THE SECTORAL DISTRIBUTION OF EMPLOYMENT AND JOB SEGREGATION BY GENDER IN RUSSIA

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Abstract

The gender patterns of industrial, occupational, and firm-type distribution of employment in Russia 2000-02 are examined using a nationally representative household survey. After a decade of reforms, the degree of gender job segregation remains high. Women gravitate to lower paid industries and occupations, while men concentrate in more highly paid sectors of the economy. The attitudes and stereotypes resulting from the patriarchal social and cultural legacy play an important role in determining the patterns of gender job segregation by influencing both employers' preferences and workers' choices.

JEL classification: J1, J3, P2

Key words: employment, gender, Russia, transition

1. Introduction

In Soviet Russia, strict labor-market regulations based on the Constitution and Labor Codes that proclaimed the principle of equal pay for equal work regardless of gender seemed to minimize the possibilities for discrimination against women. Nevertheless, a persistent gender pay gap in favor of men existed (McAuley (1981), Ofer and Vinokur (1992), Katz (2001)). The literature generally agrees that this pay gap was largely a result of job segregation by gender, which reflected patriarchal social attitudes and stereotypes rooted in Russia's historical background and cultural traditions and institutionalized and sustained through the Soviet labor legislation,

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official policies, and unofficial labor-market practices (see Ogloblin (1999)).

The first years of Russia's economic "shock therapy," which started in 1992 with the price and wage liberalization, resulted in dramatic changes in the labor market. The managers' influence on labor relations and wage setting increased greatly, with virtually no workers' interference (Commander et al. (1995, 1996)). Ogloblin (1999) found that in 1994-96 gender job segregation accounted for most of the gender earnings differential and concluded that the new economic conditions had not essentially changed the social attitudes and stereotypes that formed "female" and "male" jobs.

In 2000-02, Russia experienced a new stage of transition. After recovering from the 1998 financial crisis, the economy started to grow, and labor market responded quickly with rising real wages, falling unemployment, and declining wage arrears. The growing understanding of the need to adjust Russia's labor relations to the new economic conditions resulted in the passage in 2001of a new Labor Code, which takes a modest step in making labor-market legislation more consistent with a market economy. Ogloblin (2005) shows that on this new stage of Russia's transition, job segregation by gender is the biggest contributor to the gender pay gap.

What are the patterns of sectoral distribution of employment by gender after a decade of radical economic reforms? Do the social attitudes and stereotypes that shaped the "female" and "male" industries and occupations during the Soviet era and the early years of Russia's transition still play an important role? The present study addresses these questions by examining occupational, industrial, and firm-type distributions of employment and the patterns of job segregation by gender in Russia 2000-02.

The study uses individual-level data from Phase II of the Russia Longitudinal Monitoring Survey (RLMS), a household-based nationally representative survey designed and implemented by an interdisciplinary partnership of leading Russian and American

experts.[1] The sample includes working individuals, women aged 18-54 years old and men aged 18-59 years old, which are considered the normal working ages for women and men in Russia. A preliminary analysis of the data has shown that the differences and trends in the gender patterns of employment within the period of 2000-02 are not as well-defined as those between this period as a whole and the previous periods. Hence, pooled 2000-02 data are analyzed as a homogeneous dataset representing the new phase of Russia's transition.

2. Employment Distribution and Job Segregation by Gender in Russia's Transition Economy

Table 1 shows Russia's labor market statistics for 2000-02 in comparison with 1994-96. The labor force participation and unemployment rates are calculated using both the ILO definition of labor force and—to account for a significant percentage of the "discouraged workers"—the definition that includes all individuals who want to find a job. In 2000-02, both male and female labor force participation rates are very high by international standards and only slightly lower than the 1994-96 rates. Both male and female participation rates calculated using the ILO definition are noticeably lower than those that include all workers who want to find a job, which indicates a considerable percentages of the "discouraged workers." Women's participation is only slightly lower than men's. Given this, selection of women into labor force is not likely to bear any significant influence on the gender pay gap.

The level of unemployment in 2000-02 is virtually the same as that in 1994-96, with no apparent gender differences in the unemployment rates. However, an increase in the percentage of the

[1] The survey has been coordinated by the Carolina Population Center (CPC) at the University of North Carolina at Chapel Hill in collaboration with Paragon Research International and Russian Academy of Sciences. Detailed project descriptions, including the sampling techniques, and the RLMS datasets are available from the RLMS Web site (http://www.cpc.unc.edu/projects/rlms/rlms_home.html).

discouraged male workers may be noteworthy. In both periods wage employment accounts for more than 90% of the employed women and men. The gender differences in hours worked are more pronounced. Compared to men, women work shorter hours, and a substantially higher percentage of them works part-time.[2]

Table 1. Russia's Labor Market Statistics, (%).[a]

	1994-1996		2000-2002	
	Women	Men	Women	Men
Participation rate				
ILO definition	82.9	87.4	78.2	83.8
Want to work [b]	93.1	94.6	90.2	93.2
Unemployment rate				
ILO definition	10.3	9.7	9.9	11.2
Want to work [b]	20.1	16.6	21.9	20.2
Wage employment rate [c]	97.0	94.5	92.7	90.5
Employed part-time [d, e]	—	—	13.9	3.8
Usual weekly hours [e]	—	—	40.9	46.0
Worked part-time last month [d, f]	32.6	16.6	29.1	14.0
Average weekly hours worked last month [f]	36.8	42.1	37.7	42.6
Wage arrears [g]	45.4	50.9	24.0	30.0

[a] Calculated from the RLMS data, Rounds 5-7 and 9-11, for women aged 18-54, and men aged 18-59. [b] Labor force is defined as those who either are employed or are not employed but want to find a job. [c] Percentage of the employed who work for an organization and don't own more than 20% of it. [d] Less than 35 hours per week. [e] Calculated for the wage employed.
[f] Calculated for the wage employed who worked at least 10 hours per week.
[g] Percentage of the wage employed who are owed back wages.

[2] The worker part-time or fulltime status is best defined by usual weekly hours worked, the data on which are not available in the RLMS Rounds 5-7. For the purposes of comparison, hours actually worked last month are also used as an indicator of the worker status. This variable, however, may also reflect vacations, involuntary leaves, and slack work due to business conditions, which explains why it shows lower average weekly hours worked and higher percentages of part-time workers.

An important difference between the pre-crisis and post-crisis labor markets is that wage arrears are notably less prevalent in the latter. But in both 1994-96 and 2000-02, the incidence of arrears is higher among men than among women. Since Russia's wage non-payments are firm-specific, rather than individual-specific (Earle and Sabirianova (2002), Lehmann et al. (1999)), this suggests that men-dominated organizations are less likely to pay wages on time than are those dominated by women.

Table 2 shows the industrial distribution of employment by gender in Russia 2000-02. The patterns of segregation are distinct and very similar to those in 1994-96.[3] More than 45% of the wage employed women work in trade, consumer services, health care, and education, whereas the percentage of men employed in these industries is less than 15%. On the other hand, more than 44% of men are employed in agriculture, extractive industries, construction, transportation, and protective service, while the respective figure for women is only about 17%. The index of industrial segregation, calculated at 0.365, is greater than that in 1994-96 (0.324) and is above average by international standards. For comparison, the industrial segregation indices calculated by Blau and Kahn (1996) are 0.247 for Hungary, 0.291 for Switzerland, 0.320 for Germany, 0.343 for the U.S., 0.349 for the U.K., and 0.426 for Sweden.

Industrial segregation by gender is also reflected in the distribution of employment by the type of firm (Table 3). Since women-dominated health care and education consist mainly of state budgetary organizations, the percentage of women working for these organization (36.3%) is much higher than that of men (19.0%).

The index of occupational segregation calculated at the one-digit level of aggregation is somewhat smaller in 2000-02 (0.476) than it was in 1994-96 (0.514), but remains high by international standards. The gender segregation indices at the one-digit level computed by Blau and Kahn (1996) are 0.322 for Switzerland, 0.357 for the US,

[3] This and all further comparisons with 1994-96 use the results from Ogloblin (1999).

0.408 for Hungary, 0.422 for Germany, 0.440 for the UK, and 0.461 for Sweden.

Table 2. Industrial Distribution of Employment, 2000-02 (%).[a]

Industry [b]	Women	Men
Agriculture [c]	7.2	12.8
Extractive industries [d]	1.6	4.2
Manufacturing, industrial repair	19.9	27.0
Construction	2.6	9.5
Transportation	3.6	9.6
Trade, consumer services	16.6	9.0
Housing, utilities, municipal services	4.4	6.8
Health care	12.0	2.0
Education	17.2	3.5
Information, science, professional services [e]	6.2	4.1
Government, public administration	3.7	1.6
Protective services [f]	2.3	8.4
Others [g]	2.7	1.5
Segregation index [h]	0.365	

[a] Calculated from the RLMS data, Rounds 9-11, for wage employed workers, women aged 18-54 and men aged 18-59. [b] The industries are coded by the author from the original textual responses. The classification is based on the tabulation categories in International Standard Industrial Classification (ISIC) with the specific features of the Russian transition economy taken into account. [c] Including agri-services, fishery, and forestry. [d] Include fishing and logging. [e] Including communication, media, financial, real estate, and other professional services. [f] Police, fire, armed forces, and other protective services. [g] Sports, culture, entertainment, recreation, and other industries, not elsewhere classified. [h] Computed as $0.5\sum_i | p_{im} - p_{if} |$, where p_{im} is the proportion of men employed in industry i and p_{if} is the proportion of women employed in industry i.

Table 3. Distribution of Workers by Firm Type, 2000-02 (%).[a]

Type of firm	Women	Men
Budgetary organization [b]	36.3	19.0
State enterprise [c]	24.1	29.6
Firm with mixed ownership	10.7	15.3
Private firm	21.8	26.9
Indeterminate ownership	7.2	9.2
Segregation index [d]	0.173	

[a] Calculated from the RLMS data, Rounds 9-11, for wage employed workers, women aged 18-54 and men aged 18-59. [b] Non-profit organizations financed from the state or municipal budget. [c] Business firms owned by the state or municipal government. [d] Computed as $0.5\sum_i | p_{im} - p_{if} |$, where p_{im} is the proportion of men working for firm type i and p_{if} is the proportion of women working for firm type i.

According to Gunderson (1989) and Kidd and Shannon (1996), gender segregation within the one-digit occupational categories is usually substantial. To account for this segregation, I group the four-digit occupations within each one-digit category according to the following rule: an occupation is "female" or "male" if more than 70% of those in the occupation are women or men, respectively. The occupational distribution of employment by gender in Russia 2000-02, with occupations classified using this approach is shown in Table 4.

The segregation index calculated from this distribution is 0.669. The index of occupational segregation calculated by Ogloblin (1999) for 1994-96, using the same method, is 0.673. That is, in the new phase of transition, the degree of occupational gender segregation remains virtually the same, very high. "Female" occupations employ 70.0% of wage-employed women, while 70.1% of wage-employed men have "male" jobs. The patterns of occupational segregation in Table 4 are also largely the same as those in 1994-96 and are well explained by the "female" and "male" job stereotypes mentioned above.

Table 4. Occupational Distribution of Employment, 2000-02 (%).[a]

Occupation [b]	Women	Men
Managers		
Female	0.2	0.0
Male	0.7	2.6
Other	3.7	3.2
Professionals		
Female (teachers, accountants)	16.0	1.7
Male (engineers)	0.2	0.8
Other	7.2	5.9
Technicians and associate professionals		
Female (nurses, pre-school teachers)	17.7	0.8
Male (detectives, trade brokers)	0.6	2.4
Other	5.1	4.5
Clerks		
Female	10.2	1.3
Male	—	0.1
Other	—	—
Service and market workers		
Female (shop assistants, cooks)	12.7	1.5
Male (police, military)	0.4	5.0
Other	0.1	0.0
Craft and related trade		
Female (plasterers, painters)	3.3	0.4
Male (mechanics, welders, carpenters)	1.0	25.4
Other	0.4	0.6
Plant/machine operators and assemblers		
Female (weaving- and sewing-machine operators)	2.5	0.4
Male (drivers, motorized plant operators)	1.4	25.8
Other	3.9	6.3
Unskilled		
Female (helpers, cleaners)	7.5	0.6
Male (freight handlers)	1.5	7.9

Table 4. Continued.

Occupation [b]	Women	Men
Other	3.9	2.9
Segregation index [g]	0.669	

[a] Calculated from the RLMS data, Rounds 9-11, for wage employed workers, women aged 18-54 and men aged 18-59. [b] Occupations were coded by the RLMS team, generally following the International Standard Classification of Occupations (ISCO-88) but taking into account the idiosyncrasies of some occupations in Russia. Typical examples of "male" and "female" occupations are given in parentheses. [g] Computed as $0.5\sum_i | p_{im} - p_{if} |$, where p_{im} is the proportion of men employed in occupation i and p_{if} is the proportion of women employed in occupation i.

3. Explaining the Patterns of Gender Job Segregation

The results of the gender earnings differential decomposition in Ogloblin (2005) show that the most highly paid industries are extractive industries, construction, and transportation, which are, as shown in Table 2, heavily dominated by men. And the lowest paid industries, such as education and health care, are by large "female" industries. Also, the earnings in the men-dominated private sector are higher than those in the state sector, where most women work. The main contributors of occupational segregation to the gender pay gap are highly paid "male" operator and craft occupations and lower-valued "female" technician, clerical, service, and unskilled, occupations.

Since "male" and "female" jobs account for most of the gender pay gap in today's Russia, an important question is what explains this job segregation. Do the social attitudes and stereotypes that caused gender job segregation by shaping the "female" and "male" industries and occupations in the Soviet past still play a role in determining the patterns of job segregation by gender? The RLMS data from 2000 provide some evidence that supports an affirmative answer to this question. The respondents answers to the question whether certain representative jobs are more suitable for men or for women are summarized in Table 5.

Table 5. Suitability of certain jobs for women and men in the RLMS respondents' opinion. [a]

Occupation [b]	Women, %	Men, %
Director of a large enterprise		
More suitable for men	69.1	74.8
More suitable for women	1.2	1.3
Equally suitable for men and women	29.7	23.9
School principal		
More suitable for men	46.7	43.5
More suitable for women	12.4	18.2
Equally suitable for men and women	40.9	38.3
Store director		
More suitable for men	24.9	27.3
More suitable for women	21.4	22.5
Equally suitable for men and women	53.8	50.2
Engineering designer		
More suitable for men	68.0	66.8
More suitable for women	3.7	4.1
Equally suitable for men and women	28.3	29.2
Teacher		
More suitable for men	8.5	8.1
More suitable for women	33.4	39.8
Equally suitable for men and women	58.1	52.1
Doctor		
More suitable for men	8.3	6.7
More suitable for women	15.4	22.5
Equally suitable for men and women	76.3	70.8
Bricklayer		
More suitable for men	97.4	96.5
More suitable for women	0.3	0.5
Equally suitable for men and women	2.3	3.0
Cashier		
More suitable for men	2.6	2.8
More suitable for women	85.5	85.6
Equally suitable for men and women	11.9	11.6
Entrepreneur		
More suitable for men	34.2	38.1

Table 5. Continued

Occupation [b]	Women, %	Men, %
More suitable for women	2.4	2.4
Equally suitable for men and women	63.4	59.5

[a] Calculated from the RLMS data, Round 9 (2000) for working-age respondents. [b] The translation of this question in the English variant of the Questionnaire is not always accurate; the occupation definitions in the table are direct translations from the original Russian Questionnaire.

The gender job preferences are most remarkable for the representative occupations that are among the main contributors to the gender pay gap through occupational segregation. Women and men are almost unanimous in their opinion that bricklayer—which represents a typical "male" craft occupation—is more suitable for men than for women. At the same time, more than 85% of both female and male respondents regard cashier, a typical "female" service job, as more suitable for women, with less than 3% saying that it's more suitable for men. For professional occupations ("male" engineering designer and "female" teacher and doctor) these gender preferences are somewhat less pronounced, but still quite remarkable. Managerial occupations are generally regarded as more suitable for men than for women, but the strength of this preference depends on the industry being more "male" or "female." And there is a clear preference for men if a job is associated with entrepreneurship, risk, or high responsibility (entrepreneur and director of a large enterprise).

These social attitudes are likely to influence both employers' preferences and workers' choices. Standing (1994, 1996) found that in the early years of Russia's transition, employers expressed strong preferences for men in heavy industries and for women in light industries. He explains these preferences primarily by employers' perception of gender specific skills. And, apparently, "men's" skills are valued more highly. In the RLMS, only 34.5% of the female respondents and 43.4% of the male respondents think that women and men have equal opportunities to get a good, highly paid job, and only 2.7% of women and 5.9% of men believe that this opportunity

is greater for women.[4]

Women's preferences for lower paying jobs are often explained by compensating differentials (Filer (1985), England et al. (1988)). Ogloblin (1999) has found some evidence that in Russia's transitional labor market, high pay is more important for man than for women, who show higher preferences for reduced work hours and flexible schedule, for work that is not physically hard or harmful, for work that is not very responsible and allows more family time, and for workplaces that are close to home and provide childcare facilities.

These women's "preferences," however, are to a certain extent forced by the patriarchal social context and popular attitudes, which emphasize the role of women as "homemakers" and men as "breadwinners" and which are still strong in Russia. According to the RLMS (2003), 51.2% of women and 65.3% of men agree that it's a husband's responsibility to earn money and a wife's responsibility to take care of the house and children. Only 23.9% of women and 21.5% of men disagree with this statement (the rest are not sure).[5] It is worthy of note, however, that the percentage of women who accept this socially prevalent attitude is noticeably lower than that of men.

4. Conclusions

After a decade of radical reforms, the degree of industrial, occupational, and firm-type segregation by gender in Russia remains high. The patterns of sectoral distribution of employment by gender in 2000-02 are remarkably similar to those in the early years of transition. The patriarchal social attitudes and stereotypes that shaped the "female" and "male" industries and occupations during the Soviet era still influence both employers' preferences and workers' choices causing job segregation by gender. Women gravitate to lower paid but more "family friendly" work, whereas

[4] Calculated from the RLMS data, Round 9, for working-age respondents.
[5] Calculated from the RLMS data, Round 12, for working-age respondents.

men seek jobs that are physically harder but more highly paid. And men have better opportunities to get high-paying jobs than do women. Although women show preferences for jobs that the popular stereotypes classify as "female," these "preferences" are to a certain extent forced by the patriarchal social environment and prevalent attitudes.

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