

Job Rights in Russian Firms: Endangered or Extinct Institution?

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Working Paper Number 128 January 1998

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September 1996 revised August 1997 revised January 1998

Funding for data collection provided by the University of Michigan's William Davidson Institute (1995), the University of Pittsburgh's BURK program (1994, 1995), the International Research and Exchange Board (1995), and Michigan State University's Center for International Business Education and Research (1992). Funding for research assistance was provided by a Michigan State University All-University Research Initiation Grant (1995). I thank Cecelia Howell, and numerous Russian colleagues, for their invaluable assistance in completing the project, as well as Gary Krueger, Bob Stuart and an anonymous referee for comments on an earlier version of the paper.

ABSTRACT

Did the Soviet institution of job rights, guaranteed employment despite individual or firm performance, survive the initial stages of transition in the Russian economy? This paper employs survey data collected in 1992 and 1995 to evaluate the extent to which job rights continued to influence the behavior of firms and households three years after Russia initiated its reform program. Using a variety of measures, the results indicate that, while job rights might have been an endangered institution in 1995, the institution does not appear to have been rendered extinct.

JEL Classification: P3, J4

Key Words: job rights, employment, Russian transition economy

Executive Summary

Russia's transition from plan to market clearly puts job rights at risk as an endangered institution. Survey data collected from employees in Moscow, Taganrog, and Volgograd are used here to evaluate the extent to which the Soviet institution of job rights continued to characterize the Russian labor market in 1995. The simplest approach uses a proxy variable -- perception of job security -- and tests for a significant difference in the mean value over time. It is not possible using this variable, however, to distinguish between responses that reflect an employee's desire to seek higher wages elsewhere and responses that reflect anticipated release associated with adverse conditions at the workplace. Consequently a second approach involves analysis of a series of variables drawn, in part, from Granick's (1987) examination of the economic conseequences of job rights in the Soviet economy. Variables that may reflect how individuals respond to job rights in their employment search and selections processes, as well as their perception of how job rights might influence factors important to career advance, also are included. Finally, variables which attempt to caputre Russian managers' efforts to maintain employment at their firms are examined. The results indicate that three years after the initiation of Russia's transition from plan to market, the Soviet legacy of job rights was not extinct in the workplaces included in this analysis. Alternative measures of job rights do suggest relatively strong perceptions of less employment security in 1995, however. In Appendix A, a "job rights index" is developed and applied to these survey data, and, for comparative purposes, applied as well to survey data collected in 1983 under the auspices of the Soviet Interview Project.

Russia initiated the transition from plan to market in January 1992 with the liberalization of domestic prices, the implementation of a program to privatize state-owned enterprises and permit the creation of privately-owned firms, the removal of planners from production and distribution decisions, the decentralization of foreign trade activities, and the adoption of legal codes that permitted unemployment, as well as unemployment compensation (*Voprosy ekonomiki*, no 2, February 1993, Millar 1994, Aslund 1995, Azarova 1995). These reform measures contributed to rather large percentage reductions in annual output levels, especially in manufacturing, and to rather dramatic changes in ownership structure. However, official data indicate rather small percentage changes in sectoral and regional employment patterns in Russia between 1992 and 1995. For example, the share in total employment accounted for by industry fell by only 5% between 1992 and 1995; employment in trade and other services expanded by just under 2% during this same period (Goskomstat 1996a).

Stable employment patterns were maintained in industry despite the fact that more than two-thirds of the state-owned enterprises completed the privatization process prior to December 1995 (Jeffries 1996). Stable employment patterns are surprising in light of Goskomstat reports that real GDP in 1994 was less than 60% of the 1990 level; for select branches of industry, the decline in output since 1992 exceeds 75% (1996a, pp. 8, 248-272). Moreover, while Russia's unemployment rate was reported as increasing from 4.7% in 1992 to 8.3% in 1995, these figures remain well below the unemployment rates experienced by other transition economies (Commander and Coricelli 1995), and well below reported overstaffing rates in Soviet firms (Berliner 1988, Freris 1984, Linz and Martin 1982, Linz 1992 1995).

To what extent has the impact of transition on employment patterns in the Russian economy been mitigated by the Soviet legacy of job rights? Job rights, the institution which guaranteed each individual a job, regardless of their performance and regardless of the performance of the firm in which they worked, was

¹ For detailed discussion of the economic consequences of job rights in the Soviet economy, see Granick (1987).

the cornerstone of the social contract between workers, managers, and planners in Soviet industry (Lane 1986. Gregory 1990). Job rights were enforced in the Soviet centrally planned economy by labor legislation which made it difficult for firms to fire workers, and "parasite laws" which required nearly all able-bodied individuals to work for the state (Bornstein 1978, Gregory and Collier 1988, Gregory and Stuart 1990, Koval 1995). Job rights also were enforced by planner-established incentives to enterprise managers and households. Moreover, planners established firms as the loci for providing all social services (housing, medical clinics, child care, sports facilities, subsidized meals, access to consumer goods, and the like). For generations, managers and workers alike viewed employment security and the corresponding benefits as an entitlement.

Russia's transition from plan to market clearly puts job rights at risk as an endangered institution. To the extent that privatization and price liberalization replaced planners' preferences with profitability as the criterion governing enterprise decisions, then "socialist" production and employment patterns will be terminated, especially if legal restrictions prohibiting unemployment are removed and subsidies to loss-making firms are eliminated. Yet, central and local authorities continued to set prices of inputs and final goods (energy, bread, and medicine, for example), as well as to allocate subsidies and provide cheap credits to firms, for at least three years into the reform program, despite announcements to the contrary. Moreover, Russia's mass privatization program (trading vouchers for shares) initially resulted in employee buyout, thus any change jeopardizing the size or composition of the firm's workforce may have been impeded by

² Planner-established incentives to managers to hire and retain surplus workers took the form of: (i) a discontinuous bonus structure where payments were high for plan fulfillment and zero otherwise (Berliner 1957, Linz and Martin 1982), (ii) taut planning; that is, annual plan targets set high relative to a firm's productive capacity (Hunter 1961, Keren 1972, Levine 1966), (iii) ratchet planning; that is, annual plan targets increased each year by a certain percentage over previous fulfillment performance (Birman 1978, Keren 1982), (iv) "soft" budget constraints; that is, a continual flow of financial support (Kornai 1980), and thus (v) no threat of bankruptcy. Incentives to individuals to seek employment came in the form of planner-determined wages, set low relative to the price of consumer durables to encourage a high level of participation, and differentiated to allocate individuals to particular occupations, industries, or regions (Adam 1987, Chapman 1963, Goodman and Schleifer 1982, Moskoff 1984).

³ Granick (1987) defines job rights to encompass a worker's right to her existing occupation; that is, managers were restricted from transferring workers to different occupations, other than temporarily, if the transfer was not acceptable to the worker. The outcome of this restriction, employment security, is the focus of this analysis.

"insiders." Finally, despite the fanfare associated with the new radical reform program, the incentive for central or local authorities to adopt any policy that would result in high unemployment among their constituents would be rather weak. Thus, given its prominent position in the Soviet economy, and the policies adopted in the early stages of the transition process, it is unlikely that the institution of job rights would disappear in the short run without a trace.

Survey data are used here to evaluate the extent to which the institution of job rights continued to characterize the Russian labor market in 1995. The simplest approach uses a proxy variable -- perception of job security -- and tests for a significant difference in the mean value over time. That is, employees were asked about the likelihood they would be looking for another job in the next two years, and given the option of selecting: very likely, likely, not likely. It is not possible using this variable, however, to distinguish between responses that reflect an employee's desire to seek higher wages elsewhere and responses that reflect anticipated release associated with adverse conditions at the workplace. Consequently, a second approach involves analysis of a series of variables drawn, in part, from Granick's (1987) examination of the economic consequences of job rights in the Soviet economy. Variables that may reflect how individuals respond to job rights in their employment search and selection processes, as well as their perception of how job rights might influence factors important to career advance, also are included. Finally, variables which attempt to capture Russian managers' efforts to maintain employment at their firms are examined.

This analysis of the Soviet institution of job rights in the Russian transition economy is divided into five parts. Part I offers two perspectives on the relative pace of the transformation from plan to market, and what each means for the likelihood that the institution of job rights would remain intact for any prolonged period of time. Alternative explanations for Russia's relatively stable employment patterns between 1992 and 1995 are examined in Part II. Part III describes various ways job rights might be measured, and the survey data used in this analysis to explore whether or not the institution of job rights had become extinct by 1995. In Part IV, survey responses collected from employees in nine workplaces Taganrog, Russia, in 1992, and twenty-four workplaces in Moscow, Taganrog, and Volgograd, Russia, in 1995 are compared. The results

⁴ A detailed analysis of the impact of "insider" versus "outsider" ownership structures on enterprise restructuring in Russia is provided by Earle and Estrin (1997).

indicate that three years after the initiation of Russia's transition from plan to market, the Soviet legacy of job rights was not extinct in the workplaces included in this analysis. Alternative measures of job rights do suggest relatively strong perceptions of less employment security in 1995, however. In Appendix A, a "job rights index" is developed and applied to these survey data, and, for comparative purposes, applied as well to survey data collected in 1983 under the auspices of the Soviet Interview Project (Millar 1987). Part V offers concluding remarks.

I. Will Job Rights Wither Away?

In the transition economies literature, a relatively rapid transformation from plan to market frequently is described in both theoretical and empirical studies as a dominant outcome. Socialist institutions are dismantled, and market institutions are established in response to the incentives and opportunities provided by the reform process. Completing the transition in speedy manner reduces the cost of transformation and brings forth the benefits -- e.g., efficiency, growth -- in such as way as to make nearly everyone better off. Different aspects of this basic argument are presented by Lipton and Sachs (1992), Aslund (1995), World Development Report (1996), de Melo, Denizer and Gelb (1996), Sachs and Woo (1997), and Fischer, Sahay and Vegh (1996).

Perhaps not so equally evident in the literature, as measured by quantity of publications, is the proposition that the transition, to be successful, must incorporate change not only in the economic structure but also in the economic institutions required to support the post-transition economy (Murrell 1992, van Brabant 1993). In transition economies, changing relationships among economic agents, in particular, breaking the ties that held the former planned economy together, is vital to enterprise restructuring. In Russia and other countries formerly part of the Soviet Union, where the Soviet legacy was strongest, the transition from plan to market has not been as rapid as in Poland, Hungary, and the Czech Republic (Jeffries 1996, World Development Report 1996), nor has it been equally successful in all dimensions of the economy (Ericson 1997, Gregory 1997). Russia, in particular, has performed poorly with regard to introducing the

⁵ Krueger and Ciolko (1996) demonstrate that the results based on World Development Report (WDR) measures of "cumulative liberalization" are extremely sensitive to the inclusion of proxies for initial conditions. Heybey and Murrell (1997) also offer counter-arguments to the WDR measure and analysis.

basic institutions that form the foundation of a market economy, as well as institutions that are required to facilitate the transition process itself. Hendley et al (1997) focus on legal institutions related to enterprise operation and restructuring. Similar studies are emerging with regard to institutions necessary to support the fledgling commercial banking structure and financial markets.

The point to be made here is that Russia appears to have experienced mixed "success" with regard to the speed of transformation. In part, this is because new institutions have taken time to construct. In part, it is because old institutions take time to dismantle; indeed, some may carryover into the post-transition economy.

Will the institution of job rights, a tangible benefit of the socialist economy and a key component of the social contract between managers and workers, survive Russia's transition from plan to market?

Numerous elements of the Russian economic reform process initiated in January 1992 had the potential to undermine the Soviet legacy of job rights. New labor codes adopted in 1992 specified procedures for releasing workers in response to production declines. These labor codes made unemployment "legal" for the first time since the 1930s, removing a significant barrier to workforce downsizing. "Hardening" firms' budget constraints by reducing subsidies to state-owned firms and eliminating subsidies to firms targeted for privatization forced a growing number of Russian companies to rely on sales revenues to finance expenditures (Blasi et al 1997, Earle and Estrin 1997). Combined with an overall reduction in demand by central authorities, Russian manufacturing firms faced pressure to reduce their wage bill by releasing surplus workers. In addition, expanding employment options in the non-state sector where prices and wages were set by market conditions provided incentives for individuals to seek higher paying jobs in privately-owned, leased, or cooperatively-owned organizations. Thus, the reform program not only removed constraints endemic to the Soviet labor market that were inimical to the Russian transition process, but also created a new set of incentives for firms and households to change existing employment patterns.

At the same time, however, incentives for policy makers, managers, and workers to sustain the institution of job rights were strong. In 1992, for example, access to social services remained exclusively determined by place of employment; alternative sources of such basic social services as housing, child care, medical and dental care were unavailable. In the first two years of the transition process, most firms continued to operate as local monopsonists. Moreover, the prestige of firms, and thus managers, continued to

be positively correlated to workforce size (Linz and Krueger 1996). Because unemployment, essentially, had been illegal in the Soviet economy, no institutions were in place in the Russian economy in 1992 to provide unemployment compensation. Nor were job retraining/job placement services in place when the new labor codes legalized unemployment (Standing 1996). Despite announcements to the contrary, in the state sector, which accounted for more than 85% of total economic activity in 1992, no real economic consequences were imposed on firms maintaining surplus workers. Finally, technological backwardness and low quality production in Soviet industry (Berliner 1976, Hill and McKay 1988, Kushnirsky 1987) inevitably put many firms at risk as the Russian economy opened to foreign competition. In both the civilian and military spheres, the majority of firms produced a significant share of their output utilizing out-dated capital stock (Gaddy 1996, Thornton 1970, Thornton and Mikheeva 1996, Desai 1985, Whitesell 1994). Managers discovered early on that many of their products were not competitive at any price (Blasi et al 1997, Linz and Krueger 1996, Linz 1997a).

In short, to terminate job rights in one fell swoop would likely have displaced more than one-in-four workers in 1992. Yet, sustaining the institution of job rights, that is, maintaining employment despite production declines, would put a brake on the speed of transition. Slowing the pace of transition, while potentially reducing short-term costs, could jeopardize the overall reform effort (Wolf and Laband 1995, Aslund 1995). Did planners and managers find this trade-off acceptable? Summary statistics describing changes in Russian employment patterns are a first step in answering this question.

II. Employment Patterns in Transition

Perhaps the most dramatic change in employment patterns in Russia since 1992 has been the shift from state to non-state employment. Nearly 70% of the workforce was employed in the state sector in 1992; in manufacturing, employment in state-owned enterprises exceeded 85% of the industrial workforce (Linz 1997b). By 1995, state sector employment totalled less than 40% (Goskomstat 1996a). The change was driven in large part by Russia's mass privatization program which changed the ownership structure of two-thirds of the manufacturing companies (Boycko et al 1995, Earle and Estrin 1997, Linz 1997c) and virtually all retail trade organizations (Barberis et al 1995).

Ownership transfer had little impact on sectoral employment patterns, however. For example, overall

employment in industry fell by 5% between 1992 and 1995 (Goskomstat 1996a), despite output declines exceeding 50% in most industrial branches; employment in services expanded by only 2%. As a percent of total employment, employment in agriculture, construction, transportation and communication remained virtually unchanged between 1994 and 1995, experiencing less than a 2% change, overall.⁶

Firm-level employment data illuminate the impact of transition on different industries. Using a panel of 5,875 civilian manufacturing firms, constructed by matching firm-specific registration numbers in 1992 and 1995 across twenty-five different regions in Russia,⁷ it is possible to calculate the percentage change in employment in the major industrial branches during the first stages of Russia's transition process. Overall, employment in this group of firms fell by more than 12%.⁸ Only for firms in the fuel (n=130) and food (n=1955) industries was the employment reduction significantly less: 2% and 3%, respectively. Employment in the power industry (n=112) expanded by 10%. Employment in machine building fell by 28% (n=898); in both forestry/wood/paper (n = 872) and light industry (n = 886), the employment decline reached 18%. Given the tax advantages of overstating workforce size,⁹ these figures are probably underestimates of the actual reduction in the number of paid employees showing up regularly to work. They are, however, significantly larger than what one would predict based on aggregate employment data provided by Goskomstat.

The impact of the new labor codes on employment and unemployment patterns is illustrated in Table 1.10 First, the size of the labor force fell by nearly 7% between 1992 and 1996; with women's share falling

⁶ Standing (1997) provides a detailed analysis of why Russian employment figures, as reported by Goskomstat, overstate actual employment.

⁷ The panel data set was constructed using a listing of civilian manufacturing firms published in 1992 and 1995 by the Business Information Agency (Moscow), based on Goskomstat data. The panel includes only those firms that: (1) did not divide into multiple units between 1992 and 1995, and (2) did not switch industries between 1992 and 1995. For futher discussion of these data, see Linz (1997b, 1997c).

⁸ Firms in ferrous/nonferrous metallurgy (n=42), chemicals (n=149), construction materials (n=393), and printing (n=387) industries experienced about average workforce size reductions, ranging from 9-14%.

⁹ Prior to August 1996, Russian firms faced an "excess wage tax" -- if they paid wages in excess of six times the Federal minimum, the "excess" could not be deducted as a cost. In such an environment, keeping surplus workers on hand, expecially at near-zero wages, reduced the firm's tax burden (Linz 1996a). For more complete discussion of the magnitude of surplus workers, see Standing (1997).

¹⁰ While measurement problems (Marnie 1993) and issues of self-reporting something that recently was considered a criminal offense may contribute to low unemployment rates in Russia, these figures also may be taking into account the 6.9% reduction in the labor force between 1992 and 1995 (Goskomstat 1996a, p. 33).

Table 1: Employment and Unemployment in Russia: 1992-1995 (thousands)

		1992			1993	į		1994			1995	
	_ Total	Women	Women as Women % of Total	Total	Women	Women as % of Total	Total W	Women %	Women as % of Total	Total W	Women 9	n omen as % of Total
Labor Force	72,071	72,071 36,756	15	70,852	36,134	51	68,484	34,927	51	67,100	31,400	47
Unemployed	3,594	1,777	49	4,160	2,006	48	5,478	2,533	46	6,431	2,945	46
Registered Unemployed of which	577.7	417.0	72.2	835.5	567.4	67.9	1636.8	1051.3	64.3	2,327	1454.7	62.5
Left job voluntarily	217.9	143.9	0.99	393.1	254.1	64.6	825.0	496.6	60.2	1157.6	682.0	58.9
Released/dismissed from job	238.8	182.8	75.1	226.2	182.4	80.6	421.2	322.2	76.4	442.2	341.8	77.3
< 18 years old	31.1			8.44		64.7	73.3	44.3	60.4	106.9	63.1	59.0
18 - 21 years+	76.2	57.9 85.2	76.0	110.9	83.0	75.2	304.7	146.2 208.3	68.3	311.1	205.9	66.2
retirement age ++	44.8			60.1		6.99	115.7	68.3	59.0	148.4	77.1	52.0

⁺ for 1995, the age category figures refer to 18-24 years and 25-29 years.

Source: Sem'ya v Rossii (Moscow: Goskomstat 1996c), pp. 89; Trud i zanyatost' v Rossii (Moscow: Goskomstat, 1996b), p. 351, Russia in Figures (Moscow: Goskomstat 1996a), p. 32.

⁺⁺ retirement age for women refers to age category 50-55 years; for men, refers to age category 55-60 years.

from 51% to 47% during this same period.¹¹ Unemployment rose from 5% in 1992 to 9.6% in 1995; the proportion of unemployed who registered at the employment service bureau increased from 16% in 1992 to 36% 1995.¹² Of those registering as unemployed, the proportion of women declined: from 72% in 1992 to 62% in 1995. Women continue to represent a disproportionate share of those released from work.

Regional unemployment has been particularly severe (above 10%) in areas dominated by a single firm or industry: for example, in Arkhangel, Murmansk, Pskov, Ivanovo, Kirov, Khabarovsk, Kamchatka, and Magadan (Goskomstat 1995a, pp. 104-109). Regional unemployment figures tend to mask the overall proportion of the population put at risk¹⁴ by the transition process (Moskoff 1993, Clarke 1996, Standing 1996).

These data suggest that during the course of the first years of Russia's transition, (i) the size of the labor force fell, (ii) the proportion of women in the labor force fell, (iii) the fraction of workers employed in state-owned organizations fell, and (iv) the percentage of industrial workers in the economy fell. The unemployment rate increased, as did the number of unemployed electing to register at employment service bureaus. Unemployment tended to be more concentrated in regions dominated by a single industry. One particular result appears regardless of the unit of analysis. That is, whether measured by sector, region, industry, or firm, between 1992 and 1995, the percentage reduction in employment (5%-15%) was

¹¹ For a detailed discussion of the problems associated with the reliability or accurancy official employment and unemployment statistics in Russia, see Standing (1997).

¹² Standing (1997) reports that, in the first two years of the reform program, men were "not allowed to register" or strongly discouraged from registering as unemployed in Moscow, as well as at local branches of the Federal Employment Service Bureaus.

¹³ In "A Survey of Russia" (*The Economist*, 12 July 1997) it is reported that there are "70 towns of over 50,000 people dependent on one industry, an industry often heading for the junk heap" (p. 8).

employees accounted for 4.2% of total employment in 1990; by 1994 this group of employees earned less than 40% of their 1990 level of real wages (Goskomstat 1995a, 1995b). A similar situation of declining real wages emerges for employees in education, heavy industry, health care, culture/arts, and agriculture (1995a, p. 58). People at risk are those identified as living at or below poverty-level conditions: 33.5% of the population in 1992 (Goskomstat 1995a, p. 71). People at risk are those facing deteriorating health conditions. Goskomstat (1995a, p. 41) reports average life expectancy in 1990 at 69.2 years, in 1994 at 64.2 years. For men, the situation is more severe: average life expectancy for Russian males in 1990 was 63.8 years, in 1994 it was 57.3 years. Equally revealing, the number of deaths per 1000 population rose from 11.2 in 1990 to 15.6 in 1994 (p. 38); infant mortality rose from 17.4 to 18.7 deaths per 1000 births during this same time (p. 38). In Taganrog, Russia, the cemetery doubled in size between 1992 and 1994. For Russia as a whole, the share in the total population declines steadily between 1989 and 1994 for those in age categories 45-49 years, 50-54 years, 60-64 years, and 70+ years (Goskomstat, 1995a, p. 25).

significantly less than the percentage reduction in output (40%-60%).¹⁵

Several explanations emerge in the literature regarding the relative differences in output and employment declines. Layard and Richter (1995), for example, use declining real wages as a possible explanation; one not inconsistent with the continuation of job rights. Standing (1996) uses measurement and/or recording error as a possible explanation; employment declines are really bigger than that reported in the statistical handbooks. The focus here is on the extent to which employment stability and the relatively low unemployment rate have been driven by the Soviet legacy of *job rights*.

III. Measuring Job Rights

Analyzing the disappearance of an institution like job rights would be challenging in economies where all important features are stable, and functioning normally. Job rights are a multi-dimensional phenomenon, consequently the institution of job rights is not directly observable. To analyze the disappearance of the institution, one must rely on assessments of its manifestation. Such a task is more difficult than the oft-cited refrain: "describing an economic system is like describing an elephant to a blind man." Indeed, analyzing the disappearance of an institution like job rights in a transition economy is more like describing to a polar bear how catepillars turn in to butterflies. The task is made exceedingly difficult due to the paucity of relevant data and the dramatic changes occuring almost daily. Consequently, because any single measure or analysis will necessarily fail to capture the complexity or multidimensionality of the process, a variety of measures are examined in this analysis.

In principle, at least three rough measures exist as a way to evaluate the pervasiveness of job rights in the Russian transition economy.

From a macroeconomic perspective, maintaining job rights will affect the rate and composition of unemployment. If the institution of job rights continues to characterize the Russian labor market, the unemployment rate will remain far below the percentage of surplus employees that Soviet state-owned enterprises kept on staff -- estimated at 15-35% of the firm's workforce. If job rights continues to dominate workplace conditions, employment reductions will be voluntary -- those with marketable skills will leave for

¹⁵ For further discussion, see Linz and Krueger (1997).

higher wages elsewhere -- rather than involuntary. A demise in job rights would likely be reflected in a growing percentage of "released workers" in the unemployment statistics.

Alternatively, if enterprise subsidies remain a relatively constant share of total government expenditures, such commitment by policy makers and managers to sustaining socialist employment patterns might lead one to conclude that the institution of job rights had not disappeared.

From a microeconomic perspective, if firms report significant workforce downsizing -- reductions at least equal to overstaffing estimates -- one might conclude that the institution of job rights has withered away, especially if the employment reductions were initiated by the firm's management.

In practice, data limitations constrain each measure. First, unemployment rates hovered around 8-9% of the workforce as late as 1995 (Goskomstat 1996b), well below overstaffing estimates. However, aggregate unemployment figures have been notoriously misleading due to the magnitude of errors and omissions (Commander and Coricelli 1995, Marnie 1993, Standing 1996). While expansion in private sector employment opportunities may absorb some fraction of those released from privatized (former state-owned) firms, there is no indication in any of the official statistics that employment transfers of the magnitude required to satisfy the overstaffing reduction condition have occurred. Second, the aggregate way in which budgetary information is reported makes it impossible to accurately assess whether enterprise subsidies have fallen significantly in total government expenditures. Thus, firm-level data may offer the only informative picture of the nature and scope of job rights in the Russian transition economy. Yet, to date, firm-level data rarely are published in official statistical handbooks, and when available, coverage typically is incomplete or the data are inadequate for addressing even the most routine economic questions. Consequently, numerous Russian and Western scholars have taken to the field to collect firm and household data (Barberis et al 1995,

¹⁶ Unemployment rates reported as 4.7%, 5.5%, 7.4% and 8.3% between 1992 and 1995 (Goskomstat 1996b, p. 32), yet when calculated based on figures provided, the rates are 5.0%, 5.9%, 8.0% and 9.6% for these same years. See Standing (1996) for further discussion of anomalies associated with Goskomstat unemployment figures.

¹⁷ It is the case, however, that changes in both state sector and private sector employment, combined with the 7% reduction in workforce size between 1992 and 1995, does account for a major shift in employment patterns. That is, private sector employment rose from 18% in 1992 to 36% in 1995; state sector employment fell from 69% to 38% during this same period (Goskomstat 1996a, p. 33). Had the 1995 workforce size equalled that of 1992, the expansion in private sector employment would have been less (from 18% to 34%), as would the reduction in state sector employment (from 69% to 34%).

Blasi 1996, Buck et al 1995, Cox et al 1994, Dolgopyatova 1994, Earle et al 1996, Jones 1996, Krueger 1995. Glinskaya and Mroz 1996, Nelson and Kuzes 1994, Standing 1996, and Stone 1995, among others).

Firm-level survey data are used here to measure the extent to which the institution of job rights may be withering away in Russia. The first measure relies on a proxy variable -- perception of job security -- and tests for a significant difference in the mean value over time. Employees in nine workplaces in Taganrog, Russia, in 1992 and twenty-four workplaces in Moscow, Taganrog, and Volgograd, Russia, in 1995 were asked whether they thought they would be looking for another job in the next two years (ANOTHJOB). Each respondent was given the option of selecting: very likely, likely, and not likely. In the coding scheme where very likely = 3 and not likely = 1, the lower the score, the stronger the perception of job security. It is not possible, however, to distinguish between responses that reflect an employee's desire to seek higher wages elsewhere and responses that reflect anticipate release associated with adverse conditions at the workplace. Consequently, a second measure of job rights is derived from Granick's (1987) analysis of the economic consequences of job rights in the Soviet economy prior to perestroika.

In a study based on decades of first-hand observation, Granick links the institution of job rights to "zero" unemployment, enterprise overstaffing, infrequent firing, and low productivity, all of which contributed to the technological backwardness of Soviet industry. That is, when the institution of job rights dominated Soviet labor market conditions: (i) the incidence of unemployment during an individual's worklife was low, and voluntary in nature; (ii) the incidence of enterprise overstaffing was high; (iii) the incidence of firing for poor performance or any other reason was low; and (iv) labor productivity was low.

To elicit information on these variables, respondents in the employee surveys were asked about their experience with unemployment (UNEMPLOY), whether their firm could produce the current level of output with fewer workers (FEWERWKR), how often employees were fired for poor performance (FIREFREQ), and whether labor productivity was changing (PRODDOWN). Workplaces where few employees had direct experience with unemployment, where respondents answered affirmatively to FEWERWKR, where firing

¹⁸ Respondents were asked: How likely is it that you will look for another job at another company in the next two years? (Select only one) Very likely, Likely, Not likely.

frequency was rare, 19 and where labor productivity is reported as low or declining, 20 are viewed as exhibiting job rights.

To broaden the scope of analysis, this paper expands the measure of job rights to include a number of propositions about how the institution of job rights affected job search, job choice, and perceptions of factors influencing career advance. In particular, when the institution of job rights dominated Soviet labor market conditions: (i) job search relied heavily on "insiders" (friends, relatives, or others at the workplace); (ii) job change occurred infrequently; (iii) job choice relied heavily on benefits and location; and (iv) to the extent that guaranteed employment coincided with guaranteed promotion, then seniority, connections (protektsia), and ability to get along with superiors was more important to career advance than experience, qualifications, or performance.

Respondents were asked about their job search activities, and given the option of selecting from a list of eight sources of information: friend/relative, offered job at graduation, notice posted, union official, supervisor, top of seniority list, asked to take job, coworker. Only three options are considered here: friends, relatives, or others at the workplace (FRDREL, COWORKER), and seniority (SENIORTY). Respondents also were asked about their job choice, with six options provided.²¹ Of interest here are the BENEFITS and LOCATION responses. Regarding factors important to career advance, respondents were given a list of eight, from which they were instructed to select only one.²² This analysis incorporates the role of connections (PROTEKSI) and ability to get along with a supervisor (GETALONG). That is, individuals who relied on friends/relatives, coworkers or seniority in their job search activities; individuals who selected their job

¹⁹ Respondents who responded affirmatively to a question asking whether employees were fired for poor performance at their place of work, were asked then asked: *How often were such people fired for poor performance?* (Select only one) Often, Sometimes, Rarely. Rarely was coded as one, Often was coded as three.

²⁰ Respondents were asked: At this organization, are employees producing less per day now than 5, 10, or 15 years ago? Yes is coded as one.

²¹ Respondents were asked: Select from the options below the one that best describes why you chose your current job. It was interesting. Offered good benefits. Conveniently located. Gave me an opportunity to serve others. Best available. Had no choice.

²² Respondents were asked: Select one of the following that best describes what is most important to career advance at this organization (where you work): Education/diploma. Experience/knowledge. Be a man, not a woman. Participate in political/social activities. Connections. Have talent and ability. Get along with supervisor. Nationality.

because of benefits or location; individuals who reported that either connections or getting along with their supervisor were most important to career advance, are defined here as exhibiting behavior consistent with job rights dominating workplace conditions. Indeed, in this investigation of the persistence of job rights in Russia's transition economy, the underlying premise is that if the economic consequences associated with job rights in the Soviet economy were evident in the Russian economy, one cannot reject the hypothesis that the institution of job rights was extinct in 1995.

Not all features consistent with job rights were evident in the Soviet economy, however. One proposition in the enterprise restructuring literature, for example, is that Russian managers, particularly red executives, ²³ devoted considerable effort in the early years of the transition period to maintaining employment at their firm. Their strategies included putting workers on unpaid leave (UNPAIDLV), ²⁴ delaying wage payments (DELAYWG), ²⁵ and keeping employees on the payroll despite work stoppages associated with reduced demand (JOBSTOP). ²⁶ In workplaces where the incidence of these variables is high, that is, the mean value exceeds .75, this is considered evidence in support of the proposition that job rights are not extinct.

To evaluate whether the institution of job rights in the Russian transition economy had become extinct, responses to questions addressing the variables described above are reported for 1992 and 1995. For comparative purposes, 1992 mean values are set equal to 100, and 1995 mean values are reported accordingly. In Appendix A, a "job rights index" is developed on the basis of these variables, and applied to the 1992 and 1995 employee survey data. For comparative purposes, the index also is applied to survey data collected from

For a description of red executives, see Granick (1961); for a discussion of the motivation of red executives in the Russian economy to maintain workforce size, see Linz (1996a).

²⁴Respondents were asked: In the past 12 months, did it happen that you had to take any unpaid leave? Yes is coded as one.

²⁵ Respondents were asked: In the past 12 months, did it happen that your monthly wage payment was delayed? Yes is coded as one. Interestingly enough, when asked whether it ever happened that they received only partial payment of their wage, the answer was nearly unanimously no. In fact, in a different series of in-depth interviews with enterprise managers in 1993 and 1994, it was not unusual for managers to describe making sure at least one member of the (extended) family received their full wage each month. In such descriptions, it was usually the case that gender determined who would receive payment (women's wages were typically lower, and managers elected to pay the man's wage).

²⁶ Respondents were asked: Was it ever the case in the past 12 months that you were not able to do your jorb -- not working at your job because the company did not sell its products? That is, supplies were available and equipment was working, but it was not necessary for you to do your job. Yes is coded as one.

Soviet emigrants in 1983 under the auspices of the Soviet Interview Project (Millar 1987).

Basic characteristics of the two employee samples used in this analysis of job rights are described below. Confidentiality and anonymity requirements make possible only broad descriptions of the participating firms and respondents.

1992 Employee Survey:

Managers and workers employed in nine state-owned enterprises and R&D organizations in Taganrog, Russia, were asked a series of questions in the spring and early summer of 1992 about their work experience and work environment. Why Taganrog? Budget constraints limited the project to a single geographic location, and previously-established contacts in that city made it possible to complete the survey project. Moreover, Taganrog has been identified by Soviet sociologists and survey researchers as the "Peoria" of the (former) Soviet Union (Grushin 1980).

By design, the survey was limited to state-owned organizations, in part because state-owned organizations in 1992 still represented more than 80% of the manufacturing firms and employed more than 75% of the workforce in Russia, and in part to maximize comparability with previous surveys.²⁷ The nine participating organizations are not necessarily representative of those in Taganrog in 1992, however.²⁸ As a foreigner in a location dominated by defense-related production, getting information about the number and types of firms in the area, or the number and types of products made by a particular firm, proved to be a difficult task. Indeed, even current publications advertised as offering a complete listing of civilian manufacturing firms by region (*BusinessMap* 1993) fail to include two firms (one employing more than 10,000 workers) participating in the 1992 project, and numerous other state-owned firms that I visited over the course of several trips to the city in 1993 and 1994. Of the nine participating workplaces, four R&D organizations were engaged designing and producing a variety of electronic devices used in military, space.

²⁷ Comparison of these data with previous surveys is found in Linz (1995).

²⁸ Ten organizations were contacted by a local project coordinator about participating in the project. The selection of these firms was guided in part by the objective of including as much variation as possible: by output (main product line) and by workforce size, and in part by identifying organizations where appropriate/necessary connections had already been established. Since this was the first survey project headed by a foreigner ever conducted in the city, the importance of the local project coordinator in identifying organizations potentially willing to participate cannot be exaggerated.

medical and other spheres; the manufacturing companies all would be categorized as heavy industry. In terms of workforce size, using the size definitions adopted for the Russian privatization program, two participating firms would be categorized as *small* (<200 employees), three as *large* (>1000 employees).

The tradition of secrecy surrounding the organizations participating in the project made it impossible to select a sample representative of the employees at each workplace. Thus, respondent selection was guided by the goal of including at least 50 employees per workplace, of which 25% were to be supervisory personnel and a similar number of women. In most cases, respondents completed the questionnaire under the supervision of the interviewer; about 25% of the questionnaires were filled out by the interviewer based on responses dictated by the participant.

Regarding respondent characteristics, some 537 men and 300 women (for 8 individuals gender information is not available) answered questions about their work experience and workplace conditions.

Nearly half (46%) were between ages of 35 and 54 at the time of the interview; the mean age of the sample was 41 years. On average, respondents had 17.7 years of work experience, of which 13.3 years were at their current workplace. Just over 10% reported engaging in additional private sector employment. More than one-third held a supervisory position. Twenty-six (of 835 responding) were top-level managers (director, assistant director, chief engineer) at their place of work. One-third held low-skilled or manual labor positions. As a group, engineering-technical personnel accounted for the largest share of the sample occupations (41%). Overall, some 77% of the respondents worked in manufacturing organizations, 23% in R&D organizations. 1995 Employee Survey:

Between June and September 1995, questionnaires were administered to 581 employees in Moscow, Taganrog, and Volgograd. Local project coordinators, in charge of arranging for company participation, were instructed to include at least 20 firms in the sample, with as much variety as possible in terms of workforce size, ownership structure, and main product/industry.²⁹ They contacted top-level managers for permission to conduct the employee interviews. Once the special pass for entering the company was granted, interviewers

²⁹ Information on the population of firms in each region in 1995 is even more incomplete than that available in 1992, given the entry and exit of new firms in the Russian transition economy. Consequently, in the project design it was not possible to even consider the option of drawing a random sample of firms for each region.

were responsible for describing the project, requesting volunteers, and administering the questionnaire.

Of the twenty-four participating organizations, nine were in heavy industry, seven in other manufacturing (including light industry), and eight in non-manufacturing sectors (construction, transportation, retail and other services). Thirteen of the companies comleted the privatization process and established either an open or closed joint stock company. Two had been leased firms prior to privatization. Three were state-owned at the time the survey was conducted; one is likely to remain state-owned, given the nature of its product/service. Eight of the firms were newly-created private companies (*de novo* firms).

Two strategies were employed to administer the survey instrument at each workplace: interviewers went from shop to shop (department to department) within the company to solicit volunteers; and, interviewers positioned themselves in "common" areas in the company (cafeteria, lobby, gardens, and the like) to solicit volunteers. Since detailed information about the workforce at each firm was not available, it was not possible to draw a random sample of employees at each workplace. In some instances, it was not possible to get enough respondents from the company to permit statistical analysis of the results by workplace. Taken as a whole, however, the sample size is sufficiently large to establish confidence intervals. albeit rather loosely assigned and interpreted with numerous caveats.

Regarding respondent characteristics, of the 577 reporting their occupation, 11 (2%) held top-level positions in their company, 41% fall into the category of low skill/manual labor, and 36% held engineering-technical and other professional positions. More than one-third held a supervisory position; 43% had received at least one promotion at their current place of work. Of the 568 responding, 29% had completed some type of higher education (university or institute). Nearly half of the respondents (48%) were between the ages of 35 and 50 years at the time of the interview; 19% were 50+ years old, and 8% were 25 years old or younger. One-third of the respondents had worked at their current place of employment for 5 years or less; less than 2% had worked at their current workplace for 40 years or more. Just under two-thirds owned shares in the company where they worked.

IV. Results

Survey results illuminate four dimensions of job rights. First, with regard to perceptions of job security, we expect to find an increase in the mean value of ANOTHJOB over time if job rights has

Table 2: Job Rights Variables: Mean Values

		1992			1995		. \$661		Taganrog 1995		Taganrog 1995
	пеап	st. dev.	Z	mean	st. dev.	z	(1992=100)	mean	st. dev.	Z	(1992=100)
ANOTHJOB ²	1.40	.652	702	2.24	.757	434	160	2.49	.714	179	178
UNEMPLOY	.02	.137	828	.42	.495	574	2100	.35	.479	246	1750
FEWERWKR	69:	.462	748	1	1	:	1	:	-	1	
FIREFREQ	2.38	.672	822	2.24	.706	528	94	2.13	.942	251	68
PRODDOWN	.47	.499	531	1	1	i	9 5	;	1	1	1
FRNDREL	.31	.462	844	.42	.494	573	135	.45	.498	251	145
SENIORTY	.02	.123	844	.01	.117	573	50	.003	.063	251	15
COWORKER	4	.345	844	.24	.429	573	171	.20	.403	251	143
BENEFIT	90.	.238	844	.15	357	581	250	80.	.271	251	133
LOCATION	11 .	.350	844	.03	.159	581	21	.02	.153	251	142
PROTEKSI	.13	.333	836	61.	389	581	146	.20	.397	251	153
GETALONG	.13	.337	836	.13	.334	581	100	11.	.320	251	84
UNPAIDLV ^c	1	1	1	.26	.453	565	*	.22	.441	245	-
JOBSTOP	1	ļ	†	.54	.499	534	:	.52	.501	236	1
DELAYWG	1	+	!	59:	.478	578	:	.43	.495	249	

^a Coded as Not likely=1, Likely=2, Very Likely =3.
^b Coded as Often=1, Sometimes =2, Rarely =3.
^c Coded as Yes =1.

diminished. When this question was asked in 1992, some 488 employees (of 702 responding) selected "not likely." The sample mean response was 1.40. Perhaps because all nine workplaces were state-owned, employees in 1992 felt no pressure to look elsewhere. Interestingly enough, although there is significant variation by workplace in the mean value of ANOTHJOB, as well as in the mean value of reported earnings,³⁰ the correlation coefficient for these two variables is very small (0.0312).

The sample mean response in 1995 was 2.24, where 190 employees (of 434 responding) selected "not likely." When the 1995 sample is restricted to the same city as 1992, Taganrog, this result is even more striking: the mean value of ANOTHJOB is 2.49 (see Table 2). The simple interpretation is that employees felt less job security. However, in workplaces where respondents report themselves less likely to look for another job, reported wages are higher; the correlation coefficient is -0.1043.³² OLS regression results underscore this relationship: where ANOTHJOB = $a_0 + a_1$ lnwage +.e, the relatively large, negative (-0.44) and statistically significant (t = -3.50) coefficient, a_1 , appears to reflect higher wages rather than job rights as the explanation for the response pattern.

The second dimension of this job rights analysis incorporates variables specified in Granick's (1987) study. Other than experience with unemployment, these variables reflect workplace conditions associated

³⁰ Respondents were asked to report their net monthly income (gross wage payment plus bonus payments). In 1992, average monthly earnings of industrial employees is reported at 7064 rubles (5995 rubles for overall economy) in *Russia in Figures* (Moscow: Goskomstat, 1996), p. 55. Wage and employment figures typically are reported in annual Goskomstat publications for October or December, although in this case, no month is indicated. Because the employee survey was completed by June 1992, the monthly income figures in the state-owned firms participating in this study are significantly less that that reported for year-end 1992.

	Workplace n	nean response
•	ANOTHJOB	NETINCOM
workplace 1	1.38 (n=70)	819 rubles (n=79)
workplace 2	1.23 (n=109)	1260 rubles (n=139)
workplace 3	1.22 (n=136)	1473 rubles (n=170)
workplace 4	1.64 (n=25)	2580 rubles (n=28)
workplace 5	1.09 (n=81)	718 rubles (n=80)
workplace 6	1.73 (n=61)	2379 rubles (n=64)
workplace 7	1.42 (n=50)	1000 rubles (n=50)
workplace 8	1.85 (n=72)	618 rubles (n=74)
workplace 9	1.48 (n=98)	2767 rubles (n=112)

³¹ The question asked in 1995 allowed respondents the option of selecting "don't know." Just over 20% of the 558 respondents selected this option, perhaps reflecting a degree of job insecurity. To make the comparison with 1992 results, the "don't know" responses were not included in the sample mean response for 1995.

³² This result could be an artifact of the sample characteristics; that is, I do not have an independent source of average wages for the 24 firms in this study.

with job rights. On the basis of the four variables for which data were collected, no clear picture of job rights emerges, although a rather strong signal is found in the UNEMPLOY variable.

As seen in Table 2, experience with unemployment was significantly greater in 1995 than in 1992, although this result is driven in part by respondents in two start-up firms. When controlling for a possible regional effect, that is, restricting the 1995 sample to Taganrog, the change in UNEMPLOY mean value is still rather dramatic. Unlike in the Soviet economy and in the first year of the Russian transition economy, it appears much more likely for an employee in 1995 to report experience with unemployment. Assuming that individuals would not voluntarily leave their place of work without alternative employment options, this suggests that job rights may have diminished in workplaces by 1995.

For two of the workplace conditions, FEWERWKR and PRODDOWN, information is only available for 1992. The mean values of both approximate or exceed .50, but neither sends an unambiguous signal³³ about the strength of job rights in these nine workplaces. For the third workplace condition, FIREFREQ, the reduction in the mean value over time is insignificant. That is, the frequency of firing employees for poor performance is not significantly different among response patterns in 1992 and 1995, regardless of how the 1995 sample is constructed. Unfortunately, this question does not address other reasons why workers might be released. The result that the mean value of FIREFREQ is lower, or at least not any higher, may be consistent with improved work habits by individuals concerned about being released from work because of adverse demand conditions.

The third dimension of this analysis focuses on individual behavior that is hypothesized to be related to job rights. Comparing the mean values over time, friends/relatives and coworkers become more important sources of information about employment opportunities. Seniority essentially disappears as a perceived mechanism for generating employment opportunities. Holding region constant, there is a relatively modest gain in BENEFITS and LOCATION as explanations for job choice, but the latter is smaller when one controls for gender. Connections (PROTEKSI) appears to be strengthening, albeit marginally, as a factor important

³³ An unambiguous signal would be a mean value exceeding .75; that is, three-out-of-four employees share the view that their firm employs "too many" workers, and that labor productivity is "low or declining."

³⁴ Women were more likely than men to select LOCATION.

to career advance. The ability to get along with one's supervisor appears to have become less important. Perhaps most disturbing in these results is the growing importance of who you know: "insiders" and "connections" were an important feature of the former Soviet economy, and appear to be even more important in Russia's transition economy. If job rights are indeed disappearing, the cost will be greatest for those without connections. Moreover, if connections are based on relationships established in the Soviet regime, there is no reason to believe that performance with be a dominating factor in employment or advancement decisions.

Finally, with regard to management behavior that is consistent with job rights, the results are somewhat mixed. Relatively few employees in the 1995 sample reported direct experience with unpaid leave. Unfortunately, those currently participating in the unpaid leave policy would not be included among the respondents. Consequently, one might interpret the result that more than 25% of those employees participating in the survey experienced unpaid leaves signals a rather high incidence in the application of this policy. That is, more than one-in-four people reported participating in an unpaid leave in the previous 12 months. This could be a signal of management's commitment to maintaining employment levels. Whether the commitment stems from from the legacy of employment security, or from financial pressures -- insufficient cash to pay wages, for example -- is not evident in the result, however.

Work stoppages and delayed wages were reported by the majority of respondents (see Table 2).

Neither variable exceeded the mean value of .75 which was defined as evidence in support of proposition that job rights are not extinct. That both variables have mean values exceeding .55 attests to the widespread incidence, however. The incidence of work stoppages was highly correlated with delayed wages (.4204).

More than half of the employees in the 1995 survey had direct experience with one or the other; more than, one-third had experience with both. The fact that management had not released these workers may be interpreted as a signal of the persistence of job rights. The fact that these workers remained at their firm may indicate the existence of no alternative employment options, and is equally likely a reflection of the inadequacy of Russia's unemployment compensation benefits.

V. Summary and Conclusions

The literature on transition economies grows constantly as new information is obtained and new

theories are generated. To date, this literature rarely has addressed the withering away of institutions associated with socialism. Taking a small step in that direction, this paper examines the pervasiveness of the institution of job rights in Russia's transition economy. In the short run, understanding the nature and scope of job rights in Russia facilitates developing adequate unemployment compensation and other "social safety net" programs, as well as appropriate employment retraining programs. In the long run, understanding the nature and scope of job rights as the Russian economy moves from plan to market will be an important component of any evaluation of the relative pace of systemic transition, as well as the economic, social, and political consequences of the transition process.

Given its fundamental importance in the Soviet economy, as well as the absence of alternative institutions or mechanisms to cover the fallout of abrupt termination, it is unlikely that the institution of job rights would disappear as rapidly as the "shock therapy" advisors would hope or expect. Job rights generated numerous tangible benefits in the Soviet economy; an economy where most basic goods and services typically were in short supply. In many respects, Russia's transition from plan to market was predicted to be, and in fact has been, extremely costly to exactly those citizens for whom job rights were most important. As such, an implicit contract may have been substituted for the withdrawal of explicit support for job rights.

The premise here is that if the economic consequences associated with job rights in the Soviet economy are evident in the Russian economy, the institution of job rights has not become extinct. Moreover, certain strategies adopted by enterprise managers in the Russian transition economy may signal continued commitment to the Soviet legacy of job rights.

In an attempt to map out different dimensions that require examination as the economic and social institution of job rights is no longer supported by legal codes, four different perspectives of the consequences of job rights are evaluated. The first relies on respondents' perception of employment security, as measured by the likelihood they would be looking for another job in the near future. The mean value of this variable rises, indicating a perception of growing insecurity. The second relies on variables identified in Granick's (1987) analysis of the economic consequences of job rights in the Soviet economy. Direct experience with unemployment is significantly higher in 1995 than in 1992, although it appears unlikely that the incidence of firing for poor performance increased. The third relies on hypothesized behavior with respect to job search.

job choice and career advance in response to job rights. No clear signal of the pervasiveness of job rights emerges from these variables. The fourth relies on managerial strategies frequently associated with maintaining workforce size, assumed here to be a manifestation of management's commitment to job rights. If the assumption is true, it would appear that the commitment to job rights remained strong among managers of state-owned firms, as well as many privatized firms. It is not possible to rule out, however, the proposition that the policies of unpaid leave, delayed wages and work stoppages are a result of adverse financial conditions of the firm rather than the management's commitment to job rights.

However imperfect these measures of job rights might be, they tend not to support the proposition that job rights were extinct in Russian firms in 1995. Nor do they unambiguously support the proposition that managers were sustaining their commitment to job rights. It does appear that the institution of job rights may have been influencing decisions of firms and households as late as mid-1995. For those who adhere to the neoclassical tradition and favor rapid transformation, this result is rather disturbing. For those who favor the institutional approach and an evolutionary transformation, the result is not surprising.

Appendix A: Constructing a Job Rights Index

To get a measure of job rights over time, an index is constructed using the variables described in the text, listed again here in Table A1. INDEX1 includes variables common to both employee surveys:

ANOTHJOB, 35 UNEMPLOY, FIREFREQ, 36 and FRDREL or COWORKER (respondents were instructed to select only one of these job search variables), BENEFIT or LOCATION (respondents select only one of these job choice variables), PROTEKSI or GETALONG (respondents select only one of these career advance variables). All variables are equally weighted, thus INDEX1 takes on a maximum value of six. A sample job rights index is calculated by summing the relevant variables and dividing by the number of respondents. Given this arbitrary manner of assigning variable weights, the absolute value of the sample job rights index is less important than the relative ranking. That is, if the pervasiveness of job rights in the Russian economy is diminishing during transition, the value of INDEX1 in 1995 should be less than in 1992.

A workplace job rights index also is calculated for each specification. I expect to find the workplace job rights index correlated to ownership structure. That is, for state-owned firms, the index will be higher than for privatized (former state-owned) firms; the index will be lowest for privately-owned firms. The rationale for such a ranking is twofold. First, state-owned firms are less likely than privatized or private firms to face profitability constraints, and thus are more likely to retain surplus workers. Second, both managers and employees in state-owned and privatized (former state-owned) firms had direct experience with, and perhaps a commitment to the institution of job rights in the Soviet economy. Managers and employees in newly-created private firms (de novo firms) are unlikely to have such a commitment at their

³⁵ In the text, ANOTHJOB was presented using all three options: not likely, likely, very likely. Here, ANOTHJOB takes on a value of 1 if respondents selected "not likely," and a value of 0 if respondents selected either of the other two options.

³⁶In the text, FIREFREQ was presented using all three options: often, sometimes, rarely. In the index, FIREFREQ takes on a value of one if the response was rarely, and zero otherwise.

³⁷ I also expect to find the job rights index inversely correlated to wages, in part because wages appear correlated to ownership structure (average wages typically are lower in state-owned organizations). Thus in firms where the job rights index is relatively high, I would expect to find relatively low average wages. Similarly, to the extent that wages are correlated to industry or sector of the economy, firms located in high wage industries or sectors would be expected to score lower on the job rights index.

Table A1: Job Rights Index, Variable List

Variable name	Variable description	Value	1992	1995
ANOTHJOB	How likely is it that you will look for another job at another company in the next 2 years? (Select only one) Very Likely Likely Not Likely	NOT LIKELY = 1	*	*
UNEMPLOY	Was there ever a time in the last 5 years when you were without work and looking for work for at least 30 days?	NO = 1	*	*
FEWERWKR	Is it possible at this organization to produce a given level of output with fewer workers?	YES = 1	*	
PRODDOWN	At this organization, are employees producing less per day now than 5, 10, or 15 years ago?	YES = 1	*	
FIREFREQ	[for those who responded YES to the question on firing workers for poor performance] How often are such people fired for poor performance? (Select only one) Often Sometimes Rarely	RARELY = 1	*	*
FRDREL	How did you find out about this job? (Select only one) Friend/relative Offered job at graduation Notice posted Union official	YES = 1	*	*
SENIORTY	Supervisor Top of seniority list			*
COWORKER	Asked to take Job Coworker	YES = 1	*	*

Table A1 (cont'd)

Variable name	Variable description	Value	1992	1995
BENEFIT	Select one of the following that best describes why you chose this job: It was interesting Offered good benefits Conveniently located	YES = 1 $YES = 1$	* *	* *
	Gave me opportunity to serve others Best available Had no choice			
	Select one of the following that best describes what is most important to career advance at this organization: Education/diploma Experience/knowledge			
PROTEKSI	Be a man, not a woman Political/social activity Connections	YES = 1	*	*
GETALONG	Get along with supervisor Nationality	YES = 1	*	*
UNPAIDLV	In the past 12 months did you have to take any unpaid leave?	YES = 1		*
JOBSTOP	Was it ever the case in the past 12 months that you were not able to do your job, not working at your job, because the organization did not sell its products? That is, supplies were available and equipment was working, but it was not necessary for you to do your job.	YES = 1		*
DELAYWG	Has it happened in the past 12 months that your monthly wage payment was delayed?	YES = 1		*

current place of work, even if they had formerly worked in the Soviet economy where job rights dominated labor market conditions. Variation in the job rights index across firms of a given ownership type may be driven by differences in enterprise performance or management strategies.

Table A2 reports the results of applying the job rights index to the 1992 employee survey data. The sample job rights index is 3.34 using INDEX1,³⁸ compared to an expected mean value of 3.0. By itself, this sends a relatively weak signal of the institution of job rights, especially considering the 1992 survey included only state-owned firms. In comparison with results from survey data collected in 1983 from Soviet emigrants, however, the index value is not out of line.

The Soviet Interview Project (SIP) involved a mass survey of 3,360 Soviet emigrants to the United States (Millar 1987, Anderson and Silver 1987). A randomly selected third of the original sample participated in a supplemental project that focused on economic issues. Indeed, many of the questions in the 1992 employee survey were adapted from SIP. Several SIP questions relate to the institution of job rights. It is the responses of the 911 individuals who completed those questions in the Blue Supplement that are used here.³⁹

Altogether, seven variables, each equally weighted, are used to construct the SIP job rights index: UNEMPLOY, FEWERWK, 40 PRODDOWN, FIREFREQ, FRDREL/COWORKER (respondents were instructed to select one), BENEFIT/LOCATION (respondents select one), PROTEKSI/GETALONG (respondents select one). The maximum value of the SIP job rights index is seven. The **sample job rights index**, calculated by summing the variables and dividing by the number of respondents, equaled 3.57 (standard deviation = 1.42), which is not significantly different from the expected mean value of 3.5.41 The fact that the value is rather low at a time when job rights clearly dominated workplace and labor market

³⁸ With regard to INDEX1, there is no significant variation in the measure of job rights across firms.

³⁹ Regarding the characteristics of the 911 respondents who answered questions in the Blue Supplement of the general survey of the Soviet Interview Project, that is, those questions relevant to the institution of job rights: 508 respondents were male (403 females); 322 held supervisory positions (36%) just prior to their decision to emigrate; less than 15% (124) held a second job in the private sector. All of the respondents who answered questions in the Blue Supplement worked at some point prior to emigrating from the Soviet Union; 92% reported never being unemployed.

⁴⁰ SIP respondents were asked: Was it possible to fulfill the plan with fewer workers?

⁴¹ Given the nature of the SIP survey, it is not possible to calculate a workplace job rights index.

Table A2: 1992 Employee Survey: Job Rights Index

Workplace	Ownership Structure	Index1 ^a	Index92 ^b	Number of Observations
1	state	3.69	5.01	88
•	5. 	(1.37)	(1.58)	
2	state	3.42	4.48	151
2	state	(.95)	(1.23)	131
3	state	3.50	4.51	175
		(.99)	(1.16)	
4	state	3.21	4.03	29
		(1.26)	(1.48)	
5	state	3.35	3.81	81
J		(.50)	(.73)	
6	atata	2.72	3.45	71
6	state	(.89)	(1.34)	/1
		(,	(5,5 1)	
7	state	3.20	3.32	50
		(.78)	(.99)	
8	state	3.08	4.26	86
C	3,400	(.84)	(1.06)	
			4.10	
9	state	3.39	4.19	114
		(1.22)	(1.28)	
Sample		3.34	4.25	845
-		(1.04)	(1.29)	

Standard deviation in parentheses.

^a Index1 was compiled using the six variables common to both the 1992 and 1995 employee surveys (see Table A1).

^b Index92 includes two additional job rights variables: FEWERWK, PRODDOWN (see Table A1).

Table A3: 1995 Employee Survey: Job Rights Index

	Ownership			Number of
	Structure	Index1 ^a	Index95 ^b	Observations
Workplace				
1	joint stock	3.38	4.38	13
•	joint stook	(.96)	(.96)	13
2	joint stock	3.38	3.50	8
	3	(.74)	(.92)	
3	joint stock	2.85	5.23	13
		(1.46)	(1.69)	
4	private	2.65	3.75	20
		(1.09)	(1.29)	
5	joint stock	3.31	5.15	13
		(.95)	(.99)	
6	joint stock	3.03	4.43	30
		(1.18)	(1.65)	
7	joint stock	2.35	4.19	31
		(.91)	(.98)	
8	joint stock	3.11	4.91	34
		(1.17)	(1.29)	
9	joint stock	3.46	5.04	24
		(1.02)	(1.46)	
10	private	3.15	3.15	13
		(.98)	(.98)	
11	private	3.20	3.37	30
		(.76)	(.81)	,
12	private	3.54	3.67	24
	_	(.72)	(.82)	
13	joint stock	3.31	4.04	90
		(1.02)	(1.23)	
14	joint stock	2.32	3.96	47
		(.78)	(1.02)	

Table A3 (cont'd)

Workplace	Ownership Structure	Index1ª	Index 265 b	Number of Observations
15	joint stock	2.60 (.96)	5.04 (1.10)	25
16	private	3.25 (.50)	3.50 (.58)	4
17	private	1.80 (1.30)	2.20 (1.79)	5
18	private	2.33 (.58)	2.33 (.58)	3
19	state	1.60 (.55)	3.00 (1.58)	5
20	state	2.60 (1.81)	4.40 (1.67)	5
21	joint stock	2.96 (.80)	3.76 (1.09)	21
22	joint stock	2.45 (1.03)	4.69 (1.42)	55
23	private	2.67 (.91)	4.76 (1.14)	51
24	state	2.77 (1.30)	3.15 (1.28)	13
Sample		2.90 (1.06)	4.23 (1.34)	581

Standard deviation in parentheses.

^a Index1 compiled using variables common to both the 1992 and 1995 employee surveys (see Table A1).

^b Index95 adds: SENIORTY, UNPAIDLV, JOBSTOP, DELAYWG (see Table A1).

conditions casts new light on the value of the 1992 index.

A second job index was constructed to include all variables available in 1992 pertaining to job rights. That is, INDEX92, was constructed by adding FEWERWK and PRODDOWN to INDEX1, and thus has a maximum value of eight. The **sample job rights index** is 4.25, not significantly different than the expected mean value of 4.0. There is somewhat more variation in the **workplace job rights index** using this measure. The differences are not correlated to differences in average wages across firms, but do tend to be higher in heavy industry firms and firms employing more than 1000 workers.

Table A3 reports the results of applying the job rights index to the 1995 employee survey data. The sample job rights index is 2.90 using INDEX1, significantly lower than the comparable measure in 1992, no doubt reflecting the inclusion of non-state-owned firms in this calculation.⁴²

A second index also is constructed for 1995, one which utilizes all variables available pertaining to job rights. That is, INDEX95, adds SENIORTY, UNPAIDLV, JOBSTOP, and DELAYWG to the variables included in INDEX1. The maximum value for INDEX95 is nine. As seen in Table A3, the sample job rights index for INDEX95 is 4.23, not significantly different than the expected mean value (4.50).

The hypothesis that the job rights index varies by ownership structure generates mixed results. In eight of the twenty-four workplaces in the 1995 survey there are sufficient observations available to get a statistically significant **workplace job rights index** (workplaces 6, 7, 8, 11, 13, 14, 22, 23). Of these, using INDEX1, for four firms (workplaces 6, 8, 11, 13), the job rights index was as least as great as the expected mean value (3.0). Using the best measure of job rights given the variables available in the 1995 survey, INDEX2₉₅, and focusing on those eight firms for which sufficient data are available, only three companies (workplaces 8, 22, 23) exhibited a job rights index greater than the mean value (4.5). Of the six joint stock companies (workplaces 6, 7, 8, 13, 14, 22) and two private firms (workplaces 11, 23) for which sufficient data are available, in more than half the cases, the predicted result emerges; that is, the job rights index (INDEX2₉₅) for the joint stock companies is greater than that associated with the private firms. The result that

⁴² The results of an OLS regression with INDEX1 as the dependent variable and a dummy variable that treats 1992 observations as one and 1995 observations as zero: INDEX1 = $a_0 + a_1$ YEAR + e, where the coefficient on a_1 is .47 (standard error = .182), with a t-statistic of 2.59, indicate a significant decline in the index. This result seems robust to the inclusion/exclusion of particular firms.

the workplace job rights index for one of the private companies (workplace 23) is greater than that associated with most of the joint stock companies is significant, and contrary to the predicted result.

Given sample size and selection constraints, one must use caution in thinking about how to generalize these results to the entire Russian economy. The results are informative because they signal the possibility that the Soviet insitution of job rights continued to exert an influence as late as 1995, three years after the initation of the transition process. Moreover, the 1992 and 1995 values are not relatively lower than the SIP job rights index. To the extent that the index under-estimates job rights, one might conclude that job rights was somewhat stronger in 1995 than the index would suggest. Again, this note is made simply to reinforce the main conclusion that while job rights appear to have significantly diminished in importance, it does not appear that job rights were extinct by 1995.

References

- Adam, Jan. 1987. Employment Policies in the Soviet Union and Eastern Europe (London: Macmillan).
- Amann, Ronald and Julian Cooper. 1982. *Industrial Innovation in the Soviet Union* (New Haven: Yale University Press).
- Anderson, Barbara and Brian Silver. 1987. "The SIP General Survey Sample," in Millar (ed), *Politics, Work and Daily Life in the USSR* (New York: Cambridge University Press), pp. 354-371.
- Aslund, Anders. 1995. How Russia Became a Market Economy (Washington D.C.: Brookings Institution).
- Azarova, Yelena. 1995. "Social Secruity for Women and Children in Russia," in V. Koval (ed.), Women in Contemporary Russia (Oxford: Berghahn Books).
- Barberis, Nicholas, Maxim Boycko, Andrei Schleifer, and Natalia Tsukanova. 1995. "How Does Privatization Work? Evidence from the Russian Shops." (Cambridge: NBER Paper 5136).
- Berliner, Joseph S. 1957. Factory and Manager (Cambridge: Harvard University Press).
- 1976. The Innovation Decision in Soviet Industry (Cambridge: MIT Press).
- _____ 1988. Soviet Industry: From Stalin to Gorbachev (Ithaca NY: Cornell University Press).
- Birman, Igor. 1978. "From the Achieved Level," Soviet Studies, vol 31, no 2 (April), pp. 153-172.
- Blasi, Joseph. 1996. "Russian Enterprises After Privatization." paper presented at ASSA meetings in San Francisco (January).
- Blasi, Joseph et al. 1997. Kremlin Capitalism (Ithaca NY: Cornell University Press).
- Bornstein, Morris. 1978. "Unemployment in Capitalist Regulated Market Economies and Socialist Centrally Planned Economies," *American Economic Review*, vol 68, no 2, pp. 38-43.
- Boycko, Maxim et al. 1995. Privatizing Russia (Washington D.C.: Brookings Institution).
- Buck, Trevor, Igor Filatochev, Mike Wright, and Yves van Frausum. 1995. "The Process and Impact of Privatization in Russia and Ukraine," Centre for Management Buy-Out, University of Nottingham, Working paper 59.
- Chapman, Janet C. 1963. Real Wages in Soviet Russia since 1928 (Cambridge: Harvard University Press).
- Clarke, Simon. ed. 1996. Labour Relations in Transition: Wages, Employment and Industrial Conflict in Russia (Brookfield, VT: Edward Elgar).
- Commander, Simon and Fabrizio Coricelli (eds.) 1995. Unemployment, Restructuring and the Labor Market in Eastern Europe and Russia (Washington DC: World Bank).
- Cox, Donald, Emmaneul Jimenez, and John Jordon. 1994. "Family Safety Nets and Economic Transition: A Study of Private Transfers in Kyrgyzstan," World Bank, Policy Research Department. Washington D.C.
- de Melo, Martha et al. 1996. "Explaining Transition: The Role of Initial Conditions in Reforming Socialist Economies," World Bank draft paper (March).
- de Melo, Martha and Alan Gelb. 1996. "A Comparative Analysis of Twenty-Eight Transition Economies in Europe and Asia." Post-Soviet Geography and Economics, vol 37 (May), pp. 265-285.

- Desai, Padma. 1985. "Total Factor Productivity in Postwar Soviet Industry and its Branches," *Journal of Comparative Economics*, vol 9, no 1 (September), pp. 1-23.
- Dolgopyatova, Tatyiana. 1994. Ekonomicheskoye povedeniye promychlennyh predpriyatiy v perehodnoy ekonomike (Moscow: Vyshaya shkola).
- Earle, John E., Saul Estrin and Larisa Leshchenko. 1996. "Ownership Structures, Patterns of Control and Enterprise Behavior in Russia," in S. Commander, Q. Fan and M. Schaffer, eds., *Enterprise Restructuring and Economic Policy in Russia* (Washington DC: EDI Development Studies, World Bank).
- Earle, John and Saul Estrin, 1997. "After Voucher Privatization: The Structure of Corporate Ownership in Russian Manufacturing," mimeo, London Business School (April).
- Ericson, Richard. 1997. "The Market and the Yeltsin Succession," *Problems of Post-Communism* (November-December), pp.23-23.
- Fischer, Stanley et al. 1996a. "Economies in Transition: The Beginnings of Growth," American Economic Review (May), pp. 229-233.
- Fischer, Stanley et al. 1996b. "Stabilization and Growth in Transition Economies: the Early Experience," *Journal of Economic Perspectives* (Spring), pp. 45-66.
- Freris, Andrew. 1984. The Soviet Industrial Enterprise (New York: St. Martin's Press).
- Gaddy, Clifford. 1996. The Price of the Past: Russia's Struggle with the Legacy of a Militarized Economy (Washington DC: Brookings Institution).
- Glinskaya, Elena and Tom Mroz. 1996. "The Gender Gap in Wages in Russia from 1992 to 1995," Carolina Population Center, University of North Carolina (June).
- Goodman, Andrew and Gordon Schleifer. 1982. "The Soviet Labor Market in the 1980s," in Joint Economic Committee, *Soviet Economy in the 1980s* (Washington DC: USGPO).
- Goskomstat. 1993. Trudoystroistvo naselyeniya chislennost' i sostav bezrabotnikh v 1992 godu (Moscow).
- Goskomstat. 1995a. Russia in Figures (Moscow).
- Goskomstat. 1995b. Trud i zanyatost' v rossii (Moscow).
- Goskomstat. 1996a. Russia in Figures (Moscow).
- Goskomstat. 1996b. Trud i zanyatost' v rossii (Moscow).
- Goskomstat. 1996c. Sem'ya v rossii (Moscow).
- Granick, David.1961. Red Executive (New York: Anchor Books).
- 1987. Job Rights in the Soviet Union: Their Consequences (New York: Cambridge University Press).
- Gregory, Paul. 1997. "Has Russia's Transition Been a Failure?" *Problems of Post-Communism* (November-December). pp. 13-22.
- 1990. The Soviet Economic Bureaucracy (New York: Cambridge University Press).
- and Irwin Collier. 1988. "Unemployment in the Soviet Economy: Evidence from the Soviet Interview Project."

 American Economic Review, vol 78, no 4, pp. 613-632.
- and Robert C. Stuart. 1990. Soviet Economic Structure and Performance, 4th edition (New York: Harper

Collins).

- Grushin, Boris. 1980. Massovaya informatsiya v sovetskom prom 'shylennom gorode (Moscow: Polizdat).
- Hendley, Kathyrn et al. 1997. "Observations on the Use of Law by Russian Enterprises," *Post-Soviet Affairs* vol 13, no 1 (January-March), pp. 19-41.
- Heybey, Berta and Peter Murrell. 1997. "The Relationship between Economic Growth and the Speed of Liberalization During Transition," University of Maryland, Department of Economics and IRIS Center (November).
- Hunter, Holland. 1961. "Optimum Tautness in Developmental Planning," *Economic Development and Cultural Change*, vol 9, no 4 (July), pp. 561-572.
- Jeffries, Ian. 1996. A Guied to the Economies in Transition (London: Routledge).
- Jones, Derek C. 1996. "The Nature and Effects of Employee Ownership and Control: Evidence from the Baltics, Russia and Bulgaria," paper presented at ASSA meetings in San Francisco (January).
- Keren, Michael.1972. "On the Tautness of Plans," Review of Economics and Statistics vol 39, no 4 (October), pp. 469-486.
- _____ 1982. "The Ministry, Plan Changes, and the Ratchet Effect in Planning," *Journal of Comparative Economics* vol 6, no 4 (December), pp. 327-342.
- Kornai, Janos. 1980. The Economics of Shortage (New York: North-Holland).
- Koval, Vitalina V. 1995. "Women and Work in Russia," in V. Koval (ed.) Women in Contemporary Russia (Oxford: Berghahn Books).
- Krueger, Gary. 1995. "Transition Strategies of Former State-Owned Firms in Russia," Comparative Economic Studies vol 37, no 4 (Winter), pp. 1-18.
- Kushnirsky, Fyodor. 1987. "The Role of Industrial Modernization in Soviet Economic Planning," in Joint Economic Committee, *Gorbachev's Economic Plans* (Washington DC: USGPO), pp. 257-273.
- Laban, R. And H. Wolf. 1993. "Large-scale Privatization in Transition Economies," *American Economic Review* vol 83, no 5 (Fall), pp. 238-245.
- Lane, David (ed). 1986. Labour and Employment in the USSR (New York: New York University Press).
- Levine, Herbert. 1966. "Pressure and Planning in the Soviet Economy," in M. Bornstein and D. Fusfeld (eds). *The Soviet Economy* (Homewood IL: Irwin), pp. 64-82.
- Linz, Susan J. 1992. "Politics and Productivity in Soviet Industry," in Millar (ed), Cracks in the Monolith: Party Power in the Brezhnev Era (Armonk NY: M.E. Sharpe), pp. 33-62.
- _____1995. "Russian Labor Market in Transition," Economic Development and Cultural Change, vol 43, no 4 (July), pp. 693-716.
- _____ 1996. "Red Executives in Russia's Transition Economy," *Post Soviet Geography and Economics* vol 37, no 10 (November), pp. 633-651.
- 1997a. "Russian Firms in Transition: Champions, Challengers, and Chaff," Comparative Economic Studies vol 39, no 2 (Summer), pp. 1-36.
- _____ 1997b. "Labor Productivity in Transition: A Regional Analysis of Russian Industry," Michigan State University Department of Economics Working Paper #9700 (August).
- 1997c. "Depreciation and Russian Corporate Finance: A Pragmatic Approach to Surviving the Transition,"

- MSU Economics Department Working Paper # 9702 (December).

 _____ and Robert E. Martin. 1982. "Soviet Enterprise Behavior Under Uncertainty," Journal of Comparative Economics (March), pp. 24-36.

 _____ and Gary Krueger. 1996. "Russia's Managers in Transition: Pilferers or Paladins?" Post Soviet Geography and Economics vol 37, no 7 (October), pp. 397-425.

 _____ and Gary Krueger. 1997. "Enterprise Restructuring in Russia's Transition Economy: Formal and Informal Mechanisms," presented at the ACES/ASSA meetings (Chicago, January 1998).

 Lipton, David and Jeffrey Sachs.1990. "Creating a Market Economy in Eastern Europe: The Case of Poland," Brookings Papers on Economic Activity,, pp. 75-147
- Marnie, Sheila. 1993. "Who and Where are the Russian Unemployed?" RFE/RL Research Report, vol 2, no 33 (20 August), pp. 36-42.
- Millar, James, R. (ed) 1987. Politics, Work and Daily Life in the USSR (New York: Cambridge University Press).
- Moskoff, Willaim. 1984. Labor and Leisure in the Soviet Economy (London: Macmillan Press).
- 1993. Hard Times: Impoverishment and Protest in the Perestroika Years (Armonk NY: M.E. Sharpe).
- Nelson, Lynn and Irina Kuzes. 1994. "An Assessment of the Russian Voucher Privatization Program," *Comparative Economic Studies* vol 36, no 1 (Spring), pp. 24-36.
- Sachs, Jeffrey and Wing Thye Woo. 1997. "Understanding China's Economic Peformance," Harvard University (May).
- Standing, Guy. 1996. Enterprise Restructuring and Russian Unemployment: Reviving Dead Souls (New York: Macmillan).
- ______. 1997. "Myths and Distortions of Russian Unemployment," presented at ACES/ASSA meetings (Chicago, January 1998).
- Stone, Andrew, Irina and Victor Novitzky. 1995. "Private Enterprise in Ukraine: Getting Down to Business -- Results from a Private Enterprise Study," (Washington D.C.: World Bank).
- Thornton, Judith. 1970. "Value-Added and Factor Productivity in Soviet Industry," *American Economic Review* vol 60 (December), pp. 863-871.
- Thornton, Judith and Nadezhda Mikheeva. 1996. "The Strategies of Foreign and Foreign-Assisted firms the Russian Far East: Alternatives to Missing Infrastructure," *Comparative Economic Studies* vol 38, no 4 (Winter), pp. 85-120.
- van Brabant, Jozef. "Lessons From the Wholesale Transformation in the East," Comparative Economic Studies vol 35, no 4 (Winter), pp. 73-102.
- Whitesell, Robert. 1994. "Industrial Growth and Efficiency in the United States and the Former Soviet Union," Comparative Economic Studies vol 36, no 4 (Winter), pp. 259-268.