The Russian Labor Market: Moving from Crisis to Recovery

A copublication of Izdatelstvo Ves Mir and the World Bank

Printed in the Russian Federation

A copublication of the World Bank and Izdatelstvo Ves Mir

Izdatelstvo Ves Mir
9a Kolpachny Per.
101831 Moscow-Center
Russian Federation

ISBN: 5-7777-0274-0

Library of Congress Cataloging-in-Publication Data has been applied for.

CONTENTS

Figures

Tables

Acknowledgements

This report was prepared by a team comprising Mansoora Rashid (Task Team Leader), Emily Andrews, Gordon Betcherman, Harry Broadman, John Earle, Arvo Kuddo, Francesca Rescanitini, Klara Sabirianova, and Elena Zotova. Tatyana Tchetvernina and her team also contributed a background paper for this report. The team benefited from the advice of Russian labor market experts during its preparation, including: Alexander Ananiev, Natalia Chekorina, Lubov Eltsova, Tatyana Gorbacheva, Vladimir Gimpelson, Zoya Hotkina, Veronika Kabalina, Rostislav Kapelushnikov, Alexander Leonov, Valeri Naboishikov, Serguey Panin, Alexander Rasumov, Ludmila Rjanitsyna, Zinaida Ryshikova, Oleg Saenko, Vitali Savin, Igor Shanin, Irina Soboleva, Galina Strela, Vladimir Varov, and Ludmila Xahulina. The team would like to thank the presenters and participants at the joint Ministry of Labor and Social Development of the Russian Federation (MLSD) / World Bank workshop on this study for their comments and suggestions. We are also grateful to Alexander Pochinok, Minister of Labor and Social Development of the Russian Federation, Mikhail Dmitriev, First Deputy Minister, Ministry of Economic Development and Trade of the Russian Federation (MEDT), Eugene Gontmakher, Director, Department of Social Development, Russian Federation Government Office, Maxim Topilin, Deputy Minister, MLSD, and Marina Moskvina, former Deputy Minister, MLSD, for their support of this work and for their comments to earlier drafts of the report. This work has also benefited from comments from Anders Aslund, Anastassia Alexandrova, Robert J. Anderson, Vladimir Debrentsov, Brian Pinto, Ana Revenga and Ruslan Yemtsov. The report was prepared under the guidance of Michal Rutkowski, Sector Manager, ECSHD, World Bank, and Annette Dixon, Sector Director, ECSHD, World Bank.

Acronyms and Abbreviations

ALMP	Active Labor-Market Program
BLR	Balance of Labor Resources
BLS	Bureau of Labor Statistics
CEE	Central and Eastern Europe
CEET	Central and Eastern European Team
CIS	Commonwealth of Independent States
CPI	Consumer Price Index
EBRD	European Bank for Reconstruction and Development
FDI	Foreign Direct Investment
FIAS	Foreign Investment Advisory Service
FTE	Full-Time Equivalent
FSU	Former Soviet Union
GDP	Gross Domestic Product
ICFTU	International Confederation of Free Trade Unions
ILO	International Labour Organization
IMF	International Monetary Fund
ISA	Individual Saving Account
ISITO	Institute for Comparative Labor Relations Research
LFPR	Labor Force Participation Rate
LFS	Labor Force Survey
MLS	Minimum Living Standard
MLSD	Ministry of Labour and Social Development of the Russian Federation
NDC	Notional Defined Contribution
OECD	Organization for Economic Cooperation and Development
OLS	Ordinary Least Squares
REB	Russian Economic Barometer
RLFS	Russian Labor Force Survey
RLMS	Russian Longitudinal Monitoring Survey
SIF	Social Insurance Fund
UI	Unemployment Insurance
UISA	Unemployment Insurance Savings Accounts
VTsIOM	All-Russian Center for Public Opinion Research
WBES	World Business Environment Survey
WTO	World Trade Organization

EXECUTIVE SUMMARY
The Labor Market in Russia: Moving from Crisis to Recovery

I. Overview

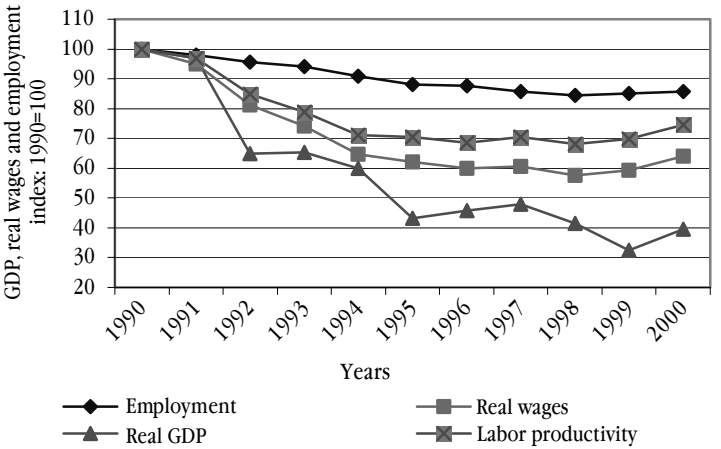
i. One of the main challenges confronting the Russian Federation today is to increase real wages and productive employment in order to improve the standard of living of its population. This report focuses on *labor-market policy options* that are important for achieving this outcome. Macroeconomic policies that promote competitive product markets, raise aggregate demand for labor, and increase labor productivity may have the most critical impact on employment and wage outcomes. However, labor-market policies and institutions also can affect the functioning of the labor market and the level of employment and wages.

ii. The report is forward-looking, in that it suggests measures to help Russia develop a formal, competitive labor market over the medium term. The study addresses four major questions: (1) How well has Russia been able to redress the misallocation of labor inherited from its socialist past? (2) Do wages increasingly reflect market forces? (3) Are labor-market institutions consistent with those required in a market economy? (4) How well has Russia been able to reduce explicit protection offered by firms and create an effective safety net? This report addresses each question in a separate chapter and also highlights key issues and policy options in each area. The development of a well functioning labor market will contribute to Russia's ability to integrate with the global economy, particularly as it faces the opportunity and challenges that will come with WTO accession.

iii. Attempting to evaluate the labor market in Russia, given its vastness, complexity, and diversity, is a daunting task. This report attempts to remedy these problems in part, by providing a comprehensive picture of labor markets. We rely heavily on work by both Russian and international scholars to inform this report. We also have incorporated salient points from the considerable discussions and debate on labor-market policy issues that took place in Russia during the course of this study. We have attempted to overcome data issues by using both nationally representative surveys and smaller regional surveys of enterprises, workers, and the unemployed, and by cross-checking their results with each other.[1] No data set is perfect; therefore, the strengths and weaknesses of each are discussed in relevant sections of the report.

[1] Specifically, the analysis combines official statistics of the Russian Government, detailed findings from the Russian Labor Force Survey (RLFS), and the results from several micro-data sets on firms and households, including a large enterprise survey, firm registries, and the Russian Longitudinal Monitoring Survey (RLMS).

Figure 1. Real GDP, Employment, Real Wages, and Labor Productivity



See Chapter I.

iv. Russia experienced a severe recession through most of the 1990s, and the effects were felt in the labor market, with a sharp decline in real wages and a rise in unemployment. Nevertheless, the report finds that Russia made some progress in moving to a market-based allocation of labor over this period. The allocation of labor across industries, occupations, and sectors has moved toward that found in a market economy. Unemployment rates have increased over the 1990s as the economy has restructured and enterprises have downsized. Job destruction rates in manufacturing have also substantially increased over the 1990s confirming this trend, and this reallocation has worked to raise total productivity. The determination of wages also has started to reflect market forces: The returns to education have markedly increased (although returns to vocational education have fluctuated over time), and the returns to work experience in the socialist era have declined. These changes are explained in part by the downsizing of enterprises and the growth of the private sector.

v. Recent economic growth has demonstrated the ability of the Russian labor market to respond rapidly to economic growth. Real wages, employment, and labor productivity have increased, with an average annual rate of growth similar to that realized by Central and Eastern European (CEE) countries in their first two years of economic recovery. Wage arrears and inappropriate fringe benefits (housing, kindergartens, etc.) also have sharply declined, although they have not completely disappeared. The unemployment rate has declined sharply - more so than in CEE countries during a similar growth period. In accordance with the above trend, job creation trend substantially grew and job destruction rate decreased, at least in the production sector that appeared to be in the more favorable position because of the devaluation of the currency in the recent years.

vi. The report cautions that a large outstanding agenda in creating a well-functioning labor market still confronts the Government, employers, trade unions, and workers. Years of slow restructuring, limited economic reforms, and lack of job opportunities have led to a decline in formal labor-market activity and a shift of many employed toward subsistence self-employment, primarily in agriculture. Despite recent declines, the level and duration of unemployment (ILO definition) are not low by Organization for Economic Co-operation and Development (OECD) standards; and the recent slowdown in economic activity has started to gradually reverse previous gains in terms of unemployment trends. The employment share of the private sector remains small, and genuine entrepreneurship is limited. While in manufacturing job-creation rates have increased somewhat over the 1990s, they remain lower than in OECD countries and high income transition economies. Job destruction continues to dominate job flows, and net employment growth remains negative in this sector.[2] Moreover, despite progress in market determination of wages, nonmarket forces (for example, wage arrears, fringe benefits, and in-kind substitutes outside the norm in market economies) remain important, and wage arrears have even increased for public sector workers (health and education) in recent months. Wage inequality, already high by regional standards, has increased since 1998, and the incidence of poverty remains very high.

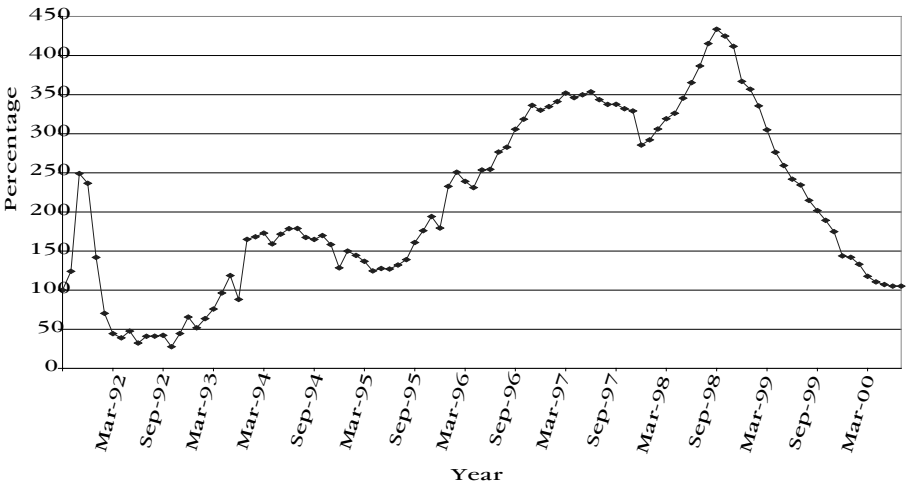
vii. Furthermore, labor-market regulatory institutions have not evolved significantly since the socialist era and are generally very ineffective. The passage of the new Labor Code was a political achievement and does offer some improvements on the old law. However, the new Code is still quite restrictive relative to many OECD countries. Employers are limited in their ability to adjust their workforce in response to economic and technological change; workers and employers do not have adequate opportunity to voice their concerns; contract enforcement is weak; and mechanisms for resolving workplace disputes and addressing health and safety concerns are limited. Even though the Government created a modern safety net in the early 1990s, limited financing of this program has made the system largely ineffective, contributing to high rates of poverty among the unemployed (relative to national levels).

viii. Weak labor-market regulation means that the excessively restrictive Labor Code has not greatly constrained labor adjustment in Russia. Poor incentives and reputational risks for employers in laying off workers have probably played a more important role in constraining Russia's gradual restructuring. Although limited regulation is beneficial for labor-market outcomes (e.g., job creation), the virtual absence of labor regulation enforcement "on the ground" has imposed large welfare and productivity tradeoffs: low and uncertain wages, growing wage inequality, poor health and safety standards and other contractual violations. This lack of labor regulation enforcement also has contributed to the informalization of the economy. While wage arrears and other labor violations have declined as a result of economic growth, the absence of effective enforcement and arbitration institutions means that workers remain vulnerable to a recurrence of such violations should economic growth subside.

---

[2] The studies on job flows do not include the private service sector, which is likely to have much higher rates of job creation and destruction.

Figure 2. Real Wage Arrears Rose, and Then Fell Sharply Post 1998



See Chapter II.

ix. The report concludes that increasing productive employment and real wages will require, first and foremost, addressing the remaining restructuring agenda and promoting sustained, private-sector-led economic growth. An increased emphasis on creating flexible and enforceable labor-market regulatory laws and institutions, however, also will be critical for promoting labor productivity and improving the welfare of workers. Finally, it will be important to complement the reduced protection offered by firms with an affordable and effective public safety net for workers to allow the lowering of restrictions in the Labor Code, facilitate layoffs in strategic state sectors, and protect workers in case of job or skill loss.

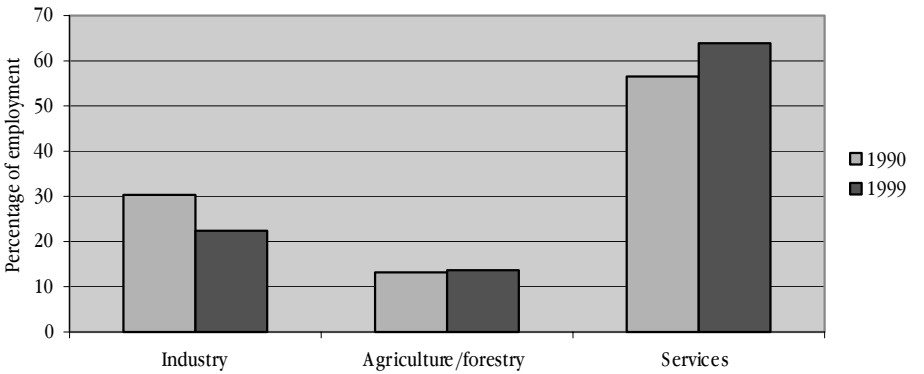
x. The Government recognizes the importance of a labor-market policy that promotes efficiency but protects the basic rights of workers and has made it an important component of its economic reform program. A notable achievement, after prolonged discussion and debate, has been the passage of the new Labor Code, which modernizes labor-contracting practices, and the signing of a decree that makes wage arrears a criminal practice. These are steps in the right direction, but more needs to be done. Further reforms along these lines would help improve labor productivity as well as promote worker welfare.

The main findings and conclusions of the report are presented in greater detail below.

II. Recent Developments

xi. The Russian labor market has been gradually restructuring during the past decade, mainly as a result of market liberalization, an ineffectively regulated labor market, and growth of the private sector. (Results from this section are presented in the Chapters I and II of this report).

Figure 3. The Composition of Employment by Sector of Economic Activity, 1990-99



See Chapter I.

- *The level and duration of unemployment gradually increased between 1990-98.* The unemployment rate rose from 5.2 percent of the labor force in 1992 to nearly 15 percent in 1998. Most of the unemployed have previous work experience, confirming that the exit of workers was the main reason for unemployment growth. Increasing job-destruction rates and low rates of job creation over the 1990s in the manufacturing sector are consistent with this increase in unemployment.
- *Among those remaining officially employed, there has been a significant reallocation of workers.* This movement reflects large shifts of workers across industries, occupations and sectors consistent with those found in a market economy. Russia now ranks at the median level for reduction in the employment share of industry and growth in the share of services, in the latter case ahead of Bulgaria, Poland, Romania, and Slovenia. This shift is also reflected in the reduced output share of agriculture and industry and the increased share of services in gross domestic product (GDP) in the past decade. These transitions can be explained in part by the decline in state employment and employment growth in mixed, domestic, private, and foreign firms.
- *Labor mobility across occupations also increased post-1991 and became more complex.* The number of people who moved to another industry, firm, or occupation was considerably higher during the first four years of reforms (1991-95) than during the preceding six years 1985-91). Mobility also became more "complex," more frequently involving simultaneous changes in occupation,

firm, and industry (table 1). Another indicator of labor mobility is job tenure, which has declined in Russia (for both men and women) to some of the lowest levels found in OECD countries.[3]

- *Wage growth started to reflect a premium to education.* The returns to education for women have increased from 3.8 percent (3.2 percent for men) in 1992 to 7.6 percent (6.8 percent for men) in 2000[4]; however, the rate of return to vocational education has fluctuated over this period. As in other transition countries, the rate of return on experience and job tenure is low and negative, signaling the irrelevance of socialist era experience in the emerging labor market. Like other transition countries, the private sector (all else equal) pays more than the state sector, signaling higher worker productivity in that sector. There is a significant gender gap, with women earning less than men with similar characteristics. Moreover, the wage share of worker remuneration has increased, as the initially large fringe benefits (e.g. kindergartens, medical care) -wage substitutes in the socialist era - have declined over time. The biggest declines have been recorded for housing construction, kindergartens, and recreation and culture.

xii. The post-1998-2000 period of 11 percent cumulative growth led to major responses from the labor market. Employment increased cumulatively by 2 percent and nonparticipation fell.[5] Unemployment rates also fell sharply to 9 percent in 2001 (but have increased slightly since then).

As in advanced CEE reformers, the employment response was much smaller than that of output. Employers reallocated existing labor more productively as opposed to increasing employment, and labor productivity increased (7 percent in 2000). The average annual growth rates in employment and labor productivity are similar to those found in CEE countries after the first two years of economic recovery, but the decline in unemployment was far greater in Russia than realized in CEE countries in this period.

Labor-market transitions between 1998 and 2000 were much higher than in the 1994-96 and 1996-98 period. The transition out of unemployment into employment increased significantly, and the transition to nonparticipation declined in response to

---

[3] High hiring and separation rates in Russia during this period of economic decline remain a puzzle that requires future research.

[4] Thus, women obtained a 3.8 percent gain in real wages per year of education (all else equal) in 1992, and this wage gain increased to 7.6 percent per year of schooling by 2000.

[5] For assessing changes in employment, the study uses the Balance of Labor Resources (BOLR) employment series. This series represents the statistical agency's attempt to estimate employment on the basis of all available information. In contrast, the RLFS is a pure survey-based measure. The report uses the RLFS for evaluating changes in the composition of the labor-force aggregates and flows. The discrepancy between the two series has been the subject of some discussion: both show a similar pattern of decline until 1998 and rise thereafter. The RLFS series shows a greater responsiveness to output than the BOLR data. A possible explanation for the difference stems from the fact that until 1999 the RLFS was carried out only in particular months of the year on a somewhat irregular schedule.

Table 1. Job and Occupational Mobility (Self-Reports in the RLMS)

Years	Changed both firm and occupation	Changed firm but not occupation	Changed occupationbut not firm	Did not change either firm or occupation
1996-1998	0.170	0.093	0.034	0.704
1998-2000	0.176	0.105	0.035	0.685

Note: The table shows the fractions of employed respondents who reported in 1998 and 2000 that they changed their place of work and occupation as compared with December 1996 and December 1998, respectively.
Source: Calculations from RLMS *(see Chapter I).*

positive economic activity. The probability of remaining employed increased, as did new entry to the labor market and re-entry into employment from out of the labor force. Economic growth in post-crisis Russia was not only strong enough to increase the probability that workers would remain employed, but it also brought the unemployed back to employment more quickly than before, and it even pulled in labor-force nonparticipants. Consistent with the decline in unemployment, job creation rates in the manufacturing sector (which benefited most from the devaluation of the currency) increased, and job destruction rates declined - although the latter continued to dominate job flows.

- *Real wages lagged employment and output growth between 1998 and 2000; and wage arrears declined by half.* Wages fell between 1998-1999, but increased by 22 percent between 1999-2000. The average annual increase in real wages in the two year period (1998 and 2000) was therefore negative, as wage growth lagged behind employment and output growth. This was also the case in both Poland and Hungary, however, in their first two-year growth period. The decrease in wage arrears may be a result of several factors, including a decree by the government criminalizing this practice, positive macroeconomic trends, devaluation of stock resulting from the burst of inflation at the end of 1998, and the trend toward reduction of barter in the economy in the past few years.
- *Wage inequality increased, and there were winners and losers post-1998.* The Gini coefficient for wages, which measures inequality in the distribution, increased from 0.439 in 1998 to 0.464 in 2000. The increase in wage inequality is the result of higher real wage gains among high-wage workers relative to low-wage workers. Workers who realized real wage gains are younger, highly educated, private-sector, urban workers. Older, less-skilled workers in rural areas and in the state sector hardly realized any increase in real wages. Thus, economic growth between 1998 and 2000 has benefited some workers more relative to others.

Table 2. The Share of Employment in New Private Sector, 1994-2000*

Ownership type	1994	1995	1996	1998	2000
Distribution of the employed by type of ownership					
State-owned	0.754	0.683	0.663	0.647	0.605
Mixed	0.073	0.100	0.116	0.113	0.129
Domestic private	0.134	0.172	0.181	0.196	0.217
Foreign	0.040	0.045	0.039	0.044	0.049
Not available	0.181	0.155	0.148	0.140	0.127

* Using ownership type as definition of new private sector (see Chapter I).
Source: Definition of ownership type. Calculations from RLMS. Goskomstat (2000b, p. 112).

xiii. The Russian labor market is still far from the formal, private-sector-based labor markets typical of OECD countries. Despite recent economic recovery, much remains to be done.

- *Formal employment is low, and a significant share of workers is self-employed in subsistence agriculture*. Despite recent increases, the decline in employment was significant in absolute terms (but less relative to output). The largest declines in the labor force were in the youngest and oldest age groups. What happened to individuals who left employment? Some joined the ranks of the unemployed, but the majority left the labor force, of which a considerable share took up self-employment, primarily in subsistence agriculture (table 2).
- *The state remains an important employer*. Government policies that have constrained downsizing of firms, through soft budget constraints and local government pressure on enterprises to maintain jobs and services, have led to excess jobs in the state sector. While the extent of overstaffing declined during the past decade, and estimates about its size are under debate, its existence is confirmed by the small response of employment to output. Despite recent increases, the private-sector share of employment remains lower than that in advanced CEE countries;[6] and the share of self-employment and genuine entrepreneurship is low as well.[7] A recent study by Foreign Investment Advisory Service (FIAS 2001) finds that there are considerable barriers to entry for

6 The estimates on the private-sector share of employment vary by definition of employment and source of data. According to ownership definition, the private share of employment increased from 13 percent in 1994 to 22 percent in 2000; and, using founding date, from 22 to 33 percent between 1995 and 2000. In contrast, the reported private-sector share of employment in Poland was 60 percent as far back as 1996.

7 In Russia, the self-employment share is approximately 6 percent; relative to more than 10 percent in Japan, the United Kingdom, Germany, the Czech Republic, and Hungary and more than 20 percent in Poland, Italy, and Republic of Korea (in the 1990s).

Table 3. The Socioeconomic Composition of the Unemployed, 1999 (Percentage)

	Average age	< 40 years (percent)	Education *				Previous work history (percent)	Longterm ** (percent)
			Basic	General secondary	Prof. secondary	Higher		
Total	35.3	64.9	16.9	31.3	38.8	13.0	81.1	47.3
Men	35.5	65.7	20.3	33.4	35.1	11.3	82.8	44.0
Women	35.2	64.1	13.2	29.1	42.9	14.8	79.3	51.0

* Complete and incomplete.
** Period of job search more than 12 months.
Source: Goskomstat (1999d).

small and medium enterprises including problems with taxes, policy instability, corruption, inflation, and the judiciary. For this reason, private and foreign direct investment is low. The lack of restructuring and continued domination of large enterprises also stymies the ability of small and medium enterprises to emerge, and dampens employment creation. As noted above, manufacturing job creation rates, while they have increased over the 1990s, still remain below OECD and high income transition countries.

- *Labor productivity is low.* Although employment fell sharply, output declined even more, leading to cumulative labor productivity losses of approximately 30 percent in the 1990s - much higher rates than those in lead CEE countries. Most of the employment adjustment came in reduction in the work force. Most evidence indicates that adjustment in hours or secondary employment did occur, but were not as important as adjustments in primary employment suggest.[8] Low productivity stems in part from continued over-manning (relative to level of output), but also as a result of limited investment in capital noted above; and obsolete skills/experience of some parts of the workforce.
- *Unemployment is exacerbated by a skills and regional mismatch; and high payroll taxes.* Despite recent declines, Russia can no longer be called a low-unemployment economy. The rate of unemployment and its duration of unemployment are high (relative to OECD and some transition countries), and regional variations in unemployment are quite large (relative to transition countries). What factors might constrain the match of demand for workers and supply of unemployed? (a) *A Skills Mismatch.* Workers with low levels of education, obsolete skills, and older age have the highest rates of unemployment and the longest

8 Further work is required to ascertain the exact nature of the informal sector in Russia. This report indicates that self-employment in subsistence agriculture and informal wage payments may constitute important parts of the informal economy.

Table 4. Incidence of Fringe Benefits by Firm Size, 2000

Fringe benefits	Total	Firm size			
		<25	26-100	101-500	>500
Paid annual vacation	0,915	0,755	0,944	0,961	0,974
Paid sick leave	0,912	0,742	0,939	0,964	0,980
Health services	0,374	0,195	0,284	0,414	0,622
Vacation subsidies	0,438	0,190	0,375	0,506	0,680
Kindergartens	0,130	0,064	0,097	0,149	0,270
Catering	0,152	0,096	0,133	0,160	0,221
Transportation	0,142	0,083	0,094	0,215	0,194
Training	0,213	0,097	0,194	0,256	0,323
Loans	0,143	0,081	0,111	0,159	0,249

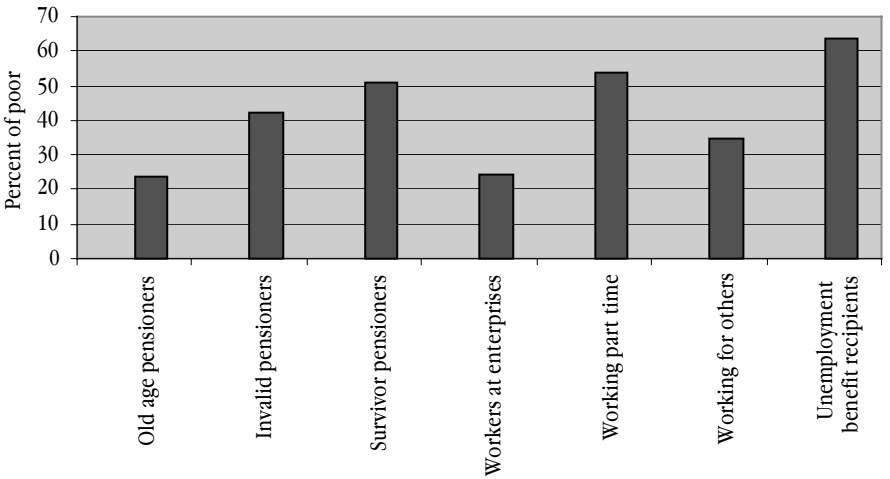
Note: The total sample size ranges from 3746 to 4102 respondents.
Source: Calculations from 2000 RLMS.

duration of unemployment; (b) *A Regional Mismatch*. There continues to be a large regional variation in unemployment levels (higher than in Poland and the Slovak Republic, for example). High unemployment regions, concentrated in eastern and western Siberia and the North Caucasus have lower expenditure per capita, high poverty rates, high birth rates, and a high industrial share of output. High unemployment rates in high industrial-share regions or particular state sectors (e.g. railways) indicate that unemployment in these regions, and in mono-company towns, might be exacerbated (in the short run) by economic restructuring, which will require social policy focus. The evidence on the extent of regional mobility that would act to reduce some regional unemployment differences is mixed. There is some evidence of informal mobility, but other studies suggest that the lack of affordable housing limits worker flows. Finally, it should be noted that *high payroll taxes* in Russia (higher than OECD, but lower than most CEE countries) may also contribute to higher unemployment than otherwise, by raising the cost of labor (as suggested by international evidence).

- *The incidence of wage arrears has declined but the average amount of wage arrears for those who continue to face them changed relatively little (between 1998 and 2000).* Wage arrears remain persistent for particular individuals (less educated, with longer job tenure), regions (rural), occupations (the military), and sectors (agriculture). It is important to note that wage arrears are not caused by contract renegotiations (or wage flexibility) but by contract violations. Wage arrears tilt the earnings-tenure profile, which together with the lack of contract enforcement, the market power of many employers, and limited mobility all serve to moderate workers' quit behavior and to increase the incentives of firms to use wage arrears.

- *Wage remuneration in the form of fringe benefits outside market norms and under-reporting of wages still are prevalent*, particularly for employees of large firms. It is therefore not surprising that, unlike CEE countries, market forces (such as education) are less important factors explaining differences in wages. Rather, non-economic factors or regional differences, or both, are probably the main reasons for wage differences in Russia. There also is considerable underreporting of wages (which make wage measurements difficult), perhaps to avoid high payroll taxes. Recent studies have found that more than one-third of private-sector employees earn more than their registered wage and, in 10 percent of the cases, actual payments are at least six times the official level.
- *Poverty among the labor force increased* over the transition (both according to Goskomstat and RLMS data) and remains high despite recent declines. High rates of poverty reflect the still-low level of wages and other income (self-employment) in Russia and the very high level of wage and income inequality.[9] The highest poverty rates among the labor force are among the unemployed and workers with wage arrears.
- *Measurement matters*. Ensuring that labor-market outcomes are measured accurately is essential for better understanding of labor-market developments. Counting subsistence

Figure 4. Poverty Rates in Russia, 2000, by Socioeconomic Group



Source: Goskomstat (see Chapter II).

9 Wage inequality has not contributed significantly to income inequality because of the low wage share in income. It is the high share of self-employment income in total income that explains high income inequality in Russia (World Bank 2001a).

agriculture workers as employed[10] - which is not done in the RLFS - would increase the employment rate (by 12 percent) and reduce unemployment rates (by 2 percent). The composition of employment also would change because the share of subsistence employment in the total labor force would increase.

III. Labor-Market Regulation

xiv. *Labor- market regulation is restrictive in law but not in practice.* During the transition, labor-market regulation in Russia was unrealistically strong and inappropriate for a market economy. Moreover, in practice, for many firms and workers, it was completely bypassed, so that the labor market was virtually unregulated. Recently, after considerable public discussion and debate, the new Labor Code has been adopted. Given the diversity of views about labor-law reform, passage of a new Code is a significant political accomplishment. The new Labor Code provides some improvements but more needs to be done, including providing more freedom to employers in deploying their work force.

xv. A strict labor code without enforcement leads to violations of labor rights and reduces the welfare of workers below acceptable levels, and impedes labor productivity. A strict code with full enforcement will improve worker welfare but impose high costs on employers and restrict the ability of the labor market to adjust to economic realities, also limiting economic growth. The challenge for Russia is to move from a labor regulatory framework that is restrictive and not enforced, to one that is flexible and fully enforced. This solution will both improve labor productivity and worker welfare. The key areas where further reforms are needed are the following (Chapter III presents a detailed discussion of this topic):

- *Excessive restrictions on flexible forms of contracting.* The legal framework in Russia has been geared heavily toward formal, permanent, open-ended contracts. There are numerous restrictions on the use of fixed-term contracts. These restrictions induce employers to engage in contracting practices that are in violation of the labor law. According to OECD data, excessive restrictions also can hurt vulnerable groups, such as women and youth. The new Labor Code takes some promising steps to introduce more flexible contracting practices; however, the Code does not make any marked improvements in either the deployment of labor or in terms of reducing the excess protections of certain categories of workers, including women.[11] Future reforms will be necessary to provide employers with the similar scope to deploy workers that their western counterparts have.
- *Substantial statutory employer obligations toward permanent employees,* This appears to have improved with the new Code. Where obligations are large, the international experience indicates that the result is more informalization,

[10] This assumes that subsistence agricultural workers were classified as non-participants.

[11] For example, the Code heavily protects women in case of contract termination, overtime work, business trips, etc., raising the costs of firing female workers, but also making them costly to hire. Maleva et al. (2001) also find that the new Labor Code imposes considerable costs on employers.

Table 5. Official Minimum Wage and Average Monthly Wage, 1995-2000

Years	Official minimum monthly wage (Rbl.)	Percent of average monthly wage due
1995	42.6	9.0
1996	72.7	9.2
1997	83.5	8.8
1998	83.5	7.6
1999	83.5	5.3
2000 (August)	132.0	5.7
2001 (Quart. 1-3)	300.0	9.7

Source: Russian Economic Trends, October 2000 (tables 5 and 6) (see Chapter III).

lower job creation, and potential reductions in the productive efficiency of enterprises. In some OECD countries, employers often overcome high protection accorded permanent employees in the labor law through the use of fixed-term and temporary contracts. In Russia, as discussed above, these options have been restricted. As a result, employers have resorted to wage arrears, administrative leave, voluntary quits rather than layoffs, and contracting in the informal sector. These practices, particularly voluntary quits and wage arrears, also reflect the reputational risk of employers in laying off workers. The new law does appear to moderate these excessive termination conditions; however, it still imposes costs on employers wishing to adjust their workforces to economic and technological realities.

- *Ineffective and disortionary wage regulation.* For example, Russia has a very low minimum wage that is not currently binding in any sense. Moreover, employers continue to use the tariff scale as a wage-setting guidepost, despite its deregulation. Wage practices such as wage coefficients for hiring northern workers, nonreporting of wages, and the compressed public wage scale continue to make wages an ineffective tool for allocating labor and measuring labor productivity in Russia. The new Labor Code largely continues existing wage regulations. What is new and worrisome is that the Code now stipulates that the minimum wage for the whole territory of the Russian Federation cannot be lower than the subsistence minimum defined for a working-age individual (which may cause both fiscal and incentive problems) and states that wages should be indexed according to a consumer price index. If enforced these changes could be very costly from an efficiency and fiscal perspective; but if not, they would once again create a discrepancy between the law and actual practice.
- *Ineffective industrial relations.* Russia has made some progress in making the transition in industrial relations from a regime designed for the planned

economy to one appropriate to a market economy. Russia still has a long way to go, however, particularly in terms of developing the institutions that underpin effective industrial relations. There is an intricate bargaining apparatus in the law, but there is actually little real collective negotiations determining wages and working conditions at the workplace. Unions or the bargaining structure do not adequately reflect the voices of workers. International research has demonstrated that worker voice, embodied in the true representation of workers and employers in the bargaining process, can improve training and health and safety in the workplace, thereby contributing to productivity gains and improvements in worker welfare. In the new Code, provisions remain for collective bargaining at all levels. The Code does change procedures for determining bargaining representatives for employees. These new rules specifically pertain to what is considered a "local union" as well as to how a bargaining representative is selected when multiple trade unions exist. While it is still unclear how these rules will function, they may have the effect of limiting the opportunity for small and independent unions to represent workers.

- *The failure of enforcement and dispute resolution.* The virtual absence of these institutions pose major challenges for Russian policymakers, employers, and labor. The consequences of the weak institutional framework for industrial justice are exacerbated in a slack labor market, and while disputes and contract violations dissipate when economic activity increases labor demand, workers remain vulnerable to the reemergence of such disputes in times of economic slack. The new Code does not appear to make major changes in this area. A positive aspect of the approach is that most conflicts are intended to be resolved at the enterprise level, which should minimize costs and time requirements. However, it appears to create a cumbersome practice of reconciliation of differences at the enterprise level. The timetable for hearing and resolution of labor disputes is very tight. While labor inspectors and inspectorates have significant privileges and rights to monitor the execution of labor legislation, their role as mediators, conciliators and arbitrators of labor disputes is diminished if nonexistent.
- *What is the impact of labor-market institutions on the labor market in Russia?* The weak enforcement of the restrictive labor law has almost certainly allowed more adjustment in wages and employment than if this law had been enforced. Reputational risks of employers and other poor incentives to managers for laying off workers - more than the labor laws --may primarily be at work in reducing the pace of layoffs in the past decade. The absence of labor regulation, however, has had important tradeoffs in the form of lower worker welfare and worker productivity, including, among other things, low wages, wage arrears, and other contract violations among particular workers and in some regions (perhaps where workers have less bargaining power and job opportunities), poor health and safety standards, and large wage inequality.

IV. Safety Nets for Workers

xvi. Early in the transition, the government introduced a modern public safety net for workers, including active labor-market programs and passive support in the form of unemployment benefits. The safety net has not been effective, however, in protecting workers against loss of income or skills.[12] In 1998, the poverty rate of unemployed with benefits was much higher than the average poverty rate in the country. (Chapter IV presents a detailed discussion on this topic)

- · *The unemployment benefit program is quite generous according to law.* The formal target replacement rate of benefits is quite high (75 percent for first three months; 60 percent for the next four months, and so on); and the duration of benefits is quite long (12 months; with reentry guarantees) relative to CEE norms. The main eligible groups are laid-off workers and voluntary quits.[13] However, more so than other countries, many other workers are also eligible, but for a significantly lower benefit. These workers include, for example, individuals who have never worked, have been fired for disciplinary reasons, or who have reentered the work force. Some groups receive special (higher) benefits, for example, Northern workers.
- *The program is not generous according to practice, however.* The coverage of the program is very low. Only 14 percent of the surveyed unemployed were registered with employment offices in 2000, out of which about 80 percent receive benefit. This is a much lower coverage rate than found for CEE or OECD countries,. The main reason for low coverage is the low and uncertain level of benefits. Effective, or actual, benefit replacement rates (25 percent of average wage) are similar to those found in CEE countries, but are much lower than rates specified by law. Unlike CEE countries, the replacement rate is subject to considerable uncertainty (a result of benefit arrears - which also was evident in 2000), and is therefore even lower. The benefit structure is much compressed with about 50 percent of the beneficiaries receive the minimum benefit.
- *Financing issues.* The main reason for low and uncertain benefits is inadequate financing of the program. Funding was 0.16 percent of GDP in 2000 - much lower than financing norms for advanced CEE countries (0.68 percent of GDP[14]) - though not inconsistent with Russia's lower level of GDP. However,

---

[12] Recent research (Lokshin and Ravallion 2000; Richter 2000) indicates that the safety net did reduce poverty more than if it did not exist; although more generous financing would have had greater impact. These studies, however, do not review the marginal impact of the unemployment benefit on poverty.

[13] The distinction between layoffs and quits is blurred in Russia. Employers sometimes lay off workers by inducing them to quit for a number of reasons: to avoid payment of past wages, satisfy local authorities (who want to see lower layoffs), or to reduce the ability of workers to claim social services from the firm (available to laid-off workers, but not to voluntary quits).

[14] Data from 1997-99 (most recent years available) for EU accession countries (the Czech Republic, Estonia, Hungary, Poland, the Slovak Republic, Slovenia).

Table 6. Employment Fund Budget (Percent of GDP) and Arrears (Millions of Rubles)

	1994	1995	1996	1997	1998	1999	2000
Incomes	0.51	0.43	0.35	0.36	0.33	0.32	0.31
Expenditures	0.30	0.37	0.34	0.35	0.32	0.29	0.29
Surplus (incomes over expenditures)	0.21	0.06	0.01	0.01	0.01	0.02	0.02
Arrears (as of 01.01 of each year)				1542.5	2843.3	3661.3	1618.6

Source: MLSD *(see Chapter IV).*

funding is uncertain and not sufficient to cover program costs, as evidenced in the accumulation of arrears. Low share of resources spent on unemployment protection programs is not necessarily the result of limited public resources in Russia, but of their misallocation to non-targeted programs (such as fringe benefits, housing allowances or spa-related benefits financed under the Social Insurance Fund). Administering an unemployment program is particularly difficult when financing is not commensurate to obligations. The informal sector, particularly under-reporting of wages complicates the calculation of benefits which are linked to past wages.

- *The net impact of active labor-market programs (ALMPs) in Russia is not well known.* There has been no rigorous evaluation of ALMPs in Russia. Existing administrative data on ALMPs raises some concerns. There are four main areas of concern. (1) Russia spends more on programs, such as training and job creation, which are generally considered by international experts as cost-ineffective and spends less on cost-effective job counseling and information programs. (2) The focus of ALMPs is on younger workers rather than older, experienced, and less-educated workers who comprise the majority of the long-term unemployed. This is a mixed blessing. The success rate of ALMPs with younger workers may be higher, making programs more cost-effective, but the program is not targeting older workers, who have the most difficult time getting jobs. (3) It is difficult to evaluate program impact based on administrative data. For example, job placement rates of training programs in Russia based on administrative data are quite high, but training recipients are usually those who already have received a guarantee letter on employment from the employer prior to enlisting as trainees, 'clouding' this statistic. (4) There also is worrisome evidence that employment offices are under pressure by local governments to maintain and create jobs and prevent restructuring and layoffs. On a positive note, however, survey evidence (though not based on rigorous evaluations) from the restructuring of the coal sector suggests that the active and passive programming and employment services may be effective in allaying the social and political cost of restructuring in strategic sectors. The Government places

strong emphasis on the performance evaluation of the Russian ALMPs. The above work is crucial to understand which programs are the most efficient in Russia. Unlike the prevailing idea, the international best practices show that ALMPs have rather modest influence upon the decrease in long-term unemployment. The greatest impact is achieved in the case if the programs are oriented to the specific groups, but even in this case they are very costly. The most cost-effective programs are those of job counseiling and job information. Nevertheless, ALMPs can play positive role while supporting the restructuring (see below).

V. Policy Options

xvii. Sustained economic growth that involves increases in employment and labor productivity will be the key for improving the living standard of Russian workers. Achieving sustained growth will involve completing the restructuring process, promoting private-sector development, and investing in education. Creating efficient labor-market institutions and an effective safety net also will be important for achieving this objective.

A. Creating an Enabling Environment for Growth

xviii. *Growth in labor productivity will require the creation of a strong private sector.* Sustaining current economic growth and closing the gap in labor productivity between Russia and CEE and OECD countries will require stronger private-sector-led growth (and ensuing investment in modern technologies and physical capital). Policies to enhance economic growth are extensive and are discussed elsewhere in the Government's reform program and other Bank reports. These policies include achieving greater product competitiveness, developing property rights, strengthening financial markets, reducing administrative barriers to the growth of small and medium enterprises, lowering payroll tax rates (while at the same time reducing social expenditures in a consistent fashion), and creating the rule of law. The government reform program is intended to address many of these constraints. The implementation of these reforms is essential for ensuring that scarce labor and capital inputs are used by the economy in the most productive way and in the most productive sectors.

xix. *Growth in labor productivity also will require a highly qualified workforce.* Continuing investment in education will be required to develop a skilled and well-educated labor force. Education has a large and increasing payoff in Russia. Real wages are higher for more-educated than less-educated workers, and highly educated individuals have a lower rate and duration of unemployment than less-educated workers. The fluctuating rate of return to vocational education indicates that its relevance to the labor market needs to be particularly addressed as part of the education sector reform. A labor force with skills that can adapt to a rapidly changing market for labor

will be critical for Russia as it enters the global marketplace. The reform of the education system to create a highly qualified and adaptable labor force has been given priority in the new Government program. The priority areas for reform in this sector are outside the scope of this study, but have been discussed elsewhere in Bank reports.

xx. *There will be winners and losers.* Growth may be more beneficial for some workers than others. Real wages for younger, highly educated workers in the private sector are likely to increase. Older, less-educated workers, with obsolete work experience, however, may not realize significant wage gains. Workers in regions with high unemployment rates that have high industrial shares of GDP, or in mono-company towns, may be particularly vulnerable to the increased pace of restructuring.

B. Creating Modern Labor-Market Institutions

xxi. Moving to market-based regulatory practices means reducing excessive protections to workers offered by the legislative framework within the firm and, at the same time, beginning to strengthen the role of institutions in allowing workers a voice to ensure that basic rights are protected. These changes need to be complemented by a strong enforcement regime (dispute resolution, labor inspectorates). Social protection for workers, beyond the basic rights offered through labor legislation and more effective industrial relations, could be achieved through active and passive labor-market programming. Reform strategies in this area must therefore be made in concert with those in the social protection area.

xxii. *The debate over labor-market reform in Russia is a contentious one, but may offer a false choice.* The debate divides those who want to see more social protection from those who want to see more labor-market flexibility. In a sense this is a false choice: By instituting a more realistic and enforceable, flexible, formal regulatory regime with a modernized safety net, the equity and efficiency concerns of both groups could be alleviated. Achieving these outcomes also will require the development of a broad consensus regarding the need and direction of labor-market reforms.

xxiii. What should the priorities be? Considering the existing laws, institutions, and actual practices, and in light of international experience, priorities could include the following:

- *Reducing excessive rigidity in the Labor Code.* The new Labor Code appears to make important progress in this area by removing the union veto on dismissals and implementing advance notice and effective appeals procedures. Some progress also has been made in providing for more flexible hiring arrangements, especially with respect to fixed-term contracting. More could still be done. Increasing flexibility in hiring and dismissals should bring more employment "out of the shadows," and international experience tells us that it should most help vulnerable segments of the workforce (for example, women and youths). It is true that these amendments will reduce formal job security and, as noted above, it is important that they be coupled with improvements in the social protection system for workers (see Chapter IV).

- *Continuing to increase minimum wages.* The current level plays little role in determining wage floors. Higher minimum wages (given the low base) are unlikely to have negative employment effects, and would reduce poverty among low-wage workers. The level of minimum wage should not exceed a low share of average wage (for example, 25 to 30 percent) to ensure that work disincentives are prevented. However, the minimum wage will not be an effective policy instrument until the economy formalizes and enforcement improves. The linkage of the minimum wage to the subsistence minimum could lead to fiscal and incentive problems, particularly in low-wage regions. Also, policymakers will need to consider how to accommodate the wide regional variations in labor markets and costs of living.
- *Reducing the influence of tariff in wage setting.* The tariff has been uncoupled from non-budgetary sector wages; but its continued relevance as a wage-setting guidepost is evidence of poor functioning of the labor market. As such it bears further investigation. The establishment of higher wages for particular areas, such as the North, is a legal requirement that is inconsistent with market practice and should be gradually phased out.
- *Developing institutions to allow worker voice, improve work conditions, enforce contracts, and resolve disputes, thereby raising worker productivity.* Some options are (a) allowing true worker and employer representation in unions and eliminating management representation of workers, which would help improve work conditions; (b) considering decentralized bargaining approaches in collective bargaining, if the centralized approach is not yielding efficient bargaining outcomes; (c) increasing the resources available to the Federal Labor Inspectorate and building its capacity to provide technical assistance and advisory services to enterprises; and (d) establishing alternative dispute-resolution mechanisms based on professional third-party mediation, conciliation, and arbitration services outside the court system.

C. Enhancing Public Protection through a Formal Safety Net

xxiv. Ensuring that a public safety net exists to protect workers against income loss and job loss is particularly important in Russia, because it would protect workers against poverty, facilitate layoffs, and would help move protection out of firms and into the public domain. The Government has introduced general revenue financing of unemployment benefit and ALMPs. The benefit design and ALMP strategy, however, have not been fully defined. Moreover, an outstanding restructuring agenda in one-company towns and particular sectors (such as railways) will require an adequate safety net to reduce the social costs of layoffs. The report concludes that the following elements might be considered for the design of the safety net for workers in Russia.

xxv. *Move from firm-based support to effective public safety nets.* Considerable progress has been made in delinking the safety net from large enterprises. The remaining benefits provided by firms should be divested to municipalities, however, and municipalities should be adequately prepared to take over this responsibility.

xxvi. *Unemployment benefit design should be simple to administer, with incentives, and adequately financed.* The report provides several policy options for unemployment benefit design.

- The report provides three key benefit options: (i) *a flat benefit*, fixed in nominal terms as some percent of average wage, and indexed to prices is one option for policy makers to consider. A flat benefit minimizes administrative requirements, is progressively distributed, and is consistent with general revenue financing. (ii) The Government could also consider *simplifying the benefit formula* to one that is some fixed percent of average wage over the entire duration of the benefit. (iii) If these options are not politically feasible, and the Government decides to retain the current formula, the report recommends the following changes in the eligibility and duration conditions of benefit. These changes should be considered whatever benefit formula option is chosen by the Government:
- *Over the medium term, the level of benefit should be set so as to minimize work disincentives.* The benefit level would remain a low share of average wage (e.g. 30 percent) to ensure work incentives. The minimum and maximum benefit levels should be delinked from minimum subsistence and established relative to the average / minimum wage. Over the medium term, the average wage will give more reliable information on the availability of fiscal resources and work disincentives for beneficiaries than the subsistence minimum. Given large regional differentiation in wages, differentiation of regional benefit levels will be important.
- *The assessment period for benefits should be increased*, and benefits established at a fixed proportion of an individual's wages (for example, 30 percent of wages) in order to ease administrative requirements for processing benefit claims.
- *The duration of benefits could also be reduced to a maximum of six/nine months* as in other CEE countries. A long duration of benefits, coupled with more generous level of unemployment benefits in the medium term, might induce longer unemployment spells.
- *Benefits could be provided to fewer categories of workers*, such as laid-off workers and voluntary quits. Over time, as the distinction between voluntary quits and laid-off workers is reduced, benefits for voluntary quits should be phased out or the eligibility of voluntary quits should considerably tightened in line with international practice. Special benefits to e.g. northern workers should be phased out as well. Targeting benefits would help save program expenditures, help the truly deserving, and reduce administration costs.

xxvii. *ALMP strategy*. The future thrust of ALMPs in Russia is difficult to determine since programs have not yet been empirically evaluated using best-practice evaluation methods. Implementing such program evaluations should be expedited by the policy makers. On the basis of administrative data and international experience, however, the report indicates the following direction for ALMPs:

- ALMPs are an important complement to passive programs, such as unemployment benefits. They have the potential to help individuals re-enter the labor market, and reduce their dependence on public support. Therefore it is important that a basic level of financing for employment services is guaranteed by the budget.
- However, in countries where ALMP financing is limited, as in Russia, the focus of ALMPs should be on the most cost-effective programs, such as job counseling and job information services should be increased. Emphasis on direct job creation programs should be reduced. Efforts to help the most disadvantaged workers (older, experienced workers, with obsolete skills) should increase. The use of employment quotas that state that individuals should have a job before being trained should be discontinued.
- Empirical profiling of users, currently being considered for introduction, may be useful for assessing what programs work best for particular groups - but the benefits and costs should be evaluated in Russia-on a pilot basis-prior to introduction because it is an administratively complex program to implement.
- The focus of employment services should be to help individuals find jobs themselves rather than helping preserve or create new jobs. Political pressure on employment agencies to contain unemployment is therefore misplaced.
- Private provision could be introduced as the sector develops so that market information can be used to match workers to training programs. Private providers should be regulated, however, so that potential abuse is restricted.

xxviii. *Financing and administration.* The report stresses that adequate financing of the program and its effective administration and monitoring are essential for its success.

- The report cautions that the general revenue financing of passive and active programs, introduced in 2001, will not necessarily reduce arrears or regional inequity of benefit. The Child Allowance Program, which is now federally financed, continues to have these problems. Therefore, adequate and certain financing of the program is required no matter the source of financing. At the same time, it is important that the program is designed to take into account the Government's fiscal constraints and that it uses scarce budgetary resources effectively. It is also important for the Government to provide a transparent allocation mechanism for transferring program resources to regions. Finally, the administration of both active and passive programs requires considerable attention to appropriate remuneration and training of staff, and their allocation across regions.
- The report finds that an adequately financed safety net for workers is possible in Russia. The simulated cost of the benefit program with a 30-percent replacement rate (30 percent coverage, using 1999 data) would be approximately equal to 0.34 percent of GDP. Total costs of the program, including ALMP benefits, would be 0.44 percent of GDP - well within the scope of Russia's level of income. (These costs would be well below the costs of similar programs in advanced CEE countries of 1.1 percent of GDP in 2000). The increase

in benefits should be done gradually, as resources are released from improvements in the targeting / phase out of other social protection programs (privileges, housing allowances, for example).

xxix. *Social support restructuring.* A combination of unemployment benefits, ALMP and severance benefits has proved important in downsizing the coal sector in Russia and also is widely used internationally to facilitate restructuring. It could therefore be used for downsizing in other sectors and regions in Russia (for example, regions with a high share of the industrial, overstaffed state sectors, or one-company towns, or other over-manned state sectors). The development of a strategy for identifying priority areas for restructuring and social programs for affected workers would be an important first step in this direction. The main elements of this strategy might include the following: (a) identification of the enterprises to be restructured, and the demographic and work skills of their personnel; (b) agreements on parameters of a social-support package (determine its scope, costs, source of financing, and administration drawing on existing mechanisms where possible); (c) stakeholder involvement; (d) a public information campaign; and (e) monitoring and evaluation mechanisms. The latter could help to ensure that workers are not rehired via a "back door" and that workers who have difficulty in re-entering the labor market are identified early and given targeted assistance to ensure they do not slip into poverty. If enterprises have social infrastructure (schools, clinics), divestiture of these assets might also be monitored to ensure that it has been successfully transferred to municipalities.

D. Monitoring and Evaluation: Bringing Information Closer to Policymakers

xxx. The report illustrates the importance of availability of data in order to monitor labor-market developments and labor-market programs to inform labor-market policy. Three main sources of labor-market information are important for monitoring the labor market: (1) the Labor Force Survey and Household Budget Surveys, (2) administrative data, and (3) enterprise-based surveys. All sources are key to monitoring labor-market developments. It is important that these surveys be strengthened and modernized. It is important that policy units within the MLSD and METD of the Russian Federation are strengthened to use administrative and survey data to make basic forecasts of the impact of labor-market policies. It is equally important that survey micro databases are available to the public so that labor-market researchers, a strong and growing community in Russia, can help the Government evaluate the labor-market situation and inform policies that would ultimately assist in improving the standard of living of the population.

Chapter I
Understanding Employment: Level, Composition, and Flows

This chapter initiates an analysis of the broad patterns of development in Russia's labor markets in transition through the year 2000.[15] The demand for labor is derived from output. Therefore, the chapter begins with a brief overview of macroeconomic developments that have shaped labor-market trends in Russia and provides a brief sketch of their impact on wages and employment. The chapter then focuses on understanding employment adjustment in Russia. It focuses on a few key questions: First, what explains the decline in employment? Despite recent increases in GDP, the increase in employment was very modest. The puzzle of aggregate employment decline is addressed through an analysis of unemployment, labor-force participation, population, hours of work, and informal-sector activities. Second, what is the structure of unemployment in Russia? Does it mirror the composition of unemployment in CEE countries? Third, to what extent have Russian labor markets restructured in the 1990s? Popular opinion suggests that labor markets have restructured very little in the past decade. This question is addressed by measuring changes in the composition of employment and by studying labor and job flows: labor-market transitions and worker mobility across industries, occupations, and firms. Finally, what is the nature of the private sector in Russia? Understanding the private sector is important for assessing the prospects for sustained growth in employment and labor productivity in Russia. A complementary assessment of labor-market functioning, provided in the next chapter (Chapter II) focuses on incentives and returns in the labor market: the wage structure, nonwage forms of compensation, and earnings inequality. These two chapters thus provide a complete overview of labor-market developments in Russia during the past decade until 2000. In doing so, they portray the Russian labor market both at a time of crisis and recovery.

[15] This is not the first attempt to provide a broad overview of Russian labor markets. Commander, McHale, and Yemtsov (1995) provided such an overview using data through 1992-93, and other researchers have focused on a number of special topics (especially unemployment, wage arrears, and earnings differentials), but the behavior of nearly all key variables changed drastically in the mid- and late 1990s. Clarke (1999) and Gimpelson and Lippoldt (2001) have provided more recent overviews, but their data cover little of the dramatic developments since the financial crisis of August 1998.

A. Setting the Stage: Macroeconomic Developments

The demand for labor is derived from output. Therefore, labor-market developments cannot be viewed outside of overall developments in product markets. Although the topic of this chapter, and indeed the report, is not macroeconomic and other sectoral policies, they are extremely important in understanding much of the labor-market behavior. For this reason, this section provides a brief overview of the salient macroeconomic trends from a labor-market perspective.

At the end of the 1980s, which begins the period of our analysis, the relevant features of the socialist system included an employment structure skewed toward large, industrial plants and associated engineering, technical, and skilled laborer occupations; essentially no self-employment (as a main activity) and few small firms; a high labor force participation rate (LFPR), especially among women; little part-time work or other flexible arrangements; and many one-company and mono-industrial towns, widely scattered geographically.

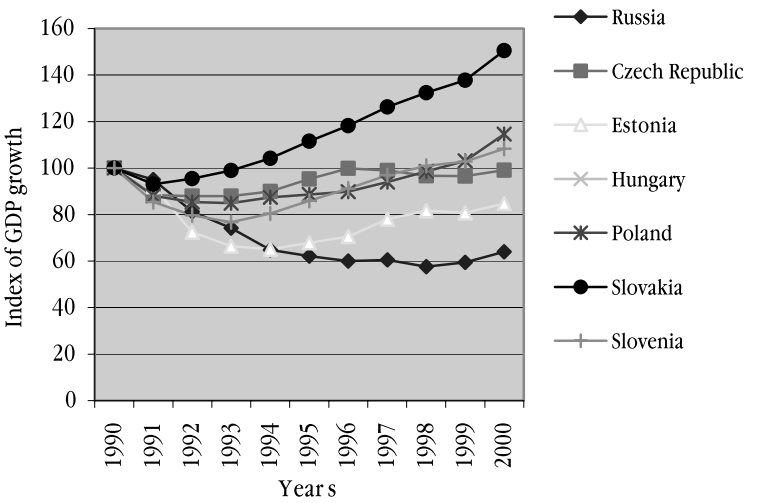
The Soviet heritage also included misallocation on an enormous scale and in every economic dimension: across industries, occupations, firms, regions, and within each of these. The tendency to overbuild in the industrial sector, particularly in the military-industrial complex, had resulted in excessively large plants producing goods with little civilian demand and engaging in labor hoarding in order to be able to meet plan targets in the presence of uncertainty about supplies. It also encompassed a compressed wage structure, but an important role played by fringe benefits and social services provided on a large scale by employers; and widespread informal activities, most notably in household plots.(for example, Granick 1987; Malle 1990; Oxenstierna 1989).

Into this situation came a gradual decentralization of enterprise decisionmaking beginning in 1988 and an abrupt "big bang" liberalization of prices, entry, foreign trade, and competition on January 1, 1992. Privatization followed rapidly, first in the small firms of the trade and consumer services sectors, and through leasing of larger firms to their employees, and then through the voucher privatization of November 1992 — June 1994 and subsequent sales of block of shares in companies.

Macroeconomic instability and soft-credit policy led to near-hyperinflation in 1992-93 and periodic crises in the following years. The attempts to achieve macrostabilization between 1995 and 1998 in Russia led to the development of a serious nonpayment problem and the growth of a barter economy. At the macro level, the Government sought to stabilize the situation by tightening credit and fixing the exchange rate despite lagging fiscal reform. At the same time the Government did not want to harden budget constraints on enterprises because it would create mass layoffs and unemployment.

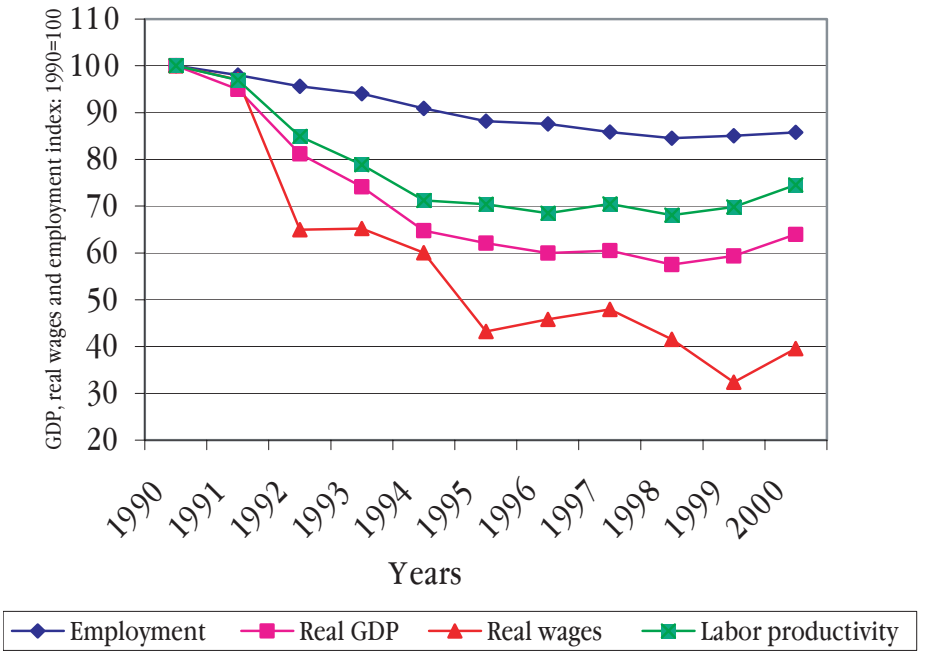
The shortage of fiscal resources led the Government to borrow heavily. Interest rates increased sharply, causing liquidity problems for enterprises. This in turn contributed to further nonpayments, but raised the need for further subsidies, tax arrears, cash shortfalls, and government borrowing. When public debt service reached unsupportable levels, the Government defaulted on its debt and caused a massive financial crisis in 1998 (Pinto et al. 2001) The subsequent drastic decline in the value of the ruble and the steep rise in the price of oil, Russia's chief export, were positive shocks to enterprise competitiveness and the state budget. However, they negatively

Figure I.1. Real GDP (1990 = 100), Russia and Select CEE Countries



Source: Annex I

Figure I.2. Real GDP, Employment, Real Wages, and Labor Productivity



Source: Annex I.

affected most Russians' real incomes, as well as wiping out any of their ruble-denominated assets, including both bank accounts and back wages owed by their employers.

The shocks that have hit the Russian economy are similar to those that hit other CEE countries and the former Soviet Union. In Russia, however, the cumulative fall in real GDP between 1990 and 1998 — approximately 40 percent — was larger than that for any CEE country. Real GDP growth also turned around much later in Russia than in CEE countries.[16] Significant aggregate growth appeared first in 1999 (a 3.2 percent rate), followed by a strong 7.7 percent growth in 2000 (Goskomstat 2001b) (see figure I.1) Growth has been fueled by rising energy prices, most notably oil, and a downward adjustment in the real exchange rate, and most recently by growth in domestic demand. (Figure AI.1[17] compares GDP growth rates for all transition countries, including those of the Commonwealth of Independent States (CIS). However, most analysts believe that economic growth remains vulnerable to the collapse of energy prices.

B. Aggregate Labor-Market Trends

Changes in real wages, labor productivity, and employment. The changes in output pre- and post-1998 had major repercussions on the Russian labor market. How did the labor market adjust? The following sections look at the changes in aggregate labor-market trends in Russia.

According to official statistics for the 1992-98 period, the labor market responded markedly to the decline in GDP (table AI.1) Aggregate employment declined by 12 percent, the unemployment rate nearly tripled, and nonparticipation in the labor force increased by a third. These numbers suggest that a significant share of the labor force left employment. However, the decline in employment was much smaller than the fall in output, and led to a sharp fall (20 percent) in labor productivity. There also were important real price effects. Real wages dropped by nearly 40 percent — far more than the decline in labor productivity — and the earnings distribution drastically widened, and poverty among workers increased. Labor contract violations in the form of wage arrears also spread to affect two-thirds of all workers.

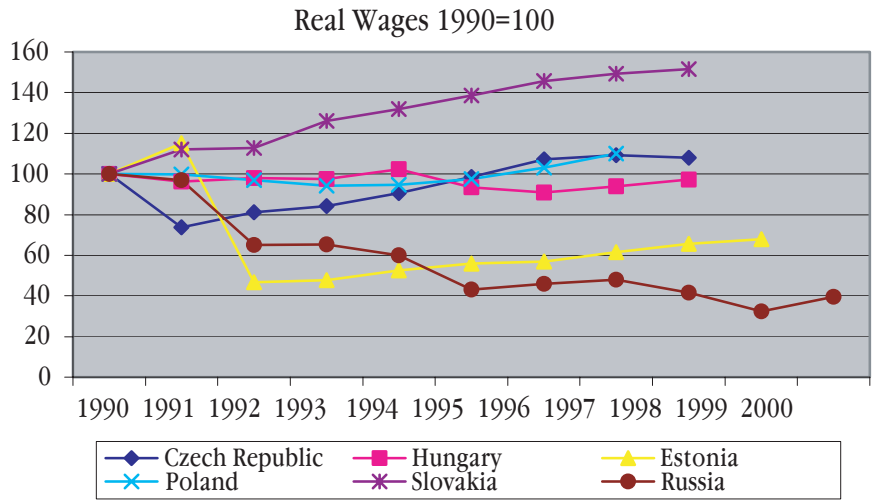
Growth in the post-1998 period sharply reversed these labor-market patterns. Between 1998 and 2000, GDP grew 11 percent in cumulative terms and employment increased by 2 percent (table AI.2). Thus, much of the increase in output was the result of an increase in labor productivity — about 9 percent (cumulatively. Real wages fell between 1998-1999, but rose by 22 percent in cumulative terms in 1999-2000. Thus cumulative growth in real wages between 1998-2000 was actually negative, as wage growth lagged the growth in output. But real wage arrears declined by more than half over this period. However, wage arrears once again increased by 2.2 percent in May 2001, and remain high among public sector workers. (figure I.2).

---

[16] According to figures provided by the European Bank for Reconstruction and Development (EBRD) (2000). Also see Fischer and Sahay (2000). The EBRD figure of 45 percent cumulative drop differs slightly from the fall of 42 percent implied by the annual figures from Goskomstat.

[17] Table numbers prefixed with A refer to annex tables.

Figure I. 3. Real Wages in Russia and Select CEE Countries



Source: Annex I.

How did labor adjustment to output shocks differ in Russia from high-growth CEE countries? Although measurement difficulties preclude precise comparisons, a number of observers (for example, Boeri and Terrell 2002) find that pre-1998, employment declines in Russia tended to be smaller (and wage and labor productivity declines larger) relative to output declines vis-a-vis CEE countries (figure I.1). Thus, price adjustment was greater in Russia than quantity (or employment) adjustment in response to output shocks relative to CEE countries. We will explore reasons for this difference in response below.

How did aggregate labor-market trends in Russia in the post-1998 period compare with CEE countries? Comparing Russia and high-income CEE countries in the first two years of economic growth shows that the average annual growth in employment and labor productivity in Russia was roughly comparable to that realized by high-income CEE countries in their first two years of growth (table AI.2). The wage response is similar to both Poland and Hungary, where wages lagged output and employment growth. Nevertheless, the much larger decline in wages and labor productivity in Russia in the 1990s, noted above, means that it will require considerable growth in these indicators to close this gap with advanced CEE reformers. The paragraphs below evaluate these labor-market trends in greater detail.

Measurement issues. In evaluating Russia's labor market, issues of measurement and definition are crucial to bear in mind. Practically all official aggregates in Russia are subject to dispute, as a result of problems of measurement and interpretation. The magnitude of the output decline, for instance, is quite controversial in Russia, as else-

where in transition economies.[18] Perhaps more output is produced in the unofficial economy or at least in the more difficult to measure sectors, such as services and home production.[19] The consensus appears to be that output has indeed fallen, although the official figures may overstate the magnitude. It also appears that the shock has been quite unevenly distributed across sectors, not only within industry, but also with respect to services.

Employment measures may also be suspect, particularly if they are based on the traditional enterprise reporting system inherited from the central planning system, which will fail to take into account or underrepresent self-employment, family businesses, start-ups, and small firms more generally, as well as multiple job-holding and a variety of other economic activities. Furthermore, officially reported wages may overstate actually received wages, because of wage arrears and forced in-kind substitutes, but they may also understate wages because firms have become adept at hiding salaries from the tax authorities. Specifically, wage data represent wages due rather than paid, as wage arrears are not taken into account. The real wage variable may not reflect worker welfare for several reasons: It is an average measure that may be unassociated with any particular worker's welfare; it captures only part of total compensation (cash payments); and it does not take into account the availability of consumer goods, a situation that was changing radically during the early transition years. There is consensus, however, that the general aggregate trends represented by this data are quite consistent and robust.

Finally, it must always be borne in mind that Russia is a huge country, the largest in the world (in area), and extremely diverse. This fact renders generalizations quite difficult, and attempts to paint an overview of the Russian situation might frequently be wrong with respect to any particular region of Russia without an exploration of regional variation in the patterns of behavior. At the same time, the regional differences provide one source of statistical leverage for sorting out some competing hypotheses purporting to account for observed labor-market patterns.

C. Understanding Aggregate Employment Fluctuations

The declines in employment in Russia are shown using four data series in figure I.4. The topmost series contains the official figures for total employment calculated from the Balance of Labor Resources and reported in yearbooks (Goskomstat 2000b), while the next highest series is derived from the RLFS. The discrepancy between the two series has been the subject of some discussion,[20] but while magnitudes differ,

---

[18] See, for example, Gacs, Holzmann, and Winckler (1995) and Fischer and Sahay (2000) for discussions.

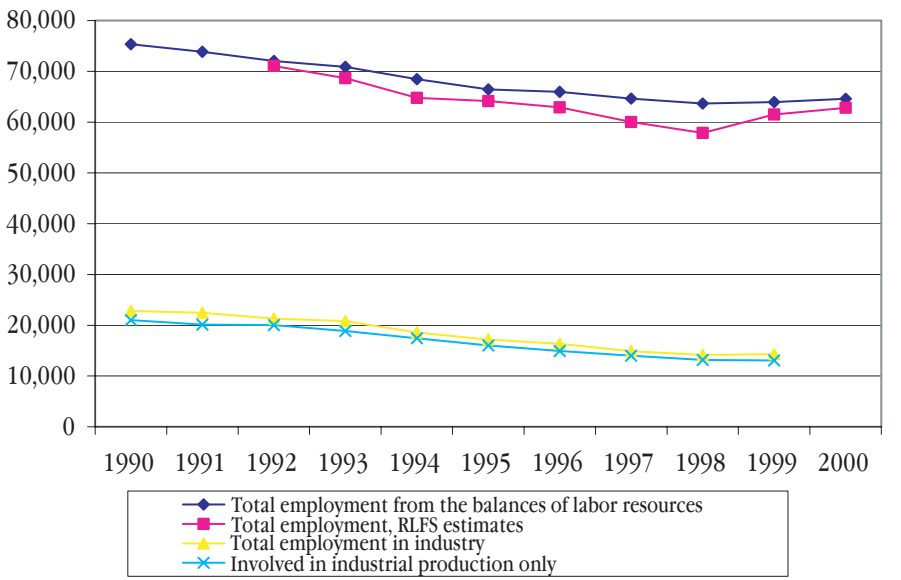
[19] See Johnson, Kaufmann, and Shleifer (1997) for a discussion of the unofficial sector.

[20] See, for example, Clarke (1999) and Gimpelson and Lippoldt (2001. The former series represents the statistical agency's attempt to estimate employment on the basis of all available information, while the latter is a pure survey-based measure. Clarke (1999) reweights the RLFS figures to account for alleged age-related response bias, which results in a reduced discrepancy.

both show a similar pattern of decline until 1998 and rise thereafter. The Balance series shows a decline of employment of 15.5 percent from 1990 to 1998 and a decline of 11.7 percent from 1992, smaller than the RLFS decline of 18.6 percent from 1992 to 1998. In the next two years, the RLFS shows a larger rise, at 8.6 percent, while the Balance series shows only 1.5 percent.[21]

The two series on the bottom of the figure pertain to employment in industry (manufacturing and mining) and are derived from reporting by large- and medium-size enterprises as well as a sample survey of small employers. The topmost of these includes all listed employees, while the bottom series covers only those employees involved in industrial production (excluding those in sales, provision of fringe benefits, and so on). Again, although there has been some controversy over which series is preferable, they are quite similar, both declining until 1998 and showing a slight increase to 1999. There has been a disproportionate growth in industrial employment since 1998.[22]

Figure I.4. Alternative Measures of Employment

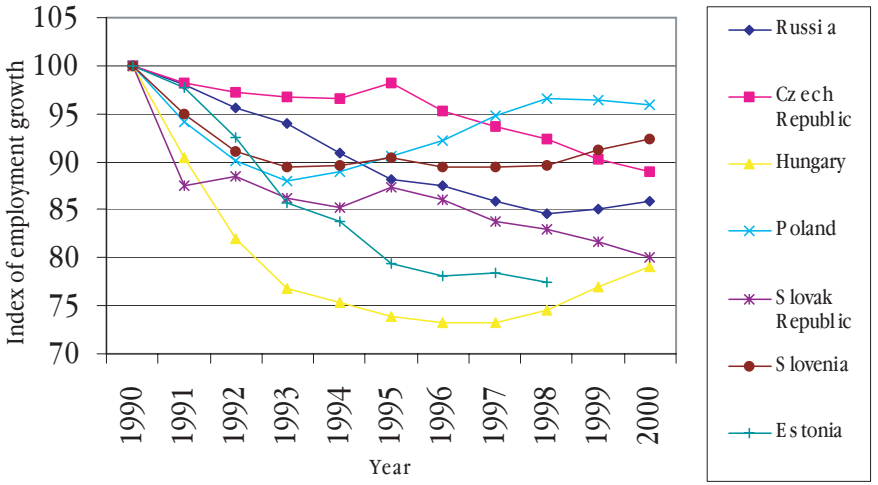


Source: Annex I.

[21] A possible explanation for the difference stems from the fact that until 1999 the RLFS was carried out only in particular months of the year on a somewhat irregular schedule (for the complete list of RLFS, see figure footnote). To maintain consistency in the time series and lacking any possibility for seasonal adjustment, figure I.4 reports the results for October 1998, August 1999, and August 2000 (the latest available). Quarterly employment figures from Goskomstat (2001b) show a 4.3 percent rise in employment from 1998:IV to 2000:IV.

[22] The industry-disaggregated RLFS employment series are discussed in section IV, below. RLFS figures include the industrial classification only since 1997.

Figure I.5. Employment Trends in Russia and Select CEE Countries



Source: Annex I.

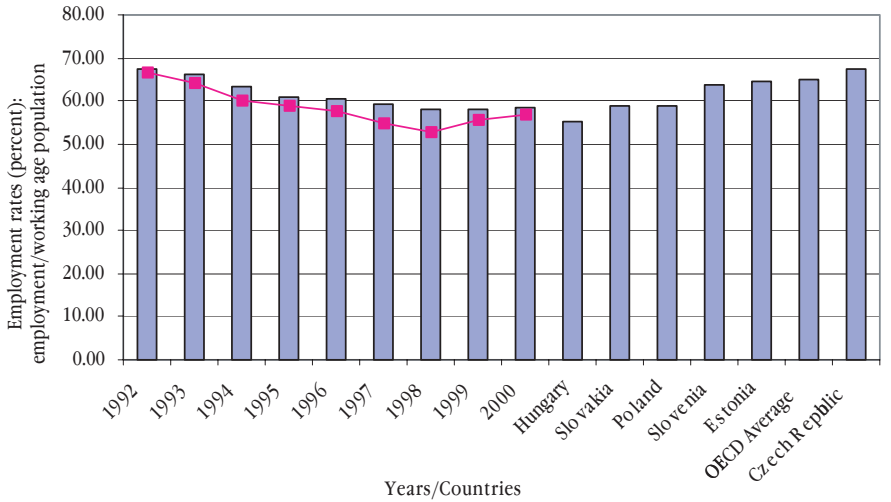
As noted above, the decline in employment in Russia was more gradual than that realized in CEE countries, but was significant nonetheless (figure I.5). Taking the Balance of Resources employment rate as the metric of comparison, the share of employment to working-age population, or employment rate, declined from 67 percent in 1990 to 58 percent in 1998. The trend is quite similar using the RLFS employment figures (line graph in figure I.6), but the magnitudes of decline and recovery are slightly higher in the RLMS series. In both series, the employment rate recovered post-1998 (figure I.6). The labor force drop was largest in the oldest and youngest age groups.

Although employment fell between 1990 and 1998, output fell more, and labor productivity declined (figure I.2). Why did employment fall relatively little (although still a great deal) with respect to output declines? The answer lies in the labor-hoarding behavior of firms, both under socialism and under capitalism.[23] The reasons for labor hoarding during socialism have already been discussed above. Under capitalism, a key determinant of labor allocation was the mode of privatization followed in Russia. The asset transfer based on the vouchers and block sales model of privatizations went to insiders, such as managers, in more successful enterprises. The concentration of wealth and political power in the hands of these well-placed business elites led them to block restructuring in order to avoid erosion of their privileges.[24] State capture occurred on a far greater scale in Russia than in other CEE reformers, perhaps

[23] Under socialism, see, for example, Kornai (1992) or Oxenstierna (1989). The classic study in a market economy is Oi (1960). For the Russian transition, see Clarke (1999), Commander, McHale, and Yemtsov (1995), and Kapeliushnikov (1998).

[24] Aslund (1999).

Figure I.6. Employment Rates in Russia and Select CEE Countries



Source: Annex I.

because Russia possessed fewer strong, market-based institutions and a larger natural resources base (World Bank 2000a).

Incentives to restructure were further reduced by the pressure imposed by local governments on employers to maintain employment and reduce the political, social, and economic consequences of "open unemployment" (McKinsey Global Institute report 1999). Local pressure is commonly applied through "discussion" with enterprise managers that encourages them to slow down the pace of layoffs, engage in job-preservation programs in exchange for tax and social insurance contribution relief, or to phase in labor-reduction programs (Pinto et al. 2001) These poor incentives to restructure were compounded by soft budget constraints, or ability of loss-making enterprises to obtain noncash settlement for utility payments. All these factors worked together to dampen incentives for enterprises to lay off staff.

The accumulated labor surplus is difficult to quantify. According to the REB (Russian Economic Barometer) survey data, the share of enterprises retaining surplus labor reached 60 percent in 1996-97, while the share of workers employed in nonproductive jobs was a bit higher — 40 percent. Since then, a small survey by Tchetvernina et al. (2000) shows that the share of surplus labor in enterprises appears to have declined. This is not surprising, given the large decline in formal employment during the past decade.

Why was employment growth so limited relative to output, post-1998? The average annual growth of employment in the first two years post-recovery was very similar to that realized in CEE countries in the same period, where the growth in output also far outpaced increases in employment. The growth in labor productivity indicates that output growth was a result of increases in employment, but also a result of

improvements in the allocation of labor. The smaller response of employment to output growth is further evidence of overstaffing in enterprises (figure 1.2).

What happened to previously employed workers? According to official figures from the RLFS — which can be used to assess the changes in labor aggregates — total employment in Russia fell from 71.1 million people in October 1992 to 57.9 million people in October 1998, a drop of 13.1 million (Goskomstat 1999a).[25] Where did these workers go? The three factors potentially accounting for the overall employment drop in Russia are growth of population, nonparticipation in the labor force, and unemployment. This section discusses the relative importance of each factor in turn.

Population. It should be noted that fertility, mortality, emigration, and immigration are unlikely to be entirely independent from the economy, and indeed it is frequently alleged that the drastic rise in mortality is a direct consequence of economic hardship.[26] Thus, the brief discussion here is pertinent not only to understanding employment changes — from the supply side — but also some of the social costs of transition.

According to Goskomstat (2000b), the total population declined by about 2 million from 1992 to 1999 (after rising since World War II). The age distribution shifted rightward (toward older age groups), and increased the share of the working-age population during this period. The net effect of these changes was to increase the working-age population (16 to 59 years old for men and 16 to 54 years old for women) by 1.6 million. Trends in mortality are less clear, and have fluctuated over time, but there is a more drastic and unambiguous decline in fertility rates.[27] Thus, economic changes have affected mortality rates (although not in a clear fashion), but have had a more substantial impact on fertility rates in Russia.

Have net migration flows helped to reduce population over and above natural increases noted above? Immigration and emigration issues are both among the policy concerns of Russian Government officials. Concerning the former, the problems include the inflow of Russians from other Republics of the former Soviet Union, the return of soldiers stationed abroad, and the growth of Chinese immigration in the far eastern portion of Russia. Concerning the latter, there are outflows to former Soviet Republics , temporary migration of unskilled workers to Europe, and "brain drain" to Israel, Western Europe, and the United States. In all cases, one must take even such official statistics as are available cautiously, as these are based on administrative registration, and they certainly omit many individuals (although the overall bias is difficult to assess).

According to Goskomstat (2000a), in 2000, there was a small, positive net inflow from the former Soviet Union to all regions of Russia except for the northern and far

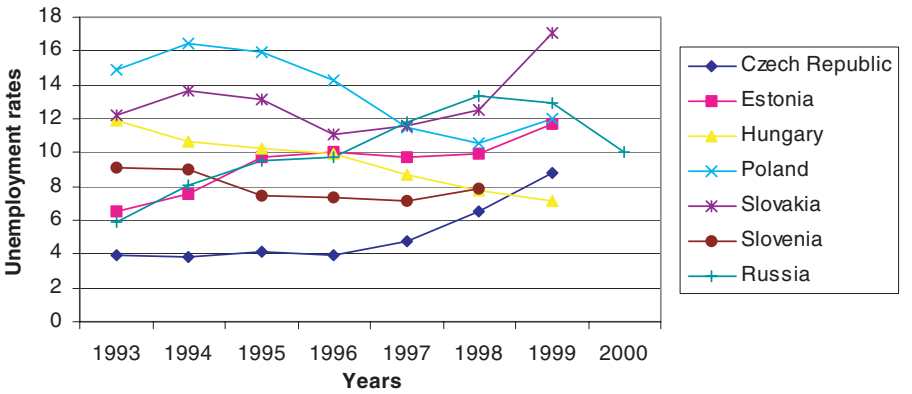
---

[25] Note that these figures are based on the LFS, thus including employment in small firms, illegal or gray activities, and self-employment, unlike official reports of enterprises. Also note that the RLFS questionnaire contains standard questions used on LFS throughout the world to define employment, although there are some ambiguities concerning home production, as discussed below.

[26] See, for example, Field (2000), who also argues that the roots of the population crisis can be traced back to the 1960s.

[27] Regional variation is again large, with a 19.5 percent unemployment rate in Dagestan and 6.6 percent in St. Petersburg.

Figure I.7. Unemployment Rates in Russia and Select CEE Countries, 1993-2000



Source: Annex I.

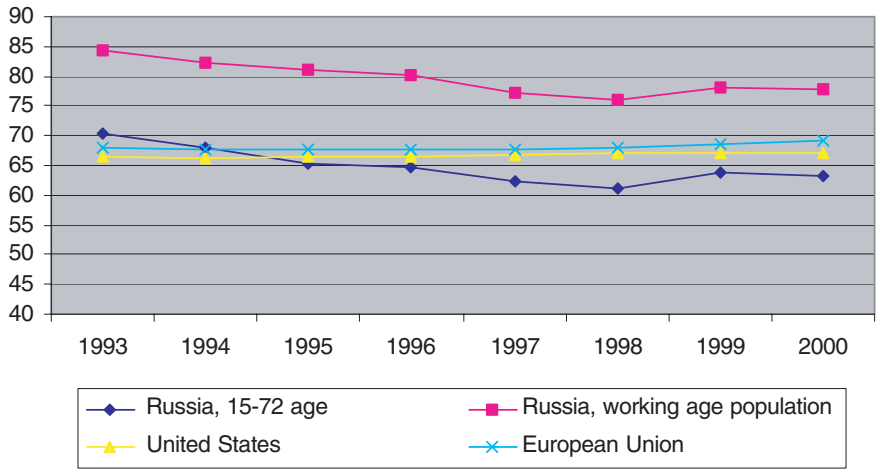
eastern regions. The latter regions show net outflows, mostly to Belarus and Ukraine. The only other (nonformer Soviet) countries from which migration flows are in Russia's favor are China and Cuba, but the reported flows are marginal. Clearly, these numbers are far below what one would infer from anecdotal reports, which suggests that better data collection will be necessary even to measure the approximate scale of the problem. Concerning flows between Russia and other foreign countries, the figures for other regions show net outflows, with the largest to Germany and Israel. Available statistics concerning the educational qualifications of emigrants suggest that many of those leaving the country tend to be the more educated and skilled workers, indicative of a brain drain (Heleniak 2000) However, this may be compensated in part by a significant inflow of highly educated individuals from FSU countries to Russia. (Garsia-Iser et al. 1998). In any case, the overall changes in flows to and from the country are not important in explaining changes in population.

Although Russia has seen some dramatic demographic changes — and the share of working-age population has increased — these changes are not significant enough to account for the substantial drop in employment. The lack of demographic impact on employment changes implies that the major factor accounting for decline in employment must be the increased share of people out of the labor force, or growth in nonparticipation.

Unemployment. Unemployment growth was quite substantial in the 1990s, but it also does not fully account for the variation in employment. The six-year unemployment growth rate (October 1992 — October 1998) of 4.9 million accounts for only 37.8 percent of the drop in employment (13.2 million) in the same period. Similarly, the more recent rise in employment is only partially associated with a decline in unemployment. The answer to the puzzle of employment decline therefore must lie mainly in the trends in nonparticipation in the labor force.

Nonparticipation in the labor force. The LFPR in the Russian economy emerging from the Soviet period tended to be high by world standards, although

Figure I.8. Changes in Labor Force Participation Rates, 1993-2000



Source: Annex I.

comparability is really possible only since the RLFS started in October 1992. At that time the overall LFPR was recorded at 70.3 percent (77.6 for males and 63.7 for females). The overall rate and the rates for both genders declined until October 1998, when the overall rate was 61.0 percent (68.1 for males and 54.7 for females). By 2000, the LFPR had fallen enormously to slightly lower than those prevailing in OECD countries (figure I.8 / table AI.10).[28]

In the 1990s, the LFPR declined for every group, but the decline was greatest for teenagers and those in their early twenties. In the prime-age range of 25-50, there is relatively little change in the LFPR. The declines in the rates by gender were almost identical. Both rates recovered somewhat in November 1999, before slipping back slightly in August 2000. Retirement rates appear to have increased, as the drop in participation at the official retirement ages became greater over the period. The published RLFS figures for various age ranges reflect the retirement policy, however, as the big drop in the male LFPR occurs in the age ranges 55-59 and 60-72, while the female rate decline is in the ranges 50-54 and 55-59. The year 1999, however, shows evidence of dramatic re-entry by retirees, as the LFPR in the oldest age group of 60-72 rose from 9.1 (October 1998) to 14.6 (November 1999).

The decline in the LFPR was associated with an increase in the out-of-labor force working-age population (15-72) of nearly 11 million people from October 1992 to October 1998 (Goskomstat 1999a) (table AI.11). Although the next two

[28] Comparison of LFPR across countries is not simple. Most countries define working age as 15, or 16-64 years. The United States uses a working age of 16+, while in Russia the definition of working age is 15-55 for women and 15-60 for men. In the comparison above, we used a definition of 15-72 years for working age in computing LFPR for Russia.

Box I.I Who Is Unemployed? Some Definitional Problems

According to the International Labour Organization (ILO) definition of unemployment (Resolution I of the 13th International Conference of Labour Statisticians, Geneva, October 1982), the "unemployed" comprise all persons above a specified age who, over a specified reference period, are:

1. "without work," that is, are not in paid employment or self-employment, "currently available for work," that is, are available for paid employment or self-employment during the reference period; and
2. "seeking work," that is, are taking specific steps in a specified recent period to seek paid employment or self-employment. The specified steps may include registration at a public or private employment exchange; application to employers; checking at work sites, farms, factory gates, market, or other assembly places; placing or answering newspaper advertisements; seeking assistance of friends or relatives; looking for land, building, machinery, or equipment to establish own enterprise; arranging for financial resources; applying for permits and licenses; and so on.

The above definitions have severe limitations when applied to transition countries. First, many workers in developing countries who qualify as employed under the ILO definition are in fact not fully employed or are underemployed (especially in rural areas). These workers may work fewer hours than they would like or work in low-productivity jobs and earn low wages. But they are so poor that they cannot afford to be without a job, and so open unemployment is rare. Edwards and Manning (2000) note that "the transition from underemployment to open employment can be partly explained as an income effect: As economies grow and household incomes rise, it becomes possible to go through periods without work while waiting for a job to open."

Second, some unemployed may be classified as inactive. Individuals who have a marginal attachment to the labor force, that is, those who are available for and desire work, but are not actively seeking work because they perceive, rightly or wrongly, that no jobs are available, are often considered economically inactive when they should be more appropriately classified as unemployed (sometimes they are called discouraged workers). Moreover, the conventional application of the term "actively seeking work" also falters in light of a fair share of economic activity occurring through informal employment arrangements or where self-employment is the norm.

Third, some employed workers may be classified as inactive. According to ILO guidelines, an individual who works at least one hour in a week, or who is temporarily absent from work (for example, on vacation or because of illness) is in employment. Those who are out of work but do not meet the criteria of ILO unemployment are classified as economically inactive. However, some forms of informal economic activity may escape this definition of employment (for example, home-based work, typically undertaken by women). And because such workers are not available for work, they do not qualify as unemployed either.

As a consequence, it is sometimes advisable to complement the unemployment rate with other measures of labor-market slack (for example, with measures of underemployment). The ILO acknowledges the possible restrictiveness and "industrialized country" bias of the definition, advising the relaxation of these clauses and the formulation of criteria suitable to the labor-market characteristics of the particular developing country. For the purpose at hand, the above discussion implies, among other things, that besides those counted as unemployed, unemployment support programs may also include the underemployed — and that the unemployed may not be the most unprivileged group in the labor market.

Source: Vodopivec and Raju.(2001).

years saw the flow reverse by around 2.5 million people (Goskomstat 2000b), the puzzle still remains: Why does it appear that so many people have stopped working, dropped out of the labor force, and do not search for another place of work? Particularly given the low level of social-security support, these enormous flows out of the labor force also raise the puzzle of how a large fraction of the population even survives.

Definition of employment. Information on those engaged in home production provided in the 1999 and 2000 RLFS sheds some light on these questions. In these two years, the survey measured those engaged in home production, divided between those with main jobs and those lacking other work. Three types of home production are included: agricultural production for sale (fully or partially), agricultural production for own consumption, and industrial and service production for sale. On an average annual basis from November 1999 to August 2000 (four quarterly surveys),[29] the total number of individuals engaged in home production for sales and own consumption is about 10 million, of which 8 million received no income from sales of their products. The corresponding figures for the February 1999 — August 2000 surveys are shown in table AI.12.[30]

Thus, the question of employment decline in Russia rests on a definitional question, namely. whether those in subsistence agriculture are included as employed. The answer appears to be that they are not. According to Goskomstat (1999a, p. 15), the definition of employment includes individuals engaged in home production only if they sell their products, but not if the production is for own consumption. The rise of home production, most significantly subsistence farming, then, provides a crucial part of the answer to the puzzling drop in employment in Russia. If subsistence agricultural workers are counted as employed the unemployment rate would decline to 8 percent, and employment would increase by 12 percent. The employment rate would increase to 69 percent — well above the average level found in most CEE and OECD countries. If this is the case, then employment declines are lower in Russia than in other transition countries, but that there has been a significant shift of employment from formal wage work to self-employment in subsistence agriculture (table AI.13).

Whether subsistence farmers should be counted in employment is certainly a judgment call, and the International Labour Office standard (ILO 1998) is not explicit

---

[29] Clearly there is enormous seasonality in these activities. The May and August surveys find particularly high rates of participation in agricultural production for own consumption: 22,589,000 in May 1999, of which 11,075,000 of whom did not have any other job. These individuals are not exclusively rural; 4,727,000 of them are reported to live in urban areas. An additional 2,504,000 nonemployed individuals engaged in the activities where sales of agricultural products were concerned, and 155,000 where the sales included home-produced manufactured items and services.

[30] In the instructions for the RLFS (Goskomstat 1998b), question 66, which elicits this information, is supposed to exclude household plots of urban dwellers, but the RLFS questionnaire itself does not make this clear. Goskomstat (1999a) contains separate tables with information on the activities of urban and rural dwellers (tables 2.60 and 2.61, respectively), so it appears the instruction was not followed.

on this point.[31] Examining the characteristics of the nonemployed engaged in agricultural production reveals (see table AI.12) that many are older individuals — particularly those who are engaged in subsistence agriculture as the sole activity, but more than half are in the normal working-age range. In addition, a nontrivial number have completed higher education.[32] The move to subsistence agriculture is not unique to Russia. In Romania, and also to some extent in Poland (where such workers are classified as employed), laid-off workers also have shifted to subsistence agriculture as a means of coping with the decline in their income.

A final point on the subsistence farmers concerns their hours of work. Goskomstat (2000c) and Table AI.13 report the number engaged in subsistence agriculture for own consumption for 30 or fewer hours in the reference week and those whose engagement was greater than 30 hours. For the year 1999, about 20 percent were engaged full-time by this definition, while 80 percent were part-time. An evaluation of the appropriateness of including such activities into the category of employment (or of assessing the degree of labor underutilization) may depend on the hours intensity, particularly for work weeks shorter than 30 hours, but unfortunately there are no other available tabulations of the RLFS data.

In summary, these results indicate that the fall in employment can be attributed mainly to a fall in labor force participation (of youth and older age groups) and somewhat to an increase in unemployment. The impact of demographics on employment was minimal. Most workers who left the labor force took up self-employment in subsistence agriculture. Therefore, the drop in employment is a measurement issue: If self-employed subsistence farmers were considered employed, the fall in employment in Russia would be less dramatic as compared with transition countries, but its composition would change toward one that was more comprised subsistence agricultural activities. (Table AI.14).

D. Adjustment through Hours of Work

The labor productivity analysis so far has not taken into account changes in hours of work. If hours of work have declined, then employment (totaling all workers)

---

[31] The Russian definition of employment appears to be inconsistent with the ILO (1998, p. 93) statement that "[P]ersons engaged in the production of economic goods and services for own and household consumption should be considered as in self-employment if such production comprises an important contribution to the total consumption of the household." Elsewhere, however, ILO (1998, p.3) states that "...in general, the data on economically active population do not include...persons living entirely on their own means...", which seems to imply that subsistence farmers should not be counted in employment. Thus, the definitional ambiguity remains.

[32] Unfortunately, no information is available on whether they are job searchers, and therefore on whether they are classified as unemployed or as nonparticipants in the reported labor force statistics. Counting them as employed would in either case raise employment and lower the measured unemployment rate — by a large amount in the first case and by a smaller amount in the second. However, these individuals are probably not counted as unemployed, as they would have answered all the standard LFS questions addressed to the jobless, and any searchers would already be appropriately categorized, as would discouraged workers.

will overstate labor usage, and the decline in labor productivity will be overstated as well.[33] An important role for hours adjustments would be consistent with a widespread view of Russian enterprise behavior whereby firms have responded to shocks by avoiding layoffs and hoarding labor, while engaging in work-sharing through unpaid leaves and short-time work and permitting employees to earn their livings through secondary activities outside the firm (for example, Aslund 1997). While the hours dimension in most countries is used only for temporary adjustments associated with the business cycle or periods of uncertainty, in Russia this situation has become a way of life, so goes the argument. Because of the popularity of this view and the complications in finding appropriate data for evaluating it, this subsection devotes detailed attention to a variety of types of evidence on the issue.

To start with, table AI.15 reports results from the RLFS. Average hours worked on the respondent's main job — defined either as "usual hours" or as "actual hours in the reference week" — have fluctuated little from 1992 to 2000 (Goskomstat 1999a and 2000c), showing only the slightest of dips in 1994-95 relative to the other years. Unless the hours cuts took place prior to 1992, these data are inconsistent with a large role for this method of adjustment. Even in October 1998, there is no perceptible decline in the aggregate figures. "Actual" hours are always reported to be lower on average than "usual" hours, with a difference of 2.6 weekly hours in October 1992 but of only one weekly hour in November 1999, which may reflect some use of work hours as a temporary adjustment mechanism. It is notable, however, that most individuals reporting a discrepancy between actual and usual hours report a larger value for the former than the latter (Goskomstat 1999a); this is true for every RLFS except March 1996 when the two groups are in rough balance.

Data by reason show that, among those working fewer hours than usual on average in the 1999 RLFS, 49.4 percent report involuntary reasons: 37.2 percent on "short hours by initiative of firm management," 10.0 percent "due to lack of orders," 1.9 percent on unpaid leave, and 0.3 percent on paid leave.[34] Yet, taken together, these involuntary part-timers account for less than 1 percent of the total labor force. If the underemployed are added to the unemployed as an alternative measure of labor underutilization [Bureau of Labor Statistics (BLS) 2000], the figure would therefore differ little from the RLFS unemployment rate. Other reasons for working fewer than usual hours include illness (8 percent), vacation (8.2 percent), normal work regime (14.0 percent), seasonal work schedule (3.6 percent), with miscellaneous voluntary reasons accounting for the rest.

Perhaps the rather constant length of the average work week is masking differential trends at a more disaggregated level. The RLFS figures in table AI.15 do show that,

---

[33] Virtually all enterprise-reported employment figures in Russia are defined in a way that partially accounts for hours of work (contractual days paid are counted for full-time and involuntary part-time employees, contractual hours paid are counted for employees on part-time contracts, and actual hours are counted for workers on civil contracts), but the adjustment is far from creating a full-time equivalent measure.

[34] See Goskomstat 1999a, table 3.20.

after falling initially, the dispersion of hours has increased somewhat, particularly at the top end, where the percentage of workers reporting actual work weeks longer than 40 hours fell from 14.5 percent in October 1992 to 2.0 percent in October 1995, then rose to 10.2 percent in October 1999. There was also a slight increase on the bottom end, reflecting a rise in part-time work. The overall rate of part-time employment, however, is still very low by international standards, with only 5.6 percent of all employed reporting a usual workweek of 30 hours or less, and only 2.8 percent reporting 20 hours or less.[35] One interpretation of the low part-time rate, inherited from the Soviet period, is that employers have not become very flexible in terms of hours of work.

Probably the old industrial sector, inherited from the socialist period, may have reduced hours downwards as the expanding new private sector has raised them, resulting in little change in the average figures. A first bit of evidence, also included in table AI.15, concerns work hours of the self-employed versus those of employees. The reported hours of the self-employed in Russia are not systematically higher than those of employees — a difference from most other countries where the self-employed typically work longer hours. Rather, self-employment in Russia appears to be a primary vehicle for part-time work, in the face of inflexible hours offered by employers. Seventeen percent of the self-employed reported usual work hours of 30 or less (as compared with 4.8 percent for employees) and 9.4 percent reported 20 hours or less (as compared with 2.3 percent for employees) in November 1999.[36]

Table AI.16 addresses this issue by examining differences in average actual hours by industry, using available RLFS data for 1998-2000. The average work week varies rather little across industries, implying that hours adjustments are relatively unimportant across the entire economy. This finding again runs counter to the widespread claims of factories not functioning, workers leaving the job to engage in other activities, and so on.

An analysis of the hours of work data in the RLMS is presented in table AI.17. As noted above, the RLMS questions pertain to the previous 30-day period, rather than to the reference week, as is standard for an RLFS. Nonetheless, the data are fairly consistent across the two surveys, with the RLMS similarly showing high levels of hours worked (both on the primary job and on all jobs) and only modest fluctuations over the period. Disaggregated by industry, the RLMS hours data are again consistent with the RLFS in displaying little deviation from a full-time work week.

Somewhat higher estimates of hours adjustments appear in firm reports and surveys. Table AI.18 shows the allocation of days worked and not worked in large and medium-sized industrial firms, from 1980 to 1996, when the series ends. The number of "not worked days" rose nearly 8 days in 1992 over 1991, but this was associated

---

[35] By contrast, 16 percent of workers in the United States were on part-time schedules (defined as less than 35 hours per week, thus a broader definition of part-time than in the Russian figures) in December 1999 (BLS 2000).

[36] A further interesting difference in Russia compared with most other countries concerns gender differences in working time: men report only slightly longer workweeks (about 1 to 2 hours longer) than do women (Goskomstat 1999a).

with an increase in holidays, vacations, and "absences allowed by the administration" (for personal reasons); the category of work stoppages, resulting from reduced production, rose by only 3 days. In 1993-96, work stoppages continued to increase, however, reaching 22.8 days by 1996. This data implies four and half weeks of leave on average for industrial workers, or around a 10 percent reduction in working time. Although much smaller than the 38 percent cumulative fall in industrial employment that was documented above, it is clear that hours of work did show some adjustment in the industrial sector.

A well-known method of hours adjustments in Russia has been the use of involuntary, unpaid leaves, which function similarly to temporary layoffs in the United States. Table AI.19 contains information from Goskomstat on involuntary leaves and short-time employment, again collected from large and medium enterprises, for 1995-2000. The use of involuntary leaves peaked in 1996 in these data, when 15.8 percent of employees in the reporting enterprises had an average leave duration of 318 hours, or about eight weeks. Across all employees in these firms, the average was 50 hours, or about 2.5 percent of annual hours. The data on short-time employment (reduced hours) are less complete, but show a similar peak in 1996 but involving only about three days per employee. Compared with the employment drops, the implied hours adjustment from both these methods, at about 9 days, is not very substantial but it is not trivial either.

The RLMS also contains information on involuntary leaves reported by the respondents with respect to the previous year. The figures displayed in table AI.20 show a relatively low incidence of such leaves in 1995, unlike the administrative information in the previous table. Because the RLMS is a panel, it is possible to calculate the persistence of involuntary leaves, measured as the conditional probability of such a leave in a particular year, conditional on having experienced a leave in one or more earlier years. The results, also in table AI.20, demonstrate that involuntary leaves tend to be concentrated in certain segments of the workforce. How the incidence of leaves varies with worker characteristics is discussed below.

In summary, this review of the evidence suggests that changes in working time have not been the major method of labor adjustment in Russia. Thus, the fall in labor productivity based on employment measures does not appear to be overstated. Of course, the evidence could be wrong, but it comes from a wide variety of sources and uses a number of alternative measurement methods. The one exception to the overall picture may be in the industrial sector, where firm-level evidence shows up to 10 percent of working days cut through work stoppages associated with reduced production. Nonetheless, this figure pales beside the much larger drop in employment in the same period.

E. Time Allocation

Associated, although not exclusively, with the view that hours adjustments have been considerable in Russia is the contention that workers have increased their participa-

tion in second job-holding and other economic activities (outside of subsistence agriculture). According to the surveys conducted by the State University Higher School of Economics (2000), for example, an estimated 7.5 million individuals are employed only in the shadow economy (that is, they do not have any other job and potentially work in subsistence agriculture), with another 18 million having both formal and shadow jobs. A significant portion of individuals who are officially classified as economically inactive, including students, pensioners, or housewives, or are formally unemployed, are also shown to be engaged, permanently or temporarily, in the shadow economy activities. Informal work is reported to be especially prevalent in construction, trade, and the services sector. Together, these individuals are estimated to comprise 33 percent of the labor force. These additional activities are purported to be a major coping mechanism for households trying to make ends meet in the face of sharp, real-wage declines, and create a mixing of the formal and informal sector activities in Russia.

Is this result robust to hard evidence? Concerning the allocation of time outside of the main job, Goskomstat (1999a) reports RLFS figures for the number of multiple-job holders only since March 1996. At that time, only 1.3 percent of the employed reported this status in the reference week; the number rose to 1.6 percent in November 1999. These remarkably low figures are hard to reconcile with casual observation and anecdotal reports. Perhaps second jobs tend to be highly irregular in nature, but this would also tend to lessen their importance as an adjustment and survival mechanism. Even if the previous month is used as the reference period for counting the fraction of workers with second jobs (Goskomstat practice from 1999), however, the percentage of workers reporting multiple jobs was only 2.2 percent in November 1999, still a very low rate.[37] Moreover, average hours of work on second jobs per week were only 14.7 in August 1999 and 11.8 in November 1999 — the difference probably reflecting seasonality. These estimates of multiple job-holding may be unbelievably low, but they would have to be off by an order of magnitude to start being really significant. Moreover, few available surveys find high rates. The RLMS shows only about 7 percent of workers reporting second jobs.

One way to calculate the difference that such secondary activities make to the calculation of employment is to aggregate the hours of participation in all these types of secondary activities (including home production for own consumption) together with hours on the first and second jobs. Dividing by "usual" hours of work (39.3 in November 1999) yields an estimate of full-time-equivalent (FTE) employment in the economy. The result of this exercise is that Russia had an average 69.6 million FTEs in 1999, compared with measured employment of only 60.4 million (GKS 1999, table 3.25). These results provide an alternative approach, based on time rather than on numbers of individuals, to address the employment change question. It shows that

[37] Goskomstat (1999a, table 2.44) appears to contain figures with inconsistent definitions, because as of 1999 respondents reporting second jobs in the previous month (not just the reference week) are included.

despite the popularity of the view that second job-holding is common in Russia, the available evidence indicates that it is a relatively minor part of the picture.[38]

This section suggests that the employed did not significantly change their hours of work, engage in secondary activity, or significantly take up involuntary leave. Thus, the major quantity adjustment in labor was the result of the fall in the number of workers.

F. Understanding Unemployment

While unemployment growth does not explain a large part of the drop in employment, it is useful to understand the evolution of unemployment in Russia to appreciate the workings of the labor market and to inform labor-market policies. It is well known that in the first several years of reforms, measured unemployment in Russia remained low compared with most other transition economies. In 1993, for instance, the Russian rate (according to the RLFS) was 5.3 percent, compared with 16.4 percent in Poland, 12.1 in Hungary, and 10.4 in Romania. As noted above, the slow rate of restructuring was consistent with the gradual rise in unemployment. This observed difference led many observers to praise the "Russian way" of labor adjustment, in which the flexibility of real wages ameliorated the social costs associated with layoffs and unemployment.[39]

However, the flexibility of wages did not forestall significant unemployment growth in the late 1990s. The unemployment rate reached as high as 15 percent by February 1999 (figure I.7 and table AI.3). The inflows into unemployment[40] were highest prior to 1995 and have gradually declined. The recent significant drop in unemployment rate (to 10 percent in August 2000, and to a further 8 percent in 2001) notwithstanding, it has been incorrect to characterize Russia as a "low-unemployment economy" for some time. The administrative unemployment rate (defined by the number registering at local labor offices) is low — in the 2 to 3 percent range — but this discrepancy is certainly the result of the low incentives to register: low unemployment benefits, frequently paid late, and little by way of retraining and job-placement support. Why did unemployment increase significantly over

---

[38] Even if secondary employment is greater than indicated by these two surveys, it is unlikely that our results on declines in labor productivity would greatly change. If, as is commonly believed, hours worked are sticky because individuals may work full time for the firm, but sell in-kind goods (received as wages) during regular work hours, workers can be thought of being sales agents of firms, selling goods and retaining 100 percent of sales revenue as wages. Alternately, it is often believed that wages are unaltered because workers use the facilities of firms in which they work to engage in secondary occupations during regular work hours. In this case, workers might be thought of as producing output for the firm (using firm equipment) but retaining 100 percent of profits as wages. While the output produced would not be accounted for in the second case, it would have to be quite large in order to dampen estimates of decline in labor productivity.

[39] See, for example, Layard and Richter (1995) and OECD (1995).

[40] Duration of unemployment one month or less.

Table I.1. The Socioeconomic Composition of the Unemployed, 1999 (Percentage)

	Average age	< 40 years (percent)	Education *				Previous work history (percent)	Long-term** (percent)
			Basic	General secondary	Prof. secondary	Higher		
Total	35.3	64.9	16.9	31.3	38.8	13.0	81.1	47.3
Men	35.5	65.7	20.3	33.4	35.1	11.3	82.8	44.0
Women	35.2	64.1	13.2	29.1	42.9	14.8	79.3	51.0

Source: Goskomstat (1999d).
* Complete and incomplete.
** Period of job search more than 12 months.

this period? The sharp growth in unemployment reflects gradual and increasing restructuring, coupled with continued economic decline, or inability of the economy to create new jobs.

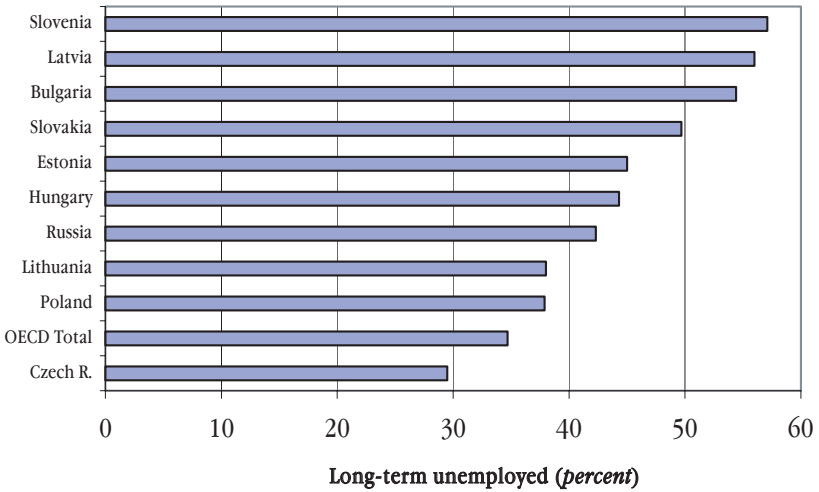
Post-1998, as a consequence of economic growth, the unemployment rate has declined rapidly. The unemployment rate declined to 10.0 percent by November 2000 (and 9 percent in 2001, and increased slightly in 2002). In most high-growth CEE countries, (except Hungary) unemployment rates actually increased in the first two years following growth — because of rapid restructuring — and declined thereafter. However, the decline was at most 2 percent over a two-year period, lower than the 3 percent decline realized by Russia between 1998 and 2000. Moreover, after a period of decline, unemployment rates have either stabilized or increased yet again in most high-growth CEE countries in recent years, as countries have renewed restructuring (for example, Poland). In Russia, the sharp decline in unemployment shows that the labor market has been more flexible in being able to respond to economic growth than it has in other CEE countries. One reason may be the lack of enforcement of restrictive legislation — such as high minimum wages or restrictive termination conditions found in other CEE countries — an issue that we will take up later in this report.

Socio-economic composition. There were large differences in unemployment rates across socio-economic groups in 2000 (table AI.3). Unemployment rates were higher for younger, less-educated, and less-skilled workers. There was little gender difference. Women had a slightly lower unemployment rate than that of men.[41] (Goskomstat 1999a, p.225). These patterns — high rates of unemployed among youths and less-educated individuals[42] — are largely similar to those found in most

[41] The essential patterns of unemployment across age, gender, and schooling groups discussed here are also found in RLMS data, and in a regression framework where the other factors as well as regions are controlled.

[42] The comparisons are with the 1996 data.

Figure I.9. Percentage of Long-Term Unemployed, Russia/CEE



Source: OECD-CEET database, Goskomstat.

CEE countries, although female unemployment rates tend to be higher than male unemployment rates in many CEE countries. As in most CEE countries, households headed by the unemployed have among the highest incidence of poverty.

Which groups comprise the majority of the unemployed? Individuals with high rates of unemployment do not comprise a large share of the unemployed population. The majority of unemployed are about 40 years of age (65 percent of all unemployed), have completed secondary education (69 percent), have previous work experience (81 percent), and are roughly evenly split between men and women (table I.1). The large share of unemployed with previous work experience and their increasing age suggests that the exit of workers from enterprises coupled with years of low aggregate demand were the main reasons for unemployment growth in Russia. The recent decline in unemployment has slightly reduced the share of experienced workers among the unemployed.[43]

Duration. How long do the unemployed stay without a job? The average duration of unemployment (uncompleted spells) increased sharply, from 4 months in 1992 to 10 months in 1999, and fell to 9 months in August 2000 (table AI.3) In the early 1990s, when the unemployment rate was low, the unemployment pool turned over fairly rapidly, but as the rate grew, so did the proportion in long-term unemployment. By early 1999, the proportion of the unemployed reporting a duration longer than 12 months (long-term unemployed) was about half the total unemployment

[43] The share of job losers has declined, and that of job quitters has increased. However, this finding is difficult to interpret because these two categories of workers are difficult to distinguish in Russia. Many employers induce workers to quit rather than laying them off explicitly.

Table I.2. Regional Unemployment Rates: Standard Deviation and Max/Min Ratios

	1993	1994	1995	1996	1997	1998	1999	2000
Standard deviation	1.93	2.27	5.66	4.84	7.69	6.55	6.37	5.16
Max	17.50	18.00	43.10	32.20	58.20	51.10	51.80	32.00
Min	3.30	5.50	5.40	5.50	3.40	4.70	5.60	3.21
Maximum/ Minimum rate ratio	5.30	3.27	7.98	5.85	17.12	10.87	9.25	9.96

Source: Goskomstat.

pool.[44] While Russia's long-term share was initially at the very low end of the spectrum, by the late 1990s it had reached the upper range of long-term shares found in OECD countries (figure I.9 and table AI.5). The share of long-term unemployed is lower in Russia, however, than in many CEE countries (with the exception of Poland and Lithuania). Why might this be the case? Some factors that explain this difference may include the lack of enforcement of restrictive legislation, which allows individuals to find jobs faster than in CEE countries; the less-generous unemployment benefit system in Russia; or a better match between the skills of the long-term unemployed and those demanded in the labor market. It will require further research, however, to understand the precise factors that explain these cross-country differences.

Despite comparing favorably to CEE countries, the duration of unemployment has not been very responsive to economic growth. Why might this be the case? As in other countries, structural factors that impede the adjustment of the supply and demand of labor of different skills and across different regions may be important for understanding the long duration of unemployment in Russia.

Skills mismatch. The groups with the longest duration of unemployment are older, less-educated (52 percent),[45] laid-off workers (56 percent), with previous work experience (47 percent). Moreover, while unemployment rates have declined for all workers, the greatest decline has been among younger workers and those with some education. The unemployment rate of workers with basic education was the same in 2000 as in 1998 (it increased in 1999 but fell to 1998 levels by 2000). One reason for the growth in long-term unemployment may be a skills mismatch, or the lack of market demand, for older, less-educated, and laid-off unemployed workers (tables AI.6-I.9). skills mismatch also explains socio-economic composition of unemployment in CEE countries. (World Bank 2001a, 2001b).

---

44 Goskomstat (2000c) is unclear about the boundary of the category "9-12 months" and "12+ months," but the qualitative picture is little affected.

45 Of all unemployed workers in this category, those that are long-term unemployed.

Regional disparities. Regional unemployment rates have converged over time. The standard deviation of regional unemployment rates has declined, from a peak of 7.7 in 1997 to 5.2 in 2000. The ratio of the minimum to maximum unemployment rate also has decreased - by almost half - in the same time period. This reflects a decline in unemployment in high unemployment regions and low unemployment regions. In particular, there has been a remarkable decline in unemployment in the highest unemployment region of Inghushetia, from 58 to 32 percent between 1999 and 2000.

Despite declining over time, regional differences in unemployment rates remain striking. In 2000, when the average unemployment rate in the Russian Federation was 10.7 percent, unemployment rates ranged from a low 3.2 percent unemployment rate in Yevenkisski to a high of 32 percent in Ingushetia 10-fold difference.[46] This ratio is higher than that realized in the Slovak Republic (8 percent) and in Poland (4 percent) Moreover, while rankings of regions with the 10 lowest unemployment rates have varied over time, high rates of unemployment have remained persistently concentrated in Eastern and Western Siberia and the North Caucasus regions (table I.2).

What explains the differences in unemployment rates across regions? Regression analysis using 1999 data revealed that unemployment rates were higher in regions with higher official poverty rates and lower in regions in which average per-capita expenditures were high (in richer regions) and where industrial production accounted for a larger share of GDP.[47] After controlling for these variables, unemployment rates tend to be higher in urban areas, in areas with high birth rates, and in areas that have welcomed refugees, although the latter effect is very slight (table AI.9a).

How can we interpret these findings? Rural populations will be less likely to exhibit open unemployment as long as farming is a welfare-augmenting alternative and jobs are scarce. While it is difficult to believe that heads of households with more children are a priori more likely to be unemployed, birth rates likely proxy other variables related to employment, such as differences in employment by ethnicity. In other words, the economic disruptions of transition may weigh more heavily on some nationalities than on others. The reasons for this would need to be investigated. There is one interesting policy dimension: Assuming restructuring will take place in regions with relatively high industrial output, then, all else being equal, these regions may face (even) higher unemployment rates in the future.

Once these factors are accounted for, unexplained differences in employment still exist for some regions.[48] In particular, the north, the North Caucasus, and the far east regions have higher-than-average unemployment rates. And these differences are considerably higher than differences in the unadjusted rates, suggesting that other correlates with lower unemployment, such as a larger agricultural population or greater industrial production, may be at work in explaining these differences.

---

46 It should be noted that Ingushetia had the highest regional poverty rate as well.

47 These latter two variables were lagged a year to reduce multicollinearity.

48 All comparisons are made with respect to the central region, which contains Moscow. The choice was arbitrary. The unemployment rate for the region at 10 percent is somewhat less than average.

Regional mobility. Differences in regional unemployment rates may stem from low regional mobility. However, this stylized fact is difficult to establish. One reason is that much internal migration may be unofficial, thus not captured by the registration system. A second reason is that it is difficult to find an appropriate standard by which to assess whether observed rates are low. Russia's territory is huge and extremely diverse, with large heterogeneity, and peculiarities of industrial location and transportation infrastructure.

With these caveats in mind, official figures on migration, which are based on registration data,[49] show annual intraregional and interregional arrival and departure rates of about 1 percent each (Goskomstat 2000a). Of course, these omit unofficial migration. Large migrations have occurred in post-transition Russia. Half of the regions classified as the extreme north have lost more than a quarter of their populations during the post-Soviet period. The two regions in the far northeast corner of Russia - Magadan, across the Bering Sea from Alaska, and Chukotka - have respectively had 42 percent and 58 percent of their populations leave because of deteriorating economic and social conditions. This rapid depopulation of Russia's northern and far eastern periphery was a response to the dismantling of subsidies and the liberalization of prices.

However, by international standards, a very high share of Russian population still continues to live in the north. Northern Russia is 2.5 times as densely populated as Alaska and 50 times as densely populated as northern Canada and Greenland. Of the 11 cities in the northern regions of the world with populations of 200,000 or more, 10 are located in northern Russia (the 11th is Anchorage, Alaska).

Barriers to mobility. One of the most commonly assumed stylized facts about Russian labor markets is that there are large barriers to internal geographic mobility. The barriers include continued use of the permit (propiska) system by Moscow and some other cities, where large bribes have to be paid to register as a resident (necessary to find an official job); poor functioning of the housing market; and poor communication and transportation links.[50] The extent of these barriers and their links to migration are difficult to establish, and evidence is mixed. Recent work by Gerber (2000) shows that this mobility is a result of economic incentives. Regions with higher levels of privatization (of housing, in particular) and higher levels of per-capita trade turnover (as a measure of economic activity) are attracting in-migration. Rural to urban flows also appear to be related to economic incentives - the access to private farms.

Other studies stress the role of housing in constraining migration across and within regions. For example, Heleniak (2000) finds that the out-migration of able-bodied workers from the north has left a large share of vulnerable individuals, such as the elderly, disabled, and unemployed people without the money to migrate. For these and other individuals who remain in the north, the unavailability of affordable housing is the main reason for not migrating to other regions. A recent study of three

---

[49] Anecdotal evidence suggests that there may be considerable informal migration as well.

[50] Friebel and Guriev (2000) analyze the impact of employer-provided fringe benefits.

oblasts (states) found evidence of long commutes to Moscow from surrounding regions. Most workers cited the unavailability or high cost of housing as the main factor constraining a move closer to work (Pinto et al. 2001)

Housing constraints also have been found to be important in limiting labor mobility in CEE countries. In Hungary, long commute times for many workers are explained by the high cost of housing in the country. Differences in regional mobility rates within the United States and across OECD countries have also been shown to stem mainly from the availability of rentals. Countries with higher shares of owner-occupied housing tend to have lower mobility rates. (Jackman 1998) To the extent that Russia has a high share of owner-occupied housing, it may account for limiting inter- and intraregional mobility in the country.

In summary, despite recent declines in the unemployment rate, Russia can no longer be called a low-unemployment economy. The long duration and high regional variation of unemployment point to a skills mismatch and potential barriers to regional mobility, such as the availability of housing.

G. Structural Change and Labor Mobility

The analysis so far has focused on the broad aggregates, in an attempt to better understand the drastic fall and partial recovery in employment and the puzzle of where workers have gone, how they spend their time, and how they survive. This section takes a more disaggregated look at labor reallocation. The big question to answer is the following: Is there genuine restructuring occurring in Russia? Many observers tend to answer negatively, but rather little systematic analysis has been undertaken. In particular, the controversies have focused on the firm-level issue of the extent of restruc-

Table I.3. Labor-Market Transitions, 1998-2000

1998-2000	Labor force status in 2000				Total 1998
	Employment	With job/ not at work	Unemployment	Out-of-labor force	
Employment	0.826	0.054	0.030	0.091	0.480
With job / not at work	0.636	0.170	0.067	0.127	0.039
Unemployment	0.482	0.028	0.185	0.305	0.060
Out-of-labor force	0.127	0.007	0.045	0.821	0.421
Total 2000	0.504	0.037	0.047	0.412	1.000
N=6510					

Note: Each cell measures the probability of transition from labor force status i to labor force status j.
Source: Calculations from RLMS.

turing in response to privatization, but there has been relatively little analysis of changes in the composition of employment and of the flows of labor across sectors; nor has there been much analysis of the extent and determinants of labor mobility[51]. (The following chapter considers restructuring from the angle of changes in price signals in the labor market: the wage structure, earnings inequality, and other aspects of compensation).

Labor market transitions. Table AI.21 starts the analysis of restructuring with gross flows of individuals between labor force states, using the definitions of table AI.3. The data are the 1994, 1996, and 1998 rounds of the RLMS, and two-year transition matrices are displayed. The 1994-96 and 1996-98 matrices are fairly similar, except for a higher propensity for the employed to enter unemployment in the latter period. 1998-2000 is quite different, however, with a substantially higher rate of transition out of unemployment into employment and lower to nonparticipation (table 1.3). The probability of remaining employed increases, as does new and re-entry into employment from out of the labor force.

Evidently, economic growth in post-crisis Russia was not only strong enough to increase the probability that workers would remain employed, but it also brought the unemployed back to employment more quickly than before, and it even pulled in labor force nonparticipants. Specifically, between 1998 and 2000, almost 50 percent of the unemployed became employed, and only 20 percent remained in that status.

Labor mobility. Another indicator of labor-market changes is labor-mobility rates. How do these compare over time? Table AI.29 shows the size of gross worker flows across sectors, industries, firms, and occupations for several subperiods between 1985 and 1998. The data are from the RLMS, using both retrospective information on the 1998 survey and the panel from earlier years. Gross worker flows are measured as the fraction of employed respondents who changed sector, industry, firm, and occupation, respectively, between the first year and last year of the considered period.

As in the earlier analysis of movements between industrial sectors, these mobility measures also show an unambiguous increase in worker mobility after 1991, the year when reforms began. The number of people who moved to another industry, firm, or occupation was already considerably higher during the first four years of reforms (1991-1995) than during the preceding six years (1985-1991). During the seven years of transition, 1991-1998, 42 percent of employed respondents changed their industry, firm, or occupation, nearly twice as great as the share of movers in the previous six pre-reform years.

Mobility also became more "complex," more frequently involving simultaneous changes in occupation, firm, and industry (Neal 1999). Table AI.29 also indicates that these labor flows were most intense during the first five years of reforms, and after 1996 the rate of labor mobility begins to fall (table I.4). This decline in mobility could be partially the result of the diminishing rate of structural change and the relative stabilization of labor force composition.

---

[51] Commander, McHale, and Yemtsov's (1995) study is based on data only through 1993, while Clarke (1999) and Gimpelson and Lippoldt (2001) have limited information on gross flows.

Table I.4. Job and Occupational Mobility (Self-reports in the RLMS)

Years	Changed both firm and occupation	Changed firm but not occupation	Changed occupa-tionbut not firm	Did not change either firm or occupation
1996-1998	0.170	0.093	0.034	0.704
1998-2000	0.176	0.105	0.035	0.685

Note: The table shows the fractions of employed respondents who reported in 1998 and 2000 that they changed their place of work and occupation as compared with December 1996 and December 1998, respectively.
Source: Calculations from RLMS.

Comparable information on industrial, occupational, and interfirm mobility for the 2000 RLMS is not yet available, but table AI.30 contains the results from a variable measuring respondents' self-reports on changes of occupation and employer in the previous two years. These data, available in the 1998 and 2000 surveys, indicate a small tendency toward increased mobility in the second two-year period (1998 to 2000 compared with 1996 to 1998). Relatively little mobility is intrafirm occupational change (an indicator of internal organizational change), but much of the interfirm mobility also involves change of occupation.

A final approach to measuring mobility in Russia relies on tenure information. Mean job tenure and tenure distributions, by age and gender, are shown for Russia and some comparator countries in table AI.31. The Russian calculations are based on the RLMS cross-sections for the years 1994, 1996, 1998, and 2000. In 1994, Russian women had much longer tenure than did Russian men and, relative to the women in other countries, the Russian female job-tenure distribution tended toward the high end of the spectrum; only Italy had longer average tenure in each age group, and only Italy and Japan had lower fractions of employment with tenure of one year or less.

The female distribution evolved quite rapidly in the late 1990s, so that by 2000 it resembled that of men, and it implied quite high rates of mobility. The tenure distribution for men changed less in this period. Particularly striking are the patterns for the two older age groups, 26-45 and 46-60 years of age, in both of which mean job tenure for Russian men was well below the figures in all the other countries; in the oldest group, this was true for Russian women by 2000 as well. The data also are consistent with a pattern of labor force exit of older workers around 1998 and re-entry before 2000, when the fraction with new jobs (tenure of a year or less) jumps substantially.

These results show that the Russian labor mobility increased in post-transition Russia, and its composition exhibited greater complexity. While labor flows declined post-1996, they increased once again - although modestly - post-1998 in response to economic growth. Job-tenure data also confirm labor flexibility in Russia.

Employee turnover. An important puzzle in Russian labor markets has concerned what are reported to be relatively high rates of worker turnover. The rate of labor turnover - both hiring and separations - is higher in Russia than in most transition countries, and approximates the range found in lower-income OECD countries

Table I.5. Hiring, Layoff, Quit, and Separation Rates, 1991-98

Year	Hiring	Layoffs	Quits	Total separations
1991	0.21	0.01	0.12	0.20
1992	0.20	0.02	0.15	0.26
1993	0.20	0.02	0.17	0.26
1994	0.18	0.03	0.19	0.28
1995	0.19	0.03	0.18	0.27
1996	0.17	0.04	0.18	0.27
1997	0.18	0.05	0.17	0.28
1998	0.18	0.04	0.18	0.26

Note: Employment separations resulting from death, entrance to army, and retirement are not counted as quits or layoffs.
Source: Results from survey "Inside the Transforming Firm," reported in Biletsky et al. (2002).

(Gimpelson and Lippoldt). Layard and Richter (1995), for instance, take this to imply substantial worker reallocation and therefore evidence of restructuring, while others cite a number of possible alternative explanations: measurement error in the Goskomstat statistics, churning (rehiring of former employees), employment changes associated with split-ups and mergers, or mover-stayer heterogeneity in the Russian labor force, such that the observed turnover is accounted for primarily by a rather small group of workers.[52]

At the moment, evidence is insufficient to be able to evaluate these alternatives, but table AI.27 documents the empirical regularities using official Goskomstat data on hirings and separations in large and medium-size firms for the years 1993-2000. The rates are fairly constant over the period, except for an upturn in hiring (and to a smaller extent in separations) in 1999 and 2000, particularly in industry and construction, but it is useful to consider some independent reporting in a firm survey.

To check the possibility of measurement error and to provide separations disaggregated into layoffs and quits, table I.5 shows employee turnover rates for a sample of Russian manufacturing enterprises. Layoff rates are low throughout, but rising steadily during this period. Quit rates are more substantial, also rising. Most striking, however, are the high hiring rates, with an only slightly declining average value during this period. Why Russian manufacturing firms should have engaged in so much hiring during a period of such drastic decline is a puzzle, certainly one that merits future research.[53]

---

[52] Discussions with Vladimir Gimpelson and Rostislav Kapeliushnikov were very useful in laying out these alternatives.

[53] See also Lippoldt and Grey (1997), Gimpelson and Lippoldt (1997), and Kapeliushnikov (1997).

Sectoral shifts in employment. Does the evidence on labor mobility above contain any evidence of productive restructuring? Were the shifts in aggregate labor demand associated with restructuring of the composition of employment? A first question on changes within employment concerns the sectoral allocation of labor. Table AI.22 shows changes in the industrial composition of the labor force, as reported by Goskomstat (2000b), for the period 1970-99. Changes are small from 1970-85, but thereafter accelerate, with a pronounced shift out of industry, construction, transport, and communications into trade, finance, and public administration. (Table I.6 shows shifts between 1990 and 1999).

The magnitude of these shifts is large even by comparison with CEE countries experiencing similar transition shocks in the early 1990s. Boeri and Terrell (2002), for instance, report OECD figures for 11 transition economies that show Russia roughly at the median level for reduction in the employment share of industry and growth in the share of services, in the latter case ahead of Bulgaria, Poland, Romania, and Slovenia.

These changes are mirrored in the large decrease in the agricultural share of GDP and increase in services share of output. From the point of view of inter-industry shifts, the evidence does not support the claim that restructuring has been particularly sluggish in Russia. It is noteworthy, however, that the pattern of shifts slightly

Table I.6. Composition of Employment by Industry, 1990-99 (Percentage)

	1990	1999	Change 1985-99
Industry	30.3	22.4	-30.7
Agriculture/ Forestry	13.2	13.7	-4.2
Construction	12	7.9	-15.9
Transport/ Communications	7.7	7.6	-22.4
Trade	7.8	14.6	75.9
Housing	4.3	5.3	29.3
Health services	5.6	7	40
Education, culture, art, and science	13.3	13	3.2
Finance, credit, and insurance	0.5	1.2	140
Public administration	2.4	4.5	136.8
Other industries	2.9	2.8	55.5
Total	100	100	

Source: Goskomstat (2000b).

reversed itself in 1999, the final year shown in table A1.22, as the industry share increased for the first time in the entire period. This results suggest that the recent recovery may, to some extent, represent a reversal of restructuring in the sense of sectoral reallocation of employment.[54]

To some extent, this proposition is reinforced by an analysis of RLFS data, presented in table AI.23. Results with industry coding are available in the RLFS only since 1997, but data since that year show a slight rise in the proportion in industry (implying a significant rise in the absolute numbers employed in industry, given the overall employment increase). Trade and public administration also have increased, while construction, utilities, health, and education have declined.

Results from similar computations using the 1998 RLMS in table AI.24 show a very sharp increase in employment in finance and commercial activities during the period 1985-2000. These data are based on retrospective questions concerning the respondents' employment status in 1985 and 1991. The results demonstrate clearly that the shifts accelerated in the 1990s.[55]

Similar to the RLFS results, however, it is noteworthy that the changes since 1998 to some extent reverse earlier changes, particularly in the rise in certain industrial sectors. The post-crisis period did show strong growth in trade and finance, however. Moreover, because they concern the same individuals, it is also possible to analyze the nature of employment transitions, shown in table AI.25. Taking first the diagonal elements in the matrices, which show the rate at which individuals stay in the same status (sector of employment, or nonemployment), it is remarkable how much higher the rates are for the 1985-91 period compared with the 1991-98 period.

Even adjusting for the slightly greater length of the latter, the figures show much greater mobility after the transition really began about 1991. The probability of remaining in the same sector declined quite substantially (except for nonemployment, which reflects retirement). On net, the expanding sectors received workers from the declining sectors, but the flows to and from non-employment are the largest. A pronounced difference between the earlier and later periods concerns the transitions from nonemployment to the various employment sectors, where the rates of movement into industry, agriculture, transportation, and construction fall drastically. This result implies that new entrants to employment tended to enter the service sectors.

Size distribution of employees. Now, a fall in employment in a sector may be the result of either firm exit or firm size reductions (or both). The latter is of interest in light of one of the major distortions produced by central planning, a tendency to concentrate production in a relatively small number of large companies. Thus, an important type of evidence of market-oriented changes in employment is downsizing of large firms.

For a sample of firms comprising most large and medium enterprises in the industrial sector, table AI.26 clearly shows the downsizing effect of transition. Average firm

---

[54] Further useful evidence on this point could in principle be obtained from more recent information on a more disaggregated set of industries, but neither is available at present .

[55] As these results are based on retrospective data, they may suffer from age-related bias if age is correlated with sectoral choice.

employment was relatively constant in the late 1980s and early 1990s. After 1993, however, average firm size decreased rapidly, and by 1999 it was less than half what it was during the Soviet period. The fuel, machine-building, light industry, and building materials sectors downsized the most proportionately.

Thus, the data do suggest substantial reallocation of employment across sectors, although the preliminary evidence also implies that much of it was accomplished through transitions involving nonemployment, that is, through withdrawals from employment, and by employment of entrants.[56] Nevertheless, the data also show quite substantial switching of sectors by workers.

Changes in occupational structure. The restructuring process also has changed the structure and directions of occupational mobility. Table AI.28 again draws upon the retrospective questions in the 1998 RLMS to show that the occupational composition has shifted toward more market-oriented and service-providing activities from 1985 to 1998. The share of managers, entrepreneurs, specialists in business and law, customer service clerks, salespersons, and other service-providing workers increased. At the same time the recent occupational changes are characterized by a strong decline in a number of engineers and skilled laborers that may reflect a shift of employment from goods-producing industries to service-providing industries. The RLMS also indicates that the share of army specialists dropped by 13.3 percent, which may have certain consequences for the labor market (retraining and high unemployment among former military specialists).[57]

Job creation and destruction. Thus far, the results show that there was considerable labor mobility overall in Russia, and across sectors and occupations, indicative of economic restructuring. To better understand if restructuring has been taking place it is important to evaluate job flows, or job creation and destruction rates in Russia.[58] High job turnover (with high job creation and destruction rates) is associated with productivity gains and higher efficiency because the process allows the destruction of less-productive jobs and the creation of more productive ones. The difference between job creation or job destruction, or net employment growth, is a measure of the extent to which new jobs were created in the economy.

Improving the allocation of labor inherited at the end of the socialist period involves two types of restructuring. The first step embodying initial restructuring involves shedding of excess labor by firms, while the second involves deeper restruc-

---

[56] This finding may reflect the long intervals during which these changes are measured using retrospective data. This could be checked using the one- or two-year transition matrices of 1994-2000.

[57] An interesting research project would be to follow these individuals through the panel and see how they have fared.

[58] The gross job-creation rate is the sum of all employment gains in expanding firms in a given year, divided by total employment at the beginning of the year. The gross job-destruction rate is defined as the sum of all employment losses in contracting firms in a given year divided by total employment. The sum of gross job creation and gross job destruction gives a measure of gross job turnover (reallocation), and the difference is the net employment growth rate. The excess job reallocation rate is the difference in the job reallocation rate minus the absolute value of net employment growth.

Table I .7. Job Flows over Time, Russia and Select Transition Countries (Percentage)

	Bulgaria	Czech Rep.	Hungary	Poland	Romania	Slovak Rep.	Russia
Job creation							
1989-1992 гг.	0.2	1.5	2.2	1.2	6.7	1.6	0.8
1992-94	1.5	4.5	1.0	6.1	–	3.7	2.5
Job destruction							
1989-1992 гг.	25	10.2	19.1	14.9	11.2	15.2	3.8
1992-1994 гг.	4.9	5.3	9.3	5	–	6.5	8.6
Job reallocation							
1989-92	25.2	11.7	21.3	16.1	17.9	16.8	4.6
1992-94	6.4	9.8	10.3	11.1	–	7.2	11.1

Source: Jackman (1998).

turing in which enterprises start to change the product mix, undertake investment, and create new jobs. The former stage involves a rise in job-destruction rates. The latter stage is evident as job-creation rates increase and job-destruction rates subside (Blanchard 1997).

CEE countries restructured more rapidly than Russia. The shedding of excess labor was reflected by a rapid initial rise in job-destruction rates in the early transition years. The second stage of restructuring is also evident in lead reformers. Job-creation rates, initially very low, started to increase over time, and job-destruction rates declined. The combination of these trends meant that job flows fell in most countries from 1989 to 1994 (Jackman 1998; table 1.7).

In Russian manufacturing, both job-destruction and job-creation rates were lower than those observed in CEE lead reformers between 1989 and 1994, but they increased over time, indicating that the economy was restructuring (table 1.7). The increase in manufacturing job destruction is consistent with the gradual rise in unemployment rates in Russia during the same period. However, despite this increase, job creation rates remain lower; and job destruction rates higher in Russia relative to OECD and other transition countries. This result is consistent across a large number of studies on job flows in Russia, e.g. Jackman 1998; Faggio and Konings 1999; Konings and Walsh 1999; Russian Economic Barometer 1996. (table AI.32/33/34). It shows that Russia is still in the first phase of restructuring its economy.[59]

[59] It should be noted that there have as yet been no studies of the private services sector where job creation rates are likely to be much higher than in other sectors.

These results on job flows are also confirmed in three recent studies evaluating evidence on job flows in Russia. (Brown and Earle 2002a, 2002b, 2002c).[60] These studies also evaluate the determinants of job flows. Brown and Earle (2002a) evaluates the evidence on gross job flows comparing Russian and Ukrainian manufacturing firms using annual industrial census data for 1985-91; and 1991-99. The study finds that the job creation rate is low in Russia throughout the period and rose slightly during the 1990s. Job destruction, reallocation, excess reallocation, and employment growth dispersion increase markedly. Excess reallocation appears to be little affected by firm size, wage, capital intensity, and market structure, but it is increasingly associated with non-state ownership. Job flows are unrelated to productivity growth under Russian socialism, but the covariance of employment share growth with relative productivity becomes strongly positive in both countries by the mid-1990s. These patterns were common across the two countries but were stronger in Russia which adopted more rapid reforms than did gradualist Ukraine. (Brown and Earle 2002a)

Gross job and worker flows in Russian industry and their determinants were studied by Brown and Earle (2002b) using panel data from a recent survey of 530 firms selected through national probability sampling. The results imply that job destruction and worker separation rates in industrial firms rose in the early 1990s, as did job flows as a fraction of worker flows and layoffs as a fraction of separations. By contrast, job creation and worker hiring rates were flat until 1999, the former low and the latter surprisingly high.

What are the determinants of job flows? The study finds that heterogeneity in individual firm behavior increased throughout the period. New firms and old enterprises that have been reorganized display much larger flows compared with un-reorganized enterprises. Unions appear to reduce worker flows, but the structure of neither product nor labor markets shows a significant impact. Private ownership has ambiguous effects: insider ownership, particularly by managers, is associated with higher worker flows and excess job reallocation, while outsider ownership, particularly by block-holders, is associated with lower flow rates. A measure of adjustment costs constructed from the work-time necessary to hire and train a new employee is strongly related to variables usually associated with adjustment costs, including worker wage, education, firm size, capital intensity, and labor productivity, but only weakly to job and worker turnover. Little evidence is found that firms' employment adjustments have become more sensitive to adjustment costs during the transition, but worker and manager ownership are associated with more sensitivity than are other types of ownership. (Brown and Earle 2002b)

An evaluation of job flows by Brown and Earle (2002c) using annual 1985-1999 census data for old Russian manufacturing firms calculates the magnitude, covariates and productivity consequences of gross job flows before and after reforms. The job creation rate was low throughout the study period but increased slightly after 1991, while job destruction, reallocation, excess reallocation, and employment growth dis-

---

[60] See also Broadman and Rescanitini (2001) for an evaluation of job creation and destruction rates in the manufacturing sector.

Table I.8. Share of Employment in New Private Sector, 1994-2000*

Ownership type	1994	1995	1996	1998	2000
	Distribution of the employed by type of ownership				
State-owned	0,754	0,683	0,663	0,647	0,605
Mixed	0,073	0,1	0,116	0,113	0,129
Domestic private	0,134	0,172	0,181	0,196	0,217
Foreign	0,040	0,045	0,039	0,044	0,049
Ownership is missing	0.181	0.155	0.148	0.14	0.127

* Using ownership type as definition of new private sector.
Source: Definition of ownership type. Calculations from RLMS. Goskomstat Annual Yearbook, 2000, p. 112.

persion rose markedly. Excess job reallocation increased in all firm size, ownership, capital intensity, and market concentration categories, while the relationship with average firm wages and labor productivity became positive post-reform. Job reallocation was unrelated to labor productivity growth under socialism but recent contributions were strongly positive. Privatization and competition did not increase job flows, but they are associated with significantly higher covariance of employment growth with relative productivity, suggesting that they may have helped to focus job destruction in firms with the lowest productivity.

To summarize, manufacturing job flows have increased over the 1990s, but job flows are explained mainly by high job destruction rates. Job creation rates remain lower than OECD norms. These changes have likely increased productivity and efficiency because destroyed jobs are presumed to be less productive than newly created ones. Some evidence, noted above, supports this hypothesis. To further understand the job creation potential of the labor market, it is important to evaluate the new private sector and the nature of entrepreneurship in Russia.

H. The New Private Sector

In most transition countries, the private sector is the main source of employment generation. Is this the case in Russia? Despite all the attention paid by both academic economists and policymakers to the new private sector in transition economies, there have been few attempts to measure it carefully. One of the reasons may be a fundamental ambiguity in what constitutes a genuinely new entity versus one that is spun-off from an old firm or otherwise created on the basis of assets and labor formerly employed in an organization inherited from the socialist period, and there are ambiguities in defining ownership as well. Simply asking managers if the firm is "new"

or for the founding date does little to resolve such ambiguities. In any case, there appear to be no estimates of the aggregate size of this sector in Russia.[61]

The approach taken here is to use detailed information from the RLMS, examining three different dimensions: firm size, ownership, and founding date. Results are displayed in table AI.35. The distribution of reported employer size has changed remarkably little during the period, with the exception of growth in the 26-100 employee category, which may reflect both the increased size of new private firms and the decreased size of old firms. Reported ownership type has evolved more significantly. The definitions here use the three RLMS questions on whether the respondent's employer has an owner that is, respectively, state, domestic private, or foreign. Following Earle and Sabirianova (forthcoming), "state" is defined to include any employer reported to have state ownership but neither domestic private nor foreign; "mixed" includes all employers with both state and either domestic private or foreign ownership; "domestic private" includes employers with only domestic private ownership; and "foreign" includes firms without state and with foreign ownership. The estimates show substantial growth in the domestic private (13 to 22 percent) and mixed categories, but foreign ownership remained low and state ownership still dominated in 2000 (table I.8).

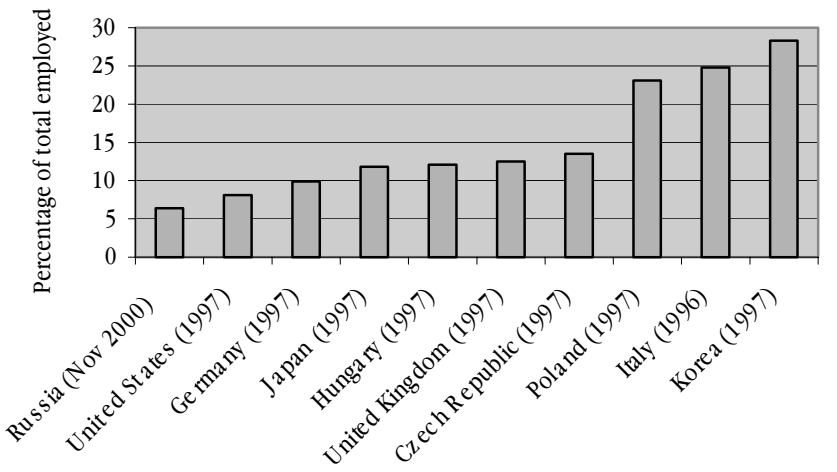
Information on the employer firm's founding date, available in the RLMS since 1995, displays large growth in the post-1994 category, but there is a decline in the fraction of employees reporting firms founded in the first half of the 1990s, the period when new private entry was really liberalized. Finally, table AI.35 shows the results from a definition of the new private sector that includes both the primary activity self-employed and employees of firms with no state ownership that were founded after 1988. According to this measure, the new private sector was growing substantially during the 1995-2000 period, from about 23 to 33 percent of all employment. Of these, approximately 40 percent worked individually as self-employed, while about 60 percent were employees. The state still remains the dominant employer, although its role has significantly declined. In 2000, the state employed roughly 60 percent of all workers - down from 75 percent in 1994. The state share of employment in Russia is higher than for CEE transition countries as far back as 1996. In that year 40 percent of all Polish workers worked in the state sector (table AI.36).

Where did the new private sector employees come from? Characteristics of the new private sector are shown in table AI.38. According to the RLMS data, men tend to be overrepresented in this sector, as are younger people and those with secondary and vocational education. In 1995, individuals with higher education were overrepresented; then the pattern shifted to underrepresentation. The new private sector is

---

[61] Clarke and Borisov (1999) and Clarke and Kabalina (1999, 2000) review various sources for measuring the new sector and analyze their own data from case studies, two oblasts, and five cities. Gimpelson and Lippoldt (1999) [provide a rough indication of the new sector based on the difference between the Goskomstat figures for total employment and for large and medium enterprises; their own analysis pertains to only four Russian regions, and their data for these regions do not permit a distinction between privatized and new private companies.

Figure I.10. Self-Employed as a Share of Employed, Select Countries



Source: Annex I

frequently connected with the informal or unofficial economy. As this is a question that concerns more directly the types of contracts than the nature of the activities, this issue is taken up in Chapter III. The question of compensation differences is addressed in Chapter II.

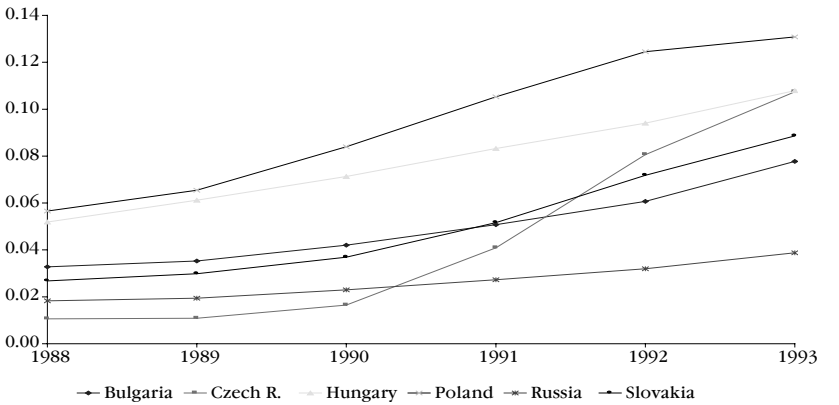
Self-employment. In most countries, private self-employment is a very important category of employment, both in the sense that displaced workers from old enterprises may find livelihoods working independently and because it may represent the beginnings of entrepreneurship.[62] It also is a category that is difficult to measure except by population surveys, which were first conducted in Russia only in the early 1990s. An early independent survey for Russia, Bulgaria, the Czech Republic, Hungary, Poland, and the Slovak Republic in 1993, reported in Earle and Sakova (2000a), found that the rates of self-employment had increased dramatically already by 1993 in every country except Russia. Figure I.11 shows that the nonagricultural self-employment rate was still only around 3 percent in 1993, compared with around 10 percent in the other five countries (and a typical share of about 8 to 10 percent in most OECD countries; see Blanchflower 2000). The share of employers was particularly low, under 1 percent of employment.

What has happened to self-employment in Russia since 1993? Unfortunately, the first RLFS reports are from 1999, and they rely on an unusual definition. In the survey

---

62 Indeed, the self-employment rate is frequently taken as an indicator of the rate of entrepreneurship. See, for example, Blanchflower and Oswald (1998). Earle and Sakova (2000a) examine the business start-up and disguised unemployment sides of self-employment in six East European countries, including Russia, in the early 1990s.

Figure I.11. Evolution of Nonagricultural Self-Employment



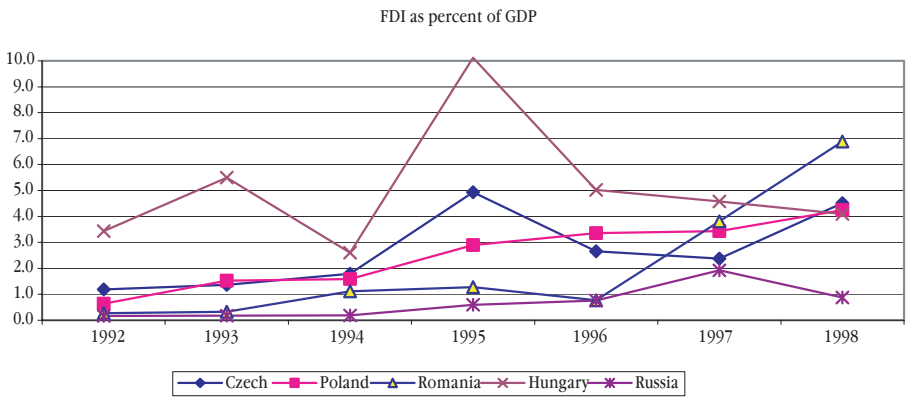
Note: Nonagricultural self-employment rates are computed for each country assuming a constant 1993 age structure.
Source: Earle and Sakova (2000a).

analysis discussed above, results are computed on the basis of a standard Western question asked of all employed respondents, namely if their primary job involved self-employment, and if so whether the respondent had employees or unpaid family helpers. The RLFS (Goskomstat 1999b) provides a broader definition of self-employment on the main job, including not only employers and own-account workers (ILO 1999) but also members of production cooperatives and unpaid family helpers. Because the latter two categories are not included in the standard definition, the first two of them.are focused on in this analysis, although information is provided on the latter two as well, since they are of independent interest

As shown in table AI.39, employers accounted for 1.0 percent, self employed workers for 4.3 percent, production cooperative members for 1.8 percent, and unpaid family helpers for 0.2 percent, or a total 7.3 percent of all employment in August 2000. The overall self-employment rate, by international definitions, was thus only 5.3 percent, a remarkably low number given Russia's level of development and severe recession, and lower than the level reached by any of the East European countries in 1993 (figure I.11).

Self-employment rates also may be calculated using the RLMS, which has a different structure of questions compared with the RLFS: Respondents are first asked to specify their main activity, and then later asked about supplementary activities. Several definitions are examined in table AI.40, using information both about the main activity and about supplementary activities when the main activity does not involve employment. According to a simple main activity definition, the self-employment rate is 2.3 percent in 1994, rising to 6.8 percent in 2000. When supplementary activity self-employment (but excluding pure subsistence activities) is included, however, the numbers are larger: 8.5 percent in 1994, rising steadily to 17.1 percent in 2000. It is noteworthy that most Russian self-employed do not classify themselves as working for their primary activity, a pattern that is only slightly less true of urban than rural respondents and that became still more pronounced between 1998 and 2000.[63]

Figure I.12. Foreign Direct Investment in Selected Transition Economies

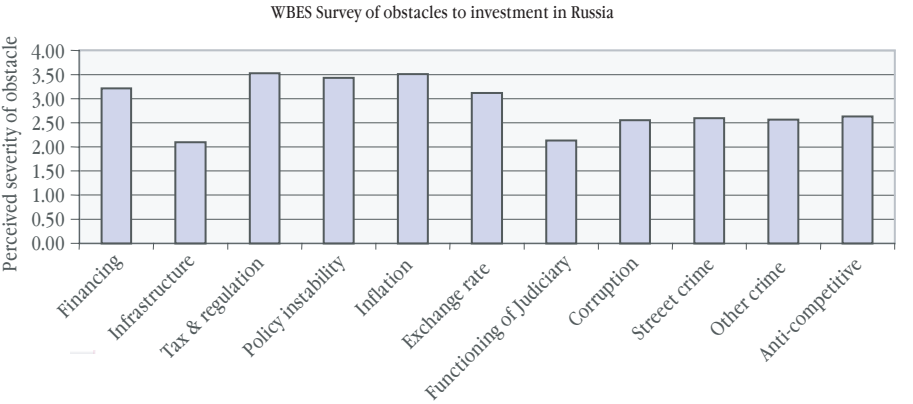


Source: FIAS (2001).

Thus, while the private sector has emerged in Russia, and has been creating jobs, genuine entrepreneurship remains limited. In contrast, as noted earlier, informal self-employment is substantial and growing.

What factors constrain growth of private-sector employment? As small private firms are the main drivers of employment and productivity growth, impediments to their start-up hurts prospects for job creation. The main constraints to formal, pri-

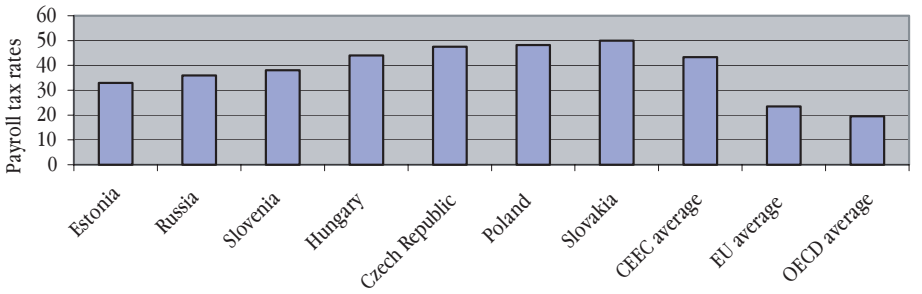
Figure I.13. World Business Environment Survey (WBES) of Obstacles to Investment in Russia



Source: FIAS (2001).

63 Distinguishing the nonagricultural self-employed in the 2000 RLMS is, as yet, not possible.

Figure I.14. Payroll Tax Rates in Russia, CEE Countries, EU and OECD



Source: World Bank (2000b).

vate-sector growth in Russia are, among other things, low rates of gross domestic private investment as well as foreign direct investment (FDI), slow restructuring, administrative barriers to entry; limited input/product market reforms, and high payroll taxes.

Investment. According to the FIAS report (FIAS 2001), gross domestic investment in the Russian Federation fell sharply between 1990 and 1998, and has only recently started to increase. The Russian Federation received less than 1 percent of GDP from 1992 to 1998 as FDI, as compared with 3 to 4 percent or more in Poland and Romania, and even higher rates in many other CEE countries. Figure I.12 from the same report shows how Russia compares with other large, emerging-market economies and other European transition economies, respectively. The low rate of FDI is a particular concern as this type of investment has a large impact on labor productivity and overall economic growth, by providing not only new sources of capital, but more importantly, new technology, and the most effective management and marketing methods. The composition of investment is also worrisome. The main activities in which investment has been concentrated are the extractive sectors, rather than high-technology export-oriented manufacturers, which are so prominent in CEE countries.

Restructuring. Russia places well below CEE countries on the EBRD privatization index (World Bank 2001a) which measures the extent to which governments have progressed on privatization and other aspects of private-sector development. While restructuring or layoffs have occurred, Russia still has a higher share of large enterprises than found in most Central and Eastern European countries. (FIAS 2000).[64] In the latter countries, there is an exactly opposite pyramid-shape structure of firms: a few large firms, more medium-sized firms, and a much larger number of small firms, many of whom are new start-ups. Large enterprises tend to have more vertically integrated supply chains that limit opportunities for private-sector entry. They also have the

64 This section is drawn from FIAS (2001).

structural advantages that come from market dominance, favored access to infrastructure services, and protection from interregional trade and investment (Broadman and Recanatini forthcoming). As such, they do not promote productivity growth.

Limited input market reforms. In addition to lack of competition in product markets, reforms of financial markets and land have been limited. Russia scores low relative to CEE countries on a market reform index that measures the pace of market reforms (World Bank 2000a).[65] Weak financial markets often provide directed credit to select enterprises and financial conglomerates on very concessionary terms (Easterly and Da Cunha 1994), and property rights, essential for promoting competition, remain ill-defined.

Administrative barriers. The lack of rule of law and the absence of a level playing field for firms also constrain investment in the private sector. Institutional and administrative barriers, including arduous licensing, registration and inspection requirements, and corruption further compound this problem. The FIAS study (2001) finds that the five main administrative barriers to investment in Russia are problems with taxes, policy instability, corruption, inflation, and the judiciary.[56,57] (figure I.13).

Payroll taxes. Payroll taxes can have an adverse impact on equilibrium employment, as suggested by international evidence. Payroll taxes in Russia - 36 percent of payroll - are lower than in CEE countries, but higher than in most OECD countries[68] (figure I.14). Evidence from OECD countries finds a negative impact of payroll taxes reduction on unemployment (Daveri and Tabellini 2000).[69] A reduction of tax rates by 5 percent reduces unemployment by 13 percent (or from 8 percent to 7 percent, for example) (Nickell and Layard 1997). Evidence from CEE countries also confirms that payroll taxes probably increase equilibrium unemployment (World Bank 2001a, 2001b). In Russia, weak enforcement of the law on collection of taxes and wages (see Chapters II and III) means the main impact of

---

65 De Melo, Denizer, and Gelb (1996) index..

66 The World Business Environment Survey (WBES) of 80 countries carried out in early 2000 also finds "tax and regulations" at the top of the list of complaints by businesses in Russia (to a degree worse than most other CEE countries), followed by inflation and policy instability. Euro-money, in a recent survey of FDI in Russia, also put tax issues at the top of the list of problems, followed by "insecure property rights", customs, and "risk of political change."

67 "Transparency International" ranked Russia 82nd (alongside Kenya) out of 90 countries in its corruption perception index for 2000. Finally, according to The Wall Street Journal and "Heritage Foundation"'s Index of Economic Freedom, Russia ranked 127 out of 155 countries, with especially poor ratings for monetary policy, the fiscal burden, trade policy, and regulations. See http://www.transparency.org/documents/cpi/2000/cpi2000.html ("Transparency International") and http://www.heritage.org/news/2000/nr110100indexoverview.html ("Heritage Foundation") (FIAS 2001).

68 Of the total tax, 28 percent goes for pensions, 3.6 percent is for medical insurance, and 4.4 percent is for social insurance. Firms also pay 13 percent personal income tax on behalf of employees. Thus, if an employee receives 100 rubles in gross wages per month, he/she will take home 56 rubles, slightly over half of his/her salary. There is a deduction of 36 rubles for payroll and a further 8 rubles for personal income tax.

69 Theoretically, the impact of payroll taxes on labor and wages depends on the relative elasticities of demand and supply of labor. The actual impact of the tax in any country therefore requires empirical analysis.

high payroll taxes may be tax avoidance and the informalization of the economy. According to Johnson et al. (1997), Russia's informal sector as a share of GDP ranks higher than all CEE transition countries. (World Bank 2001b) The reduction of payroll taxes in Russia over the medium term (in concert with improvements in the efficiency of social insurance programs) may therefore reduce informalization of the economy. As the economy formalizes, (all else equal) lower payroll taxes may also reduce equilibrium unemployment.

Summary and Conclusions

This chapter has explored the responsiveness of labor-market aggregates and flows in Russia to economic changes. The main conclusions are as follows:

- The deep and prolonged economic decline in Russia between 1990 and 98 led to a significant decline in employment. Employment fell and non-participation (particularly self-employment in agriculture) and unemployment increased. The drop in the labor force was largest in the youngest and oldest age groups. The recent economic recovery has reversed this trend, and employment has increased - pulling both unemployed and nonparticipants back to work.
- The recent growth in employment has not been very responsive to output growth (as in CEE countries). Despite recent declines, the level and duration of unemployment cannot be considered low relative to OECD countries, and the regional variation in unemployment rates remains high (higher than Poland and the Slovak Republic, for example).
- Labor productivity has increased as a result of recent economic growth. Employers have reallocated the existing work force rather than increase new hires. However, large declines in labor productivity in the past decade mean that there is a considerable gap in labor-productivity levels between Russia and CEE countries. The main reason for the decline in labor productivity during the transition was overstaffing in the face of output declines as a result of weak incentives to managers to lay off workers. Most evidence indicates that adjustment in hours or secondary employment did occur, but was not as important as adjustments in primary employment suggest. Although the labor surplus declined during the past decade, its continued existence is evident in the small rise in employment relative to recent output growth.
- Russia did restructure in the face of economic declines. Faced with declining output, enterprises did lay off workers to cut costs, as evidenced by the growing rates of unemployment noted above. Labor transitions post-1991 increased, and there was significant occupational and sectoral change in employment consistent with a move to a market economy. The growth of the private sector facilitated these transitions. Recent economic growth has accelerated these trends.

- Given that real wages and labor productivity are increasing from a very low base, it will require considerable growth for Russia to close its wage and labor productivity gap with fast-reforming CEE countries. The challenge will have to be met by private-sector-led growth. The private-sector share of employment is still not very high, and genuine entrepreneurship is limited. Job creation rates in manufacturing have increased somewhat in the 1990s, but remain well below OECD and high income transition country norms. This result may reflect barriers to entry to new enterprises, such as limited financing for start-ups, undefined property rights, licensing and other fees, high payroll tax rates, and lack of rule of law. Addressing these constraints will be critical for realizing sustained economic growth.
- Addressing structural factors that constrain matching of supply and demand in the labor market also will be important for reducing the level, duration, and regional variation in unemployment rates. These factors include: (a) A Skills Mismatch. Older workers with low levels of education and obsolete skills have the highest rates of unemployment and the longest duration of unemployment. (b) A Regional Mismatch. High unemployment regions are concentrated in Eastern and Western Siberia and the North Caucuses. These regions have lower expenditure per capita, high poverty rates, high birth rates, and a high industrial share of output. High unemployment rates in these regions might be exacerbated (in the short run) by further economic restructuring. The evidence on the extent of regional mobility is mixed (and requires further investigation), but recent studies suggest that the lack of affordable housing may limit worker flows across regions. Addressing these structural mismatches will require a focus on passive and active programming and on factors that may impede regional labor mobility.

The following chapter looks at the wage structure in Russia in order to complete the picture of the labor market in Russia.

Chapter II
Understanding Wages: Structure, Uncertainty, and Inequality

The previous chapter evaluated employment adjustment in Russia. As a companion piece, this chapter looks closely at incentives and returns in the labor market. It asks the following questions: Are wages increasingly determined by market forces in Russia? Do non-market factors still influence the level and dispersion of wages? Which workers have benefited the most, and which have lost out, in this wage-adjustment process? The answers to these questions also shed some light on the nature of labor-market flexibility in Russia and on the question of whether Russia has been restructuring during the past decade.

A. Level and Determinants of Wages

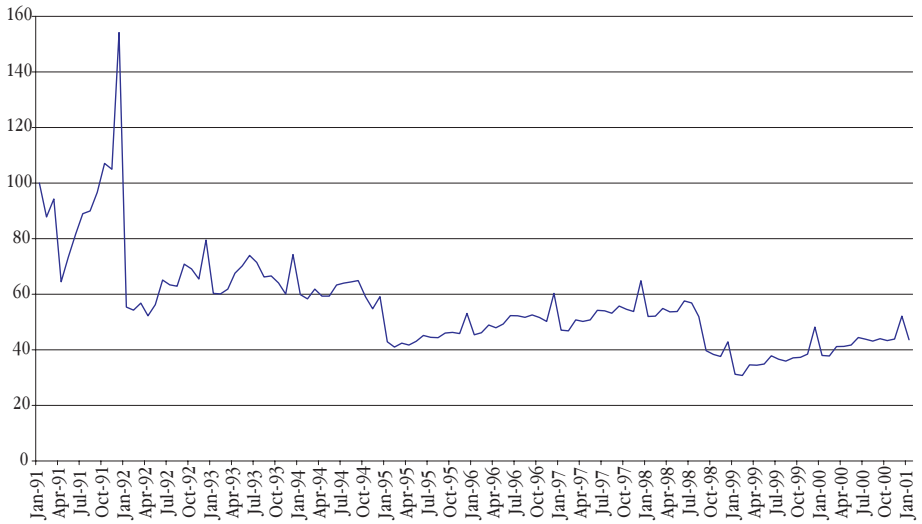
The level of real wages. As noted in the previous chapter, wage measurement in Russia is subject to many caveats. To briefly summarize, officially reported wages may overstate actually received wages, because of wage arrears and forced in-kind substitutes, but they may also understate because firms have become adept at hiding salaries from the tax authorities (on the order of 20 percent, as estimated by Goskomstat). In addition wage measurement also does not take into account the changing availability of consumer goods.

Keeping this in mind, the trend in average real wages is shown in figure II.1.[70] It reflects some important aspects of labor-market adjustments at the aggregate level, including some of the large macroeconomic events in Russia's transition: first, a large increase in wages leading up to the "big bang" price liberalization of January 1992, followed immediately by a sharp drop associated with the price jump. Next, there is a relatively stable period for most of 1992-94, followed by another sharp fall associated with the inflation after the financial crisis of late 1994. From early 1995 until July 1998, real wages were on a gradually rising trend, only to lose still more ground during autumn 1998. From January 1999 to January 2001, wages have again risen substantially, albeit starting from an all-time low. Keeping this in mind, cumulative wage growth in 1999 is higher in Russia than in higher-income CEE countries

The longer time series presented here helps to put some of the frequently discussed dramatic events concerning wages into clearer perspective. While real wages

[70] The monthly time series of the CPI-deflated real wage, presented in figure II.1, show a spike in December of each year, when bonuses are typically paid.

Figure II.1. CPI-Deflated Real Wage Rate Due, 1991-2001 (Jan. 1991 = 100)



Sources: Russian Economic Trends and Goskomstat (2001a).

declined by nearly 70 percent in cumulative terms between 1990 and 2000 — much more than realized by many CEE countries (see table AI.2), this decline was not monotonic. The huge crash in real wages in early 1992 appears much smaller when compared with early 1991 levels than to those closer to the end of the year. The recent rise in real wages following the 1998 crisis, which has sometimes been hailed as a sign that genuine restructuring has started in Russia, also appears in different perspective. As figure II.1 shows, this was not the first period of rising real wages, nor was the level reached by January 2001 higher than that in the three years prior to August 1998. The periods of stable or gradually rising real wages can be interpreted as reflecting sticky adjustment of nominal wages to the price shocks of January 1992, late 1994, and late 1998. Although nominal wages did rise significantly during the inflationary bursts, they still lagged the price changes quite significantly.

As noted in the previous chapter, the fall in real wages was deeper and more prolonged than in CEE transition countries. The fall in real wages reduced household income, and changed its composition. The wage share of household income fell. By 1998, wages comprised only 40 percent of household income, much lower than in many CEE and OECD countries. Consistent with the growth of subsistence agriculture as a primary and secondary activity in Russia, the share of income from self-employment increased (World Bank 2000a).Why were wage declines so large? The large drop in output and labor productivity, as well as the high rates of inflation realized over the past decade, explain the significant decline in real wages. However, the lack of enforcement of labor legislation and the absence of effective institutions giving voice

Table II.1. Changes in Real Wages by Characteristics of Firms and Workers, 1998-2000

Worker characteristics	Mean	Stand. dev.	Firm characteristics	Mean	Stand. dev.
Total [N=2474]	0.172	0.541	Rural	0.123	0.547
Female	0.146	0.526	Urban	0.191	0.538
Male	0.204	0.559	Sectors [N=2458]		
Age			Industry	0.264	0.520
15-24	0.328	0.662	Agriculture	0.013	0.584
25-34	0.201	0.558	Transportation/Construction		
35-44	0.173	0.534	Public Services	0.109	0.502
45-54	0.147	0.507	Other Services	0.229	0.591
55-72	0.097	0.539	Employment/ Firm [N=1938]		
Education			<26	0.170	0.613
Elementary	0.068	0.559	26-100	0.118	0.490
Secondary basic	0.186	0.541	101-500	0.186	0.528
Vocational	0.186	0.583	>500	0.240	0.502
Secondary/ Professional	0.184	0.527	Ownership [N=2186]		
University	0.176	0.520	State-owned	0.142	0.499
Job-to-job mobility			Mixed	0.238	0.553
Job stayers	0.148	0.502	Domestic Private	0.212	0.636
Job movers	0.313	0.710	Foreign	0.374	0.470

Notes: Sample is restricted to all employees aged 17-72. Changes in real wages between 1998 and 2000 are computed as a difference in log of usual monthly wages deflated by the national CPI. Characteristics of firms and workers are taken from 2000.
Source: Calculations from RLMS.

to worker concerns may also explain this phenomenon.[71] The issue of labor-market institutions is discussed extensively in Chapter III.

Who has gained and lost in terms of wages in the big fluctuations in Russia's economy in the 1990s? Table AII.1[72] provides information on the mean and standard devi-

[71] This is not to say that enforcement of restrictive legislation may have had other adverse consequences in limiting labor and employment adjustment as well.

[72] Tables prefixed by AII refer to tables in Annex II.

Table II.2. Results of Simple Earning Functions, RLMS, 1992-2000 for Women

	1992	1994	1996	1998	2000	1998	2000
	1	2	3	4	5	6	7
Log of usual weekly hours of work	0.381	0.163	0.241	0.355	0.349*	0.527*	0.579*
Schooling (years)	0.038*	0.074*	0.056*	0.077*	0.076*	0.085*	0.090*
Experience	0.026*	0.020*	0.020*	0.031*	0.039*	0.030*	0.036*
Experience squared	-0,052*	-0,037*	-0,046*	- 0,064*	0,085*	-0,063*	-0.072*
Constant	3.160*	9.875*	10.858*	3.167*	3.816*	2.260*	2.463*
N	3133	1968	1693	1664	1737	1915	1952
R2	0.303	0.267	0.331	0.307	0.294	0.419	0.42

Notes: * - significant at the 1 percent level. Sample is restricted to employees aged 15-72. In columns (1)-(5) EXP is measured as potential labor-market experience (age minus schooling minus 6). In column (1) the dependent variable is log of after-tax actual monthly wages received in the previous month. Sixteen regional dummies are included. In columns (2)-(5) the dependent variable is log of imputed contractual monthly wage. Contractual monthly wage is computed following methodology of Earle and Sabirianova (2000). In columns (6)-(7) EXP is measured as actual labor-market experience (data on actual labor-market experience became available since 1998) and the dependent variable is log of usual monthly wage. Thirty-eight regional dummies are included but not shown here.
Source: Calculations from RLMS.

ation of wages calculated from the RLMS on the CPI-deflated average real wage for different population groups, and for the actually received wage and the imputed contractual wage, respectively. All groups show sharp and usually monotonic declines from 1994 to 1998 and rise thereafter. Because of the reduction in wage arrears (discussed below), the actually received monthly wage recovers much more than the contractual wage.

Table II.1 also shows that, while the recovery since 1998 has benefited all worker-groups, the relative gains across socio-economic groups differ. Real wages increased more in absolute terms for highly educated workers, in urban areas, in the private sector. Older, less-educated workers in agriculture living in rural areas have realized hardly any absolute wage gains at all. However, the 1998 base was so low that every group still remains worse-off relative to any earlier year.

Wage differences. In most developed market economies, differences in wages are attributable to differences in skills, experience, industry and gender. What are the determinants of wages in Russia?

Education. Have wages increasingly started to reflect returns to education? The empirical evidence exploiting data from the All-Russian Center for Public Opinion Research (VTsIOM) suggests relatively modest rates of return to education before economic reforms started: 3.1 percent for males and 5.4 for females in 1991 (accord-

ing to Brainerd 1998). These results are generally consistent with the estimates from the earliest rounds of the RLMS (1992). Table AII.3 shows that in the first year of reforms, returns to additional years of schooling were 3.8 percent for women and 3.4 for men, while returns to experience were around 2.4 percent. (See also table II.2)

Since the breakup of the Soviet Union and market liberalization in the former centrally planned countries, there have been a number of studies of human capital during the transition to a market economy. Two contrary hypotheses regarding the returns to human capital have been tested: the first states that market liberalization and unconstrained wage setting should shift returns in favor of more educated people, while the second proposes that skills and experience acquired in the previous system have become obsolete in the new market conditions. This human capital devaluation can cause a decline in returns to human capital.

A review of numerous studies suggests that returns to education increased during the transition period (Svejnar 1999). The estimates of the extended returns to human capital in transitional Russia, shown in table AII.4, are also consistent with the overall picture in other former centrally planned economies. Empirical findings suggest that the average rate of return to schooling in Russia rose to 8 to 9 percent of an increase in real earnings for each additional year of schooling holding hours of work, experience, and regional residence constant. (See Table II.2 for this increase for women)

These results support the hypothesis on the positive impact of market liberalization on returns to schooling, especially for university graduates. These results, together with low rates of unemployment among university educated workers, also demonstrate the importance of investing in education in Russia. There are some caveats. We observe fluctuations in the return to schooling for some time periods and for some types of education such as vocational training. The reasons for such changes, including changes in the labor-force composition, the devaluation of some skills, and the decreased demand for narrow specialists educated in the previous system, are discussed in Nesterova and Sabirianova (1998). An additional issue is the poor measurement of wages in the context of large arrears, as discussed in Earle and Sabirianova (forthcoming).

Gender. Earnings functions estimations not shown in these tables indicate that the gender wage gap has increased over the transition period: 44.9 percent in 1998 versus 32.5 in 1992. On the other hand, after controlling for occupations and industries, the gender wage gap has declined. Estimation results from a more extended specification, including job tenure, type of ownership, and founding date are shown in table II.4. In these specifications, the gender gap is roughly constant at about 45 percent, while the schooling and experience effects are similar to those from table II.3.

Occupation/Industry. The estimated differentials across occupations and industries reported in table II.4 also are quite substantial. Officials and managers are estimated to have a higher level of hourly wages while clerks, service, and unskilled workers comprise the low-paid group of employees. Among industries, the fuel sector has the highest level of wages while workers in agriculture, health, and social services receive the lowest wages.

Firm ownership. Turning to the results concerning differences across forms of ownership, the wages of workers in foreign-owned firms relative to those in state-

owned enterprises rose strongly to a premium of more than 50 percent. Both domestic private firms and those of mixed ownership pay a premium of below half that: around 20 percent. The premium for working in a new firm (defined here as founded after 1987) fluctuates across the years and definitions; in 2000 it was over 20 percent when the measure is the imputed contractual wage, while it was only 12.6 percent when measured by the reported "usual" monthly wage.

Clarke and Kabalina (2000) also find that wage levels are higher in the private sector than in state or privatized enterprises. On average, employees in the de novo private sector report earnings that are 40 percent higher than those working in traditional enterprises.[73] Even after controlling for individual characteristics, they find that the wage gap is still 20 to25 percent. Their analysis shows that workers with high levels of human capital (that is, prime-age, high educational attainment, managerial and administrative occupations) benefit most from private-sector employment. Since employees with these characteristics tend to be above-average earners in all sectors, wage differentials are largest in de novo private enterprises.

Tenure. The tenure effect appears to increase from 1995 to 1998 and then retreat slightly in 2000. The very low tenure effect estimated in 1995 is consistent with the findings of other studies (Flanagan 1995; Chase 1998) that job tenure from the socialist period had little value given the shocks of transition. The increase in the tenure effect to 1998 would suggest that the normal effect was being re-established, while the retreat to 2000 implies that a change in the returns to existing jobs may have been one result of the 1998 crisis.

Experience. Table II.4 also shows that the experience effect on earnings in Russia, while initially falling and then rising slightly during the 1992-2000 period, is rather small compared with that implied by data from developed market countries. The small experience effect could be the result of the changing nature of the Russian economy that rewards younger, more mobile, more active, and more adaptive people. Returns to experience declined gradually from 1992 to 1996, approaching zero in the case of men. However, the 1998 data suggest that the accumulation of new experience and specific human capital from the work in the market economy raises the returns to experience.

To summarize results concerning human capital, the positive effect of transition on the returns to education — particularly in the private sector — and new market experience, and its negative effect on the returns to past experience can be considered important stylized facts of the transitional process in Russia.

Labor costs. Goskomstat (1999c) provides some measures of relative labor costs across industries and ownership types reported in tables AII.5. Hourly and monthly wages are shown, as well as the non-state/state ratio, by industry. These figures are consistent with the RLMS, showing the highest earnings in electricity, fuels, and nonferrous metals, and the lowest in textiles, food, and restaurants and catering. Employees of nonstate firms are reported to earn a significant premium over their state-

[73] This is based on the 1998 Institute for Comparative Labor Relations Research (ISITO) survey of 4,000 households in Samara, Kemerovo, Lyubertsy, and Syktyvkar.

owned firm counterparts in most sectors, with the highest premia in fuels, wood and paper, textiles, communications, and other services. The reported premium is negative in several sectors, however: chemicals, machinery, construction materials, trade, and finance. Particularly concerning the latter two categories, it is possible that unreported wages account for (or even exceed) the difference.

B. Nonwage Compensation Practices

Fringe benefits. An important issue in understanding wage and compensation behavior is the important role played by fringe benefits in both the socialist and transition periods.[74] The provision by firms of "social benefits," fringes including housing, medical care, childcare, vacation facilities, and so on, has attracted considerable attention (for example, Commander and Jackman, 1993) from Western economists concerned that they pose barriers to restructuring. While privatized firms were legally required to divest housing and medical facilities, analysts say that in practice the divestiture was somewhat incomplete, given the poor capacity of local authorities to take over these responsibilities.

The precise magnitudes are difficult to quantify, but table AII.6 shows the composition of total costs according to Goskomstat (1999c) estimates from an enterprise survey. The table shows that the share of cash wages increased from 1995 to 1998 (the immediate post-privatization years) as housing and recreation costs declined. "Social contributions" denotes the mandatory contributions to social-security funds, roughly constant across industries. But the fringe benefits vary quite substantially, with higher rates of housing costs in manufacturing, especially nonferrous metals. The data show that some significant divestiture and restructuring has occurred.

More detailed evidence, although consistent to a broad degree with the aggregate figures, comes from another firm survey of manufacturing firms, shown in table II.3. The table shows the changes in the proportion of firms providing each kind of benefit during the 1990s.

Nearly all types of fringe benefits have declined, but none has have disappeared, except for "other goods not produced by the enterprise."[75] Medical services and professional training were still, in 1998, provided by more than half the manufacturing firms in the sample. The biggest declines are recorded for housing construction, kindergartens, and entertainment and culture. Again, the data appear to reflect substantial restructuring as well as some inertia in behavior.

A final piece of evidence relies on the RLMS questions asked for the first time in the 2000 survey for a recent picture of the situation. Most interesting, the results, displayed in table AII.7, show a clear relationship of benefit probability with firm size:

---

74 See Rein, Friedman, and Woergoetter 1997 for a collection of papers on the topic.

75 Note that fringe benefits are part of a worker's contractual compensation and therefore should not be confused with forced in-kind substitutes for wages, a practice discussed in section VI, below.

Table II.3. Provision of Fringe Benefits, by Type, 1990-98 (Percentage of All Firms)

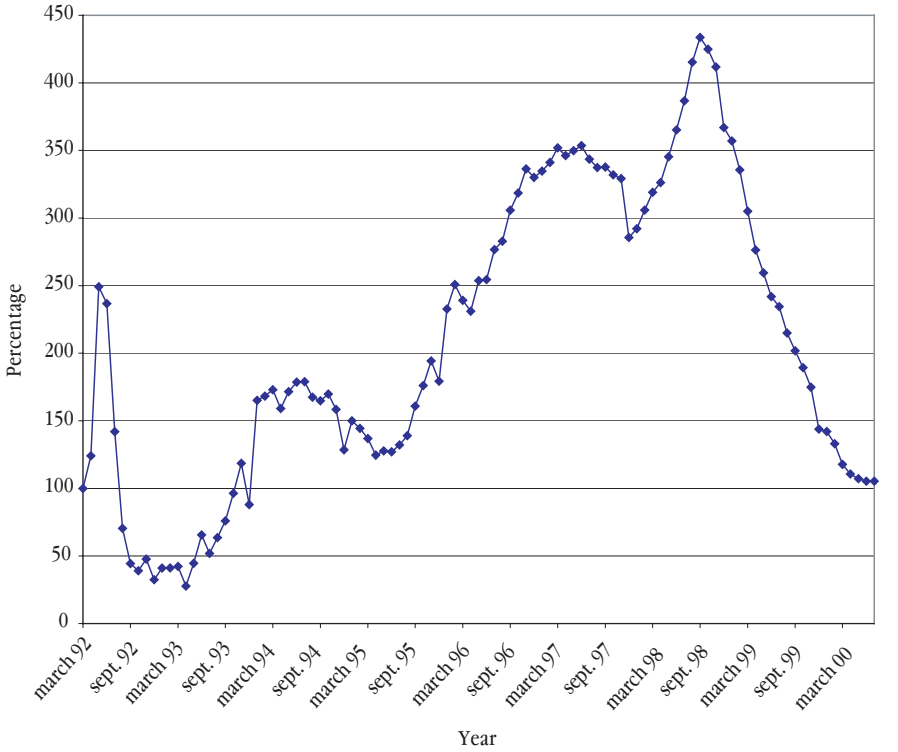
Types of fringe benefits	1990	1994	1998
Land plots or cultivation services	37.5	30.5	19.0
Subsidy for housing purchase or repair	35.0	29.5	20.0
Construction of housing for employees	45.0	34.0	18.0
Goods produced by enterprise	24.5	22.0	20.0
Food not produced by enterprise	28.5	25.0	15.5
Other goods not produced by enterprise	11.5	9.5	7.0
Catering during work time or covering costs	54.5	50.0	41.0
Utility subsidies for employees	20.5	18.5	14.0
Medical services or own policlinics	63.5	62.5	55.5
Vacation facilities	62.0	56.0	43.5
Professional training	78.0	70.5	59.0
Kindergartens	66.0	54.5	32.0
Entertainment and cultural facilities	56.0	45.0	27.5
Other fringe benefits	22.4	20.0	19.2
Average number of fringe benefits	6.3	5.5	4.0

Note: Sample is consistent across years (N = 200).
Source: Results from survey "Inside the Transforming Firm," reported in Biletsky et al. (1999).

employees of larger firms are much more likely to get every type of benefit. The proportions of RLMS worker-respondents reporting that they received each type of benefit are much lower than the proportion of firms reporting they paid them in the firm survey. This may be explained by the restricted coverage of the firm survey to the manufacturing sector, in which firms are larger and such benefits are likely higher, and by the possibility that not all workers in a firm are recipients.

In summary, this section has shown that there has been considerable evolution in the earnings and compensation structures in Russia during the 1990s. The trend toward higher remuneration of human capital, particularly schooling, continued after 1998, but it does not appear as strong for vocational education, and has not drastically accelerated as a result of growth. While experience or job tenure in the socialist era does not yield higher returns, more recent labor-market experience appears to be paying off. A restructuring of compensation away from fringe benefits and toward cash wages appears to be under way, although the fact that the former are not monetized makes them hard to value and therefore to calculate their share in total compensation (from the worker's viewpoint). However, fringe benefits and services are still important and are mainly concentrated in larger firms.

Figure II.2. Real Wage Arrears, 1990-2000



Source: Goskomstat (2000b).

Wage arrears and in-kind substitutes. One of the peculiar aspects of the transition of the Russian labor market relative to developed countries is the use of wage arrears and forced in-kind substitutes. In both cases, workers are denied timely payment of their cash wages, either because of postponement of payment or a choice between no payment and payment in the form of some goods, either those produced by the firm or acquired by it in the course of its own barter transactions. Studies of the Russian labor market, focusing especially on wage arrears, have generally treated these practices as a way for firms to reduce their wage costs. As in other transition economies, Russian firms have faced tremendous shocks to their product and factor markets over the past several years, and have come under pressure to reduce output and costs.[76]

Delaying wage payments may be a particularly effective cost-reduction mechanism under high inflation. Viewed from the standard paradigm in which some form of wage rigidity is taken as the cause of involuntary unemployment, arrears have even

[76] The pressure to cut labor costs has been particularly heavy because of the initial (pretransition) situation of overstaffing in the industrial enterprises. See Commander, McHale, and Yemtsov (1995) for a recent analysis. For more information on Soviet labor markets, see Granick (1987).

attracted some implicit or explicit praise for their contribution to the low levels of layoffs and unemployment in Russia. Layard and Richter (1995), for instance, portray wage arrears as a form of "wage flexibility... explained by the willingness of workers to accept pay cuts in order to preserve jobs." In its 1995 survey of the Russian economy, the OECD praised the "remarkable flexibility...of real wages" and the use of "wage arrears ... to finance this employment surplus."[77]

This line of thought has provided some answers to the question why Russian employers may have favored wage cuts over layoffs as an adjustment mechanism, but it does not explain why many of them have adopted wage delays and in-kind substitutes as preferred practices. This question is important because, while wage arrears clearly imply a reduction in the effective real wage, they also differ from wage cuts in several important respects, both conceptually and empirically. To begin with, arrears involve uncertainty about the timing and extent of eventual payment; this uncertainty is perhaps a more important welfare consequence of arrears than the effective real-wage reduction. The value of in-kind substitutes is also uncertain, as workers must frequently try to sell the goods on street markets. Both practices also imply violations of the labor contract, not renegotiations, which may have implications for the popular faith in the rule of law in the transition environment. Furthermore, the theoretical implications of arrears for worker quit behavior also differ from those of a simple wage cut, discussed further below.

Casual empirical observation also suggests differences between wage cuts and the practices of arrears and in-kind substitutes. First, Russian workers perceive wage arrears as different from wage cuts, as evidenced for instance by their tendency in opinion polls to rate arrears as a much larger social problem than low wages (Javeline 1999). Moreover, real wages have hardly been rigid in Russia, certainly not in the aggregate and over a sufficient time span, as high inflation has been associated with large increases in nominal wages and drastic declines in real wages during the 1990s. From September 1994 to 1996, for instance, the average nominal wage rose 235 percent, while the real wage fell 21 percent. Russian employers were repeatedly agreeing to nominal wage increases and then declining to pay them, or substituting goods for them. Finally, wage arrears are correlated with measures of demand shocks and financial distress, but the relationship is only moderately strong. Thus, it is important to search further for additional explanations of wage arrears and in-kind substitutes, particularly ones that treat them as distinct practices from wage reductions.

Closely related is the notion that financial distress is responsible for wage arrears and barter payments are accounts that focus on liquidity problems in the Russian economy.[78] According to one version (usually reported by managers to workers), cus-

---

[77] Desai and Idson (2000) Gimpelson (1998), and Lehmann, Wadsworth, and Acquisti (1999) also analyze wage arrears from the perspective of wage adjustment. Brainerd (1998) studies the evolution of the wage structure in Russia from 1991 to 1994, but does not address the problem of wage arrears, although they were quite sizable by 1994.

[78] According to Clarke (1999) for instance: "The worst non-payment of wages is not found in enterprises which are bankrupt, but in the most prosperous and profitable enterprises in Russia. They do not pay wages not because they cannot afford to pay wages, but because they do not have the live money to pay wages."

tomers have failed to pay on time, thus the firm has no money to pay wages. Another version has it that with little external finance available, firms take advantage of the possibility of interest-free loans from their workers. In support of the illiquidity explanations, it is true that wage arrears have risen in tandem with enterprise and tax arrears (Ivanova and Wyplosz 1998).

On the other hand, wage arrears are peculiar in that, unlike the other two types of arrears, they are virtually unheard of in market economies; and while barter among firms (for example, "counter-trade") is rather usual in any economy, the same cannot be said for the practice of forcing workers to accept barter payments postcontractually. Concerning arrears, Alfandari and Schaffer (1996) and Clarke (1999) show that the levels of overdue interenterprise debt in Russia have not been not particularly high by market economy standards, and tax arrears in OECD countries are of course also far from unknown.

Moreover, there are a number of additional reasons to remain dissatisfied with the illiquidity story. An account relying on unexpected liquidity shocks is inadequate to explain why wage arrears and forced in-kind substitutes could persist for several years in Russia, as firms have had time to adapt their expectations and to adjust in other ways than by not meeting their contractual obligations to their workers. If the explanation focuses rather on long-run illiquidity in some firms, then the implication is that workers voluntarily agree to make a loan to their employer (as also suggested by Lehmann, Wadsworth, and Acquisti 1999) or to accept a lower implicit wage in the form of less valuable commodities.

But again it is necessary to point out that arrears and forced substitutes imply violation of the wage contract, not renegotiation. Certainly the outrage, strikes, and other protest behavior (which is discussed in the section on unions and strikes in the next chapter) suggest that workers have not voluntarily agreed to become creditors.[79] A loan also implies some certainty, at least a formal promise, of repayment, but the fact is that receiving back wages in Russia is highly uncertain.[80] Finally, empirical analysis shows that wage arrears and forced substitutes are only moderately correlated with measures of illiquidity.

Thus, while it is clear that wage arrears and forced substitutes are related to the broader patterns of economic and financial decline in Russia, they have a somewhat independent dynamic. Before returning to the issue of worker reactions to arrears and substitutes, and the implications for the regional concentration and persistence of arrears, this section discusses some other factors — in addition to declining performance and liquidity problems — that may affect the incentives of firms to adopt

---

[79] One might ignore worker attitudes and argue that arrears are part of an implicit contract, but there is no evidence of any compensating differentials associated with arrears. To some extent, the issue is semantic, as it is still of interest why implicit contracts should take this peculiar form in Russia but in few other economies around the world.

[80] Even this could be part of an implicit contract extended to include risk-sharing, with repayment of back wages contingent on future firm performance. It is hard to imagine workers voluntarily accepting such an arrangement under any circumstances, much less so in the nontransparent environment of Russia, where workers would face insurmountable difficulties in observing performance and enforcing such an agreement.

these practices: fiscal policies and soft budget constraints, poor corporate governance and managerial self-dealing, and worker ownership arising from the Russian privatization process.

Taking each of these in turn, some aspects of Russian fiscal policies may have increased wage arrears and substitutes as firms have sought to reduce tax payments or extract subsidies. In general, high tax rates, on both wages and profits, give firms an incentive to hide cash, and the lack of effective enforcement and accounting transparency makes it easier for them to do so. Paying wages may attract the tax collector's attention, particularly since enterprises are legally permitted to use only a single bank account for all types of payments; thus wage nonpayment or forced substitution may be useful to signal inability to make tax payments.[81] In a similar vein, arrears and forced substitutes may result from attempts by enterprises to extract subsidies from the state (a speculation that appears in a number of articles, for example, Alfandari and Schaffer 1996), especially by firms with close ties to federal or local governments or those with greater bargaining power.

An additional aspect of fiscal policies was the frequent sequestration of budgetary funds by the Ministry of Finance in order to reduce the federal budget deficit in the early and mid-1990s. According to the Institute for the Economy in Transition (1994, p. 35), for instance, every expenditure line in the fourth quarter of the 1993 federal budget was sequestered by 20 percent. High inflation and political gridlock led to this unorthodox macroeconomic policy, which resulted in unpaid bills at defense contractors and late wages of bureaucrats, teachers, and health care providers.[82] Sequestration may explain high arrears under state ownership and in particular sectors of the economy, but by itself cannot account for the broader phenomenon.

A second aspect of the Russian environment, particularly relevant for understanding wage arrears, is the poor monitoring of managers, particularly in the large state-owned and recently privatized companies. As noted earlier, it is frequently alleged that managers have engaged in massive asset diversions, which would have had the indirect effect of impoverishing their companies (thus making them less capable of paying their wage bill), but such actions may have also involved the direct theft of funds intended for the workers. A further incentive for the diversion of wages may have been the large borrowing of the Russian Government to finance an outsized budget deficit. Short-term treasury bills were offered at extremely high interest rates (varying from 30 to 150 percent during the 1994–96 period of rather low inflation and mostly fixed exchange rates). Thus, by postponing some payments, managers stood to earn enormous returns — on their workers' money.

A final set of considerations influencing managerial decisions on arrears and forced substitutes concerns the massive worker ownership that arose from the Russian privatization process. One implication of worker ownership could be a greater willingness of workers with equity stakes to help their firms out of a liquidity crisis, by making a voluntary "loan" as discussed above. An alternative possibility is that managers may have used wage arrears and in-kind substitutes to try to force their (even

---

81 Hendley et al. (1997) make similar points with respect to barter deals between firms.

82 See also Gimpelson (1998).

more liquidity-constrained) employees to sell their shares shortly after the latter became shareholders — a phenomenon that is frequently alleged to have taken place, and for which there is some anecdotal evidence.[83]

None of the factors discussed above — neither the economic depression and illiquidity, the fiscal policies, the poor monitoring of managers, nor worker ownership — provides a satisfactory explanation for two particularly puzzling aspects of wage arrears in Russia: persistence over time and variation across regions, regularities that are documented in several studies.[84] The key to understanding these regularities concerns the worker mobility response to arrears: how mobility is attenuated, promoting persistence, and how mobility varies geographically, contributing to regional variation.

Researchers have pointed out that worker quits in response to arrears could be reduced by a lack of outside opportunities (Layard and Richter 1995; Lehmann, Wadsworth, and Acquisti 1999). If workers' alternatives are poor — because of high migration costs and few local options — then the firms may be able to exploit their low bargaining power and reduce their quasi-rents, particularly in the many "one-company towns" and "mono-industrial cities" remaining from the planning period in Russia.[85] Layard and Richter (1995) also argue that sluggish quit behavior in Russia may result from the desire of workers for continued access to fringe benefits, production facilities, and possible opportunities for pilferage at the enterprise.

Although these considerations apply equally to wage cuts and wage arrears, there is also an important difference in worker responses to these two actions. While both effectively lower wages, tending to raise quits, arrears also result in an upward tilt of the wage-tenure profile. If the worker expects at least some of the back wages to be paid in the future, this deferred compensation effect provides an incentive to remain longer with the employer, and overall the effect of arrears on quits is therefore theoretically ambiguous.[86] Furthermore, the incentive not to quit is greatly strengthened by an institutional consideration peculiar to Russia, namely that court enforcement (and any other type of third-party enforcement available to workers) is so weak that a worker who quits a job generally loses forever any chance to recover any of the back wages owed.

Thus, the tilting of the earnings-tenure profile together with the lack of contract enforcement, the market power of many employers, and the nature of local labor markets in Russia serve to moderate workers' quit behavior and to increase the incen-

---

[83] This evidence includes press reports and our own case studies of firms. A well-developed description is the ISITO (1998) case study of the Novokuibyshevsk Oil and Chemical Plant.

[84] See, for example, Earle and Sabirianova (2000). Lehmann, Wadsworth, and Acquisti (1999) also study these regularities, although their analysis of regional concentration is at the oblast level, while this study analyzes more disaggregated rayons (districts).

[85] Geographic mobility of labor in Russia is reduced by registration requirements (and large fees in cities such as Moscow), information problems, poorly functioning housing markets, and liquidity problems of workers. Mitchneck and Plane (1995) discuss internal migration in Russia.

[86] See, for instance, Salop and Salop (1976) for a discussion of firm use of delayed payment contracts in order to reduce quits. The case of tilted earnings profiles to elicit effort is explored by Lazear (1990) and Akerlof and Katz (1989), among others. Pencavel (1972), Flinn (1986), and Topel and Ward (1992) analyze the role of the level of wages for worker quit behavior.

tives of firms to use wage arrears. The negative feedback mechanism of worker quitting that would normally eliminate the practice is reduced, and wage arrears may spread rapidly and persist over longer periods of time than they would otherwise.

Moreover, the incentives to use both arrears and forced substitutes are enhanced by the externalities conveyed from the strategies followed by other employers: If one employer increases arrears or forced substitutes, this is likely to reduce the quits from other employers. If workers are unsure they would be paid in cash and on time at a new job, then they are less likely to respond to a late or in-kind payment by quitting to search or even to take up a new employment offer. Even firms that have good prospects and that want to expand their operations and hire additional workers may not be able to make credible promises of in-cash, on-time payment because of the volatility of the environment, the nonverifiability of their prospects, and their incentives (understood by workers) to reduce costs by delaying payment or substituting lower valued goods once the worker has signed on. Migration to a region where employers typically do pay in cash and on time is both very costly and full of uncertainties. Nonemployment may become more attractive for some workers, but it is not an option for everyone.

Thus, the consequences of paying workers late or forcing them to accept in-kind substitutes in order to ease financial problems or to cut labor costs are likely to be quite different when most other firms are doing so than when no others do, particularly those operating in the same local labor market. This interaction may lead these practices to be self-sustaining, so that they persist even if their original cause is removed.

Measurement of wage arrears and in-kind substitutes is difficult. Official information on wage arrears in Russia is limited to aggregate time series of the reported cumulative overdue wage debts in certain sectors of the economy, while there appears to be no official information on forced substitutes. Until 1996, only three series (for the aggregate industry, construction, and agriculture sectors) for arrears are available, while afterward the set of sectors is expanded. The official time series for the real stock of arrears is shown in figure II.2.

The inconsistency of sectoral reporting makes it difficult to draw firm conclusions, but it does seem that the real stock of arrears peaked in August-September 1998, and then declined steadily until the spring of 2000. Several plausible explanations exist for the decline. First, the drastic devaluation of wage debts because of the steep inflation in fall 1998 made it much easier for firms to pay off debts. Second, the manufacturing sector, where arrears are to a significant degree concentrated (as shown below), received a big boost from the currency devaluation, which made exports more competitive and imports less so. Third, there may have been some change in the policy regime, as new legal penalties were put in place in early 1999, and the Government affirmed the reduction of arrears as an important policy priority.

Despite the large fall, however, it is notable that wage arrears remain substantial in the Russian economy, and they have even started to increase again since spring 2000, including in the public sector. One interpretation of the increase is that wage arrears continue to follow a political business cycle, because of nominal wage increases and pushes to pay prior to elections and subsequent inability to meet those promises (see

Treisman and Gimpelson forthcoming). It appears that the Russian economy is still plagued by large-scale arrears, even if smaller than before, and that the environment remains vulnerable to a recurrence of a massive outbreak, if the macroeconomic situation changes.

From the official data, however, one can learn rather little about questions of interest, such as which groups of workers are most affected, whether the incidence tends to remain the same or has changed, and about the extent to which changes in the aggregate involve changes in the number of affected workers or a worsened (or improved) condition for those previously affected. The aggregate data also do not permit, of course, any analysis of the association of wage arrears with other variables. The analysis in this section therefore relies mostly on microdata, from household and firm surveys.

Defining a measure of wage arrears also faces several problems. In theory, one would like to measure the worker's present discounted loss from wage delays, taking into account the timing of past payments and the risk premium associated with the uncertainty of the timing (and probability) of future payment. Such a measure would require detailed information on the wage payment history of each worker and on his/her discount rate and expectations concerning future payment. In practice, payments of wages and repayments of back wages tend to be highly irregular, creating high volatility in the actually paid monthly wage relative to the promised or contractual wage.[87] Furthermore, detailed records on the entire histories of wage payments and repayments are hardly kept or reported.

The prevalent practice of accounting for arrears — both in individual firm balance sheets and in official Russian statistics — is to sum the cumulative debt of the firm to a worker, without regard to the timing of when the debts were incurred. Workers tend to think of their arrears as this stock expressed as the number of overdue monthly salaries that they are owed. Associated with this concept of the level of arrears is the standard practice of paying debts in the order in which they are incurred. For example, consider a worker with three months of arrears in October some year. If he/she is paid one monthly salary at the end of October, this payment is treated as the July wage, and arrears are considered to remain unchanged at three months. If he/she instead receives 2.5 monthly salaries at the end of October, this is considered payment for July, August, and half of September, and arrears decline to 1.5 months. If he/she receives nothing, then arrears are recorded as rising to four months.[88]

Incidence and persistence of wage arrears and in-kind benefits. *Wage arrears.* With this background, table AII.8 shows the incidence, magnitude and persistence of wage arrears for the years of the second wave of the RLMS: 1994, 1995, 1996, 1998, and 2000. The proportion of workers with arrears and the average num-

---

[87] Thus, the RLMS variable corresponding to the reported wage received in the previous month, which has been used by many researchers as though it were a standard wage measure, need bear little relationship to the contractual wage or to the average wage received over some longer period.

[88] One reason for this practice is that firms pay no interest or penalties on wage arrears, nor are they indexed. Thus all that matters is the total debt.

ber of overdue salaries increased steadily up to 1998, with a particularly sharp jump in 1996 compared with 1995. This is followed by an equally sharp collapse in 2000. Remarkably, however, the expected value of the magnitude of arrears (measured as the number of overdue monthly salaries) conditional on having some arrears hardly fell from 1998 to 2000. Thus, the data imply that essentially the entire decline in the average arrears is the result of a lowered incidence, while the conditional mean changed little.

The data also show strong persistence of arrears across years, with the conditional probability reaching nearly 0.9 for workers reporting arrears in the previous two interviews, and the conditional expectation of the amount of arrears reaching close to 10 monthly salaries in 1998 for those with arrears exceeding 6 months in 1996. The strength of the persistence effect was diminished in 2000, as many workers were repaid back wages.

Similar figures, but from a firm survey covering the years 1991–98, are shown in table AII.9. The growth of arrears from a negligible to a substantial level is clearly visible. Unfortunately, no data for 1999 or 2000 have yet been collected by either the RLMS or the firm survey, so it is not possible to verify the aggregate trends using microdata.

Earle and Sabirianova (forthcoming) report the heterogeneity in the incidence and magnitude of wage arrears for a set of firm and employee characteristics in the RLMS from autumn 1996. The average incidence[89] and magnitude[90] of arrears were both much higher in rural than urban areas, and there was substantial variation across localities. While the regional variation exists across six major regions of Russia, it is still higher at a more disaggregated level, as some *rayons* have very low arrears and some have very high, nearly universal arrears. The results for the City of Moscow, where 28.6 percent of employees were owed money and the mean magnitude was 0.6 months in 1996, mostly reflects arrears of the Federal Government.

Variation across industries also was reported to be large, with the highest rate in agriculture and in some industrial sectors (shown under "selected industries"), particularly machine building and defense ("Military Complex"), as well as in services financed through the state budget (education and health). In a new and rapidly developing sector such as banking, however, arrears were very small at this time. Arrears vary strongly with size, showing a much lower incidence and average magnitude in firms with fewer than 50 employees.

Arrears also vary across different forms of ownership. The data show the highest incidence and magnitude of arrears in the agricultural collectives,[91] followed by mixed and state-owned firms, while they are lowest — although still not negligible — in domestic private and foreign firms. Arrears also vary by the employer's founding date, defined on the basis of a question posed to worker-

---

89 (mean of ARRDUM).

90 (mean of ARRMOS).

91 High arrears in agricultural cooperatives may reflect limited opportunities of cooperative members in rural areas, and limitations to mobility, although as noted above mobility itself maybe impeded by wage arrears.

Table II.4. Incidence and Magnitude of Forced In-Kind Substitutes for Wages (Percentage)

Years	Percentage of firms with in-kind substitutes (N = 162)	Firms with in-kind substitutes for wages	
		Share of wage bill paid in-kind	Share of workers paid in-kind
1991	3.1	36.2	44.0
1992	3.7	39.3	52.5
1993	4.9	36.3	47.0
1994	9.9	26.4	50.0
1995	16.7	27.1	59.3
1996	22.8	30.2	64.2
1997	25.9	29.8	64.1
1998	27.2	37.0	70.6

Note: Sample is consistent across years (N = 162).
Source: Results from survey "Inside the Transforming Firm," reported in Biletsky et al. (1999).

respondents in the RLMS. Employees of firms founded before the beginning of *perestroika* (1988) were much more likely to have arrears in 1996 than those founded subsequently, although the problem was significant even among the latter, sometimes called de novo firms. In fact, the data show that some of the de novos were themselves state-owned (usually by local governments). Even among genuine, privately owned start-ups, however, it is not surprising to find some arrears, since the start-up sector tends to be highly volatile in any economy. The difference in Russia is that it is the old, established sectors and government agencies where wage arrears are the greatest problem.

Concerning personal characteristics, men tended to have a slightly higher probability and magnitude of arrears than do women. Arrears were lowest in the youngest (under 30) age group, perhaps because of the relatively low mobility costs of this group. Arrears are generally negatively related to the level of schooling and positively related to job tenure. Even new employees, those with tenure less than one year, have a 50 percent rate of arrears, however.[92]

With respect to ownership by the employee-respondent, results are based on RLMS questions on share ownership in the employer and on the percentage of company shares owned. Because of the different nature of ownership in the agricultural

[92] The implied arrears-tenure relationship (also obtained in Lehmann, Wadsworth, and Acquisti 1999) could be spurious if an employer has incurred arrears in the past but more recently has tended to pay wages on time. Unfortunately, the data (particularly on the timing of arrears) are insufficient to permit an assessment of the quantitative importance of this possibility.

cooperatives and transformed cooperatives, these are distinguished from other ownership types when large stakes are involved.[93] As rather few employees report more than 1 percent ownership, however, all responses of 1 percent or greater within these groups have been pooled together. In nonagricultural firms, the arrears-ownership relationship appears to be non-monotonic, with the highest incidence and magnitude among small shareholders (those owning less than 1 percent) and the lowest among larger shareholders (1 percent or greater), with nonemployee-owners in between. With respect to agricultural firms, however, the large shareholders show higher values for both incidence and magnitude of arrears.

Concerning variation across occupations, employees of the armed forces experience almost universal arrears. The armed forces employees in the sample are not ordinary enlisted soldiers and conscripts but rather service workers and officers residing off the military bases, because the RLMS sample did not include bases. Among civilian employees, craft workers and operators and assemblers tend to experience the highest rates, while managers have the lowest, although the rate is high even for this occupation.

A final issue concerning arrears is whether the legal system functions to force firms to pay, and if not, why not. As Table A.10 shows (and Chapter III), few firms have had to pay penalties, and those penalties that have been assessed are tiny — certainly relative to the stock of wage arrears in the firm. Evidently, the Russian legal system functions poorly in enforcing wage contracts, an issue that is taken up in the next chapter.

In-kind benefits. Concerning forced in-kind substitutes for wages, no official estimates are available. Thus, the analysis draws exclusively on micro-data: the RLMS and firm survey. Table AII.11shows the results from analysis of RLMS concerning the incidence of such forced substitutes. The proportion of workers reporting such forced substitutes during the previous year was 8 to 9 percent in 1994–95, 12 percent in 1996, 15 percent in 1998, and 9 percent in 2000. Similar to wage arrears, in-kind substitutes show strong persistence: apparently, it tends to be the same group of people who are affected, year after year.

Table II.4 uses the firm survey to address the magnitude as well as the incidence of forced substitutes, from the firm's perspective. The fraction of firms reporting the use of the practice rose steadily from 3.1 percent in 1991 to 27.2 percent in 1998. Among firms using the practice, the share of the wage bill paid through this mechanism has fluctuated but does not show a clear trend, but the share of workers paid in-kind has steadily increased. Apparently, the practice has become much more regularized over this period.

Regional variation in the use of in-kind substitutes is similar to that for wage arrears, but the variation across industries shows a much stronger concentration in agriculture. Firms with mixed ownership (including agricultural cooperatives) have

---

[93] A possible explanation might be the nature of the cooperative transformation process in agriculture, which generally resulted in equal division of ownership and closed legal forms, unlike other sectors where managers generally acquired disproportionate stakes and the legal form was usually open (a legal requirement in the State Privatization Program).

the highest rate, and actually the lowest rate is found in the state sector probably because many state-owned organizations, such as schools and hospitals, have little they can offer workers in lieu of their salaries.

In contrast to wage arrears, in-kind substitutes vary little with tenure, although they do vary strongly across occupations. Like arrears, the highest rate occurs for cooperative owners, while employee-owners of joint-stock companies are most likely to have in-kind substitutes if their ownership is small (less than 1 percent), again belying the sometimes heard claim that these practices represent voluntary recontracting.

A possible evaluation of the Russian institutions that lead to practices of wage arrears and in-kind benefits is that they demonstrate "flexibility," unhampered by legal and institutional rigidities. Layard and Richter (1995) and OECD (1997), for instance, have praised the use of wage arrears as a way of achieving wage flexibility and low unemployment in Russia. Leaving aside the question of the social desirability of wage flexibility, however, it seems dubious that arrears and contractual failure are socially efficient mechanisms for bringing about a given effective change in the real wage.

As a first welfare consideration, it should be noted that the incidence of the contractual violations is unevenly spread across regions and households, as shown above, and thus their social consequences tend to be concentrated in certain groups. Second, wage arrears and the other practices reduce utility more than equivalent wage cuts, because of the associated uncertainty concerning the timing and probability of eventual payment. Uncertainty in wage payments may also reduce worker effort and reduce investment in training, reducing labor productivity. Lack of contract enforcement therefore, compromises both consumption and production efficiency (Rashid and Townsend 1994). Third, as discussed above, arrears may sometimes actually impede mobility, particularly where arrears are widespread in the local labor market; these areas are also likely to be those where mobility — geographic and industrial — is most needed. Thus, wage arrears may actually retard the reallocation of labor that is critical to the transition process. Real flexibility may be reduced.

A major consideration in a normative evaluation of these practices in Russia, however, is the fact that labor contracts are the most important contracts for most individuals. When those contracts are not respected and enforced, it reduces confidence in other labor and non-labor contracts into which the individual might enter. In short, wage arrears may undermine the development of contract enforcement and rule of law. We take up the issue of contract enforcement in the next chapter.

C. Wage Inequality and Poverty

Wage inequality. The decline in real wages was accompanied by growing wage inequality (Commander, Tolstopiatenko, and Yemtsov 1999) early in the transition. While increased dispersion of wages is an inevitable process of the transition to market, the level of wage inequality in Russia is very high by CEE standards, and is closer to levels found in Latin America (World Bank 2000a) Most worrisome, the recent

increase in real wages has not been accompanied by declining wage inequality. Rather, wage inequality has increased between 1998 and 2000.

Wage dispersion in Russia and other former Soviet Union (FSU) countries was already much higher than in the centrally planned economies of Europe at the onset of the transition (Atkinson and Micklewright 1992) Wage data based on enterprise surveys show that prior to the transition, the Gini coefficient for earnings for CEE countries ranged from 0.198 in Czechoslovakia to 0.268 in Hungary, while it was 0.273 in Russia and 0.300 in Georgia.

For both CEE and FSU countries, the dramatic increase in earnings inequality was concentrated over a very short period, in many cases in the first few years of the transition. As such, the increase in inequality has been unprecedented. This increased the wage inequality in Russia and other FSU countries to upwards of 0.500. By contrast, in most European transition economies, the Gini is around 0.3, a value not untypical for developed market economies. While some CEE countries, such as Lithuania, Latvia, and the Czech Republic, have reduced these inequalities, these examples cannot be found among CIS countries (Rashid and Rutkowski 2001).

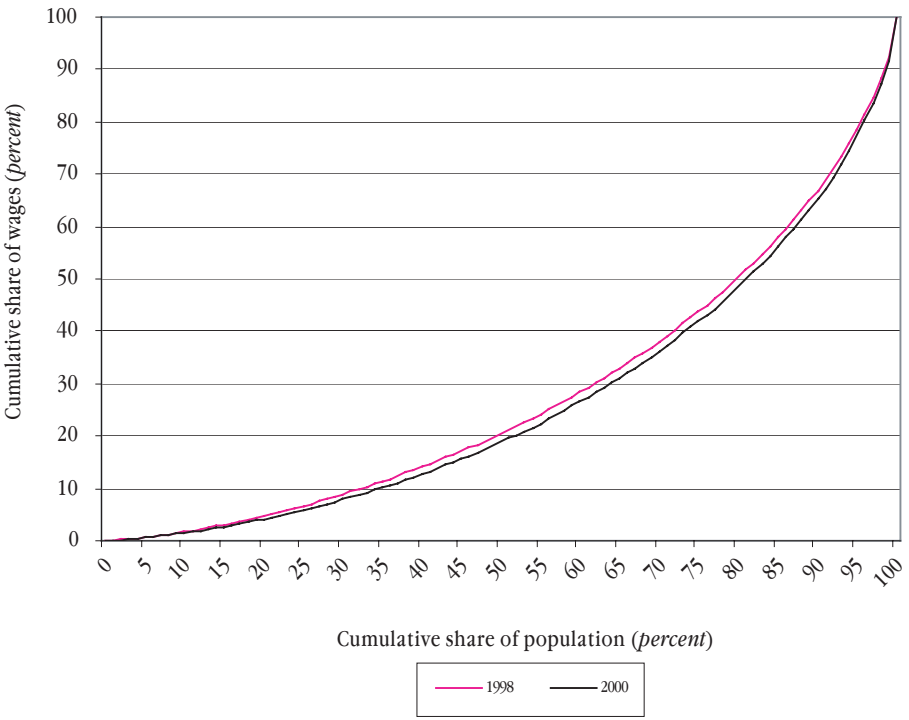
The growing wage inequality in transition economies is evident in the high incidence of both low-paying jobs and top-paying jobs, while the number of middle-paying jobs — preponderant before the transition — has decreased (figures AII.1 and AII.2). This polarization is more pronounced in Russia and the other FSU countries than in the CEE countries. In Russia as much as 34 percent of all jobs are low-paying jobs (earnings lower than two-thirds of the median), and 31 percent are relatively well-paying jobs (earnings higher than 1.5 times the median). The incidence of low pay in CEE economies is around 20 percent while it is even lower — less than 20 percent — in OECD countries.

The earnings gap between low-paid workers and median-paid workers has widened substantially during the transition. Before the transition, in most countries, a low-paid worker was earning some 60 percent of the median. This share has declined to around 30 percent in Russia, but is much higher, around 50 percent of the median, in CEE transition countries. Thus, low-paid workers are among those who suffered most in the wake of market oriented reforms.

Why is wage inequality so high in Russia? In CEE countries, wage inequality largely represents the emergence of market factors, such as differences in the level of education. In Russia, education explains only a small part of wage inequality (table AII.12). Most of the factors explaining the large dispersion in wages come from outside market-based parameters. Regional differences in wages stemming from wage arrears may be the main determinant of wage inequality (Lehmann, Wadsworth, and Acquisti 1999) Understanding wage determination in Russia therefore requires an evaluation of labor-market institutions, a topic taken up in the next chapter.

The growing inequality in wages has contributed to increasing income inequality in Russia (Commander, Tolstopiatenko, and Yemtsov 1999). However, the effect of wage inequality on total income inequality was dampened by the decline of the wage share in income noted above. Rather, the main factor contributing to increased income inequality was the rising entrepreneurial household income share. This component of income tends to be more unequally distributed than wages, even in devel-

Figure II.3. Lorenz Curve for Wages, 1998-2000



oped market countries (such as the United States). This distribution is likely to be more unequal in Russia where entrepreneurial access to credit and other inputs is more subject to personal and political connections (Ovtcharova 2000).

As noted above, real wage growth between 1998 and 2000 has been accompanied by an increase in wage inequality in Russia. The Gini index for real wages increased from 43.9 percent in 1998 to 46.4 percent in 2000. The growing inequality is illustrated in figure II.3 using a Lorenz curve. The Lorenz curve for 2000 lies further away from the 45-degree line than in 1998, indicating an increased inequality in wages. Growing wage dispersion is the result of a higher proportionate increase in real wages for workers at the higher versus lower end of the wage distribution (Figure AII.4).

Poverty in the workforce. The recent increase in economic growth, which has increased real wages and (slightly) increased wage inequality, has contributed to a decline in poverty in Russia. This result is consistent with reductions in income poverty during the same period, as reported by both Goskomstat and RLMS data. The increase in wage inequality derives from a larger increase in real wages of high- versus low-wage workers (figure AII.4). What are the characteristics of workers realizing real-wage gains? As noted above (table II.1), real wage gains from recent economic growth have been skewed to young, well-educated, urban, private-sector workers. Older workers, with low levels of education, who work in the rural agriculture sector have hardly realized any real wage gains at all. And, again as noted above (table AII.1),

Table II.5. Poverty Rates by Socioeconomic Groups (Percentage)

Goskomstat 2000		**RLMS, 1998**	
Individuals	Poor*	Households headed by:	Poor*
Old age pensioners	24.0	pensioners	33.9
Invalid pensions	42.3	Employed without wage arrears	34.9
Survivor pensions	50.8	Employed with wage arrears	51.4
Workers at enterprises	24.3	Unemployed and not receiving benefits	60.9
Working part time	53.9	Unemployed and receiving benefits	80.0
Working for others	34.9	Not in the labor force (not pensioner)	41.7
Receiving unemployment benefits	63.7	Not unemployed	41.3
		Unemployed for a year or more	63.9

* At minimum subsistence
Source: RLMS (1998) and Ovtcharova (2000).

despite wage gains for particular groups between 1998 and 2000, real wages in 2000 remained lower than pre-1998 levels.

Which workers receive low wages? In 2000, a higher proportion of rural (vs. urban); younger (less than 35 years) and female (vs. male) workers received low wages (in the first quintile). A higher proportion of agriculture (vs. non agriculture), small (vs. medium and large); and state (vs. mixed or private) workers received low wages.

Which groups among the labor force have the highest poverty rates? Some evidence on consumption poverty is available from the 1998 RLMS data. In that year, the poverty rate was 58 percent among the unemployed and 64 percent among the long-term unemployed (compared with 46 percent for the labor force as a whole). Poverty rates among employed workers were lower, at 44 percent.[94] These comparisons are bleaker for unemployed heads of household with children. These individuals faced a poverty rate of 67 percent, compared with 52 percent among employed household heads with children (table II.5/Table AII.14)). But poverty was not only greater among the unemployed, it was also higher in households with wage arrears. The poverty rate in households with children whose heads had wage arrears was 60 percent in 1999, compared with a poverty rate of 40 percent for households with children whose heads were receiving wages. High poverty rates among the unemployed (versus wage earners) are also confirmed by Goskomstat 2000 data, which indicate that individuals receiving unemployment benefits are among the poorest of all socioeconomic groups. These findings suggest that adverse developments in the labor market during the 1990s led to high rates of poverty among Russian households, particularly the unemployed and those with wage arrears.

[94] Among all individuals in the labor market, 28 percent were heads of families with children. These comparisons are based on analysis conducted with QIII 1998 data from the RLMS.

In summary, these results indicate that while economic growth has had a modest positive impact on real wages between 1998 and 2000, it has widened already high wage inequality prevailing in Russia. Workers who have realized wage gains are high-wage workers, the young, urban, private-sector workers. Real wages have hardly increased among low-wage workers, with lower levels of education, who work in rural areas, in agriculture, and for the state. Moreover, for all workers, real wages in 2000 remained lower than pre-1998 levels. The chapter also finds that while poverty has declined with recent economic growth, poverty rates likely remain high among workers with wage arrears and the unemployed.

Summary and Conclusions

The chapter has discussed the level, trends, and determinants of wages and wage inequality in Russia. The main conclusions are as follows:

The decline in real wages in absolute terms (and relative to output declines) was greater in Russia than in other CEE countries. Unlike these countries, wages were the main mode of labor-market adjustment (versus employment). The decline in wages was also accompanied by the growth of wage arrears and a large increase in wage inequality.[95]

Real wages have responded to recent economic growth, although their response lagged with respect to output (as in the case of Hungary and Poland). Despite the recent turnaround, the level of real wage in Russia remains very low by CEE standards. Recent real-wage gains were concentrated among high- versus. low-wage workers, increasing already high levels of wage inequality. Wage gains have largely benefited young, highly educated workers working in the urban private sector (versus older, less-educated, rural, agricultural-sector workers).

Recent economic growth has also reduced the incidence of wage arrears and in-kind substitutes, but they have not disappeared. The average amount of wage arrears for workers who continue to receive them has not changed. The use of inappropriate fringe benefits has also declined (and was declining in any case over the transition), but remains significant among large firms.

The use of wage arrears and in-kind substitutes as a form of wage adjustment is quite separate from wage cuts — and formal wage flexibility. Unlike wage cuts, wage arrears and in-kind substitutes reflect contract violation rather than contract renegotiation. Moreover, they impose considerable income uncertainty on workers and further lower worker welfare. Why do they persist? Wage arrears and in-kind substitutes tilt the age-earning profile for workers, making it costlier for workers to leave their firms. Limited enforcement of wage contracts, the nature of local markets (where employer contract violation behavior can be matched by other employers), and low regional mobility are factors that induce employers and workers to persist in these

[95] The contribution of wage inequality to total income inequality has been dampened by the decline in its income share. High income inequality is largely explained by the inequality in the growing share of self-employment (in total household income).

practices. The concentration among particular groups (less educated, more experienced), regions (rural), and industries (agricultural cooperatives) may reflect the lower bargaining power or job opportunities of these individuals versus other groups (younger, nonagricultural, private sector) of workers.

Recent growth has not significantly increased the returns to education. However, it is important to note that wages started to increasingly reflect returns to education during the transition, as a result of market liberalization. The returns to vocational education have fluctuated over the transition period. The returns to labor-market experience and job tenure declined in Russia, as in most transition countries, indicating low rates of returns to work experience from the socialist era. As in other transition countries, the returns to employment in the private sector are quite high relative to the private domestic sector and, particularly, the state. However, there is a gender gap. Women earn less than men, after controlling for socioeconomic and occupational characteristics.

Although recent economic growth has reduced poverty rates, they still remain very high relative to CEE countries. The fall in earnings from formal employment contributed to growing poverty among labor-market participants or the working poor. Poverty rates were highest (relative to the national level) among individuals with wage arrears and those who are unemployed (particularly those in receipt of benefits).

These results confirm the conclusions of the previous chapter that economic growth will be the main vehicle for increasing employment, labor productivity and, hence, real wages in Russia. However, the increasing payoff to education in Russia suggests that investment in education will also be important for sustained growth in labor productivity, and that particular attention will have to be paid to improving the relevance of vocational education for the labor market. While the large decline of real wages in Russia is mainly the result of the fall in aggregate demand and high rate of inflation realized over the transition, the prolonged decline in the level and uncertainty of real wages, and the growth in their inequality, may also be strongly linked to the weak regulatory structure of the labor market. Less regulation of the market helps improve labor-market outcomes, but complete lack of regulation — as in Russia — appears to have had an adverse impact on welfare, and can also have adverse efficiency consequences. The following chapter therefore looks closely at labor-market institutions in Russia, by law and by practice, and draws on Russian and international experience to understand their impact on the functioning of Russian labor markets.

Chapter III
Labor-Market Regulation

The previous chapter suggests that labor-market regulation may have played an important role in determining labor-market outcomes in Russia. In this chapter we discuss four main aspects of labor-market regulation. These are: (a) the nature of the employment "contract," including the rules and norms governing hiring, contracting, and dismissals; (b) the wage determination process; (c) the institutions determining worker organization and collective bargaining; and (d) institutions for enforcement and dispute resolution. Simply evaluating the law and institutional setup is not adequate for understanding the Russian labor market, as current practice often diverges markedly from formal arrangements. For this reason, for each of the above areas, this chapter discusses the regulatory structure, current practice, and international evidence on the labor-market impact of regulations. Policy options in each area are presented at the end of this chapter.

At the time this report was being finalized, the State Duma passed a new Labor Code, replacing the previous 1971 Code (with amendments). The new legislation is relevant for each of the four aspects of regulation considered in this chapter. As the chapter was written prior to the passage of the law, the analysis reported here is based on the prior regulatory framework. What we have done is to supplement our core analysis in each area by noting how the new Labor Code might change current practice. In our view, the new Code does take a modest step forward in making labor-market legislation more consistent with a market economy, especially with respect to contracting and terminations. However, it does not fundamentally alter many features of the old regulatory regime and therefore the analysis of this chapter.

A. Background

Before turning to the four specific aspects of regulation addressed in this chapter, this section briefly describes the overall regulatory system, the robustness of evidence on recent practice, and the applicability of international evidence.

Regulatory framework. In reviewing the regulatory framework, it is important to note that a number of laws, resolutions, and decrees come into play. The most important is the Labor Code, which establishes the general framework for labor contracts, and outlines guarantees and privileges and the role of trade unions. The Code covers all employees and all forms of organizational ownership. As we have already noted, a new Labor Code has just been passed, replacing the 1971 version (with amendments). This new Code is the culmination of a number of years of difficult

debate. In addition to this Code, contracts are further regulated by Government resolutions, including "On Confirmation of Recommendations on Conclusion of Labor Contract in Written Form" and "On Standard Form of Labor Contract" (1993). Between 1991 and 1997, new industrial relations laws were approved, including the Law on Collective Bargaining Procedures (1992), the Law on the Order of Resolution of Collective Labor Disputes (1995), and the Law on Trade Unions, Their Rights and Guarantees of Their Operation (1996). The important development in the wage-regulation area was the abolition of the Unified Tariff of Wages and Salaries in 1992.[96]

Despite all of these initiatives, by no means have Russian labor laws and regulations fully adjusted to the realities of the market economy, even after a decade of transition. The main goal of labor-market regulation is to protect employees from discrimination and to ensure that all workers are employed according to their qualifications (Denisova, Friebel, and Sadovnikova 1998a). There are strong rules governing most aspects of the employment relationship within the enterprise; regulations still provide for trade unions to assume certain functions that are viewed as managerial prerogatives in most market economies; and the law enshrines extensive guarantees and privileges for particular groups that are far beyond what is found in Western labor laws. New legislation, including the 2001 Labor Code, has only slightly moderated these facts.

Limited consensus exists regarding the role of Government and the private sector in providing employment and social protection. This debate reflects a larger political debate about the role of Government in a modern market economy. Many pro-market voices argue that this is a serious problem and that major reforms still need to be put in place to curtail guarantees and privileges and to reduce direct Government intervention in the labor market. On the other hand, there are still influential voices arguing for the state to maintain a strong regulatory hand to protect workers from economic restructuring and managerial arbitrariness.[97] This clash of views exists in all debates on labor policy, and has seriously hampered most reform initiatives including, until now, a new Labor Code. Nonetheless, as we have already noted, the Labor Code still reflects a view of the labor market that is more appropriate for a planned economy than a market economy.

Recent practice. Understanding regulatory and institutional aspects requires going beyond what is on paper and looking at employment practices on the ground.

---

[96] The other major piece of legislation is the Employment Law, which defines the state role in the labor market through the Employment Service, active labor programs, and unemployment benefits. This Law is discussed in Chapter 4 of this report. The Government has committed to introducing a new Employment Law to reflect announced changes in policy in these areas.

[97] This is a controversial question with two very different perspectives - what Freeman (1993) has called the "institutionalist" and "distortionist" views. The "institutionalist" view sees job-security arrangements, minimum wages, and collective bargaining as providing important social protection for workers, as instruments for encouraging productivity growth (through training and the accumulation of firm-specific skills), and as means of moderating the effects of downswings in aggregate demand. The "distortionist" perspective emphasizes the advantage of market processes and is concerned that these institutional forms of regulation impede adjustments to economic shocks, discourage hiring, and favor "insiders" (that is, regular workers).

For this reason, the chapter tries to piece together reality by complementing national data with evidence collected from various smaller independent surveys of establishments and workers. While smaller surveys have limitations (see below), they offer the only real channel for understanding the situation. The results of most of these surveys have been published elsewhere.[98] We also produce new and more recent data based on three surveys conducted by the Russian Academy of Sciences.[99] The surveys we draw on do flesh out the reality of employment relations in Russia. However, these data are sometimes qualitative and based on samples that are relatively small and uneven in their coverage. This limits the capacity to make reliable estimates for subsectors of the enterprise population (for example, regional, industrial, form of ownership, and so on).

International evidence. In reviewing international evidence on the impacts on employment outcomes, the chapter relies primarily on countries in the OECD region where most of the analysis has taken place. We also take advantage of a recent study that compares advanced CEE reformers with labor-market institutions in OECD countries. The chapter describes the range of approaches used and what is known about their labor-market implications.[100] Interpreting the international evidence requires a few qualifications. First, national contexts (history, culture, institutions) vary a great deal, and labor-market impacts of a given law or practice in one country may be quite different from another. Second, the actual arrangements for a specific aspect of the regulatory regime can be very difficult to capture. For example, simply looking at what is provided in the legislation may provide an incomplete or inaccurate picture if enforcement is weak or if nonformal practices in reality take precedence.[101] Third, the current practices in Russia often are "outliers" when considered within the parameters of CEE and OECD countries — consequently, it is not always clear how their experience would apply in Russia. Nonetheless, keeping these caveats in mind, the international evidence can offer important insights on reform options to encourage employment and earnings growth in the market economy. While many of the current preoccupations in Russian labor policy may seem far removed from practice in developed countries, the longer-term reform strategy should be designed with that practice in mind.

---

98 For a description of the published surveys we have relied on, see Clarke (1999).

99 Details on the methodology for the new surveys we draw on are provided in Tchetvernina (2000).The first is the RLFS. This has been carried out on a longitudinal basis a number of times beginning in 1994, with the latest wave in 2000. The longitudinal nature of this survey offers a unique view of trends; however, the panel now has a small sample size (n = 85) because of attrition and the composition of panel firms is not universal (for example, it excludes new firms in the private sector; in nonmanufacturing industries, and so on). The 2000 RLFS has been replenished by a new group of participating enterprises making the complete sample 308 enterprises. The second survey of enterprises was conducted in late 1999 in five regions. It covers 278 enterprises in a wide range of sectors. Sample selection, however, was not based on a random selection methodology. The strength of this survey is that interviews in each establishment covered managers, union leaders (in the 180 enterprises with unions), and employees in each workplace (n= 2,213). The third source of data is surveys of trade union activity in enterprises in 1995 and 1998, again with interviews of managers, union leaders, and employees.

100 This evidence is largely drawn from Betcherman, Luinstra, and Ogawa (2001).

101 See OECD (1999a) and Bertola, Boeri, and Cazes (2000) for discussions of these problems.

B. Labor Contracts

Regulatory framework (pre-2001 Labor Code). The legal framework in Russia has been geared heavily toward formal, permanent, open-ended contracts (table AIII.1). Contracts can be signed for an indefinite period or for a fixed term (not more than five years). There are numerous restrictions on the use of fixed-term contracts. However, an employer must have a specific reason for offering a fixed-term contract: if the job will be for a finite period; if there are particular working conditions (for example, working in extreme conditions); or if this is the preference of the employee. Although temporary agency work does take place, this form of employment is not covered in the Labor Code. Since 1992, there has been a statutory requirement that all new individual labor contracts be in written form. The Labor Code also places restrictions on the use of overtime and shift work. These restrictions on fixed-term contracts, use of temporary agencies, and overtime and shift work are excessive by the standards of most OECD countries**.**

Probationary periods upon hiring are permitted. This is a common way in which managers can assess the suitability of new employees without entering into the full obligations of a standard employment relationship. However, there has been a three-month maximum for probationary periods unless the trade union agrees to a period of up to six months. This three-month maximum is relatively short for screening purposes.[102] Furthermore, employers cannot use probationary periods for certain classes of workers, including youths (under 18 years of age), persons graduating from educational institutions, and disabled workers. Especially in the case of young workers, who typically will not have much of an employment record to guide prospective employers, this ban on the use of probationary periods seems inappropriate.

The Labor Code restricts managerial discretion in the deployment of labor more than is the standard in Western countries. Transferring employees to other work within the enterprise requires the consent of the worker and two months' notice. There are restrictions on the temporary transfer of workers as well. These restrictions limit internal (functional) flexibility in the enterprise. As a general rule, international experience suggests that the law should allow employers to place workers where they will be most productive. Of course, this principle should not preclude unions and managers from voluntarily negotiating collective agreements that guide labor deployment.

There are also special protections limiting the work that women can do. All women are prohibited from performing arduous work; employers should accommodate pregnant workers and mothers with children under 3 years of age by reducing norms of output or servicing or by transferring them to less-demanding jobs (while retaining previous salary). Certain restrictions exist in terms of assignments that can

[102] On the other hand, it should be noted that the use of probationary periods can be abused. Workers on probation may receive lower wages, less employment protection, and fewer benefits. Anecdotal evidence suggests that some employers terminate workers at the end of their probationary period and replace them with new probationary employees. An effective appeal procedure is necessary to protect against this.

Table III.1. Forms of Labor Contracts by Sector, ISITO Survey, April 1998

	State sector	Budgetary entities	Privatized firms	De novo firms	Average
	Distribution, percent				
Open-ended employment without contract	77	73	72	34	67
Open-ended contract or agreement	14	14	18	29	18
Fixed-term contract between 1 and 5 years	5	10	4	6	6
Fixed-term contract less than 1 year	3	2	4	9	4
Labor contract to perform certain work	1	-	1	5	2
Oral agreement	1	1	1	18	4
Total	100	100	100	100	100

Source: Clarke (1999, table 5.1).

be given to pregnant women or women with small children (for example, no overtime, night work, business trips, without consent). While regulations such as these may be motivated by social-protection objectives, they do not reflect modern realities and they may harm employment and career prospects for these workers.

The new Labor Code introduces some modest changes in the regulatory framework governing labor contracting, but in many areas it does not alter the status quo. It does increase the flexibility to hire workers on fixed-term contracts, especially in firms with fewer than 50 employees. The new Code also extends the use of probation in positive ways. However, the Code does not make any marked improvements in either the deployment of labor or in terms of the protections of certain categories of workers, including women. Future reforms will be necessary to provide employers with the similar scope to deploy workers that their Western counterparts have. Also, the protection of female employees cannot be provided to the extent it is in the Code, without making women uncompetitive in the labor market. Other policies, outside of employment-protection legislation, are required to meet such social objectives.

Recent practice. As discussed in the previous chapter, wage employment is the dominant form of employment in Russia. The legal framework creates a preference for permanent and full-time contracts in wage employment. Nearly 70 percent of jobs in the state, privatized, and de novo private sector have permanent, open-ended contracts. Table III.1 indicates that fixed-term contracts are not the norm in any sector. However, the greater flexibility allowed employers by these contracts is increasing their prevalence among particular occupational groups. This is especially true for managerial and professional categories (Tchetvernina 2000, Denisova, Friebel, and Sadovnikova (1998b). Denisova, Friebel, and Sadovnikova (1998a) cite evidence suggesting that the majority of managers think that the practice of fixed-term contracts should be expanded. Clarke (1999) has found that employees on fixed-term contracts are no more disadvantaged than other workers and, in some way, report higher levels of satisfaction. He concludes that Russian employers do not use these contracts to reduce the job security of lower-grade workers. The legal framework also accounts

for the preference for full-time positions, and discourages part time jobs. As noted in the previous chapter, the share of part-time jobs is very low. Making flexible contract forms legal would therefore bring more of the work force into the formal economy

While the law has prescribed written labor contracts since 1992 — presumably to ensure enforcement — most contracts are nonetheless oral. The common practice is still that a worker is hired on the basis of his or her application, and employment is confirmed by issuance of an order (*prikaz*) signed by an enterprise director. Therefore, most contracting is informal, which raises concerns about its enforceability. The informality in contracting is especially true in the private sector but, more surprisingly, it is also the case for many workers in other sectors of the economy. According to ISITO household data for April 1998, about 90 percent of workers employed in the state, budget, and privatized sectors were in permanent arrangements, but the vast majority did not have a written contract. In the de novo private sector, there was also a significant incidence of hiring solely on the basis of an oral agreement. Finally, informal hiring arrangements also dominate secondary employment where more than half (54 percent) of workers reported that they had been hired on the basis of an oral agreement only (Perova and Khakhulina 1997). In the full 2000 RLFS sample of 308 enterprises, which almost certainly underestimates the use of informal hiring, 15 percent reported at least some informal hiring, with the share rising to almost one-third for limited-liability companies.[103]

Written contracts, where they do exist, are often inconsistent with the law. They frequently do not contain provisions on wages and working conditions that should be included by law. It is noteworthy that a significant minority of firms (about 10 percent of privatized firms and 10 – 25 percent of de novo private-sector firms) do not include provisions for overtime, regular wage payments, or paid leave in their contracts (table III.2). These figures rise with respect to items that are not necessary to have in contracts in Russia but that would be standard in contracts in most developed countries.[104] According to Clarke (1999), a substantial number of contracts do not explicitly define job duties: roughly one-fifth of employees in state, budgetary, and privatized firms reported that their duties were only defined verbally, while this figure rose to 52 percent in the de novo private sector. Thus, whether oral or written, agreements between workers and employers in Russia are generally outside the law. As a result, workers have virtually no recourse to any contract-enforcement protection and employment-based social programs.

Contracts can be either written or oral in many OECD countries. Allowing oral contracting can help small employers and employees transact quickly. Drawing up written contracts can be time-consuming for such arrangements. However, written contracts confer protection to large employers who would like to create uniformity in contract provisions across all their subsidiaries and branches. Employees also prefer written contracts because they are easier to enforce; enforcement of an oral con-

---

[103] The sample is heavily weighted to state and privatized enterprises and away from de novo private-sector firms where informality is most prevalent.

[104] Tchetvernina. (2001) compares these incidences reported by employers with reports by employees. They find that the coverage is generally similar.

Table III.2. Provisions Stipulated in Contracts (Permanent and Fixed-term) by Property Form, Employer Reports (n = 278), 1999

	State enterprises		Privatized firms		De novo private firms	
	Perm.	Fixed	Perm.	Fixed	Perm.	Fixed
	Percent of enterprises with provision in contract					
Compulsory contract provisions						
Wage (salary) amount	97.1	99.9	86.2	100.0	79.5	88.1
Conditions and schedule of work	91.3	85.7	89.4	90.6	75.6	79.1
Conditions guaranteed by law but not compulsory for contracts						
Regular wage payments	76.8	71.4	80.9	79.2	76.9	73.1
Paid leave	99.9	85.7	96.8	86.8	91.0	74.6
Paid sick-leave	87.0	77.1	91.5	81.1	83.3	58.2
Payment for overtime hours	59.4	42.9	68.8	58.5	50.0	50.7
Conditions of dismissal	69.6	60.0	83.0	84.9	66.7	76.1

Source: Tchetvernina. (2000).

tract may be quite costly in practice. Whatever the form of contracting — written or oral — it is most important that the contract is legal, flexible, well understood by both parties, and enforceable. The importance of contract enforcement and its practice in Russia are taken up in a separate section later in this chapter.

International evidence. In the area of contracting, researchers have focused on the contracting rules (permanent, fixed-term contracts, and temporary agency work) for employing nonstandard workers. These generally include employees on fixed-term contracts and temporary agency workers. Most research tests the impact of these contracting rules on employment and unemployment outcomes for workers. It is hypothesized that creating incentives or disincentives for certain types of contracting will have impacts both on the level of employment and the composition. The main objective of contracting rules (such as the use of permanent contracts only) is to enhance job security by making dismissal costly to employers (in this case, by restricting hiring of nonpermanent employees). However, these rules can also have the unintended effect of raising costs of a worker to employers, and thereby creating hiring disincentives for employers. If these very strict regulations are enforced, they protect jobs for incumbent employees while limiting opportunities for the unemployed and new entrants (for example, youths, women re-entering).

The regulation of fixed-term and temporary agency employment generally pertains to (a) the types of work (for example, occupations) for which these forms of employment are legal, and (b) the maximum duration allowed. These rules are gen-

erally stipulated in national or subnational labor codes. There is considerable variation across industrialized countries, with Anglo-Saxon countries having the least restrictive arrangements and Southern European ones the most. Most advanced CEE countries fall between the two extremes (Riboud, Sanchez-Paramo, and Silva-Jauregui 2001). During the 1990s, there was generally a loosening of restrictions, with many countries broadening the use of fixed-term contracts and temporary agency work (OECD 1999b). TableAIII.2 provides examples of current arrangements in selected OECD countries.

The most extensive study of the labor-market impacts of different contracting arrangements was carried out by the OECD (1999a), based on the experience of its member countries. According to this analysis, strict limitations on the use of fixed-term and temporary agency contracting are associated with:

·Lower aggregate employment rates;
·Lower employment for women and young people;
·Higher levels of self-employment (as a share of total employment);
·No impact on aggregate unemployment levels; and
·Lower flows into unemployment but longer average unemployment durations.

This international evidence, then, suggests that the restrictions on flexible contracts (limitations on fixed-term contracts and lack of legality of temporary work contracts) will — all else equal — reduce employment rates, especially for women and youth, and increase the difficulty for unemployed workers and new entrants to find jobs.

In summary, excessive restrictions on flexible forms of contracting in law induce employers to engage in such contracting in the informal sector. The weak enforcement structure allows this to happen. Easing of excessive restrictions on nonstandard contracting could help to bring some employment "out of the shadows." According to OECD data, this would particularly help more vulnerable groups, such as women and youths. The new Labor Code takes some promising steps in this direction. However, the Code does not make any marked improvements in either the deployment of labor or in terms of the protections of certain categories of workers, including women. Future reforms will be necessary to provide employers with the similar scope to deploy workers that their Western counterparts have.

C. Dismissals and Terminations

Regulatory framework (pre-2001 Labor Code). Enterprise restrictions on terminations have been considerable. For example, employers can terminate labor contracts for the following reasons: (1) the enterprise is liquidated or requires a reduction in personnel; (2) the employee is not suited to the job requirements; (3) the employee regularly does not fulfill job requirements; (4) idleness (including absenteeism); (5) failing to return to work after a period of leave; (6) previous employee rehired; (7) employee showing up at job under the influence of alcohol or drugs; and (8) employee stealing state or public property.

Terminations falling under (1) staff reductions, (2) employee not suited to the job, and (5) failing to return to work require the consent of the trade union. The union is given 10 days to approve these types of dismissals. While advance notification of terminations is an appropriate option by the standards of industrialized countries, the possibility of trade union veto is a substantial and unusual restriction on the right of the employer to adjust work force size. It may be more appropriate to use an appeals procedure where labor can question the legality of the layoff decision. Women, young people, and the disabled have additional guarantees on firing.

On the employee side, workers on permanent contracts can terminate their contracts with two weeks' advance notice. The employer is obliged by the end of this period to fulfill all contractual obligations (that is, to pay back wages). In the case of fixed-term or one-off contracts, on the other hand, employees have to complete the job during the period stipulated by the contract. They can renege on the contract only on the grounds of sickness or incapability of fulfilling the job, or some other strong reason. Denisova, Friebel, and Sadovnikova (1998b) argue that this makes fixed-term contracts particularly unfavorable for workers.

There are various regulations governing mass terminations. Advance notice requirements are three months for informing the trade union and two months for informing the affected workers. Trade unions must approve these layoffs, and they can ask employers to explore various alternative employment opportunities for affected workers. In response to an application by the trade union, local authorities have the right to delay mass layoffs for up to six months. There are also limitations on mass layoffs for certain state-owned enterprises being privatized (Denisova, Friebel, and Sadovnikova 1998b).

Severance requirements depend on the nature of the termination. If an employee is dismissed because of being unsuited for the work, because the previous employee is rehired, or where the contract is terminated because of violations of the regulations by the enterprise, an employee gets not less than two weeks' salary. In the case of staff reduction, including mass layoffs, an employee gets one months' wage and is continued to be paid when looking for a new job for up to three months if he/she has registered at the Employment Service and has not been placed in a job during that period. For employees working in the far North or those having the same status and for specific categories of employees (that is, those working in closed regions), the severance payment can be for up to six months.

The new Labor Code appears to provide some significant improvements over the termination clauses in the old Code. In particular, it gives employers more flexibility to adjust to changing market conditions, which is necessary in a market economy. In supporting this flexibility, we emphasize the importance of effective unemployment benefit and employment programs to support unemployed workers in the labor market (see next chapter). The new Code appropriately obliges the employer to provide the trade union with advance notice of termination.[105] It is certainly appropriate to have such advance notice obligations in a market economy. It is critical, however, that

[105] Maleva et al. (2001) also find that the new Labor Code imposes considerable costs on employers.

trade unions not be given veto power over these dismissals — although the right to appeal dismissals that are alleged to be counter to the Code is appropriate. This trade union role — which apparently is more limited than was the case under the previous Code — may seem inappropriate given traditional practices in Russia, but it is necessary to give employers the necessary flexibility in restructuring workplaces to meet the needs of the market economy. Hopefully, procedures for dismissals and appeals can be carried out quickly and efficiently within the framework provided for by the new Code.

Current practice. As noted in the previous chapter**,** the composition of separations in Russia is strikingly different than in OECD countries. Specifically, in Russia the share of quits is a much higher share of total separations than are redundancies. However, the distinction between voluntary quits and separations is far less clear in Russia than in OECD countries. As conjectured widely in the literature, separations classified as "voluntary" and employee-initiated are often induced by employers through prolonged administrative leaves, wage arrears, reduced hours, or other forms of deteriorating working conditions. Many affected workers, having no future with the firm and no sources of income, eventually are forced to quit. Once again the lack of enforcement mechanisms facilitates this form of labor adjustment. While this adjustment may keep enterprise employment levels (although not necessarily payroll costs) artificially high — because separation is delayed — these practices are inefficient for rationalizing the work force and impose large transactions costs for firms.

One reason for the high share of voluntary quits may be high costs of layoffs (union consultations, for example). Workers have to be paid back wages; obtain severance, and are eligible for continued use of social services through their previous firms. A visit to Vladimir *oblast* and discussions with firm management revealed that the provision of social services to laid- off workers was the main reason that the firm forced workers to voluntarily quit rather than lay them off.

Other evidence on the reasons for layoffs comes from employee surveys. Table III.3 reports on reasons why workers separated from their previous job by sector. Almost one-half of those leaving de novo private-sector firms cited dissatisfaction with pay. On the other hand, personal reasons were cited more frequently in the state and privatized sectors.

What role do severance requirements play? The Russian arrangements do depart from international standards in that severance amounts are not linked to seniority. For short-tenure workers, the combination of notice and severance requirements may be overly generous, and obligations should be differentiated according to length of service to change this.[106] However, as we will see below, with this one exception, severance obligations cannot be considered onerous compared to most other transition countries and even with OECD countries. Severance obligations, though, may still be a major problem in the sense that many firms that need to restructure may be cash strapped and have no funds for severance payments. This may also encourage

[106] However, many redundant workers do have long tenure.

Table III.3. Reasons for Leaving Previous Job, by Sector of Previous Employment. Kemerovo Oblast and Komi Republic, October 1997

	Sector of employment			
	State (n = 1384)	Privatized (n = 71)	De novo private (n = 195)	Total (n = 1650)
	Distribution (percent)			
Closure of the enterprise	6	3	12	6
Dissatisfaction with social benefits	12	1	8	11
Dissatisfaction with pay	26	18	45	28
Fear for enterprise stability	3	3	6	3
Personal and family reasons	40	37	21	38
Made redundant	13	38	9	14
Total	100	100	100	100

Source: Goskomstat Labor Force Survey, cited in Clarke (1999, table 5.5).

them to avoid outright redundancies and use the alternative cost-containing strategies, such as wage arrears or administrative leave, discussed above. However, not all firms face cash constraints. Case studies of enterprises have revealed that some managers do offer financial incentives to voluntary quits (Denisova, Friebel, and Sadovnikova 1998b).

The real constraints imposed by the labor laws on employment should not be overstated. Employer reluctance to lay off workers, especially in the budgetary and privatized sectors, seems to be significantly influenced by poor incentives and reputational risks. Many of these firms — and all the more so in one-company towns — face widespread expectations about protecting their employees, especially given the current reality of poor employment opportunities and weak social protection. In interviews with 70 managers who had surplus labor but nonetheless did not plan layoffs, 46 percent reported that the main reason was "to preserve the collective" (Tchetvernina 2000)

International evidence. The key issue for policymakers concerns how difficult and costly it is for employers to terminate regular (that is, permanent) employees for economic reasons.[107] The case for restricting employer termination rights is similar to that for limiting contracting for nonstandard employees, discussed earlier. By making dismissal for economic reasons more difficult or costly, these employment-protection rules are intended to increase job security. However, the tradeoff again is that employers may be reluctant to hire workers if they face constraints in dismissing

[107] "Regular" employees are meant to cover those with a permanent or indeterminate position. It excludes fixed-term or temporary workers. The discussion does not include dismissals for "noneconomic" reasons such as discrimination, union organizing, or job performance.

them for business reasons down the road. As a result, we can expect that strong job-security rules that are enforced will lengthen tenure and reduce turnover but will have a negative effect on new hiring of regular employees.

Restrictions on terminations can take various forms, including: (a) what is considered to be a justifiable reason for termination; (b) severance obligations; (c) advance notice requirements; and (d) necessary administrative procedures for laying off workers (including the role of trade unions). There may also be special requirements in the case of mass layoffs. These restrictions are often found in national or subnational labor codes but, depending on the country, the degree of job security can also be defined by court decisions, sectoral collective bargaining agreements, or even unwritten industrial norms. For example, in many countries (especially in Northern Europe), there are no severance requirements stipulated in the labor code but severance obligations are imposed in collective agreements.

There are significant variations within the industrialized world in terms of the protection offered to regular workers. According to OECD (1999a) rankings, Southern European countries generally have the strictest arrangements while the Anglo-Saxon countries have the least restrictive — especially the United States.[108] Advanced CEE countries fall in between the two extremes (Riboud, Sanchez-Paramo, and Silva-Jauregui 2001). During the past decade, there has been no clear trend in this aspect of labor-market regulation: Some countries have eased restrictions, a few have strengthened them, but in most, arrangements have remained relatively unchanged. Table AIII.3 provides examples of termination arrangements for some OECD countries.

Measuring the degree of job-security protection afforded to regular employees is difficult, a fact that has been emphasized by many researchers (Betcherman, Luinstra, and Ogawa 2001). However, some consensus exists on its effects, based on studies of industrialized countries. Strict limitations on termination (for economic reasons) of regular employees, including generous severance pay and limitations on part-time and flexible employment, are associated with:[109]

- Lower labor turnover rates (hires plus separations);
- Lower aggregate employment levels; but greater numbers of long-tenure jobs;
- Lower labor force participation rates;
- No clear impact on unemployment levels; but longer average unemployment durations;
- More self-employment as a share of total employment;
- More nonstandard employment (for example, part-time or temporary), although there is less consensus on this; and
- Positive employment effects for skilled prime-age males but lower employment for women, young people, and less-skilled workers.

---

[108] While U.S. employers have no statutory limits on dismissal rights, in reality they do face some constraints because of court decisions and collective agreement provisions.

[109] There is a fair degree of consensus (though not complete) in the research findings in industrialized countries. The conclusions have been drawn from a range of studies including OECD (1999a), Nickell and Layard (1997), Elmeskov, Martin, and Scarpetta (1999), Lazear (1990), and Di Tella and MacCulloch (1999).

Strict job security for regular workers reinforces the same trends identified earlier in our discussion of hiring and contracting. A labor market with rules to protect job security — such as one with rules that restrict nonstandard forms of employment — has more stable jobs but also more long-term unemployment and nonparticipation than labor markets without these protections. Together, restrictive hiring and firing regulations increase the protection available for incumbent employees but reduce access to formal, paid employment. The greatest risk seems to be that these rules worsen inequality by protecting "insiders" at the expense of more vulnerable "outsiders."

The key debate concerns the magnitude of these impacts. At least in developed countries, the employment effects appear to be smaller than many economists would assume (e.g., OECD 1999a).[110] However, research in Latin American countries, where employment-protection rules tend to be very strong, has generally found much larger negative impacts on employment and inequality, including in Latin America (Heckman and Pages 2000)

In summary, statutory employer obligations toward permanent employees have been substantial (specifically regarding termination rights) in Russia, although this may change somewhat with the new Labor Code. Where obligations are large, the international experience indicates that the result is more informalization, and (by promoting voluntary quits rather than layoffs) potential reductions in the productive efficiency of enterprises. In OECD countries, employers often overcome high protection accorded permanent employees in the labor law through the use of fixed-term and temporary contracts. In Russia, as discussed above, these options are restricted, and employers have therefore resorted to wage arrears, administrative leave, and contracting in the informal sector.

The new reforms appear to moderate the excessive termination conditions. However, it is important that employers have the right to adjust their work forces to economic and technological realities. Unions should be consulted and given legitimate avenues of appeal but, ultimately, staffing should be at the discretion of employers.[111]

In the final analysis, however, explanations for employment rigidities, such as the low layoff rates, in Russia must go beyond any impositions of the law, particularly given that there appears to be significant mobility in some parts of the labor market. Reputational risk, poor incentives to firms to allocate labor efficiently, and weak enforcement of the law may also be important for explaining lack of downward adjustment of output to employment. This suggests that while legal reform is important, it will not in itself reverse the unusual patterns we have observed in the functioning of the Russian labor market.

---

[110] Again the measurement problems must be acknowledged and, in particular, the capacity of researchers to fully capture what is actually happening in the labor market. In this regard, it is noteworthy that the Di Tella and MacCulloch (1999) study, which uses a qualitative measure of employment protection, finds stronger impacts than virtually any of the other studies that attempt to use more formal, quantitative measures.

[111] Maleva et al. (2001) find that new code still imposes considerable costs on employers.

D. Wage Determination

Regulatory framework (pre-2001 Labor Code). Salaries in the U.S.S.R. were based on the unified Tariff Schedule of Wages and Salaries, which established wage supplements and coefficients depending on the region, occupation, and character of the work. In the budgetary sector, wages are still set centrally according to the Unified Tariff Table. This calculation is made by multiplying the minimal monthly wage by a coefficient that corresponds to the employee's qualifications. However, salaries outside the budgetary sector were deregulated in 1992 Enterprises may set wages independently and are bound only by minimum wage regulations and any applicable collective agreements (see below). There are some other restrictions. For example, the law states that workers in the North must be compensated with higher wages, given the arduous living conditions in that region. This practice is markedly different than in OECD countries, where wage setting is a function accorded to the market and collective bargaining arrangements, rather than to the state.

The new Labor Code largely continues existing wage regulations. What is new is that the Code now stipulates that the minimum wage for the whole territory of the Russian Federation cannot be lower than the subsistence minimum defined for a working-age individual. Although the state cannot guarantee such a level of a minimum wage immediately, it is assumed as a long-term goal per se. The subsistence minimum — an absolute poverty line based on a minimum basket of goods and services — is not an appropriate benchmark for a minimum wage. Different countries have different practices in establishing a minimum wage. In many countries, for example, it is negotiated by social partners and established thereafter by the Government taking into consideration many other aspects of the labor market. Moreover, since the cost-of-living and labor-market conditions differ enormously by region, a single federal minimum wage may not be appropriate for Russia; certainly, it will not reflect the large regional variations in subsistence minimums. The new Code also states that in order to increase the level of real earnings, wages should be indexed according to a consumer price index. In a market economy, wage levels (including the minimum wage) should be negotiated by social partners and individually between the worker and the employer. Especially in a period of deep economic recession, in order to maintain employment and avoid bankruptcies, it may be difficult to keep the level of real wages intact.

Current practice. Wage practices differ significantly by form of ownership. These differences include wage levels, benefits offered, the basis for determining wages, and the importance of variable pay (for example, bonuses) and unreported wages. However, some wage practices are universal. First, management almost always controls wage determination. As we will discuss later, collective bargaining rarely takes place and, with generally slack labor-market conditions, only highly skilled employees have any power to bargain as individuals. Second, another important aspect of wages concerns nonpayment. This includes some practices we have already discussed, such as unpaid administrative leave and wage arrears. There

Table III.4. Official Minimum Wage and Average Monthly Wage, 1995-2000

Years	Official minimum monthly wage (Rbl.)	Percent of average monthly wage due
1995	42.6	9.0
1996	72.7	9.2
1997	83.5	8.8
1998	83.5	7.6
1999	83.5	5.3
2000 (August)	132.0	5.7
2001 (Quart. 1-3)	300.0	9.7

Source: Russian Economic Trends, October 2000 (tables 5 and 6).

is also substitution of non-monetary for monetary compensation in the form of in-kind payments discussed earlier.[112]

Sectoral wage setting. In the last chapter we noted that the private sector pays a wage premium over the public sector. This is consistent with evidence from many transition economies, for example, Bulgaria, Poland, and Romania (World Bank 1997, 1998, and 2001) There are various reasons why wages are highest in the private sector. Clearly, labor productivity may be higher. However, as Clarke and Kabalina (2000) argue, a higher private-sector wage may also reflect a compensating differential because enterprises in the private sector offer less stability, require a more disciplined work environment, and provide fewer social benefits than employers in the state and privatized sectors. In fact, employees in private-sector firms are often denied legally prescribed benefits such as paid leave, sick leave, and health and maternity benefits. This is collaborated by Tchetvernina (2000) in their survey of employees (table III.5).

Pay differentials also reflect variations in how different types of enterprises set wages. As noted above, salaries outside the budgetary sector have been deregulated since 1992. In reality, wage deregulation has developed furthest in the de novo private sector (Clarke 1999). The private sector also relies much more on performance as a basis for setting pay levels. As table III.6 indicates, payments in the state and budgetary sectors are determined in 80 to –90 percent of cases according to time-based wage rates. In de novo private firms, on the other hand, almost half of respondents report that individual, collective, or enterprise outcomes (profit sharing) determine their wages.

Informal payments. As noted in the previous chapter, officially reported wages do not capture full wages paid to workers. Wage payments, especially in the private sector, are often made in two parts (Clarke 1999). First, there is the official, reported wage that is very low. This practice is abetted by the extremely low statutory mini-

[112] In the RLFS panel, 11 out of the 85 firms reported non-monetary payments in 2000. For these firms, these represented about 10 percent of total wages. At least for this panel of enterprises, the incidence of non-monetary compensation was much higher in 1996 and 1997 (Tchetvernina et al. 2001).

Table III.5. Percentage of Employees, by Sector, Reporting Guarantees Stipulated by Legislation or Contract Are Not Fully Provided, 1999

Guarantee either not provided or only partially	State	Privatized	De novo private
Paid leave	1.6	2.3	22.6
Sick leave	8.0	8.8	37.8
Overtime	29.6	47.3	50.1
N	558	771	884

Source: Tchetvernina et al. (2001).

mum wage. Second, there is the actual payment that is much higher than the reported wage. Actual payments can differ substantially from reported wages. Goskomstat (1997) has estimated the difference at 20 percent. Based on their 1999 survey of employees, Tchetvernina (2000) finds that over one-third of private-sector employees earn more than their registered wage. In 10 percent of these cases, actual payments are at least six times the official level (table AIII.4).

This practice offers tax advantages to employees on undeclared earnings and also allows them to receive compensation in the form of current cash, as tax rates are very high and future social benefits are uncertain. This practice raises concerns. For workers, their employment situation becomes vulnerable to arbitrary managerial discretion since they risk losing the unofficial wage component. From a public-policy perspective, this two-tier wage practice hurts public revenues and contributes to the general compliance problem characterizing labor relations.

Tariff structure. The Unified Tariff Table for public administration workers, using the norm of the minimum wage grade (tariff) for the whole salary grid, compresses the remuneration scale of budget employees.[113] This may have implications for the quality and quantity of staff in that sector, an issue that is being taken up in the public administration reform program of the Government. What is surprising is that despite its deregulation for non-state sector, this tariff system remains important for setting wages in the other sectors of the economy. In the 1996 Survey of managers of industrial joint stock companies and state enterprises, 95 percent reported that they used the tariff system in setting wages. Among the panel of 85 manufacturing enterprises (with no de novo firms), the role of the tariff system has continued to be important. In 1996, 68 percent of the firms reported that they either applied the state tariff scale directly or used it as the basis for their own wage scale; the corresponding figure for 2000 was 71 percent (Tchetvernina 2000).

The continuation of this practice runs contrary to expectations. One would expect that the use of the tariff would lose importance over time, rather than continuing or even increasing. It is unclear why this has happened. Perhaps employers and employees do not have a better way of determining wages given poor signals coming from the labor market. There are potential adverse impacts. The farther wage-setting

[113] Minimum wage grade was raised to Rbl. 450 on December 1, 2001.

Table III.6. Forms of Wage Payment by Sector, Kemerovo and Komi, 1997

Form of wage payment	State	Budgetary	Privatized	De novo	Total
	Percent of employees				
Piece wage, individual	9	5	13	19	11
Piece wage, collective	6	2	11	11	7
Time wage	81	91	68	53	76
Mixed (piece wage and time wage)	4	1	6	7	4
Percentage of profits (sales)	1	1	2	10	3

Источник: Clarke (1999, табл. 5.11).

is from market price, the less efficient is the market in allocating labor to its most productive use. This makes investment/allocation decisions by employers and employees suboptimal. For example, employees would be less likely to invest in human capital if wage differentials do not reflect productivity differentials.

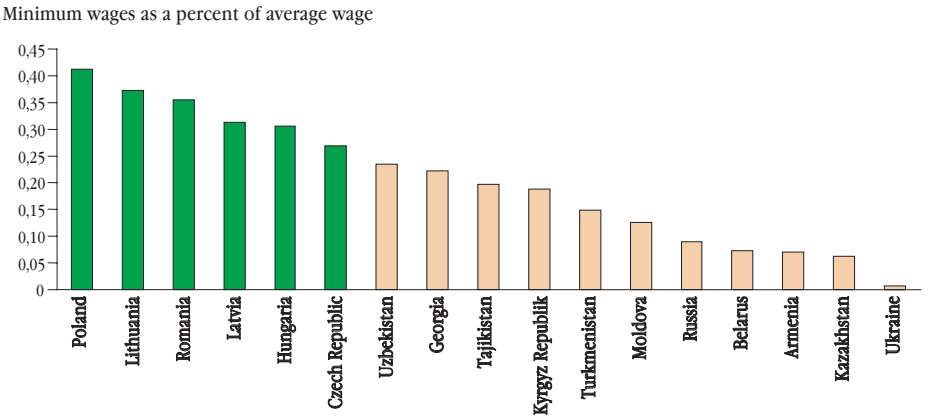
International evidence. Here, we focus on the determination and application of the minimum wage. Like the other aspects of labor-market regulation discussed in this paper, the role of minimum wages is controversial. The underlying idea is quite simple — to set a floor on what employers can pay in order to ensure that employees receive a "fair, living wage" and thus to support the incomes of low-wage workers and their families. While minimum wages can boost the earnings of low-income employees, they can also lead to unemployment where the minimum wage is above the market-clearing level and where it is actually binding.[114] The different views on minimum wage policies essentially hinge on the relative weight attached to these positive and negative effects. The controversy has heightened in recent years because of conflicting evidence regarding the actual employment impacts of increases in minimum wages.[115]

Minimum wage regulations can have several dimensions: (a) the level set; (b) coverage; (c) differentiation in the level (for example, by age, sector, region); (d) how the level is adjusted to reflect inflation; and (e) how the level is set (for example, by Government or by the social partners). Most (but not all) industrialized countries do set minimum wages but there is considerable variation in the details. The level set illustrates this variation. In OECD countries, in 1997 the adult minimum wage as a percentage of full-time mean earnings ranged from 28.8 percent in Spain and 34.9 percent in the United States to 51.1 percent in the Netherlands and 55.3 percent in France (OECD 1998). During the past decade, there has been a general decline in minimum-wage levels, both in real terms and as a percentage of average wages (OECD 1998, 1999b). In CEE transition countries, the minimum wages are lower than

[114] For a concise review of the theory regarding the employment impacts of the minimum wage, see OECD (1998).

[115] The literature summary in this chapter is based on OECD (1998).

Figure III.1. Minimum Wage as a Proportion of Average Wage, Transition Countries



Source: World Bank (2000b).

in OECD countries and are approximately 30 percent of average wage (Rashid and Rutkowski, 2001) (figure III.1).

Not surprisingly, the labor-market impacts of minimum wages depend heavily on the level at which they are set and how well they are enforced. In some countries, the level is too low to be binding (that is, to affect wage and employment decisions). The general trend toward declining real minimum wages presumably has led to weakening of its impacts on employment and earnings.

Most of the empirical research on the impacts of minimum wage is based on the experience of industrialized countries, especially the United States. Careful consideration is needed when generalizing this experience to Russia, where enforcement is weak and the minimum wage level is set too low to matter in the labor market. However, we can review the industrialized country experience to understand the effects of minimum wages when they are binding and enforced.

Much of the debate about minimum wages concerns their impact on employment levels. Currently, at least in the United States, there is a lot of controversy about this effect (for example, Neumark and Wascher 2000; Card and Krueger 1995, 2000). An international review by the OECD (1998) based on nine member countries concluded that there is a significant negative employment effect for teenagers — in the neighborhood of a 2 –to 4 percent decline in employment — for a 10 percent increase in the minimum wage. This impact then diminishes and effectively disappears for the prime-age group. On an aggregate basis, then, researchers tend to find modest or insignificant employment effects; however, negative effects become more significant once analysis focuses on workers actually constrained by the minimum wage (for example, youths and other low-wage workers).

Can minimum wages reduce inequality and poverty? On the distributional side, studies (almost exclusively in industrialized countries) have found that higher minimum wages do reduce the dispersion of earnings and the incidence of low pay. They also tend to narrow wage differentials between demographic groups (for example, age and gender). In some developed countries with large numbers of "working poor," increases in minimum wages have had modest impacts on poverty; however, the OECD (1998) has concluded that minimum wages can play only a relatively minor role compared with other factors (for example, macroeconomic conditions, generosity of public assistance).

At its current level, the Russian minimum wage can hardly be characterized as an instrument of wage policy. Its role in alleviating poverty is extremely limited, and it does not provide any adverse effects on unskilled workers.

In summary, Russia has a very low minimum wage that is not currently binding in any sense. Given its low level, the minimum wage could be raised substantially to address poverty among low-end workers without creating negative employment incentives, even for young or unskilled workers. There are several caveats. The minimum wage will become a more relevant policy instrument as the economy is formalized and enforceability improves. Under these conditions, the ultimate level of minimum wage should be evaluated against the average wage and kept sufficiently low (about 30 percent or so) so that it does not create adverse work incentives. Regional differentiation in the minimum wage should be considered given the large variation in average wages in Russia. The provisions in the new Labor Code that create public obligations for guaranteeing and creating a single nationwide minimum wage, and keeping its real value fixed, are worrisome in this regard.

The continued use of the tariff, despite its deregulation, suggests that wages do not convey important signals about worker productivity to employers or about labor supply and demand. Indeed, despite recent gains in wages as signals of worker productivity, wage practices such as wage coefficients for hiring Northern workers, nonreporting of wages, and the compressed public wage scale continue to make wages a noisy indicator of the opportunity costs of labor in Russia. The new Labor Code does not make any significant changes in this area.

E. Trade Unions, Employer Organizations, and Collective Bargaining

Regulatory framework (pre-2001 Labor Code). In the Soviet era, virtually all workers belonged to trade unions.[116] However, the function of unions differed greatly from what they typically do in market economies. Their major role was to provide social services, recreation and culture, housing, consumer goods and services in short supply, and sick pay. They were also part of the official apparatus and had various functions associated with the administration of the labor and social insurance

[116] For a discussion of trade unions before and in the early years of the transition, see Hoffer (1997).

systems. At the enterprise level, unions were a partner of management and mobilized workers for production. In fact, enterprise directors could be union members. Collective bargaining over the terms of employment (including wages) did not take place.

With the transition, unions lost their "quasi-state" functions (for example, to introduce draft legislation, impose penalties for labor law or safety violations, decide labor disputes, administer social insurance). During the 1990s, legal reforms were introduced to provide for the basic industrial relations concepts in a market economy. These included the right to form independent unions, collective bargaining rights for unions and employers, the right to strike (but not lockouts), and the exclusion of employers from union membership or bargaining for workers. A tripartite commission was also established (discussed below).[117]

As Hoffer (1997) points out, with the changes in the labor regulatory regime, the Russian model changed from one where the state structured all aspects of the employment relationship to one where the state role was to establish minimum standards with management and labor to "flesh out the framework provided by law" through the negotiation of the specific terms of employment. In principle, this is an appropriate model that follows the practice of advanced countries. However, the capacity to carry it out in the current Russian context is inadequate because of the weaknesses of labor institutions, including unions, management, and (as we will discuss below), enforcement and dispute-resolution institutions.

A framework for collective bargaining exists in Russia, as in other market economies. The Law on Collective Agreements defines a framework for agreements at different levels. At the highest level, the General Agreement sets general principles regulating labor relations in the Russian Federation. It is signed every year by the Russian Tripartite Commission, which includes representatives of the Government, the unions, and employers. The Law on Collective Agreements also provides for tripartite regional, sectoral, and professional agreements. Agreements also can be negotiated at the level of the enterprise. As we will see in the next subsection, however, little real bargaining occurs, and the wages and working conditions are rarely determined in any real or enforceable manner by collective agreements

In the new Code, provisions remain for collective bargaining at all of these levels. The Code does change procedures for determining bargaining representatives for employees. These new rules specifically pertain to what is considered a "local union" as well as to how a bargaining representative is selected where multiple trade unions exist. These provisions may have the effect of limiting the opportunity for small and independent unions to represent workers.

Current practice. Although membership is no longer universal, the most commonly reported union density rate of 75 percent is nevertheless among the highest in the world (ILO 2000a).[118] The trade unions are consolidated into trade union centers,

---

[117] The Constitution guarantees that everyone has the right of association, including the right to create trade unions. Russia has ratified the ILO conventions 87 and 98 regarding freedom of association and collective bargaining.

[118] This figure represents union members as a share of the total nonagricultural labor force. The ILO (2000a) reports this density for 1995.

Table III.7. Who Protects the Employees? Opinions of Employees, Employers, and Trade Union Leaders, 1999

	All enterprises		Enterprises with trade unions		
	Employees	Employers	Employees	Employers	Union leaders
	Distribution (percent)				
Employer/manager	38.9	64.0	34.7	62.4	26.7
Trade union	6.2	9.1	11.2	16.8	49.3
Workers themselves	25.9	6.5	24.9	5.6	12.2
Labor contract	–	10.4	–	11.2	–
Nobody	22.6	3.9	23.6	3.2	4.6
Other	6.4	6.1	5.6	0.8	7.3
Total	100.0	100.0	100.0	100.0	100.0
N	2213	278	1049	132	132

Source: Tchetvernina (2000).

the largest being the FNPR (Federation of Independent Trade Unions of Russia), which was founded in 1990 as the ancestor of the official Soviet Central Council of the Trade Unions. Other trade union centers emerged during the 1990s as new independent unions were formed.[119] The high union density figure greatly overstates the health of the labor movement in Russia and its capacity to represent workers. Surveys suggest that membership levels are much lower than the cited numbers; according to some studies, membership actually declined by 25 percent in the 1990s (Wesolowsky 2000. There is no doubt that many economic and social trends are acting against unionization. Most notably, unions are almost unknown in the de novo private sector. (table III.7). The financial situation of the trade unions is also difficult because of sharp declines during the 1990s in membership dues received (Hoffer 1997).[120]

How well have unions represented workers?[121] According to the 1999 survey carried out by Tchetvernina (2000), both employees and employers rated unions poorly in terms of their performance in representing the interests of workers (table III.7). In unionized establishments, only 11.2 percent of employees and 16.8 percent of

[119] Recently, Russian trade unions have become integrated into the international labor movement because the FNPR and two smaller unions - All Russia Labor Confederation (VKT) and Russia's Labor Confederation (KTR) have become affiliates of the International Confederation of Free Trade Unions, the world's largest trade union body.

[120] Trade unions, especially the FNPR, do have substantial assets in, and receive important income from, real estate from the Soviet era.

[121] These latter unions originated largely as protest movements. While they played important roles in the last years of the Soviet era and in some industries during the transition (for example, mining), they have not been able to consolidate themselves as a real national alternative to the Russia's Federation of Independent Trade Unions (FNPR) (Hoffer 2000).

employers identified unions as the primary protector of employee interests. Given these responses, table III.7 suggests that union leaders may have an unrealistic sense of their own role; still, one-half did not believe that their unions were the primary protectors of workers. According to these results, then, workers must rely on themselves or management for protection. A sizable proportion of employees believes that nobody is representing their interests.

Despite the provision in Russian law for full collective bargaining rights at national, sectoral, regional, and enterprise levels, little real bargaining occurs. The nationally applicable General Agreements largely consist of nonenforceable statements of intent on social and labor policies (Denisova, Friebel and Sadovnikova 1998a; Hoffer 1997). According to Denisova, Friebel and Sadovnikova (1998a), sectoral agreements are often formal and merely reproduce legislative norms.[122] While some regional agreements have more substantive content, wide variations exist (Hoffer 2000).

These framework agreements have generally not been an instrument for collective bargaining of wages and working conditions. Most observers point to the lack of employer representation as a major stumbling block. In many instances, agreements are signed between governments and unions with no representative of the employers.[123] This lack of representation reflects both tradition (where the state was the employer in labor agreements) and weak employers' organizations.[124] The upshot, however, is that employers typically do not take responsibility for the content of these agreements and, even where terms of employment are stipulated, enforcement is a major problem.

At the level of the enterprise, the available evidence suggests that contracts do little to represent worker interests. In a 1999 establishment survey, 48 percent of union leaders said that their collective agreements did not protect the socioeconomic interests of their workers (Tchetvernina 2000). This lack of protection partly reflects the contents of the agreements, which do not always specify the terms of employment (including wages). It also reflects the inability of unions to ensure their enforcement. In the 1999 survey of enterprise trade union leaders, only 20 percent reported no violations of the collective agreement. The most frequently violated provisions were wage arrears (cited by 59 percent of union respondents); wage increases (24 percent); work safety and conditions (21 percent), and benefits (11 percent) (Tchetvernina 2000)

Simply in terms of coverage, 1996 Ministry of Labor data indicated that only about 18 percent of enterprises were covered by collective agreements. And this figure masks wide variations by region and type of enterprise. Collective agreements are less prevalent where economic restructuring has occurred more rapidly. They are rare in

---

[122] Sectoral agreements are generally not binding for enterprises that do not sign the agreement.

[123] For example, only 17 of the 58 sectoral agreements in 1996 were signed by employer representatives (Denisova, Friebel and Sadovnikova 1998a).

[124] Employers' associations are beginning to emerge although they have a long way to go, especially in terms of representing the private sector. According to Denisova, Friebel and Sadovnikova (1998a), more than 60 employers' associations exist, with about 30 to 35 functioning in practice.

smaller enterprises and in the de novo private sector. Just slightly more than 5 percent of Moscow's registered enterprise trade unions had managed to sign a collective agreement that would be recognized as a valid document by the courts (Hoffer 2000). He reports that the city's trade union federation explains the low level of collective bargaining as the result of local union representatives not knowing their legal rights and being too close to management. Tchetvernina. (2000) found in 1999 that 80 percent of enterprise union leaders favored the traditional Soviet practice of including management in unions. Hoffer (2000) also argues that management intimidation is an important factor in the low level of union activity and collective bargaining. There are currently a number of cases before the ILO's Committee on Freedom of Association.[125]

International evidence. Collective bargaining can play an important role in determining wages (and other conditions of work). It is well known that, *ceteris paribus*, unions can raise wage pressures, and wages bargained collectively are generally higher than those bargained individually. Economists also focus on how responsive wages determined through collective bargaining will be to labor-market conditions. The characteristics of the bargaining process (that is, the structure in which bargaining is carried out) can matter as well as the extent of bargaining. So researchers have attempted to look at both dimensions. Studies have tended to use two measures of the extent of bargaining: trade union density (union members as a percentage of the work force) and collective bargaining coverage (percentage of workers having wages determined by collective bargaining). They have also looked at two dimensions of bargaining structure: the degree of centralization and the degree of coordination.

There are major differences across countries in terms of the extent of bargaining and the bargaining structure. These differences reflect both industrial relations laws and culture and practice. The extent of collective bargaining is shrinking in many countries, at least on the basis of union membership trends (table AIII.6). In terms of bargaining structure, there has perhaps been some shift away from centralized and coordinated approaches to more enterprise-level bargaining. In CEE transition countries, for example, most bargaining occurs at the level of the firm. However, this is not a universal trend (ILO 2000a)

Economists also test the hypothesis that representation of worker voice through unions and collective bargaining can reduce discrimination. And by instituting dispute resolution mechanisms, reducing arbitrary management decisions increases job tenure and investment in training. It can also help improve work safety conditions. These positive effects of unions would contribute to greater labor productivity. However, unions can have monopolistic tendencies, pushing up wages more in their own sector than in the economy as a whole, thus increasing wage disparities. Still, this is not always negative if "discrimination" of some workers leads them to accept lower wages than other workers with similar skills. In addition, unions can sometimes resist

---

[125] According to reports by the ICFTU, there have been numerous cases of obstruction of lawful union activity, including alleged incidents of union activists being murdered. (See <http:/www.icftu.org>).

reforms, such as restructuring of enterprises, as in Latin America. Unions may not always resist reforms. For example, Poland and South Africa are examples where unions had a very positive impact of driving their respective countries toward political and economic freedom.

An extensive survey of the literature on the economic and employment impacts of unions and collective bargaining on the basis of the experience of OECD countries (Aidt and Tzannatos 2000) and other countries (World Bank 1995)[126] and Nickell and Layard (1997) includes the following conclusions:

- Collective bargaining increases wages for covered workers by 5 to 15 percent (depending on the country). The size of this premium increases when total compensation is measured because unions also bargain for better benefits.
- This wage pressure, all else being equal, could raise unemployment, but is offset in some countries by effective coordination of wage bargaining by unions and firms. However, this coordination can be fragile and break down. If it does, as in the case of Sweden in the 1990s, then strong unions can have very adverse impact on wages.
- At the aggregate level, bargaining coverage (but not union density) tends to be associated with higher real wage growth but lower employment (and in some studies, higher unemployment).
- Unions and collective bargaining compress the wage distribution and particularly the differential between skilled and unskilled workers. Countries with union (density) tend to have lower earnings inequality.
- There is no consistent evidence on the impacts of the degree of centralization in collective bargaining.
- Unions can also reduce discrimination against women, ethnic groups, and other minorities.
- Job tenure is longer in firms with unions, and more training is carried out in unionized firms, promoting growth in labor productivity.
- Unions increase compliance with worker safety and health standards. When combined with overall improvement in industrial relations, this helps increase labor productivity.
- Unions can also engage in monopolistic behavior and opposition to reform, and reduce productivity growth. In the United States and Britain, unions are negatively associated with productivity growth. In continental Europe, this productivity impact is minimal, suggesting that effective coordination can negate the adverse impact of unions.
- While coordination between employers' organizations and unions seems to have improved macroeconomic and labor-market performance in the 1970s and 1980s, the evidence is less clear in the 1990s.
- Competitive product markets and laws that give workers the right to opt for the union of their choice or not at all also enhances the positive impact of unions and negates their adverse effects.

[126] World Bank (1995).

In summary, Russia has made some progress in making the transition in industrial relations from a regime designed for the planned economy to one appropriate to a market economy. For example, some important pieces of the legal framework are now in place. However, there is a long way to go, particularly in terms of developing the institutions that underpin effective industrial relations. Unions or the bargaining structure do not adequately reflect the voices of employers or workers. International research has demonstrated that worker voice, embodied in the true representation of workers and employers in the bargaining process, can improve training and health and safety in the work place, thereby contributing to productivity gains and improvements in worker welfare. In the new Code, provisions remain for collective bargaining at all of these levels. The Code does change procedures for determining bargaining representatives for employees. These new rules specifically pertain to what is considered a "local union" as well as how a bargaining representative is selected where multiple trade unions exist. These rules may have the effect of limiting the opportunity for small and independent unions to represent workers.

Reaching the goal of modern industrial relations will require true worker and employer representation in unions and collective bargaining. However, unions can also raise wage pressures, and all else being equal, raise unemployment. Ensuring that product markets are competitive should help contain wage pressures by unions. There is no consensus in the literature about whether centralized or decentralized bargaining is more efficient. But given that Russia now has a very centralized regime that is not achieving genuine bargaining outcomes, encouraging more decentralized bargaining where there is no existing institutional inertia might be considered. Achieving this objective will require developing capacity of unions and employers, as well developing enforcement and dispute-resolution institutions. We discuss these institutions below, in the final section of this chapter.

F. Enforcement and Dispute Resolution

Regulatory framework (pre-2001 Labor Code). The principal responsibility for monitoring and enforcement of labor regulations rests with the Federal Labor Inspectorate under the MLSD.[127] Table AIII.7 summarizes the activities of the labor inspectorate between 1994 and 1998. It shows a large increase, especially during the early years of this period, in the inspections carried out and in the number of violations found. However, it is generally understood that labor legislation is still violated on a massive basis. Note from table AIII.7 that, despite the large numbers of infringements (more than 2 million a year), only a relatively small number of employers are actually penalized in some way. The resources of the Federal Labor Inspectorate are inadequate for fulfilling its mandate. As table AIII.7 indicates, in 1998 there were just 4,720 staff labor inspectors to cover a work force of 65 million workers and more than 700,000 establishments.

[127] The Labor Code also provides for labor inspectorates to be established by other bodies, including trade unions.

The new Code does not appear to make major changes in this area. A positive aspect of the approach is that most conflicts are intended to be resolved at the enterprise level, which should minimize costs and time requirements. On the other hand, the system creates a cumbersome practice of reconciliation of differences at the enterprise level. The timetable for hearing and resolution of labor disputes is very tight. Each dispute should be heard within 10 days after it is filed, and should be executed within 3 days but after 10 days allocated for an appeal. On many occasions, the worker can and has to resolve a dispute directly in court, These include periods when the worker is not satisfied with the resolution of the commission, the issue of rehabilitation to work is on the agenda, the date and cause for dismissal are appealed, the worker is on transfer to another job, or the workers is on payment for an idle period. Although the Code provides labor inspectors and inspectorates significant privileges and rights to monitor the execution of labor legislation, their role as mediators, conciliators, and arbitrators of labor disputes is diminished if not nonexistent.

Current practice. Weak enforcement in Russia is evident in practice. As noted in the previous chapter, nonpayment of contractual obligations, or wage arrears, spread to nearly 60 percent of all workers in 1998 and, despite declining, continues to affect a significant share of the work force. Other contract violations are also evident. In 1999, about 48 percent of the individuals on administrative leave did not get any cash compensation during their absence despite regulations requiring they receive two-thirds of their regular pay (Goskomstat 2000b) Most worrisome, contractual violations are more prevalent among workers with the least bargaining power. Thus, limited enforcement means that some workers are more affected than others.

Legal restrictions are also binding on particular firms. Formal termination procedures seem to apply relatively more to more "visible" entities. Clarke (1999) finds that the share of employees in state and budget entities that believe they can be easily dismissed without formal grounds is much lower than the share in privatized firms, and both are well below the share of such employees in de novo private firms (figure III.2).

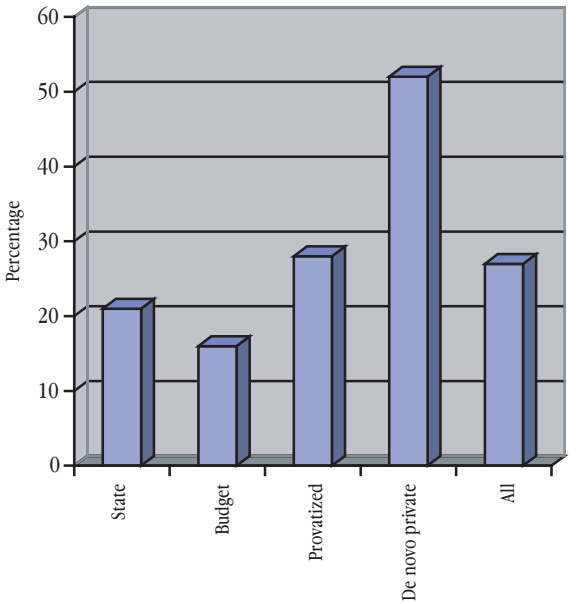
A recent study by Pinto et. al. (2001) of three regions also found that the labor law was binding on the labor reallocation decisions of half the surveyed firms. While not conclusive, this evidence suggests that limited enforcement mechanisms do not create a level playing field for all firms.

Why is enforcement weak? There are many reasons for the weak enforcement of legislation and the basic rights of workers. Certainly, these problems are indicative of the more general problem of compliance that plagues many aspects of life in Russia. Moreover, in the past it has been exacerbated by the current high levels of unemployment and weak demand for many types of labor that afford employers a great deal of discretionary power in managing their work forces. As well, there are specific problems related to labor-market regulation. One involves the Soviet tradition of subordinating workplace concerns, such as occupational health and safety.[128]

---

[128] In that tradition, which still exists, dangerous or unhealthy working conditions are compensated for by special wage premiums, additional leave, free meals, and early retirement. Many workers have (albeit short-run) incentives not to seek improved conditions.

Figure III.2. Percentage of Employees Reporting They Can Be Dismissed without Any Formal Grounds by Sector, Year



Source: Clarke (1999, table 5.3).

More importantly, the institutions for the enforcement of legislated worker rights and labor contracts, and for the effective resolution of labor-management disputes are ineffective or nonexistent in Russia. Parties can pursue claims through the legal system. However, labor courts do not exist and cases must be brought to civil courts. Although procedures stipulate that labor cases be handled quickly (within a month at most), they often take much longer. Moreover, in most situations, employees do not have legal representation for financial reasons (Denisova, Friebel, and Sadovnikova 1998a). The courts also face a major challenge in simply handling the huge volume of labor cases. The flood of unpaid wage complaints exacerbated this situation in the mid- to late 1990s. In 1997, 2 percent of the labor force was involved in lawsuits with their employers — 97 percent over unpaid wages. In that year, the civil courts heard more than 1.3 million wage-payment cases, representing one-third of all lawsuits.

In these unpaid wage cases, the court almost always has decided in favor of the employee (99 percent in 1997).[129] However, court decisions were often not enforced,

[129] The court decisions regarding other types of labor disputes were also generally in the employee's favor but not overwhelmingly so. For example, between 1994 and 1997, two-thirds of dismissal-related cases were decided in favor of the employee (Denisova, Friebel and Sadovnikova 1998a).

and many workers did not receive compensation (Denisova, Friebel and Sadovnikova 1998a). The difficulty of this situation was compounded by the fact that a substantial share of unpaid wages was in the government sector. As chapter I indicated, economic growth (hence improvement in the bargaining power of workers) and the criminalization by the Government of wages arrears in 1999 has led to a significant decline in wage arrears both in absolute terms and as a share of the total overdue payables of enterprises, but arrears still remain sizable in 2001 and it is obvious that this problem has not disappeared.

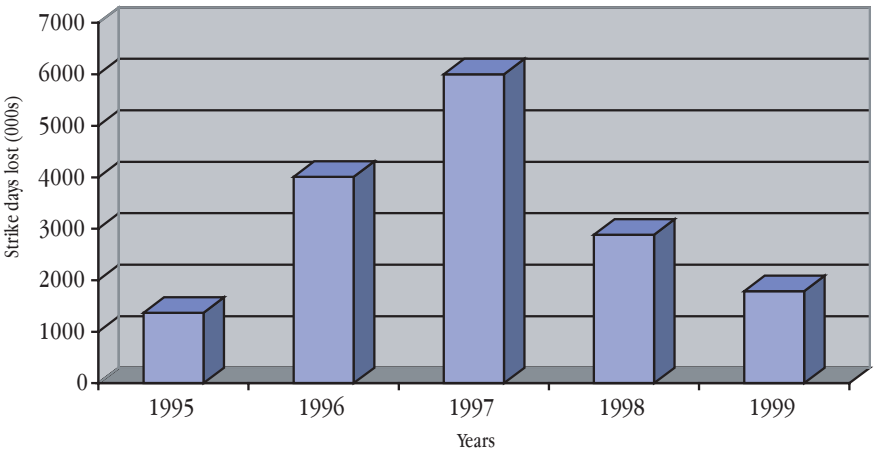
Procedures also exist for enterprise-level mediation and arbitration committees to address the enormous number of alleged labor violations and other workplace disputes. These committees include representatives of both the workers and the enterprise. However, available evidence suggests that neither employers nor employees consider these committees to be effective mechanisms for resolving disputes. Table AIII.8 summarizes data from Tchetvernina (2000) on which mechanisms the parties have used to resolve a labor dispute — most often related to wages. As the table shows, there are some differences between employers and employees. However, there is agreement in that only a very small number have relied on the available dispute-resolution institutions: labor-management dispute committees; trade-union committees, or the courts.

Not unexpectedly, survey data suggest that this situation does not lead to reasonable outcomes, at least from the worker's perspective. Note from table AIII.8 that 44 percent of employees indicated that the conflict had not been resolved. In another survey by Tchetvernina (2000) with a much larger sample of employees (n = 2213), 37.2 percent reported that they do not seek assistance anywhere when faced with a labor conflict.

Finally, the Federal Law on Collective Bargaining Procedures gives employees the right to organize strikes when disputes have not been resolved or when employers have not fulfilled the terms of the resolution. Lockouts, however, are not permitted. In recent years, the major reason for strikes has been unpaid wages, and the level of strike activity has roughly reflected the trends in wage arrears, peaking in 1997 and declining in the past couple of years (figure III.3). In their survey of enterprise trade union leaders, Tchetvernina (2000) have found that only a small number view strikes as an effective means of defending workers' interests. However, between 1998 and 1999, the percentage taking this view increased significantly (from 12.5 percent in 1998 to 25.2 percent in 1999). Perhaps the relative success of labor strikes over the wage arrears issue has had a demonstrable effect on union leaders.

International evidence. Compliance with labor laws and valid labor contracts and the resolution of disputes represent important elements of the labor-market regulatory framework in OECD countries. Why are these institutions important aspect of labor-market regulation in OECD countries? Enforcement of contracts (written or oral) improves both consumption and production efficiency. If contracts are not enforced, then there is a time inconsistency problem. At any time after the contract is negotiated, either party that finds that it can obtain better terms through reneging and renegotiating terms will do so. Renegotiated terms would favor the party that has the greatest bargaining power at any one point in time. This is consistent with evidence on contract violations in Russia. The

Figure III.3. Number of Person-Days Lost in Strikes, 1995-99



Source: Russian Economic Trends, October 2000, table 5.

ensuing income uncertainty for workers and employers reduces investment in human and physical capital and work effort for workers (Rashid and Townsend 1994).

Perhaps most importantly, labor contracts are the most important contracts for most individuals. When those contracts are not respected and enforced, this reduces confidence in other labor and non-labor contracts into which the individual might enter. North (1990) has argued that these are critical institutions in promoting impersonal exchange, which in turn explains much of the differences in economic growth and performance. Nonenforcement of labor contracts in Russia are, by this reasoning, inimical to the healthy development of a market economy.

Unlike the other issues covered in this chapter, there is little empirical work on the economic or employment impacts of different enforcement arrangements or dispute resolution. However, there is an emerging best practice.[130]

Enforcement. International best practice in enforcement has been undergoing important changes over the past decade. Much of the innovation has taken place on the occupational health and safety front but it applies to a wide range of compliance issues. These changes reflect new ideas about the economic impacts of compliance — that is, growing emphasis on the longer-term competitive advantages of healthy, safe, and legally compliant workplaces as opposed to the short-run benefits of undercutting competitors. New approaches are also emerging in response to the increasing complexity of enforcement in the labor field and to the stretched resources of inspection services everywhere. Innovations involve an emphasis on technical assistance as opposed to sanctions, using enterprise compliance plans as benchmarks for improving conditions, and involving the social partners.

[130] This section is drawn from Betcherman, Luinstra, and Ogawa (2001).

The new approaches do not exclude sanctions because the threat of their imposition remains essential for demonstrating the rule of law. However, the experience in OECD countries, particularly with respect to occupational health and safety, underlines the benefits of involving employers in developing their own policies and implementation plans. This can save on the resources required of the inspectorate and it increases the likelihood of compliance by employers who "own" the strategy. Inspectors can then judge the enterprise's performance against its own plan that is specific to its needs and circumstances (as opposed to the generality of legal requirements). Some countries require all enterprises over a certain size (for example, 50 employees) to prepare an annual plan on improving working conditions or to report each year to the labor inspectorate on progress made (Hammer and Ville 1998).

This evolving approach to compliance still places important obligations on Government. It must develop a clear framework of rights, obligations, powers, structures, and mechanisms for enforcement. An effective administration and field inspectorate is necessary, although the role of inspectors is changing with the transition from sanctions to technical assistance and support. Rather than simply inspecting premises and prosecuting statutory violations, inspectors take on a more "service-minded" approach in which they work with the enterprise to resolve concerns and agree on a plan of action. Advisory, educational, and mediating skills become more important (Hammer and Ville 1998).

One important set of issues concerns the resources required for enforcement and the appropriate balance between protection and costs. Many OECD countries have developed standards based on "reasonable practicability" and "disproportional measures" — that is, that costs of prevention must be in proportion with the risks (Von Richthofen 1999). In terms of the source of funds for financing labor protection, the general practice is that costs should be borne by employers. In many countries, preventative activities and inspection services are financed from the social insurance fund. The ILO recommends against funding these activities through fines because this will inhibit the inspectorate's promotional/educational role and create incentives for sanctions (Hammer and Ville 1998).

One challenge faced by all countries relates to where inadequate resources (for example, limited finances, stretched inspectorates) should be targeted. Hammer and Ville (1998) contend that large employers and the worst violators need to be the priority. To reach the rest, including the huge numbers of smaller enterprises, governments are trying a number of alternatives: involving other organizations (such as chambers of commerce, trade unions), using the media for national educational campaigns, targeting inspections, and establishing advisory services or accrediting private advisory service providers. Some governments (for example, Zimbabwe, Japan, the EU) subsidize or provide tax incentives to small and medium-size enterprises engaging in preventative measures and/or during the transition to new regulations.

Dispute resolution. Effective dispute resolution relies on three key principles. First, prevention is always better than resolution. As discussed above, adequate enforcement of labor laws goes a long way toward preventing labor disputes. Second, if a dispute is unavoidable, the parties to a dispute ought to attempt to resolve it themselves.

Third, if a dispute cannot be resolved, third-party intervention ought to involve the disputing parties as much as possible (Heron and Vandenabeele 1999).

In OECD countries, there has been increasing experimentation with approaches to dispute resolution that improve accessibility and minimize cost and time burdens. These innovations generally involve a move away from court-based procedures and adversarialism and toward alternative noncourt approaches that emphasize fact-finding, conciliation, and arbitration. Many of these newer approaches to dispute resolution build on the expertise of industrial relations specialists as opposed to legal experts. There is also growing interest in approaches that place the primary responsibility for the resolution of disputes with the social partners (that is, management and labor), with the Government playing a role of catalyst and resource (for example, through an advisory service such as the British Advisory, Conciliation, and Arbitration Service) (Thomason 1993).

The dominant innovation in many countries over the past half-century has been the introduction of administrative labor tribunals as an alternative to litigation. Typically, legal review of the decisions of these tribunals is available through the court system. One trend with administrative labor tribunals has been to promote an "investigative" rather than "adversarial" approach. This is especially successful where the representation of one party (usually the employee, especially in nonunion situations) either is absent or weak. Investigative approaches are characterized by (a) the active role of the tribunal authority or mediator in prior investigation and leading discussion during the hearing; (b) the lack of legal, adversarial processes such as cross-examination of witnesses; and (c) representation by industrial relations specialists instead of lawyers (Clark 1999).

Another related innovation is "extra-judicial conciliation," which has been used, for example, in Chile to expedite dismissal-related disputes. Labor inspectors can hear dismissal claims in order to determine the legality of the dismissal and the amount of wages/severance/welfare benefits due. Hearings inspectors can summon both the employer and employee to appear. This process has been cited as a "good practice" in labor law administration by the ILO (2000b).

Alternative dispute resolution approaches (that is, that do not involve court procedures) have a number of advantages. They can be fast, informal, and simple without requiring expensive technical expertise. As well, they give the parties control of the process; for example, both generally must agree on "neutrals" such as conciliators, mediators, and arbitrators. By definition, alternative dispute resolution is less antagonistic and can preserve working relationships. Since settlements are not usually in the public record, they also protect the privacy of the parties.

There are some disadvantages, however. One is a lack of transparency. Also, due process considerations, including rules of evidence, the right to representation, the right of appeal, and other basic court procedures, are not a part of these alternative dispute resolution approaches. These considerations have been relevant in the transition countries of Eastern Europe where both workers and employers have been concerned about the predictability and legitimacy of resolution outcomes — and, as a result, have tended to continue to rely on court procedures. However, to address such concerns, some countries and organizations have developed guidelines such as

the Due Process Protocol adopted by the American Bar Association to ensure that the rights of each party are protected. Despite these concerns, alternative dispute resolution is largely considered a fair and effective means of resolving employment disputes and of reducing the backlog in courts and government-sponsored labor tribunals (Zack 1997).

In summary, enforcement and dispute resolution pose major challenges for Russian policymakers, employers, and labor. The failure of the existing institutions perpetuates an environment where too many employers can violate laws and contracts with impunity; where there is little access to viable means to resolve disputes; and where employees too often expect that their concerns will be dismissed. The consequences of the weak institutional framework for industrial justice are exacerbated in a slack labor market, and while disputes and contract violations dissipate when economic activity increases labor demand, workers remain vulnerable to their re-emergence in times of economic slack. The new Labor Code does not appear to significantly change this framework.

Summary and Conclusions

Labor-market regulation in Russia is restrictive in law but not in practice. Labor-market regulation in Russia has been and largely remains unrealistically strong and inappropriate for a market economy. It imposes a lot of costs of worker protection on employers. However, for many firms and workers, in practice labor regulation is completely bypassed, so that the labor market is virtually unregulated.

Has the Labor Code impeded restructuring in Russia? The weak enforcement of the restrictive labor law, coupled with evidence of significant labor flows before and after the crisis, indicate that the Labor Code has not been a major factor in preventing labor redeployment in Russia. Reputational risks of employers and other poor incentives to managers for laying off workers may also be at work in reducing the pace of layoffs earlier observed in Russia. The weak regulation of the labor market may have helped employment flexibility, but it also appears to have had tradeoffs in promoting informalization of the economy (through its avoidance), lower worker productivity, and reduced worker welfare (for example, low wages, and growth of in-kind substitutes and wage arrears). What can be done? The enforcement of restrictive law is not the solution. Rather, reducing excessive restrictions and increasing enforcement should be the focus of future efforts. The new Labor Code provides some improvements but more needs to be done, including providing more freedom to employers in deploying their work force.

Moving to a flexible labor code that is fully enforced. A strict labor code without enforcement leads to violations of labor rights and reduces the welfare of workers below acceptable levels, and impedes labor productivity. A strict code with full enforcement will improve worker welfare but impose high costs on employers and restrict the ability of the labor market to adjust to economic realities, also limiting economic productivity. The challenge for Russia is to move from a labor regulatory framework that is restrictive and not enforced, to one that is flexible and fully enforced.

The following priority actions would reduce excessive protection to workers offered by the legislative framework within the firm but, at the same time, would begin to strengthen the role of institutions in allowing workers a voice to ensure that basic rights are protected. These changes need to be complemented by a strong enforcement regime (dispute resolution, labor inspectorates). Social protection for workers, beyond the basic rights offered through labor legislation and more effective industrial relations, could be achieved through active and passive labor-market programming. Reform strategies in this area must therefore be made in concert with those in the social-protection area. (We take up social protection for workers in the next chapter).

Considering the existing laws, institutions, and actual practices, and in light of the international experience, priorities could include the following:

- *Reducing excessive rigidity in the Labor Code*. The new Labor Code appears to make important progress in this area by removing the union veto on dismissals and implementing advance notice and effective appeals procedures. Some progress also has been made in providing for more flexible hiring arrangements, especially with respect to fixed-term contracting. More could still be done. Increasing flexibility in hiring and dismissals should bring more employment "out of the shadows," and international experience tells us that it should most help vulnerable segments of the workforce (for example, women and youths). It is true that these amendments will reduce formal job security and, as noted above, it is important that they be coupled with improvements in the social-protection system for workers (see Chapter IV).
- *Continuing to increase minimum wages*. The current level plays little role in determining wage floors. Higher minimum wages (given the low base) are unlikely to have negative employment effects, and would reduce poverty among low-wage workers. The level of minimum wage should not exceed a low share of average wage (for example, 25 to 30 percent) to ensure that work disincentives are prevented. However, the minimum wage will not be an effective policy instrument until the economy formalizes and enforcement improves. The linkage of the minimum wage to the subsistence minimum could lead to fiscal and incentive problems, particularly in low-wage regions. Also, policymakers will need to consider how to accommodate the wide regional variations in labor markets and costs of living.
- *Reducing the influence of tariff in wage setting.* The tariff has been uncoupled from nonbudgetary sector wages; but its continued relevance as a wage-setting guidepost is evidence of poor functioning of the labor market. As such it bears further investigation. The establishment of higher wages for particular areas, such as the North, is a legal requirement that is inconsistent with market practice and should be gradually phased out.
- *Developing institutions to allow worker voice, improve work conditions, enforce contracts, and resolve disputes*, thereby raising worker productivity.
  (a) Allow true worker and employer representation in unions, and eliminate management representation of workers, which would help improve work conditions.

(b) Consider decentralized bargaining approaches in collective bargaining, if the centralized approach is not yielding efficient bargaining outcomes.
(c) Increase the resources available to the Federal Labor Inspectorate and build its capacity to provide technical assistance and advisory services to enterprises.
(d) Establish alternative dispute-resolution mechanisms based on professional third-party mediation, conciliation, and arbitration services outside the court system. The development of competitive product markets should help contain wage pressures exerted by unions.

The chapter finds that the debate over labor-market reform in Russia is a contentious one, but may offer a false choice. The debate divides those who want to see more social protection from those who want to see more labor-market flexibility. In a sense this is a false choice: By instituting a more realistic and enforceable, flexible, formal, regulatory regime with a modernized safety net, the equity and efficiency concerns of both groups could be alleviated. Achieving these outcomes will also require the development of a broad consensus regarding the need for and direction of labor-market reforms.

Chapter IV
Safety Nets for Workers

Older, less-educated workers, with previous work experience and hence, obsolete skills, are the most vulnerable labor-force participants in Russia. These workers constitute the majority of the unemployed and, once unemployed, find it very difficult to find a job. As noted earlier, households headed by workers with wage arrears and the unemployed had much higher poverty rates than the national average.

Most OECD countries establish unemployment-protection programs to protect workers against the loss of income and skill as a result of unemployment. Russia has also established the two main programs found in OECD countries: (a) *an unemployment benefit (passive) program*, providing temporary cash assistance to the unemployed; and (b) *Active Labor Market Programs (or ALMPs)*, including, among other things, training, job counseling, and public works. The objective of these programs is to prevent poverty among the unemployed and, by allowing workers to find a job better suited to their skills, to increase their productivity. This chapter discusses four aspects of these programs: financing, distribution, efficiency, and administration. It includes a brief review of social-support programs used to facilitate restructuring in Russia. International experience in unemployment programs is also provided throughout the chapter.

A. Background

Russia has two public programs for assisting the unemployed: (a) a passive labor-market program that provides short-term income replacement or unemployment benefits in case of job loss; and (b) an ALMP that imparts training and other services to help the unemployed re-enter the job market. In 1999, about 2.1 million individuals participated in both these programs. [131]

The unemployment-benefit program provides a sliding scale of benefits (expressed as a proportion of past wage) for a maximum duration of 12 months. Benefits are subject to maximum and minimum thresholds. The unemployment-benefit

[131] Unemployment-assistance programs have been the responsibility of the MLSD since 1996, after the dissolution of the self-standing Employment Service. The MLSD central staff provides policy-level oversight, while operations are conducted through a network of branches, including 99 regional and 2,444 local offices. These regional offices manage passive and ALMPs and offer a regionally differentiated program mix. In addition to these programs, redundancy measures to protect workers include the obligation by enterprises to provide prenotification of mass layoffs in agreement with their labor unions and to provide severance pay.

program is fairly typical of unemployment programs in developed countries, although the eligibility conditions of the Russian program are broader. (A detailed description of the Russian unemployment-benefit program is provided in box IV.1.)[132]

ALMPs implemented in Russia include training, job creation (wage subsidy, and so on), public works schemes, counseling, and job information. The programs are administered through the federal employment service. The main purpose of these programs is to assist the unemployed to rejoin the work force. ALMPs in Russia are similar to those found in many developed countries around the world. Like other countries, the Government has used a combination of ALMPs and cash benefits to facilitate enterprise restructuring, most notably in the coal sector.

B. Evaluation of Unemployment-Protection Programs in Russia

The following sections evaluate the unemployment-protection program in Russia according to four main criteria: financing, distributive and efficiency impacts (and tradeoffs between these two program objectives), and program administration. Some issues to be addressed in each area include the following:

- *Protection vs. efficiency:* A natural tension between protection and efficiency exists in theory and practice. Protection can be defined as the maintenance of living standards or protection from poverty. Efficiency can be defined in terms of the balance between benefits that are low enough to reduce work disincentives and those that are high enough to allow workers to take enough time to find jobs in which they are the most productive. Too much protection can dampen efficiency objectives — and reduce incentives to work, but programs that focus on efficiency alone can thwart protection and job-search objectives. Therefore, program coverage has to be carefully reviewed and benefit levels carefully tempered to ensure that the program provides protection, encourages job search, and does not create unintended adverse work incentive effects.
- Two other aspects of efficiency have to be considered. First, programs that provide explicit protection to laid-off workers should separate job protection (financed by employers) from protection that is financed by the state. Second, programs that facilitate restructuring should lead to future productivity gains that offset short-term costs.
- *Public vs. private roles:* Employment programs should be designed to address the rationale for public provision and financing. There is general agreement that the public provision of protection against unemployment can be used to pool risks over a large number of people more effectively than risk management using only

[132] Not all countries have unemployment insurance-based benefits as in Russia. Other programs followed worldwide include unemployment-assistance programs (means tested or flat amount) that are supplementary to unemployment insurance accounts or stand-alone programs and individual savings accounts. Salient characteristics of these programs are provided in table AIV.1.

Table IV.1. Employment Fund Budget (Percent of GDP) and Arrears (Millions of Rubles)

	1994	1995	1996	1997	1998	1999	2000
Incomes	0.51	0.43	0.35	0.36	0.33	0.32	0.31
Expenditures	0.30	0.37	0.34	0.35	0.32	0.29	0.29*
Surplus (incomes over expenditures)	0.21	0.06	0.01	0.01	0.01	0.02	0.02
Arrears (as of 01.01 of each year)				1542.5	2843.3	3661.3	1618.6

*0.25 percent of GDP was actual expenditures (table AIV.3).
Source: MLSD.

informal family and community networks. However, the public sector need not always be involved in the delivery of services. In the case of ALMPs, for example, public financing may help the low-income unemployed obtain training, but private firms may be the most effective in providing services.

- *Administration/financing:* Do programs reflect the financial and administrative constraints of the country? Programs that are complex to administer require monitoring (cross-checking of information) and efficient information systems to be effective. If these do not exist, programs that require them have limited effectiveness.

Program financing. Public expenditures on unemployment-protection programs have been declining since 1998 (table IV.1). In 1999, the Government spent a total of 13 billion rubles on active and passive employment programs, amounting to 0.21 percent of GDP. This is consistent with Russia's level of income, but lower than program expenditures in advanced CEE countries (approximately 1.1 percent of GDP) and much lower than in OECD countries (average 2.4 percent) (table AIV.3).

The expenditures trend in CEE countries is mixed. Unemployment benefit expenditures as a share of GDP have declined in Hungary and Slovenia, are increasing in the Czech Republic, and are stable in Poland (Vodopivec, Wцrgцtter, and Raju 2000).

Composition of expenditures. The composition of program expenditures has also been changing over time, with the share of expenditures on benefits increasing (table IV.2). In 1999, nearly 64 percent of total program expenditures went to passive programs (0.16 percent of GDP) and a much smaller share, 20 percent (0.05 percent of GDP), was devoted to ALMPs. The remaining expenditures were allocated to administrative expenses of both programs. The lower share of expenditures on ALMPs relative to unemployment benefits is typical of both CEE and OECD countries (table AIV.2).

Large regional differences in composition of unemployment-program expenditures can be observed. The largest share of ALMP expenditures are in Moscow and Orel

Box IV.1. The Unemployment-Benefit System in Russia

Russia's unemployment-benefit system was established in 1991 to protect workers and other eligible labor-force participants against loss of income and skill from layoffs and other causes of unemployment. Its main parameters are as follows:

Eligibility. Every registered unemployed person in Russia is eligible for unemployment compensation, including those who are laid off. As in other European countries, and transition countries, there are special groups who are eligible for benefits. Voluntary quits, new entrants and re-entrants, and individuals near retirement are eligible for benefits. However, the number of eligible groups is quite large in Russia relative to other countries, and includes individuals dismissed for disciplinary problems, long-term unemployed, dropouts of training programs, and re-entrants to the labor market. The law also contains employment quotas, for example, for persons with disabilities. Therefore, perhaps more than other systems, the Russian system does not distinguish between social assistance and standard unemployment benefits.

For redundant workers and voluntary quits, benefits are a function of individuals' past wages. Specifically, eligible individuals are entitled to receive unemployment benefits equal to 75 percent of their wages for the first three months of unemployment, 60 percent of their wages for the next four months, and 45 percent of their wages for the next five months. The duration of benefits is 12 months (of the past 18). The benefit replacement rate and duration are on the high end for CEE countries (see annex IV). For redundant workers, there is a waiting period equal to the number of months of severance pay received. There is no such waiting period for voluntary quits (unlike practice in most CEE countries).

Minimum and maximum. Unemployment compensation is subject to maximum and minimum constraints. The minimum benefit must be at least equal The minimum benefit must be at least equal to the level of 20 percent of the regional subsistence minimum but not less than Rbl. 100. The maximum benefit is the regional subsistence minimum. Other eligible categories receive 20 percent of the subsistence minimum. The duration of benefits (six months), and maximum (20% of subsistence) and minimum thresholds (minimum wage) are also lower for this group of workers.

Privileges. Also specific to Russia, some workers receive greater privileges, such as higher compensation for living in the North; or for having been subjected to the Chernobyl accident. In addition to cash benefits, dismissed workers can obtain other provisions, including housing, medical, and preschool services at former places of work.

Work incentives. As in other CEE countries, the unemployment-benefit program includes mechanisms to addresses moral hazard problems. Benefits can be terminated or suspended for some time for fraud and abuse, as well as lack of participation in training, refusal to participate in employment and - what remains quite contentious -public works after three months of unemployment.

Financing Until 2001, when general revenue funding of benefits was introduced, this system was financed via a classic, OECD-type, pay-go, unemployment-insurance system. It was financed through the collection of "contributions," of 1.5 percent of payroll (down from 2 percent in 1996) within each region. To allow consumption smoothing across the country, regions were supposed to send 20 percent of their revenues to the federal level for distribution to deficit regions.

in the Central region, and Amur in the Far East — each with somewhat over 40 percent of their expenditures spent on ALMPs. By contrast, Nenets, Karelia, and Astragan directed less than 20 percent of their employment fund expenditures toward active programs (see table AIV.3).

The regional financing of passive labor-market programs is negatively correlated with ALMPs, suggesting tradeoffs between the two types of expenditures.[133] One hypothesis explaining the disparate regional provision of ALMPs is that only regions

[133] The correlation coefficient between expenditures on active and passive programs is -0.834 703 35.

Table IV.2. Share of Benefits in Total Unemployment-Program Expenditures

	Share of benefits for the unemployed in:		
	Employment Fund revenues	Mandatory insurance contributions by employers	Aggregate expenditures of the Employment Fund
1993	6.0	6.7	10.3
1994	13.3	18.3	17.8
1995	26.8	38.9	29.2
1996	45,7	58.6	47.6
1997	54.4	63.0	56.8
1998	56.0	63.7	58.3
1999*	55.3	60.2	59.6

* Nine months.
Source: Data on formation and spending of the Employment Fund from the MLSD.

have funding above and beyond what is required to pay unemployment benefit can offer these programs. Another explanation is that some regions opt for ALMPs rather than unemployment benefits in order to reduce 'benefit dependency.

One reason advanced for regional inequities in financing of unemployment programs is that, prior to 2001, contributions were decentralized to the regions. Contributions for unemployment were collected at the regional level, and the regions were responsible for passing on 20 percent of their contributions to the center and paying out benefits. This amount was not always obtained, and insufficient revenues were distributed to tax-poor regions[134] For this reason, starting 2001, benefits are based on general revenue financing. It is expected that this change will improve financing of benefits and regional incidence of arrears.

There are three caveats. Our analysis finds that the distribution of contribution arrears across regions in 1999 was virtually uncorrelated with the distribution of payment arrears to the unemployed.[135] Thus, the hypothesis that benefit arrears were related to local revenue problems is not substantiated. It remains to be seen whether federal financing of unemployment benefits will reduce the level and inequality in arrears. General revenue financing has not reduced arrears or regional disparities in the child allowance program.[136] Finally, regions may tend to

[134] By contrast, social insurance and health insurance will be funded by a combined social tax.
[135] Correlation coefficient is -0.166 177 887.
[136] As noted earlier, per-worker contribution arrears by region normalized for average wage rates are only weakly (0.18) correlated with per-worker wage arrears normalized for average wage rates.

Table IV.3. Replacement Rate of Unemployment Benefit

	Ratio of unemployment benefits to:		
	Subsistence minimum for working-age persons	Average wage	Average per-capita income
1993	27.7	9.7	12.6
1994	47.0	18.5	19.7
1995	36.3	20.3	18.6
1996	42.4	19.8	20.6
1997	61.8	26.7	27.3
1998	68.3	32.1	34.7
1999	40.2	25.5	16.7

Sources: Calculations based on 1999 data from the MLSD and Goskomstat (1999, pp.20-21).

overstate their budgetary needs for ALMPs and Benefits because they are no longer responsible for financing these programs. Thus, regional financing and auditing mechanisms will have to be introduced so that regional arrears and inequities are minimized.

The main reason for limited and uncertain financing does not appear to be insufficient budgetary resources. Rather, social protection against unemployment in Russia has more often taken the form of employment guarantees and enterprise delivery of social benefits and services. In some transition countries, the share of resources going to subsidies ranges between 2 and 3 percent of GDP.[137] The Government has therefore given less attention to the adequate and timely payment of unemployment benefits.

In addition, social spending has been plagued by misallocation of resources. A reallocation of expenditures from nontargeted spending could help improve the financial sustainability of the program. For example, if SIF (Social Insurance Fund) recreational benefits not related to poverty (sanatoriums and resort vouchers) had not been in effect in 1999 and 2000, these savings could have been reallocated to employment programs (table AIV.4). In that case, 0.52 percent and 0.46 percent of GDP would have been spent on unemployment benefits.

Distributive impact: *Adequacy of support.* The Russian unemployment-benefit program has a system (legal) benefit replacement rate that is similar to or even higher than many CEE and OECD countries (table AIV.1/box IV.1). However, inadequate program financing has made the effective replacement rate (the ratio of benefit to average wage) of benefits much lower than the system rate. Aside from arrears in financing, other factors such as low reported wage or workers, or contribution record

[137] Riboud, Sanchez-Paramo, and Silva-Jauregui (2001).

Table IV.4. Minimum Unemployment Benefit

	Unemployment benefit recipients receiving minimum benefit (percentage)	Ratio of the minimum unemployment benefit to: (percent)		
		Subsistence minimum for working-age persons	Average wage	Average per-capita income
1993	—	26.9	10.4	13.5
1994	—	20.3	8.0	8.5
1995	49.2	16.1	9.0	8.2
1996	47.3	19.7	9.2	9.6
1997	47.0	20.3	8.8	9.0
1998	47.6	16.9	7.9	8.6
1999	48.1	8.3	5.3	3.5

Note: Before 1995 no such indicator had been calculated.
Source: Calculations based on 1999 data from MLSD and Goskomstat (1999, pp.20-21).

of workers, could also explain the low level of benefit. The (expected) benefit replacement rate was 25.5 percent of the average wage in 1999 (about 40 percent of the minimum living standard)[138] (table IV.3).

With double-digit inflation and benefit arrears, the average replacement rate has varied from month to month. For example, the replacement rate for the first quarter of 2000 was reduced to 22 percent of the average wage. The replacement rate for benefits has also declined in CEE transition countries, but in these countries benefits are not subject to arrears.

The reported benefit level also includes arrears paid to unemployed as well as benefits paid as a result of court decisions in favor of benefit claimants. (Tchetvernina 2000) Therefore, the adequacy of benefits (share of benefit as proportion of average wage) in Russia is likely to be much lower (and with a lower expected value) than implied by the reported replacement rate.

The unemployment-benefit structure is currently quite flat. In 1999, about half of all unemployed received the minimum benefit (about 5.3 percent of average wage). The actual paid maximum benefit was also much lower than the legislated maximum and is about 56 percent of the average wage (table IV.4).

Actual replacement rates in CEE transition countries are in the same range as in Russia (table AIV.5), but average replacement rates in OECD countries are much higher —

[138] The share of benefits in total consumption, a measure of benefit adequacy, obtained from RLMS 1998 household survey data was surprisingly high. However, very few households report receiving benefits. In some cases, results are based on fewer than 10 observations — and results are not robust (table AIV.12).

about 60 percent.[139] However, the benefit replacement rates for most CEE countries have fallen over the past decade, as has the maximum duration of benefit, as countries have tightened programs in response to fiscal problems.(Figures AIV.1 and AIV.2).

Coverage. In August 2000, the unemployment rate based on the RLFS was 10.1 percent, while the registered unemployment rate was 1.0 percent[140]. This difference is substantial. In other words, out of an estimated 7.1 million unemployed persons, less than a million, or 14 percent, were registered with the employment offices (table IV.2 above).[141] Most registered unemployed are women, perhaps reflecting the lower opportunity cost of women for applying for benefit. In contrast, as noted earlier in Chapter I, women constitute roughly half of the survey unemployed.

The coverage of the unemployment-benefit program, or share of benefit recipients to survey unemployed (80 percent of registered unemployed receive benefit), is much lower than for similar programs in CEE countries (tables AIV.6 and AIV.7). In CEE countries, registered unemployment rates are much closer to survey rates. In OECD countries, a much higher share of survey unemployed (versus Russia) receives benefits. For example, beneficiaries equal 82 percent of the unemployed in Australia and 89 percent in Germany. In some OECD countries such as Austria and the Netherlands, and CEE countries such as Slovenia, the number of registered unemployed is actually higher than the number of unemployed. There is considerable variation among OECD countries. The lowest registration ratios are in Greece (30 percent), Japan (36 percent), and the United States (34 percent).

Program coverage in Russia has declined since 1996, after increasing until 1995 (table IV.5). Several factors may be responsible for this development. Prior to 1998, program applications likely declined because of low and uncertain benefits. For the same reason, employment offices may have reduced the share of applicants granted unemployment status. Since 1998, improvement in economic conditions, coupled with tightened eligibility conditions introduced in 1999, are likely to have further lowered the rate of application, as well as registration.

A calculation of a generosity index of unemployment benefits for Russia, which takes into account both the replacement and coverage rates shows that the country has a much lower generosity index (3.0) than the average for CEE (12.1) or OECD (26.3) countries (Vroman 2001).[142]

---

[139] The range is quite substantial even within OECD countries. New Zealand and Australia and Ireland have replacement rates of approximately 30 percent, while Sweden and Denmark have replacement rates of 80 percent of average wage and above. Source: OECD Employment Outlook (1995, 1999); IMF World Economic Outlook (1999).

[140] The coverage rate is the number of registered unemployed relative to survey unemployed. The number of registered unemployed is used to assess coverage of both ALMPs and Unemployment benefit programs. However, most registered unemployed (over 80 percent in 2000) receive benefit.

[141] Household budget survey data confirm the low coverage found in administrative data. According to the 1998 RLMS, less than 1 percent of all households receive unemployment benefit (as compared with 8 percent for child allowances and 37 percent for old age pension). Table AIV.11 household data (using a different definition of the poor and therefore not strictly comparable) for CEE countries indicate that coverage in those countries is generally higher than in Russia (the exception is the Slovak Republic).

[142] The generosity index is a product of the coverage of the program and its replacement rate multiplied by 100 (Vroman 2001).

Table IV.5. Trends in Applicants and Registered Unemployed

	Number of applicants.		Share of nonworking applicants (percent)	Number of applicants registered as unemployed	Share of registered unemployed among nonworking applicants (percent)
	Total	Jobless			
1992	2.3	2.3	100	1.0	43.5
1993	2.1	2.1	100	1.4	70.0
1994	3.2	2.8	88.8	2.5	78.1
1995	5.1	3.9	76.8	3.3	82.9
1996	5.3	4.4	83.6	3.5	78.9
1977	4.6	3.8	82.8	2.8	73.6
1998	4.7	3.8	80.9	2.7	70.0
1999	4.3	3.3	76.7	2.1	63.6

Source: Annual reports "Data on job placement of applicants to employment offices of the Russian Federation". The data for January — December of each year are presented in the T-2 (Job-placement) Forms of the MLSD.

There is considerable variation in regional coverage (registration rates) in Russia. In 1999, seven regions had a 30 percent or better registration rate, while 10 regions, including St. Petersburg, had less than a 10 percent registration rate (table IV.4). Regression results show that the regional registration rates vary positively with the regional variations in the RLFS unemployment rates (table AIV.8). Regions with higher survey unemployment rates tend to have higher coverage rates. However, the RLFS unemployment rate explains only a small portion of the regional variation in registration. Other factors are significant as well. Registration is lower in areas in which unemployment benefits are smaller relative to average incomes. Benefit generosity is therefore an important factor in explaining regional variation in coverage rates and low rates of registration overall. A positive link between benefit generosity and the *registered* unemployed rate has also been found for CEE transition countries (Vodopivec and Raju 2001)

After accounting for survey rates and benefit levels, the registered unemployment rate also varies positively with the ratio of Employment Service staff per unemployed person. Thus, the staffing of the program has an important impact on its ability to attract and serve clients, independent of the level of benefit. Broad regional groupings account for additional variation in registered unemployment rates. In particular, regional registered unemployment rates are higher in the North, the Volga-Vyatka region, and Eastern Siberia. After adjusting for other factors, the coverage is lower in the Northern Caucasus than in the Central region.

Consumption smoothing. The low level of benefits and the high uncertainty in their payment means that unemployment benefits are likely to provide negligible consumption smoothing. A recent study by Richter (2000) shows that Russians tend to consume less from benefits with large arrears (such as child allowances) because they are considered transitory income, and consume more from more permanent, or less arrears-prone benefits, such as pensions. This finding suggests that unemployment benefits, which are also subject to considerable arrears, are not likely to have contributed to consumption smoothing in Russia.

If financed adequately, unemployment-insurance programs can be successful in smoothing consumption. In the United States, studies show that the income levels of recipients were only 3 to 8 percent lower than those of nonrecipients with similar characteristics and that, without these benefits, consumption would have fallen substantially.[143] The unemployment-insurance system also performs well under idiosyncratic sectoral and regional shocks. It can also act as a stabilizer in times of recessions, reducing the magnitude of the downturn. By inference, a well-implemented unemployment-benefit system could have positive effects in smoothing consumption in Russia.

Poverty alleviation. The 1998 RLMS data indicate that unemployment benefits have a poverty-reduction impact among household that receive them, but the small number of individuals covered by the program means that the overall poverty-reduction impact is very small. Without unemployment benefits, the poverty rate among the few households with children that received unemployment benefits would have increased by 8 percentage points to 83 percent. Furthermore, the poverty gap for recipient families was reduced from 40 percent to 25 percent. While families who actually receive benefits are among the poorest, and tend to stay poor, unemployment insurance still has had a positive impact on their welfare (table AIV.9). These results should be interpreted with caution, however, because of the small number of observations in the data set.

The poverty reduction of unemployment-benefit programs in CEE countries is mild and varies considerably (table IV.6). While strict comparison with Russian results is not possible (table IV. 6 uses a different poverty line), the results show that outside of Poland and Hungary and Slovenia — where programs are more generous, poverty was reduced by only 2 percent for the countries studied. The small impact is the result of the insignificant share of poor individuals eligible for the program. Among those poor who were eligible, unemployment benefits accounted for almost a third of all income in Poland, and between a third and a quarter in Hungary and Slovenia. However, unemployment formed a small share of income in Bulgaria, Estonia, and the Slovak Republic.[144]

---

[143] Hamermesh and Sleznick (1995) and Gruber (1997), cited in Vodopivec and Raju (2001).

[144] Lokshin and Ravallion (2000) suggests that safety nets helped individuals cope with the 1998 crisis. The incidence of poverty was reduced relative to that which would have been obtained if such public programs (even excluding pensions) did not exist. However, slightly greater funding would have helped to reduce poverty more significantly. Richter (2000) finds that keeping transfer levels at the 1994 levels would have reduced poverty by 10 percent in 1998. However, neither study isolates the impact of unemployment benefits on poverty alleviation.

Table IV.6. Poverty Impact of Unemployment Programs in Select Transition Economies, Mid-1990s (Percentage)

	Bulgaria	Estonia	Hungary	Latvia	Poland	Slovak Rep.	Slovenia
Poverty reduction[145]	1.1	0.5	14.8	2.2	16.7	2.7	6.8
Targeting[146]	17.4	31.1	4.9	12.4	6.8	0.5	16.0

Source: Vodopivec and Dhushyanth (2001).

Of course, limited poverty reduction offered by unemployment-benefit programs is not very surprising if unemployment programs are designed to smooth consumption and not to alleviate poverty. That is to say, earnings-related benefits are designed to help maintain living standards during temporary periods of income loss, rather than to provide benefits targeted to the poor.

Incidence of public expenditures. In Russia, in 1998, approximately 26 percent of total spending for the unemployed accrued to the bottom 20 percent of the population, indicating that the poor receive a share of transfers that is slightly higher than their share in the population (Table AIV.14). (Once again, the small number of observations means that this evidence should be interpreted with extreme caution.)

Evidence from transition countries (with the same caveat on comparability of results as above) also suggests that — other than in Estonia — the poor do not receive the largest share of spending on unemployment benefits (table IV.6). While the share of unemployment benefits collected by the richest quintile exceeds the share collected by the poorest quintile in quite a few countries, the overall effects are neutral or may be progressive, because unemployment insurance contribution rates are earnings related. Unemployment benefits are also not an important tool for income redistribution in developed countries. The effects of benefits are progressive in about half of the OECD countries, and neutral in the other half (Vodopivec, Wцrgцtter, and Raju 2000, table AIV.16). This is perhaps not surprising. Unemployment programs are not by definition pro-poor, as benefits are proportional to past income. These are primarily consumption smoothing programs.

There is little empirical evidence on the distributive impact of other types of unemployment benefit programs. Available evidence, summarized in table AIV.17, suggests that the distributive impact differs by type of program. Evidence from Argentina suggests that public works are also very pro-poor. Training programs and public works are progressively distributed, while individual savings account (ISA) programs are regressively distributed (in Columbia). Severance pay, which is available only to formal-sector workers, seems to increase the advantage of formal-sector

[145] Change in poverty headcount brought about by unemployment benefit receipt, in percent). Poor are defined as individuals with consumption less than 50 percent of median.

[146] The share of unemployment benefit received by the poor, in percent.

workers versus those working informally, limiting any distributive impact (De Ferranti, Perry, and Serven 2000). Further evidence from Vroman (2001) indicates that the Australian means-tested unemployment-assistance system is very progressive, perhaps because these benefits are not contribution- and wage-related. Roughly 70 percent of cash benefits are paid to those in the bottom three deciles of the income distribution.[147]

Efficiency impact: Unemployment-benefit programs. Because benefits provided by the unemployment program in the Russian Federation are largely negligible, adverse work incentive effects are small, if any. Adverse incentive effects imposed by unemployment benefit systems can be quite significant, however, in countries in which actual benefits are more generous.

In OECD countries, unemployment benefits reduce the probability of recipients leaving unemployment to take up employment — leading to an unemployment trap.[148] These negative effects of duration of benefit on probability of exit from unemployment to employment have also been found for CEE countries (Bulgaria, Czech Republic, Estonia, Hungary, Poland, Slovak Republic, and Slovenia), although the effects of replacement rate are much less pronounced. For these reasons, recommendations have often been provided to tighten program benefit and eligibility conditions so that the efficiency costs of the programs do not outweigh their consumption-smoothing impact (World Bank 2001a).Interestingly, there does not seem to be much impact of unemployment benefit on increasing intensity of job search, improving job matches, or entry into regular jobs.

Nonetheless, the incentive impacts of unemployment-benefit schemes are not all the same. For example, work disincentive effects will differ in terms of unemployment insurance and means-tested unemployment benefits. Disincentive effects may be lowest in ISAs, because individuals receive benefits that represent a return on their own contributions, unless contributor entitlements exceed their ISA balances. The ability of countries to reduce adverse work incentives also depends on administrative capacities as well as benefit levels (see administrative section below). The efficiency aspects of unemployment-benefit programs are provided in table AIV.18.

Has the lack of a well-funded unemployment-benefit system in Russia reduced managers' incentives to lay off workers, impeding economic efficiency? Haltiwanger and Singh (1999) also show that a generous compensation has helped facilitate downsizing in other countries. In Russia, clearly the restructuring of the coal sector might not have taken place without a generous benefit package, including severance pay, back wages, and unemployment benefit (see below). There is considerable evidence from the United States that the availability of benefits strongly increases the probability of temporary (rather than permanent) layoffs.[149] According to a theoretical model

---

[147] Vroman (2001) uses 1995 data to show that the bottom three deciles receive total transfers expenditures equal to 20.8 percent in Italy and 58.0 percent in Australia. The top three deciles in Australia received 7.4 percent of transfers, the lowest percentage among all the countries studied.

[148] This section draws on Vodopivec, Worgotter, and Raju (2000).

[149] Clark and Summers (1982), Feldstein (1978), and Topel (1983), referenced in Vodopivec and Raju (2001).

Table IV.7. International Assessment of Unemployment-Benefit Programs

Scheme	Financing	Strengths and weaknesses
Unemployment insurance	Payroll tax	Allows risk pooling; and provides consumption smoothing. Performs well where labor-market institutions encourage flexibility, informal sector is small, and there is strong administrative capacity to monitor program and control incentives. Benefits/taxes must be kept low to avoid adverse incentive effects.
Unemployment assistance	General revenues	Means-tested benefits: Is very progressive but may have disincentive effects similar to unemployment insurance if benefits are too high. Where means-tested requires strong administrative and monitoring capacity and low informal sector. Flat benefit: Regressive; potential to work well in countries where administrative capacity is weak and informal-sector activity is high - Duration of benefit and replacement rate should be set low to avoid adverse incentive effects.
Individual Savings Accounts	Worker contributions	Works well in low or middle income countries. Avoids disincentives to work, has good self-monitoring features, but does not cover poorer and/or informal sector workers. Largely untested.
Severance payments	Financed by firm	Unfavorable option; strong negative efficiency effects - limits hires; limited risk pooling; politically contentious.
Public works	General revenues	Can reach informal-sector workers and poor for income support. Where administrative capacity is weak entails large non-labor costs; is often temporary in nature; and does not help increase wage or employment prospects (see ALMP section below).

Источник: Betcherman (2000).

proposed by Blanchard (1997), a generous unemployment benefit that raises the cost of new hires (through a higher payroll tax rate) could reduce the impact of labor reallocation and growth by dampening job creation. However, if program benefits have been tightened over time, as in the case of CEE countries, these initial adverse effects may well decline. Forteza and Rama (2000) find that higher mandated benefits do not impede recovery, once economic reforms have been implemented.

In Russia, economic restructuring has occurred despite the lack of an effective unemployment-benefit program. However, in strategic sectors, such as coal, it has required a very generous severance package to lay off workers. Given that employment declines have not been as great as output declines might dictate, and there is evidence of surplus labor, particularly in certain regions and some industries, and fur-

ther restructuring may be required, and an effective unemployment package may help facilitate restructuring.

Thus, in summary, in addition to allowing consumption smoothing, a well-funded unemployment-benefit system would protect workers than the current system – a goal well worth achieving. While the evidence on the efficiency impact of unemployment benefits is mixed, a well funded unemployment may well increase economic efficiency by facilitating a more efficient allocation of labor and facilitating layoffs. Another advantage of an unemployment-benefit system could be to complement more flexibility in the Labor Code, by transferring social-protection activities from firms to the public sector. However, the generosity of such a system should be such that it does not dampen job creation and reduce incentives to work. As noted above, serious work disincentive effects and the persistence of unemployment can result from to generous a programs. A summary of the international assessment of unemployment-benefit programs, from both efficiency and distribution aspects, is presented in table IV.7.

Efficiency impact: *ALMPs.* The efficiency of Russian ALMPs is not known, that is, whether they have the ability to provide program participants with a job or higher wages (as compared with a program in which they do not participate). Rigorous program evaluation, which identifies impacts on program participants relative to a control group of nonparticipants (with roughly same characteristics), has not, as yet, been conducted in Russia. The current Government places a strong emphasis on such evaluation, however, and has recently initiated the collection of administrative data to assist in program evaluation. While better administrative data are useful, full program evaluations require control groups and microdata files to derive meaningful results. The Government also proposes to introduce profiling of the unemployed to identify individuals at the greatest risk of long-term unemployment, and matching them with the ALMP programs that would most improve their chances of finding a job.

Impact evaluation of programs. The quantitative evaluation of ALMPs that has been carried out in selected OECD and transition countries has yielded interesting results. A brief review of the impact assessment of each program is presented in table IV.8 (Dar and Tzannatos 1999).[150]. The research suggests that ALMPs require substantial administrative capacity in terms of design and implementation and can be relatively expensive to be effective. Evaluations of their impact on employment prospects and wages have been mixed at best. Specifically, most training and retraining programs tend to be no more effective than job-search assistance. These studies also show that public-works programs do not necessarily lead to continued employment but can be rationalized on the basis of community development or as antipoverty measures. In some countries, they can also provide employment to informal-sector workers.

Some evidence from a recent evaluation of ALMPs in the Czech Republic, Hungary, Poland, and Turkey indicates that, while the results differ in some ways, OECD-country findings are generally supported in transition economies as well (Fretwell, Benus,

---

[150] Dar and Tzannatos (1999) also discuss methodological issues relating to the evaluation of ALMPs. In their summary assessment, they give particular emphasis to scientific approaches where outcomes for program participants are compared with outcomes from a control group.

and O'Leary 1999). The implications of this research are that the aggregate gains from ALMPs tend to be modest at best, but that targeted groups can potentially benefit from certain types of well-designed programs, albeit at high cost. Given that these evaluations are based on the experience in advanced industrialized and CEE transition economies, their applicability to a country like Russia is an open question, and can only be answered once evaluations are completed.

A rigorous evaluation of ALMPs has to address the following questions:

- *Deadweight loss*: Are outcomes no different than they would have been without the program?
- *Substitution effect*: Do workers in subsidized jobs just substitute for other unsubsidized workers that would have been hired anyway?
- *Displacement:* Do firms with subsidized workers take business away from other unsubsidized firms?

Administrative data. Despite the absence of program impact evaluation, some evidence on the performance of Russian ALMPs, however inconclusive, can be gleaned from administrative data. The data suggest two trends (table AIV.3). First, the share of program resources spent on job creation/preservation programs has decreased, while the share of resources spent on training and public works has increased. The decline in job preservation/creation expenditures is likely to be a positive development. Job-preservation programs provide funding for job maintenance, while job-creation programs directly provide 12-month average salaries for workers.

Tchetvernina (2000) finds that these programs are costly for employers. Enterprise managers estimate costs of creating one job as one year of payroll per worker. Such high costs can have the potentially harmful effect of preserving obsolete jobs and/or creating nonviable employment. Nevertheless, despite declining, these programs still remain substantial. In 1999, employment offices helped preserve and create 50,000 jobs, and seven federal targeted programs resulted in the creation of another 250,000 jobs. Indeed, spending on job subsidies is much higher in Russia than in both OECD and CEE countries (table AIV.19).

Second, administrative data show that out of the total resources spent on ALMPs in 1998, 38 percent was spent on job creation and another 41 percent was directed toward training and retraining. The remainder was spent on early retirement and other programs, including public works (table IV.9). The least costly program on a per-recipient basis was public works; while job creation/training programs were the most expensive. These finding are consistent with those frequently observed in OECD countries. Thus, Russia spends the majority of resources on high-cost programs that have been found internationally to be no more effective than job-search assistance.

Efforts to improve cost-effective, job-information services have been initiated in Russia, and the availability of regional, job-information databases is increasing. In 1999, 40 regional employment services contributed to establishing the job bank, and 70 regions used these data compared with only 50 in 1998. The job bank contained information on 10,000 vacancies compared with 2,700 vacancies in 1998. Informa-

Table IV.8. Effectiveness of Active Labor-Market Programs: International Evidence

Program	Appears to Help	Comments
1. Job-search assistance/ employment services (19)	Adult unemployed generally when economic conditions are improving; women may benefit more.	Relatively more cost-effective than other labor-market interventions (for example, training) — mainly because of the lower cost; youths do not benefit usually. Difficulty lies in deciding who needs help in order to minimize deadweight loss.
2. Training of long-term unemployed (28)	Women and other disadvantaged groups.	No more effective than job-search assistance in increasing reemployment probabilities and postintervention earnings, and is two to four times more costly.
3. Retraining in the case of mass layoffs (12)	Little positive impact — mainly when economy is doing better.	No more effective than job-search assistance and significantly more expensive. Rate of return on these programs usually negative.
4. Training for youths (7)	No positive impact.	Employment/earnings prospects not improved as a result of going through the training. Taking costs into account, the real rate of return of these programs is negative.
5. Employment/ wage subsidies (22)	Long-term unemployed in providing an entry into the labor force.	High deadweight and substitution effects. Impact analysis shows treatment group does not do well as compared with control. Sometimes used by firms as a permanent subsidy program.
6. Public-works programs (17)	Severely disadvantaged groups in providing temporary employment and a safety net.	Long-term employment prospects not helped: program participants are less likely to be employed in a normal job and earn less than do individuals in the control group. Not cost-effective if objective is to get people into gainful employment.
7. Microenterprise-development programs (15)	Relatively older groups, the more educated.	Very low take-up rate among unemployed. Significant failure rate of small businesses. High deadweight and displacement effects. High costs — cost-benefit analyses rarely conducted but sometimes show costs to unemployment insurance budget higher than for control group.

Source: Dar and Tzannatos (1999).

tion on open vacancies was reported by about 4,000 employers, compared with 1,300 in 1998. However, a recent evaluation of job-bank database use indicates that, while the data bank is promising for intraregional data sharing, the nationwide exchange of job-vacancy information is limited in practice and needs to be improved (Tchetvernina 2000).

Table IV.10 shows that the declining trend in registered unemployed was mainly among voluntary quits or laid-off workers and secondary or vocational graduates — another important development in the composition of ALMP clients. The number of students, pensioners, and workers in search of secondary employment among regis-

Box IV. 2, ALMPs in Russia: A Brief Overview

A large range of ALMPs were established in Russia in the early 1990s. This box focuses on only the main programs:

Job Creation/Preservation. Job preservation/creation (financial support) were the main ALMPs (in terms of expenditure share) until the mid-1990s. Over time, the emphasis of ALMPs has shifted to vocational guidance and training. The move away from these programs reflects both financial and economic considerations. The programs are very costly to employers; the use of funds is difficult to monitor, the substitution and displacement impacts of these programs are not well known. Many aspects of these programs were modified from 1995 onward. However, these programs still remained important in 1999, comprising more than 40 percent of total expenditures. In 1999 employment offices helped preserve and create 50,000 jobs, while seven federal targeted programs created an additional 250,000 jobs. However, no rigorous scientific evaluation of these or other ALMPs (listed below) has yet been completed.

Vocational training. The share of registered unemployed referred for vocational training has increased. Referrals tend to be younger individuals (aged 16-29) and women. In some cases, local employers, who receive remuneration for this effort, provide training. The placement rate of trainees has increased over time; and their re-registration rate has decreased. By the end of the 1990s, the share of those placed after training exceeded 90 percent. But this statistic is biased. Often, training is only offered to those unemployed who provide written guarantees of employment after completion of the course. In regions that have had to give up this practice because of litigation, the placement rate is much lower (40 percent).

Vocational guidance. Vocational guidance includes providing information, vocational counseling services, and psychological support to the unemployed. The employment offices have provided these services only since the mid-1990s. Over time, both unemployed and employers participating in the program have increased. Interestingly, the share of unemployed receiving vocational guidance has declined. Anecdotal evidence suggests vocational guidance and consulting services help individuals find jobs, although exact numbers are not available.

Early retirement pensions. As in some CEE countries, the duration of unemployment benefits is extended for workers with length of service that entitles them to old-age pensions. The maximum duration of benefit is 24 months (in 36 months). Pensions are paid from the pension fund, and reimbursed from the Employment Fund (now general revenue). A large proportion of women and long-term unemployed participate in the program. The share of retired beneficiaries among the total registered unemployed has increased over time. However, the number of retirees has been declining. Only 1 percent of early retirees received benefits in 1998-1999, down from 4 percent in 1995. However, a growing share of pre-pension-age unemployed is participating in public works, and some are being placed in jobs through employment quotas.

Targeting vulnerable unemployed. In the late 1990s, ALMPs were developed to help specific categories of unemployed, such as young graduates of secondary vocational schools and long term unemployed, acquire job-seeking skills. These programs include, for example, job clubs, the New Start program and the Youth Practice program. The latter two programs provide youths with job-seeking skills (writing CVs, calling employers) and practical training (with wages paid by both employers and the employment service). Job placement after participation in Job Seekers Clubs (66 percent) is high, but quite low in both Youth Practice (33 percent) and New Start.

Public works. The objective of public works is to help the long-tem unemployed maintain their skills and work habits. A large share of women and long-term unemployed participate in these programs. Participants are paid low wages (about 30 to 40 percent of the wage of permanent employees and according to their qualifications; table IV.8). Public works are mandatory for certain categories of the unemployed. A previous experiment to make public works participants give up their registered unemployment status and receive a wage equal to benefit led to a reduction in program participation.

Source: Tchetvernina (2000).

Table IV.9. Employment Fund Expenditures on Active Policies, 1992-99

	1993	1994	1995	1996	1997	1998	1999*
Vocational training, vocational guidance	8.5	19.4	24.9	36.5	42.8	45.8	47.1
Public works	1.9	3.9	7.7	16.8	17.5	15.0	9.2
Social adjustment	0	0	0	3.0	6.5	2.8	2.5
Job creation/preservation	88.7	75.1	66.7	43.7	31.9	35.6	40.6
R&D	0.9	1.5	0.6	0	1.2	0.9	0.6

* Nine months.
Source: Data from the MLSD (Tchetvernina 2000).

tered unemployed actually increased between 1997 and 1999. Recently initiated targeted programs to assist the long-term unemployed tend to be focused on youths (see box IV. 2).

ALMPs have shifted to younger workers rather than older, experienced, and less-educated workers who comprise the majority of the long-term unemployed. This is a mixed blessing. The success rate of ALMPs with younger workers may be higher, making programs more cost-effective; but the program is not targeting older workers, who have the most difficult time getting jobs.

Finally, administrative data on program effectiveness include placement rates of specific programs (table IV.11). These data suggest that placement rates for training graduates have increased over time. But this result must be interpreted with skepticism because many trainees are already guaranteed a job prior to joining a program, which biases this statistic. In regions where a job guarantee is not a prerequisite for obtaining training, placement rates are in fact quite low. Therefore, administrative statistics on program impact are not a useful guide to the success of ALMPs in Russia

A beneficiary survey covering only four Russian regions found that 70 percent of those served by the training centers rated them "very useful" (World Bank 2000). Employment services also appear to have been very useful in assisting coal-sector workers learn about their eligibility to receive benefits and services (see below). But since these smaller surveys are inconclusive, a more rigorous evaluation of ALMPs would be the best means to assess the efficiency of ALMPs.

Lastly, the Russian Employment Service does not contract services to private providers. Private service providers appear to have been growing over time, including ones with firms as clients and ones that accept applications from individuals. Private services are largely concentrated in Moscow, which has higher average wages and more

foreign enterprises than any other part of the country. These private providers appear to be concentrated in providing jobs by "head hunting" for highly qualified professionals for private firms. As private-sector providers increase in number, they could be used by employment services to contract out the provision of particular services.

Profiling. Employment Office staff do profile workers in order to discuss their suitability for particular programs. However, the Government is currently considering

Table IV.10. The Socioeconomic Characteristics of Applicants, 1993-99 (Percent of the Previous Year)

Reason for separation	1995/ 1994	1996/ 1995	1997/ 1996	1998/ 1997	1999/ 1998	1995/ 1992	1999/ 1996
Persons having paid employment	136	88	69	105	92	177	75
Students	377	84	97	113	117	1327	128
Pensioners	100	117	106	103	85	313	92
Teenagers	—	85	90	111	112	—	111

Based on: Annual reports "Data on job placement of applicants to employment offices of the Russian Federation". The data for January — December of each year are presented in the T-2 (Job-placement) Forms of the MLSD (Tchetvernina 2000).

more empirical profiling methods to both identify which unemployed are susceptible to long-term unemployment and to match them to ALMP programs that will best improve their employment prospects. This type of profiling is used in many OECD countries (box IV.3). There are two main methods of profiling the unemployed: (a) statistical model-based programs that use multivariate regression techniques to identify individuals most vulnerable to long term unemployment, and (b) characteristics-based programs that mainly rely on the judgment of case workers.

A recent evaluation of profiling programs in OECD countries, notably the United States, Canada, Australia, and the United Kingdom, finds that profiling based on statistical models or judgmental "characteristics screening" by staff can result in two types of error (OECD 1998).[151] The first type, errors of exclusion, fails to identify vulnerable groups. The second type, errors of inclusion, identifies nonvulnerable groups as vulnerable and includes them in the program. Although the predictive powers of statistical estimation are found to be quite low, evidence from the United States suggests that a model-based approach leads to better selection of groups at risk than characteristics screening. Countries are now refining their models, adding more explanatory variables, and using more available data.

Certain tradeoffs inherent in the model-based approach are important from a policy perspective. If the probability threshold for defining groups at risk is to be kept low (to include many unemployed), to ensure that all groups have access to ALMPs, the risk of individuals being excluded will certainly be reduced, but inclusion error may be increased. On the other hand, if ALMPs are to be offered to all at-risk workers, the probability threshold for being at risk could be kept high. While a high probability threshold would reduce inclusion errors, it would increase the risk of exclusion. In this case, judgmental screening could be introduced to capture excluded workers, although these procedures would have to be used judiciously. In addition, the report finds that:

The probability values assigned to the unemployed should not be the only method used to determine appropriate program placement. More in-depth analysis is needed.

[151] OECD (1998).

Table IV.11. Job Placements of Unemployed Completing Training Programs, 1993-99

	Percent of individuals placed after training	Number of those not placed	Percentage of those reregistered
1993	64.3	28,964	40.8
1994	59.2	65,713	—
1995	62.9	99,131	43.7
1996	74.3	59,911	50.0
1997	82.9	31,129	28.8
1998	90.0	22,722	34.2
1999	91.2	21, 331	28.6

Source: MLSD; Tchetvernina (2000).

There is as yet no evidence on the macroeconomic impact of profiling, or whether the substitution or displacement effects, would offset any microeconomic impacts. However, a full evaluation of job profiling and its cost-effectiveness has not yet been undertaken. The only evidence available is on the cost-effectiveness of ALMPs. A specific assessment of profiling would require the development of new evaluation methods and an extended follow-up period.

4.55 In other words, while profiling is an interesting option for identifying at-risk groups — and scientific evaluations work best — its cost-effectiveness is not yet well known. This is an area in which further work is required. Any experiment in Russia on profiling should be undertaken with a built-in evaluation so that cost-effectiveness and program impacts can be assessed. The implementation of profiling may require greater sophistication and financing than is possible given the administrative capacity and financial resources available to Employment Services Russia.

In summary, the general absence of program evaluations in Russia makes it difficult to assess the performance of ALMPs. Their composition indicates a much greater focus on training and job creation/preservation than on programs that have been determined through international experience to be more cost-effective, such as job-counseling or job-information services. Profiling may help identify at-risk groups in Russia, but the cost-effectiveness of this mechanism is not well known, and its introduction should be monitored with care. If profiling will reduce the effectiveness of job counseling and information services, its introduction should be reconsidered. The political pressure applied to employment services to reduce open unemployment (maintain/create jobs), rather than helping the unemployed find jobs, represents a serious area of concern from the standpoint of the functioning of an efficient labor market.

Social support for enterprise restructuring. The Russian economy still requires significant restructuring, which may involve mass layoffs in particular industries. This section discusses social-protection strategies for laid-off workers in restruc-

Box IV.3. Profiling to Reduce Long-Term Unemployment

Profiling of the unemployed is used in many OECD countries to identify those vulnerable to long-term unemployment and to match them with cost-effective ALMPs that would improve their chances of employment. Profiling methods differ across OECD countries.

United States. Profiling is based on early identification of those likely to become long-term unemployed, particularly repetitive job losers. A model has been developed to predict which unemployed persons will exhaust their benefits. Those identified are required to take part in cost-effective job-search assistance.

Australia. Profiling based on a statistical model is used to identify those running a risk of long-term unemployment on the basis of age, education, and other variables. In 1995, such methods identified 5 percent of the unemployed; another 10 percent were identified based on judgmental factors.

Belgium. Since 1993, the employment service has targeted the unemployed under age 46 without complete secondary education and unemployment of 10 months or more. These persons are required to participate in an action plan consisting of steps such as job-search counseling, training, or subsidized employment.

Great Britain. During the initial interview, the job seeker and counselor agree on a reemployment plan as a condition of receiving benefits. Job seekers are provided job-search or job-review seminars. After unemployment for more than 24 months, the unemployed must attend a New Start course. More intensive assistance is given to those under age 25 in order to prevent long-term unemployment among youths.

Source: Prokopov and Maleva (1999).

turing industries, one-company towns, and remote areas in Russia. Findings from international experience complement this evidence.

Restructuring the coal industry. Workers in particular industries, such as coal, are likely to face greater reductions in employment than workers in the economy overall. This is certainly true of transition economies and in developed market economies as well. For example, a shrinking demand for coal, and consequently coal miners, has been experienced in Great Britain, France, Germany, and the United States, as other forms of energy have become more economical than coal. This situation has affected Russia rather later than the OECD countries.

Strong unions and high wages and benefits have typified the coal industry in many countries. Unionization started in the mines because of the terrible working conditions in the 19th century, and continued strong as hazardous circumstances prevailed in even the best-run mining operations. Furthermore, long-term health risks have long been recognized, in particular black-lung disease, which has led to earlier retirement ages and other special programs to assist miners.

Russia has been no exception to these trends. In addition, because of high wages and family traditions, in many countries there is a pattern of sons following fathers into the mines. In other words, there is not a long history of alternative employment among mineworkers. Consequently, restructuring in the coal industry is a particularly delicate and difficult issue for any government to address.

Two surveys of the social impact of coal restructuring, one each in 1996 and 2000, which cover several coal-mining regions in the Russian Federation, have been com-

missioned by the World Bank[152] Findings indicate that the self-reported status of the living conditions of laid-off miners improved between 1996 and 2000, with the proportion of miners saying that they "had trouble making ends meet" declining from 45 percent to 36 percent. The demographic pattern of lay-offs was more heavily concentrated among women than the overall pattern of employment in the industry. In 1996, about one-quarter of lay-offs were women, while in 2000 that proportion had risen to 40 percent. Overall, women make up a large share of mineworkers. The overrepresentation of women may reflect the elimination of increasing proportions of "surface" jobs later in the mine closure process.

Over time, workers also obtained better information about their rights and entitlements, reflecting in part the effectiveness of Employment Services. Workers in the 2000 survey appeared to be much better informed about their rights and entitlements than those in 1996. Benefits include two types of severance pay: (a) standard severance equal to three months' average salary, and (b) 15 percent of salary per year employed for workers at retirement age. In both survey years, about three-quarters of the respondents reported receiving the required two months' advance notice of layoffs. In 2000, a considerably higher percentage of workers reported receiving information about their rights compared with 1996. Those receiving an old-age pension tend to report a relatively better financial situation than other laid-off workers do, while those receiving a disability pension do not.

Laid-off miners are also eligible for wage arrears. In 1999, more than 95 percent of laid-off miners knew about their entitlement, and a similar percent said they were eligible to receive back wages. Nonetheless, as in all programs in Russia, there were regional differences among those surveyed. In 2000, the incidence of wage arrears was higher among those workers laid-off at closing mines compared with those laid off at continuing operations. This finding suggests that the continuing operations in 2000 have managed to develop a business strategy that will ensure that they continue in operation, hopefully, on a profitable basis. Miners laid off at continuing mines also appear to be in a better financial situation than others are, but this may result from regional and demographic differences, such as additional earners, higher education, and re-employment in mining, as well.

Part of the social impact survey focused on the economic situation of miners laid off because of mine closings.[153] The proportion of unemployed in 2000, at 38 percent, was substantially smaller than in 1996, at 66 percent, possibility indicating a more robust and flexible labor market. Nonetheless, the 2000 rate is more than three times higher than the 10 percent unemployment rate reported for the country as a whole. One reason may be that they have significantly higher wages, and thus unemployment benefits are much higher for them. Three-quarters of the unemployed had registered at their local employment offices, a proportion many, many times greater than that of the population overall.[154]

[152] This section of the report is based entirely on a study (forthcoming) on the social impact of the coal sector restructuring (ECSIE) The regions are Kemerovo oblast, Rostov oblast, Tula oblast, and in 2000, the Komi republic.

[153] The 2000 survey also looked at lay-offs from downsizing.

[154] These high proportions of registered unemployed are not reflected in overall oblast figures, however.

While we have no research on the reason for this finding, it may be related to the fact that severance pay and back wages are enforced among coal miners and to the active role that Employment Services played in this process. Similarly, in 2000 more than 70 percent of the unemployed were receiving employment benefits on time and in full. The recipiency rate of unemployment benefit is also in considerable contrast to the rest of the population.

Laid-off miners in 2000 frequently found other jobs within the coal sector. This may have led to the decline in the numbers of unemployed who indicated that they would like retraining, which dropped to 41 percent in 2000 from just over half in 1996. Furthermore, some 54 percent of respondents believed that retraining would not be effective. This is an interesting finding, as training programs have not been found to be effective in many cases in both OECD and transition economies. The survey also found that younger people were more likely to want to start a business. This is also a finding that needs to be considered carefully, particularly since results of other studies indicate that conditions for business development need to be improved in Russia.

In summary, the financial options offered miners have probably assisted them in their period of unemployment. However, once again no quantitative assessment has been conducted, and the impacts of these programs (other than allaying the political costs of transition) are not well known. Furthermore, retirement options have removed miners from the work force, but at a cost to the pension fund. Nonetheless, the higher unemployment rate indicates that the measures used cannot have reduced social stress among miners completely. This should not be a surprise, however, because this is an issue with which all developed market economies with mining operations contend. The availability of severance pay, back wages, and unemployment benefits for mine workers, however, is far higher than that received by other unemployed persons in the population. In other words, the role of ALMPs and severance packages, including back pay, retirement benefits, and unemployment benefits, has been important in downsizing strategic industries, as it often is worldwide

Out-migration from one-company towns. Restructuring the North requires a further reduction in the population, although significant population shifts already have taken place naturally. The high cost of moving, particularly given the rigidity of the Russian housing market, has made out-migration for some groups quite difficult. As noted in the first chapter, research and surveys have shown that the greatest obstacle to migration is the need for sufficient cash to purchase housing in a new region, as mortgage markets are not yet well developed. Other considerations, such as availability of employment and education, are secondary to migrants. If opportunities to move to more hospitable areas of Russia are facilitated for the unemployed, retired, and others, subsidies and costs to the federal and local governments could be reduced. These costs include the maintenance of an artificially large population in the North. Population redistribution could also improve the financial footing of fledging private companies in the North by lowering taxes and enhancing the welfare of the remaining population.

The objective of the recently initiated Northern Restructuring program of the Government addresses this problem by supporting the restructuring of three municipalities, including supporting the out-migration of up to 25,000 people. The partici-

pating municipalities represent the diversity of economic and social circumstances of the Russian North. One is the center of a mono-industrial coal producing area in which the industry has been severely downsized since the government significantly reduced subsidies for coal producers, liberalized prices, and initiated coal-sector privatization. In this case, the closing of a small, nonviable settlement will be tested. Another municipality is a mono-industrial city of about 250,000. The major enterprise has been privatized and is restructuring. In this case, a large proportion of nonworking people (pensioners, disabled, or unemployed) will be assisted. The third area is a gold-producing area where work is seasonal. There, enterprises are starting to hire a seasonal workforce, and settlements are being consolidated at the district center.

The government will provide eligible groups with migration-assistance allowances in the form of housing certificates to those who voluntarily participate in the program. Thus, allowances are specifically tied to the purchase of housing. In addition the migrants will be provided transportation to the new location for their families and household belongings.

Who should be eligible for assistance? The eligibility criteria for the Migration Assistance Program were developed in cooperation with the local authorities and stakeholders in each municipality and are tailored to reflect the local priorities. The selection criteria were intended to reduce costs and improve productivity, and vary considerably across regions. The results of this program should help inform similar initiatives to restructure enterprises or facilitate migration in other remote one-company towns, both in the North and elsewhere in Russia.

International experience. Social support for laid off workers has been critical for facilitating restructuring around the world.[155] Some social-support programs for labor retrenchment are directly linked to the privatization of state-owned enterprises (for example,, in transition economies in Eastern Europe and Central Asia), while others (for example, in North America and Western Europe) are part of an ongoing process of economic change and renewal. However, the design and use of social-support programs vary considerably across countries and are greatly influenced by the economic environment, including the level of unemployment, and type of general social-support programs already in place where economic restructuring is occurring. These programs can take various forms: they can be voluntary or involuntary; compensation packages can be standard or tailor-made, and they may or may not include ALMPs. A brief survey of a sampling of such programs follows.

Western Europe. In Germany, a new institution, the Truhandanstalt (THA) was established to deal with rapid privatization of some 8,000 state-owned companies, with a workforce of 4.1 million. The privatization program had a rapid, severe impact on employment. Labor reductions were achieved by early retirement; job placement in new private firms; employment-creation schemes, including wage subsidies, public works, and retraining; plus unemployment benefits. Special employment companies and counseling services were also established to employ and retrain workers. In the United Kingdom, British Coal divested a total of 204,000 workers, mostly over the

[155] This section draws from Fretwell, David, T. Beck, and E. Johannsson. (1995); Hoeven, Robert and Gyorgy Sziraczki (1997); Kikeri, Sunita.(1998).

age of 50, who accepted lump-sum redundancy payments. In addition, British Coal Enterprise Ltd. was established to assist employees in the sector, and their families, in developing skills and securing new employment with a special emphasis on helping displaced workers start small businesses. In Sweden, the Uddevalla shipyard was downsized via normal turnover, early retirement, a freeze on recruitment, and assistance with job search and retraining. The KLAB mine was downsized by normal and early retirement, severance, and retraining.

Eastern Europe. Privatization in transition economies often has taken place in a difficult environment with the economy contracting and unemployment increasing. In Poland, restructuring in the coal sector has been supported by a Miners Social Package, which includes lump-sum payments and early retirement assistance, combined with active labor programs (for example, small business assistance, counseling, retraining) and local economic development assistance to affected communities. Early retirement pensions were also used in many other CEE countries to facilitate layoffs early in the transition, but were quickly abandoned as their long-term fiscal costs became apparent. In Macedonia, severance payments were combined with active labor programs to assist workers affected by restructuring of 25 large loss makers. Approximately one-third of affected workers participated in the latter services. An added complication, particularly in the CIS transition economies such as Russia, is the connection of a large number of community services (for example, schools, hospitals, heating, and housing) with state enterprises. When these enterprises are liquidated or downsized, the social assets must be disbursed in a manner to ensure that essential community social services are maintained.

Latin America. In Brazil, a varied set of income support and other support packages were used to retrench workers in labor in six state-owned enterprises, including three banks and thee utilities, between 1995 and 1997. A parallel program was carried out by several states. Severance payments were a core element of the program, plus extended medical benefits, retraining, help for business start-ups, and job-search assistance to affected workers. Economic restructuring in Latin America has sometimes been carried out in a manner and in an environment that has increased employment, thus making divestiture more palatable to labor. For example, in Chile, employment in 10 state-owned companies privatized between 1985 and 1990 increased 10 percent because of overall headway achieved in economic growth and investment by the firms involved.[156] In Argentina, starting from a base of 222,000 employees in 13 major public enterprises in 1990, employment was reduced to about 42,000 by 1993 by transferring 66,000 workers to private firms, retiring 19,000, and providing 95,000 with severance payments. Retirement, generous severance, multijob holding phenomena, and reactivation of the economy and expanding labor market, are credited with deterring labor opposition.[157, 158]

The social-support programs used internationally combine both passive and active labor-market elements. Income-support programs include unemployment

[156] Larroulet (1992).
[157] World Bank (1993).
[158] Guasch, Luis (1996).

benefits, social assistance, pensions, and regular mandated severance. They sometimes include special job-loss compensation (lump sum) in addition to regular severance, early retirement schemes either through the regular pension system or through additional social assistance payments to workers near voluntary retirement age. For older workers, programs also may include temporary community employment until retirement age or administrative leave at some percentage, 75 80 percent, of salary until retirement. ALMPs provided to workers displaced because of restructuring generally include intensive job-placement assistance such as remote job search. As noted earlier, these are the most cost-effective programs of all ALMPs. However, different types of on-the-job training or institutional training, small business assistance, and public works are also provided in the case of structural unemployment. As noted above, while these programs may mitigate the social and political cost of layoffs, they tend to be very costly with very moderate wage or employment impact.[159]

Empirical work on enterprise restructuring conducted by Haltiwanger and Singh (1999) finds that the generosity and extent of programs reflects the underlying causes of restructuring. When retrenchment was perceived as a one-time event to address low worker productivity, compensation typically consisted of severance and enhanced pensions, and retrenchment was voluntary. On the other hand, when retrenchment was perceived as part of a fundamental, radical transformation of the public sector, including a restructuring of the labor market, such as that of transition countries, programs were richer. Provisions for severance and enhanced pensions were accompanied by worker safety-net measures such as unemployment benefits, job-placement services, and worker retraining. In addition, these programs more often included a mandatory component. Severance pay was the most common instrument (used in 68 percent of projects), followed, in turn, by enhanced safety nets (63 percent) and enhanced pensions (29 percent). The authors also find that for every dollar spent on severance pay, an additional 1.2 dollars was spent on enhancing safety nets and 2.2 dollars on enhancing pensions.[160]

---

[159] Fretwell and Wilson (1999).

[160] For political reasons, voluntary retrenchment programs have become increasingly popular (Rama 1999). However, standard voluntary retrenchment programs, offering benefits primarily based on years of experience, may lead to severe adverse selection problems, because the most productive workers often have superior labor-market opportunities outside the public sector. Special tailor-made programs could be designed to increase the efficiency of downsizing by disclosing worker characteristics. For example, the use of confidential individual bids for exit compensation, with safeguards to prevent collusion, has been proposed to lead to such disclosure (Jeon and Laffont 1999). Unproductive workers would propose the highest bids, all else being equal, as they would stand to lose the most from separation. Because determining the right menu may be difficult in practice, Rama (1999) recommends the use of other, simpler procedures as well, however. Another possible cost-effective procedure would determine severance pay on the basis of welfare losses arising from the worker's separation ("indexing"). Severance pay can be indexed to a wide selection of observable worker attributes, including present wages, job security, gender, years of past service, expected duration of the unemployment spell, and prevailing wages that the separating worker can expect to earn in the private sector. For state-owned enterprises in Egypt, Asaad (1999) finds that a tailor-made program could reduce total compensation by 31 percent in comparison with a standard program, and that severance pay providing higher payments to long-tenured workers is likely to overpay them (from Vodopivec and Raju 2001).

In summary, the review presented in the preceding paragraphs demonstrates that a broad range of social-support programs often accompany enterprise restructuring. Most successful programs include direct dialogue between stakeholders (for example, the Government, enterprise management, workers, and community leaders) both before and during the restructuring program. The stress on income support (for example, severance) and other forms of support (for example, labor services) and their generosity varies depending on economic and employment conditions, and the rationale for restructuring, but most programs include both elements to varying degrees.[161] While these programs may be very similar to those used to combat unemployment that is cyclical or frictional economy-wide, they are frequently provided with greater generosity than is financially feasible for the economy as a whole. Furthermore, benefits tend to be more generous despite disemployment effects as they serve communities in crisis in which a lack of focused assistance could lead to greater social unrest.

Administration of unemployment programs. The success of unemployment-protection programs and special restructuring also depends on proper program administration. The Russian Government has been active in improving its employment-program operations. The organization of employment offices was upgraded by the creation of 39 model offices intended to introduce best practices of European labor services. Career counseling centers were established in 20 regions, and social partnerships to encourage job creation were developed in three pilot regions. Staff was trained, and many *rayon* offices across 77 regions of the Russian Federation were computerized. These new methods — both ideas and technology — were disseminated to other regions through training seminars and exchange of regional experiences (Tchetvernina 2000).

Staffing and training. The staffing ratios and administrative costs of regions vary considerably. While average expenditures on administration and information technology are 18 percent across Russia, 13 regions allocate 25 percent or more of their employment program budgets to administration and information technology (IT). These include regions such as Moscow and Smolensk, which are relatively prosperous, but also Eastern Siberia and the Far East, in which workers receive pay coefficients to make up for hardship conditions (table IV.3).

Administrative expenses in high-cost regions are not related to staff size. Total regional administrative costs per staff member (administration and IT) are higher relative to regional average wage rates, when such expenditures take up a greater share of employment fund resources. The basis for these high-cost offices needs to be evaluated in order to improve the efficiency of resource allocation in these offices and nationwide. It may well be that administrative expenses capture provision of ALMPs as well as staff and service costs, and are not strictly related to the latter.

This assessment is particularly important because staffing ratios help explain part of the regional variation in coverage of employment programs. Regions with low staffing ratios handle fewer clients, limiting the coverage of the program. The quality of staffing (inadequate training, lack of information) — perhaps reflecting differen-

[161] This discussion is based on Fretwell (2000) and Vodopivec and Raju (2001).

tial access to training — may also be important in explaining regional variations in coverage. Recent studies, including a beneficiary assessment of employment offices conducted as part of the Bank-financed Employment Service and Social Protection (ESSP) project, finds that Employment Office workers find that their effectiveness could be improved through a greater sharing of ideas and information across regions (Tchetvernina 2000).

Monitoring eligibility and work incentives. A rigorous evaluation of the administrative efficiency of the Russian Employment Service offices in monitoring and verifying claims and enforcing work incentives has not been conducted. However, Russian Employment Office staff are likely to face similar problems as administrative workers in CEE transition countries. A recent review of the administrative capacity in transition countries to monitor unemployment-program eligibility found that Employment Service staff face considerable difficulty in undertaking this task. First, the large informal economy prevailing in most transition countries makes the task of monitoring very difficult. This is particularly the case in transition countries with considerable corruption and lack of law and order. Second, the culture of entitlement remains ingrained in both beneficiaries and employment office workers, so that eligibility is often not verified.

Weak monitoring and enforcement capacity, such as the lack of technology, information systems, resources, and often also the political will to monitor and enforce existing laws, makes this task even more difficult. For example, although informal employment is prevalent in many transition countries, labor inspectors catch few violators. In Hungary and Slovenia, benefit disqualifications are very rare. Similarly, verifying the accuracy of self-reported earnings of the benefit recipients (in countries that require such reports) is often not done — in part because there are no mechanisms available to counselors to do so. Therefore, the adoption of unemployment-insurance programs more suited to the administrative capacity, information availability, and formalized markets of OECD countries may have been slightly premature in Russia as in other CEE countries.

*Program dependence***.** International evidence suggests that the administrative capacity to implement unemployment-protection programs varies by program. Flat unemployment benefits are the least difficult to administer. They do not require past wage and employment history or collection of contributions, or changes in benefit over time. Public works are also not very difficult to administer. However, means-tested unemployment benefits are at least as difficult, if not more difficult, to administer as unemployment-insurance programs. In countries where the informal economies are large, and cross-checking systems don't exist, means tests are likely to be ignored, used on an ad hoc basis, and may be unreliable (World Bank 2001b).

The self-policing nature of the ISA system could help reduce some of the work-incentive effects imposed by unemployment-insurance programs. Under the traditional unemployment-insurance system, employers in developing countries sometimes fail to pay program contributions. By introducing personal accounts, workers themselves monitor such payments. Of course, if workers anticipate frequent spells of unemployment, and if benefits are paid to those who exhaust their accounts, compliance may still be a problem. Furthermore, the administrative complexities from

introducing individual account based ISAs are similar to those required by Notional Defined Contribution (NDC) or second-pillar pension systems.[162] ISA programs require the essential preconditions of funded pension systems: a functioning financial market, including adequate supervisory and regulatory capacity, so that money accumulating in individual accounts can be managed appropriately. These preconditions are important before ISAs can be introduced in Russia.

Political pressures. Another major concern about the administration of unemployment-protection programs in Russia is in the effectiveness of Employment Service offices, which may be compromised by interactions between municipal governments and loss-making enterprises (Tchetvernina, 2000). These interactions may result in the inappropriate use of ALMP resources. Enterprises with accumulated arrears to the Employment Fund are reported to have been "encouraged" (forced) to participate in "job preservation" or "youth training" programs as a way to restructure their arrears. More generally, enterprises admitted being under pressure by local authorities to maintain employment. While the decline in expenditures on job-creation/preservation programs may have lessened this pressure, it is important that Employment Service offices focus on assisting the unemployed to find jobs, rather than containing the growth of unemployment itself.

C. Policy Options

In summary, Russia's safety net for workers has not been very effective in allaying the social costs of layoffs. But, an effective unemployment-benefit system is important for helping workers cope with income and skill loss as a result of unemployment. It is also important if Russia is to move protection outside of firms to the public domain and to facilitate restructuring of large industry, the budget sector, and one-company towns or facilitate depopulation of the North. The recent government program has made important steps in this regard. The following policy options provide some choices to the government as it moves forward to create a financially viable and effective unemployment-protection program.

Unemployment Benefit Programs

Benefit design options. The three options for the unemployment-benefit programs are: (a) benefits based on past wages and work history (currently the case), (b)

[162] Vodopivec and Raju (2001) note that the risk of having high administrative costs of private pension accounts in the United States as low to medium, and a similar assessment is valid also for ISA accounts, and for other countries as well. To keep the costs of private accounts low, some experts proposes that investment funds are approved and regulated by the government and subject to standard auditing controls to reduce fraud. He also proposes limits on investment charges as well as on free movements of money between funds. In such a case, most of the administrative costs would come from collecting contributions from individual workers, that is, at few extra costs in comparison to the public system.

unemployment assistance (means-tested or flat), and (c) Individual Saving Accounts (ISAs). A flat benefit is best suited to Russia because it minimizes administrative requirements and is consistent with the shift toward general revenue financing. While, in theory, workers can provide documentation on their work at a firm without a contribution history, in practice, this may be subject to considerable fraud and abuse. Furthermore, workers in the informal sector who lose their jobs are unlikely to be able to obtain accurate documentation from their employers. The 1999 reforms have already moved the unemployment benefit part way to a flat system, at least for all but voluntary and redundant workers.

The introduction of a flat benefit may not be a politically viable option. There is considerable preference in Russia for a benefit that reflects past wages. In this case, a simplified version of a wage-based benefit might be introduced, with benefit as a fixed proportion of an individual's wages, subject to appropriate maximum and minimum caveats. The benefit could still be financed from general revenues. However, the period of wage assessment for benefit should be increased considerably from the current three months to reduce incentives for collusion between employer and employees. That is, wages paid for the final three-month period could be inflated considerably above those received earlier. The success of a benefit system that depends on past wages will require improvements in collection of accurate information on wages (or greater formalization of the economy). Keeping benefit levels dependent on past wages may have the additional benefit of creating incentives for workers to accurately declare past wages once the benefit level improves.

Unemployment insurance (based on the collection of individual contributions) might be re-introduced once the economy has formalized and administrative capacity to monitor individual records has improved. ISAs might also be considered, perhaps in conjunction with unemployment insurance. However, their introduction will require better financial markets and regulatory capacity than are currently in place. The introduction of these accounts is also risky at present, as there is limited experience with this system worldwide.

Incentives. In the future, the government would have to ensure that "unemployment traps" arising from a more generous level and duration of benefit are avoided. Research has shown that benefit generosity can help smooth consumption but also reduces incentives for individuals to re-enter the labor force.

- Whether benefits are set as a share of individual or national wage, or are flat, the proportion of benefit should be set to ensure that it is not too high as a share of average national or regional wages. Therefore, benefit levels might be set as a low share of average wage, for example, equal to about 30 percent of the average wage and within the financing envelope (see section on financing and administration below) to avoid adverse incentive effects.
- The benefit level should be coordinated with the minimum wage. In the short run, a flat benefit equal to about 30 percent of average wage would be much higher than the minimum wage. However, over time, the level of unemployment benefit should be roughly equal to or somewhat lower than the minimum wage (assuming it is roughly 30 to 35 percent of average wage in the

long run). If wages are a proportion of average wage, the minimum benefit could keep pace with the regional minimum wage, while maximum benefit could be some proportion of average wage (for example, 50 percent). Regional differentiation in benefit would also be important given differences in income across the regions.

- Benefits should be assessed with reference to the average wage. This is because the opportunity cost of beneficiaries is the market average wage, not the subsistence level. Over the medium term, the average wage, rather than the subsistence minimum, also provides better information about the fiscal resources available to the government to finance the unemployment benefit program. Evaluating benefits with respect to the subsistence minimum can be very costly if wages are lower than the subsistence level. If current average benefit were equal to the subsistence minimum, then benefits would be 60 percent of average wages. It would then be very expensive for the government to finance unemployment benefits and would also cause work disincentives for low-wage workers.
- The duration of benefit might be reconsidered or reduced for voluntary quits from a year to about six months. If the reformed program is fully funded, the current duration of benefit would induce work disincentives as found in many CEE countries.

Benefits/privileges for some. The current benefit program also provides several guarantees and benefits on a preferential basis that might be reconsidered to make the program more targeted and less costly in the medium term. Phasing out these privileges is consistent with the government's policy to reduce privileges and better target benefit. The most important privileges/benefits for some workers include:

- *Guarantees for dismissed workers*. Guarantees to dismissed workers for housing, medical, and preschool services at their former places of work should be removed. These encourage employers to press workers to quit rather than be laid off and provide disincentives for former workers to relocate where better jobs can be found.
- *Northern and Chernobyl benefits*. Additional benefits for persons located in the North who had received higher compensation. Such benefits are inappropriate in a market-oriented employment program because they create inequities across unemployed workers, provide work disincentives, and discourage mobility.
- *Early retirement benefits spanning unemployment to pension*. These schemes tend to be extremely costly, often with costs spiraling out of control. Consequently, it is better not to have early retirement provisions in the Employment Law. However, if it is desired, the scheme should be designed very carefully, with tight eligibility conditions, taking into consideration future expenditures.

Eligibility options. The unemployment scheme in the Russian Federation makes many workers eligible, which turns it into a hybrid program — somewhere in between an unemployment-benefit and a social-assistance system.

- *Large number of benefit categories.* The program in Russia covers individuals who do not qualify for benefits in OECD countries for moral hazard reasons, for example, workers who have left for disciplinary reasons, job leavers, reentrants, and training dropouts. Therefore, consideration should be given to reducing eligibility from the wide array of unemployed currently eligible under the system, both to target the system and to reduce moral hazard problems in the future.
- *Voluntary quits vs. layoffs.* The current practice of providing unemployment benefits to individuals with recent work histories, such as job losers and job leavers, might be continued since there is little difference between the two groups. In the longer run, benefits to job leavers should be restricted. But such a reform must be delayed in Russia until the labor market becomes more transparent.

Program monitoring. The Household Budget Survey, if nationally representative and redesigned to include questions on the level of benefit and individuals' characteristics, could be used to approximate the incidence, adequacy, and coverage of the unemployment-benefit program on a continual basis. Continual monitoring of these indicators could help policymakers assess the impact of the program and make changes to improve its effectiveness, as needed.

Active Labor-Market Programs

Contrary to popular belief, ALMPs have only moderate impact on alleviating long-term unemployment. Their ability to assist high-risk unemployment groups might be improved in the following areas:

Program selection/evaluation. Despite their intuitive appeal to politicians and the public, ALMPs provided should be cost-effective and likely to succeed. This is particularly the case given the weak results found across OECD and transition economies. The international evidence suggests that if resources and administrative capacity is limited, job counseling and information are the most effective ALMPs. International evidence also suggests that evaluation of programs is also important to assess their performance, prior to any replication of current efforts. For this, well-designed program evaluations are required, including of unemployed participants and nonparticipants. This work is being initiated in Russia and should be expedited.

Profiling to improve matching. Profiling could also help match particular groups to programs that work best for them. However, since the cost-effectiveness or impact of profiling is not well known, an experiment in Russia on profiling should be undertaken with caution. A pilot approach is warranted that would include built-in evaluation so that the cost-effectiveness of the program and its impact on reducing long-term unemployment can be assessed.

Employment quotas. Employment quotas should not be part of the ALMP program. Employment requirements for training-program participants should also be avoided. Evidence suggests that employment quotas are not an effective means of

providing jobs for persons with disabilities. In fact, employers tend to prefer to pay fines rather than having their employment policies weighted down with special rules and regulations that may make hiring persons with disabilities costly.

Introducing private provision. A redesign of ALMPs toward hard-to-place employed would also be appropriate since a private-sector employment service industry has started to develop. These services ought to be encouraged but also should be well regulated. Such private businesses are more likely to provide services for more highly qualified workers. Individual choices of program and private provision of training would allow a better match of individuals with program and jobs, because individuals and the market can be assumed to have better information about training needs than the Government. However, appropriate regulation of private providers is also required in order to reduce any potential abuse.

Social Support Packages for Restructuring

In addressing the remaining restructuring agenda, the government might consider developing a strategy prioritizing key industries and areas (North, or one-company towns), while phasing in the social support required. This strategy could be informed by Russia's own experience in restructuring and on international practice. The main elements of this strategy might include the following: (a) identification of the enterprises to be restructured, and the demographic and work skills of their personnel; (b) agreements on parameters of a social-support package (determine its scope, costs, source of financing, and administration drawing on existing mechanisms where possible); (c) stakeholder involvement; (d) a public information campaign; and (e) monitoring and evaluation mechanisms. The latter could help to ensure that workers are not rehired via a "back door" and that workers who have difficulty in re-entering the labor market are identified early and given targeted assistance to ensure they do not slip into poverty. If enterprises have social infrastructure (schools, clinics), divestiture of these assets might also be monitored to ensure that it has been successfully transferred to municipalities.

Cross-Cutting Issues: Administration, Financing, and Evaluation

Changing requirements for employers. The demands placed on employers to report job vacancies or job placements to employment offices should be reduced and reporting should be voluntary. Employers also should not be required to accept applicants from employment offices or indicate why applicants have not been accepted. Furthermore, municipalities should not be able to forgive tax or contribution arrears in exchange for the establishment of training programs, hiring of unemployed workers, or the like. These are all outside the practices of a competitive economy because they raise the cost of business for employers.

Evaluate and regulate administrative expenditures. In line with policy reforms, the Government could profitably undertake a serious evaluation of staffing needs and organization. Organizational changes should ensure that staff is well trained and flex-

ible and that ALMPs offered are related to local employment opportunities. Information exchange could be ensured through direct contacts between regional and *rayon* employment-service specialists.

Financing. Resources budgeted for unemployment benefits and ALMPS should reflect expected regional needs to avoid arrears. In addition, distribution of benefits to regions should be done in a fair and transparent fashion. A simple way to do this is to distribute finances (within the overall budget envelope) using information on regional and or survey-based unemployment rates (RLFS).

A simple simulation analysis varying the basic parameters of employment-program expenditures across regions was conducted to inform total financing decisions. The simulation is as follows: Consider several flat-benefit alternatives that could have been substituted for the underfunded and overly complex system in place in 1999. For example, what if an adequately financed and redesigned program were based on one of the following scenarios:

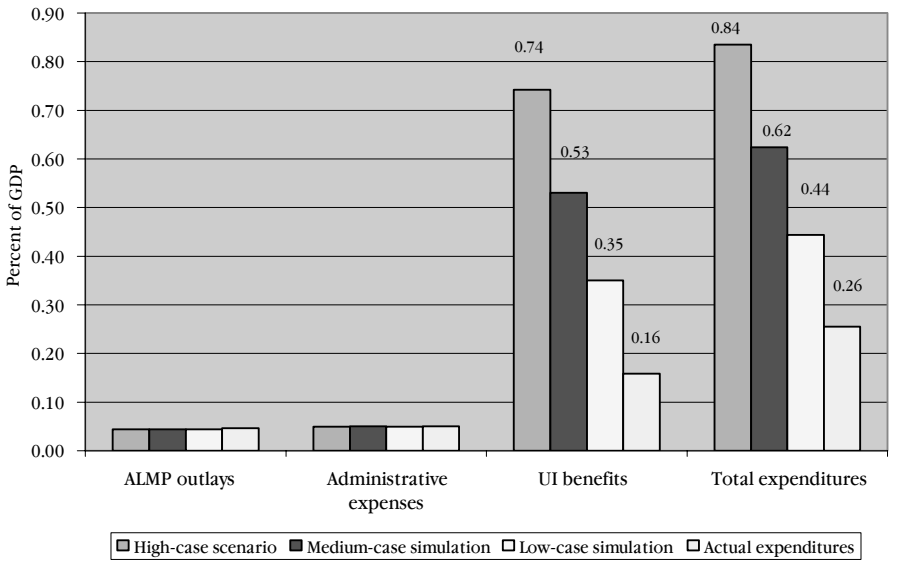
(1) Low-Case Scenario:
·Registration of at least 30 percent of the unemployed;
·Payments averaging 30 percent of the average regional wage;
·Reallocation of ALMPs toward effective treatments; and
·Reduction of administrative expenses in high-outlay regions.

(2) Medium-Case Scenario:
·Registration of at least 35 percent of the unemployed;
·Payments averaging 40 percent of the average regional wage;
·Reallocation of ALMPs toward effective treatments; and
·Reduction of administrative expenses in high-outlay regions.

(3) High-Case Scenario:
·Registration of at least 40 percent of the unemployed;
·Payments averaging 50 percent of the average regional wage;
·Reallocation of ALMPs toward effective treatments; and
·Reduction of administrative expenses in high-outlay regions.

Furthermore, in each of the three cases, "high-outlay regions" in terms of expenditures for ALMPs were constrained to reduce expenses. Eight regions had expenditures on ALMPs that were considerably higher than the average of 17.5 percent of expenditures. In fact, they averaged 38.2 percent of expenditures compared with an average of 12.8 percent for the others. The regions are Moscow, Orel, Smolinsk, Belgorod, Ingushetia, Orenberg, Amur, Sakah, and Yakutia. The expenditures of these eight regions alone accounted for 40 percent of spending on ALMPs in 1999. The high-cost-region expenditures were particularly directed toward the "preservation of job places" and the "creation of additional jobs." The first provides funding for job maintenance and the second directly provides 12-months' average salaries for workers. These are essentially job-subsidy programs of one sort or another that research has shown to be inefficient.

Figure IV.1. Simulation of Unemployment-Benefit Expenditures



In addition, regional expenditures were increased to equal actual expenditures reported for Sakha (Yakutia), measured as a percentage of simulated passive labor-market program expenses. Only Sakah spent as much as 5.5 percent of outlays on programs facilitating job search

for the long-term unemployed, that is, persons out of work for more than six to eight months. As noted above, these programs are often the most cost-effective. Lastly, administrative expenditures were constrained at a maximum of 25 percent of passive program outlays, with the exception of Moscow.[163]

Figure IV.1 compares actual with simulated expenditures for the three scenarios presented above compared with actual expenditures as a percentage of 1999 GDP. Under the simulations, expenditures on unemployment benefits in 1999 would have ranged between 0.35 and 0.74 percent of GDP compared with actual expenditures of only 0.16 percent. Each of the new programs would have increased expenditures for each type of activity — ALMPs, administration, and passive programs — but as a percentage of GDP expenditures ALMPs and administrative expenses would not be significantly higher. The gains from cost reductions in high-cost regions are essentially balanced by increased expenditures on more effective ALMP programs across all regions. Total expenditures in the high-cost regions would have been reduced by

[163] A number of regions that had unusual expenditures on administration or ALMPs, based on actual outlays on unemployment benefits, did not need to cut their expenditures once their passive labor-market programs were improved.

nearly 60 percent as a result of cutting inefficient programs, and their share of ALMP expenditures would have decreased from 41 percent to 15 percent of the total expenditures.

In the Low-Case Scenario, increased total expenditures could have been easily funded through reductions in allocations for other social programs (discussed above). In the other cases, more difficult choices would have to be made. The simulations also presume that higher benefits lead to higher take-up rates. For example, if benefits were set at 50 percent of the regional average wage (the High-Case Scenario), the simulations assume a take-up rate of 40 percent of the unemployed. With higher benefits, the likelihood of work disincentives increases, particularly for lower-wage workers. These increases could be reflected in higherinitial take-up rates or in a higher proportion of the unemployed staying on the rolls for the full period of benefit entitlement. For that reason, Russia should consider pursuing a less generous benefit policy until sufficient data are available to determine the behavioral responses of program participants to more modest unemployment benefits, but ones that encourage take-up among unemployed and unpaid workers.

Summary and Conclusions

Unemployment-benefit programs and ALMPs have had limited coverage and uncertain financing over the past decade, reducing their potential to protect workers against income or skill loss as a result of unemployment**.** A very low and unpredictable level of benefits reduces the usefulness of the system, thus putting large numbers of workers to hardship which could be avoided. The Government has introduced general revenue financing of unemployment benefit programs and ALMPs. However, the benefit design and ALMP strategy has not been fully defined. The chapter suggests that the following elements might be considered for the design of the safety net for workers in Russia.

An effective safety net would protect workers against poverty, help facilitate restructuring, and assist in moving protection out of firms and into the public domain. The report suggests considering the following elements in the design of the new program.

Unemployment benefit design should be simple to administer, with incentives, and adequately financed. The report provides several policy options for unemployment benefit design.

- The report provides three key benefit options: (i) *a flat* benefit, fixed in nominal terms as some percent of average wage, and indexed to prices is one option for policy makers to consider. A flat benefit minimizes administrative requirements, is progressively distributed, and is consistent with general revenue financing. (ii) The Government could also consider *simplifying the benefit formula* to one that is some fixed percent of average wage over the entire duration of the benefit. (iii) If these options are not politically feasible, and the Government decides to retain the current formula, the report recommends the following changes in the eligibility and duration conditions of benefit.

These changes should be considered whatever benefit formula option is chosen by the Government:

- *Over the medium term, the level of benefit should be set so as to minimize work disincentives.* The benefit level would remain a low share of average wage (e.g. 30 percent) to ensure work incentives. The minimum and maximum *benefit levels* should be delinked from minimum subsistence and established relative to the average wage. Over the medium term, the average wage will give more reliable information on the availability of fiscal resources and work disincentives for beneficiaries than the subsistence minimum. Given large regional differentiation in wages, differentiation of regional benefit levels will be important.
- *The assessment period for benefits should be increased*, and benefits established at a fixed proportion of an individual's wages (for example, 30 percent of wages) in order to ease administrative requirements for processing benefit claims.
- *The duration of benefits could also be reduced to a maximum of six/nine months* as in other CEE countries. A long duration of benefits, coupled with more generous level of unemployment benefits in the medium term, might induce longer unemployment spells.
- *Benefits could be provided to fewer categories of workers*, such as laid-off workers and voluntary quits. Over time, as the distinction between voluntary quits and laid-off workers is reduced, benefits for voluntary quits should be phased out or the eligibility of voluntary quits should considerably tightened in line with international practice. Special benefits to e.g. northern workers should be phased out as well. Targeting benefits would help save program expenditures, help the truly deserving, and reduce administration costs.

ALMP strategy. The future thrust of ALMPs in Russia is difficult to determine since programs have not yet been empirically evaluated using best-practice evaluation methods. Implementing such program evaluations should be expedited by the policy makers. On the basis of administrative data and international experience, however, the report indicates the following direction for ALMPs:

- ALMPs are an important complement to passive programs, such as unemployment benefits. They have the potential to help individuals re-enter the labor market, and reduce their dependence on public support. Therefore it is important that a basic level of financing for employment services is guaranteed by the budget.
- However, in countries where ALMP financing is limited, as in Russia, the focus of ALMPs should be on the most cost-effective programs, such as job counseling and job-information services should be increased. Emphasis on direct job creation programs should be reduced. Efforts to help the most disadvantaged workers (older, experienced workers, with obsolete skills) should increase. The use of employment quotas that state that individuals should have a job before being trained should be discontinued.
- Empirical profiling of users, currently being considered for introduction, may be useful for assessing what programs work best for particular groups — but the

benefits and costs should be evaluated in Russia—on a pilot basis—prior to introduction because it is an administratively complex program to implement.

- The focus of employment services should be to help individuals find jobs themselves rather than helping preserve or create new jobs. Political pressure on employment agencies to contain unemployment is therefore misplaced.
- Private provision could be introduced as the sector develops so that market information can be used to match workers to training programs. Private providers should be regulated, however, so that potential abuse is restricted.

Financing and administration. The report stresses that adequate financing of the program and its effective administration and monitoring are essential for its success.

- The report cautions that the general revenue financing of passive and active programs, introduced in 2001, will not necessarily reduce arrears or regional inequity of benefit. The Child Allowance Program, which is now federally financed, continues to have these problems. Therefore, adequate and certain financing of the program is required no matter the source of financing. At the same time, it is important that the program is designed to take into account the Government's fiscal constraints and that it uses scarce budgetary resources effectively. It is also important for the Government to provide a transparent allocation mechanism for transferring program resources to regions. Finally, the administration of both active and passive programs requires considerable attention to appropriate remuneration and training of staff, and their allocation across regions.
- The report finds that an adequately financed safety net for workers is possible in Russia. The simulated cost of the benefit program with a 30-percent replacement rate (30 percent coverage, using 1999 data) would be approximately equal to 0.34 percent of GDP. Total costs of the program, including ALMP benefits, would be 0.44 percent of GDP-well within the scope of Russia's level of income. (These costs would be well below the costs of similar programs in advanced CEE countries of 1.1 percent of GDP in 2000). The increase in benefits should be done gradually, as resources are released from improvements in the targeting/phase out of other social protection programs (privileges, housing allowances, for example).

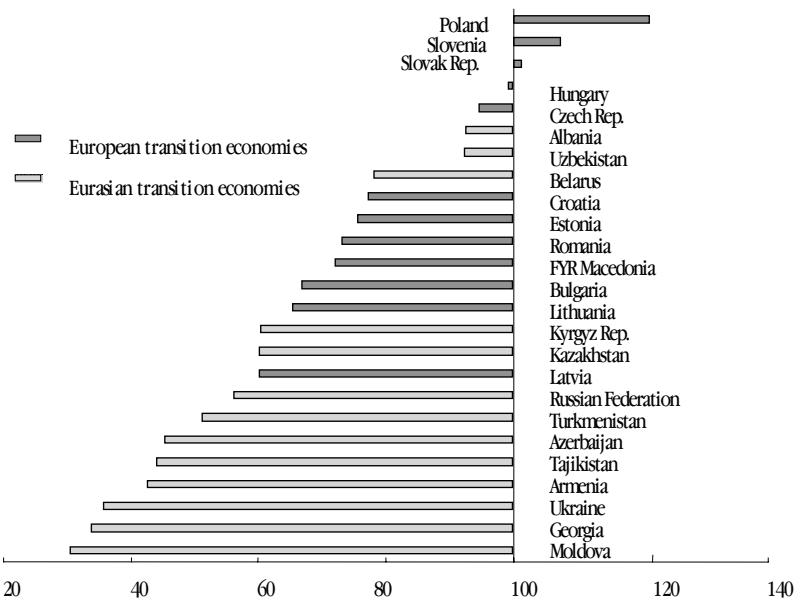
Social support restructuring. A combination of unemployment benefits, ALMP and severance benefits has proved important in downsizing the coal sector in Russia and also is widely used internationally to facilitate restructuring. It could therefore be used for downsizing in other sectors and regions in Russia (for example, regions with a high share of the industrial, overstaffed state sectors, or one-company towns, or other over-manned state sectors). The development of a strategy for identifying priority areas for restructuring and social programs for affected workers would be an important first step in this direction.. The main elements of this strategy might include the following: (a) identification of the enterprises to be restructured, and the demographic and work skills of their personnel; (b) agreements on parameters of a social-

support package (determine its scope, costs, source of financing, and administration drawing on existing mechanisms where possible); (c) stakeholder involvement; (d) a public information campaign; and (e) monitoring and evaluation mechanisms. The latter could help to ensure that workers are not rehired via a "back door" and that workers who have difficulty in re-entering the labor market are identified early and given targeted assistance to ensure they do not slip into poverty. If enterprises have social infrastructure (schools, clinics), divestiture of these assets might also be monitored to ensure that it has been successfully transferred to municipalities.

ANNEX I

EMPLOYMENT

Figure I. 1. Changes in GDP in Transition Countries
(Real GDP of 1999, 1989 = 100)



Source: World Bank (2000b)

Table I.1. Cumulative Change in GDP, Employment, Productivity, and Wages in Russia, 1990-2000

Cumulative change	CPI wages	Real GDP	Employment	Productivity
1992–98	-36%	-29%	-12%	-20%
1998–2000	-5%	11%	2%	9%
1990–2000	-60%	-36%	-14%	-25%
1990–98	-57%	-39%	-14%	-30%
1999–2000	22%	8%	1%	7%

Source: Goskomstat (2000b, 2001b)

Table I.2. Changes in GDP, Employment, Wages, and Productivity, Russia and Select CEE Countries

Growth of key labor market indicators; Russia and advanced CEE countries (in percent)

	Czech Republic	Hungary	Estonia	Poland	Slovak Rep.	Slovenia	Russia
Average annual growth (first two years of positive GDP growth)							
Wages	8.2	-5.8	8.0	-1.2	3.6	8.1	-2.5
GDP	4.1	4.1	2.2	4.5	5.8	4.0	5.4
Employment	0.7	-3.5	1.9	-0.7	0.6	-0.8	0.7
Productivity	3.3	7.5	0.3	5.2	5.2	4.8	4.7
Cumulative growth since 1990							
Wages	12.7	-2.7	-32.1	10.1	-2.7	51.6	-60.5
GDP	-0.9	-15.2	14.6	50.5	8.3	24.8	-36.0
Employment	-11.1	-22.5	-21.0	-4.1	-20.0	-7.7	-14.2
Productivity	10.2	7.3	35.6	54.6	28.3	32.5	-21.8
Cumulative growth since first year of positive GDP growth							
Wages	33.85	-4.98	42.05	13.51	26.04	34.40	-4,84
GDP	12.60	30.30	34.98	57.76	41.20	44.78	11,15
Employment	-8.16	-7.52	-14.69	6.44	-7.19	1.43	1,51
Productivity	20.76	37.82	49.67	51.32	48.39	43.35	9,64

Sources: Riboud, Sanchez Paramo, and Silva-Jauregui (2001); Goskomstat (2000).

Table I.3. Unemployment Trends, 1992-2000

Panel A	October 1992	October 1993	October 1994	October 1995	October 1997	October 1998	November 1999	November 2000
A. Unemployment rates, percent								
LFS Unemployment rate	5.2	5.9	8.1	9.5	11.8	13.3	12.9	10.0
Gender								
Male	5.2	5.9	8.3	8.7	12.2	13.6	13.0	10.4
Female	5.2	5.8	7.9	9.2	11.5	13.0	12.8	9.6
Age groups								
< 20 years	20.4	21.1	26.5	28.7	41.4	46.3	36.5	35.1
20-24	9.7	10.6	12.8	15.3	18.9	22.5	20.0	16.6
25-29	5.5	6.7	9.2	11.4	12.7	14.2	14.0	10.7
30-34	4.1	5.3	8.0	9.2	11.7	12.9	13.1	9.6
35-39	3.6	4.5	6.7	8.2	11.0	12.1	12.0	9.4
40-44	3.1	4.0	6.3	7.0	9.3	10.7	10.3	8.6
45-49	3.1	3.8	5.4	6.5	8.3	9.6	10.0	7.3
50-54	2.9	3.2	5.2	5.8	7.7	8.8	9.3	6.2
55-59	3.8	3.7	5.3	5.7	8.1	8.8	10.0	8.5
60-72	5.6	4.5	4.9	5.2	6.9	8.7	10.7	8.0
Level of education								
University	3.3	3.5	4.8	5.0	5.7	7.1	7.1	5.3
Technical/vocational	4.5	5.3	7.3	8.3	10.2	11.4	10.6	7.9
General secondary	5.9	6.7	9.5	11.6	14.2	16.2	16.1	13.5
Basic secondary	6.6	7.8	10.7	12.9	17.6	19.4	19.9	16.5
Elementary	4.0	4.2	6.4	7.3	15.9	17.5	23.4	17.6
B. Duration of unemployment								
Average duration (in months)	4.1	5.7	6.6	7.4	8.8	9.9	9.7	9.1
C. Previous experience (percent)								
Had previous labor experience	79.9	81.3	83.6	83.2	88	85.9	80.6	81.9
Job losers	20.9	22.8	28.9	28.3	34	37.1	32.6	26.8
Job quitters	34.8	40.4	39.3	39.4	25.0	22.2	21.1	26.4
Other reasons	24.2	18.0	15.4	15.5	28.9	26.6	26.9	28.6
Did not have labor experience	20.1	18.7	16.4	16.8	12.0	14.1	19.4	18.1

Note: Sample includes respondents aged 15-72.
Source: LFS figures reported in Goskomstat 1999a, 2000c .

Panel B	1992	1993	1994	1995	1997	1998	1999	2000
Russia	5.2	5.9	8.1	9.5	11.8	13.3	12.9	10.0
United States	7.5	6.9	6.1	5.6	4.9	4.5	4.2	4.0
European Union	9.1	10.6	11.0	10.6	10.4	9.8	9.1	8.2
OECD Total	7.1	7.8	7.7	7.4	7.0	6.8	6.7	6.3

Source: LFS figures reported in Goskomstat (1999a, 2000c); OECD (2000).

Table I.4. Unemployment Growth Rates, Select CEE Countries and Russia

	1993	1994	1995	1996	1997	1998	1999	2000
Czech Republic	3.9	3.8	4.1	3.9	4.8	6.5	8.8	
Estonia	6.5	7.6	9.7	10	9.7	9.9	11.7	
Hungary	11.9	10.7	10.2	9.9	8.7	7.8	7.1	
Poland	14.9	16.5	15.9	14.3	11.5	10.6	12	
Slovak Rep.	12.2	13.7	13.1	11.1	11.6	12.5	17.1	
Slovenia	9.1	9	7.4	7.3	7.1	7.9		
Russia	5.9	8.1	9.5	9.7	11.8	13.3	12.9	10

Source: OECD-CCET Labor Market Database 1990-97.

Table I.5. Composition of Unemployed by Duration of Unemployment

Panel A: Russia (LFS, percent, 1992-2000)

	< 1 month	1-3	3-6	6-9	9-12	12+
1992 October	26.8	29.6	19.6	7.6	5.3	11.1
1993 October	17.5	19.3	28.7	8.6	7.7	18.2
1994 October	11.9	16.7	29.9	10.3	8.3	23.0
1995 March	8.7	12.8	27.7	12.5	10.2	28.1
1995 October	10.4	14.8	26.3	10.0	8.9	29.6
1996 March	7.4	10.3	26.8	12.3	10.7	32.5
1997 October	7.8	15.9	15.8	10.7	11.6	38.1
1998 October	6.1	16.0	15.9	10.3	10.8	40.9
1999 February	4.5	12.4	14.7	10.8	11.2	46.6
1999 May	6.9	12.4	11.2	9.4	10.5	49.7
1999 August	7.9	15.7	12.5	8.6	10.5	44.8
1999 November	6.8	14.1	13.6	8.2	10.0	47.2
2000 February	6.6	12.1	12.7	9.9	9.4	49.4
2000 May	8.7	10.3	11.8	7.4	11.4	50.4
2000 August	9.0	17.9	11.7	7.6	10.7	43.0
2000 November	8.1	16.4	14.1	8.8	10.2	42.3

Note: Sample includes respondents aged 15-72.
Source: LFS figures reported in Goskomstat 1999a, 2000c.

Panel B: Percentage of long-term unemployment (12 months or more) in total unemployment, selected OECD countries, 1997

Canada	12.5	Poland	38.0
Czech Republic	30.5	Spain	55.5
Finland	29.8	Sweden	33.4
France	41.2	Turkey	41.6
Germany	50.1	United Kingdom	38.6
Hungary	51.3	United States	8.7
Italy	66.3	European Union - 15	51.3
Japan	21.8	OECD Total	34.7

Source: OECD 1999.

Table I.6. Unemployment, by Reason for Leaving and Duration of Unemployment, Feb. 2000 - Nov. 2000

	Total (000s)	Out of total Unemployed during (mos)						Average time looking for a job (mos)
		Less than 1	From 1 to 3	From 3 to 6	From 6 to 9	From 9 to 12	12 and more	
Total: 000s percent	**7,515**	**604 8.0**	**1,053 14.0**	**946 12.6**	**639 8.5**	**781 10.4**	**3,493 46.5**	**9,6**
Out of them, with working experience:	6,105	7.6	13.6	12.4	8.5	10.3	47.6	9.7
Out of them, leave previous job because of:								
Layoff, liquidation of enterprise	153	3.9	9.1	11.0	8.3	11.4	56.4	11
Leave (nonforceful)	512	10.3	18.4	13.4	9.4	9.7	38.9	8.6
Exhaustion of contract duration	744	12.3	22.0	18.9	10.6	9.7	26.5	7.2
Retirement	258	5.3	7.1	9.4	5.0	10.9	62.1	11.4
Residence place change	856	7.7	14.2	15.4	8.5	9.2	44.6	9.3
Health reasons	154	6.6	10.7	11.1	7.8	7.4	56.8	10.6
Personal/family reasons	1,361	7.8	14.7	10.3	7.5	9.7	49.8	9.9
Discharge from army	959	28.2	10.3	15.4	7.7	7.7	28.2	6.6
Other reasons	1,107	12.6	14.8	12.4	8.2	11.0	40.7	8.8
Without working experience	1,410	9.8	15.8	13.5	8.5	10.6	41.8	9

Source: Goskomstat, Labor Force Survey, November, 2000

Table I.7. Unemployment, by Age and Duration of Unemployment, Feb. 2000 - Nov. 2000

	Total (000s.)	Out of total Unemployed during (mos)						Average time looking for a job (mos)
		Less than 1	From 1 to 3	From 3 to 6	From 6 to 9	From 9 to 12	12 and more	
Total: 000s percent	**7 515**	**604 8.0**	**1,053 14.0**	**946 12.6**	**639 8.5**	**781 10.4**	**3,493 46.5**	**9.6**
Out of them, aged (years):								
before 20	530	17.2	25.8	17.5	9.2	10.2	20.0	6.2
20–24	1,309	10.2	16.6	15.0	9.2	11.3	37.6	8.6
25–29	961	7.1	13.8	13.1	8.8	10.8	46.3	9.6
30–34	909	7.7	14.1	12.4	9.4	8.8	47.5	9.6
35–39	1,072	7.0	13.1	12.1	7.7	10.2	49.9	10
40–44	1,001	7.4	12.6	10.8	8.6	9.6	51.1	10.1
45–49	801	5.6	12.1	10.9	8.0	11.9	51.7	10.3
50–54	453	5.7	9.1	10.8	6.8	9.9	57.4	10.9
55–59	269	4.5	6.7	9.3	8.2	11.2	59.9	11.4
60–64	161	4.3	8.1	9.3	8.1	9.9	60.2	11.3
65–72	51	2.0	3.9	5.9	2.0	5.9	76.5	12.9

Source: Goskomstat, LFS, November 2000.

Table I.8. Unemployment, by the Last Working Place and Duration of Unemployment, Feb. 2000 - Nov. 2000

	Total (000s.)	Out of total Unemployed during (mos)						Average time looking for a job (mos)
		Less than 1	From 1 to 3	From 3 to 6	From 6 to 9	From 9 to 12	12 and more	
Total: (000s) percent	**7,515**	**604 8.0**	**1053 14.0**	**946 12.6**	**639 8.5**	**781 10.4**	**3493 46.5**	**9.6**
Out of them:								
With working experience, as:	6,105	7.6	13.6	12.4	8.5	10.3	47.6	9.7
Executives of all levels, including top-managers	153	8.5	9.2	10.5	14.4	8.5	48.4	10
Specialists (highest level of qualification)	512	7.4	13.1	13.1	7.2	12.1	46.9	9.7
Specialists (average level of qualification)	744	7.4	11.0	10.9	8.3	10.3	51.9	10.2
Employed on information preparation, documenting, counting	258	8.1	7.4	11.6	7.4	12.0	53.5	10.6
Employed in services, utilities, retail trade and similar sectors	856	8.3	14.6	13.2	8.4	10.6	44.9	9.4
Qualified workers of agriculture, forestry, hunting, fishery	154	6.5	12.3	12.3	9.1	9.7	50.6	10.1
Qualified workers of industrial enterprises, craft arts, construction, transportation, communication, geology.	1,361	7.2	14.8	11.5	7.9	10.7	47.8	9.7
Machine operators and mechanics	959	7.9	16.1	13.6	9.1	10.2	43.4	9.2
Workers without qualification	1107	7.5	13.4	13.0	8.9	8.9	48.4	9.7
Without working experience	1410	9.8	15.8	13.5	8.5	10.6	41.8	9
With qualification	602	8.0	17.3	14.0	9.3	10.8	40.7	8.9
Without qualification	808	11.1	14.7	13.1	7.9	10.4	42.6	9

Source: Goskomstat, LFS, November 2000.

Table I.9. Unemployment, by Education and Duration of Unemployment, Feb. 2000 - Nov. 2000

	Total, (000s)	Out of them Unemployed during (mos)						Average time looking for a job (mos)
		Less than 1	From 1 to 3	From 3 to 6	From 6 to 9	From 9 to 12	12 and more	
Total: (000s) percent	**7515**	**604 8.0**	**1,053 14.0**	**946 12.6**	**639 8.5**	**781 10.4**	**3,493 46.5**	**9.6**
Out of them with education:								
University (≥4 years)	755	8.7	14.3	13.6	9.3	11.1	42.9	9.2
College (<4)	259	13.1	14.3	13.5	9.7	9.7	40.2	8.7
High vocational *(teknikum)*	2,001	7.5	13.1	12.4	9.0	10.3	47.5	9.7
Vocational (PTU)	897	7.0	16.8	13.8	8.8	10.7	42.7	9.2
High school	2,337	7.5	13.9	12.1	8.2	10.6	47.7	9.7
Secondary school	1,062	9.3	13.7	12.5	6.9	9.5	48.2	9.6
Primary school/without primary school	204	6.9	11.8	9.8	10.3	9.8	52.0	10.2

Source: Goskomstat, LFS, November, 2000.

Table I.9a Determinants of Survey Unemployment Rates

LFS Unemployment Rate	
Regression statistics	
Multiple R	0.930
R square	0.864
Adjusted R square	0.829
Standard error	2.665
Observations	79

ANOVA

	df	SS	MS
Regression	16	2801.55	175.10
Residual	62	440.38	7.10
Total	78	3241.93	

	Coefficients	Standard Error	t Stat
Intercept	-7.01	4.19	-1.67
Per capita expenditures	0.00	0.00	-4.01
Percent urban	12.71	4.15	3.06
Birth rate (per 1000 population)	1.37	0.23	5.86
Industy/ GDP	-4.75	1.85	-2.57
Refugees/Population	182.40	34.22	5.33
Poverty rates (official data)	0.07	0.03	2.32
Northern area	3.80	1.52	2.49
North-Western area	1.71	1.53	1.12
Volgo-Vyatsky area	-1.40	1.45	-0.96
Central Tchernozemny area	2.04	1.64	1.25
Povolzhsky area	-0.36	1.24	-0.29
Northern Caucasus	6.32	1.58	4.00
Ural area	-0.69	1.39	-0.49
West-Siberian area	0.08	1.36	0.06
East- Siberian area	1.78	1.54	1.15
Far East.	2.06	1.24	1.66

Source: Goskomstat Data

Table I.10. Labor Force Participation Rates, 1992-2000 (Percent)

	October 1992	**October 1993**	**October 1994**	**October 1995**	**October 1997**	**October 1998**	**November 1999**	**November 2000**
Labor force participation rate, p.c.	70.3	68.1	65.4	64.8	62.3	61.0	63.8	63.2
Gender								
Male	77.6	75.6	72.8	72.1	69.4	68.1	70.4	69.4
Female	63.7	61.3	58.7	58.3	55.9	54.7	57.9	57.6
Location								
Urban	71.9	69.7	66.9	66.6	64.3	63.4	66.0	65.4
Rural	65.6	63.4	60.8	59.8	56.4	54.2	57.5	56.6

Continued on next page

Table I.10 — *Continued*

	October 1992	October 1993	October 1994	October 1995	October 1997	October 1998	November 1999	November 2000
Age groups								
< 20 years	31.1	29.3	23.2	23.9	16.5	14.3	15.4	11.9
20-24	79.4	78.0	76.9	77.2	71.1	68.1	70.0	68.2
25-29	90.3	88.4	87.1	87.0	84.4	83.4	86.3	86.3
30-34	92.9	90.9	89.5	89.0	87.0	85.9	88.0	88.7
35-39	93.9	92.8	91.2	90.6	88.9	88.4	90.0	90.5
40-44	94.6	92.9	91.4	90.7	89.2	88.5	89.5	89.9
45-49	92.9	91.6	89.7	89.3	87.7	86.8	88.7	88.0
50-54	85.1	82.4	79.1	78.4	80.1	78.8	83.5	82.8
55-59	57.5	54.9	49.7	47.9	45.8	44.2	48.7	48.3
60-72	18.3	15.2	11.7	11.3	9.9	9.1	14.6	12.8

Note: Sample includes respondents aged 15-72.
Sources: LFS figures, reported in Goskomstat (1999a, 2000c).

Panel B	**1992**	**1993**	**1994**	**1995**	**1997**	**1998**	**1999**	**2000**
Russia, age 15-72	70.3	68.1	65.4	64.8	62.3	61.0	63.8	63.2
Russia, working-age population	84.2	82.2	81.1	80.3	77.2	76.0	78.0	77.7
United States	66.4	66.3	66.6	66.6	66.8	67.1	67.1	67.1
European Union	68.0	67.7	67.7	67.6	67.8	68.1	68.6	69.1
OECD Total	67.8	67.7	67.8	67.8	68.0	68.2	68.3	...

Notes: Labor force participation rates are not fully comparable across countries because of different definitions of the working-age population. In Russia it is 16-54 for women and 16-59 for men; in the United States it is 16 years of age and more; and in most other countries it is 16-64 years.

Table I.11. Labor Force Status of the Russian Population (LFS, 1992-2000)

	Employment (share)	Unemployment (share)	Out-of-labor force (share)	Total Population (000s)
1992 October	0.667	0.036	0.297	106 590
1993 October	0.641	0.040	0.319	107 112
1994 October	0.601	0.053	0.346	107 839
1995 March	0.589	0.054	0.357	107 846
1995 October	0.587	0.061	0.352	109 285
1996 March	0.576	0.062	0.363	109 284
1997 October	0.549	0.074	0.377	109 343
1998 October	0.529	0.081	0.390	109 354
1999 February	0.534	0.094	0.372	110 217
1999 May	0.545	0.083	0.372	110 217
1999 August	0.558	0.079	0.363	110 217
1999 November	0.556	0.083	0.362	110 217
2000 February	0.550	0.078	0.373	109 587
2000 May	0.567	0.067	0.366	110 218
2000 August	0.570	0.064	0.366	110 310
2000 November	0.568	0.063	0.368	110 310

Note: Sample includes respondents aged 15-72.
Sources: LFS figures, reported in Goskomstat (1999a, 2000c).

Table I.12. Home Production and Subsistence Agriculture, 1999-2000 (000s)

		Had other employment				Didn't have other employment			
	Total	Total	Subsistence agriculture for own consumption		Home production for sale	Total	Subsistence agriculture for own consumption		Home production for sale
			< 31 hours	31 hours and more			< 31 часов	31 час и более	
1999 February	13 556	7 071	4 054	245	2 772	6 485	3800	568	2 117
1999 May	28 488	14 814	10 071	1 443	3 300	13 674	8352	2 723	2 659
1999 August	25 729	13 602	9 493	1 119	2 990	12 127	7182	2 404	2 541
1999 November	14 996	7 826	4 747	238	2 841	7 170	4416	678	2 076
2000 February	15 094	7 640	4 947	213	2 480	7 455	4820	562	2 073
2000 May	28 357	15 400	10 966	985	3 449	12 959	8 038	2 182	2 739
2000 August	24 843	13 213	9 478	672	3 063	11 631	7 210	1 889	2 532
2000 November	13 009	6 682	3 937	131	2 614	6 327	3 962	333	2 032
Feb.2000-Nov.2000	20 326	10 734	7 332	500	2 902	9 593	6 008	1 242	2 344
Age groups									
<20 years	1 583	137	83	4	50	1 446	1 027	42	377
20-29	2 766	1 820	1 316	55	449	946	654	90	202
30-39	4 138	3 193	2 113	152	928	945	565	147	233
40-49	4 802	3 820	2 569	202	1 049	982	588	155	239
50-59	2 773	1 485	1 040	68	377	1 288	745	204	339
60-72	4 264	278	211	19	48	3 986	2 428	603	955

Note: Sample includes respondents aged 15-72.
Sources: LFS figures, reported in Goskomstat (1999a, 2000c).

Table I.13. Subsistence Agriculture: Working Hours, 1992-2000

	October 1992	October 1993	October 1994	October 1995	October 1997	October 1998	Novem-ber 1999	November 2000
Usual working hours per week	39.8	39.4	38.8	38.8	39.1	39.1	39.3	39.5
Distribution of employed by hours of work, p.c.								
< 21 hours per week	2.0	1.7	2.1	2.1	2.1	2.1	2.8	2.5
21-30	3.2	2.5	2.6	2.4	2.3	2.5	2.8	2.2
31-40	80.3	85.9	92.4	93.5	89.4	86.6	84.1	84.7
>40	14.5	9.9	2.8	2	6.3	8.8	10.2	10.5
Actual working hours per week	37.2	37.3	36.4	36.4	37.5	37.4	38.3	38.6
Distribution of employed by hours of work, p.c.								
< 21 hours per week	2.2	2.1	2.5	2.6	2.6	2.8	3.1	2.7
21-30	3.4	3.2	3.7	3.6	3.3	3.6	3.3	2.6
31-40	72.3	76.8	80.2	81.3	79.0	77.2	75.9	77.2
>40	15.4	12.2	7.1	5.9	10.5	11.9	13.9	14.1

Note: Sample includes respondents aged 15-72.
Sources: LFS figures, reported in Goskomstat (1999a, 2000c).

Table I.14. Difference in Employment and Unemployment Rates With and Without Self-Employment

	Unemploy-ment rate (without)	Unemploy-ment rate (with)	Employment rate (with)	Employment rate (without)
1999 Feb	0.13	5.9	0.66	0.53
1999 May	0.09	8.1	0.80	0.55
1999 August	0.09	9.5	0.79	0.56
1999 Nov	0.11	9.7	0.69	0.56
2000 Feb	0.10	11.8	0.69	0.55
2000 May	0.08	13.3	0.82	0.57
2000 August	0.07	12.9	0.80	0.57
2000 Nov	0.08	10	0.69	0.57

Source: Goskomstat.

Table I.15. Working Hours among Employees and Self-Employed, 1999

Feb. 1999 — Nov. 1999	Total	< 21	21-30	31-40	>40	Average per worker
Usual working hours per week						
All employed	60 408	1 681	1 808	50 530	6 390	39.4
Percent	100	2.8	3.0	83.6	10.6	
Employees	55 966	1 310	1 450	47 929	5 277	39.4
Percent	100	2.3	2.6	85.6	9.4	
Self-employed	4 442	370	358	2 601	1 113	39.7
Percent	100	8.3	8.1	58.6	25.1	
Actual working hours per week						
All employed	60 408	1 898	2124	44 760	8 847	38.0
Percent	100	3.1	3.5	74.1	14.6	
Employees	55 966	1 484	1751	42 721	7 368	37.9
Percent	100	2.7	3.1	76.3	13.2	
Self-employed	4 442	414	373	2 040	1 478	39.7
Percent	100	9.3	8.4	45.9	3.7	

Feb. 2000 — Nov. 2000	Total	< 21	21-30	31-40	>40	Average per worker
Usual working hours per week						
All employed	62 180	1 565	1 537	52 821	6 259	39.6
Percent	100	2.52	2.47	84.95	10.07	
Employees	57 928	1 306	1 465	45 254	7 427	38.3
Percent	100	2.25	2.53	78.12	12.82	
Self-employed	4 286	365	288	2 530	1 103	39.8
Percent	100%	8.5%	6.7%	59.0%	25.7%	
Actual working hours per week						
All employed	62 180	1 705	1 759	47 157	8 942	38.4
Percent	100	2.74	2.83	75.84	14.38	
Employees	57 928	1 306	1 465	45 254	7 427	38.3
Percent	100	2.25	2.53	78.12	12.82	
Self-employed	4 252	400	294	1 903	1 515	40.1
Percent	100	9.41	6.91	44.76	35.63	

Note: Sample includes respondents aged 15-72.
Sources: LFS figures, reported in Goskomstat (1999a, 2000c).

Table I.16. Average Working Hours per Week by Industry (LFS, 1999-2000)

	Usual Hours		Actual Hours	
	Feb. 1999 — Nov. 1999	**Feb. 2000 — Nov.2000**	**Feb. 1999 — Nov. 1999**	**Feb. 2000 — Nov.2000**
Total	39.4	39.6	38.0	38,4
Industry	40.0	40.1	37.9	38.5
Agriculture & forestry	39.4	39.4	39.3	39.7
Transportation	40.4	40.6	39.1	39.5
Communications	38.7	38.5	36.6	36.7
Construction	40.3	40.6	39.2	39.7
Trade	40.8	41.0	40.1	40.5
Municipal utilities	39.8	39.6	38.4	38.4
Health services	38.5	38.6	36.6	36.9
Education	34.7	34.9	32.8	33.1
Culture and art	37.8	38.4	36.0	36.7
Science	39.7	39.7	37.9	38.0
Finance, credit, and insurance	39.6	39.7	38.4	37.9
Public administration	40.2	40.3	39.5	39.5
Other industries	40.1	40.0	38.6	39.4

Sources: LFS figures, reported in Goskomstat (1999a, 2000c).

Table I.17. Trends in Hours Worked (LMS, 1994-2000)

	1994 November — December	1995 October — November	1996 October — November	1998 November — December	2000 October — November
Hours worked at the primary job					
Mean and standard deviation					
	159.8	167.1	168.4	164.0	170.3
	[61,7]	[63,5]	[60.0]	[58.9]	[60.3]
Year effects		6.066***	7.508***	4.547***	8.969***
		(2.73)	(3.32)	(3.04)	(3.66)
Hours worked in all jobs					
Mean and standard deviation	157.0	164.2	165.4	159.3	165.5
	[70.3]	[71.9]	[68.9]	[69.9]	[72.4]
Year effects		7.443**	8.729***	2.501	7.866***
		(2.97)	(3.42)	(1.48)	(2.86)

** Significant at 5% level.
*** Significant at 1% level.
Notes: Sample consists of respondents aged 15-72. Standard deviations are in brackets; t-statistics are in parentheses. The year effects are estimated relative to 1994 from OLS (Ordinary Least Squares) equation, in which other controls included are gender, age, years of schooling, 38 district dummies, daily time trend (interview date) and interactions between district dummies and the time trend.

Table I.18. Time Budget of Industrial Workers, 1980-96

	1980	1985	1990	1991	1992	1993	1994	1995	1996
Number of days in the year	366	365	365	365	366	365	365	365	366
of which:									
Holidays and weekends	97	97	102	105	108	107	110	110	110
Days worked	229	228	225	220	213	205	189	193	192
Days not worked	40.1	40	38.3	39.7	47.6	52.4	65.5	61.9	63.7
of which by reason:									
Vacations	22.5	23.1	21.6	22.7	26.6	26.8	26.3	25.8	25.5
Sickness	11.8	11.2	12.0	11.9	10.0	10.5	9.9	10.7	9.5
Absences allowed by law	4.0	4.6	3.3	2.9	2.5	2.1	1.9	1.5	1.3
Absences allowed by administration	1.0	0.5	0.8	1.2	4.6	4.5	4.6	4.4	4.4
Unpermitted absences	0.6	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.2
Work stoppage (whole days)	0.2	0.1	0.2	0.5	3.5	8.1	22.4	19.1	22.8

Sources: Goskomstat (1993, 1997).

Table I.19. Involuntary Leaves and Short-Time Employment, 1995-2000

	1995	1996	1997	1998	1999	2000
Involuntary leaves						
Number of employees (thousands)	2401	7538	5194	4742	3325	2175
Percentage of employees affected	4.8	15.8	11.5	11.1	7.9	5.2
Duration (millions of person-hours)	195.7	2393.8	1652.2	1472.5	785.9	472.0
Duration per employee on leave (hours)	82	318	318	311	236.4	217.1
Duration per employee (hours)	3.9	50.3	36.7	34.4	18.8	11.3
Part-time involuntary employment						
Number of employees (thousands)	...	...	...	4306	11.5	5.7
Percentage of employees affected	...	...	...	10.1	2728	1499
Nonworked time (millions of person-hours)	...	1321.4	862.6	809.5	481.8	240.3
Nonworked time per part-time involuntary employee (hours)	...	...	...	188.0	176.6	160.4
Nonworked time per employee (hours)	...	...	19.2	18.9	6.5	3.6

Note: Excludes small enterprises.
Sources: Goskomstat (1999c, 2001a).

Table I.20. Incidence and Persistence of Involuntary Leaves (RLMS)

ULVDUM (dummy)	Sample	Expected probability of involuntary unpaid leave				
		1994	1995	1996	1998	2000
Unconditional Mean (ULVDUM t)	Full cross-section	.112 (N=4745)	.063 (N=4398)	.078 (N=4186)	.083 (N=3931)	.033 (N=4151)
Mean($ULVDUM_t$ ½ $ULVDUM_{t-1}$ = 1)	Panel for t, t-1	...	.276 (N=388)	.366 (N=205)	...	...
Mean ($ULVDUM_t$ ½ $ULVDUM_{t-2}$ = 1)	Panel for t, t-1	...	...	.279 (N=340)	.296 (N=206)	.170 (N=218)
Mean ($ULVDUM_t$ ½ Xi $ULVDUM_{t-i}$ = 1)	Panel for t, t-1, t-2	...	.276 (N=388)	.443 (N=88)	.382 (N=34)	.300 (N=10)

Note: ULVDUMt = 1 if an employed respondent reports unpaid leaves on his/her primary job in year t. Sample size is shown in parentheses for number of valid responses for ULVDUM; sample sizes vary primarily because of attrition and replacement in the RLMS panel, and secondarily because of missing values for some respondents.
Source: Calculations from RLMS.

Table I.21. Labor-Market Transitions (RLMS, 1994-2000)

1996–1998	Labor Force Status in 1996				Total 1994
	Employment	With job but not at work	Unemployment	Out-of-Labor Force	
Employment	0.799	0.060	0.038	0.103	0.524
With job but not at work	0.620	0.150	0.053	0.177	0.051
Unemployment	0.402	0.035	0.239	0.324	0.044
Out-of-labor force	0.103	0.009	0.054	0.834	0.382
Total 1996	0.507	0.044	0.054	0.395	1.000
N = 5944					

1996–1998	Labor Force Status in 1998				Total 1996
	Employment	With job but not at work	Unemployment	Out-of-labor force	
Employment	0.782	0.057	0.053	0.108	0.502
With job but not at work	0.646	0.175	0.062	0.117	0.045
Unemployment	0.403	0.021	0.224	0.353	0.056
Out-of-labor force	0.103	0.007	0.045	0.845	0.397
Total 1998	0.485	0.041	0.060	0.415	1.000
N = 6073					

1998–2000	Labor Force Status in 2000				Total 1998
	Employment	With job but not at work	Unemployment	Out-of-labor force	
Employment	0.826	0.054	0.030	0.091	0.480
With job but not at work	0.636	0.170	0.067	0.127	0.039
Unemployment	0.482	0.028	0.185	0.305	0.060
Out-of-labor force	0.127	0.007	0.045	0.821	0.421
Total 2000	0.504	0.037	0.047	0.412	1.000
N = 6510					

Note: Each cell measures the probability of transition from labor force status i to labor force status j.
Source: Calculations from RLMS.

Table I.22. Composition of Employment by Industry, 1970-99 (Percent)

	1970	1975	1980	1985	1990	1995	1998	1999	Change 1985-99
Industry	33.9	33.0	32.5	32.3	30.3	25.9	22.2	22.4	-30.7
Agriculture/forestry	17.6	15.6	15.0	14.3	13.2	15.1	14.1	13.7	-4.2
Construction	8.9	9.6	9.6	9.4	12.0	9.3	7.9	7.9	-15.9
Transport/ communications	8.9	9.3	9.6	9.8	7.7	7.9	7.6	7.6	-22.4
Trade	7.7	8.2	8.3	8.3	7.8	10.1	14.5	14.6	75.9
Housing	3.2	3.6	3.9	4.1	4.3	4.5	5.4	5.3	29.3
Health services	4.8	4.9	4.8	5.0	5.6	6.7	7.0	7.0	40.0
Education, culture, art, and science	11.0	11.7	12.3	12.6	13.3	13.5	13.1	13.0	3.2
Finance, credit, and insurance	0.4	0.4	0.5	0.5	0.5	1.2	1,1	1.2	140.0
Public administration	1.9	2.0	1.8	1.9	2.4	3.0	4.4	4.5	136.8
Other industries	0.9	1.1	1.7	1.8	2.9	2.8	2.7	2.8	55.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

Source: Goskomstat (2000b).

Table I.23. Composition of Employment by Industry (LFS, 1997-2000, Percent)

	Industry	Agriculture	Transport and communications	Construction	Trade	Utilities	Health services	Education	Culture, art, and science	Finance, credit, and insurance	Public administration	Other industries
1997 October	26.1	11.2	9.1	7.2	12.4	4.1	7.1	9.5	2.7	1.4	7.2	1.9
1998 October	26.1	10.6	9.2	6.6	12.7	4.3	7.3	9.7	2.7	1.4	7.6	2.0
1999 February	26.1	11.7	8.9	6.6	12.0	3.6	7.4	10.2	2.8	1.2	7.7	1.8
1999 May	26.3	10.5	9.1	7.2	12.6	3.8	7.3	9.7	2.6	1.3	7.7	2.0
1999 August	26.9	11.2	9.3	6.5	12.3	3.6	7.0	9.4	2.7	1.2	7.8	2.0
1999 November	26.4	10.4	9.0	6.2	13.0	4.1	7.6	9.7	2.5	1.3	7.9	2.0
2000 February	27.5	10.7	8.7	6.1	12.4	3.9	7.2	10.0	2.7	1.2	7.8	1.9
2000 May	26.5	11.0	8.5	6.4	12.9	3.6	7.2	9.3	3.1	1.2	8.1	2.1
2000 August	26.7	11.2	9.0	6.5	13.3	3.5	6.6	8.9	2.6	1.3	8.1	2.2
2000 November	27.8	9.0	8.8	6.4	13.7	3.9	7.4	9.4	2.6	1.3	7.6	2.1

Note: The table shows the percentage distribution of employment across industries.

Table I.24. Changes in Industrial Composition between 1985 and 2000 (RLMS, percent)

Industry categories	1985	1991	1998	2000	Change 1985-00
Energy/fuel	2.62	3.01	3.52	2.98	13.74
Metallurgy	2.53	2.62	2.33	2.62	3.56
Chemicals	1.80	1.49	1.16	1.30	-27.78
Machine-building	10.61	10.24	7.06	7.04	-33.65
Military complex	3.71	3.33	2.64	1.84	-50.40
Wood processing/ building materials	4.37	4.50	3.59	3.52	-19.45
Light/food	5.70	5.45	4.83	4.77	-16.32
Agriculture	14.34	13.05	10.05	10.20	-28.87
Transportation	8.10	7.27	7.63	7.42	-8.40
Construction	8.21	7.96	6.51	6.50	-20.83
Trade	7.92	8.31	9.67	10.72	35.35
Finance/commerce	0.71	1.08	4.44	5.54	680.28
Housing	3.62	3.74	5.09	5.11	41.16
Health services	5.33	6.32	8.58	7.94	48.97
Education, art, and science	13.72	14.35	13.69	13.18	-3.94
Public administration	4.82	5.54	6.99	6.61	37.14
Other industries	1.91	1.73	2.21	2.71	41.88
Total	100.0	100.0	100.0	100.0	
N	4506	4621	4207	4461	

Source: Calculations from RLMS, reported in Earle and Sabirianova (2002b).

Table I.25. Sectoral Reallocation in Russia, Transition Matrices (RLMS, 1985-98)

1985–1998	Industry	Agriculture	Transportation/ construction	Public services	Other services	Nonemployment
Industry	0.378	0.010	0.052	0.048	0.068	0.443
Agriculture	0.030	0.359	0.033	0.025	0.036	0.518
Transportation/ construction	0.083	0.014	0.365	0.044	0.081	0.414
Public services	0.062	0.006	0.017	0.484	0.070	0.362
Other services	0.075	0.017	0.023	0.071	0.322	0.492
Nonemployment	0.097	0.044	0.053	0.159	0.103	0.544

1985–1991	Industry	Agriculture	Transportation/ construction	Public services	Other services	Nonemployment
Industry	0.732	0.013	0.034	0.033	0.035	0.153
Agriculture	0.028	0.705	0.024	0.041	0.017	0.185
Transportation/ construction	0.070	0.031	0.692	0.035	0.047	0.125
Public services	0.041	0.008	0.015	0.764	0.031	0.142
Other services	0.062	0.018	0.032	0.048	0.644	0.197
Nonemployment	0.126	0.043	0.052	0.133	0.058	0.588

1991–1998	Industry	Agriculture	Transportation/ construction	Public services	Other services	Nonemployment
Industry	0.479	0.010	0.051	0.055	0.075	0.330
Agriculture	0.022	0.468	0.042	0.027	0.043	0.399
Transportation/construction 0.320		0.077	0.011	0.461	0.043	0.088
Public services	0.047	0.012	0.017	0.567	0.074	0.282
Other services	0.058	0.021	0.029	0.064	0.422	0.407
Nonemployment	0.045	0.019	0.020	0.092	0.053	0.771

Source: Calculations from 1998 RLMS, 1998.

Table I.26. Average Size (Employment) of Industrial Enterprises by Industry, 1985-99

Year	1985	1987	1989	1991	1993	1994	1995	1996	1997	1998	1999
Energy	903	930	935	944	1012	919	855	841	827	784	771
Fuel	3668	3805	3794	3417	2973	1676	1683	1523	1611	1162	1002
Metallurgy	3737	3667	3468	3289	2966	2294	1961	1845	1660	2187	2074
Chemicals	2097	2161	2002	1740	1926	1378	1380	1144	1291	1095	1008
Machine-building	1544	1563	1522	1310	1625	815	883	713	712	472	432
Wood processing	548	555	516	460	378	366	342	297	288	258	257
Building materials	567	592	533	466	357	316	304	300	280	266	260
Light	635	622	591	513	586	472	355	252	238	205	197
Food	319	306	290	279	227	212	207	209	201	194	196
Other industries	246	238	236	394	287	242	258	137	132	120	121
Total	768	767	736	653	748	536	550	472	455	366	350

Source: Calculations from the Goskomstat Registry of Industrial Firms.

Table I.27. Annual Hiring and Separation Rates in Large and Medium Enterprises, 1993-2000

	Hiring rates, percent								Separation rates, percent							
	1993	1994	1995	1996	1997	1998	1999	2000	1993	1994	1995	1996	1997	1998	1999	2000
Total	21.1	20.8	22.6	18.9	19.9	21.0	24.2	26.9	25.1	27.4	25.7	23.9	24.5	24.9	24.5	27.8
Industry	20.1	18.2	21.1	16.9	19.2	19.8	27.4	30.1	28.8	32.0	28.4	27.0	26.8	27.7	27.0	29.5
Agriculture	11.3	12.4	12.7	12.4	13.0	14.8	18.3	20.3	14.5	19.6	18.5	18.0	19.5	20.7	21.8	26.3
Forestry	28.1	31.9	31.5	26.1	28.0	28.9	34.8	36.1	25.5	30.0	32.8	28.7	29.5	31.2	33.2	36.7
Construction	38.7	34.9	39.4	29.0	31.3	32.8	40.3	47.7	44.1	45.9	45.1	42.5	41.3	40.8	42.8	48.8
Transportation	26.5	23.0	24.7	19.5	18.3	18.9	21.3	24.2	29.6	29.6	25.9	24.7	26.6	24.0	22.5	26.0
Communication	32.1	27.5	29.0	27.3	28.1	26.1	27.0	31.0	33.2	28.6	28.9	27.9	28.6	28.7	28.6	31.3
Wholesale and retail trade	22.5	29.2	26.7	24.8	28.5	30.3	33.7	39.1	27.1	24.8	31.7	33.3	36.7	37.7	35.8	40.7
Housing services	36.2	39.4	39.7	35.6	35.2	37.1	37.2	41.7	30.5	30.8	30.2	29.5	31.3	33.0	36.4	42.5
Health services	18.0	20.9	22.1	18.9	19.7	21.1	19.5	20.8	17.2	18.8	20.4	17.7	19.6	20.0	19.1	22.0
Education	15.2	17.0	17.1	15.4	15.1	16.6	16.0	16.6	12.6	14.1	15.3	13.5	15.0	15.8	15.4	17.9
Culture and arts		16.9	19.7	17.7	19.1	22.4	25.2	24.5		16.5	17.9	16.7	18.0	20.7	20.3	22.8
Science	12.1	11.4	12.8	11.1	11.0	12.3	14.2	17.0	25.1	23.1	22.4	17.9	18.5	18.1	15.6	17.2
Finance and insurance	22.3	30.5	25.2	20.7	19.1	19.8	17.3	20.5	15.2	17.0	19.8	19.9	19.3	22.4	21.1	21.3
Public administration	18.3	22.3	17.1	14.2	15.3	13.7	13.9	...	11.1	13.8	12.5	12.5	12.6	13.1	11.6	...

Notes: Hiring rates are computed as a percentage ratio of workers hired during the year to the average number of employed workers; hiring and separation rates are given for large and medium-sized firms.
Sources: Goskomstat (1998c, 1999d, 2000b, and 2001a).

Table I.28. Hiring, Layoff, Quit, and Separation Rates from Survey Data, 1991-98

Year	Hiring	Layoffs	Quits	Total separations
1991	0.21	0.01	0.12	0.20
1992	0.20	0.02	0.15	0.26
1993	0.20	0.02	0.17	0.26
1994	0.18	0.03	0.19	0.28
1995	0.19	0.03	0.18	0.27
1996	0.17	0.04	0.18	0.27
1997	0.18	0.05	0.17	0.28
1998	0.18	0.04	0.18	0.26

Note: Employment separations because of death, entrance to army, and retirement are not counted as quits or layoffs.
Source: Results from survey "Inside the Transforming Firm," reported in Biletsky et al. (1999).

Table I.29. Changes in Occupational Composition between 1985 and 1998 (RLMS, percent)

One- and two-digit occupational categories	1985	1991	1998	Change 1985-98
Officials and managers				
Officials	0.20	0.09	0.14	-30.0
Corporate managers	0.62	0.77	1.53	146.8
Small firm managers	0.66	0.91	1.98	200.0
Entrepreneurs and independent farmers	0.00	0.21	1.79	+I'
Professionals				
Physicists, mathematicians, and engineers	6.47	5.87	3.59	-44.5
Life science and health professionals	1.92	2.04	2.31	20.3
Teaching professionals	3.56	3.61	4.39	23.3
Business and law professionals	1.70	1.72	2.05	20.6
Other professionals	0.86	0.74	0.80	-7.0
Associate professionals				
Technicians	3.62	3.44	3.82	5.5
Life science and health associate professionals	2.96	3.10	3.94	33.1
Teaching associate professionals	2.34	2.74	2.55	9.0
Finance and business associate professionals	1.48	1.64	1.77	19.6
Other associate professionals	4.84	4.85	4.70	-2.9
Clerks				
Office clerks	5.85	5.65	5.03	-14.0
Customer services clerks	1.37	1.68	1.91	39.4
Service workers				
Personal services workers	2.43	2.36	2.88	18.5
Catering services workers	1.97	2.08	0.99	-49.7
Protective services workers	1.02	1.45	3.42	235.3
Salespersons	2.72	2.78	4.56	67.6
Craft workers				
Extraction and building trades workers	4.09	3.66	3.90	-4.6
Metal and machinery workers	12.79	12.76	9.47	-26.0
Other craft workers	2.72	3.27	2.95	8.5
Operators and assemblers				
Stationary-plant operators	3.25	3.51	3.40	4.6
Machine operators and assemblers	3.09	2.51	2.12	-31.4
Drivers and mobile-plant operators	14.03	13.88	11.47	-18.2
Elementary occupations	11.95	10.88	11.21	-6.2
Military specialists	1.50	1.79	1.30	-13.3
Total	100.0	100.0	100.0	
N	4527	4704	4236	

Note: The last column indicates the positive or negative changes in the share of each type of occupation.
Source: Calculations from 1998 RLMS.

Table I.30. Mobility Trends in Russia (RLMS, 1985-1998)

Years	Sectoral mobility	Inter-industry mobility	Inter-firm mobility	Occupational mobility	Complex mobility	Share of complex flows
1985—1998	0.306	0.485	—	0.497		
1985—1991	0.149	0.239	0.260	0.219	0.153	49.2%
1991—1998	0.262	0.416	0.415	0.422	0.296	56.1%
1991—1995	0.180	0.285	—	0.287		
1994—1998	0.174	0.261	0.280	0.284	0.183	49.1%
1994—1996	0.103	0.161	0.166	0.177	0.110	47.8%
1996—1998	0.101	0.161	0.177	0.166	0.096	39.9%

Note: Sectoral, inter-industry, inter-firm, and occupational mobility are fractions of employed respondents who changed their sector, industry, firm, and occupation, respectively, between the first year and the last year of the considered period. Complex mobility is defined as simultaneous changes in occupation, firm, and industry.

Table I.31. Job Mobility Measures Based on Years of Tenure, International Comparisons

	Mean job tenure (years)			Fraction of employed with tenure						
				1 year and less			10 years and more		20 years and more	
	Age ≤25	26–45	46–60	≤25	26–45	46–60	26–45	46–60	26–45	46–60
Women										
France	1.67	8.39	17.92	48.89	15.42	4.54	38.81	71.57	10.02	47.18
Germany	2.38	7.04	11.60	35.98	15.23	7.54	23.64	45.23		
Netherlands	2.29	6.21	10.55	42.97	20.69	11.32	22.15	46.28	3.77	15.79
Italy	3.06	9.09	17.93	29.06	9.64	3.41	36.71	70.82	8.30	43.39
Japan	2.62	7.72	13.04	23.46	7.61	4.51	26.55	54.75	5.17	23.26
Spain	1.42	7.44	14.28	75.73	29.38	14.70	33.70	62.58	8.83	33.53
Sweden	1.88	8.02	14.38	53.46	16.47	7.01	36.75	64.33	7.37	29.28
United Kingdom	2.39	5.89	10.27	40.80	20.14	9.90	21.40	44.32	3.26	15.93
United States	1.97	5.77	10.54	51.62	23.81	11.82	19.47	43.95	2.74	16.01
Russia										
1994	2.52	7.87	14.82	30.93	14.40	11.15	34.24	60.35	5.66	36.81
1996	2.11	7.17	13.51	43.58	19.14	13.12	30.69	51.09	5.86	35.39
1998	1.86	7.26	13.49	41.59	15.32	9.76	29.16	50.60	6.18	33.47
2000	1.62	6.85	12.33	52.39	19.74	14.03	26.21	45.68	6.39	28.60
Men										
France	1.84	9.00	19.64	44.87	11.39	4.68	42.85	76.77	9.68	56.29
Germany	2.37	7.42	17.31	36.49	16.34	6.85	29.29	59.54		
Netherlands	2.18	7.59	16.37	47.16	20.44	8.64	30.68	66.85	7.41	39.67
Italy	3.26	9.62	19.91	29.55	8.19	3.56	39.89	28.05	8.62	52.40
Japan	2.57	10.18	21.10	25.36	4.32	2.97	44.43	76.65	10.78	60.55
Spain	1.22	8.17	17.83	76.50	28.76	13.09	37.67	72.66	10.67	50.24
Sweden	2.14	7.68	17.33	44.94	18.19	5.33	33.45	69.03	7.16	45.56
United Kingdom	2.56	8.25	14.48	39.65	14.83	9.77	36.03	58.11	8.97	34.76
United States	2.02	6.87	14.17	52.23	20.00	12.22	25.80	56.04	4.01	33.53
Russia										
1994	1.63	6.83	13.73	48.13	20.74	15.21	28.64	53.16	5.34	34.02
1996	1.55	6.05	12.16	47.84	23.19	16.23	23.87	44.08	5.48	29.82
1998	1.95	5.83	11.57	36.93	21.61	12.72	20.92	39.96	4.91	26.79
2000	1.52	5.27	11.49	49.44	24.95	16.81	16.24	40.55	3.30	25.21

Sources: Burgess (1999) and calculations based on RLMS.

Table I.32. Job Destruction and Job Creation Rates over Time (Percent), Select Transition Countries

	Bulgaria	Czech Rep.	Hungary	Poland	Romania	Slovak Rep.	Russia
Job creation							
1989-92	0.2	1.5	2.2	1.2	6.7	1.6	0.8
1992-94	1.5	4.5	1.0	6.1	n.a.	3.7	2.5
Job destruction							
1989-92	25.0	10.2	19.1	14.9	11.2	15.2	3.8
1992-94	4.9	5.3	9.3	5.0	n.a	6.5	8.6

Source: Jackman (1998).

Table I.33/34. Job Flows in Russia, Selected Transition and OECD Countries (Percent)

Country (years)	Job creation	Job destruction	Job reallocation	Net employment growth
OECD countries				
United States (1973-1988)	9.1	10.2	19.3	-1.1
Canada (1979-1984)	10	10.0	20.6	0.6
France (1978-1984)	11	12.0	23.4	-0.6
Germany (1988-1995)	4.6	4.1	8.7	0.4
United Kingdom (1987-1995)	5.4	5.4	10.8	-0.1
Transition economies				
Poland (1994-1997)	3.0	3.7	6.7	-0.6
Poland (1993, 1996, 1999)	8.4	9.1	17.5	-0.7
Estonia (1993-1997)	9.3	8.8	18.1	0.6
Slovenia (1993-1997)	3.3	5.4	8.8	-2.1
Bulgaria (1994)	1.4	5.2	6.6	-3.7
Romania (1993-1997)	3.7	9.9	13.6	-6.2
Hungary (1994)	1.3	6.6	7.9	-5.3
Ukraine (1996)	2.5	15.3	18.0	12.0
Table I.34. Russia				
Faggio and Konings (1999)	1.2	4.9	6.1	-3.7
Earle and Brown (2002a)				
(1985-1992)	0.9	3.9	4.8	-3.16
(1992-1996)	2.1	11.2	13.3	-9.1
(1996-2000)	3.5	8.7	12.2	-5.2
Earle and Brown (2002b)				
(1990-1999)	2.4	9.2	11.6	-6.8
Earle and Brown (2002c)				
(1985-1991)	1.4	4.5	5.9	-3.2
(1991-1999)	2.4	10.3	12.7	-8.0
Russian Economic Barometer (1996)	1.7	11.1	11.8	-8.4

Sources: OECD (1997); Faggio and Konings (1999); Konings and Walsh (1999); Bilsen and Konings (1998); Davis et al. (1996); Brown and Earle (2002a, 2002b, 2002c). From different data sets; not fully comparable.
Note: Job Reallocation = Job Creation + Job Destruction; Net Employment Growth = Job Creation - Job Destruction.

Table I.34a. Job Creation, Job Destruction and Net Employment Growth by Ownership Type

Ownership type	Job creation		Job destruction		Net employment growth		
	1997/ 1996	1999/ 1998	1997/ 1996	1999/ 1998	1997/ 1996	1998/ 1997	1999/ 1998
State-owned enterprises	17.3	21.7	37.3	26.7	-19.9	-15.4	-5.0
Private-owned enterprises	7.5	10.8	18.3	13.2	-10.9	-8.6	-2.4
Foreign-owned enterprises	122.6	33.4	105.8	44.4	50.8	58.5	-11.0
Joint ventures	17.3	11.2	13.3	11.7	4.0	-7.3	-0.5

Source: Calculations from the Goskomstat Registry of Industrial Firms.

Table I.35. Growth of the New Private Sector (RLMS, 1994-2000)*

	1994	1995	1996	1998	2000
Distribution of the employed by firm size					
Employment per firm					
£25	0.251	0.274	0.264	0.240	0.250
26-100	0.277	0.280	0.307	0.310	0.292
101-500	0.256	0.241	0.249	0.253	0.251
>500	0.216	0.205	0.180	0.197	0.207
Firm size is missing	0.198	0.308	0.302	0.267	0.234
Distribution of the employed by type of ownership					
State-owned	0.754	0.683	0.663	0.647	0.605
Mixed	0.073	0.100	0.116	0.113	0.129
Domestic private	0.134	0.172	0.181	0.196	0.217
Foreign	0.040	0.045	0.039	0.044	0.049
Ownership is missing	0.181	0.155	0.148	0.140	0.127
Distribution of the employed by founding date					
Founded before 1980	...	0.601	0.600	0.610	0.574
1980-1984	...	0.062	0.060	0.045	0.042
1985-1989	...	0.068	0.058	0.045	0.038
1990-1994	...	0.243	0.218	0.163	0.151
after 1994	...	0.026	0.064	0.137	0.194
Founding date is missing	...	0.510	0.488	0.446	0.422
N	4167	3781	3553	3374	3531
New private sector	...	0.229	0.249	0.300	0.327
Working individually at primary job	...	0.066	0.081	0.126	0.136
Employees at nonstate-owned firms founded after 1989	...	0.163	0.168	0.174	0.191
N	...	1758	1724	1877	2138
Employed in the private sector (Goskomstat)		22.8	23.5	27.5	28.3

*Goskomstat Annual Yearbook, 2000, p. 112.
Notes: Sample includes respondents aged 15-72.
Source: Calculations from RLMS.

Table I.36. Share of Public and Private Sector Employment in Transition Countries, 1996 (Percent)

Sector	Bulgaria	Latvia	Poland	Romania	Slovak Rep.	Slovenia
Private	50.3	54.0	59.5	53.7	45.8	47.4
Public	48.5	46.0	40.5	46.3	54.2	52.6

Source: OECD-CEET database.

Table I.37. Entry to the New Private Sector (Percent)

N = 1631	Employed in old sector in 2000	Employed in new sector in 2000
Status in 1998	100.0	100.0
Employed in old sector	55.5	10.9
Employed in new sector	4.1	39.8
Employed but sector is missing	28.5	28.7
With job but not at work	5.3	3.1
Unemployed	2.1	8.2
Out-of-labor force	4.6	9.4
N = 1413	**Employed in old sector in 1998**	**Employed in new sector in 1998**
Status in 1996	100.0	100.0
Employed in old sector	51.3	14.4
Employed in new sector	3.9	30.4
Employed but sector is missing	32.0	30.4
With job but not at work	6.8	4.7
Unemployed	2.1	7.6
Out-of-labor force	3.9	11.5

Note: The new private sector includes the primary activity self-employed and employees of firms with no state ownership that were founded after 1989.
Source: Calculations from RLMS.

Table I.38. Characteristics of Employment in the New Private Sector

	1995	1996	1998	2000
Female	0.189	0.220	0.261	0.275
Male	0.272	0.281	0.346	0.387
Age				
15-24	0.409	0.436	0.527	0.486
25-34	0.358	0.393	0.422	0.439
35-44	0.178	0.232	0.294	0.333
45-54	0.153	0.142	0.193	0.213
55-72	0.118	0.077	0.095	0.125
Education				
Elementary	0.192	0.133	0.325	0.308
Secondary basic	0.261	0.292	0.349	0.355
Vocational	0.245	0.315	0.366	0.478
Secondary professional	0.190	0.242	0.275	0.275
University	0.245	0.227	0.248	0.276
Total	0.229	0.249	0.300	0.327
N	1758	1724	1877	2138

Note: Table shows the percentage of employed in the new private sector among all employed in a particular group.
Source: Calculations from RLMS.

I.39. Self-Employment in the LFS, 1999-2000

			Of which			
	Employees	Non-employees	Employers	Self-employed	Members of production cooperatives	Unpaid family workers
February 1999	0.917	0.083	0.008	0.053	0.020	0.001
May 1999	0.925	0.075	0.009	0.040	0.023	0.002
August 1999	0.930	0.070	0.009	0.043	0.016	0.002
November 1999	0.933	0.067	0.009	0.041	0.016	0.001
February 2000	0.937	0.063	0.008	0.038	0.016	0.001
May 2000	0.927	0.073	0.011	0.046	0.014	0.001
August 2000	0.927	0.073	0.010	0.043	0.018	0.002
November 2000	0.936	0.064	0.009	0.042	0.012	0.001

Note: Sample includes respondents aged 15-72.
Source: LFS figures, reported in Goskomstat (2000c).

Table I.40. Self-Employment in the RLMS, 1994-2000

Total population	**1994**	**1995**	**1996**	**1998**	**2000**
Share of the employed involved in any type of individual economic activity at any job	0.156	0.159	0.156	0.195	0.229
Of which: share of the employed reporting individual employment as their primary activity	0.085	0.102	0.098	0.143	0.171
Of which: reported not having a primary job but involved in individual economic activity	0.061	0.075	0.063	0.083	0.103
Worked individually at the primary job	0.023	0.027	0.035	0.060	0.068
Urban Population	**1994**	**1995**	**1996**	**1998**	**2000**
Share of the employed involved in any type of individual economic activity at any job	0.164	0.159	0.170	0.198	0.224
Of which: share of the employed reporting individual employment as their primary activity	0.088	0.101	0.100	0.141	0.161
Of which: reported not having a primary job but involved in individual economic activity	0.064	0.073	0.060	0.078	0.082
Worked individually at the primary job	0.025	0.028	0.040	0.063	0.079

Notes: Sample is restricted to the RLMS respondents aged 15-72 years old who worked at least one hour at any job in the previous month. The employed reporting individual employment as their primary activity consist of those reporting not having a primary job but involved in individual economic activity and those working individually at the primary job (not working at the enterprise or organization with more than one employee).
Source: Calculations from RLMS, reported in Earle and Sabirianova (2002b).

ANNEX II

WAGES

Table II.1. Real Wages for Worker Groups, 1994-2000

	1994	1995	1996	1998	2000
Monthly wage actually received last month	211.0	173.1	174.8	112.5	164.4
Imputed contractual wage	231.6	201.2	232.6	167.7	188.0

Notes: Sample is restricted to employees aged 15-72 with positive hours of work last month. Contractual wage is computed following Earle and Sabirianova (forthcoming)
Source: Calculations from RLMS.

Table II.2. Average Wage Level by Characteristics of Firms and Workers, 2000, Rubles

Worker characteristics	Mean	St.Dev.	Firm characteristics	Mean	St.dev.
Total [N = 3803]	1740	2391	Rural	1142	1452
Female	1324	1326	Urban	1988	2646
Male	2207	3122	Sectors [N = 3767]		
Age			Industry	2132	2079
15-24	1326	1393	Agriculture	762	948
25-34	1704	1806	Transportation/ construction	2389	2073
35-44	2005	3529	Public services	1343	2973
45-54	1779	1809	Other services	2012	1842
55-72	1440	1445	Employment		
Education			per firm [N = 2886]	1728	1821
Elementary	1248	1469	<26	1539	1720
Secondary basic	1603	1741	26-100	1569	3677
Vocational	1685	1617	101-500	1678	1614
Secondary professional	1591	1654	>500	2298	2235
University	2320	3932	Ownership [N = 3321]	1675	4771
Job-to-job mobility [N = 2666]			State-owned	1414	1481
Job stayers	1696	2713	Mixed	2240	2049
Job movers	2159	2199	Domestic private	2262	2207
			Foreign	2499	1886

Note: Sample is restricted to all employees aged 15-72.
Source: Calculations from RLMS.

Table II.3. Basic Wage Equations, 1992-2000

	1992 (1)	1994 (2)	1996 (3)	1998 (4)	2000 (5)	1998 (6)	2000 (7)
Women							
Log of actual monthly hours of work	0.381***	0.163***	0.241***	0.355***	0.349***		
	(16.78)	(4.62)	(5.62)	(9.06)	(8.32)		
Log of usual weekly hours of work						0.527***	0.579***
					(13.35)	(13.07)	
Schooling (years)	0.038***	0.074***	0.056***	0.077***	0.076***	0.085***	0.090***
	(7.79)	(9.31)	(7.00)	(9.18)	(8.36)	(13.96)	(13.37)
EXP (years)	0.026***	0.020***	0.020***	0.031***	0.039***	0.030***	0.036***
	(8,21)	(3.84)	(3.94)	(5.98)	(6.84)	(7.50)	(8.40)
$EXP^2/100$	-0.052***	-0.037***	-0.046***	-0.064***	-0.085***	-0.063***	-0.072***
	(-8,16)	(-3.50)	(-4.56)	(-5.83)	(-6.82)	(-6.91)	(-7.20)
Constant	3.160***	9.875***	10.858***	3.167***	3.816***	2.260***	2.463***
	(23,87)	(48.60)	(44.81)	(13.77)	(15.52)	(10.34)	(9.99)
N	3133	1968	1693	1664	1737	1915	1952
R^2	0.303	0.267	0.331	0.307	0.294	0.419	0.420
Men							
Log of actual monthly hours of work	0.306***	0.226***	0.182***	0.322***	0.285***		
	(12.46)	(6.12)	(3.40)	(6.47)	(5.45)		
Log of usual weekly hours of work						0.424***	0.203***
					(7.97)	(3.48)	
Schooling (years)	0.034***	0.050***	0.052***	0.051***	0.068***	0.059***	0.075***
	(7,22)	(6.49)	(6.24)	(6.00)	(7.59)	(9.71)	(10.88)
EXP (years)	0.030***	0.020***	0.012***	0.023***	0.032***	0.021***	0.026***
	(8,46)	(3.64)	(1,97)	(3.91)	(5.49)	(5.09)	(6.03)
$EXP^2/100$	-0.065***	-0.044***	-0.027**	-0.052***	-0.063***	-0.049***	-0.061***
	(-9,57)	(-4.04)	(-2.28)	(-4.47)	(-5.39)	(-5.64)	(-6.52)
Constant	3.941***	10.315***	11.645***	4.172***	4.687***	3.645***	5.206***
	(27,67)	(49.26)	(39.22)	(15.11)	(15.74)	(12.63)	(16.36)
N	3128	1993	1531	1466	1559	1631	1692
R^2	0.374	0.342	0.344	0.339	0.377	0.472	0.461

Notes: t-statistics are in parentheses; *** - significant at the 1% level; ** - significant at the 5% level; * - significant at the 10% level. Sample is restricted to employees aged 15-72. In columns (1)-(5) EXP is measured as potential labor-market experience (age minus schooling minus 6). In column (1) the dependent variable is log of after-tax actual monthly wages received in the previous month. Sixteen regional dummies are included. In columns (2)-(5) the dependent variable is log of imputed contractual monthly wage. Contractual monthly wage is computed following methodology of Earle and Sabirianova (forthcoming) In columns (6)-(7) EXP is measured as actual labor-market experience (data on actual labor-market experience became available since 1998) and the dependent variable is log of usual monthly wage. Thirty-eight regional dummies are included but not shown here.
Source: Calculations from RLMS.

Table II.4. Extended Wage Equations with Tenure, Type of Ownership, and Founding Date, 1995-2000

	Dependent variable is log of imputed contractual monthly wage				Dependent variable is log of usual monthly wage	
	1995	**1996**	**1998**	**2000**	**1998**	**2000**
Log of actual monthly hours of work	0.153***	0.180***	0.319***	0.284***		
	(5.47)	(5.46)	(10.43)	(8.86)		
Log of usual monthly hours of work					0.432***	0.368***
					(13.91)	(10.71)
Individual characteristics						
Female	-0.457***	-0.411***	-0.431***	-0.423***	-0.455***	-0.489***
	(-17.08)	(-15.29)	(-15.78)	(-14.95)	(-22.20)	(-22.14)
Schooling (years)	0.047***	0.050***	0.064***	0.072***	0.071***	0.080***
	(8.15)	(8.59)	(10.48)	(11.33)	(16.55)	(16.82)
EXP (years)	0.035***	0.011***	0.021***	0.029***	0.021***	0.026***
	(8.66)	(2.89)	(5.18)	(6.82)	(6.95)	(8.21)
$EXP^2/_{100}$	-0.075***	-0.032***	-0.049***	-0.063***	-0.049***	-0.059***
	(-9.44)	(-4.02)	(-5.92)	(-7.19)	(-7.56)	(-8.17)
TENURE (years)	0.011**	0.017***	0.021***	0.018***	0.015***	0.014***
	(2.35)	(3.61)	(4.42)	(3.76)	(4.37)	(3.65)
$TENURE^2/_{100}$	-0.016	-0.025*	-0.038***	-0.027*	-0.028***	-0.024**
	(-1.11)	(-1.68)	(-2.69)	(-1.91)	(-2.58)	(-2.16)
TENURE missing	0.058	0.181***	0.055	0.045	0.015	-0.033
	(1.13)	(3.58)	(0.94)	(0.70)	(0.35)	(-0.69)
Type of ownership (omitted: state-owned)						
Domestic private	0.170***	0.154***	0.174***	0.301***	0.215***	0.262***
	(3.49)	(3.38)	(3.73)	(6.65)	(6.30)	(7.56)
Mixed	0.232***	0.145***	0.162***	0.286***	0.183***	0.239***
	(5.58)	(3.59)	(3.97)	(6.88)	(5.98)	(7.46)
Foreign	0.236***	0.215***	0.313***	0.542***	0.404***	0.524***
	(3.40)	(2.88)	(4.36)	(7.83)	(7.57)	(9.98)
Ownership is missing	0.008	-0.090**	0.031	0.118***	0.013	0.001
	(0.20)	(-2.24)	(0.76)	(2.68)	(0.42)	(0.04)
Founding date (omitted: old firms)						
New firms (founded after 1989)	0.196***	0.285***	0.177***	0.205***	0.150***	0.126***
	(4.22)	(6.40)	(4.10)	(4.84)	(4.64)	(3.79)
Founding date is missing	0.024	-0.008	0.005	0.021	-0.030	-0.033
	(0.81)	(-0.27)	(0.16)	(0.64)	(-1.30)	(-1.32)
Constant	10.726***	11.140***	3.438***	4.014***	2.859***	3.602***
	(66.60)	(59.98)	(19.48)	(21.45)	(16.80)	(19.07)
N	3441	3224	3130	3296	3546	3644
R^2	0.361	0.375	0.359	0.385	0.501	0.501

Source: Calculations from RLMS.
Notes: t-statistics are in parentheses; *** - significant at the 1% level; ** - significant at the 5% level; * - significant at the 10% level. Sample is restricted to employees aged 15-72. Contractual monthly wage is computed following methodology of Earle and Sabirianova (forthcoming). In the first four columns EXP is measured as potential labor-market experience (age minus schooling minus 6). In the last two columns EXP is measured as actual labor-market experience (data on actual labor-market experience became available since 1998). Thirty-eight regional dummies are included but not shown here.

Table II.5. Labor Costs by Industry and by State/Nonstate Ownership, 1998 (Rubles)

	Hourly				Monthly			
	Total	State	Nonstate	Nonstate/ State	Total	State	Nonstate	Nonstate/ State
Economy	15.4	14.1	16.0	1.13	2094.4	1949.3	2160.6	1.11
Industry	16.2	15.2	16.3	1.07	2114.1	1971.1	2138.0	1.08
Electricity	24.2	22.5	24.6	1.09	3441.9	3165.6	3511.0	1.11
Fuels	30.9	24.4	31.2	1.28	4074.8	3397.2	4103.2	1.21
Ferrous metals	15.9	13.2	15.9	1.20	2236.5	1831.8	2241.9	1.22
Nonferrous metals	28.7	25.8	28.9	1.12	3727.6	3532.1	3736.9	1.06
Chemicals	16.2	18.7	15.8	0.84	2130.9	2451.0	2077.6	0.85
Machinery	12.8	13.4	12.6	0.94	1601.4	1688.6	1578.7	0.93
Wood and paper	12.3	9.2	12.6	1.37	1625.9	1270.3	1656.8	1.30
Construction materials	13.0	14.4	12.9	0.90	1745.2	1831.4	1736.6	0.95
Glass	10.2	9.7	10.2	1.05	1348.6	1097.7	1356.9	1.24
Textiles and footwear	8.6	6.6	8.9	1.35	969.8	840.4	986.4	1.17
Food	15.3	15.1	15.3	1.01	2128.1	2127.5	2128.2	1.00
Construction	16.4	14.9	16.8	1.13	2260.0	2077.1	2307.2	1.11
Transport	17.0	16.2	18.9	1.17	2297.0	2184.2	2549.9	1.17
Communications	15.2	10.9	18.8	1.72	2164.1	1532.6	2696.8	1.76
Trade	10.8	11.7	10.6	0.91	1583.1	1660.7	1566.0	0.94
Restaurants and catering	7.6	7.1	7.9	1.11	1072.3	949.8	1137.3	1.20
Other services	12.0	11.2	15.8	1.41	1737.2	1626.7	2302.6	1.42
Finance and banking	20.0	22.7	18.3	0.81	2923.5	3325.1	2660.5	0.80

Source: Results from Goskomstat Enterprise Survey, reported in Goskomstat (1999c, p. 290).

Table II.6. Structure of Labor Costs in 1995 and 1998 (Percent)

	Cash wages	Housing costs	Social contributions	Training costs	Recreation costs	Other costs
Economy						
1995	60.5	4.6	28.3	0.3	3.3	3.0
1998	63.2	2.0	30.2	0.3	1.5	2.8
Manufacturing						
1995	58.0	6.2	28.5	0.3	4.2	2.8
1998	60.5	3.1	30.7	0.3	2.4	3.0
Fuels						
1995	55.4	3.6	32.4	0.4	5.9	2.3
1998	59.5	2.5	31.5	0.3	3.0	3.2
Nonferrous metals						
1995	48.4	19.8	25.1	0.2	3.9	2.6
1998	59.0	5.0	29.9	0.4	2.8	2.9
Food						
1995	64.0	1.2	30.5	0.2	1.4	2.7
1998	65.0	0.9	29.1	0.1	1.0	3.9
Trade						
1995	67.6	0.9	28.2	0.2	0.5	2.6
1998	68.4	0.4	28.8	0.1	0.3	2.0
Services						
1995	69.0	0.6	28.1	0.1	0.4	1.8
1998	67.5	0.5	30.2	0.1	0.2	1.5

Source: Results from Goskomstat Enterprise Survey, reported in Goskomstat (1999c, pp. 288-289).

Table II.7. Incidence of Fringe Benefits by Firm Size, 2000

Fringe benefits	Total	Firm size			
		<25	26-100	101-500	>500
Paid vacation	0.915	0.755	0.944	0.961	0.974
Paid sick leave	0.912	0.742	0.939	0.964	0.980
Health services	0.374	0.195	0.284	0.414	0.622
Vacation subsidies	0.438	0.190	0.375	0.506	0.680
Kindergartens	0.130	0.064	0.097	0.149	0.270
Catering	0.152	0.096	0.133	0.160	0.221
Transportation	0.142	0.083	0.094	0.215	0.194
Training	0.213	0.097	0.194	0.256	0.323
Loans	0.143	0.081	0.111	0.159	0.249

Note: The total sample size ranges from 3746 to 4102 respondents.
Source: Calculations from 2000 RLMS

Table II.8. Incidence and Magnitude of Wage Arrears in the RLMS, 1994-2000

	Expected probability and magnitude of wage arrears				
	1994	1995	1996	1998	2000
Panel A: ARRDUM (dummy = 1 if worker has wage arrears)					
E(ARRDUM t)	0.405 (N=4716)	0.419 (N=4389)	0.599 (N=4166)	0.637 (N=3928)	0.293 (N=4151)
$E(ARRDUM_t$ ½ ARRDUMt-1 = 1)		0.683 (N=1402)	0.838 (N=1399)		
$E(ARRDUM_t$ ½ ARRDUMt-2 = 1)			0.788 (N=1213)	0.796 (N=1652)	0.392 (N=1798)
$E(ARRDUM_t$ ½ Π_i ARRDUMt-i = 1)		0.683 (N=1402)	0.887 (N=776)	0.882 (N=525)	0.513 (N=372)
Panel B: ARRMOS (number of overdue monthly wages)					
$E(ARRMOS_t)$	1.10 (N=4668)	1.11 (N=4312)	1.92 (N=4050)	3.00 (N=3784)	1.14 (N=4011)
Unconditional distribution ($ARRMOS_t$)					
ARRMOS < 1 month	0.603	0.594	0.415	0.379	0.731
= 1 month	0.149	0.156	0.149	0.122	0.111
2-3 months	0.164	0.170	0.250	0.219	0.085
4-6 months	0.055	0.054	0.134	0.162	0.032
> 6 months	0.029	0.026	0.053	0.119	0.041
$E(ARRMOS_t$ ½ $ARRMOS_t > 0)$	2.75 (N=1861)	2.73 (N=1760)	3.27 (N=2381)	4.82 (N=2358)	4.24 (N=1078)

Cotinued on next page

Table II.8. — *Continued*

	1994	1995	1996	1998	2000
E(ARRMOS$_t$ ½ ARRMOS$_{t-i}$).		(N=3199)	(N=3017)	(N=2480)	(N=2568)
where ARRMOS$_{t-]}$< 1 month		0.49	1.07	1.16	0.31
= 1 месяц		1.27	2.11	2.14	0.50
2–3 months		2.13	3.30	3.71	0.80
4–6 months		3.27	4.94	6.03	1.58
> 6 months		4.51	7.69	9.41	3.65

Notes: ARRDUMt = 1 if an employed respondent reports overdue wages on his/her primary job, 0 if no wages are overdue in year t. ARRMOSt = number of monthly wages reported overdue by an employed respondent in year t. Sample consists of all employed respondents in the respective files of the RLMS. Sample sizes are shown in parentheses for number of valid responses for ARRDUM and ARRMOS, respectively; sample sizes vary primarily because of attrition and replacement in the RLMS panel, and secondarily because of missing values for some respondents.
Source: Calculations from RLMS.

Table II.9. Wage Arrears: Accountants' Reports in a Firm Survey, 1991-98

Years	Unconditional mean (all firms)		Conditional mean (firms with wage arrears)
	Percentage of firms with wage arrears	Amount of wage arrears per worker (rubles)	Amount of wage arrears per worker (rubles)
1991	13.0	0	2
1992	14.6	3	17
1993	18.8	15	75
1994	25.0	1 913	7 041
1995	35.4	4 778	13 140
1996	46.9	5 302	11 098
1997	57.8	7 142	12 123
1998	56.3	9 321	16 532

Note: Sample is consistent across years (N = 192). A total of 66.5% of accountants (135 of 203 firms in the full sample) indicated that firms had wage arrears in 1991-98; 64.6% of accountants (124 of 192 firms in the consistent sample) indicated that firms had wage arrears in 1991-98.
Source: Results from survey "Inside the Transforming Firm," reported in Biletsky et al. (1999).

Table II.10. Legal Penalties for Wage Arrears

Years	Percentage of firms who had penalties for wage arrears	Amount of penalties for wage arrears (in rubles)	Ratio of penalties for wage arrears to the stock of wage arrears	Number of firms with wage arrears
1991	0	0	0	25
1992	0	0	0	27
1993	0	0	0	34
1994	0	0	0	48
1995	0	0	0	64
1996	2.4	3997	0.003	85
1997	0.9	926	0.001	108
1998	2.8	6929	0.004	106

Note: Sample is restricted to firms with wage arrears in each year. Just 6% of firms with wage arrears (134 firms) ever had penalties for wage arrears.
Source: Results from survey "Inside the Transforming Firm," reported in Biletsky et al. (1999).

Table II.11. Incidence and Persistence of In-Kind Substitutes for Wages in the RLMS, 1994-2000

INKDUM (dummy)	Sample	Expected probability of in-kind substitutes				
		1994	1995	1996	1998	2000
Unconditional Mean ($INKDUM_t$)	Full crosssection	0.087 (N=4744)	0.082 (N=4390)	0.122 (N=4183)	0.154 (N=3935)	0.090 (N=4159)
Mean ($INKDUM_t$ ½ $INKDUM_{t-1}$ = 1)	Panel for t, t-1	...	0.369 (N=306)	0.395 (N=281)	...	...
Mean ($INKDUM_t$ ½ $INKDUM_{t-2}$ = 1)	Panel for t, t-1	...		0.387 (N=266)	0.542 (N=330)	0.348 (N=446)
Mean ($INKDUM_t$ ½ Π_i $INKDUM_{t-i}$ = 1)	Panel for t, t-1, t-2	...	0.369 (N=306)	0.565 (N=92)	0.846 (N=39)	0.679 (N=28)

Note: INKDUMt = 1 if an employed respondent reports in-kind payments on his/her primary job, 0 if no wages are paid in kind in year t. Sample size is shown in parentheses for number of valid responses for INKDUM; sample sizes vary primarily because of attrition and replacement in the RLMS panel, and secondarily because of missing values for some respondents.
Source: Calculations from RLMS.

Figure II.1. Incidence of High Pay and Low Pay in Transition Countries, 1997 &1992

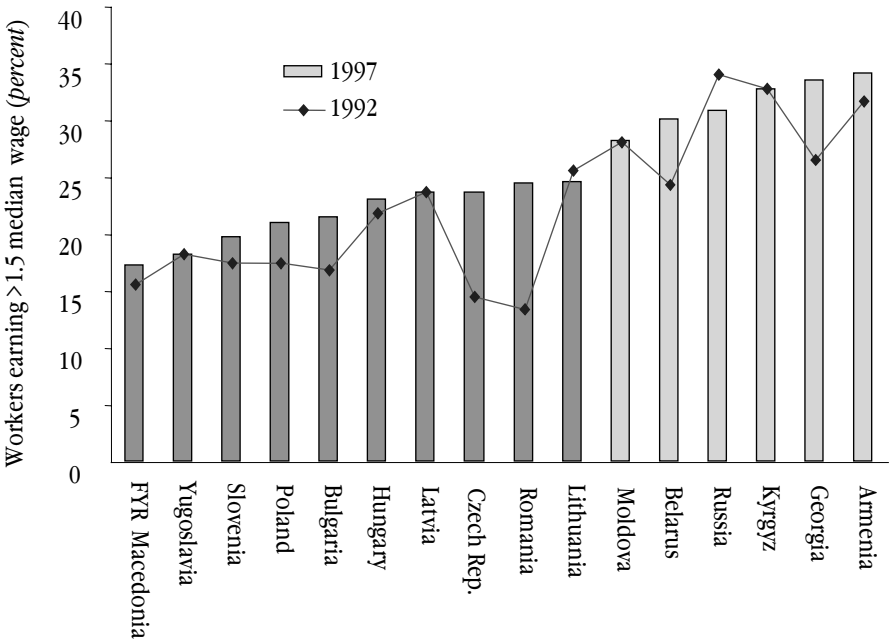


Figure II.2. Incidence of Low Pay in Transition Countries, 1997&1992

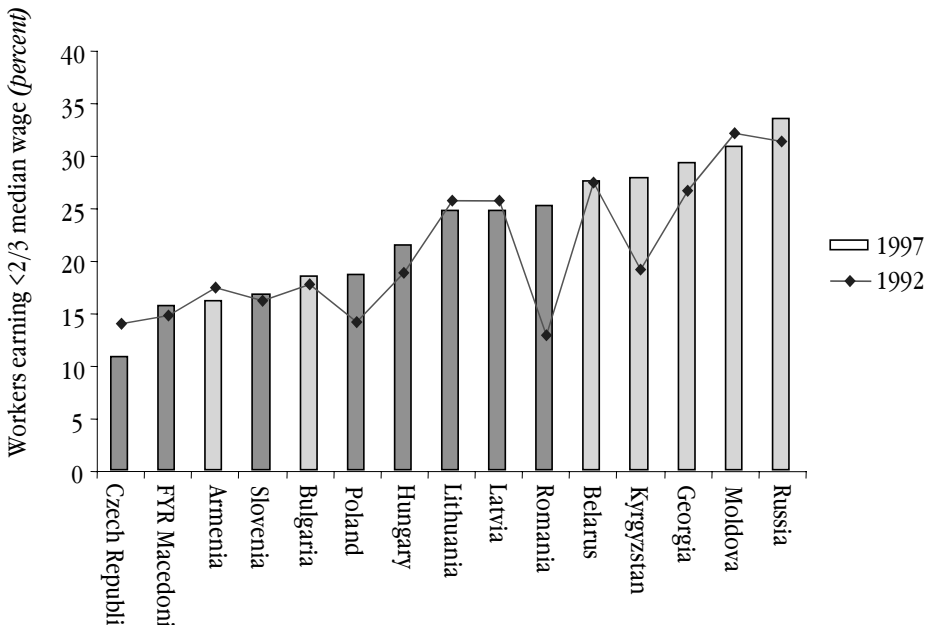


Table II.12. Contribution of Selected Factors to (Log) Earnings Inequality

	Poland (1995)		Hungary (1996)		Macedonia (1996)		Armenia		Georgia		Russia		UK
	Total variance	Explai-ned variance	Total variance	Explai-ned variance	Total variance	Explai-ned variance	Total variance	Explai-ned variance	Total variance	Explai-ned Variance	Total variance	Explai-ned variance	Total variance
Education	11.5	34.9	25.9	61.7	8.9	35.3	0.3	0.8	0.4	1.1	2.7	8.1	12.9
o/w tertiary	9.1	27.4	17.9	42.7	9.4	37.1	-	-	-	-	-	-	-
Job experience	3.8	11.6	2.1	5.0	5.8	22.9	0.4	1.1	1.9	5.5	1.5	4.6	13.7
Gender	6.8	20.5	3.8	9.1	2.0	7.7	7.8	23.7	6.1	17.4	6.5	20.0	11.9
Ownership	-0.6	-1.9	0.0	0.0	0.0	0.0	8.4	25.4	6.1	17.3	1.0	3.0	0.0
Sector	8.7	26.3	4.8	11.3	8.4	33.1	12.4	37.7	13.4	38.2	7.5	23.0	10.8
Location	2.9	8.6	5.5	13.1	0.6	2.5	3.6	10.9	7.2	20.6	13.5	41.3	0.9
Total explained	33.1		42.1		25.7		32.8		35.0		32.7		50.2
Unexplained	66.9		57.9		74.3		67.2		65.0		67.3		49.8
Total	100		100		100		100		100		100		100

Sources: : Poland, Hungary and Macedonia (Rutkowski, 1999); Armenia (Yemtsov, 1999); Georgia (World Bank, 1999b); Russia (Lehman & al., 1999a); United Kingdom (Lehman et al., 1999b).

Table II.13. Distribution of Workers with Particular Characteristics by Wage Quintiles,2000

Worker and firm characteristics	1998 wage quintiles				
	1 (low)	2	3	4	5 (high)
Female	0.245	0.279	0.193	0.172	0.111
Male	0.144	0.168	0.161	0.283	0.245
Age					
15-24	0.341	0.220	0.136	0.220	0.083
25-34	0.245	0.221	0.165	0.218	0.151
35-44	0.176	0.227	0.181	0.213	0.204
45-54	0.177	0.213	0.184	0.247	0.179
55-72	0.175	0.298	0.211	0.186	0.131
Education					
Elementary	0.329	0.273	0.137	0.153	0.108
Secondary basic	0.269	0.216	0.152	0.217	0.147
Vocational	0.213	0.221	0.176	0.259	0.131
Secondary professional	0.195	0.249	0.212	0.203	0.142
University	0.076	0.207	0.189	0.251	0.278
Job-to-job mobility					
Job stayers	0.198	0.236	0.183	0.215	0.168
Job movers	0.213	0.189	0.155	0.259	0.184
Rural	0.378	0.273	0.139	0.139	0.070
Urban	0.129	0.212	0.195	0.254	0.211
Sectors					
Industry	0.124	0.177	0.220	0.261	0.218
Agriculture	0.532	0.258	0.116	0.082	0.013
Transportation/construction	0.075	0.179	0.155	0.309	0.283
Public services	0.242	0.284	0.173	0.182	0.119
Other services	0.141	0.220	0.188	0.243	0.208
Employment per firm					
<26	0.274	0.240	0.161	0.184	0.142
26-100	0.252	0.273	0.157	0.184	0.134
101-500	0.188	0.222	0.177	0.243	0.170
>500	0.103	0.152	0.213	0.273	0.260
Ownership					
State-owned	0.237	0.250	0.177	0.207	0.129
Mixed	0.113	0.188	0.204	0.249	0.246
Domestic private	0.112	0.231	0.196	0.208	0.254
Foreign	0.087	0.111	0.175	0.381	0.246
Total [N = 2474]					

Notes: Sample is restricted to all employees aged 17-72. Characteristics of firms and workers are taken from 2000. The sum of shares does not add up to one because of missing values
Source: Calculations from RLMS.

Figure II.3. Cumulative Change in the Distribution of Real Wages, 1998-2000: RLMS Data

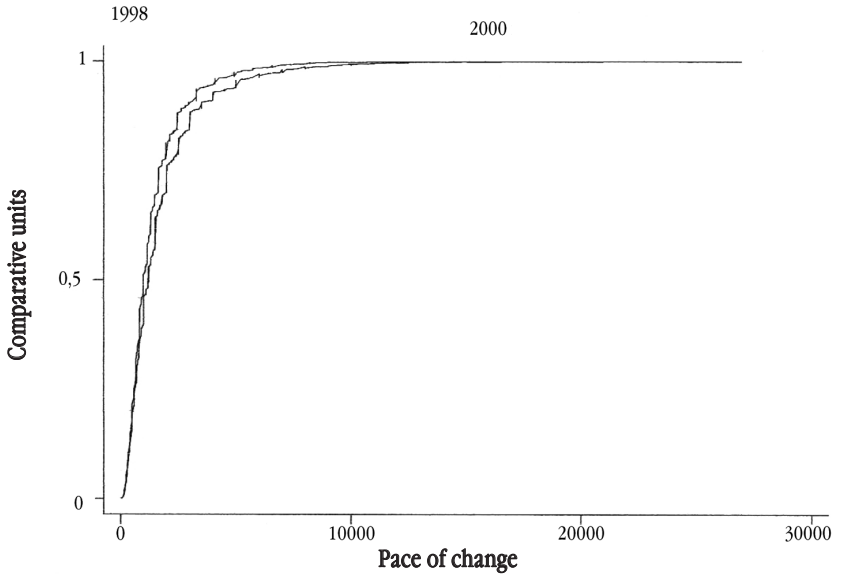


Figure II.4. Growth in Wages by Quintile, 1998-2000

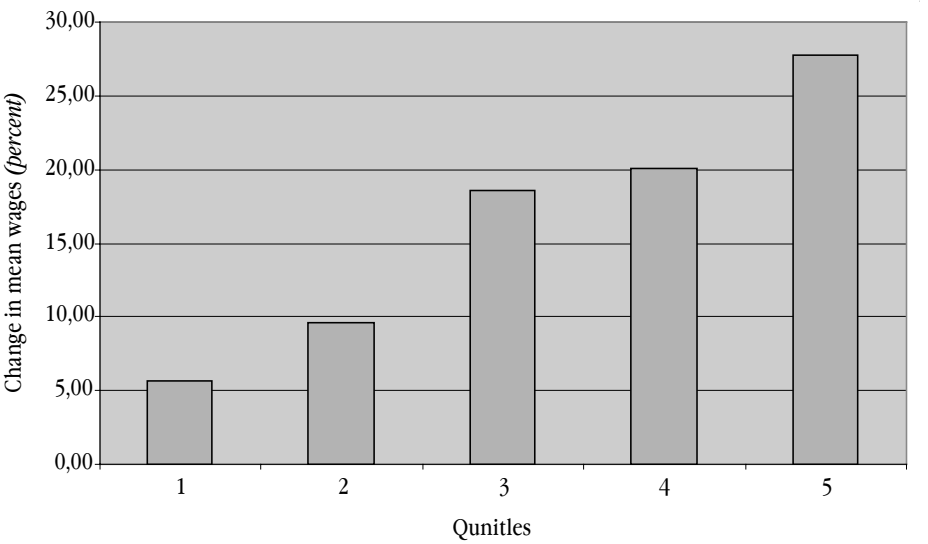


Table II.14. Poverty Rates: Households With and Without Children

Poverty Rates (% of Heads of Households[7])		Round 8 of RLMS*		
		Non-poor[2]	Poor[3]	Total
Employment status	Pensioner	66.1	33,9	**100**
	Employed without wage arrears	65.1	34.9	**100**
	Employed with wage arrears	48.6	51.4	**100**
	Unemployed[6] and not receiving unemployment benefits	39.1	60.9	**100**
	Unemployed[6] and receiving unemployment benefits	20.0	80.0	**100**
	Not in the labor force (not pensioner)	58.3	41.7	**100**
Duration of unemployment	Not unemployed[6]	58.7	41.3	**100**
	Not unemployed[6]	41.2	58.8	**100**
	Unemployed[6] for a year or more	36.1	63.9	**100**
	Total	**56.0**	**44.0**	**100**
Poverty rates (percent of household heads[7] with children[8])		**Round 8 of RLMS***		
		Non-poor[2]	**Poor[3]**	**Total**
Employment status	Pensioner	45.1	54.9	**100**
	Employed without wage arrears	59.6	40.4	**100**
	Employed with wage arrears	39.9	60.1	**100**
	Unemployed[6] and not receiving unemployment benefits	32.7	67.3	**100**
	Unemployed[6] and receiving unemployment benefits	28.6	71.4	**100**
	Not in the labor force (not pensioner)	60.0	40.0	**100**
Duration of unemployment	Not unemployed[6]	48.4	51.6	**100**
	Unemployed[6] for less than a year	31.3	68.8	**100**
	Unemployed[6] for a year or more	33.6	66.4	**100**
	Total	**45.8**	**54.2**	**100**

Cotinued on next page

Notes to the Table II.14:

* Round 8 of the RLMS survey was conducted in Russia in October 1998 - January 1999.

1 Adults - those who 16 are years or older.

2 Poor - households with total expenditures (see explanation in # 4) below official regionally differentiated (see explanation in # 5) subsistence minimum adjusted for economies of scale in the household (MLSD).

3 Non-poor - households with total expenditures (see explanation in # 4) above or equal to official regionally differentiated (see explanation in # 5) subsistence minimum adjusted for economies of scale in the household (MLSD).

4 Total expenditures - total household monetary food and non-food expenditures excluding big purchases, purchases of luxury goods, bonds/stocks, and savings plus value of home-produced food evaluated at prevailing market prices.

5 Regionally differentiated subsistence minimum - 8 regional poverty lines computed as population weighted average across 78 official regional subsistence minima to match survey sample division of Russia into 8 regions

6 Unemployed - those who do not report any work, receive neither pension nor disability benefit, and would like to work.

7 Household head was determined as follows: the oldest prime-aged male (male aged 18-59), if there was no prime-aged male in the household then the oldest prime-aged female (female aged 18-54), if there was no prime-aged female in the household then the oldest male aged 60 and over, if there was no male aged 60 and over then the oldest female aged 55 and over, if there no adults (18 or over) in the household, then the oldest person in the household was chosen as a head.

8 Children - those below 16 years of age

ANNEX III

LABOR-MARKET REGULATION

Table III.1. Employment by Type of Labor Contract, 2000 (000s)

	Permanent job	Of which		Temporary job	Of which	
		full-time	part-time		full-time	part-time
Total	54 836	54 061	775	1 954	1 733	231
Male	27 849	27 577	272	1 204	1 086	118
Female	26 988	26 484	504	750	637	112

Source: Average LFS figures for February 2000 — November 2000, reported in Goskomstat (2000c).

Table III.2. Legal Arrangements for Fixed-Term Contracts and Temporary Agency Work, Four OECD Countries

	Fixed-term contracts	Temporary agency work
Germany	• Widely possible without justification • Maximum number of 4 contracts/24 months (no limits in justified cases)	• Generally approved except for construction
Japan	• < 1 year duration without restriction • up to 3 years for particular types of workers	• Restricted to specific occupations
Spain	• Permitted for various reasons (for example, specific projects; temporary replacements; training contracts; production eventualities; special categories of workers; long-term unemployed)	• Legal for justifiable cases
United States	• No restrictions	• No restrictions

Source: OECD (1999a) and country documents.

Table III.3. Legal Arrangements for Termination, Four OECD Countries

	Justifiable reasons for eonomic dsmissal	Severance requirements	Advance notice required
Germany	• Compelling business or operational needs	• No legal entitlement but often in collective agreement	• Progressive increase based on years of service (from 2 weeks notice in trial period to 7 months for >20 years of service) • 1-month delay required after public notice for mass layoffs
Japan	• Rational restructuring reason or unavoidable redundancy (court precedence, not law) • Reasonable selection criteria	• No legal entitlement but most large enterprises have voluntary plan	• 30 days' notice • Notification also to Public Employment Security Office in mass layoff (>30 workers)
Spain	• Economic redundancy	• 20 days' wages for each year of service (up to 12 years)	• 30 days' notice • for mass layoffs, consultation required for 30/15 days in firms with 50+/<50 employees
United States	• No restriction (except in public sector)	• No legal requirement but voluntary or negotiated policies exist	• No regulation for individual dismissal • 60 days' notice for mass layoffs

Source: OECD (1999a) and country documents.

Table III.4. Ratio of Real Wage to Official Wage, Employee Reports by Sector, 1999

Real wage divided by official wage	State	Privatized	De novo private
	Percent of employees		
Less than one	0.9	1.6	1.9
One (equal)	88.4	87.5	59.8
Up to two	9.1	7.4	13.8
Three	0.9	1.6	8.0
Four	0.4	0.8	2.7
Five	0.2	0.8	1.9
Six or more	0.2	0.2	10.2
No regular ratio	0.0	0.1	1.6
Total	100.0	100.0	100.0
N	558	771	884

Source: Tchetvernina (2000).

Table III.5. Union Membership by Type of Enterprise, October 1997

	State sector	Budgetary entities	Privatized	De novo private firms	Average
Membership in trade unions (percent of employees)	69	62	65	10	56
Entities with trade unions (percent of organizations)	85	79	75	10	68

Source: Goskomstat survey in Kemerovo and Komi supplemented by questions designed by ISITO.

Table III.6. Union Membership Trends by Region, Mid-1980s to Mid-1990s

	Percentage point change in union density, mid-1980s to mid-1990s			
	Decline of more than 10 points	Decline of up to 10 points	Gain of up to 10 points	Gain of more than 10 points
Africa	Kenya (-25)	Egypt (-4) Mauritius (-9) Uganda (-4) Zambia (-6)	Zimbabwe (+2)	South Africa (+27)
Latin America	Argentina (-29) Costa Rica (-13) Mexico (-17) Venezuela, R.B. de (-13)	Colombia (-4) Dominican Rep. (-2) Guatemala (-4) Uruguay (-8)	Chile (+4) El Salvador (+2)	
Asia	India (-11)	Bangladesh (-8) Pakistan (-1) Thailand (-0.1)	Korea (+0.4) Philippines (+6)	
Eastern Europe and Central Asia	Azerbaijan (-33) Czech Rep. (-34) Estonia (-46) Hungary (-20) Poland (-25) Slovak Rep. (-15)	Bulgaria (-4) Cyprus (-9) Romania (-10)	Turkey (+4)	Malta (+17)
Industrialized	Australia (-20) Israel (-77) New Zealand (-22) Austria (-13) Greece (-12) Ireland (-14) United Kingdom (-13)	Canada (-7) United States (-4) Japan (-6) Singapore (-4) Denmark (-3) France (-4) Germany (-10) Italy (-4) Luxembourg (-6) Netherlands (-5) Norway (-1) Switzerland (-4)	Hong Kong (+4) Belgium (+3) Finland (+10) Spain (+7) Sweden (+7)	
Total number [%]Developing countries Developed countries	19 [32.8] 12 [35.3] 7 [29.2]	26 [44.8] 14 [41.2] 12 [50.0]	11 [19.0] 6 [17.6] 5 [20.8]	2 [3.4] 2 [5.9] 0 [0.0]

Source: Betcherman, Luinstra, and Ogawa (2001), based on data from ILO (2000a).

Table III.7. Activities of the Federal Labor Inspectorate, 1994-98

	1994	1995	1996	1997	1998
Inspections	35 051	117 457	211 178	267 895	263 977
Violations registered	391 227	1 414 732	2 915 509	2 237 524	2 098 350
Instructions ordered to eliminate violations	59 924	113 271	169 137	187 624	201 057
Inspections on wage issues	203	7 520	53 796	45 945	41 192
Wage arrears eliminated as a result of inspections (million rbl.)	41.2	302.8	8 325.3	7 733.4	10 275.5
Workers who were unlawfully fired returned to jobs	74	1 579	2 930	3 770	2 814
Employers penalized for violation of labor legislation	3612	12 554	32 260	34 029	32 963
Employees of Labor Inspectorate	2 601	4 135	4 647	4 812	4 720

Source: Federal Labor Inspectorate, MLSD.

Table III.8. Means of Resolving Labor Conflicts, Evidence of Employers and Employees, 1999

	Employers	Employees
	Percent citing means of resolution for conflict	
Labor-management committee	3.9	2.7
Trade union committee	4.9	7.0
Court	9.8	3.7
Dismissal	17.7	0.5
Agreement reached with employer (informal)	18.6	35.8
Conflict expired	22.5	4.8
Conflict not resolved	15.7	44.3
N	123	226

Source: Tchetvernina (2000).

ANNEX IV

SOCIAL SAFETY NETS

Box AIV. 1. Different Systems of Unemployment Protection

Aside from unemployment-insurance programs, three other types of unemployment compensation programs are used worldwide - means tested or flat unemployment benefits, severance pay (discussed in the previous chapter) and ISAs. All programs cover formal-sector workers, but differ in their risk-pooling arrangements, source of funding, and their eligibility and benefit conditions. Unemployment Insurance and Unemployment Assistance involve risk pooling at the economy level. Severance Pay provides firm level risk pooling, while ISAs provide risk pooling at only the individual level. Public works programs are also used to provide income support, and are available to both formal- and informal-sector workers. With respect to financing, unemployment assistance is mainly financed from general revenues; unemployment insurance is financed through individual, government, or employee payroll tax revenues; ISAs directly from own contributions of workers; and severance pay from own or employer contributions.

Eligibility and benefit conditions as well as financing also differ across programs: Unemployment-assistance programs generally provide means-tested benefits to households with income below a particular threshold (as a primary benefit or once unemployment insurance benefits have been exhausted). However, some transition countries have unemployment-assistance programs where the benefit is flat or is some proportion of average wage. Unemployment-insurance systems and severance pay are defined-benefit programs, where benefits are linked to past wages and years of service. ISAs provide benefits that are defined contribution, that is, benefits are based on investment returns on worker contributions; and as such are not predetermined. Most programs restrict benefits to laid--off workers to avoid moral hazard problems, although some countries provide restrictive benefits to new entrants and special provisions for unemployed nearing retirement.

The incidence of these programs varies worldwide. In many countries, both developing and developed countries have some form of severance agreement. The existence of unemployment insurance depends a great deal on the level of income and region. Most OECD and transition countries (including Russia - until 2001) have these systems; in East Asia, only China, Korea, and Japan have it. Unemployment assistance exists in many European countries and transition countries as a supplemental program for long-term unemployed who have exhausted their benefits. It is a primary system of unemployment assistance in Australia. ISAs exist in some Latin American countries, where they have evolved from severance pay funds. Public works are prevalent in most countries, and along with severance pay, are the main protection systems in developing countries.

Source: Betcherman (2000).

Table IV.1a. Stylized Features of Unemployment-Insurance (UI) Programs, by Groups of Countries

Coverage	Level of benefit	Benefit duration	Eligibility conditions	Conditions for keeping benefits	Source of financing
OECD Countries					
Most countries offer UI.The majority of programs cover all employed individuals irrespective of type of industry or sector. Austria, Germany, and Luxembourg: coverage extended to apprentices and training graduates. Many exclude the self-employed, whether generally, special occupation groups, or based on other conditions.Public-sector employees excluded in Austria and Canada (voluntary provisions exist for provincial government employees). Few exclude domestic and/or casual workers (for example, Ireland, Japan, Portugal, Spain, United .States). Denmark, Finland, and Sweden: voluntary UI.	Generally, initial replacement rates vary between 40 and 75% of recent average earnings. Exceptions on high side include Sweden (80%) and Denmark (90%). However, ceilings on wages and maximum-benefit provisions limit range. Flat-rate benefits, independent or in combination, offered in Ireland, France, and the United Kingdom Waiting period: between 3 and 7 days. In some countries, in cases of voluntary quit or dismissal for misconduct, waiting period is extended (range: 6 weeks to 6 months). Additional flat-rate benefits or additional percentage of average earnings for workers with spouses or children (for example, Belgium, Germany, United Kingdom). Most countries tax benefits (for example, Belgium, Canada, Netherlands, United States, United Kingdom, Denmark, France). In some countries, long-term UI recipients transit into unemployment assistance	Most countries limit length of UI entitlement. Belgium: benefit duration is indefinite. Maximum entitlement period usually is between 8 and 36 weeks. UI entitlement duration is also sometimes related to length of the most recent period of contributions, employment, and/or age.	General minimum employment requirement: 6 months in the past year. Range: 10 weeks in last 52 weeks in Iceland to 540 days in last 24 months in Portugal. All countries require registration at the employment office. Residency required in Iceland and France. Benefits denied in cases of voluntary quit, misconduct, work stoppage, or refusal of suitable offer in almost all countries.	Almost all programs require the recipient to be capable, available, and willing to work. Exceptions are Finland, Iceland, and Spain. Disqualification for failure to undergo training, unjustified refusal of suitable job offer, or noncompliance with job search requirements. Degree of offense determines period of disqualification; however, usually between 1 and 4 months. Regularly reporting to employment office is required in a number of countries.	Most UI programs financed by contributions from employers and employees; in cases where both employees and employers contribute to the UI fund, the rates are equal or higher for the latter. There are only a few cases where only employers or employees contribute (Employer: Iceland, Italy, United States; Employee: Luxembourg).Typically the state covers any deficits that arise. In both Italy and Spain, the state provides subsidies. In the United States, Japan, and Italy the state covers administrative costs. Although very atypical, the state also contributes to UI. Contribution rates vary significantly between countries. The majority of countries, however, have contribution rates below 3%. Most of the remainder have contributions rates in the range of 3 to 8%.

Table IV.1a. Stylized Features of Unemployment-Insurance (UI) Programs, by Groups of Countries (*Continued*)

Coverage	Level of benefit	Benefit duration	Eligibility conditions	Conditions for keeping benefits	Sources of financing
East Europe and Central Asia (Transition Countries)					
Majority of programs cover employed workers (citizenship or residency required). Coverage by age: usually 16-59 for men and 16-54 for women. Croatia, Romania: discharged military personnel eligible for UI. University or training graduates eligible. Usually domestic and casual workers are excluded.	Initial income replacement rates generally vary between 50 and 75%. Level range limited by wage floors (usually the min. wage) and ceilings (usually the local, regional, or national avg. wage, or double the min. wage). Benefits level can sometimes be dependent on cause of job loss. Some countries provide flat-rate benefits (usually [(minimum wage or average wage] instead of or in addition to the earnings-related benefits (for example, Albania, Croatia, Estonia, Georgia). Earnings-related or flat-rate benefits can be graduated over time. Typically, new unemployed labor-market entrants receive flat-rate benefits J min. wage. Albania, Azerbaijan, Kyrgyz Republic, Russia, Ukraine, Uzbekistan: provide dependent supplements; usually a percentage of the minimum wage or benefit level for each dependent (ceiling present).	In most countries, the maximum entitlement duration is 6 months (26 weeks). High end: Hungary, 2 years. In some countries, entitlement duration varies depending on length of employment, contribution period, and/or age (Azerbaijan, Bulgaria, Croatia, Poland, Russia, Slovenia, Slovak Republic). University and training graduates usually have shorter entitlement periods. Some countries provide extensions for those near early retirement age.	Minimum past employment requirement ranges from 4 months (Armenia, Russia) to 4 years (Bulgaria). Commonly, countries require employment between 6 months in the last year to 12 months in the last 2 years. Registration at employment offices required by all countries. Income level in Latvia, Romania, and Ukraine must be below minimum wage. In Serbia and Montenegro, household income must be below stipulated income. In a few countries (for example, Armenia, Belarus, Bulgaria, Georgia, Moldova), workers not eligible if dismissal for misconduct. In Bulgaria and Hungary, workers not eligible if unemployment due to refusal of suitable offer.	About half require the recipient to be able and willing to work. Benefits are reduced, postponed, or terminated if recipient does not comply with labor-market requirements (job search, training, etc.) or files fraudulent claim.	Almost all countries require employer contributions. Nine (out of 21) require employee contributions. Only exception: Estonia, UI state financed entirely. Employee contribution rates generally vary between 0.06% (Slovenia) and 1% (Slovak Republic). Employer contributions vary between 0.06% (Slovenia) and 6% (Albania). State subsidies (when needed) or deficit financing is common. Latvia: state finances UI for special groups. Slovak Republic: state finances special programs.

Source: Vodopivec, Milan, and Raju (2001).

Table IV.1a. Stylized Features of Unemployment-Insurance (UI) Programs, by Groups of Countries (*Continued*)

Coverage	Level of benefit	Benefit duration	Eligibility conditions	Conditions for keeping benefits	Sources of financing
Latin America and the Caribbean					
Argentina, Barbados, Brazil, Chile, Ecuador, Mexico, Uruguay, and Republica Bolivariana de Venezuela.Most provide coverage to all employed workers. Exceptions: Uruguay (excludes workers outside industry and commerce), Republica Bolivariana de Venezuela (excludes domestics and casual workers), and Barbados (excludes public sector employees and the self-employed).	Income-replacement rate varies between 50 and 60% of average earnings. Chile: graduated flat-rate benefits. Ecuador: lump-sum benefits (based on earnings and service length). Argentina, Brazil, Uruguay: minimum and maximum benefit limits are proportional functions of the minimum wage. Uruguay: 20% dependent supplement. Waiting period: Barbados (3 days), Brazil (60 days), Republica Bolivariana de Venezuela (30 days).	All countries, maximum entitlement period 1 year (range: 3 to 12 months). Argentina, Brazil: entitlement period dependent on employment length. Brazil: in special cases/circumstances, entitlement durations are increased.	Generally, must have been employed for 6 to 12 months in some stipulated period of recent employment. Argentina and Chile require registration at employment offices. Brazil, Chile, Uruguay: applicants ineligible if dismissal for misconduct. Argentina: applicants cannot be recipients of other social-security benefits. Brazil: claimant must lack other means to support self or household.	In Argentina, Chile, and Venezuela, R.B. de, recipients must be able and willing to work.	Contribution rates vary between 0.75 and 2%. In 5/7 countries both employers and employees contribute. Except for Ecuador (employees, 2%; employers, 1%), employers contribute an equal or higher percentage of payroll (N=4). Uruguay: contributions (employees, 15%; employers, 12.5%) for social security including UI (state finances deficits).Chile: state finances total costBrazil: employer-financed through various ear-marked taxes, but mainly through a business sales tax of 0.65%.
Asia					
Bangladesh, China, Islamic Republic of Iran, South Korea, Taiwan, China.Coverage differs significantly. Islamic Republic of Iran: excludes the self-employed, voluntarily insured persons, and those covered under other provisions. Bangladesh: only commerce and industry. China: permanent and contract workers in public-sector enterprises, and some collective enterprises. South Korea: all firms. Taiwan, China: excludes the self-employed and firms with less than 5 workers.	Iran, Taiwan, China: initial replacement rate is 55% of average earnings. Bangladesh: 50% of basic wages + lump sum benefits based on length and nature (permanent/casual) of employment. China: flat rate below minimum wage. Iran: 10% benefit supplement per dependent up to 4 dependents. South Korea: 50% of "basic daily wage" (minimum: 90 percent of minimum wage, maximum: 30,000 Won per day). A reemployment bonus is offered if claimant leaves before half the duration period. Waiting period: South Korea and Taiwan,China, 14 days.	2 years. South Korea: 90-240 days, based on age of claimant and length of previous employment (benefits extended in special cases). Taiwan, China: 3--16 months, based on employment length. Islamic Republic of Iran: 6-50 months, based on employment length and marital status.	Insured employment requirement: Islamic Republic of Iran: 6 months; China: 1 year; South Korea: 6 months; and Taiwan, China: 2 years. South Korea, Taiwan, China: unemployment must be involuntary. In Islamic Republic of Iran, unemployment also cannot be for misconduct or refusal to accept suitable offer. Registration at employment office required.	China, Islamic Republic of Iran, South Korea, and Taiwan, China: must be capable, available, and willing to work.	Bangladesh, employers: total cost. China, employers: 0.6-1% (rate dependent on local govt. provisions); state: subsidies. Islamic Republic of Iran, employers: 3%; state: finances deficit. South Korea: employers: 0.5%; employees: 0.5%. Taiwan, China, employees: 0.2%; employers: 0.7%; state: cost of administration, 0.1% of employee wages, and allocations from other social insurance funds.

Table IV.1a. Stylized Features of Unemployment-Insurance (UI) Programs, by Groups of Countries (*Continued*)

Coverage	Level of benefit	Benefit duration	Eligibility Conditions	Conditions for keeping benefits	Sources of financing
Africa					
Algeria, Arab Republic of Egypt, South Africa, and Tunisia. Coverage differs between countries. Algeria: laid-off salaried workers from economic sector. Egypt: excludes public-sector employees, casual and agricultural workers. South Africa: excludes domestics and highly paid employees (>76,752 Rand/year). Tunisia: excludes agricultural workers.	Egypt: 60%; South Africa, 45%. Tunisia: minimum wage of industrial and commerce sectors. Algeria: mean of average earnings and national minimum earnings with a floor of 75% of the latter; graduated benefits; spousal allowances provided.Waiting period: South Africa and Egypt: 7 days	Algeria: duration varies based on length of employment (12-36 months). Egypt: maximum entitlement duration varies between 16 and 28 weeks based on contribution length. Tunisia: 3 months. South Africa: 26 weeks.	Algeria: 3 years of covered employment; employer must be current with contributions. Egypt: 6 months; Tunisia: 12 quarters; South Africa: 13 weeks in last 52 weeks. Algeria and Tunisia require that applicants have no other sources of income. Algeria also requires 3 months of active search prior to application. Tunisia: applicants must have dependents. Unemployment cannot for voluntary quit (Egypt, Tunisia), misconduct (Egypt), refusal of suitable job offer (Egypt, South Africa) or participation in strike (South Africa).	Egypt, Tunisia, and South Africa: must be able, available, and willing to work.	Algeria, employees: 1.5%; employers: 2.5%. Egypt, employees: 2%, state: finances deficit. South Africa, employees: 1%; employers: 1%. Tunisia, state: total cost.

Table IV.1b. Stylized Features of Unemployment-Assistance (UA) Programs, by Groups of Countries

Coverage	Level of benefit	Benefit duration	Eligibility conditions	Conditions for Keeping Benefits	Sources of Financing
OECD countries					
Present in about half of member countries (complement UI systems). Only Australia and New Zealand have self-standing UA systems. Available for all unemployed workers, irrespective of sector, industry, or occupation.	Generally, means-tested minimum income at uniform rates to meet the basic needs of unemployed individuals and their families. Typically, benefit level depends on marital status and presence or number of dependents. Benefits are flat rate over time. Some countries have threshold income levels, above which benefits are reduced and/or completely eliminated. Usually, special provisions exist for the older unemployed. Sometimes, special provisions also granted to younger persons. Generally, no waiting periods. However, waiting period sometimes applied to applicants not transiting from UI (for example, Ireland, 3 days; Sweden, 5 days).	Indefinite, as long as conditions are fulfilled. Exceptions include the Netherlands (1 year); Spain (6 months; 30 months for those with dependents); Sweden (150 days; 5-day-week basis). In Portugal, duration depends on age and if claimant is a UI exhaustee or not (longer duration for the latter).	Typically, must satisfy means-test (household income and assets test; excludes state assistance such as family and housing benefits). Generally offered irrespective of employment or contribution history. Some exceptions: the Netherlands (4 years of employment in 5 years preceding unemployment); Portugal (6 months of contributory employment in the year preceding unemployment); France (5 years of employment in 10 years preceding unemployment). In some countries, employment or contribution conditions only applicable for UA applicants ineligible for UI (for example, Germany, 6 months). In some countries: UA only available for UI exhaustees (for example Austria). In Australia: if unemployment is voluntary, due to labor dispute, or refusal of suitable job offer, then benefits are reduced and limited or waiting period is extended to 8 weeks.	Many programs require the claimant to be fully unemployed, capable and available for work; and actively seeking work.Eligibility conditions must be satisfied throughout the period of receipt (periodic checks conducted).	Government-financed through general tax revenues.

Table IV.1b. Stylized Features of Unemployment-Assistance (UA) Programs, by Groups of Countries (*Continued*)

Coverage	Level of benefit	Benefit duration	Eligibility conditions	Conditions for keeping benefits	Sources of financing
East Europe and Central Asia (Transition Countries)					
Bulgaria, Czech Republic, Estonia, Hungary, Poland, Romania, Russia, Slovak Republic, Slovenia.Dual systems of UI and Ua in most countries. Estonia has an UA system only.All salaried workers. Special provisions for recent graduates and discharged military officers.	Means-tested minimum assistance at flat rates. Generally, benefit level depends on marital status, number of dependents, household size, and age of children. Usually, the receipt of other social assistance does not affect benefit level. However, any earnings, either full or above a certain stipulated amount, are fully deducted from UA benefits (for example, Czech Republic, Hungary). Poland: benefits can be in cash or in kind.	In some countries, entitlement length is indefinite, so long as eligibility conditions are fulfilled. Exceptions include Estonia (180 days), Hungary (2 years), Romania (18 months, renewal possible), Russia (6 months for the unemployed; 12 months for dependents of unemployed), Slovenia (6 months). Entitlement is sometimes limited for certain groups such as recent graduates (for example, Bulgaria, 3 months). In Poland, entitlement duration decided by social workers. In Estonia, duration extended if claimant is near retirement, has 3 or more children, or if income is below poverty level.	Provided irrespective of employment or contribution history. Must be registered as unemployed. Regular visits to the labor/employment office required. Generally, must satisfy household income (and assets) test. Capable and willing to work.	Most programs require the claimant to be capable, available, and willing to work. Refusal of training or acceptable job offer results in benefit cancellation. Eligibility conditions must be satisfied throughout the period of UA receipt.	Government-financed through general tax revenues.
Asia					
Hong Kong, China	Means-tested, flat-rate benefits based on marital status and presence of dependents.				Government-financed through general tax revenues.
Africa					
Tunisia, Mauritius.Tunisia: all nonagricultural salaried workers covered under National Social Security Fund.	Mauritius: means-tested income to households after 30 days of registered unemployment. Tunisia: minimum wage in industry and commerce.	Tunisia: 3 months.	Tunisia: 12 quarters of contributions to the fund, registered as unemployed, and capable of work. Worker must be involuntarily unemployed, have dependents, and have no other source of income.		Government-financed through general tax revenues.

Table IV.1c. Stylized Features of Unemployment Insurance Savings Accounts Programs, Latin America

Coverage	Level of benefit	Eligibility conditions	Sources of fnancing
In Brazil (Fundo de Garantia de Tempo do Servicio - FGTS, established in 1967), Chile, Colombia, Ecuador, Panama, Peru, Republica Bolivariana de Venezuela, All formal-sector workers.	Amount accumulated in the individual savings account (deposits plus interest earned).In Brazil, if dismissed, employer must pay an additional 40 percent (plus interest) as penalty. In Panama and Republica Bolivariana de Venezuela, penalty set as multiple of previous wages.	Upon separation (regardless of the reason of separation). Exception: Brazil, only if worker is dismissed. Some programs allow access for other reasons as well (for example, health and education expenditures).	Brazil, Ecuador, Colombia: 8 percent contribution rate; Peru: one half of a monthly salary each 6 months; contributions are paid by employers in workers' ISAs. In Uruguay, employees contribute 15 percent of earnings: the first 7.47 new pesos goes to social insurance and the balance, less a 3 percent administrative fee, goes to an individual account. Employers contribute a further 12.5 percent of payroll to the system, and the government, if necessary, finances deficits (this is a dual social/private insurance system that covers old age, disability, death, sickness and maternity benefits, family allowances, and unemployment).

Table IV.1d. Main features of unemployment benefit systems in Central and Eastern European Countries (latest legislation in bold)

	Date	Reference period	Required min. employment record	Max. duration of benefits	Relation to individual's gross earnings	Unemployment benefit levels (minimum and maximum, expressed in percent of minimum wage)	
Bulgaria	1989	12 months	6 months	6 months[a]	100 percent of last monthly wage for first month, then 10 percent less for next 5 months[b]	100 percent[c]	
	1991	12 months	6 months	12 months	Equal to minimum wage		
	1992	12 months	6 months	12 months	60 percent[d]	90 percent	140%
	1998	**12 months**	**9 months**	**12 months**	**60 percent[d]**	**85 percent**	**140%**
Czech R.	1991	3 years[e]	12 months	12 months	60 percent first 6 months 50 percent following 6 months (70 percent in case of retraining course)	none, but 70 percent of minimum living standard (MLS) if not employed before	
	1992			6 months	60 percent first 6 months 50 percent following 6 months (70 percent in case of retraining course)	none, but 70 percent of minimum wage if not employed before	150-180 percent[f]
	1996	3 years[e]	12 months	6 months	60 percent first 6 months 50 percent following 6 months (70 percent in case of retraining course)	none, but 70 percent of MLS if not employed before	150-180 percent of MLS[f]
	1998	**3 years[e]**	**12 months**	**6 months**	**50 percent first 6 months 40 percent following 6 months (60 percent in case of retraining course)**	**none (but 70 percent of MLS if not employed before)**	**150-180 percent of MLS[f]**
Estonia	1991	12 months	180 days	6 months	Flat rate	60 percent of minimum wage	
			180 days	6 months (3 months extensions considered on individual basis)	Flat rate	60 percent of minimum wage	
	1995	12 months					
Hungary	1989	3 years[e]	18 months	24 months[g]	70 percent first 6 months 60 percent following 6 months 45 percent following 12 months	80 percent since 1990[i]	300 percent

Table IV.1d. Main features of unemployment benefit systems in Central and Eastern European Countries (latest legislation in bold) *(Continued)*

	Date	Reference period	Required min. employment record	Max. duration of benefits	Relation to individual's gross earnings	Unemployment benefit levels (minimum and maximum, expressed in percent of minimum wage)	
	1991	4 years	360 days		70 percent first half of entitlement period 50 percent second half period	100 percent[i]	
	1992				70 percent first half of entitlement period 50 percent second half period	none	200 percent
	1993	4 years	90 days	360 days	70 percent during phase I 50 percent during phase IIh	8600 fiorints[i]	18000 fiorints during phase I 1500 fiorints during phase II
	1997	**4 years**	**90 days**	**360 days**	**65 percent[h]**	**90 percent of minimum old-age pension[i]**	**180 percent of minimum old-age pension**
Latvia	1993			6 months	90 percent of minimum wage (70 percent for new entrants)	70 percent of minimum wage	140 percent of minimum wage
Lithuania	1993			6 months	70 percent, later reduced to 60 percent and 50 percent		
Poland	1989	None	None	None	70 percent first 3 months 60 percent following 6 months 45 percent after 9 months	100 percent	average wage
	1992-94	1 year[j]	180 days[j]	12 months 2 years in exceptional cases	36 percent of national average wage	None	None
	1997	**18 months**	**1 year**	**18 months**	**flat rate amount paid at 378,2 zl**	**None**	**None**
Romania	1996	1 year	6 months 1 year	9 months	50-60 percent for 9 months	75-80 percent	200 percent
	1998	**1 year**	**1 year**	**9 months[k]**	**50-60 percent for 9 months**	**76-92 percent**	**210 percent**
Slovak R.	1991	3 years	12 months	12 months	65 percent first 6 months 60 percent following 6 months 70 percent during retraining	None 45 percentl None	None 150-180 percent[f] 150 percent
	1992			6 months	65 percent first 6 months 60 percent following 6 months 70 percent during retraining		
	1995	3 years	12 months	12 months	60 percent first 3 months 50 percent following 9 months		
	1997	**3 years**	**12 months**	**12 months**	**60 percent first 3 months 50 percent following 9 months**	**None**	**150 percent**
Slovenia	1996	18 months	9-12 months	24 months	70 percent first 3 months 60 percent following 3 months[o]	80 percent[p]	320 percent[p]
	1998	**18 months**	**9-12 months**	**24 months**	**70 percent first 3 months 60 percent following 3 months[o]**	**100 percent**	**300 percent**

Notes to the Table IV.Id
a Plus an additional three months of unemployment assistance.
b Unemployment insurance equal to the minimum wage plus 20 percent of the difference between the average wage and the minimum wage
c Since October 1990.
d Average of last six months' wage; an additional 15 percent is awarded upon completion of a training course.
e Not required if enrolled in a training course.
f The recipient receives 180 percent if enrolled in a training course.
g One year until January 1990 when it was extended to two years.
h Unemployed earning from casual work not more than half of the minimum wage per month remain entitled to full UI
i If previous earnings were less than minimum wage then the benefit is set equal to previous earnings.
j Introduced in September 1990.
k Some of the unemployment benefit exhaustees (after 9 months) qualify for a SUPPORT ALLOWANCE PROGRAM for an additional (maximum) 18 months. This program is means tested, and the level of allowance is 60 percent of the level of unemployment benefit they initially receive
l Minimum applies only to first time unemployed and school leavers and is paid for a period of six months.
m Net monthly wage if lower than the minimum pension income.
n First three months paid at 70 percent, then remaining months paid at 60 percent of average wage.
o Recipients can receive a supplement for each family member to raise the average income per family member to 80 percent of the gross min wage
p As a percentage of the guaranteed minimum wage.
Source Vodopivec, Worgotter, and Raju (2000).

Table IV.2. Spending[1] on Passive and Active Labor-Market Policies in Selected OECD and EU Accession Countries[2,3]

	Unemp. rate	Passive policies		Active policies	
		Percent of GDP	Spending per unempl.	Percent of GDP	Spending per unempl.
OECD					
Austria (1999)	3.7	1.22	0.32	0.52	0.14
Belgium (1998)	9.5	2.51	0.26	1.34	0.14
Denmark (1999)	5.2	3.12	0.60	1.77	0.34
Finland (1999)	10.3	2.33	0.23	1.22	0.12
France (1999)	11.3	1.85	0.16	1.33	0.12
Germany (1999)	8.7	2.12	0.24	1.30	0.15
Greece (1997)	9.8	0.50	0.05	0.35	0.04
Ireland (1996)	11.7	2.42	0.21	1.66	0.14
Italy (1999)	11.4	0.64	0.06	1.10	0.10
Netherlands (1999)	3.3	2.81	0.85	1.80	0.55
Norway (1999)	3.3	0.47	0.14	0.82	0.25
Portugal (1996/98)	5.2	0.83	0.16	0.87	0.12
Spain (1999)	15.9	1.41	0.09	0.81	0.05
Sweden (1999)	7.2	1.70	0.24	1.84	0.26
Switzerland (1997/98)	4.2	1.03	0.25	0.41	0.10
United Kingdom (1997/98)	7.0	0.82	0.12	0.37	0.05
Canada (1998/99)	8.3	0.99	0.12	0.51	0.06
United States (1998/99)	4.5	0.25	0.06	0.18	0.04
Japan (1998/99)	4.1	0.52	0.13	0.09	0.02
Australia (1998/99)	8.0	1.06	0.13	0.52	0.07
New Zealand (1998/99)	7.4	1.57	0.21	0.62	0.08
EU average[4]		1.73	0.26	1.16	0.16
OECD average[5]		1.43	0.23	0.92	0.14
CEEC					
Czech Republic (1999)	8.8	0.31	0.04	0.19	0.02
Estonia (1998)	9.9	0.08	0.01	0.08	0.01
Hungary (1997)	8.7	0.56	0.06	0.40	0.04
Poland (1996)	14.3	1.71	0.12	0.49	0.03
Slovak Republic (1996)	11.1	0.54	0.05	0.56	0.05
Slovenia (1998)	7.9	0.89	0.11	0.83	0.11
CEEC average		0.68	0.06	0.42	0.04

Sources Riboud et al. (2001)
Data for 1996, 1997 and 1999. in Riboud, Sanchez-Paramo, and Silva-Jauregui (2001).
1/ Data from different years (in parentheses).
2/ Spending Measure 1: Ratio of GDP spending on UI to unemployment rate (both in percentage terms).
3/ Spending Measure 2: Spending per unemployed individual as a percentage of GDP per labor force participant.
4/ Does not include Luxemburg.
5/ Average for all OECD countries in the table

Table IV.3. Unemployment Program Parameters, 1999

Region	Unemployment benefits	ALMPs	Administrative expenses	Contribution arrears	Payment arrears	Replacement rate	Unemployment rate
	Percent of GDP			Percent total employment fund expenditures		Percent average wage	(Labor Force Survey)
Federal Republic	**0.16%**	**0.05%**	**0.04%**	**18.8%**	**9.8%**	**16.73%**	**0.1%**
North region				**25.9%**	**12.3%**		**0.1%**
Arkhangelsk region (oblast)	0.39%	0.09%	0.02%	16.3%	27.6%	18.79%	0.3%
Incl. Nenets autonomous area	0.24%	0.05%	0.01%	11.4%	36.2%	13.86%	0.4%
Volograd	0.20%	0.03%	0.04%	71.0%	0.5%	18.10%	0.0%
Murmansk	0.33%	0.06%	0.03%	0.6%	5.7%	13.13%	0.1%
Republic of Karelia	0.42%	0.06%	0.02%	1.0%	22.7%	14.66%	0.2%
Republic of Komi	0.20%	0.05%	0.02%	50.6%	2.7%	7.88%	0.0%
North-Western region				**3.9%**	**12.0%**		**0.1%**
St.Peterburg	0.15%	0.05%	0.06%	0.2%	0.0%	18.84%	0.0%
Leningrad region	0.27%	0.04%	0.03%	7.4%	36.9%	19.43%	0.4%
Novgorod region	0.21%	0.05%	0.04%	7.3%	0.8%	8.56%	0.0%
Pskov region	0.36%	0.09%	0.02%	20.1%	47.7%	14.43%	0.5%
Central region				**9.7%**	**8.2%**		**0.1%**
Bryansk region	0.34%	0.09%	0.02%	0.7%	40.2%	22.96%	0.4%
Vladimir region	0.40%	0.08%	0.01%	8.0%	38.4%	20.76%	0.4%
Ivanovo region	0.46%	0.15%	0.04%	8.9%	37.2%	16.02%	0.4%
Tver region	0.14%	0.05%	0.04%	39.1%	0.4%	25.72%	0.0%
Kaluga region	0.22%	0.09%	0.04%	13.1%	0.5%	28.50%	0.0%
Kostroma region	0.30%	0.08%	0.01%	9.7%	47.3%	22.46%	0.5%
Moscow	0.08%	0.06%	0.09%	0.0%	0.0%	7.74%	0.0%
Moscow region	0.20%	0.08%	0.06%	23.8%	15.6%	20.17%	0.2%
Orel region	0.14%	0.07%	0.09%	21.4%	0.0%	18.62%	0.0%
Ryazan region	0.18%	0.05%	0.03%	25.8%	13.9%	20.97%	0.1%
Smolensk region	0.06%	0.08%	0.10%	36.5%	0.3%	15.19%	0.0%
Central region				**9.7%**	**8.2%**		**0.1%**

Region	Unemployment benefits	ALMPs	Administrative expenses	Contribution arrears	Payment arrears	Replacement rate	Unemployment rate
	Percent of GDP			Percent total employment fund expenditures		Percent average wage	(Labor Force Survey)
Federal Republic	**0.16%**	**0.05%**	**0.04%**	**18.8%**	**9.8%**	**16.73%**	**0.1%**
North region				**25.9%**	**12.3%**		**0.1%**
Arkhangelsk region (oblast)	0.39%	0.09%	0.02%	16.3%	27.6%	18.79%	0.3%
Incl. Nenets autonomous area	0.24%	0.05%	0.01%	11.4%	36.2%	13.86%	0.4%
Volograd	0.20%	0.03%	0.04%	71.0%	0.5%	18.10%	0.0%
Murmansk	0.33%	0.06%	0.03%	0.6%	5.7%	13.13%	0.1%
Republic of Karelia	0.42%	0.06%	0.02%	1.0%	22.7%	14.66%	0.2%
Republic of Komi	0.20%	0.05%	0.02%	50.6%	2.7%	7.88%	0.0%
North-Western region				**3.9%**	**12.0%**		**0.1%**
St.Peterburg	0.15%	0.05%	0.06%	0.2%	0.0%	18.84%	0.0%
Leningrad region	0.27%	0.04%	0.03%	7.4%	36.9%	19.43%	0.4%
Novgorod region	0.21%	0.05%	0.04%	7.3%	0.8%	8.56%	0.0%
Pskov region	0.36%	0.09%	0.02%	20.1%	47.7%	14.43%	0.5%
Central region				**9.7%**	**8.2%**		**0.1%**
Bryansk region	0.34%	0.09%	0.02%	0.7%	40.2%	22.96%	0.4%
Vladimir region	0.40%	0.08%	0.01%	8.0%	38.4%	20.76%	0.4%
Ivanovo region	0.46%	0.15%	0.04%	8.9%	37.2%	16.02%	0.4%
Tver region	0.14%	0.05%	0.04%	39.1%	0.4%	25.72%	0.0%
Kaluga region	0.22%	0.09%	0.04%	13.1%	0.5%	28.50%	0.0%
Kostroma region	0.30%	0.08%	0.01%	9.7%	47.3%	22.46%	0.5%
Moscow	0.08%	0.06%	0.09%	0.0%	0.0%	7.74%	0.0%
Moscow region	0.20%	0.08%	0.06%	23.8%	15.6%	20.17%	0.2%
Orel region	0.14%	0.07%	0.09%	21.4%	0.0%	18.62%	0.0%
Ryazan region	0.18%	0.05%	0.03%	25.8%	13.9%	20.97%	0.1%
Smolensk region	0.06%	0.08%	0.10%	36.5%	0.3%	15.19%	0.0%
Central region				**9.7%**	**8.2%**		**0.1%**
Tula region	0.26%	0.05%	0.02%	19.1%	1.1%	25.84%	0.0%
Yaroslavl region	0.21%	0.06%	0.01%	29.5%	2.1%	19.47%	0.0%

Volga-Vyatka region				**33.2%**	**10.0%**		**0.1%**
Nizhny Novgorod region	0.22%	0.05%	0.03%	44.6%	0.5%	25.36%	0.0%
Kirov region	0.31%	0.08%	0.04%	15.0%	21.7%	16.14%	0.2%
Republic of Mariy El	0.27%	0.09%	0.05%	27.0%	12.5%	0.00%	0.1%
Republic of Mordovia	0.28%	0.07%	0.01%	22.7%	21.8%	23.12%	0.2%
Republic of Chuvash	0.31%	0.07%	0.03%	36.5%	12.1%	20.83%	0.1%
central-Chernozyem region				**27.9%**	**8.5%**		**0.1%**
Belgorod region	0.14%	0.04%	0.12%	12.3%	0.4%	34.81%	0.0%
Voronezh region	0.19%	0.05%	0.05%	39.4%	6.4%	16.85%	0.1%
Kursk region	0.17%	0.03%	0.02%	40.7%	0.0%	22.66%	0.0%
Lipetsk region	0.09%	0.05%	0.05%	30.8%	0.1%	23.19%	0.0%
Tambov region	0.30%	0.09%	0.02%	18.9%	37.0%	18.42%	0.4%
Povolzhye region				**14.2%**	**6.0%**		**0.1%**
Astrakhan region	0.38%	0.09%	0.01%	0.0%	8.9%	20.11%	0.1%
Volgograd region	0.13%	0.05%	0.06%	7.9%	0.1%	28.48%	0.0%
Samara region	0.27%	0.02%	0.02%	9.7%	2.3%	13.60%	0.0%
Penza region	0.33%	0.07%	0.08%	17.5%	26.3%	13.03%	0.3%
Saratov region	0.19%	0.06%	0.03%	16.0%	1.3%	17.34%	0.0%
Ulyanovsk region	0.17%	0.05%	0.03%	62.9%	2.9%	19.48%	0.0%
Republic of Kalmykia	0.77%	0.23%	0.03%	15.3%	42.5%	23.15%	0.4%
Republic of Tatarstan	0.00%	0.00%	0.00%			0.00%	
Northern Caucasus region				**21.0%**	**6.2%**		**0.1%**
Krasnodar territory	0.12%	0.04%	0.03%	33.5%	0.5%	24.72%	0.0%
Republic of Adygeya	0.23%	0.09%	0.05%	0.4%	0.6%	16.83%	0.0%
Stavropol territory	**0.11%**	**0.08%**	**0.02%**	**24.8%**	**0.3%**	**21.80%**	**0.0%**
Republic of Karachaev-Circassian	0.17%	0.12%	0.01%	26.3%	9.6%	26.37%	0.1%
Rostov-on-Don region	0.12%	0.05%	0.08%	10.0%	0.0%	17.90%	0.0%
Republic of Dagestan	0.58%	0.12%	0.08%	1.5%	23.5%	25.25%	0.2%
Republic of Kabardian-Balkar	0.21%	0.06%	0.01%	24.3%	16.2%	16.05%	0.2%
Republic of North Ossetia-Alania	0.17%	0.06%	0.12%	86.8%	2.5%	8.43%	0.0%
Republic of Ingushetia	0.58%	0.15%	0.34%	1.8%	45.0%	32.22%	0.5%
Republic of Chechen							

Region	Unemployment benefits	ALMPs	Administrative expenses	Contribution arrears	Payment arrears	Replacement rate	Unemployment rate
	Percent of GDP			Percent total employment fund expenditures		Percent average wage	(Labor Force Survey)
Ural region				**20.8%**	**6.4%**		
Kurgan region	0.32%	0.09%	0.06%	18.3%	27.0%	15.37%	0.3%
Orenburg region	0.05%	0.03%	0.04%	17.8%	0.0%	24.32%	0.0%
Perm region	0.14%	0.04%	0.04%	28.0%	0.1%	22.28%	0.0%
incl. Komi-Permyatsky autonomous area	0.56%	0.19%	0.01%	7.9%	13.6%	17.83%	0.1%
Sverdlovsk region	0.22%	0.04%	0.03%	21.3%	0.0%	22.07%	0.0%
Chelyabinsk region	0.19%	0.05%	0.06%	28.0%	2.0%	20.15%	0.0%
Republic of Bashkortostan	0.00%	0.00%	0.00%			0.00%	
Republic of Udmurtia	0.35%	0.08%	0.06%	5.3%	26.3%	10.08%	0.3%
Western Siberian region				**27.5%**	**12.8%**		
Republic of Altai	4.15%	1.10%	0.93%	28.1%	19.6%	11.74%	0.2%
Altai territory	0.03%	0.01%	0.00%	31.1%	0.6%	28.35%	0.0%
Kemerovo region	0.24%	0.07%	0.07%	30.4%	10.6%	22.79%	0.1%
Western Siberian region				27.5%	12.8%		
Novosibirsk region	0.19%	0.06%	0.03%	15.2%	1.1%	25.94%	0.0%
Omsk region	0.16%	0.09%	0.04%	12.6%	21.9%	20.77%	0.2%
Tomsk region	0.24%	0.06%	0.02%	74.3%	46.7%	11.59%	0.5%
Tyumen region	0.27%	0.08%	0.05%	42.1%	34.8%	11.39%	0.3%
Khanty-Mansi autonomous area	0.16%	0.02%	0.04%	5.5%	5.8%	16.89%	0.1%
Yamalo-Nenetz autonomous area	0.16%	0.04%	0.06%	69.7%	3.7%	0.00%	0.0%
Eastern Siberian region				**14.1%**	**11.3%**		
Krasnoyarsk territory	0.23%	0.05%	0.03%	14.4%	16.3%	20.72%	0.2%
Republic of Khakassia	0.29%	0.07%	0.07%	20.2%	19.2%	31.62%	0.2%
Taimyr autonomous area	1.49%	0.41%	0.04%	6.5%	20.0%	38.93%	0.2%
Evenki autonomous area	0.42%	0.57%	0.38%	9.0%	5.5%	0.00%	0.1%
Irkutsk region	0.21%	0.05%	0.07%	2.6%	1.2%	15.68%	0.0%
Incl. Ust-Ordyn Buryat autonomous area	0.15%	0.11%	0.05%	99.6%	3.3%	56.26%	0.0%
Chita region	**0.25%**	**0.07%**	**0.02%**	**36.9%**	**20.5%**	**46.59%**	**0.2%**
Incl. Aginski Buryat autonomous area	0.42%	0.34%	0.12%	8.7%	55.4%	35.79%	0.6%
Republic of Buryatia	0.27%	0.07%	0.04%	23.3%	0.0%	28.77%	0.0%

Republic of Tuva	**0.30%**	**0.19%**	**0.04%**	**15.2%**	**11.4%**	**13.79%**	**0.1%**
Far East region				**29.6%**	**15.2%**		
Primorsky territory	0.31%	0.09%	0.03%	15.2%	26.0%	25.26%	0.3%
Khabarovsk territory	0.29%	0.07%	0.04%	22.4%	20.1%	18.70%	0.2%
Jewish autonomous oblast	**0.32%**	**0.16%**	**0.03%**	**17.5%**	**1.5%**	**39.08%**	**0.0%**
Amur region	**0.20%**	**0.09%**	**0.21%**	**65.9%**	**12.6%**	**28.63%**	**0.1%**
Kamchatka region	0.40%	0.12%	0.02%	29.7%	16.8%	22.83%	0.2%
Incl. Koryak autonomous area	0.39%	0.16%	0.00%	83.2%	0.0%	16.28%	0.0%
Far East region				29.6%	15.2%		
Magadan region	0.35%	0.11%	0.03%	0.0%	10.7%	22.78%	0.1%
Chukchi autonomous area	0.39%	0.16%	0.02%	84.4%	21.1%	13.28%	0.2%
Sakhalin region	0.32%	0.09%	0.02%	15.7%	15.0%	13.53%	0.1%
Republic of Sakha (Yakutia)	0.14%	0.04%	0.12%	42.7%	1.0%	29.75%	0.0%
Kaliningrad region	**0.32%**	**0.06%**	**0.08%**	**4.9%**	**15.6%**	**30.62%**	**0.2%**

Sources: MLSD and Goskomstat (2000).

Table IV.4. Selected Social Expenditures as Percentage of GDP, 1998-2000

Social protection program	1998 mln Rubles	1999 mln Rubles	2000 mln Rubles
Employment programs financed from the Employment Fund	0.33%	0.32%	n/a
Monthly child allowances (federal and regional budgets) (excluding administrative expenses, IT, etc.)	0.25%	0.21%	0.19%
Benefits financed by SIF, including maternity, sick leave, birthgrants, funeral service benefit, etc.	0.76%	0.56%	0.54%
Chernobyl benefits by SIF	0.00%	0.00%	0.00%
Chernobyl benefits compensated to SIF by federal budget	0.01%	0.00%	0.00%
Recreational benefits + capital investment	0.32%	0.31%	0.27%
Pensions (planned total pension payment expenditures for state pensions - military pensions not included)	7.02%	4.71%	4.76%
Chrnobyl, Mayak, Semipalatinsk state expenditures as planned by federal budget	0.20%	0.08%	0.07%

Table IV.5. Unemployment Benefit Replacement Rate, Select CEE Countries, 1992-99

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Bulgaria	0.68	0.29	0.34	0.31	0.30	0.38	0.30	–	–
Czech Republic	0.42	0.30	0.28	0.27	0.25	0.24	0.24	0.20	0.20
Estonia	–	–	0.17	0.10	0.08	0.07	0.07	0.09	0.09
Poland	–	–	–	–	0.31	0.31	0.30	0.27	0.25
Slovenia	0.32	0.29	0.33	0.34	0.33	0.31	0.36	0.37	0.37
Slovak Republic	0.49	0.32	0.30	0.27	0.25	0.23	0.30	–	–

Source: Vodopivec, M., A. Worgotter, and D. Raju (2000).

Table IV.6. Survey Unemployment Rate, CEE Countries

	1991	1992	1993	1994	1995	1996	1997	1998
Bulgaria	–	–	21.4	20.5	14.7	13.7	15.0	16.0
Czech Republic	–	–	3.9	3.8	4.1	3.9	4.8	6.5
Estonia	1.5	3.7	6.5	7.6	9.7	10.0	9.7	9.6
Hungary	–	9.3	11.9	10.7	10.2	9.9	8.7	7.8
Latvia	–	–	–	–	18.9	18.3	14.4	13.8
Lithuania	–	–	–	17.4	17.1	16.4	14.1	13.5
Poland	–	13.7	14.9	16.5	15.2	14.3	11.5	10.6
Romania	–	–	–	8.2	8.0	6.7	6.0	6.3
Slovak Republic	–	–	122	13.7	13.1	11.1	11.6	11.9
Slovenia	7.3	8.3	9.1	9.0	7.4	7.3	7.4	7.9

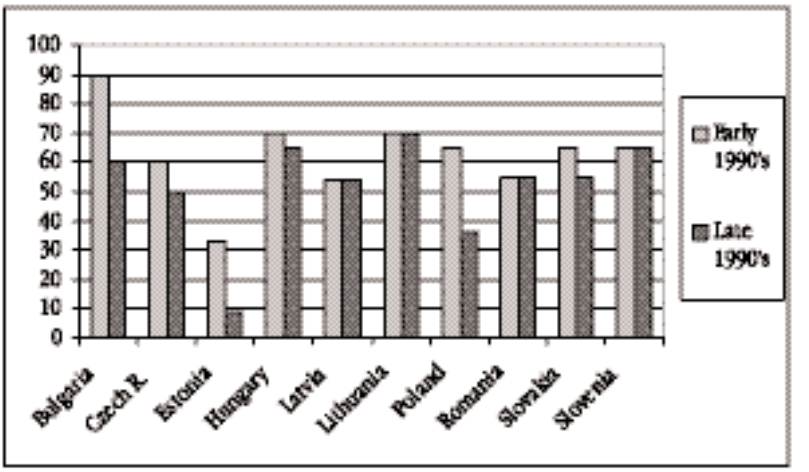
Source: Vodopivec, M., A. Worgotter and D. Raju (2000).

Table IV.7. Registered Unemployment Rate

	1991	1992	1993	1994	1995	1996	1997	1998
Bulgaria	11.1	15.3	16.4	12.8	11.1	12.5	13.7	12
Czech Republic	4.1	2.6	3.5	3.2	2.9	3.5	5.2	7.5
Estonia	n.a.	n.a.	5.0	5.1	5.0	5.5	4.6	2.0
Hungary	7.4	12.3	12.1	10.4	10.4	10.5	10.4	9.1
Latvia	0.6	3.9	8.7	16.7	18.1	19.4	14.8	13.8
Lithuania	0.3	1.3	4.4	3.8	6.2	7	5.9	6.4
Poland	11.8	13.6	16.4	16.0	14.9	13.2	10.5	10.4
Romania	3.0	8.2	10.4	10.9	9.5	6.6	8.8	10.3
Slovakia	n.a.	n.a.	12.2	13.7	13.1	11.1	11.6	11.9
Slovenia	8.2	11.5	14.4	14.4	13.9	13.9	14.4	14.5

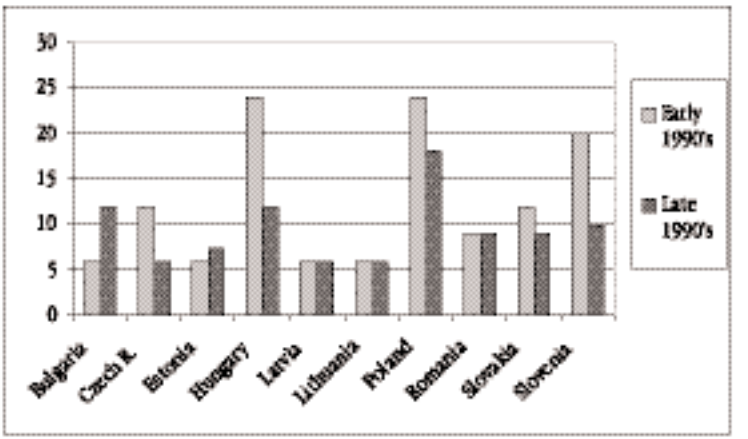
Source: Vodopivec, M., A. Worgotter and D. Raju (2000).

Figure IV.1. Replacement Rate of Unemployment Insurance Payments, Transition Economies, Early and Late 1990s* (Percent)



* Average replacement rate in the first six months of benefit eligibility. For Estonia, the benefit is flat, so the rate is calculated as the level of the benefit divided by the average wage.
Source: Vodopivec, M., A. Worgotter, and D. Raju (2000).

Figure IV.2. Maximum Potential Duration of Unemployment Insurance Payments, Transition Economies, Early and Late 1990s (in Months)



Source: Vodopivec, M., A. Worgotter and D. Raju (2000).

Table IV.8. Determinants of Regional Registration Rates

SUMMARY OUTPUT

Registered Unemployment Rate			
Regression			
Multiple	0.831		
R Square	0.691		
Adjusted R Square	0.615		
Standard Error	0.009		
Observations	77		
ANOVA			
	df	SS	MS
Regression	15	0.01002	0.00067
Residual	61	0.00447	0.00007
Total	76	0.01450	
	Coefficients	*Standard Error*	*t Stat*
Intercept	0.00225	0.00562	0.40
Unemployment	0.00248	0.00029	8.43
GDP/capita	0.00000	0.00000	1.34
UIBenefit/Average Income	-0.03874	0.01510	-2.57
Unemployed per Employee	-0.00005	0.0001	-4.02
Mono	0.00002	0.00021	0.08
North	0.01142	0.00446	2.56
NW	-0.00119	0.00499	-0.24
V/B	0.00857	0.00456	1.88
C-C	0.00026	0.00462	0.06
Pvolz	-0.00041	0.00395	-0.10
N. Cauc	-0.01195	0.00531	-2.25
Ural	-0.00426	0.00462	-0.92
W. Sib	-0.00095	0.00441	-0.22
E. Sib	0.01102	0.00529	2.08
Far E.	0.00046	0.00421	0.11

Table IV. 9. Poverty Rate and Poverty Gap for Households with Children* in Russia (calculations are based on the data from Round 8 of RLMS)**

Type of household with children*		Number of households	Average number of children* per yousehold	Poverty rate[1], percent	Poverty gap[1] (for households in group), percent
Household receives child allowance (may receive other benefits as well)	Including child allowance	260	1.26	55.00	20.83
	Excluding child allowance	260	1.26	60.38	26.75
Household member other than head[2] receives unemployment benefits	Including unemployment benefits	7	1.43	85.71	26.76
	Excluding unemployment benefits	7	1.43	100.00	41.07
Household head receives unemployment benefit (other's may receive UI benefits too)	Including head's unemployment benefit	5	1.60	60.00	22.16
	Excluding head's unemployment benefit	5	1.60	60.00	37.43
Any household member receives unemployment benefits	Including unemployment benefits	12	1.50	75.00	24.84
	Excluding unemployment benefits	12	1.50	83.33	39.84
Household receives other benefits[3] (may receive benefits from the list above as well)	Including other benefits	485	1.19	55.88	23.37
	Excluding other benefits	485	1.19	67.42	36.33

* **Children** are those below 16 years of age.
** **Round 8 of RLMS** survey was conducted in Russia in October 1998 - January 1999.
[1] **Poor** — households with total expenditures below official regionally differentiated subsistence minimum adjusted for economies of scale in the household (MLSD). **Non-poor** — households with total expenditures above or equal to official regionally differentiated subsistence minimum adjusted for economies of scale in the household (MLSD).
[2] **Household head** was determined as follows: the oldest prime-aged male (male aged 18-59), if there was no prime-aged male in the household then the oldest prime-aged female (female aged 18-54), if there was no prime-aged female in the household then the oldest male aged 60 and over, if there was no male aged 60 and over then the oldest female aged 55 and over, if there no adults (18 or over) in the household, then the the oldest person in the household was chosen as a head.

[3] **Total expenditures** — total household monetary food and nonfood expenditures excluding big purchases, purchases of luxury goods, bonds/stocks and savings plus value of home-produced food evaluated at prevailing market prices.
[4] **Regionally differentiated subsistence minimum** — 8 regional poverty lines computed as population weighted average across 78 official regional subsistence minima to match survey sample division of Russia into 8 regions.
[5] **Other benefits** included different types of pensions and subsidies and benefits from apartment renting as well as subsidies for fuel.

Table IV.10. Poverty Impact of Unemployment Programs in Select Transition Economies, Mid-1990s

	Bulgaria	Estonia	Hungary	Latvia	Poland	Slovak Rep.	Slovenia
Poverty reduction[165]	1.1	0.5	14.8	2.2	16.7	2.7	6.8
Coverage[166]	3.8	3.8	7.5	2.5	5.6	0.6	11.5
Targeting[167]	17.4	31.1	4.9	12.4	6.8	0.5	16.0
Adequacy[168]	13.0	15.2	25.4	29.8	34.1	7.3	21.2

Source: Vodopivec and Raju (2001).

[165] Change in poverty headcount brought about by unemployment benefit receipt, in percent. Poor are defined as individuals with consumption less than 50% of median.
[166] The share of poor who were unemployment benefit recipients, in percent.
[167] The share of unemployment benefit received by the poor in percent.
[168] Average share of unemployment benefit in total household income of recipients, in percent.

Table IV.11. Percentage of Households Receiving Transfers by Type of Transfer in Russia (calculations are based on the data from Round 8 of RLMS*)

		By type of settlement			By per-capita expenditure[2] quintiles				
Type of Transfer	**Total**	**Metropolies[1]**	**Urban**	**Rural**	**Poorest**	**2nd**	**3d**	**4th**	**Richest**
Subsidies and benefits from apartment renting, subsidies for fuel	14.03								
Benefits for children	7.84	23.40	5.66	6.39	5.66	9.10	9.53	8.00	6.91
Unemployment benefits	0.75	0.99	0.80	0.52	0.97	0.83	0.97	0.83	0.14
Old-age pension	36.86	39.41	34.50	41.36	33.84	38.76	37.29	41.10	33.29
Other pensions	13.69	16.26	13.84	12.25	14.78	13.79	12.71	15.03	12.15
Total	54.67	68.23	52.63	53.72	52.62	56.83	56.08	58.90	48.90

* **Round 8 of RLMS** survey was conducted in Russia in October 1998 - January 1999.
[1] **Metropolies** included Moscow and St. Petersburg.
[2] **Per-capita expenditures** — total household monetary food and nonfood expenditures excluding big purchases, purchases of luxury goods, bonds/stocks and savings, plus value of home-produced food evaluated at prevailing market prices divided by the household size.

Table IV. 12. Percentage of Transfer in Total Consumption for Households Receiving Transfers in Russia (Calculations are Based on the Data from Round 8 of RLMS*)

		By type of settlement			By per-capita expenditure[2] quintiles				
Type of transfer	**Total**	**Metropolies[1]**	**Urban**	**Rural**	**Poorest**	**2nd**	**3d**	**4th**	**Richest**
Subsidies and benefits from apartment renting, subsidies for fuel	5.33	5.02	4.96	13.58	15.64	6.67	8.07	4.79	3.26
Benefits for children	7.06	3.84	8.27	11.57	22.05	13.39	8.10	7.18	3.52
Unemployment benefits	18.45	14.60*	17.93	24.16*	42.81*	22.13*	19.32*	8.75*	17.21*
Old-age pension	32.05	26.65	33.36	32.16	95.50	51.35	41.92	28.19	15.75
Other pensions	22.55	20.85	22.60	23.77	62.84	36.70	29.47	21.29	11.06
Total	28.68	21.62	29.54	32.02	81.51	47.28	36.25	27.10	13.97

Note: **n** (size of the cell) < 10.

* **Round 8 of RLMS** survey was conducted in Russia in October 1998 - January 1999.

[1] **Metropolies** included Moscow and St. Petersburg.

[2] **Per-capita expenditures** — total household monetary food and nonfood expenditures excluding big purchases, purchases of luxury goods, bonds/stocks and savings, plus value of home-produced food evaluated at prevailing market prices divided by the household size.

Table IV.13. Distributions of Transfers by Urban/Rural and Per-Capita Expenditures[2] in Russia (Calculations are Based on the Data from Round 8 of RLMS*)

Type of transfer	Total	By Type of settlement			By Per-capita expenditure[2] quintiles				
		Metropolies[1]	Urban	Rural	Poorest	2nd	3d	4th	Richest
Subsidies and benefits from apartment renting, subsidies for fuel	4.98	7.82	5.56	2.08	4.52	2.99	5.80	4.66	6.88
Benefits for children	5.69	8.97	4.94	5.92	4.47	8.15	7.20	7.74	7.80
Unemployment benefits	0.88	1.07	0.83	0.88	1.40	1.04	1.51	0.89	0.62
Old-age pension	67.24	59.31	66.11	74.03	66.06	86.42	86.64	98.22	80.51
Other pensions	21.21	22.83	22.55	17.09	23.55	23.92	24.40	32.87	27.05
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

* **Round 8 of RLMS** survey was conducted in Russia in October 1998 - January 1999.
[1] **Metropolies** included Moscow and St. Petersburg.
[2] **Per-capita expenditures** — total household monetary food and nonfood expenditures excluding big purchases, purchases of luxury goods, bonds/stocks and savings, plus value of home-produced food evaluated at prevailing market prices divided by the household size.

Table IV.14. Distributions of Transfers by Per-Capita Expenditures[1] in Russia (Calculations are Based on the Data from Round 8 of RLMS*)

	By per-capita expenditure[1] quintiles					
Type of transfer	**Poorest**	**2nd**	**3d**	**4th**	**Richest**	**Total**
Subsidies and benefits from apartment renting, subsidies for fuel	14.60	11.89	23.80	22.05	27.66	100.00
Benefits for children	12.63	23.04	20.38	21.90	22.05	100.00
Unemployment benefits	25.58	19.03	27.62	16.35	11.43	100.00
Old-age pension	15.81	20.68	20.73	23.51	19.27	100.00
Other pensions	17.87	18.15	18.51	24.94	20.52	100.00
Total	16.09	19.83	20.46	23.58	20.04	100.00

* **Round 8 of RLMS** survey was conducted in Russia in October 1998 - January 1999.

[1] **Per-capita expenditures** — total household monetary food and nonfood expenditures excluding big purchases, purchases of luxury goods, bonds/stocks and savings, plus value of home-produced food evaluated at prevailing market prices divided by the household size.

Table IV.15. Per-Capita Transfers by Urban/Rural and Per-Capita Expenditure[2] Quintiles in Russia Computed Among Those Who Receive a Particular Type of Transfer (Calculations are Based on the Data from Round 8 of RLMS*)

Type of transfer	Total	By Type of settlement			By Per-capita expenditure[2] quintiles				
		Metropolies[1]	Urban	Rural	Poorest	2nd	3d	4th	Richest
Subsidies and benefits from apartment renting, subsidies for fuel	42.40	44.57	39.09	75.87	5.00	27.06	47.41	42.87	65.85
Benefits for children	56.65	38.96	66.33	61.37	42.00	52.41	47.96	64.90	83.32
Unemployment benefits	100.22	137.33	85.43	127.50	84.59	85.82	109.60	81.12	567.00
Old-age pension	233.08	238.84	236.67	223.57	192.41	199.00	248.35	253.51	288.71
Other pensions	166.29	193.01	176.20	130.40	124.24	145.13	172.25	188.16	222.07
Total	212.98	205.67	216.86	208.09	163.62	184.30	214.67	244.24	279.2

* **Round 8 of RLMS** survey was conducted in Russia in October 1998 - January 1999.
[1] **Metropolies** included Moscow and St. Petersburg.
[2] **Per-capita expenditures** — total household monetary food and nonfood expenditures excluding big purchases, purchases of luxury goods, bonds/stocks and savings, plus value of home-produced food evaluated at prevailing market prices divided by the household size.

Table IV.16. Summary of Distributive Effects of Unemployment-Benefit Programs

	Coverage	Adequacy	Effects on income redistribution
Unemployment insurance/assistance	In developed economies, wide coverage (self-employed, agricultural and household workers excluded).In developing countries mostly not available or available to segments of formal-sector workers.	*Consumption smoothing*: in developed economies, the consumption level of claimants fairly well preserved. In most transition countries, benefits less generous. *Poverty reduction*: in transition economies, benefits mildly reduce poverty.	Mildly progressive (in some developed countries) or neutral effects on redistribution.
Severance pay	Available to a subset of formal-sector workers, not always de facto provided in spite of legal entitlement.Hinders access to jobs by disadvantaged groups.	Little evidence.Consumption per head of those unemployed who received severance pay is higher than otherwise for similar workers who are employed (Peru).	Little evidence. Program participants concentrated among the rich (Peru). By contributing to labor-market dualism, severance pay increases the advantage of already privileged formal-sector workers, thus increasing inequalities in society.

Unemployment insurance savings accounts	Available to a subset of formal-sector workers.	Inconclusive evidence.	In its pure form, redistributive effects eliminated by design. Program participants concentrated among the rich (Colombia). Redistributive effects of its introduction are likely to be small (simulation results obtained on the United States).
Public works	In principle, available to all (participation rates in some developing countries reach double digits; in transition economies, they have been typically kept below 1 percent). In reality, jobs often rationed.	Strong effects on poverty reduction.	Strongly progressive.

Source: Vodopivec and Raju (2001).

Table IV.17. Distribution of Benefits and Beneficiaries of Unemployment Support Programs, Mid-1990s*

	Poorest quintile	2nd poorest quintile	Middle	2nd richest quintile	Richest quintile
Unemployment insurance**					
Average	15.4	22.3	22.5	20.0	18.9
Brazil	10.6	24.6	19.1	25.1	13.6
Bulgaria	17.8	14.9	32	13	22,4
Estonia	31.1	17.7	19.6	18	13.6
Hungary	7.8	20.4	28.2	24.6	19.1
Latvia	15.7	13.8	18	26	26.5
Poland	14.8	24.1	22.9	21.6	16.6
Slovak Rep.	3.1	33.2	20.8	18.8	24.1
Slovenia	22.5	30	19	13.1	15.4
Unemployment insurance savings accounts					
Colombia	0.0	4.3	n/a	19.1	76.6
Severance pay					
Peru	4.7	9.5	28.6	33.3	23.8
Public works					
Argentina	78.6	15.3	3.5	2.1	0.4
Training					
Mexico	69.9	15.5	8.1	5.0	1.5

Notes: *Share of benefits received by individual quintile, for transition economies, and share of beneficiaries in population group, for Latin American countries.
**Unemployment insurance benefits include both payments of unemployment insurance and unemployment assistance.
Source: Vodopivec and Raju (2001)

Table IV.18. Summary of Efficiency Effects of Unemployment-Benefit Programs

	Job-search effort and post-unemployment wages	Equilibrium labor-market outcomes and persistence of unemployment	Enhancing restructuring of enterprises and overall adjustment	Labor supply of other family members	Encouragement of taking regular vs. informal jobs	Output and growth
Unemployment insurance	Significant disincentives for leaving unemployment (moral hazard problem).Inconclusive evidence on the improvement of job matching (via post-unemployment wages).	A benefit increase in increases [[word missing?]]the equilibrium unemployment rate.For some groups positive effect on labor force participation, but reductions in inactivity primarily show up as increases in unemployment.Benefits slow down adjustment to shocks and make unemployment more persistent (European unemployment).	Attractiveness of restructuring increases; in United States strong evidence on increase of temporary layoffs (partial equilibrium results). Because job creation is hindered, overall adjustment not assisted (Blanchard 1997).	Reduces labor supply of the spouses of unemployed workers.	Inconclusive evidence on entry into precarious jobs. In Brazil, UI payments increase probability to enter self-employment.	By acting as automatic macroeconomic stabilizer, UI reduces GDP losses during downturns by 10 to 15 percent. Theoretical predictions about the effects on output inconclusive.The effects on growth insignificant.
Unemployment assistance	Significant disincentives for leaving unemployment, particularly for low-wage earners.	Similar, but milder effects as under unemployment insurance.	Similar, but milder effects as under unemployment insurance.	Strong disincentive for other family members to take a job.	Similar effects as under unemployment insurance.	Similar, but milder effects as under unemployment insurance.

Continued on next page

Table IV.18. Summary of Efficiency Effects of Unemployment-Benefit Programs (*Continued*)

	Job-Search Effort and Post-Unemployment Wages	Equilibrium Labor-market Outcomes and Persistence of Unemployment	Enhancing Restructuring of Enterprises and Overall Adjustment	Labor Supply of Other Family Members	Encouragement of taking regular vs. informal jobs	Output and growth
Unemployment assistance	Significant disincentives for leaving unemployment, particularly for low-wage earners.	Similar, but milder effects as under unemployment insurance.	Similar, but milder effects as under unemployment insurance.	Strong disincentive for other family members to take a job.	Similar effects as under unemployment insurance.	Similar, but milder effects as under unemployment insurance.
Severance pay	No moral hazard problem with job-search effort, but incentives to enter unemployment increased. (Large litigation costs from disputes over the cause of separation.)	Strongly reduces employment, particularly of young workers. Increases participation in self-employment. Effects on unemployment inconclusive.	Negative effects on labor reallocation - economy's "sclerosis" increased: inflows into unemployment reduced, but so is job creation.	No evidence.	No evidence.	The effects on growth not well researched.

Source: Vodopivec and Raju (2001).

Table IV. 19. Expenditures on ALMPs as a Percentage of Total ALMP Expenditures, 1995/96

Country	Training	Public works	Micro-enter-prises	Job sub-sidies	Employ-ment services	Total as percent of GDP
Australia	33.7	26.5	3.6	7.2	28.9	0.84
Belgium	35.7	40.7	0.0	7.9	15.7	1.41
Canada	48.2	5.4	7.1	3.6	35.7	0.56
Denmark	77.0	12.8	3.5	1.3	5.3	2.26
France	55.8	17.1	3.1	12.4	11.6	1.30
Germany	55.2	21.0	2.1	4.9	16.8	1.43
Ireland	32.0	38.3	1.1	14.3	14.3	1.75
Netherlands	54.7	9.5	0.0	9.5	26.3	1.37
Sweden	59.1	19.1	3.1	7.6	11.1	2.25
UK	53.2	2.1	2.1	0.0	42.6	0.46
USA	57.9	5.3	0.0	0.0	36.8	0.19
Czech Rep.	14.3	7.1	0.0	7.1	71.4	0.14
Hungary	30.2	25.6	0.0	14.0	30.2	0.43
Poland	40.6	21.9	6.3	25.0	6.3	0.32

Source: OECD (1997).

REFERENCES

Aidt. T., and Z. Tzannatos. 2000. Collective Bargaining and Country Economic Performance Review of the Empirical Literature. Unpublished paper. World Bank, Social Protection Unit, Washington, D.C.

Akerlof, George A., and Lawrence F. Katz. 1989. "Workers' Trust Funds and the Logic of Wage Profiles." *Quarterly Journal of Economics* 104 (August):525-36.

Alfandari, Gilles, and Mark E. Schaffer. 1996. "Arrears in the Russian Enterprise Sector." In Simon Commander, Qimaio Fan, and Mark E. Schaffer, eds., *Enterprise Restructuring and Economic Policy in Russia*. Washington, D.C.: World Bank.

Asaad, R. 1999. "Matching Severance Payments with Worker Losses in the Egyptian Public Sector." *The World Bank Economic Review* 13:117-54.

Aslund, Anders. 1997. "Social Problems and Policy in Postcommunist Russia." In Ethan.B. Kapstein and M. Mandelbaum, eds., Sustaining the Transition: *The Social Safety Net in Postcommunist Europe*. New York, NY: Council on Foreign Relations.

Aslund, A. 1999. "Winner Takes All." Carnegie Endowment for International Peace. Processed.

Atkinson, A. B., and J. Micklewright. 1992. "Economic Transformation in Eastern Europe and the Distribution of Income." Cambridge University Press.

Bertola, G., T. Boeri, and S. Cazes. 2000. "Employment Protection in Industrialized Countries: The Case for New Indicators." *International Labour Review* 139 (1).

Betcherman, G. 2000. An Overview of Labor Markets World-Wide: Key Trends and Major Policy Issues. World Bank, HDNSP.

_____. 2001., An Overview of Labor Markets Worldwide: Key Trends and Major Policy Issues. World Bank, HDSPN.

Betcherman, G., A. Luinstra, and M. Ogawa. 2001. "Labor Market Regulation: International Experience in Promoting Employment and Social Protection." Unpublished paper. World Bank, Social Protection Unit.

Biletsky, Serhiy, J. David Brown, John S. Earle, Julia Khaleeva, IvanKomarova, Olga Lazareva, and Klara Z. Sabirianova. 2002. "Inside theTransforming Firm." Working Paper, Budapest: CEU Labor Project.

Bilsen, V. and J. Konings (1998), "Job Creation, Job Destruction, and Growth of Newly Established, Privatized, and State-owned Enterprises in Transition Economies: Survey Evidence from Bulgaria, Hungary and Romania", *Journal of Comparative Economics*, Vol.26, 1998.

Blanchard, Olivier. 1997. The Economics of Post-Communist Transition. Clarendon Lectures in Economics. Oxford: Oxford University Press.

Blanchflower, David G., and Andrew J. Oswald. 1998. "What Makes an Entrepreneur?" *Journal of Labor Economics* 16(1):26--60.

Blanchflower, David.G. 2000. "Self-Employment in OECD Countries." *Labour Economics*.

Boeri, Tito, and Katherine Terrell. 2002. "Institutional Determinants of Labor Reallocation in Transition." *Journal of Economic Perspectives* 16 (1): 51-76.

Brainerd, Elizabeth. 1998. "Winners and Losers in Russia's Economic Transition." American Economic Review 88(5):1094-1116.

Broadman, H., ed. (1998). *Case-by-Case Privatization in the Russian Federation: Lessons from International Experience*, The World Bank.

Broadman, H., ed. (1999). *Russian Enterprise Reform: Policies to Further the Transition*, The World Bank.

Broadman, H., and F. Recanatini. 1999. "Corruption and Market Institutions in Transition Countries," Washington, D.C.: World Bank

Broadman, H., and F. Recanatini. 2001. "Is Russia Restructuring: New Evidence on Job Creation and Destruction," World Bank Policy Research Paper No. 2641.

Broadman, H., and F. Recanatini. (forthcoming). "Seeds of Corruption," *Economics of Planning*.

Brown, J.D, and J.S. Earle, 2002a, Job Reallocation and Productivity Growth: A Comparative Study of Russian and the Ukraine. Draft. Heriot Watt University (j.d.brown@hw.ac.uk) and Upjohn Institute for Employment Research and Central European University (earle@upjohn.org)

Brown, J.D, and J.S. Earle, 2002b, The Reallocation of Workers and Jobs in Russian Industry: New Evidence on Measures and Determinants. Draft. Heriot Watt University (j.d.brown@hw.ac.uk) and Upjohn Institute for Employment Research and Central European University (earle@upjohn.org)

Brown, J.D, and J.S. Earle. 2002c. Gross Job Flows in Russian Industry Before and After Reforms: Has Destruction Become More Creative? SITE, Stockholm School of Economics, and CEU, Budapest. Forthcoming in the Journal of Comparative Economics.

Bureau of Labor Statistics (BLS). 2000. *Employment and Earnings*. Washington, DC.

Burgess, Simon. 1999. "Reallocation of Labour: An International Comparison Using Job Tenure Data." Processed.

Card, D., and A.B. Krueger. 1995. *Myth and Measurement: The New Economics of the Minimum Wage*. Princeton, NJ: Princeton University Press.

_____.2000. "Minimum Wages and Employment: Case Study of the Fast Food Industry in New Jersey and Pennsylvania: Reply." *American Economic Review* 90(5)

Chase, Robert. 1998. "Markets for Communist Human Capital: Returns to Education and Experience in the Czech Republic and Slovakia." *Industrial and Labor Relations Review* 51(3): 401-23.

_____., 1999. *The Formation of a Labour Market in Russia*. Cheltenham: Edward Elgar,

Clark, Jon. 1999. "Adversarial and Investigative Approaches to the Arbitral Resolution of Dismissal Disputes: A Comparison of South Africa and the UK." *Industrial Law Journal* 26(4)

Clark K.B., and L.H. Summers. 1982. Unemployment Insurance and Labor Market Transitions." In M.N. Bailey, ed., *Workers, Jobs, and Inflation*. Washington, D.C.: The Brookings Institution.

Clarke, Simon. 1998b. "The Financial System and Demonetization of the Economy." Processed.

Clarke, Simon. 1999. *New Forms of Employment and Household Survival Strategies in Russia*. ISITO and Centre for Comparative Labour Studies. Coventry, U.K., and Moscow.

Clarke, S., and V. Borisov. 1999. "New Forms of Labour Contracts and Labour Flexibility in Russia." *Economics of Transition* 7(3):593-614.

Clarke, S., and V. Kabalina. 1999. "Employment in the New Private Sector in Russia." *Post-Communist Economies* 11(4):421-44.

_____., 2000. "The New Private Sector in the Russian Labour Market." *Europe-Asia Studies* 52(1):7-32

Commander, S., and R. Jackman. 1993. "Providing Social Benefits in Russia," Policy Research Working Paper No. 1184. EDI-World Bank.

Commander, Simon, John McHale, and Ruslan Yemtsov. 1995. "Russia." In Simon Commander and Fabrizio Coricelli, eds., *Unemployment, Restructuring, and the Labor Market in Eastern Europe and Russia*. Washington, D.C.: EDI-World Bank.

Commander, Tolstopiatenko, and Yemtsov, 1999, "Channels of Re-Distribution: Inequality and Poverty in Russia's Transition," *Economics of Transition* 7(2):411-47.

Dar, A., and Z. Tzannatos. 1999. "Active Labor Market Programs: A Review of the Evidence from Evaluations." Human Development Network, Social Protection Department, World Bank, Washington, DC.

Daveri, F, and G. Tabellini. 2000. "Unemployment, Growth and Taxation in Industrial Countries", Economic Policy: A European Forum (30): 49-104.

Davis, S., J. Haltiwanger and S. Schuh (1996), "Small Business and Job Creation: Dissecting the Myth and Reassessing the Facts", *Small Business Economics*, Vol.8, 1996.

Davis, S., J. Haltiwanger and S. Schuh (1996), *Job Creation and Destruction*, MIT Press.

De Ferranti, D., G.E. Perry, I.S. Gill, and L. Serven. 2000. *Securing Our Future in a Global Economy*. World Bank Latin and Caribbean Studies, Washington, D.C.: World Bank.

De Melo, Denizer, and Gelb. 1996. From Plan to Market: Patterns of Transition. World Bank Policy Research Paper No. 1564.

Denisova, I., G. Friebel, and E. Sadovnikova. 1998a. *TheRegulatory Framework of the Russian Labour Market: Current State and Reform Tendencies*. Working Paper Series No. 5. Russian-European Centre for Economic Policy.

_____. 1998b. *Internal Labour Markets and Human Resources Policies: An Account from the Existing Surveys*. Working Paper Series No. 6. Russian-European Centre for Economic Policy.

Desai, Padma, and Todd Idson. 2000. "Work without Wages. Russia's Nonpayment Crisis." Massachusetts Institute of Technology

Development Practice. 1993. "Argentina's Privatization Program: Experience, Issues, and Lessons Learned." World Bank.

Di Tella, R., and R. MacCulloch. 1999. "The Consequences of Labor Market Flexibility: Panel Evidence Based on Survey Data." www.people.hbs.edu/rditella/research.html.

Earle, John S., and Klara Z. Sabirianova. 2000. "Equilibrium Wage Arrears: A Theoretical and Empirical Analysis of Institutional Lock-In." IZA Discussion Paper No. 11964.

_____. (forthcoming). "How Late to Pay. Understanding Wage Arrears in Russia." *Journal of Labor Economics*.

Earle, John S., and Sabirianova, Klara Z. 2002b. Structural Change, Mismatch, and Job Mobility: Evidence from Russia." Unpublished manuscript.

Earle, John S., and Zuzana Sakova. 2000a. "Business Start-Ups or Disguised Unemployment? Evidence on the Character of Self-Employment From Transition Economies." *Labour Economics* 7(5):575-601.

Easterly, W., and P. Viera Da Cunha. 1994. "Financing the Storm: Macroeconomic Crisis in Russia." *Economics of Transition* 2 (December):443-65.

Edwards and Manning. 2000. "The Economics of Employment Protection and Unemployment Insurance Schemes: Policy Options for Indonesia, Malaysia, Philippines and Thailand." In G. Betcherman and R. Islam, eds., *East Asian Labor Markets and Economic Crisis: Impact, Response and Lessons*. Washington, D.C.: World Bank.

Elmeskov, J., J. Martin, and S. Scarpetta. 1999. "Key Lessons for Labour Market Reform: Evidence from OECD Country Experiences." *Swedish Economic Policy Review*

European Bank for Reconstruction and Development (EBRD). 2000. *Transition Report Update May 2000*. London: EBRD.

Faggio, G. and J. Konings (1999) "Gross Job Flows and Firm Growth in the Transition Countries: Evidence Using Firm Level Data on Five Countries", *CEPR Discussion Paper*, No. 2261.

Feldstein, M. 1978. "The Effect of Unemployment Insurance on Temporary Layoff Unemployment." *American Economic Review* 68: 834-46.

FIAS (2001) "Administrative Barriers to Investment within Subjects of the Russian Federation", World Bank, Washington, DC.

Field, Mark.G. 2000. "The Health and Demographic Crisis in Post-Soviet Russia: A Two-Phase Development." In Mark.G. Field and Judyth.L. Twigg, eds., *Russia's Torn Safety Nets*. New York: St. Martin's Press.

Fischer, Stanley, and Ratna Sahay. 2000. "The Transition Economies After Ten Years." International Monetary Fund Working Paper.

Flanagan, R. 1995. "Wage Structures in the Transition of the Czech Economy." *International Monetary Fund Staff Papers* 42(4):836-54.

Flinn, Christopher. 1986. "Wages and Job Mobility of Young Workers." *Journal of Political Economy* 94(3):S88-110.

Forteza, A., and M. Rama. 2000. "Labor Market 'Rigidity' and the Success of Economic Reforms Across More than One Hundred Countries." World Bank. Processed.

Freeman, R.B. 1993. "Labor Market Institutions and Policies: Help or Hindrance to Economic Adjustment?" *Proceedings of the World Bank Annual Conference on*

Development Economics, 1992. Supplement to the *World Bank Economic Review and the World Bank Research Observer*.

Fretwell, David (2000), "Note on Safety Nets for Economic Restructuring", ECSHD, World Bank.

Fretwell, David, and Wilson. 1999. Public Service Employment: A Review of Programs in Selected OECD Countries and Transition Economies. World Bank Discussion Paper No. 9913

Fretwell, David, T. Beck, and E. Johannsson. 1995. "Privatization and Restructuring: Issues Related to Divestiture of Labor and Social Assets." World Bank Working Paper.

Fretwell, D., J. Benus, and C.J. O'Leary. 1999. "Evaluating the Impact of Active Labor Programs: Results of Cross Country Studies in Europe and Central Asia." Social Protection Discussion Paper No. 9915. The World Bank.

Friebel, G., and S. Guriev. 2000. "Should I Stay or Can I Go?" Draft paper.

Gacs, Janos, Robert Holzmann, and George Winckler, eds. 1995. *Output Decline in Eastern Europe — Prospects for Recovery?* Kluwer Academic Press.

Gaddy, C., and B.W. Ickes. 1998. "Underneath the Formal Economy: Why are Russian Enterprises Not Restructuring?" *Transition: The Newsletter about Reforming Economies*. World Bank, Development Research Group.

Garsia-Iser, M., Smirnov, S., Kashepov, A., Babushkina, T and E. Sindyashkina (1998). Rynok truda Rossii. Moscow, Fast-Print.

Gerber, T. 2000. *Regional Migration Dynamics in Russia Since the Collapse of Communism*. University of Arizona. Tucson.

Gimpelson, Vladimir. 1998. "Politics of Labor Market Adjustment (the Case of Russia)." Processed.

Gimpelson, Vladimir, and Douglas Lippoldt. 1997. "Labour Turnover in the Russian Economy." In OECD, *Labour Market Dynamics in the Russian Federation*. Paris: OECD.

_____. 1999. "Private Sector Employment in Russia: Scale, Composition and Performance." *Economics of Transition* 7, no. 2(1999): 505-33.

_____. 2001. The Russian Labour Market: Between Transition and Turmoil. Lanham: Rowman and Littlefield, 2001.

Goskomstat. 1993. R*ussian Federation in 1992: Statistical Yearbook*. Moscow: Goskomstat of Russia.

_____. 1996. *Strikes in Enterprises and Organizations of the Russian Federation in 1990-1995*.

_____. 1997. *Russian Statistical Yearbook: 1997*. Moscow: Goskomstat of Russia.

_____. 1998a. *Social-Economic Situation of Russia 1997*. Moscow: Goskomstat of Russia. .

_____. 1998b. *Instructions for the Survey of Population on Problems of Employment*, dated December 28, 1998. Moscow: Goskomstat of Russia.

_____. 1998c. *Russian Statistical Yearbook: 1998*. Moscow: Goskomstat of Russia.

_____. 1999a. *Survey of Population on Problems of Employment: November 1999*. Moscow: Goskomstat of Russia.

_____. 1999b. *Regional Yearbook of Russia*. Moscow: Goskomstat of Russia.
_____. 1999c. *Labor 1999*. Moscow: Goskomstat of Russia.
_____. 1999d. *Russian Statistical Yearbook: 1999*. Moscow: Goskomstat of Russia
_____. 2000a. *Population and Migration in the Russian Federation in 1999*. Moscow: Goskomstat of Russia
_____. 2000b. *Russian Statistical Yearbook: 2000*. Moscow: Goskomstat of Russia.
_____. 2000c. *Survey of Population on Problems of Employment: November 2000*. Moscow: Goskomstat of Russia.
_____. 2000d. *Prices in Russia: 2000*. Moscow: Goskomstat of Russia.
_____. 2001a. *Social and Economic Situation in Russia: January 2001*. Moscow: Goskomstat of Russia.
_____. 2001b. *Short-Term Economic Indicators: March 2001*. Moscow: Goskomstat of Russia.
Graeser, Paul. 1998. "Human Capital in a Centrally Planned Economy: Evidence." *Kyklos* 41(1): 75-98.
Granick, David. 1987. *Job Rights in the Soviet Union*. Cambridge University Press. Oxford.
Gregory, Paul, and Janet Kohlhase. 1988. "The Earnings of Soviet Workers: Evidence from the Soviet Interview Project." *Review of Economics and Statistics* 70:23-35.
Gruber, J. 1997. "Consumption Smoothing Effects of Unemployment Insurance." *American Economic Review* 87:192-205.
Guasch, Luis. 1996. "Estimating the Employment Benefits of Labor Reform in Argentina." World Bank, Sector Study.

Haltiwanger J. C., and M. Singh (1999). "Cross Country Evidence on Public Sector Retrenchment." *The World Bank Economic Review* 13: 23-66
Hamermesh, D.S., and D.T. Slesnick. 1995. "Unemployment Insurance and Household Welfare: Microeconomic Evidence 1980-93." NBER Working Paper No. 5315.
Hammer, J.D.G., and C. Ville. 1998. "The Role of Labour Inspection in Transition Economies." ILO Government and Labour Law and Administration, Document No. 48. Available at www.ilo.org./public/english/govlab/papers/1998/labins/index.htm.
Heckman, J.J., and C. Pages. 2000. *The Cost of Job Security Regulation: Evidence from Latin American Labor Markets*. National Bureau of Economic Research, Working Paper No. 7773. Cambridge, MA.
Heleniak, T. 1997. "Internal Migration in Russia during Economic Transition." World Bank, International Economics Department.
Heleniak, T. (2000), Russia's Modest Migration Gains Unlikely to Stop Population Decline; Population Today, Population Reference Bureau.
Hendley, Kathryn;Ickes, Barry; Murrell, Peter; and Ryterman, Randi "Observations on the Use of Law by Russian Enterprises." *Post-Soviet Affairs*, 13, no.1 (January-March 1997): 19-41.
Heron, R., and C. Vandenabeele. 1999. "Labour Dispute Resolution: An Introductory Guide." ILO Regional Office for Asia and the Pacific, ILO East Asia Multidisciplinary Advisory Team, Bangkok.
Hoeven, Robert, and Gyorgy Sziraczki. 1997. "Lessons from Privatization, Labor Issues in Developing and Transitional Economies." International Labour Organisation, Geneva.

Hoffer, F. 1997. "Traditional Trade Unions During Transition and Economic Reform in the Russian Federation." International Labour Organisation, Enterprise and Cooperative Development Department, Geneva.

_____. 2000. "Good Governance and Social Dialogue in Russia." Unpublished paper, ILO.

IMC Consulting Ltd. 1999. "Mono-Company Towns: Final Report"

IMF World Economic Outlook. 1999.

Institute for Comparative Labour Relations Research (ISITO). 1998. "Situation with Wage Arrears in the Samara Oblast." ISITO Reports on the Non-Payment of Wages in Russia, Moscow.

Institute for the Economy in Transition. 1994. "Russian Economy in 1993: Trends and Prospects." Moscow: Institute for the Economy in Transition.

International Labour Office (ILO). 1998. 1998 *Yearbook of Labour Statistics*. Geneva: International Labour Office.

International Labour Organisation (ILO).1999. "Social and Labour Issues: Overcoming Adverse Consequences of the Transition Period in the Russian Federation." Moscow

_____. 2000a. "Organization, Bargaining and Dialogue for Development in a Globalizing World." Paper prepared for the Working Party on the Social Dimensions of Globalization, ILO. GB.279/WP/SDG/2

_____. 2000b. "Good Practices in Settlement of Individual Labour Disputes: the Case of Chile." Available at www.ilo.org.

Ivanova, Nadezhda, and Charles Wyplosz. 1998. "Arrears: The Tide that is Drowning Russia." Paper presented at the RECEP Conference on Economic and Social Reform in Russia, September 1998.

Jackman, R. 1998 "Unemployment and Restructuring in Central and Eastern Europe." In P. Boone, S. Gomulka, and R. Layard, eds., *Emerging From Communism: Lessons from Russia China and Eastern Europe*. Cambridge, MA: MIT Press.

Javeline, Debra. 1999. *Protest and Passivity: How Russians Respond to Not Getting Paid*. Manuscript, Harvard University.

Jeon, D., and J. Laffont. 1999. "The Efficient Mechanism for Public Sector Downsizing." *The World Bank Economic Review* 13:67-88.

Johnson, Simon, Daniel Kaufmann, and Andrei Shleifer. 1997. "The Unofficial Economy in Transition." *Brookings Papers on Economic Activity* 2(1):159-239.

Kapeliushnikov, Rostislav. 1997. "Job and Labour Turnover in the Russian Industry." *Russian Economic Barometer* VI(1)

_____. 1997. "Job Turnover in a Transitional Economy: The Behaviour and Expectations of Russian Industrial Enterprises." In OECD, *Labour Market Dynamics in the Russian Federation*. Paris: OECD.

_____. 1998. "Overemployment in Russian Industry: Roots of the Problem and Proposed Solutions." *Studies on Russian Economic Development* 9(6):596-609.

Kikeri, Sunita. 1998. "Privatization and Labor, What Happens to Workers When Governments Divest." World Bank Technical Paper No. 396.

Konings and Walsh (1999), "Employment Dynamics of Newly Established and Traditional Firms: A Comparison of Russia and Ukraine", *LICOS Discussion Paper*, No. 81/1999.

Konings, J., H. Lehmann and M. Schaffer (1996), Job Creation and Job Destruction in a Transition Economy: Ownership, Firm Size and Gross Job Flows in Polish Manufacturing, 1988-91", Centre for Economic Performance, Discussion Paper, No.282.

Kornai, Janos. 1992. *The Socialist System: The Political Economy of Communism*. Princeton: Princeton University Press.

Larroulet, Cristian.1992. "Impact of Privatization: The Chilean Case 1985-1989". Working Paper. Institute of The Americas, San Diego.

Layard, Richard, and Andrea Richter. 1995."How Much Unemployment is Needed for Restructuring: The Russian Experience." *Economics of Transition*, 3(1):35-58.

Lazear, Edward P. 1979 "Why is there Mandatory Retirement?" *Journal of Political Economy* 87(6):1261-84.

_____. " (1981) Agency, Earnings Profiles, Productivity, and Hours Restrictions." *American Economic Review* 71no.4: 606-20.

Lazear, E.P. 1990. "Job Security Provisions and Employment." *Quarterly Journal of Economics* 105(3):699-726.

Lehmann, Hartmut H., and Jonathan Wadsworth. 1997. "Job Insecurity and Wage Arrears in the Russian Federation." In OECD, *Labour Market Dynamics in the Russian Federation*. Paris: OECD.

Lehmann, Hartmut H., Jonathan Wadsworth, and Alessandro Acquisti. 1999. "Grime and Punishment: Job Insecurity and Wage Arrears in the Russian Federation." *Journal of Comparative Economics* 27(4):595-617.

Lippoldt, Douglas, and Alex Grey. 1997. "Labour Market Dynamics in the Russian Federation: An Introduction and Overview." In OECD, *Labour Market Dynamics in the Russian Federation*. Paris: OECD.

Lokshin , Michael, and Ravallion, Martin (2000). "Welfare impact of the 1998 financial crisis in Rusisan and the response of the Safety Net, Economics of Transition, Volume 8 (2).

Maleva, T., P. Kudyukin, S. Misikhina, S. Surkov, (2001), "How Much Does the Labor Code Cost?" Working Papers, Issue 3, Carnegie Moscow Center, Moscow.

Malle, Silvana. 1990. *Employment Planning in the Soviet Union: Continuity and Change*. MacMillan, New York.

McKinsey Global Institute. 1999. *Unlocking Economic Growth in Russia*; http://mgi.mckinsey.com/mgi/russian.asp

Mitchneck, Beth, and David A. Plane. 1995. "Migration and the Quasi-Labor Market in Russia." *International Regional Science Review* 18(3):267-88.

Neal, Derek. 1999. "The Complexity of Job Mobility among Young Men." *Journal of Labor Economics* 17(2): 237-61.

Nesterova, Daria, and Klara Z. Sabirianova. 1998. "Investment in Human Capital under Economic Transformation in Russia." EERC Working Paper No. 99/04.

Neumark, D., and W. Wascher. 2000. "Minimum Wages and Employment: Case Study

of the Fast Food Industry in New Jersey and Pennsylvania: Comment." *American Economic Review* 90(5)

Nickell, S., and R. Layard. 1997. "The Labour Market Consequences of Technical and Structural Change." Centre for Economic Performance, Discussion Paper Series, No. 23.

North, Douglass C. 1990. *Institutions, Institutional Change, and Economic Performance*. New York: Cambridge University Press.

Organisation for Economic Co-operation and Development (OECD). 1995. *OECD Economic Surveys: The Russian Federation*. Paris: OECD.

_____. 1996. *Employment Outlook*. Paris.

_____. 1997. *Employment Outlook*. Paris.

_____. 1997. *OECD Economic Surveys 1997-1998: The Russian Federation*. Paris: OECD

_____. 1998. "Early Identification of Jobseekers at Risk of Long Term Unemployment: The Role of Profiling." Paris

_____. 1998. *Employment Outlook*. Paris.

_____. 1999. *OECD in Figures*. Paris: OECD

_____. 1999a. Employment Outlook. Paris.

_____. 1999b. Implementing the OECD Jobs Strategy: Assessing Performance and Policy. Paris.

_____. 2000. *Employment Outlook*. Paris

_____. 2000. "Review Report of Labor Market and Social Policies in the Russian Federation: Main Issues for Discussion." Directorate for Education, Employment, Labour and Social Affairs, Employment, Labour and Social Affairs Committee .

_____. 2000. *OECD Economic Outlook*, No. 68, December 2000. Paris: OECD

Ofer, Gur, and Aaron Vinokur. 1981. "Earnings Differentials by Sex in the Soviet Union: A First Look." In S. Rosefilde, ed., *Economic Welfare and the Economics of Soviet Socialism: Essays in Honor of Abram Berson*. Cambridge, MA: Harvard University Press.

Oi, Walter. 1962. "Labor as a Quasi-Fixed Factor." *Journal of Political Economy* 70:538-55.

Ovtcharova, L. 2000. "Children at Risk of Poverty and Social Protection Programs." Background Paper for the Child Welfare Report.

Oxenstierna, Suzanne. 1989. *From Labour Shortage to Unemployment? The Soviet Labour Market in the 1980s*. Swedish Institute for Social Research..

Pencavel, John H. 1972. "Wages, Specific Training, and Labor Turnover in U.S. Manufacturing Industries." *International Economic Review* 13: 53-64.

Perova, I., and L. Khakhulina. 1997. "Informal Secondary Employment." VTsIOM Bulletin 6.

Pinto, B., V. Debrentsov, and A Alexandrova, (2001). The Russian Federation after the 1998 Crisis: Win Win Strategies for Growth and Social Protection, World Bank.

Prokopov, F.T., and T.M. Maleva. 1999. "Anti-Unemployment Policy." Bureau of Economic Analysis Foundation, Moscow.

Rama, M. 1999. "Public Sector Downsizing: An Introduction." *World Bank Economic Review* 13(1):1-22.

Rashid, M, and J. Rutkowski. 2001. "Labor Market Strategy for Transition Countries: Recent Developments and Future Options," Social Protection Policy Paper, World Bank.

Rashid, M. and R. Townsend, 1994. "Targeting Credit and Insurance" Efficency, Mechanism Design, and Program Evaluation, ESP Discussion Paper, World Bank.

Rein, Martin, Barry Friedman, and Andreas Woergoetter, eds. 1997. *Enterprise and Social Benefits After Communism*. Cambridge: Cambridge University Press.

Riboud, M, C. Sanchez-Paramo, and C. Silva-Jauregui. 2001. *Does Euroschlerosis Matter? Institutional Reform and Labor Market Performance in Central and Eastern European Countries in the 1990s*. World Bank.

Richter, R. 2000. "Government Cash Transfers, Household Consumption and Poverty Alleviation, the Case of Russia." Discussion Paper No. 2422. Center for Economic Policy Research, London.

Rimashevskaya, Natalia, and Valeriy Patsiorkovski. 1992. "Social-Economic Research of Welfare and Living Standards of Urban Population." Moscow: ISEPN

Russian Economic Trends 4, No. 1 (1995)

Russian Economic Trends, October 2000.

Russian Expert Institute. 2000. *Mono-profile Towns and Town-forming Enterprises of the Russian Federation*. Review Report. Moscow

Russian Federation. 1999. *Ministry of Labor and Social Development Report on Strikes in the Russian Federation in 1999*

Sabirianova, Klara. 2002. "The Great Human Capital Reallocation: A Study of Occupational Mobility in Transitional Russia." Journal of Comparative Economics 30(1): 191-217.

Sah, Raaj K. 1991. "Social Osmosis and Patterns of Crime," *Journal of Political Economy* XCIX:1272-95

Salop, Joanne, Steven and Salop. 1976. " Self-Selection and Turnover in the Labor Market. *Quarterly Journal of Economics* 90: 619-2

Schwab, Stewart. 2000. Comments on the Russian Labor Code. Processed

Skoufias, E. 2001. "Consumption Smoothing in Russia: Evidence from the RLMS. IFPRI Discussion Paper. Washington, D.C

Standing, G. 1999. *Global Labour Flexibility: Seeking Distributive Justice*. New York: St. Martin's Press

State University Higher School of Economics, Institute for Macroeconomic Research of RF Ministry of Economy. 2000. "Development of a Concept and Drafting New Legislation on Employment of the Population of the Russian Federation.. Report commissioned by the World Bank and Russian Foundation for Social Reforms. Moscow.

Strumilin, Stanislav. 1924. "The Economic Significance of National Education." National Planning.

Suvorov, A.V. 2000 *Macroeconomic Analysis of Poverty Feminization in Russia*. Report prepared for the World Bank (translated from Russian

Svejnar, Jan. 1999. "Labor Markets in the Transitional Central and East European Economies." In O. Ashenfelter and D. Card, eds., *Handbook of Labor Economics*, Vol. 3b. Amsterdam: Elsevier Science.

Tchetvernina, Tatyana, (2000) Employment Services and Social Protection: World Bank Summary Report.

_____. 2001. "Unemployment Benefit Programs in Russia. Draft chapters. Unpublished.

Tchetvernina, T.Y., I.V. Soboleva, E.N. Sobolev, P.G. Smirnov, A.A. Moskovskaya, and S.V. Lomonosova. 2001. *Employment Situation in Russian Enterprises*. Unpublished interim report prepared for the World Bank.

Thomason, G. 1993. "Preventing and Resolving Industrial Conflict, Final Report." Labour Market and Social Policy Occasional Papers No. 11. OECD.

Topel, R. 1983. "On Layoffs and Unemployment Insurance." *American Economic Review* 73:541-59.

Topel, Robert H., and Michael P. Ward. 1992. "Job Mobility and the Careers of Young Men." *Quarterly Journal of Economics* 107(2):439-79.

Treisman, Daniel, and Vladimir Gimpelson. (forthcoming). "Political Business Cycles and Russian Elections, Or the Machinations of Chudar." *British Journal of Political Science*.

Tzannatos, Z., and S. Roddis. 1998. "Unemployment Benefits" World Bank, Human Development Network.

Vodopivec, Milan, and Dhushyanth, Raju. 2001. "Income Support Systems for the Unemployed: Issues and Options." Social Protection Department, Human Development Network.

Vodopivec, M., A. Worgotter, and D. Raju. 2000. "Unemployment Benefits in Transition Economies: Lessons Learned and Policy Options." Washington D.C.

Von Richthofen, W. 1999. "New Prevention Strategies for Labour Inspection, Introduction." ILO Government and Labour Law and Administration, Document No. 56. Available at ww.ilo.org./public/english/govlab/papers/1999/labins/index.htm.

Vroman, W. (2001). "Unemployment Insurance and Unemployment Assistance: A Comparison."The Urban Institute, processed (prepared for the World Bank).

Wesolowsky, T. 2000. "Russia: Trade Unions Face Skeptical Public." *Radio Free Europe*. www.rferl.org/nca/features/2000/01/F.RU.000112155117.html.

World Bank, 1993 "Argentina's Privatization Program, Experience, Issues, and Lessons Learned." Washington, DC.

World Bank, 1995. *Workers in an Integrating World*. World Bank Development Report. Washington, D.C.

World Bank, 1997. Poverty Assessment: Poland. Washington, DC

World Bank, 1998. Poverty and Social Policy in Romania, Washington DC.

World Bank, 2000.

Implementation Completion Report, Employment and Social Protection Project, ECSHD.

World Bank, 2000a. *Balancing Protection and Opportunity: Social Protection Strategy for Transition Economies*. Washington, D.C.

World Bank, 2000b. "Russia: Poverty in 1998." Draft: not for citation. Human Development and Poverty Reduction and Economic Management.

World Bank 2001 "The Russian Federation after the 1998 Crisis: Towards "Win-Win" Strategies for Growth and Social Protection." Unpublished paper. Poverty Reduction and Economic Management Sector Unit, Europe and Central Asia Region.

World Bank. 2001a. Slovak Republic, Living Standards, Employment and Labor Market Study. ECSPE, Washington, D.C.

World Bank. 2001b. Poland: Labor Market Study: The Challenge of Moving from Old to New Jobs. ECSPE, Washington, D.C.

Zack, A. 1997. "Can Alternative Dispute Resolution Help Resolve Employment Disputes?" *International Labour Review* 136(1)

ООО Издательство «Весь Мир» является
официальным дистрибьютором публикаций Всемирного банка
в Российской Федерации

Наш адрес: 101831, Россия, Москва, Колпачный переулок, 9а
Тел.: (095) 923-68-39, 923-85-68
Факс: (095) 925-42-69
e-mail: vesmirorder@vesmirbooks.ru
http://www.vesmirbooks.ru

В Издательстве можно приобрести
или заказать по каталогу
любые издания международных организаций

**РОССИЙСКИЙ РЫНОК ТРУДА:
ПУТЬ ОТ КРИЗИСА К ВОССТАНОВЛЕНИЮ**
(*на английском языке*)

Выпускающий редактор: Бондаренко А.В.
Корректор: Горбатова И.А.
Руководитель производственного отдела: Кузнецова Н.А.
Верстка: Богач О.Н., Абрамова И.В.

Лицензия ИД № 03510 от 15.12.2000 («Весь Мир»)
Подписано в печать 04.06.2003.
Печать офсетная. Формат 70×100 $^{1}/_{16}$. Печ. л. 17

ООО Издательство «Весь Мир»
101831, Москва-Центр, Колпачный пер., 9а

Отпечатано в ООО
типографии «ПОЛИМАГ»
127247, Москва, Дмитровское шоссе, 107