survey.<sup>18</sup> Among the employed, half report working for an exclusively government-owned employer, whereas the remainder are divided, almost equally, into those that work for an organization owned exclusively by private individuals and/or firms and those that work for an organization of mixed or unspecified ownership.

We consider the effects of three types of labor market hardships: an expression of concern about job security, experiences with wage arrears, and spells of unemployment. With respect to their “primary” job, respondents were asked “How concerned are you that you might lose your job?” In our subsequent regression analysis, we distinguish between responses that designate being *insecure*

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<sup>16</sup>Phase I, launched in 1992, was neither a panel, nor did it provide a representative profile of the Russian population.

<sup>17</sup>We only retain respondents in our data if they appear in multiple waves.

<sup>18</sup>The official retirement ages for men and women at this time were 55 and 60, respectively. (For both genders, the working age population begins at 18-years old.) But as can be confirmed in the RLMS data and has been noted elsewhere, it was relatively common for Russians to work well beyond these ages (Kolev and Pascal, 2002; Remington, 2011).

– i.e., “very concerned” in response to the question – from less concerned responses. So designated, roughly a third of respondent-year responses are *insecure*. A similar share of respondent-year observations are for workers whose primary employer is in *arrears*, owing them money that “has not been paid on time.” The third labor market hardship refers to those that are *unemployed* – i.e., “temporarily not employed ... and looking for a job.”<sup>19</sup> With respect to the unemployed, the longitudinal data do not allow us to distinguish between those that may have left an earlier employer of their own volition and those who were laid off.<sup>20</sup> Figure 1 captures temporal variation in these three hardships. Not surprisingly, they peak as Russia’s post-communist recession reaches its nadir in the second half of the 1990s. With growth restored after 1999, job insecurity, the incidence of arrears, and the rate of unemployment all decline.

Our analysis below supplements the longitudinal data from 1994 to 2002 with pseudo-panel data collected in 2006. Unique in the RLMS, this one round includes a retrospective question about labor market histories extending back to 1991. Respondents were specifically asked in which years did they “lose a job because the enterprise where they worked either closed down or laid off personnel.” Figure 2 shows the percentage of all respondents reporting a hardship of this sort.

Unfortunately, unlike the earlier waves of the RLMS discussed above, respondents in 2006 were not asked whether they thought it better to work in the public or the private sector. They were asked, however, questions touching on policy with respect to former state-owned enterprises that had been privatized. One asked, “What should be done to earlier-privatized state enterprises?” As shown in Table 2, 47 percent agreed that they should be “returned to the state (nationalized).”<sup>21</sup> A second question asked respondents to select from a long list the three policies to best address inequality. “Return private enterprises to the state” was selected by 25 percent of all respondents. More popular options included: “implement price regulation,” “make good education universally available,” and “enforce compliance with laws.” Although these questions do not capture preferences with respect to public sector employment, they do reflect sentiments toward public sector employers. We feel that it is not unreasonable to draw comparisons between answers to them (and how they relate to labor market hardships) and the answers to the question we use as the dependent variable in the longitudinal analysis. As with that earlier question, older Russians evince a stronger preference for the public over the private sector.

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<sup>19</sup>This definition excludes students, retirees, students, retirees, the disabled, and those otherwise not looking for a job.

<sup>20</sup>Evidence from the Russian Labor Force Survey suggests that the involuntary unemployment was more rare than voluntary transitions from employment (Lehmann et al., 1999).

<sup>21</sup>Alternative responses include “left in the hands of current owners,” “left in the hands of current owners provided they pay a just price,” and “returned to the state and then re-privatized more transparently than had been the case initially.”

## 4.2 Methodology

### 4.2.1 Shorter term

We exploit the panel structure of the RLMS to run linear fixed effects models of the following form:

$$y_{irt} = \beta_0 + \beta_1 E_{irt} + \beta_2 X_{irt} + \alpha_i + \gamma_t + \beta_3 R_r + u_{irt} \quad (1)$$

The dependent variable,  $y_{irt}$ , is a binary that takes the value of 1 if the respondent believes working for a government employer is better than working for a private one.<sup>22</sup>  $E_{irt}$  is a vector of binary variables representing individuals' labor market circumstances.  $X_{irt}$  is a vector of additional time varying controls: dummies for married, divorced, and widowed, and a scaled measure of subjectively determined health.<sup>23</sup> The individual fixed effect,  $\alpha_i$ , ensures that the estimated associations reflect within-individual relationships, thus controlling for the possibility that people who are more likely to find themselves in certain labor market circumstances have different benchmark preferences.<sup>24</sup> A year fixed effect,  $\gamma_t$ , controls for time-specific factors that have the same influence on all individuals. Finally, to disentangle egoistic and sociotropic preferences, we include a vector of time-varying regional controls,  $R_r$  that captures the PSU-level aggregates of labor market indicators in  $E$  as well as the region-level difference between the average wage in the private and state sectors.

$E_{irt}$  varies across specifications. Since prior cross-sectional analysis confirm that one's preference for employment in the public or private sector is correlated with whether one currently works in one or the other, all models include dummies for primary employment in a government firm or organization, a private firm, or a firm of mixed (or unspecified) ownership (Van de Walle et al., 2015). All models also include a dummy variable for holding a second job based on the hypothesis that those with a second job will, all else equal, feel less insecure about losing their primary job and thus be more inclined toward the private sector.  $E_{irt}$  may include dummies entered directly for *insecure* or *arrears*. In some specifications, however, these dummies are interacted with those for employment with a government firm or organization, with a private firm, and with a firm of mixed ownership. These interaction terms reveal whether, conditional on employment with a firm of a particular ownership type, preferences shift in response to suffering a disruption in pay and/or hours. Hardships imposed on employees of private (state) firms, we hypothesize, will produce more favorable opinions of state (private) firms.

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<sup>22</sup>Some people are in professions that are primarily in either the private or the state sector – e.g., teachers and doctors are primarily in the latter. Opportunities for them to switch to the other sector will be more limited unless they change professions.

<sup>23</sup>The *health* variable is based on the response to the question “how would you evaluate your health?” In the original questionnaire, the response was on a scale from 1 to 5, where 1 was “very good” and 5 was “very bad.” For a more intuitive interpretation of the coefficient, we re-scaled it for higher score to signify better health.

<sup>24</sup>Owens and Pedulla (2014) argue that by using longitudinal data in this way, any measured relationship between shocks to material well-being and attitudes speaks to the importance of self-interest since “the individual fixed effects net out any deep-seated ideology or values that are presumed to be *stable* within individuals over time.”

A couple of caveats are in order. First, since one’s employment status is not randomly assigned, our regressions may suffer from endogeneity. A person experiencing wage arrears or concern about losing a job may, for instance, switch to one in another sector, and/or find a second. Our fixed effects specifications, moreover, are unable to control for either individual characteristics that change over time or for macro-level factors that impact respondents differently. For such reasons, we hesitate to make any causal claims. Relatedly, we note that because the regressions include individual fixed effects, the coefficients are identified exclusively by people’s switches across categories over time and these “switchers” may be a special subsample. Finally, though the RLMS attempted after 1998 to follow people to other addresses, those attempts may not have been fully successful; there may thus be a sample bias in favor of persons staying at the same address over time.

In a first round of specifications, we restrict analysis to the sub-sample of employed individuals so as to focus on hardships connected directly to a current job. In a second round, we expand the sample to encompass the entire active labor force, including in  $E_{irt}$  a dummy for being *unemployed*.

If preferences are driven primarily by deep-seated “ideological” predispositions – either conceived of as deep-seated beliefs about the proper role of the state in society or broadly understood as stable preferences over job characteristics associated with either the public or private sector – then labor market hardships should not shift them. However, if self-interest and/or learning effects are more powerful, we expect to find that labor market disruptions shift preferences. For instance, much as prior research identifies a self-interest-related link between becoming unemployed and expressing greater support for government welfare programs, we anticipate a connection between becoming unemployed and expressing greater support for employment in the public sector since, relative to the private sector, it is known to offer greater employment stability. Similarly, an individual may shift his or her preferences in response to wage arrears or feelings of greater job insecurity. Whether such hardship-induced shifts in preferences are due to *self-interest* or *learning*, however, cannot be deduced from the these specifications alone.

We initially ask whether *current* hardships in the labor market translate into a shift in preferences. In subsequent “two-period” specifications, we deploy a modified  $E_{irt}$  that includes controls for labor market hardships across consecutive RLMS rounds. Introducing these “transitions” (e.g., employed-to-unemployed) as controls provides us with some traction in distinguishing between self-interest and learning effects. If unemployment does indeed heighten one’s support for the proposition that employment in the government sector is better, that effect could result from narrow concerns of material self-interest or through learning and a change in one’s worldview. If preferences shift solely in response to one’s immediate material circumstances, self-interest would dictate that the employed-to-unemployed transition (i.e., becoming unemployed after being employed in the prior round) would have a different effect than unemployed-to-employed. However, if unemployment gives rise to learning – i.e., adopting a new perspective based on lived experience – these two transitions, both of which involve unemployment, could have a similar effect on preferences.

Fixed effects specifications of the sort estimated here neither control for individual characteristics that change over time nor for macro-level changes that impact respondents differently. So although longitudinal data enable accounting for time-invariant unobserved characteristics across individuals, we cannot make strong causal claims.

#### 4.2.2 Longer term

Building on the longitudinal analysis of within-individual effects, we explore cross-sectional differences in labor market histories over a longer period. Using the retrospective question highlighted above from the 2006 RLMS, we observe whether over a 15-year time horizon, greater experience with involuntary unemployment correlates with views about re-nationalizing former state-owned enterprises. The dependent variable for this analysis combines responses to two related questions: “what should be done, in general, with earlier privatized state enterprises?” and “what can be done in order to reduce income inequality?” We use the first to generate a binary variable that takes the value of “1” if respondents answered “returned to the state (nationalized)”; the second is used to generate a binary variable that takes the value of “1” if respondents included “return enterprises to the state” as one of up to three favored responses selected from a long list. We combine these two variables, which have a pairwise correlation coefficient of 0.27, to generate two separate variables. One, we apply factor analysis to generate the first principal component of the two.<sup>25</sup> Two, we sum the binary variables to get a new variable that takes the value of “0,” “1,” or “2.”

We operationalize employment history over fifteen years in two ways. First, we assess the impact of specific blocs of time by creating three five-year bins – 2001-2005, 1996-2000, and 1991-1995 – and calculating the average number of years in each in which a respondent reports having lost a job because the enterprise where she/he worked “either closed down or laid off personnel.” Whereas, in some contexts, more recent spells of unemployment have been shown to matter more than more distant ones in terms of explaining beliefs in the present (Alesina and Giuliano, 2011), the 1990s in Russia, a period over which GDP collapsed by roughly 40 percent, has been characterized as a unique decade that was critical to forging Russians’ worldviews (Alexievich, 2017; Sharafutdinova, 2020; Pyle, 2021). The coincidence of the economic shock with the introduction of new institutions left indelible impressions as to the desirability of those new institutions (e.g., markets and democracy). With respect to private property, the landscape changed dramatically. Between 1991 and 1999, the share of GDP accounted for by the private sector expanded from 5 to 70 percent in good part because large swaths of state-owned industry were sold off and/or given away. Many privatized firms responded to the newly competitive environment by laying off workers. By 1998, the formal unemployment rate stood at over 13 percent. Extrapolating from the literature that has demonstrated a link between the lived experience of the “wild 1990s” and long-lasting beliefs, it is possible that being laid off involuntarily at that time left an enduring impression as to the relative desirability of state versus private ownership of industry.

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<sup>25</sup>We use *Stata’s factor* command.

Our second approach for formalizing labor market experience over this “longer run” draws on the weighting function applied by [Malmendier and Shen \(2019\)](#). Specifically, experience with labor market hardships circa  $t=2006$  can be measured as a weighted sum of labor market hardships over the prior fifteen year period:

$$E_t = \sum_k^{t-1} w(\lambda, t, k) W_{t-k} \quad (2)$$

where  $W_{t-k}$  represents labor market hardship in year  $t - k$ . Weights  $w$ , per the parameterization of [Malmendier and Shen \(2019\)](#), are

$$w(\lambda, t, k) = \frac{(t - k)^\lambda}{\sum_k^{t-1} (t - k)^\lambda} \quad (3)$$

As  $\lambda$  increases, the weighting scheme gives greater emphasis to more recent experiences, with that emphasis increasing in the value of  $\lambda$ . In our analysis, we use  $\lambda = 1$  and  $\lambda = 0.5$ . In all specifications,  $t = 2006$ ; and, to capture a 15-year horizon,  $k = 1991$ .<sup>26</sup>

We estimate the following equation:

$$y_{ir} = \beta_0 + \beta_1 E_{ir} + \beta_2 X_{ir} + \gamma_r + u_{ir} \quad (4)$$

The dependent variable,  $y_{ir}$ , captures support for re-nationalization by combining the respondent’s beliefs that “earlier-privatized state enterprises” should be “returned to the state (nationalized)” and that one of the best ways to reduce inequality in Russia is to “return private enterprises to the state.”  $E_{ir}$  is the respondent’s measure of accumulated labor market hardships, defined as either the average number of years in three separate half-decade periods in which the respondent reported having been laid off involuntarily, or as the weighted sum of those experiences over the prior fifteen year period.  $X_{ir}$  is a vector of individual controls, and  $\gamma_r$  is a PSU-level fixed effect.<sup>27</sup> Since we are interested in the relationship between historical spells of involuntary unemployment and present beliefs, we restrict analysis to those that are employed at the time of the survey.

<sup>26</sup>In their investigation on how labor market histories shape subsequent consumption spending, [Malmendier and Shen \(2019\)](#) apply  $\lambda = 1$ .

<sup>27</sup>Individual controls include gender, age, dummies for completing vocational or university schooling, and four dummies to capture employment status at the time of the survey: unemployed, employed in the private sector, employed in the public sector, and employed by a firm of mixed or unspecified ownership.

## 5 Results

### 5.1 Labor market hardships and preferences in the shorter run

Table 3 presents results from the version of equation (1) run exclusively on employed individuals. It generally confirms that preferences relate to labor market hardships in the short run in the manner hypothesized. For one, when individuals feel more insecure about being able to keep their primary job, they are more likely to believe that a government firm or organization is a better employer than one in the private sector. Specifically, a worker who reports feeling insecure is 2.5 percentage points more likely to want to work for the government than for a private owner. On comparison of columns (1) and (2), this appears to be a general relationship, rather than being specific to workers at firms or organizations of a particular ownership type.

Columns (3) and (4) suggest that responses to arrears are a function of the type of firm or organization in which respondents are employed. Notably, when owed back pay, those working for private sector firms are more positively disposed than they otherwise would be toward the public sector. A reciprocal response, however, is not observed for those working for a public sector firm or organization. We think it plausible that this asymmetry stems from the relative inexperience workers have with the private sector, which at the beginning of the 1990s accounted for only a very small share of GDP. As the private sector expanded rapidly in the mid-1990s, a single instance of delayed wages from a private employer could have a large learning-induced effect on one's beliefs about the probability of future hardships in the sector. On the other hand, since most Russians in the labor force between 1994 and 2002 would have had experience before the market liberalizing reforms being paid on time by state employers, any single instance of delayed payments involving a state employer might not substantially alter their beliefs about the probability of experiencing hardships in the sector in the future.<sup>28</sup>

Expanding the sample to the entire active labor force, we see in column (2) of Table 4 that unemployment in the current period is associated with increased support for public sector employment relative to being employed by a firm of mixed ownership. Specifically, becoming unemployed increases one's support for working for a government employer by 2.8 percentage points. In column (3), we continue to observe in this expanded sample that private sector arrears heighten support for public sector work.

Tables 3 and 4 thus show that preferences, far from being stable, shift with changing labor market experiences. Either because of self-interest or learning, individuals respond in intuitive ways to employment-related hardships. Feeling more insecure in one's job, experiencing wage arrears, and

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<sup>28</sup>This interpretation resonates with recent research showing that the effects of a given economic shock weighs on the beliefs of younger more than older adults (Malmendier, 2021).



becoming unemployed all induce greater appreciation for the government as an employer.<sup>29</sup> These results complement earlier findings, also based on longitudinal data, that labor market hardships produce greater support for more robust government redistribution and welfare programs (Margalit, 2013; Marten, 2019; Wiertz and Rodon, 2019). In both cases, economic shocks shift out the demand for a government of greater size and scope.

Table 5 presents results from the two-period version of equation (1). In the first column, the model is run on only those that are employed, with the omitted category being a feeling of job security across consecutive periods. In the second column, all of those active in the labor force are considered, with the omitted category being employed in consecutive periods. Controls have been included for the ownership of the firm(s) employing the individual over the two periods.

Column (1) shows that relative to successive periods of job security, feeling “insecure” in back-to-back periods increases the preference for work in the government sector by 5.0 percentage points. The difference between the insecure-to-insecure and the secure-to-insecure transitions is, moreover, statistically significant at the 1 percent level. That is, consistent with learning as opposed to immediate self-interest, this suggests that preferences in the current period can in part reflect one’s labor market status in a prior period.

Column (2) shows that relative to having been employed in successive periods, the three transition combinations that involve at least one period of unemployment are associated with being more likely to agree that it is better to work for a government employer.<sup>30</sup> The numbers of these transitions in our data, however, are relatively few so the coefficients are not precisely estimated.<sup>31</sup> In sum, while Table 5 builds on evidence from Table 3 and Table 4 that preferences respond to current-period labor market status, it also offers suggestive evidence that prior-period status plays a role as well.

## 5.2 Labor market hardships and preferences in the longer run

In the foregoing analysis, we restricted the temporal focus to short run relationships. Pivoting now to the pseudo-panel data, we adopt a fifteen-year perspective to aid in distinguishing preference shifts induced by self-interest and those that reflect learning and a more enduring change in preferences and beliefs. That is, if the shifts we observed above were due exclusively to short-term self-interest, we would expect that upon controlling for current labor market circumstances, one’s prior experience with labor market hardships should not matter for current preferences.

From the 2006 wave of the RLMS, we focus on the relationship between the answer to a retrospec-

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<sup>29</sup>Splitting the sample by gender, we find that the relationship between feeling insecure in one’s job and one’s preference to work for a state employer is stronger for women than for men. The results with respect to arrears are similar for men and women.

<sup>30</sup>Splitting the sample by gender, we find that the highlighted relationships are stronger for women than for men.

<sup>31</sup>80 percent of the transitions in the data are “employed to employed.” The remainder are roughly evenly split among “unemployed to employed,” “unemployed to unemployed,” and “employed to unemployed.”

tive question addressing historical experiences with involuntary layoffs, and two preference-related questions germane to our interests. For columns (1)-(3) of Table 6, the dependent variable is the first principal component of two binary variables that represent positive responses to the following two questions: (1) should earlier privatized state enterprises be returned to the state? and (2) to reduce income inequality, should enterprises be returned to the state? For columns (4) - (6), the dependent variable is the sum of those same two binary variables.

In columns (1) and (4), we observe that the experience of involuntary unemployment in the latter half of the 1990s is positively and statistically significantly associated with supporting the re-nationalization of former state-owned enterprises in 2006. More recent labor market hardships have less of an impact; there is a positive association, that is, but it is statistically insignificant. Together, these results are not inconsistent with the potential for learning effects to be relatively greater at critical historical junctures (Malmendier and Nagel, 2011; Pyle, 2021). In the late 1990s, in the wake of the massive sell-off and giveaway of state-owned enterprises in the middle of the decade, Russians appear to have been particularly attuned to the employment-related effects coincident with the expansion of the private sector. Negative individual experiences at that time seem to have left an enduring impression.

In the other four columns, we observe further evidence of learning from prior labor market hardships. The weighted sum of years in which the individual experienced involuntary unemployment explains a stronger preference for re-nationalization. This finding is robust to changes in the weighting scheme and to changes in how the dependent variable is defined.

## 6 Conclusion

Over the past ten years, in part due to the global financial crisis, the political economy literature has devoted increasing attention to the way in which economic shocks shape opinion about the proper size and scope of the public sector. This research, however, has been limited by the small number of longitudinal data sets that permit a parallel tracking of relevant preferences and individual economic circumstances. Largely as a consequence, attention has focused rather narrowly on the question of how economic shocks shape attitudes toward public social safety net programs. Governments, of course, have other tools at their disposal to redistribute income and otherwise insulate individuals from adverse economic shocks: public sector employment (and employers) for one. Our analysis here confirms that much as prior research has demonstrated a connection between labor market shocks and support for more generous social safety net programs, similar hardships may, in some contexts, strengthen preferences for public sector employment (and employers).

Margalit (2013, 2019) persuasively argues that longitudinal survey data, in addition to potentially helping shed light on the dynamic relationship between labor market experiences and attitudes, allow us to assess the relative contributions to the formation of political preferences of self-interest,

“ideological” dispositions, and learning effects. Given the robust evidence from the longitudinal data that labor market circumstances do shift preferences, we feel confident concluding that “ideological” predispositions alone are insufficient in explaining variation in preferences over the size and scope of the state. Distinguishing between self-interest and learning, however, is a bit more difficult. Our analysis does, however, turn up evidence, in both longitudinal and pseudo-panel settings, that the second of these two, the enduring lessons absorbed from labor market hardships, plays a non-trivial role.

Figure 1: Labor market difficulties (longitudinal data)

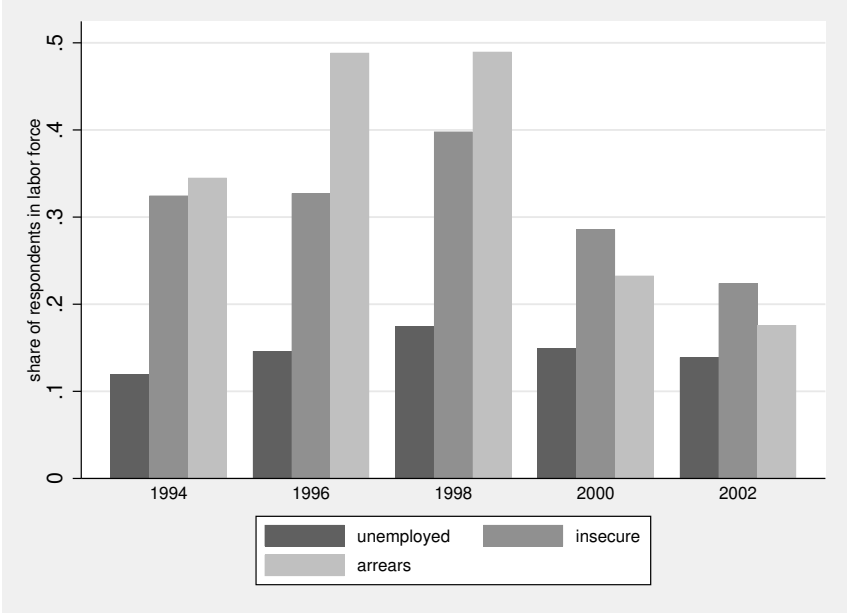


Figure 2: Lost job because enterprise closed or conducted sudden reductions in staff (pseudo-panel data)

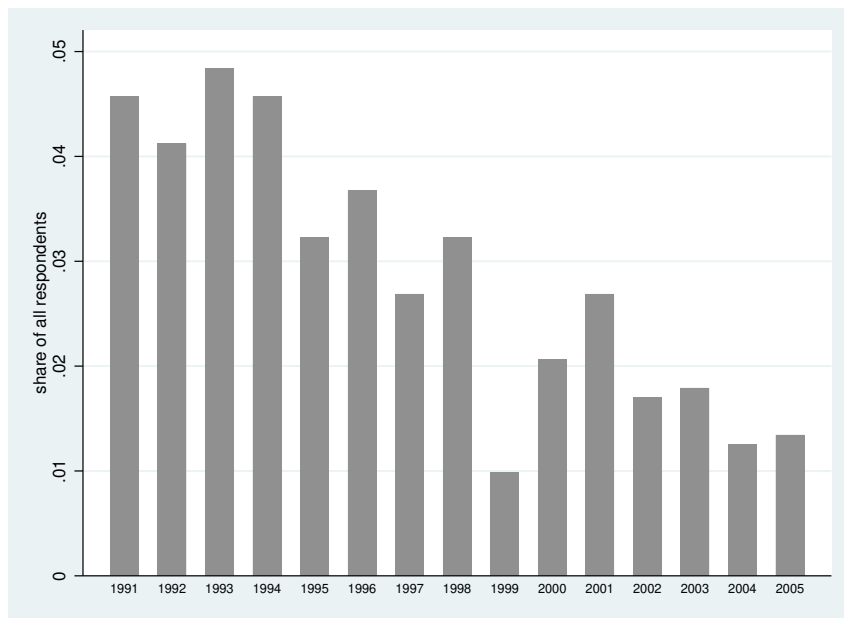


Table 1: Summary statistics for those in labor force (longitudinal data)

	count	mean
better to work for government than private owner	15,275	0.52
insecure	15,275	0.31
arrears	15,275	0.35
unemployed	15,275	0.15
state job	15,275	0.42
private job	15,275	0.19
mixed job	15,275	0.23
second job	15,275	0.04
age	15,275	38.59
female	15,275	0.50
married	15,275	0.67
divorced	15,275	0.09
widowed	15,275	0.04
health	15,275	3.28

Years of coverage: 1994, 1996, 1998, 2000, 2002.

Note: The variable *health* is a response to the question "how would you evaluate your health?" In the original questionnaire, the response was in a scale from 1 to 5, where 1 was "very good" and 5 was "very bad." For a more intuitive interpretation of the coefficient, we re-scaled it for higher score to signify better health.

Table 2: Summary statistics (cross-section data)

	count	mean	sd
renationalize and keep in state hands	1116	0.47	0.50
renationalize to reduce inequality	1116	0.25	0.43
unemployed	1116	0.00	0.00
state job	1116	0.45	0.50
private job	1116	0.33	0.47
mixed job	1116	0.22	0.42
vocational school completed	1116	0.28	0.45
university completed	1116	0.27	0.45
age	1116	49.78	6.83
female	1116	0.53	0.50
married	1116	0.64	0.48
divorced	1116	0.14	0.35
widowed	1116	0.09	0.28
health	1116	3.14	0.57
relative economic wellbeing	1116	3.80	1.38

Year of coverage: 2006.

Note: The variable *health* is a response to the question "how would you evaluate your health?" In the original questionnaire, the response was in a scale from 1 to 5, where 1 was "very good" and 5 was "very bad." For a more intuitive interpretation of the coefficient, we re-scaled it for higher score to signify better health. The variable *relative economic wellbeing* is a measure of how one perceives their own economic welfare on a scale of 1 to 9, with 1 being the poorest and 9 being the richest.

Table 3: Better to work for a government employer (employed portion of labor force)

	(1)	(2)	(3)	(4)	(5)
insecure	0.025*				0.026*
	(0.013)				(0.013)
arrears			0.005		
			(0.013)		
insecure X state job		0.019			
		(0.016)			
insecure X private job		0.025			
		(0.028)			
insecure X mixed job		0.037*			
		(0.021)			
arrears X state job				-0.007	-0.007
				(0.014)	(0.014)
arrears X private job				0.059**	0.059**
				(0.028)	(0.029)
arrears X mixed job				-0.017	-0.016
				(0.025)	(0.026)
state job	0.073***	0.079***	0.073***	0.070***	0.070***
	(0.019)	(0.021)	(0.019)	(0.018)	(0.017)
private job	-0.010	-0.005	-0.010	-0.036*	-0.035*
	(0.016)	(0.021)	(0.016)	(0.019)	(0.019)
second job	-0.063**	-0.063**	-0.065**	-0.065**	-0.063**
	(0.030)	(0.030)	(0.030)	(0.030)	(0.029)
Observations	12,962	12,962	12,962	12,962	12,962
R-squared	0.059	0.059	0.059	0.060	0.061
Number of individuals	5,931	5,931	5,931	5,931	5,931
Other individual controls	Yes	Yes	Yes	Yes	Yes
Spouse labor market controls	Yes	Yes	Yes	Yes	Yes
Regional and PSU controls	Yes	Yes	Yes	Yes	Yes
Year and individual fixed effects	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1.



Table 4: Better to work for a government employer (entire labor force)

	(1)	(2)	(3)
unemployed	-0.002 (0.011)	0.028* (0.014)	0.031* (0.016)
state job		0.082*** (0.019)	0.084*** (0.018)
private job		-0.005 (0.015)	-0.028 (0.017)
arrears X state job			-0.016 (0.013)
arrears X private job			0.061** (0.028)
arrears X mixed job			-0.013 (0.024)
insecure			0.020 (0.012)
Observations	15,275	15,275	15,275
R-squared	0.047	0.051	0.054
Number of individuals	6,575	6,575	6,575
Other individual controls	Yes	Yes	Yes
Spouse labor market controls	Yes	Yes	Yes
Regional and PSU controls	Yes	Yes	Yes
Year and individual fixed effects	Yes	Yes	Yes

Robust standard errors in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table 5: Better to work for a government employer (transitions)

	(1)	(2)
insecure to secure	-0.009 (0.018)	
secure to insecure	0.014 (0.018)	
insecure to insecure	0.050*** (0.018)	
unemployed to employed		0.044 (0.028)
employed to unemployed		0.046 (0.028)
unemployed to unemployed		0.031 (0.040)
Observations	9,803	12,198
R-squared	0.061	0.054
Number of individuals	4,767	5,665
Controls for ownership of employer	Yes	Yes
Other individual controls	Yes	Yes
Spouse labor market controls	Yes	Yes
Regional controls	Yes	Yes
Year and individual fixed effects	Yes	Yes

Robust standard errors in parentheses.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table 6: Privatized enterprises should be returned to the state  
(involuntary employment experiences over 15 years)

	(1)	(2)	(3)	(4)	(5)	(6)
2000 - 2005, average hardships per year	0.217 (0.448)			0.084 (0.315)		
1996 - 2000, average hardships per year	0.826** (0.390)			0.628** (0.285)		
1991 - 1995, average hardships per year	-0.013 (0.318)			-0.043 (0.227)		
lambda=1.0		0.985** (0.403)			0.641** (0.282)	
lambda=0.5			1.055** (0.415)			0.688** (0.294)
Observations	1,116	1,116	1,116	1,116	1,116	1,116
R-squared	0.164	0.162	0.163	0.167	0.165	0.165
Individual controls	Yes	Yes	Yes	Yes	Yes	Yes
PSU fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Note: For columns (1)-(3), the dependent variable is the first principal component of two binary variables that represent positive responses to the following two questions: (1) should earlier privatized state enterprises be returned to the state? and (2) to reduce income inequality, should enterprises be returned to the state? For columns (4) - (6), the dependent variable is the sum of those same two binary variables. The models are run on those respondents that are at least 40 years of age in 2006 and employed.

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