

RUSSIA'S RURAL UNEMPLOYED

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Executive Summary

This article focuses on unemployment in rural Russia. While a large amount of attention has been given to socio-economic consequences of the market transition and Russia's unemployment program in general, absent in the scholarly literature are detailed analyses about the rural unemployed. Our intent is to further understanding of the attitudes and behaviors of rural households which have an unemployed member, and of rural individuals themselves. The paper is organized around two main questions: how have the rural unemployed fared during reform; and how have the rural unemployed adapted during reform?

In our survey, 8% of our sample responded that they were unemployed, of whom 22% were aged 18-29, another one-third was aged 30-39, and one-third was aged 40-49. The unemployed cohort is on the whole much younger: the unemployed have a mean age of 37, while the employed have a mean age of 53. Female unemployment dominates in our survey data, accounting for 62.5% of those who are unemployed. Our data also add additional detail to the portrait of the rural unemployed. More than 95% of the unemployed are married. Households with at least one unemployed person have higher levels of education than households where no one is unemployed. In household with at least one unemployed person, the mean educational level of the husband is 11.06 years and the wife's is 11.37, compared with 9.99 for husbands and 9.84 for wives in households with no one unemployed. Finally, the mean size of a household with at least one member unemployed is 3.5 persons, while a household with no one unemployed is 3.0 persons, which is a significant demographic difference.

Our data lead to the following conclusions:

- (1) Households with an unemployed member are not severely disadvantaged with regard to productive capital – land, animals, and equipment.
- (2) At the same time, households with an unemployed member do not take advantage of their “surplus” labor and do not obtain higher levels of productive capital.
- (3) Households with an unemployed member produce less food, consume higher percentages of their household production, and sell less of their household production.
- (4) Satisfaction levels of unemployed persons are essentially equal to or better than that of employed persons.
- (5) Unemployed persons receive slightly less economic assistance from other family members, but more from friends and neighbors. Neither cohort receives significant assistance from large farms.
- (6) Unemployed persons have higher participation rates in the ceremonies of family members, friends and neighbors, and the village than do employed persons.

Introduction

The literature on Russia's social and economic transformation has provided key insights into the effects of market reform.¹ Among the many consequences attendant with Russia's transition from a command to a market economy, two distinguishing socio-economic trends stand out. The first is a significant increase in stratification among social classes, giving rise to new social strata--led by the oligarchs who possess enormous wealth and power.² Cleavages of inequality also were evident across occupation, within occupational groups, and across regions. Among the working class, stratification was most evident in finance, energy, and metallurgy sectors of the economy, with differentiation in agriculture the least pronounced.³ There was also stratification within occupational groups, as top managers, middle managers, and chief specialists fared the best, while unskilled rural workers fared the worst.⁴

Finally, regional inequality became more pronounced, as some regions became economic and financial centers, others are resource-rich, and for others the economic future is bleak.⁵ Surveys by The Russian Center for Public Opinion Research showed that as the 1990s progressed, an increasing percentage of the population felt large income differences did not contribute to national prosperity, and that the state should regulate differences in income.⁶

A second important aspect is an increase in the misery of the ordinary worker. During the 1990s, the working class suffered from, among other things, wage arrears, a decline in real incomes and purchasing power, decreasing standards of living, increasing health problems, lower food consumption and a deterioration in the quality of their diet, and a loss of job security.⁷ These occurrences contributed to higher incidence of depression, alcoholism, and suicide among workers.⁸ Part of the overall deterioration in the standards of living by most workers is an increase in underemployment and unemployment. Underemployment existed during the Soviet era as well, but it is accepted that it has increased in the post-Soviet period. Underemployment is a negative factor because it means that labor is not being used in the most effective or productive ways possible. While labor mobility is evident--a positive for the economy since it suggests adaptation to the requirements of a market economy--a large portion of those who have changed jobs are now in the trade and service sectors, professions which do not require an upgrade of existing skills.⁹ Therefore, Russia has a large number of employed persons who are working below their

skill level and are not contributing to economic growth to their fullest extent possible.

Regarding unemployment, the official unemployment rate in 2001 was 9.7%.¹⁰ However, analysts commonly argue that Russia's national unemployment data are inaccurate for the picture they portray, agreeing that the official unemployment rate in Russia is understated.¹¹ Russian unemployment is understated because only a small percentage of unemployed persons actually register for state assistance, owing to the fact that assistance is often inadequate.¹² In 2000, only 15% of those who were officially unemployed even registered for state assistance.¹³ It is hard to know how many more are unemployed and did not register, but surely the actual number of unemployed is much greater than official statistics would indicate.

For example, total unemployment in 1994 was stated to be only 6% by Goskomstat, which was about one-half the level estimated by the International Labor Organization.¹⁴ If the Goskomstat figure had been accurate, it would have meant that in Russia, which was in the throes of economic contraction and collapse, 'the cumulative effects of which have been much more severe than those of the Great Depression,' had a lower unemployment rate than Germany, France, Austria, Belgium, Denmark, Finland, Netherlands, Sweden, the United Kingdom, the United States, and Canada.¹⁵ In 1995, the unemployment and underemployment rate in Russia was 12.3%, or just over the average of 11% in the European Union, leading one analyst who accepted official data as accurate to proclaim that 'Russia's problem is falling productivity and low earnings rather than unemployment.'¹⁶ Others disagree with this view, and argue that unemployment 'has been concealed in the most cruel way possible.'¹⁷

While the official unemployment rate understates reality, most analysts also agree that Russia has experienced its economic transition without mass unemployment.¹⁸ Even accounting for under-reporting, the unemployment rate in Russia is much less than was anticipated when reform began. Mass layoffs, which were feared by Russian government officials, did not occur in either the industrial or agricultural sectors of the economy.¹⁹ Unemployment among industrial workers increased less than industrial production fell. In 1993, arguably the year that market reforms had their most severe impact, one analyst claims that only 1.5% of workers in large and medium-size enterprises were laid off.²⁰

The reasons he cites for this phenomenon are that wages were so low they were not a large cost to

enterprises, that a loose monetary policy meant firms had plenty of money, that labor was perceived as tight, and that large wage funds increased the political clout of enterprises.²¹ Another analyst points to the underlying political strategy that kept unemployment artificially low:

Soviet factories had been greatly overstaffed, but unemployment rose very slowly despite a precipitous decline in industrial production in the first three years of Yeltsin's economic reform....From the beginning, the Yeltsin government had a very deliberate, sophisticated policy of social support, although almost never articulated, especially to westerners. It was deliberately trying to maintain consumption in cities in the face of declining production. It was using the factory and other places of employment as its major social welfare institution and was paying wages rather than unemployment insurance to employees even when they were not working.²²

Similarly, rural unemployment is less than what would have been expected because managers of agricultural enterprises did not engage in mass layoffs. Field work in Novosibirsk found that weak enterprises actually shed the most labor, a trend confirmed in Kostroma oblast as well.²³ The International Finance Corporation, a subsidiary of the World Bank, found that on reorganized and non-reorganized farms social protectionist measures were common despite growing farm debt and unprofitability.²⁴ Thus, in both sectors of Russia's economy, unemployment increased as a consequence of reform, but not nearly as much as had been expected and feared.

This article focuses on unemployment in rural Russia. While a large amount of attention has been given to socio-economic consequences of the market transition and Russia's unemployment problem in general, absent in the scholarly literature are detailed analyses about the rural unemployed.²⁵ The neglect of rural unemployment among analysts is unfortunate, because the number of people is significant, numbering in the millions. Officially, in 2001 the number of unemployed persons in rural areas was 1.84 million, out of a rural workforce of 8.2 million, or 21.95% of the rural workforce.²⁶

If one broadens the concept of 'unemployed' to 'not working' the number grows even more. The numbers speak for themselves: there were more than 39.2 million people living in rural areas in 2001. Some analysts, ignoring official data, estimate that as many as 3.5 million rural workers may be unemployed, and another 8.8 million persons are retired.²⁷ If one adds other groups of non-working individuals such as the disabled and homemakers, the total non-working rural population grows to over 12

million people, or over 31% of Russia's rural population.

Therefore, this article contributes an original analysis to the rural employment issue in two ways. First, it explores a topic that previously has not been analyzed in the literature; and second, it uses survey data which allows in-depth examination of unemployment at the household and individual level.

The purpose of this article is not to quantify or estimate the real rural unemployment rate. Rather, is to understand the condition of being unemployed. In other words, the intent is to further our understanding of the attitudes and behaviors of rural households which have an unemployed member, and of rural individuals themselves. The paper is organized around two main questions: how have the rural unemployed fared during reform; and how have the rural unemployed adapted during reform? The analysis includes two units of analysis: rural households and rural individuals. Our data allow us to compare households with at least one unemployed member to rural households in which all adults are employed; and to compare rural individuals who are employed with those who are unemployed. In order to conduct our analysis, a dummy variable was created: (1) 'employed' and 'not employed.' This dichotomous variable captures those who are employed and those who are not, using the traditional definition of unemployed which usually includes people who are not working but who wish to work and are searching for employment. Those who are working are defined as having employment outside the household, and includes part-time and full-time employment.²⁸

Two dimensions are used for comparative analysis: (1) economic behaviors, including the use of land reform opportunities, household food production, and household food sales; and (2) social opinions about the village and life, which includes levels of satisfaction, use of assistance networks, and participation in village activities. We begin first with a few words about our research data and an overview of rural unemployment before turning to the comparative dimensions indicated above.

Research Data

In order to understand better the attitudes and behaviors of the rural unemployed, the data for this article are drawn from a survey conducted in five Russian regions during 2001. Those five regions include: Belgorod oblast, Volgograd oblast, Krasnodar kray, Novgorod oblast, and the Chuvash Republic.

Within each region, four villages were selected, and within each village, 40 households were surveyed, for a total sample of 800 households (160 households in each region). The pretest of the questions was conducted in June 2001 in Ryazan oblast, followed by the full survey during July-October 2001. Thus, N=800 for our sample and this article.

In selecting villages to be surveyed, a primary objective was to gather data from "real" rural Russians, owing to the well-known effects of modernization and urbanization which influence attitudes and behaviors. Previously, when surveying 'rural' Russia, it has often been the case that 'rural' villages are selected due to their close proximity to an urban center, for the sake of convenience. The consequence of this selection method is that respondents' views do not capture the real attitudes of rural Russia. The selection method purposefully focused on remote villages that were located several hours (by bus) from an urban center. Moreover, a cross-section of different types of villages was used: small, middle-sized, economically weak, and economically strong.

For each of the selected villages a stratified sample was composed from the household list of permanent residents which is kept by the village administration for all households within its jurisdiction. This list is updated annually and contains demographic and social characteristics of the households on the list. Households on this list included persons working on large farms, private farmers, persons working in food processing or food trade business, and persons engaged in private household agricultural production and/or processing. One person from each household was interviewed. Data were collected about the respondent and the household in which he/she resides, which allows either the individual or the household to be used as the unit of analysis. The survey consisted of more than 100 questions per respondent. Interviews were conducted person to person by a research team from the Institute on Socio-Economic Problems of the Population (Moscow).

An Overview of Rural Unemployment

We start with an overview of the unemployment situation nationwide before turning to our survey data. For Russia as a whole, a contraction in rural employment during the 1990s occurred within the context of a general contraction in employment in the Russian economy at large. While total employment

in the national economy decreased about 11% during 1992-2000, the total number of persons employed in agriculture declined from 10.1 million in 1992 to 8.4 million persons in 2000, a decrease of more than 17%.²⁹ The decline in rural employment was not distributed evenly. Official data show that the number of skilled agricultural workers increased, while the number of unskilled workers decreased.³⁰ Exacerbating the employment situation was an increase in the rural population during 1992-1994, fueled mainly by in-migration from Near Abroad countries as part of a deliberate resettlement policy of the Federal Migration Service.³¹ Rural in-migration to areas in southern Russia, where agriculture is most productive, aggravated the rural unemployment problem the most, as rural unemployment increased 2,700 percent in the Volga Economic Region during 1992-1996.³²

Rural unemployment has been marked by two dimensions in particular. First, Russia for some time has had the odd combination of a high percentage of its workforce employed in agriculture--almost 14% of the labor force in 2000--while at the same time experiencing yearly labor shortages during harvest time. In the past, labor-deficit regions could partially compensate for labor shortages through seasonal migration from labor-surplus regions. During the 1990s, however, seasonal migration declined significantly due to regional conflicts in southern Russia. Furthermore, the high cost of relocating, plus the difficulty of finding affordable housing, decreased mobility. Thus, during the transitional period the agricultural sector has not been able to attract unemployed workers from other branches or regions as before.³³

The second aspect of rural unemployment is that it increased disproportionately compared to the rest of the economy. According to official statistics, during 1992-1994 rural unemployment grew by more than 370%, and in 1994 alone rural unemployment doubled. During this time period, nearly two-thirds of rural unemployment occurred in five economic regions: the Central Region,³⁴ the Volga Region, the Northern Caucasus Region, the Urals Region, and the Western Siberian Region. In 2000, the rural unemployment rate was estimated at nearly 12 percent.³⁵ Under-reporting, as indicated above, is common, and in the agricultural sector it is estimated that the actual number of unemployed is two to 2.5 times higher than official statistics show.³⁶ Many rural unemployed do not register because registration offices are located in distant raion centers. For example, in 2000, only 2% of the rural unemployed had registered

for state assistance.³⁷ As a consequence, many rural unemployed persons conduct private plot operations as their main source of income.

Although much of rural unemployment has been concealed, estimates ranged between 1.8-2.0 million rural unemployed in 1994, a number equal to about 33-37% of total unemployment at the end of 1994.³⁸ Using the upper estimate of two million rural unemployed, the number of rural unemployed equaled 20 percent of the number of persons actually employed in agricultural production in 1994. In 1999, it was estimated that 3.3 million rural dwellers were unemployed, or nine times more than had officially registered.³⁹ If those calculations are correct, it was equal to 38% of the number of persons employed in rural areas.⁴⁰ Thus, compared to the economy as a whole, rural unemployment is disproportionately high. Rural unemployment is expected to increase through 2005 by another 35%.

Who are the rural unemployed? Among the rural unemployed nationwide, men account for about 58% of the unemployed, although they are a demographic minority in rural Russia. Male unemployment increased from the early 1990s, when just over half of rural men were unemployed. There is a great deal of regional variation of unemployment by gender. Some regional surveys, such as in Novosibirsk, found that rural women accounted for 70 percent of the rural unemployed, although women comprise about 30 percent of the rural work force.⁴¹ Survey findings also reveal that rural women experience longer periods of unemployment, and a higher percentage of rural women are chronically unemployed.⁴²

A second group affected by unemployment has been the rural young. In 1994, the age group most affected by unemployment were those between 22-29 years of age.⁴³ In 2000, one-third of the rural unemployed was comprised of people aged 20-29, and another 28 percent were aged 30-39.⁴⁴ This statistic is significant because an important requirement for the revival of Russian agriculture is the retention of young workers in the countryside.

In our survey, 8% of our sample responded they are unemployed, of whom 22% who are aged 18-29, another one-third is aged 30-39, and one-third is aged 40-49. The unemployed cohort is on the whole much younger: the unemployed have a mean age of 37, while the employed have a mean age of 53. Female unemployment dominates in our survey data, accounting for 62.5 percent of those who are unemployed. Our data also add additional detail to the portrait of the rural unemployed. More than 95

percent of the unemployed are married. Households with at least one unemployed person have higher levels of education than households with no one unemployed. In households with at least one unemployed person, the mean educational level of the husband is 11.06 and the wife's is 11.37, compared to 9.99 for husbands and 9.84 for wives in households with no one unemployed. Finally, the mean size of a household with at least one member unemployed is 3.5 persons, while a household with no one unemployed is 3.0 persons, which is a significant demographic difference.

Economic Behaviors of Households with Unemployed Members

Our analysis begins by comparing economic behaviors of households with at least one unemployed adult to households having no one unemployed. In our survey, there are significant income differences between households with an unemployed member and those without. More than 81 percent of households with at least one unemployed adult live at or below the poverty level, and have a mean household income of 85% that of households with no unemployed members.⁴⁵ By investigating and comparing economic behaviors of households with an unemployed adult with those without, we can better understand why unemployed households have lower mean incomes. Our analysis also suggests that lower mean incomes is not an inherent feature of having an unemployed adult, and may be mitigated by a change in behavior. To illustrate our argument, we examine three specific dimensions: behaviors toward land, household food production, and household food sales.

A traditional approach to household income links household income to the number of adults in a household--the Chayanov model.⁴⁶ In other words, the level of human capital is a key determinant of rural household income. Statistically, the more working adults in the household, the higher the household income.⁴⁷ According to the Chayanov model, it would be obvious that if a household has an unemployed adult, overall household income will suffer. Households with an unemployed person are exceptions to the Chayanov model because they have higher levels of human capital, but lower mean incomes. Households with an unemployed person have 'surplus labor' by which we mean the unemployed individual is not contributing monetary support to the household, although that person is available to contribute labor. Since 'extra' labor is available, it might be expected that households with an unemployed person would

show greater tendencies to increase the size of the household plot, would have larger plots to grow more food, and would have larger tracts of rental and farm land to grow more food.

Therefore, we argue that lower mean incomes in households with an unemployed adult is not a given. Household income, and thus welfare, could be increased by a change in behavior, that is, greater utilization of 'surplus' labor toward land and food. In short, the unemployed member could contribute to the welfare of the household by using his/her labor to contribute non-monetary income to the household. With regard to land, it might be expected that households with an unemployed adult might be more prone to increase their household plot, or have larger plots, especially if the unemployment has been long-term.⁴⁸ To examine this hypothesis, Table 1 below presents data on household behaviors toward land.

Table 1: Differences in Land Plots (in %)

| Size, in hectares | Households with at least one unemployed member | Households with no unemployed members |
|---|---|--|
| Increased size of household land plot since 1991 | | |
| No Increase | 61 | 66 |
| Increase by .01-.99 | 36 | 25.5 |
| Increase by 1.0-4.99 | 3 | 7 |
| Increase by 5.0-9.99 | -- | <1 |
| Increase by 10.0 or more | -- | 1 |
| Size of household plot | | |
| No Plot | 6 | 2 |
| .01-.99 | 94 | 97 |
| 1.0-4.99 | -- | <1 |

Comparing households with at least one unemployed person to households without any unemployed, the data yield the following conclusions. First, there is some difference between the two types of households concerning the tendency to increase the household plot: 39% of households with an unemployed person increased their plot, while 34% of households without any unemployed did so. Although not surprising, we do not consider this to be a significant difference and it does not meet our original expectation. We are unsure why the difference is not greater, but perhaps it is due to the fact that

households with an unemployed person do not have the monetary resources to acquire additional land, even though land is rather inexpensive.

Likewise, there are some, but not enormous differences in the sizes of household plots. Households with no one unemployed have a mean plot size of .30 hectares, while households with at least one person unemployed have a mean plot size of .23 hectares. It is worth noting that although almost all rural households have a private plot, households with an unemployed person are more likely *not* to have a household plot at all, compared to households in which everyone is employed (6% of households with an unemployed adult have no household plot, compared to 2% of households with no one unemployed). This is somewhat surprising, given the fact that in households with an unemployed person additional labor is available to work the plot, and because a household plot is positively correlated with total household income and income from the sale of produce.⁴⁹ In short, a household plot contributes to household non-monetary and monetary income.

The largest difference between the two types of households concern the use of rental land plots. Households with an unemployed adult are more likely to have a rental plot than a household with everyone employed, 42% to 33%. This is an interesting finding: why would a household with an unemployed member be more likely to have a rental plot and not simply increase the size of its household plot? Because a rental plot does not require a capital investment, rental payments are not expensive, and rental land is more temporary, whereas the expansion of a household plot entails an up front expenditure and the land is then owned permanently.

The permanence of additional land can be a drain on household resources in two ways: first, if the unemployed person finds employment, then the surplus labor to operate the plot disappears and the work burden must be redistributed; and second, taxes, fees, and upkeep require an allocation of scarce monetary resources. Given that households with an unemployed person already have lower incomes, it may be entirely rational to rent rather than buy land. In particular, the leasing of municipal land is very common, and the lease rate is regulated, making rental land very inexpensive.⁵⁰ The tendency of households with an unemployed person to rent additional land is reflected in Table 1.

There is also evidence that household and rental plots have different uses. The size of a household

plot is positively correlated with income from the sale of produce, which suggests that at least some household production is sold.⁵¹ However, a rental plot is *negatively* correlated with income from production sales. Although the correlation is not statistically significant at the .05 level of confidence, the fact that it is negatively signed suggests that production from a rental plot tends to be consumed, not sold. If this conclusion is correct, it implies that households use their plot to earn additional income from food sales, and use rental plots to grow food for consumption. The smallest difference between households with and without an unemployed person concerns the use of land plots allocated from a large farm. There is no statistically significant difference between the two types of households, as both overwhelmingly do not use land from a farm.⁵²

The second economic behavior concerns household food production. Similar to the hypothesis above, it might be expected that households with 'surplus labor capacity,' (at least one unemployed person), would produce more food than households in which all of the adults are employed and therefore have greater time constraints. Tending the plot, whether it be the household plot or a rental plot, contributes non-monetary income to the household, and thus would be encouraged. Annual food production data are presented in Table 2.

Table 2: Mean Volume of Annual Household Food Production

| | Households with at least one unemployed member | Households with no unemployed members | Production in households with at least one unemployed member as % of production in households with no one unemployed |
|--------------------------|---|--|---|
| Potatoes produced (kg) | 1133.11 | 1105.44 | 102.5 |
| Vegetables produced (kg) | 610.16 | 686.08 | 89 |
| Fruit produced (kg) | 229.14 | 381.89 | 60 |
| Meat produced (kg) | 301.94 | 411.63 | 73 |
| Milk produced (liters) | 4616.83 | 5020.86 | 92 |
| Hay produced (kg) | 4702.04 | 4782.74 | 98 |
| Eggs produced (number) | 1354 | 1747 | 77.5 |

Source: Authors' calculations based on survey data, 2001.

The table shows that households without any unemployed members produce more food, even though the mean size of the household is smaller and greater time constraints exist. With the exception of potatoes, households with an unemployed person actually produce less food than households in which all adults are employed. Potatoes are a staple in the Russian diet, and even more so in the rural diet compared to the urban diet.⁵³ As the rural diet has shifted to more carbohydrates, potatoes are likely to be even more important in the diet of households with an unemployed member because they are cheap, accessible, and easy to grow. The greatest differences in household production are for fruits and meat. With regard to meat, what is particularly interesting is that lower production levels of animal products in households with an unemployed member are not necessarily the result of fewer head of livestock.

For example, households with an unemployed member have a mean of 1.36 cows and calves, while households with no one unemployed have a mean of 1.37. Households with an unemployed member have a mean of 1.11 pigs, while households with no one unemployed have a mean of 1.41. The largest difference in the possession of animal production is the number of poultry. Households with an unemployed member have a mean of 13 poultry, while households with no one unemployed have a mean of over 27 poultry.

Our data therefore suggest that higher production levels are not necessarily a function of significantly more land or more animals. Nor is there evidence that employed households have significantly higher levels of mechanized machinery, use more fertilizer, or have other advantages in production. For example, households with no one unemployed have a mean of .40 autos and .20 motorcycles, while households with an unemployed adult have a mean of .36 autos and .17 motorcycles, a difference we do not feel is significant. Households with an unemployed adult are slightly more likely to own a truck (8% of households versus 6%). Moreover, both types of households have essentially the same proclivity to use mineral fertilizer, organic fertilizer, and pesticides. Finally, 30% of households with an unemployed adult have a greenhouse, while only 24% of households with no unemployed adult do. Thus, there are no clear trends to suggest that higher production levels are due to differences in productive capital possessed by the household.

The one primary difference between the two types of households concerns the cultivation of their

household plot. Households with an unemployed adult are much more likely to rely upon their own labor or the help of relatives, while households with no unemployed adult have a greater tendency to conclude an agreement with a large farm for assistance in cultivation. According to our data, 17% of households with an unemployed adult use agreements with a large farm for cultivation assistance, while 37.5% of households with zero unemployed adults do so.

Due to higher production volumes, it is to be expected that households without any unemployed members would sell more of their produce, which contributes to higher household income. These data are presented in Table 3. But beyond comparisons of food sales between the two types of households, the interesting question is how much food is consumed and how much sold within each type of household. These data are also shown in Table 3.

Table 3: Mean Volume of Annual Food Production Sales

| | Households with at least one unemployed member | Households with no unemployed members | Volume of sales in households with at least one unemployed member as % of production in households with no one unemployed |
|--|---|--|--|
| Potatoes sold (kg)/ % of production | 68/6% | 125.45/11% | 54 |
| Vegetables sold (kg)/ % of production | 117/19% | 84.71/12% | 138 |
| Fruit sold (kg)/ % of production | 00/0% | 155.27/41% | 0 |
| Meat sold (kg)/ % of production | 123.52/41% | 250.65/61% | 49 |
| Milk sold (liters)/ % of production | 2239.02/48.5% | 2745.02/55% | 81.5 |
| Hay sold (kg)/ % of production | 00/0% | 9.92/.2% | 0 |
| Eggs sold (number)/ % of production | 31/2% | 190/11% | 16 |

Source: Authors' calculations based on survey data, 2001.

The data show that with the exception of vegetables, households with an unemployed member sell less of their production compared to households with no one unemployed. Particularly important is the sale of meat, which is a high preference item. Households with an unemployed member sell less than one-half the volume of meat than do households with no one unemployed. In addition, households with an unemployed member sell none of their fruit and none of their hay. Comparisons across types of households, therefore, show that households with no one unemployed produce more and sell more of their production.

Previous field work has shown that household non-monetary income, represented by food consumption, increased during the 1990s.⁵⁴ In the present survey, calculations for the percentage of food production that is sold for each food product show that households with no one unemployed sell higher percentages of their total production, while households with an unemployed member consume a greater percentage of their total production, with the exception of vegetables. This finding is not unexpected, as an unemployed adult is a 'consumer' and not a 'producer' of income, and therefore food production that could be sold is instead consumed. Of course, some of the higher consumption is attributed to having a larger household. Overall, however, differences in the size of the household do not fully account for significantly lower food sales.

This section has shown that households with an unemployed member have more human capital, have potential 'surplus' (unused) labor, and are not disadvantaged with regard to productive capital (land, animals, and equipment). Thus, there are few differences in the possession of different types of productive capital between the types of households. However, there are significant behavioral differences: households with an unemployed member do not obtain or use significantly more land, they produce less food, and they consume more and sell less of their food production. Thus, as hypothesized, differences exist between the two types of households, but differences lie primarily in the utilization of economic opportunities. In other words, the main differences between the two types of households are in economic behaviors, and less in basic endowments of land, labor, and capital. This reality helps us to understand why such a high percentage of households with an unemployed member live in poverty and have lower mean household incomes. It is difficult to escape the conclusion that households with an unemployed

member are not utilizing their production potential to the full extent, and have wasted labor capacity which acts as a drag on household welfare.

Social Attitudes and Behaviors of the Rural Unemployed

This section uses the individual as the unit of analysis to assess various social aspects of the rural environment in which respondents live and work. While the section compares levels of satisfaction, sources of economic assistance, and different forms of participation between the employed and unemployed, the essence of the measurement is a general satisfaction with one's environment.⁵⁵ We would expect significant differences, especially if the cause of the unemployment was involuntary (which our survey did not measure). To begin, we would expect unemployed individuals to be less happy and to exhibit lower levels of satisfaction with their immediate environment. The data for personal happiness and levels of satisfaction are shown in Table 4.

Table 4: Satisfaction (in %)

| Question | Unemployed | Employed |
|---|-------------------|-----------------|
| How often do you feel happy? | | |
| Never | 17 | 19 |
| Sometimes | 55 | 55 |
| Often | 19 | 21 |
| Most of the time | 9 | 5 |
| Are you satisfied with family relations? | | |
| Absolutely dissatisfied | 2 | 3 |
| Dissatisfied | 2 | 4.5 |
| So-so | 17 | 17 |
| Satisfied | 66 | 56 |
| Absolutely satisfied | 14 | 19 |
| Are you satisfied with village life? | | |
| Absolutely dissatisfied | 5 | 3 |
| Dissatisfied | 6 | 10 |
| So-so | 39 | 31 |
| Satisfied | 45 | 51 |
| Absolutely satisfied | 5 | 5 |

Numbers have been rounded and may not add to 100 percent.

Source: Survey data, 2001.

Turning first to feelings of happiness, the data are surprising in two respects. First, there are no significant differences between the employed and unemployed, which is surprising because it would be expected that unemployed individuals would feel frustrated, despondent, and perhaps even angry about their condition. But the data show that the frequency of happiness 'sometimes' and 'often' do not differ significantly between the two groups. In fact, the mean level of happiness is higher for the unemployed than the employed: 2.20 to 2.13 (on a 4 point scale).

Second, unemployed respondents were almost twice as likely to feel happy 'most of the time' than the employed, which suggests either that rural work has become less and less pleasant, or that the condition of being unemployed is not necessarily psychologically debilitating. Our data do not support the idea that people who work in the rural economy are unhappy with their work, as only 6.5% of the entire sample, and 6.8% of employed individuals, expressed the sentiment that work had become worse in 2000. The default explanation is that the condition of being unemployed is not psychologically damaging. The interesting question is why wage arrears, which plagued Russia in the 1990s, would lead to increased depression, alcoholism, and even suicide among workers, but rural unemployment does not appear to have similar negative psychological effects.⁵⁶

Subsequent survey questions ask whether the respondent is satisfied with family relations and village life. With regard to family relations, again there are no significant differences.⁵⁷ The unemployed actually display lower levels of dissatisfaction, and somewhat higher levels of satisfaction than the employed: 80 percent of unemployed persons were 'satisfied' or 'absolutely satisfied' with family relations, whereas 75 percent of employed persons were. One explanation is that the stress of inadequate incomes, or having more than one job in order to earn sufficient income, contribute to family tension, while unemployed persons do not feel the same degree of stress.⁵⁸

Unemployed persons are slightly more likely to have lower estimates of satisfaction with village life, although the differences are not large. On a scale of 1-5, with 5 being absolutely satisfied, unemployed individuals have a mean satisfaction of 3.39 with village life, and employed individuals have a mean of 3.45, which is not statistically significant. In general, therefore, unemployed and employed persons have essentially the same level of satisfaction with village life.

Why would the unemployed have essentially similar, if not higher, levels of satisfaction than employed persons? We will discuss this question in more detail in the conclusion, but for now it is important to note that part of the answer lies in the use of economic assistance networks and the degree of support from them. Table 5 indicates the receipt of economic assistance from different sources.

Table 5: Receipt of Economic Assistance (in %)

| | Unemployed | Employed |
|---|------------|----------|
| How much assistance does your household receive from other family members? | | |
| None | 11 | 17.5 |
| A little or very little | 41 | 31 |
| Average | 11 | 10 |
| A lot or very much | 37.5 | 41 |
| How much assistance does your household receive from friends or neighbors? | | |
| None | 5 | 14 |
| A little or very little | 55 | 49 |
| Average | 14 | 15 |
| A lot or very much | 31 | 22 |
| How much assistance does your household receive from your farm? | | |
| None | 59 | 51 |
| A little or very little | 36 | 38 |
| Average | 5 | 7 |
| A lot or very much | -- | 4 |

Numbers have been rounded and may not add to 100 percent.
Source: Survey data, 2001.

The data in Table 5 are important for several reasons. First, they show that the unemployed are less likely to receive 'no' assistance from family, and more likely to receive at least 'a little' support from family. Employed persons are more likely to receive 'a lot' or 'very much' assistance from other family members, although the overall mean level of support for the two cohorts is very close. On a 1-5 scale, with 1 being 'no support' and 5 being 'very much,' unemployed persons have a mean of 2.53 and employed persons a mean of 2.61, which is the highest mean for any type of assistance, and shows this type of support is most common.

For assistance received from friends and neighbors, unemployed persons are less likely to receive 'no' support, more likely to receive at least 'a little' support, and more likely to receive 'a lot' or 'very much.' The mean level of support from friends and neighbors is 2.34 for unemployed persons and 2.03 for employed. These two sources of assistance are economically important because assistance helps support the unemployed person.

Perhaps more important, assistance prevents a sense of anomie by maintaining support networks inside the family and outside the household. Support from the family and friends is positively correlated with a happy mood and satisfaction with village life, and these correlations are statistically significant below the .01 level of confidence using a two-tailed significance test. Conversely, assistance from family and friends is *negatively* correlated with feelings of depression, loneliness, and sadness.⁵⁹

Assistance from a large agricultural enterprise is the least common source of assistance-- unemployed persons have a mean of .52 and employed persons have a mean of .81, showing that not much farm assistance is provided to either cohort. Unemployed persons are somewhat more likely not to receive any assistance, indicated by the 59% of the unemployed sample which responded they received no assistance, compared to 51% of the employed respondents. These trends those in the industrial realm, where enterprise benefits not only declined during the 1990s, but certain groups of workers experienced more erosion in benefits than others.⁶⁰

Regarding friends and family, our data suggest that unemployed persons do not retreat into isolation and do not withdraw from social interaction, but on the contrary remain involved in social activities. These data are presented in Table 6.

Table 6: Participation in Ceremonies (in %)

| | Unemployed | Employed |
|---|------------|----------|
| How often do you participate in family ceremonies? | | |
| Never | 11 | 12.5 |
| Seldom or very seldom | 42 | 45 |
| Sometimes | 20 | 14 |
| Often or very often | 28 | 28 |
| How often do you participate in neighbors' ceremonies? | | |
| Never | 5 | 15 |
| Seldom or very seldom | 64 | 58 |
| Sometimes | 11 | 14 |
| Often or very often | 20 | 13 |
| How often do you participate in village ceremonies? | | |
| Never | 33 | 36.5 |
| Seldom or very seldom | 48 | 51.5 |
| Sometimes | 11 | 6 |
| Often or very often | 8 | 5.5 |

Numbers have been rounded and may not add to 100 percent.

Source: Survey data, 2001.

The table shows that the unemployed are *less likely* to not participate at all in family or friends ceremonies, and are either equally or more likely to 'often' or 'very often' participate with family and friends. Overall, the mean participation rate for the unemployed is higher for family, friends/neighbors, and village ceremonies. All three types of ceremonies are on a 5 point scale, with 1 'never' and 5 'very often.' For family ceremonies, the mean participation for the unemployed is 2.33 and the employed 2.29. This shows that participation in family activities is most common, but also that the unemployed remain active participants despite their work status. For ceremonies of friends and neighbors, the mean for the unemployed is 2.11, and for employed persons 1.73, which shows that the unemployed are more actively involved with their neighbors, and the difference is significant. Participation in village ceremonies is least frequent for both cohorts. The unemployed have a mean of 1.24 and the employed 1.04, showing that the unemployed are somewhat more likely to participate but village participation is least frequent.

Part of the reason for higher participation rates on the part of the unemployed may be more free time. However, participation in social activities is important for two reasons: (1) it maintains assistance

networks; and (2) it contributes to positive feelings about self and one's environment. Point 2 is supported by positive correlations between participation in ceremonies and feelings of happiness, satisfaction about family relations, and satisfaction with village life.⁶¹ Thus, participation plays an important economic and psychological role in the lives of the rural unemployed.

Conclusion

Rural unemployment in Russia increased significantly during the 1990s, and may be as high as 38% of the rural work force. Rural unemployment is disproportionately high compared the economy as a whole and especially compared to industrial workers. An overwhelming percentage of households with an unemployed member live below the poverty level. Rural unemployment is expected to increase in the years ahead. This article analyzed rural unemployment in detail for the first time, and presented findings that are surprising. In particular, the data presented above presented the following conclusions:

- (1) Households with an unemployed member are not severely disadvantaged with regard to productive capital--land, animals, and equipment.
- (2) At the same time, households with an unemployed member do not take advantage of their 'surplus' labor and do not obtain higher levels of productive capital.
- (3) Households with an unemployed member produce less food, consume higher percentages of their household production, and sell less of their household production.
- (4) Satisfaction levels of unemployed persons are essentially equal to or better than that of employed persons.
- (5) Unemployed persons receive slightly less economic assistance from other family members, but more from friends and neighbors. Neither cohort receives significant assistance from large farms.
- (6) Unemployed persons have higher participation rates in the ceremonies of family members, friends and neighbors, and the village than do employed persons.

Although a very high percentage of households with an unemployed member live below the monetary threshold for poverty in our survey, the overall picture that emerges--one that is quite consistent

across different social measures--is that being unemployed is not a perilous condition, and does not seem to carry the same social-psychological consequences that are often attributed to urban unemployment. There is little evidence of acute economic need by rural households with an unemployed member, as food consumption from household production is greater than in households without an unemployed member.⁶²

If basic survival were an issue, rural households with an unemployed member would increase food production, yet that does not seem to be the case. Satisfaction levels toward family and village are comparable with the employed, and in some instances better than in households with no one unemployed. Personal happiness levels are higher for the unemployed than the employed. There is little evidence of anomie, isolation, or frustration among the unemployed. Unemployed persons do not withdraw from their social environment, but rather are involved in their communities and maintain social networks.

These surprising trends are explained by a number of factors, some of which are documented in the survey and some are not. First, the condition of unemployment is partially offset by employment within the household, which takes on two forms. The first type of employment was alluded to above and concerns work on the household plot. Our survey is not able to distinguish how much work each household member contributes to the household plot, but logically, the person without outside employment has the most time to devote to such labor. As noted above, this type of labor contributes monetary and non-monetary income to the household, and undoubtedly gives the unemployed member a sense of worth.

The second type of employment within the home concerns private business, which may include small-scale services or repair of watches, shoes, or appliances. This type of employment often yields 'hidden' income, which by some estimates constitutes one-quarter to one-third of all income earned by Russians. One study found that the lower the 'open' income of a household, the higher the percentage of its total income comes from 'nonregistered' supplementary employment (hidden income).⁶³ Therefore, unemployed persons are likely to be contributing hidden income to the household, which also provides them with a sense of belonging and worth.

A second factor contributing to the economic and psychological condition of the unemployed is the economic assistance provided by family and friends. This assistance has a dual purpose: on the one hand,

it helps sustain the unemployed person or the household with an unemployed person, especially if the assistance is food or labor on the household plot. On the other hand, the second purpose is social, that is, assistance helps the unemployed person feel connected to his social environment, and gives gratification in the knowledge that he/she has a support network and is not alone. In this respect, assistance provides psychological support and helps to prevent acute feelings of worthlessness, frustration, loneliness, and isolation.

The implications of our analysis are fourfold. First, from an economic perspective, households with an unemployed person are not as bad off as would be expected. Not only do unemployed persons have assistance networks, they most likely have hidden income, both of which sustain the person or the household. Furthermore, as argued above, households with an unemployed member have the capacity to increase household welfare by increasing the utilization of surplus labor represented by the unemployed person.

Second, from a political standpoint, it would appear that even though rural unemployment increased significantly during the 1990s, it is not a source of rural instability. The rural unemployed have not demonstrated or protested, as have other occupational groups, but instead have been quiescent.⁶⁴ In addition, there is little evidence of significant anti-system tendencies among the unemployed, shown by the fact that 12.4% of our unemployed sample voted for the Communist party in the 1999 Duma election, and only 9.4% of our unemployed sample voted for the Communist candidate G. Zyuganov in the 2000 presidential election.⁶⁵ Moreover, only 17% of the unemployed in our sample responded that the Communist Party best represents their interests, compared to 28% of employed respondents.

Third, from our analysis an interesting theoretical hypothesis begins to emerge concerning the issue of a Chayanov peasant household survival model versus a more modern employment model. What our data suggest is a two track adaptation to reform by rural households. On the one hand, there are households and individuals who are learning new ways to make a living, starting new businesses, and seek sources of income from sources other than the primary job. This cohort would be represented by the employed in our sample. On the other hand, there are those who are not employed outside the household, do not have much money, who essentially engage in subsistence existence, but who are generally happy

and who have a lot of social support. What we might be seeing, therefore, is the very beginnings of significant class stratification, which in a decade's time will be obvious to all, but right now is not.

Finally, from a policy standpoint, the fact that points 1-3 are true gives policy makers considerable latitude, for instance in pressing unprofitable farms to shed labor and become more efficient.⁶⁶ Unlike from some professions, our data suggest that policy makers do not have to fear rural militancy or political instability. However, unemployment constitutes lost labor power, and we have seen that the rural unemployed are highly educated and usually of working age. Rural labor mobility needs to be utilized in order to increase labor productivity, especially if unemployment increases as much as is estimated in the years ahead. In this respect, rural unemployment represents an opportunity to restructure the inefficient labor policies that were inherited from the Soviet era. This task is especially important as Russia moves toward membership in the WTO and global competition for its agricultural products. Therefore, rural unemployment is a problem that policy makers cannot afford to neglect if they want sustainable economic growth in the future.

ENDNOTES

¹ See, for example, Lynn D. Nelson and Irina Y. Kuzes, *Radical Reform in Yeltsin's Russia: Political, Economic, and Social Dimensions* (Armonk, NY, 1995); Ethan B. Kapstein and Michael Mandelbaum, eds., *Sustaining the Transition: the Social Safety Net in Postcommunist Europe* (New York, 1997); Bertram Silverman and Murray Yanowitch, *New Rich, New Poor, New Russia: Winners and Losers on the Russian Road to Capitalism* (Armonk, NY, 1997); Thane Gustafson, *Capitalism Russian-Style* (Cambridge, 1999); Chrystia Freeland, *Sale of the Century: Russia's Wild Ride from Communism to Capitalism* (New York, 2000); Jerry F. Hough, *The Logic of Economic Reform in Russia* (Washington, DC, 2000); Caroline Humphrey, *The Unmaking of Soviet Life: Everyday Economies after Socialism* (Ithaca, 2002); and Brigitte Granville and Peter Oppenheimer, eds., *Russia's Post-Communist Economy* (Oxford, 2002).

² Freeland, *Sale of the Century*, chap. 5; Silverman and Yanowitch, *New Rich, New Poor, New Russia*, chap. 6.

³ N. M. Rimashevskaya, ed., *Rossiia 2000: sotsial'no-demograficheskaya situatsiya* (Moscow, 2001), p. 89.

⁴ Bertram Silverman and Murray Yanowitch, *New Rich, New Poor, New Russia: Winners and Losers on the Russian Road to Capitalism*, Expanded edition (Armonk, NY, 2000), p. 92. However, it should be noted that even among the 'winners,' most evaluated their family's material condition as 'average,' with the second most common response 'poor.' See Yurii Levada, 'Vozvrashshayas' k probleme sotsial'noy elity,' *Monitoring obshchestvennogo meneniya: ekonomicheskie i sotsial'nye peremeny*, 1998, 1, p. 14.

⁵ See Philip Hanson, 'Regional Income Differences,' in Granville and Oppenheimer, eds., *Russia's Post-Communist Economy*, chap. 15.

⁶ Liudmila Khakhulina, 'Sotsial'noe neravenstvo v Rossiyskom obshchestve: mneniya i otsenki,' *Monitoring obshchestvennogo meneniya: ekonomicheskie i sotsial'nye peremeny*, 1999, 4, pp. 28-30. In 1992, 34% agreed or completely agreed that large income differences contributed to national prosperity, while 55% disagreed or completely disagreed. In 1999, only 16% agreed, and 73% disagreed. In 1992, about 66% thought the state should regulate income differences; in 1999, 80% thought so.

⁷ See Anders Aslund, 'Social Problems and Policy in Postcommunist Russia'; Gustafson, *Capitalism Russian-Style*, chap. 8; and Padma Desai and Todd Idson, *Work Without Wages: Russia's Nonpayment Crisis* (Cambridge, MA, 2000).

⁸ Debra Javeline, 'Labor Challenges and the Problem of Quiescence,' in Stephen K. Wegren, ed., *Russia's Policy Challenges: Security, Stability, and Development* (Armonk, NY, 2003), chap. 10.

⁹ Gustafson, *Capitalism Russian-Style*, p. 180.

¹⁰ Official data stated that 65 million people were employed in the economy, and 6.3 million were unemployed. *Rossiia v tsifrakh 2002* (Moscow, 2002), pp. 80, 86.

¹¹ Silverman and Yanowitch, *New Rich, New Poor, New Russia (2000)*, pp. 96-97.

¹² For an analysis of non-registration and reasons for visiting a local employment service, see Tatyana Chetvernina, 'Russian Unemployment in the mid-1990s: Features and Problems,' in Simon Clarke, ed., *Structural Adjustment without Mass Unemployment?* (Cheltenham, UK, 1998), esp. pp. 227-39.

¹³ *Rossiia v tsifrakh 2001* (Moscow, 2001), p. 85.

¹⁴ As cited in Anders Aslund, *How Russia Became a Market Economy* (Washington, DC, 1995), p. 23.

¹⁵ Quote from Serguey Braguinsky and Grigory Yavlinsky, *Incentives and Institutions: The Transition to a Market Economy in Russia* (Princeton, 2000), p. 240; unemployment data from *1997 Almanac* (Boston and New York, 1997), p. 139.

¹⁶ Anders Aslund, 'Social Problems and Policy in Postcommunist Russia,' p. 131.

¹⁷ Guy Standing, 'Reviving Dead Souls: Russian Unemployment and Enterprise Restructuring,' in Simon Clarke, ed., *Structural Adjustment without Mass Unemployment?*, p. 149.

¹⁸ In particular, see Simon Clarke, ed., *Structural Adjustment without Mass Unemployment?*

¹⁹ Hough, *The Logic of Economic Reform in Russia*, p. 23, who cites government officials expecting 10-15% unemployment in the early years of reform and as much as 30% in later years.

²⁰ Aslund, *How Russia Became a Market Economy*, p. 277.

²¹ Ibid; and Simon Clarke, 'Structural Adjustment without Mass Unemployment? Lessons from Russia,' in Clarke, ed., *Structural Adjustment without Mass Unemployment?* pp. 9-86.

²² Hough, *The Logic of Economic Reform in Russia*, p. 24.

²³ Zemfira I. Kalugina, 'Survival Strategies of Enterprises and Families in the Contemporary Russian Countryside,' Paper presented at Workshop on Rural Russia, Woodrow Wilson Center, Kennan Institute, Washington, DC, 4-6 May 1999; and Stephen K. Wegren, 'Socioeconomic Transformation in Russia: Where is the Rural Elite?' *Europe-Asia Studies*, 52, 2, 2000, p. 253.

²⁴ International Finance Corporation, *Monitoring Russian Reorganized Farms: An Integrated Analysis of Economic and Social Change in Nizhny Novgorod, Oryol and Other Oblasts, Results of 1997 Studies* (Washington, DC, 1998), pp. 30-31.

²⁵ On different aspects of unemployment, but excluding rural unemployment, see Clarke, ed., *Structural Adjustment without Mass Unemployment?* For an analysis of sociological characteristics of the unemployed, see Zoya Kupriyanova, 'Bezrobotitsa i bezrobotnye,' *Monitoring obshchestvennogo meneniya: ekonomicheskie i sotsial'nye peremeny*, 1999, 1, pp. 28-31.

²⁶ *Rossiia v tsifrakh 2002*, pp. 80, 86.

²⁷ *Demograficheskiy ezhegodnik Rossii 2001* (Moscow, 2001), p. 37.

²⁸ In addition, a second dichotomous variable was created (but not included in the analysis of this paper): 'working' and 'not working.' The second variable, 'not working,' captures all persons who for one reason or another are not employed in an economic activity outside the home, which includes persons who are disabled, retired, unemployed, homemaker, or on child care leave. This variable compares those who are not working to those who are working either full or part time. This second variable expands the conception of unemployment to mean 'not working' by including the retired, homemakers, and disabled. Persons who are disabled, on child care leave, or are homemakers might seek employment outside the household in a small private business, for example shoe, watch, or other type of repair, sewing, or child care. Persons who are retired most likely are not seeking outside employment, but rather tend the household plot. Although statistical computations and tables were created using this second dichotomous variable, they are not included in this article in order to avoid unnecessary confusion and complication in the analysis. Suffice it to say that the working cohort is significantly more economically active than the non-working cohort. Persons who are interested in these data may contact the authors.

²⁹ *Rossiia v tsifrah 2001*, p. 79.

³⁰ *Rossiyskiy statisticheskiy ezhegodnik 2001* (Moscow: 2001), p. 144.

³¹ Stephen K. Wegren and A. Cooper Drury, 'Patterns of Internal Migration During the Russian Transition,' *Journal of Communist Studies and Transition Politics*, 17, 4, 2000, p. 24.

³² A. Kruglikov, 'Problemy zanyatosti sel'skogo naseleniya,' *APK: ekonomika, upravlenie*, 2, 2001, p. 55. While about one-half of the rural unemployed left their place of employment on their own, more than a quarter were released due to reductions in farm labor as a consequence of decreased production.

³³ R. V. Ryvkin, ed., *Sotsial'nye posledstviya rynochnykh reform v Rossii* (Moscow, 1997), p. 181.

³⁴ Within the Central Region the oblasts with the highest rates of rural unemployment were Vladimir, Ivanovo, and Yaroslavl'.

³⁵ N. Vlasova, 'O polozhenii na rynke truda v sel'skoy mestnosti,' *Ekonomist*, 2001, 9, p. 91.

³⁶ A. V. Petrikov, "Sotsial'nye problemy Rossiyskoy derevni," in A. V. Petrikov, ed., *Ekonomicheskie i sotsial'nye problemy agrarnogo sektora* (Moscow, 1998), p. 166.

³⁷ Vlasova, 'O polozhenii na rynke truda v sel'skoy mestnosti,' p. 91.

³⁸ V. Mashenkov and V. Malakhova, "Bezrobotitsa na sele i puti eyo smiagcheniya," *APK: ekonomika, upravlenie*, 1996, 3, p. 19.

³⁹ B. P. Pankov, 'Problemy regulirovaniya rynka truda na sele,' in A. V. Petrikov, ed., *Rynohnaya transformatsiya sel'skogo khozyaystva: desiateletniy opyt i perspektivy* (Moscow, 2000), p. 285.

⁴⁰ *Trud i zanyatost' v Rossii* (Moscow, 1999), pp. 38, 61.

⁴¹ Zemfira Kalugina, *Rural Women of Russia under Agrarian Transformations* (Novosibirsk, 1999), p. 18; *Trud i zanyatost' v Rossii*, p. 84.

⁴² Kalugina, *Rural Women of Russia under Agrarian Transformations*, p. 18.

⁴³ Mashenkov and Malakhova, 'Bezrobotitsa na sele i puti eyo smiagcheniya,' p. 20.

⁴⁴ Vlasova, 'O polozhenii na rynke truda v sel'skoy mestnosti,' p. 92.

⁴⁵ At the time of our survey in 2001, the official subsistence minimum was 1,547 rubles per person per month. Using a mean of three persons per household, the poverty level is defined as households with 4,641 rubles or less per month.

⁴⁶ David J. O'Brien, Valeri V. Patsiorkovski, and Larry D. Dershem, *Household Capital and the Agrarian Problem in Russia* (Aldershot, 2000).

⁴⁷ Households with higher human capital grow more produce on their household plot, and sell more, which contributes to higher levels of income. See *ibid*, chap. 9.

⁴⁸ In our sample, 39% of unemployed persons lost their job in the preceding year (2000) and were still unemployed at the time of the survey, while 5% of employed persons had lost a job in the preceding year but were employed at the time of the survey. Vlasova

notes that, nationwide, almost 47% of unemployed persons searched for work for more than a year, compared to 41% of urban unemployed. Vlasova, 'O polozhenii na rynke truda v sel'skoy mestnosti,' p. 92. A survey by The Russian Center for Public Opinion Research conducted a survey of 2,409 respondents in November 1998 throughout Russia, finding that 45% of respondents were unemployed for less than six months, 23% from six to 12 months, and 27% more than a year. The average length of time of being unemployed in 1997 was 14 months, and in 1998, 12 months. Kupriyanova, 'Bezrabotitsa i bezrabotnye,' *Monitoring obshchestvennogo meneniya: ekonomicheskie i sotsial'nye peremeny*, p. 29.

⁴⁹ Using Pearson correlation coefficients with a two-tailed significance test, both correlations are statistically significant at the .05 and .01 level of confidence, respectively.

⁵⁰ On land buying and leasing land, see Stephen K. Wegren and Vladimir R. Belen'kiy, 'Change in Land Relations: The Russian Land Market,' in David J. O'Brien and Stephen K. Wegren, eds., *Rural Reform in Post-Soviet Russia*, (Washington, DC, 2002), pp. 95-97, 103-110.

⁵¹ The correlation is statistically significant at the .01 level of confidence, using a two-tailed significance test.

⁵² It is interesting to note, however, that if a household with an unemployed person does have land from a farm, its size is likely to be in excess of 1.0 hectare. This is interesting because the mean size of a household plot for the entire sample is .25 hectares, and 97% of all households have a plot between .01-.99 hectares. Thus, although the use of allocated farm land is rare, when it does occur the size of such a plot is significant and exceeds the size of the household plot.

⁵³ L. V. Bondarenko, 'Tendentsii v potreblenii sel'skogo naseleniya,' *Ekonomika sel'skokhozyaystvennykh i pererabatyvayushchikh predpriyatii*, 1998, 3, p. 38; and *Prodovol'stvennyy rynek Rossii* (Moscow, 2000), p. 56.

⁵⁴ O'Brien, Patsiorkovski, and Dershem, *Household Capital and the Agrarian Problem in Russia*, chap. 8.

⁵⁵ The compatibility of the three variables is shown by Alpha Reliability which measures the degree to which variables are measuring the same phenomenon. In short, it is similar to multi-collinearity, but in this case we want collinearity to be sure the variables are measuring similar phenomena. The Alpha Reliability for the three variables is .714, on a scale of 0-1.0, which is a fairly strong indicator of reliability.

⁵⁶ See Desai and Idson, *Work Without Wages*; and for the psychological and health effects of wage arrears, see Debra Javeline, 'Labor Challenges and the Problem of Quiescence,' chap. 10.

⁵⁷ On a scale of 1-5, with 5 being absolutely satisfied, unemployed individuals have a mean satisfaction of 3.89 with family, and employed individuals have a mean of 3.85.

⁵⁸ This is shown by considering two additional variables about the respondent's mood: the degree to which the respondent enjoys life, and the degree to which everything is difficult. Both variables are scaled 1-4, with 1 being 'never' and 4 'most of the time.' Unemployed persons have a mean of 2.44 for enjoyment of life, while employed have a mean of 2.29, which shows that unemployed persons enjoy life somewhat more. Expressed as a percentage, 16% of the unemployed respondents enjoyed life 'most of the time' while only 9% of unemployed persons did so. For the variable 'everything is difficult,' unemployed persons have a mean of 1.94 and employed persons 2.22, which shows that life is somewhat less complicated and easier for unemployed persons. Expressed as a percentage, 36% of unemployed persons answered that everything is difficult 'never,' while only 22% of employed persons said so; and 8% of unemployed persons said everything is difficult 'most of the time,' while 15 percent of employed persons gave this response.

⁵⁹ Correlations for family assistance are statistically significant below the .05 level of confidence, and for assistance from friends and neighbors, the significance level is .01 or below.

⁶⁰ Standing, 'Reviving Dead Souls,' p. 182.

⁶¹ All correlations were statistically significant below the .001 level of confidence using a two-tailed significance test.

⁶² This conclusion is supported by other survey data on the unemployed. In the survey conducted by The Russian Center for Public Opinion Research, 12% of the respondents indicated that the loss of work did not 'substantially' affect the material condition of their family, even though 54% of the sample were males and therefore the main breadwinner. Kupriyanova, 'Bezrabotitsa i bezrabotnye,' *Monitoring obshchestvennogo meneniya: ekonomicheskie i sotsial'nye peremeny*, p. 29.

⁶³ More generally, we should note that the higher the family income, the higher the ruble value of hidden supplementary income, although the percentage contribution to total income is lower. See Irina Perova and Liudmila Khakhulina, 'Otsenka dokhodov ot

nezaregistririvannoy dopolnitel'noy zanyatosti,' *Monitoring obshchestvennogo meneniya: ekonomicheskie i sotsial'nye peremeny*, 1998, 3, p. 35.

⁶⁴ On labor militancy see Walter D. Connor, *Tattered Banners: Labor, Conflict, and Corporatism in Postcommunist Russia* (Boulder, 1996), pp. 151-162.

⁶⁵ By comparison, the Communist party received 24.29% of the national party vote in the 1999 Duma election, and Zyuganov received 29.17% of the presidential vote in 2000.

⁶⁶ In 2001, 48% of large agricultural enterprises were unprofitable, down from 89% in 1998.