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MULTIPLE JOB HOLDING IN RUSSIA DURING ECONOMIC TRANSITION

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Abstract

This article analyzes multiple job holding in the context of economic transition. Evidence from a nationally representative longitudinal survey of Russian citizens is used to characterize secondary jobs and second job holders, with emphasis on the determinants of multiple job holding. There has been a marked increase in multiple job holding, rising from 5.6 percent overall in 1992 to 10.1 percent in 1996. Economic conditions prevalent in Russia's labor market are found to strongly affect secondary job activity. Workers who have experienced wage arrears, been placed on involuntary leave, or are working less than full-time are all significantly more likely to take on second jobs. Higher education nearly doubles this probability. As transition has progressed, women have become not only much less likely to engage in additional work, but those that do so receive significantly lower second-job wages, with a gender wage gap of 68 percent, over 3 times that for primary jobs. Marriage and young children are associated with lower multiple job holding rates for women.

KEY WORDS: Multiple Job Holding, Economic Transition, Russia

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I. Introduction

In recent years, many economies throughout the world have undertaken the challenge of building a market-based economy from an existing centrally planned system. A common characteristic of these economies has been a relatively high labor force participation rate stemming in part from a socialist ideology which espoused the duty and right to work. Prior to economic transition, individuals were required to work if able, and unemployment was officially eradicated. However, during the period of economic restructuring, the work requirement is no longer universally binding, and open unemployment has become a critical issue. In addition, the process of economic transformation has had detrimental welfare effects on much of the population. In Russia, poverty has increased markedly from approximately one quarter of the population in 1992 to over two-fifths in 1995 (World Bank, 1995; Kolev, 1996), and real consumer expenditure at the end of 1995 was only 67 percent of its pretransition level in 1991 (Russian Economic Trends, 1996). Overall wage inequality, measured by the 90-10 log wage differential, has nearly doubled since 1991, surpassing the levels observed in most advanced industrial economies (Brainerd, 1995). Exacerbating the increased wage inequality are nonpayment of wages, involuntary leave, short-time work, and increasing unemployment. The unemployment rate was approximately 8 percent in 1995, with individuals on involuntary leave constituting another 1.5 percent of the labor force, and those on short-time work a further 3 percent. During 1995, nearly 30 percent of all firms were experiencing wage arrears at any given time.

This paper examines one way in which labor market behavior has changed in response to these conditions, namely the ability and willingness of individuals to take on a second job in addition to their primary employment. Multiple job holding has received surprisingly little attention given its prevalence in modern economies. In a developed economy such as the United States, approximately 20 percent of working males and 12 percent of working females hold a second job in addition to their primary employment for some portion of a given year (Paxson and Sicherman, 1996). Moreover,

greater than half of continuously working American males hold a second job at least once during their lives. Multiple job holding is more common in developing countries. For example, 27 percent of male workers in Malaysia in 1976 (Schaffner and Cooper, 1991) and 50 percent of workers in rural Gujarat, India in 1987-88 held two or more jobs (Unni, 1992).

Working a second job in addition to full-time state sector employment was also a feature of Soviet economic life. Evidence from the Soviet Interview Project[1] (SIP) indicates that in the late 1980's, 6 percent of Soviet citizens held a second state job while 13 percent engaged in "private work or a private job other than a private plot" (Millar, 1987). This is broadly consistent with an estimate by Soviet economists that 30 million individuals, or 20 percent of the total Soviet workforce in the late 1980's, engaged to some degree in illegal second economy activities (Koryagina, 1990). With economic transition, opportunities to engage in private economic activity have become legal and have markedly increased. At the same time as new opportunities arise, many individuals now face austere economic conditions brought on by job loss, nonpayment of wages, forced leave, and a declining macroeconomic environment.

This paper first documents the characteristics of second jobs and second job holders in Russia, and then investigates the role of demographic and economic characteristics in explaining multiple job holding behavior. Men, urban residents, and higher educated individuals have the highest secondary employment rates. Multiple job holding in Russia has nearly doubled from 5.6 percent in 1992 to 10.1 percent in 1996. Economic conditions prevalent in Russia's labor market are found to strongly affect secondary job activity. Individuals who have experienced involuntary leave, are owed wage arrears, or work less than full-time are all significantly more likely to take on second jobs. Higher education

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[1] The Soviet Interview Project was a survey undertaken to study everyday life in the Soviet Union by interviewing adult Soviet emigrants to the United States. Since applying to emigrate often significantly changed Soviet citizens' lives, the last "normal" period of residence before their lives changed significantly was identified. For 91.7 percent of the 2,793 respondents, this was between 1978 and 1981. The majority of respondents were Jewish, from large and medium-sized cities, and most emigrated voluntarily.

nearly doubles the moonlighting probability. As transition has progressed, women have become not only much less likely to engage in additional work, but those that do so receive significantly lower second-job wages, with a gender wage gap of 68 percent, over 3 times that for primary jobs.

The paper is organized as follows: the next section describes the trend in multiple job holding, the characteristics of second jobs and second job holders, and the relative wages in primary versus secondary employment. Section III presents a conceptual framework for analyzing secondary labor supply. Section IV outlines the estimation approach while Section V discusses the empirical results. Section VI offers concluding comments.

II. Characteristics of Multiple Job Holding in Russia

The available data come from the Russian Longitudinal Monitoring Survey (RLMS), the first nationally representative sample of the Russian Federation. The RLMS is a household-based survey designed to systematically measure the effects of the economic reforms on the welfare of households and individuals in Russia. The project is divided into two phases, with four rounds of data collected in phase one, and three rounds in phase two. Each phase is a separate panel dataset. This research first uses data from both phases to capture trends in multiple job holding from 1992 to 1996, and then focuses on the most recent data to analyze the determinants of secondary labor supply. Data from phase one are Round 1 (June-August 1992) and Round 3 (July-September 1993), and from phase two Round 5 (October-December 1994), Round 6 (November-December 1995), and Round 7 (November-December 1996).[2] The sample in phase two is smaller, but the number of primary sampling units was doubled to enhance representativeness.

An individual is considered a multiple job holder if he or she maintains primary employment and engages in additional work for pay. Two types of additional work are considered: working at a second formal job and engaging in individual (self-employed) economic activity, which will be

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[2] Each dataset is denoted by the corresponding year in the tables and text.

referred to as formal and informal secondary work, respectively. Participants in additional formal jobs answered the following question affirmatively: "Do you have some other kind of work?" Participants in additional informal jobs answered this question affirmatively: "In the last 30 days, did you engage in some additional kind of work for which you got paid? Maybe you sewed someone a dress, gave someone a ride in a car, assisted someone with apartment or car repairs, purchased and delivered food, looked after a sick person, or did something else that you were paid for?"[3] A third type of additional employment is working on the family's private plot, growing agricultural products; however, the breakdown between selling such produce for income or keeping it for home consumption is unavailable. As Table 1 indicates, for those engaging in personal subsidiary agriculture, a significant amount of time is spent working on private plots: 12.2 hours per week on average for working males, 10.1 for working females in 1996. This type of additional work is omitted from the present analysis because the monetary value of the output is unknown and no wage can be inferred.

This research focuses on prime-aged individuals, men aged 15 to 59 and women 15 to 54.[4] A significant percentage of individuals beyond retirement age do work though. The employment rate at the end of 1996 for men aged 15 to 59 was 69.1 percent and 66.5 percent for women age 15 to 54; the corresponding employment rate for men beyond retirement age was 15.7 percent and for women 14.8 percent. As Table 1 shows, the multiple job holding rate in 1996 was 12.2 percent for prime-aged men and 8.0 percent for prime-aged women. The rates for persons of retirement age are only 3.1 and 3.6 percent, respectively. Much lower employment and multiple job holding rates indicate that older

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[3] The first question about additional work was asked only if, earlier in the questionnaire, the respondent reported having a job. This indicates a more formal type of employment. The latter question is asked of all respondents, regardless of labor force participation, supporting the conclusion that these jobs are informal in nature. The first question about employment is: "Do you now work, are you on paid or unpaid leave, or do you not work?" If the response is other than "I do not work," the respondent is next asked about occupation, income, hours worked, etc., and, if employed in several jobs, she is instructed to talk about the one she considers primary. Under this definition, data show that primary job hours exceed second job hours for 91.5 percent of workers.
[4] Retirement age is 60 for men, 55 for women.

persons could possibly have complicating reasons for holding more than one job and might be following a different behavioral model.

As indicated, the reference period for questions regarding multiple jobs is unspecified for formal additional employment, and the previous month for informal additional employment. Given that the first question about additional work is general and does not mention a time frame, these jobs are likely to be more permanent than the types of activities mentioned in the question on informal secondary employment. Less than one percent of workers with multiple jobs have more than one extra job, therefore, conditional on supplying positive second-job hours, multiple job holders specialize in one sector or the other. In comparison, the Panel Study of Income Dynamics (PSID) asks about secondary employment in the previous year and the Current Population Survey (CPS) collects data on additional jobs in the previous week. The PSID estimates dual job holding rates at 21 percent for men and 12 percent for women, while the CPS reports 7 and 6 percent, respectively (Paxson and Sicherman, 1996). In general, shorter reference periods yield lower rates, particularly for activities of a temporary nature such as working at a second job. The above magnitudes roughly encompass the RLMS figures of 12.2 percent for men and 8.0 percent for women. As a second comparison, in West Germany in 1990, 7.2 percent of workers held a second job when interviewed, an immediate reference period (Hamermesh, 1996). The RLMS estimates break down by type of second job as follows: 4.5 percent of men and 4.1 percent of women hold additional formal jobs, while 8.0 percent of men and 4.3 percent of women have additional informal jobs.

A. Trends in Multiple Job Holding

Table 1 documents the level and trends in multiple job holding, wage arrears, involuntary leaves, and private plot activity for working-age individuals from 1992 to 1996. There has been a marked increase in multiple job holding, rising from 5.6 percent overall in 1992 to 10.1 percent in 1996. During the early period of economic transition, the gender difference in multiple job holding

rates was small. As transition progressed, men have taken on second jobs at a significantly higher rate than women. The upper panel of Table 1 shows that a wage cannot be calculated for many individuals due to missing monthly earnings or hours.   Typically, observations with missing data would be excluded from the analysis and the sample restricted to persons with complete information. However, for Russia the absence of earnings and/or hours worked is indicative of the current economic situation, a fact which should be emphasized rather than ignored. It is likely that the main cause of missing earnings is nonpayment of wages, which is expected to contribute to multiple job holding behavior as individuals faced with more stringent economic budgets may seek supplementary income. A possible reason for not reporting hours of work is that the person was on unpaid leave during the previous month. This is likely the case since a filter question asking whether the respondent worked at their job in the previous month accounts for the majority of missing primary-job hours.

The bottom panel of Table 1 focuses on employees who report positive hours worked at their primary job. Thus, the difference between the samples in each panel of Table 1 is the set of employees who reported zero hours worked at their main occupation. Therefore, this unconditional tabulation suggests that individuals on unpaid leave in the previous *month* do not have significantly different multiple job holding rates. In other words, selection on hours worked does not affect multiple job holding rates. Note that the percentage of individuals put on forced unpaid leave in the last *year* decreases since it incorporates those on unpaid leave in the previous month.

Since 1992, men have consistently worked approximately 15 percent more hours than women, hours which are remunerated at a greater wage rate.   In 1992, female hourly wages were 24.7 percent less than male hourly wages. This difference fell to 15.0 percent in 1993, rose to 22.7 percent in 1994 and further to 29.7 percent in 1995. In 1996 the gender wage gap was 18.3 percent on primary jobs.[5] Men are slightly more likely to suffer from wage arrears. Women are not only more likely than men to

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[5] A similar trend is reported in Mroz and Glinskaya (1996), for an RLMS sample restricted to urban adults, aged 24-54.

experience compulsory unpaid leave, the average duration of their leaves, 40 days in 1996, is 12 percent longer.

Table 1	Multiple Job Holding and Labor Market Conditions in Russia									
	Men					Women				
	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
Number of Observations	4603	4144	3180	3005	2944	4946	4521	3190	3022	3008
Employment Rate	79.6	77.5	72.8	71.6	69.1	72.9	70.3	69.1	68.3	66.5
Percent of Total Employed with:										
Positive earnings	90.6	89.8	75.2	71.5	66.1	89.0	90.2	80.3	76.1	68.6
Positive hours	86.2	86.9	90.2	87.8	86.0	82.5	85.6	84.1	82.8	82.7
Positive wage rate	81.8	79.2	70.0	64.6	58.5	79.5	79.6	71.8	67.0	60.2
Put on Forced Leave [avg days in last year][1] (std.dev)	...	2.2 15.9 (11.0)	9.9 46.4 (58.3)	5.2 42.5 (45.6)	6.9 52.1 (82.5)	...	3.5 15.0 (10.0)	12.5 40.2 (46.9)	7.2 64.6 (99.3)	8.1 50.0 (55.9)
Multiple Job Holding	5.7	5.8	15.0	12.4	12.2	5.6	4.9	9.2	8.2	8.0
Percent of Multiple Job Holders with:										
Positive 2nd job earnings	78.9	79.1	84.4	82.3	77.8	69.0	80.9	82.2	76.3	78.1
Positive 2nd job hours	...	...	89.9	87.2	83.9	...	...	89.1	92.9	90.6
Positive 2nd job wage	...	...	80.1	75.6	71.4	...	...	77.2	73.4	73.1
Summary Statistics for those employed with positive primary-job hours: mean (std.dev)										
Monthly earnings at primary job ($Y \geq 0$)[2]	3900 (3546)	3850 (4678)	3565 (5652)	2943 (4082)	2974 (4754)	2708 (2298)	2918 (3139)	2215 (2921)	2161 (2636)	2201 (3153)
Monthly earnings at primary job ($Y > 0$)	4112 (3520)	4223 (4736)	4593 (6036)	3998 (4292)	4374 (5208)	2809 (2279)	3136 (3148)	2851 (2998)	2669 (2689)	3024 (3342)
Monthly hours of work at primary job	180.1 (67.7)	171.0 (57.2)	171.1 (65.1)	181.3 (64.5)	181.6 (64.3)	156.8 (54.0)	150.2 (50.1)	148.1 (55.3)	155.5 (53.1)	156.7 (53.7)
Wage rate at primary job ($Y \geq 0$)	27.0 (46.9)	29.25 (73.8)	24.73 (44.6)	21.38 (75.3)	18.17 (33.4)	20.65 (31.8)	25.37 (57.1)	21.02 (43.1)	16.52 (26.0)	15.89 (27.0)
Wage rate at primary job ($Y > 0$)	28.46 (47.7)	32.09 (76.7)	31.86 (48.3)	29.04 (86.5)	26.72 (37.5)	21.42 (32.2)	27.27 (58.8)	24.64 (45.7)	20.41 (27.5)	21.84 (29.6)
Owed back wages	...	...	42.1	43.5	59.4	...	...	35.9	39.3	55.6
Worked without pay [previous month]	5.2	8.9	22.4	26.4	32.0	3.6	7.0	14.7	19.0	27.2
Put on Forced Leave [avg. days in last year][1] (std.dev)	...	1.6 12.2 (9.5)	8.9 41.0 (46.9)	4.7 38.4 (42.2)	6.4 35.7 (37.8)	...	2.7 10.6 (9.0)	12.0 35.0 (38.6)	6.9 50.9 (59.9)	7.4 40.3 (40.1)
Worked on Private Plot [avg. hours in last week] (std.dev)	50.9 15.5 (12.3)	64.2 16.1 (11.9)	14.7 14.2 (11.2)	30.0 11.7 (10.6)	31.1 12.2 (10.3)	45.4 13.5 (10.3)	59.9 16.2 (11.8)	9.7 12.9 (9.5)	22.4 11.0 (9.8)	22.7 10.1 (9.5)
Multiple Job Holding	5.5	5.7	14.6	12.3	12.3	5.5	4.8	9.2	8.1	8.2
Age	39.3 (10.8)	39.3 (11.0)	37.9 (10.9)	37.9 (11.1)	37.9 (11.0)	38.3 (9.4)	38.4 (9.4)	36.2 (9.3)	37.2 (9.1)	37.3 (9.1)
[1] 1993 figure refers to the previous month, rather than year [2] Y = earnings ... indicates data not available *Source*: Russian Longitudinal Monitoring Survey, 1992-1996.										

Table 2A is restricted to multiple job holders while Tables 2B and 2C disaggregate multiple job holders by type of second job, formal or informal. Hourly wages are calculated based on reported earnings and hours worked. Earnings are the sum of "wages, bonuses, grants, benefits, revenues, and profits" plus the monetary value of any in-kind payments in the last 30 days. Dividing by actual hours worked yields the wage rate. Using Goskomstat's consumer price index (Russian Economic Trends, 1996), rubles earned at different points in time were deflated to a common date, June 1992. All wage rates in the paper are expressed in June 1992 rubles.

Second jobs, on average, yield a much higher wage rate than primary jobs: 198.13 rubles per hour compared to 26.72 for men in 1996, and 62.15 versus 21.84 for women. As mentioned, the gender wage gap on primary jobs was 18.3 percent in 1996. At second jobs, women experience an even greater disparity with a gender wage gap of 68.6 percent, up from 43.2 percent in 1994.[6] The value of any enterprise-provided social benefits which may be received through formal employment is not included in the primary-job wage. Formal sector benefits, such as housing, child day care, health care facilities, and access to subsidized foods and goods, may explain part of the difference in cash wages paid by primary and secondary jobs. The nature of many secondary jobs, particularly the informal sector ones, can create limits to their activity in practice. First, individuals may be credit constrained and not able to acquire the capital investment necessary to pursue the activity full time. Second, the avoidance of taxes may become more difficult as productivity and hours increase. Lastly, the absence of formal sector benefits at informal second jobs could keep workers attached to their primary job.

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[6] These figures are for individuals with the positive hours worked and positive earnings, the intersection yielding well-defined wage rates

A comparison of Tables 2B and 2C reveals that participants in additional informal jobs enjoy greater wage rates than those working at additional formal jobs.[7] For men, the hourly wage rate at informal second jobs is 39 percent higher than at formal second jobs. Women earn approximately 59 percent more at informal secondary work. As mentioned, however, women are earning only 31.4 percent what men do at second jobs overall, 26.1 percent at formal jobs and 45.5 percent at informal jobs.

In addition, while the incidence of both types of secondary employment has increased over time, informal work has risen much faster. The multiple job holding rate for formal second jobs rose from 3.7 to 4.5 percent over the period 1992 to 1996 among men, and increased from 3.4 to 4.1 percent among women during the same period. In contrast, the rate of holding secondary informal jobs nearly quadrupled to reach 8.0 percent for men in 1996, and approximately doubled to reach 4.3 percent for women. This is due in part to the greater ease of entry into informal secondary work and the flexibility this kind of job provides in terms of time allocation.

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[7] Again, formal sector benefits may explain part of the difference in cash wages paid by formal and informal *secondary* jobs.

Table 2A	Sample Characteristics for Multiple Job Holders									
	Men					**Women**				
	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
Multiple Job Holders with positive primary job hours:										
Positive 2nd job earnings	79.8	79.9	85.5	83.3	78.5	72.8	80.9	83.5	77.7	77.9
Positive 2nd job hours reported	...	...	90.1	88.8	86.9	...	...	90.0	93.5	94.9
Positive 2nd job wage rate	...	...	80.9	77.7	73.4	...	...	78.8	75.5	75.7
Summary Statistics for Multiple Job Holders with positive hours on primary and secondary jobs: mean (std. dev.)										
Owed back wages at 2nd job[1]	...	...	7.6	5.3	7.0	...	...	9.2	10.0	20.2
Monthly earnings at 2nd job $(Y_{second} \geq 0)$[2]	3448 (9639)	3202 (4614)	2458 (4327)	2418 (3329)	2282 (3494)	1054 (2193)	1687 (2413)	1206 (1575)	1027 (1286)	1637 (3492)
Monthly earnings at 2nd job $(Y_{second} > 0)$	3854 (10123)	3951 (5012)	2738 (4483)	2766 (3422)	2704 (3651)	1342 (1621)	2085 (2637)	1377 (1612)	1272 (1318)	2050 (3801)
Monthly hours of work at 2nd job	...	...	40.2 (58.6)	48.5 (57.5)	40.9 (70.5)	...	...	41.2 (41.7)	46.0 (47.9)	52.3 (56.7)
Wage rate at 2nd job $(Y_{second} \geq 0)$	...	...	147.22 (286.6)	118.16 (242.9)	167.23 (403.2)	...	...	81.63 (139.4)	52.73 (90.4)	49.62 (81.0)
Wage rate at 2nd job $(Y_{second} > 0)$	...	...	163.98 (298.0)	135.13 (255.4)	198.13 (432.0)	...	...	93.12 (145.4)	65.29 (96.5)	62.15 (86.3)
Age [Dual job holders]	38.2 (9.1)	38.7 (9.2)	35.8 (10.2)	36.4 (10.5)	36.1 (10.4)	36.6 (9.1)	38.0 (9.0)	36.6 (8.7)	38.3 (8.7)	37.6 (9.2)

[1] Figures pertain to both types of additional work, but "back wages" for individual economic activity are not available. See Table 2B for figures relevant to additional formal jobs only.

[2] Y_{second} = earnings at second job

... indicates data unavailable [hours unavailable for secondary formal jobs]

Source: Russian Longitudinal Monitoring Survey, 1992-1996

Lastly, monthly hours worked at formal second jobs are substantially higher than at informal second jobs. Informal work can be done for only a few hours at a time, while formal jobs carry greater responsibility. For men, the number of hours devoted to second jobs of either type has remained stable since 1994, however, women are working more hours at second jobs, with their second formal job hours reaching the same level as men by 1996, and their second informal job hours surpassing the level for men.

Table 2B	**Sample Characteristics for Multiple Job Holders**									
	Additional Formal Jobs									
	Men					**Women**				
	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
Percent of Total Employed:										
Multiple Job Holding Rate	3.7	4.1	5.2	4.6	4.5	3.4	3.4	4.3	4.3	4.1
Percent of Total Employed with positive primary job hours:										
Multiple Job Holding Rate	3.6	3.9	4.8	4.6	4.3	3.4	3.5	4.4	4.3	4.3
Multiple Job Holders with positive primary job hours:										
Positive 2nd job earnings	84.4	82.0	58.4	67.4	60.0	79.3	78.9	70.7	67.1	54.9
Positive 2nd job hours reported	...	...	79.2	82.6	88.0	...	...	87.8	87.7	93.0
Positive 2nd job wage rate	...	...	52.5	60.5	57.3	...	...	67.1	64.4	54.9
Summary Statistics for Multiple Job Holders with positive hours on primary and secondary jobs: mean (std. dev.)										
Owed back wages at 2nd job	...	...	26.3	15.5	19.7	...	...	19.4	18.8	39.4
Monthly earnings at 2nd job ($Y_{second} \geq 0$)	2103 (3033)	2840 (4211)	2843 (5314)	2507 (3870)	2792 (3871)	916 (1077)	1397 (2037)	928 (1033)	1234 (1491)	1294 (2379)
Monthly earnings at 2nd job ($Y_{second} > 0$)	2315 (3024)	3242 (4490)	4292 (6048)	3423 (4167)	4285 (4079)	1171 (1143)	1809 (2226)	1215 (1024)	1681 (1510)	2191 (2768)
Monthly hours of work at 2nd job	...	...	73.7 (73.9)	75.1 (55.2)	70.3 (101.6)	...	...	55.0 (45.3)	63.9 (50.7)	68.7 (64.0)
Wage rate at 2nd job ($Y_{second} \geq 0$)	...	...	64.19 (111.0)	61.10 (128.0)	100.03 (354.8)	...	...	39.88 (90.1)	34.40 (73.3)	23.70 (41.1)
Wage rate at 2nd job ($Y_{second} > 0$)	...	...	96.89 (124.4)	83.4 (143.4)	153.53 (431.8)	...	...	52.20 (100.1)	46.84 (82.3)	40.10 (47.0)
Age [Dual job holders]	39.1 (8.4)	39.0 (9.4)	36.9 (10.1)	37.0 (10.5)	37.0 (10.4)	38.1 (8.5)	38.5 (8.7)	37.5 (9.0)	39.1 (8.8)	40.0 (8.4)

Notes: The first two rows of data do not refer strictly to multiple job holders, but report multiple job holding rates for *formal* secondary jobs. This allows comparison to the relevant rows of Table 1 which report overall multiple job holding rates.

... indicates data unavailable [hours unavailable for secondary formal jobs]

Source: Russian Longitudinal Monitoring Survey, 1992-1996

Table 2C	Sample Characteristics for Multiple Job Holders									
	Additional Informal Jobs									
	Men					**Women**				
	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
Percent of Total Employed:										
Multiple Job Holding Rate	2.1	1.9	10.6	8.2	8.0	2.2	1.6	5.4	4.2	4.3
Percent of Total Employed with positive primary job hours:										
Multiple Job Holding Rate	2.0	2.0	10.6	8.3	8.2	2.1	1.4	5.2	4.2	4.4
Multiple Job Holders with positive primary job hours:										
Positive 2nd job earnings	71.0	72.7	95.5	91.0	86.8	54.1	82.1	94.9	86.1	97.3
Positive 2nd job hours reported	69.4	89.1	93.7	91.7	86.1	72.3	94.9	92.8	94.4	95.9
Positive 2nd job wage rate	61.3	67.3	90.5	85.3	79.9	50.8	76.9	89.7	83.3	93.2
Summary Statistics for Multiple Job Holders with positive hours on primary and secondary jobs: mean (std. dev.)										
Owed back wages at 2nd job	...	...	...	...	...	...	...	...	...	...
Monthly earnings at 2nd job ($Y_{second} \geq 0$)	6955 (17308)	4162 (5645)	2100 (3313)	2249 (2974)	1947 (3214)	1284 (2248)	1990 (2833)	1307 (1847)	800 (1009)	1797 (4128)
Monthly earnings at 2nd job ($Y_{second} > 0$)	7871 (18239)	5512 (5902)	2174 (3347)	2418 (3017)	2089 (3290)	1823 (2496)	2454 (2964)	1352 (1863)	907 (1028)	1850 (4177)
Monthly hours of work at 2nd job	90.3 (90.2)	73.6 (76.2)	24.8 (37.8)	32.9 (51.8)	24.0 (33.1)	61.1 (53.8)	56.4 (51.6)	26.0 (29.8)	27.8 (37.6)	31.6 (36.5)
Wage rate at 2nd job ($Y_{second} \geq 0$)	253.92 (969.2)	107.00 (158.3)	188.81 (361.9)	146.9 (276.5)	199.31 (418.4)	37.35 (62.5)	53.30 (90.0)	110.57 (157.6)	70.36 (100.3)	95.04 (199.1)
Wage rate at 2nd job ($Y_{second} > 0$)	287.34 (1028)	141.70 (168.5)	195.42 (366.4)	157.95 (283.7)	214.91 (430.7)	53.01 (68.8)	65.74 (96.0)	114.38 (158.9)	79.74 (103.3)	97.84 (201.4)
Age [Dual job holders]	38.6 (10.2)	38.5 (9.4)	35.4 (10.2)	36.0 (10.5)	35.5 (10.3)	34.6 (10.3)	35.7 (9.9)	35.7 (8.4)	37.3 (8.9)	35.3 (9.2)

Notes: The first two rows of data do not refer strictly to multiple job holders, but report multiple job holding rates for *informal* secondary jobs. This allows comparison to the relevant rows of Table 1 which report overall multiple job holding rates.

... indicates data unavailable

Source: Russian Longitudinal Monitoring Survey, 1992-1996

B. Multiple Job Holding by Occupation

Russia has a relatively high degree of occupational segregation by gender. The degree of occupational segregation can be quantified using the Duncan index (D), calculated as $D = \sum_{i=1}^{N} |M_i - F_i|$, where M_i and F_i are gender-specific proportions of all workers employed in occupation *i*. In 1992, using the one-digit occupational codes, the D index in Russia was 0.49, increasing slightly to 0.51 in 1994 (Mroz and Glinskaya, 1996). In comparison, the Duncan index in

Sweden is 0.46, 0.44 in the UK, and 0.36 in the US (Blau and Kahn, 1992). Thus, Russia's labor market is characterized by a relatively high level of gender segregation.

Women are represented in more occupations than men. Fifty percent of males work in just three occupations:[8] "Drivers and Mobile-Plant Operators," "Metal and Machinery Workers," and "Extraction and Building Trades Workers" (see Table 3). Only 29.1 percent of females work in the three most populous female occupations: "Other Associate Professionals – finance, administrative, customs, tax, social work, entertainment, sport, and religious," "Teaching Professionals," and "Sales and Services Elementary Occupations." A minimum of 6 occupations are needed to classify half of female workers.

Table 3 lists the multiple job holding rates by occupation in 1992 and 1996. There is considerable variance, with rates ranging from 1.59 percent for men in the "Armed Forces" to over 20 percent for male "Life Science and Health Professionals" and male "Other Professionals."[9] Among women, no "Stationary Plant Operators" held multiple jobs while nearly 10 percent of "Teaching Professionals" did. The occupations with the highest percentage of multiple job holders were "Life Science and Health Professionals," "Teaching Professionals," and "Other Professionals" with overall rates of 13.0, 11.4, and 10.6 percent respectively.[10] By 1996, while those three professions retained high overall rates, they remained at approximately the same level, experiencing little or no growth in multiple job holding. Other fields experienced dramatic increases in the percentage of their workers taking on second jobs. The rate for "Physical, Mathematical, and Engineering Science Professionals" rose from 8.9 percent in 1992 to 17.9 percent in 1996, over 100 percent growth. Since many of these jobs would fall under the budget sphere of the government, this increase is likely due in part to the financial burden placed on state institutions under recent government retrenchments. Occupations

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[8] This distribution occurs when jobs are classified according to two-digit occupational codes.
[9] This is limiting the range to categories for which there are at least 30 observations.
[10] Note that overall figures for both genders are not shown. They can be calculated from the reported information.

under the general heading of "Craft and Related Trades"[11] had rates among the highest in 1996 and simultaneously experienced above average growth in multiple job holding. Each of their growth rates exceeds the 80 percent growth rate in multiple job holding for *all* jobs.

Men account for the majority, approximately 57 percentage points, of the 80 percent growth in multiple job holding from 1992 to 1996. The bulk of this increase was by workers in "Craft and Related Trades" and "Drivers and Mobile-Plant Operators," primarily male occupations. While some female-dominated occupations such as "Life Science and Health Associate Professionals," "Teaching Associate Professionals," and "Customer Services Clerks" had little change in multiple job holding, the largely female occupations of "Teaching Professionals," "Models, Salespersons, and Demonstrators," and "Office Clerks" realized notable increases.

The preceding has referred to the primary occupation of multiple job holders, but what fields are they entering for their second job? Table 3A amalgamates the gender-based multiple job holding rates of Table 3 and, in the latter two columns, presents the percentage of cases in which the second job is in the same occupation as the first, as well as the distribution of second job occupations.

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[11] "Craft and Related Trades Workers" is a one-digit category (number 7) in the International Standard Classification of Occupations (ISCO-88). These include "Extraction and Building Trades Workers" (two-digit code 71), "Metal and Machinery Workers" (72), and "Other Craft & Related Trades Workers" (70,74). "Precision, Handicraft, and Printing Workers" (73) had a small sample size.

Table 3	**Multiple Job Holding by Primary Job Occupation** **1992 & 1996** Multiple Job Holding Rate (year-gender-occupation sample size)			
	1992		**1996**	
Occupational Category (two-digit ILO code)	Men	Women	Men	Women
Armed Forces (01)	1.59 (63)	0 (9)	11.54 (52)	0 (7)
Legislators, Senior Officials, Corporate Managers (11,12)	22.22 (9)	11.1 (9)	0 (3)	0 (3)
General Managers (13)	8.97 (145)	1.64 (61)	10.00 (30)	7.69 (13)
Physical, Mathematical, Engineering Science Professionals (21)	11.76 (272)	6.23 (289)	26.32 (114)	8.16 (98)
Life Science and Health Professionals (22)	20.51 (39)	9.21 (76)	17.14 (35)	10.45 (67)
Teaching Professionals [university, secondary, primary, special] (23)	17.81 (73)	9.70 (268)	21.95 (41)	13.44 (186)
Other Professionals [business, legal, archivist, writer, religious] (24)	22.58 (62)	7.72 (259)	10.81 (37)	10.24 (127)
Physical and Engineering Science Associate Professionals (31)	4.21 (95)	1.14 (176)	14.00 (50)	3.45 (58)
Life Science and Health Associate Professionals (32)	3.70 (27)	5.75 (226)	16.67 (6)	6.41 (156)
Teaching Associate Professionals (33)	0 (2)	5.74 (122)	0 (1)	6.00 (50)
Other Associate Professionals [finance, administrative, customs, tax, social work, entertainment, sport, religious] (34)	9.38 (64)	7.98 (238)	14.13 (92)	5.21 (211)
Office Clerks (41)	8.11 (37)	4.13 (363)	4.76 (21)	9.44 (180)
Customer Services Clerks (42)	0 (4)	3.39 (59)	0 (3)	3.08 (65)
Personal and Protective Services Workers (51)	9.20 (87)	7.19 (153)	8.82 (68)	15.25 (59)
Models, Salespersons, and Demonstrators (52)	18.18 (11)	4.67 (150)	9.38 (32)	6.13 (163)
Skilled Agricultural and Fishery Workers (61,62)	15.79 (19)	0 (5)	8.33 (24)	0 (5)
[Table 3 ... continues next page]				

Table 3 (continued)	Multiple Job Holding by Primary Job Occupation 1992 & 1996 Multiple Job Holding Rate (year-gender-occupation sample size)			
	1992		**1996**	
Occupational Category (two-digit ILO code)	Men	Women	Men	Women
Extraction and Building Trades Workers (71)	6.35 (315)	3.75 (80)	14.62 (171)	21.05 (38)
Metal & Machinery Workers (72)	4.77 (733)	2.65 (113)	12.89 (380)	3.45 (29)
Precision, Handicraft & Printing Workers (73)	5.56 (18)	0 (17)	12.50 (8)	0 (15)
Other Craft & Related Trades Workers [food processing, wood treaters, textile] (74, 70)	5.13 (39)	7.45 (94)	20.00 (20)	10.26 (39)
Stationary-Plant Operators [metal, wood, chemical processing] (81)	2.91 (103)	0 (50)	4.94 (81)	3.51 (57)
Machine Operators and Assemblers (82)	3.39 (177)	6.90 (174)	7.89 (76)	13.56 (59)
Drivers and Mobile-Plant Operators [motor vehicle, ship crews] (83)	2.41 (872)	8.11 (37)	9.62 (468)	3.23 (31)
Sales and Services Elementary Occupations [street vendor, domestic cleaning] (91)	4.49 (89)	5.32 (263)	12.12 (99)	8.74 (183)
Agricultural & Fishery Laborers (92)	1.65 (121)	2.29 (131)	4.76 (42)	1.45 (69)
Laborers in Mining, Construction, Manufacturing, Transport (93)	2.10 (143)	2.92 (137)	10.81 (74)	4.00 (25)
Total	5.71 (3627)	5.54 (3572)	12.18 (2028)	8.03 (1993)

Notes: The sampling procedure was changed for 1996, yielding a smaller sample than 1992, but based on more primary sampling units to enhance national representativeness.
In 1992, the rate for women with unknown occupation is 6.06 (n=33), men 2.78 (n=36)
In 1996, there were 7 men, 7 women with unknown occupation.
Source: Russian Longitudinal Monitoring Survey, 1992, 1996.

among second job holders. Over 87 percent of multiple job holders have second jobs which are not in the same occupation as their main job.[12] This is slightly greater than the US rates of 83 percent for men and 77 percent for women (Paxson and Sicherman, 1996). Medical and teaching professionals, salespersons, and extraction workers are most likely to take second jobs in the same field as their main occupation. The most common second job occupations are teaching and elementary sales and

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[12] Note that second job occupations are only known for those with formal secondary employment, approximately 40 percent of multiple job holders. Persons moonlighting in individual economic activities such as taxi driving or private repairs are considered to have different primary and secondary occupations.

Table 3A	Second Job Occupation by Primary Job Occupation: 1996			
Occupational Category (two-digit ILO code)	Main Job Frequency	Dual Job Rate	% in Same Occupation	Dual Job Distrib.
Armed Forces (01)	59	10.17	0	0
Legislators, Senior Officials, Corporate Managers (11,12)	6	0	0	0
General Managers (13)	43	9.30	25.0	4.1
Physical, Mathematical, Engineering Science Professionals (21)	212	17.9	21.0	5.9
Life Science and Health Professionals (22)	102	12.7	38.5	3.0
Teaching Professionals [university, secondary, primary, special] (23)	227	15.0	29.4	11.2
Other Professionals [business, legal, archivist, writer, religious] (24)	164	10.4	3.2	4.1
Physical and Engineering Science Associate Professionals (31)	108	8.3	0	0.6
Life Science and Health Associate Professionals (32)	162	6.8	18.2	1.2
Teaching Associate Professionals (33)	51	5.8	0	0
Other Associate Professionals [finance, administrative, customs, tax, social work, entertainment, sport, religious] (34)	303	7.9	16.7	13.0
Office Clerks (41)	201	9.0	0	3.6
Customer Services Clerks (42)	68	2.9	0	1.2
Personal and Protective Services Workers (51)	127	11.8	13.3	3.6
Models, Salespersons, and Demonstrators (52)	195	6.7	1.8	10.1
Skilled Agricultural and Fishery Workers (61,62)	29	6.9	0	0
Extraction and Building Trades Workers (71)	209	15.8	18.2	10.1
Metal & Machinery Workers (72)	409	12.2	8.0	4.7
Precision, Handicraft & Printing Workers (73)	23	4.3	0	0
Other Craft & Related Trades Workers [food processing, wood treaters, textile] (74, 70)	59	13.6	12.5	0
Stationary-Plant Operators [metal, wood, chemical processing] (81)	138	4.3	0	0.6
Machine Operators and Assemblers (82)	135	10.4	7.1	0.6
Drivers and Mobile-Plant Operators [motor vehicle, ship crews] (83)	499	9.2	2.2	1.2
Sales and Services Elementary Occupations [street vendor, domestic cleaning] (91)	282	9.9	14.3	14.2
Agricultural & Fishery Laborers (92)	111	2.7	0	1.2
Laborers in Mining, Construction, Manufacturing, Transport (93)	99	9.1	0	2.4
Total	4021	10.12	12.7	100 %

Notes: There were 7 men, 7 women with unknown main occupation.

Main Job Frequency and Dual Job Rate are the overall figures, disaggregated by gender in Table 3.

% in Same Occupation is the percentage of second job occupations which are in the same two-digit category as the respondent's main occupation.

Dual Job Distribution is based on 408 reported second job participants, of which 41 percent held formal second jobs, that are categorized above, and 59 percent held informal second jobs (see footnote 12).

Source: Russian Longitudinal Monitoring Survey, 1996

service work such as cleaning or street vending. Potential explanations for secondary employment most often being in a different field than the main occupation are that workers may be exploring possible career shifts without having to make a full investment and leave their primary job, or workers may be taking on second jobs as a form of insurance against fluctuating income on the primary job. Also, hours constraints on the main job may induce workers to look for occupations which allow for evening or weekend hours.   Most secondary jobs are informal in nature, suggesting that ease of entry and control over time allocation are important factors influencing an individual's choice.

C. Wages on Primary and Secondary Jobs

Different theories of multiple job holding imply different functional relationships between second-job wages relative to a main-job wage. For example, hours constraint models assume that the main-job wage exceeds the second-job wage, creating a convex kink in the budget constraint due to the hours constraint on the main job. Tables 1 and 2A show that the average second-job wage rate was significantly above the average primary-job wage: 7.4 times as great for men, 2.8 times for women. For men, this ratio was up from 5.1 in 1994, but for women the average second-job wage has declined from 3.8 times the average main-job wage in 1994.[13]

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[13] Inclusion of the value of benefits, such as housing, associated with a primary job would close this gap, although it would likely be large nonetheless.

Table 4	Men					Women				
Second Job Wages Relative to Main Job Wages	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
All Additional Jobs:										
Mean	...	...	10.4	10.1	13.3	...	...	11.5	6.3	4.8
Median	...	...	4.2	3.9	4.0	...	...	2.0	2.0	2.3
N	...	...	201	139	114	...	...	128	86	83
min/max	...	...	.06/333	.11/113	.27/123	...	...	.06/704	.17/92	.06/36
% above 1	...	...	86.6	82.0	93.8	...	...	76.6	72.1	68.7
Additional Formal Jobs only:										
Mean	...	...	4.8	3.1	5.7	...	...	2.9	2.3	3.3
Median	...	...	2.2	1.4	3.2	...	...	1.9	1.4	1.3
N	...	...	45	44	30	...	...	54	38	32
min/max	...	...	.23/32	.11/19	.80/27	...	...	.38/18	.25/11	.06/30
% above 1	...	...	68.9	63.6	93.3	...	...	68.5	60.5	56.3
Additional Informal Jobs only:										
Mean	8.2	15.0	12.0	13.3	16.2	6.0	3.4	16.6	9.1	6.3
Median	2.7	5.0	5.3	6.1	4.95	2.3	2.7	3.0	2.8	2.9
N	37	32	162	97	84	32	28	82	50	55
min/max	.25/120	.30/258	.06/333	.17/113	.50/123	.11/73	.07/12	.06/704	.17/92	.37/36
% above 1	64.8	81.2	92.0	91.8	94.0	84.4	71.4	76.8	82.0	78.2

Notes: Disaggregated min/max values can differ from overall min/max figures due to persons holding both types of second jobs
... indicates data unavailable [hours unavailable for secondary formal jobs]
Source: Russian Longitudinal Monitoring Survey, 1992-1996

In the US, the mean ratio of second-job wage to main-job wage is 1.84 for men and 1.72 for women. The median wage ratios were only 1.05 and 1.00 respectively (Paxson and Sicherman, 1996). Table 4 tells a different story for Russia in 1996. The mean wage ratios were 13.3 for men and 4.8 for women, well above those in the US. And the median ratios, equal to 4.0 and 2.3 respectively, indicate that the majority of individuals have a higher second-job wage rate. In fact, over 90 percent of men and two-thirds of women had ratios above one, compared to only 50 percent in the US. In short, most second jobs in Russia carry a greater wage rate than the individual's primary work, yet the trend is increasing for men and decreasing for women.

III. Analytical Framework

In modeling the decision to participate in secondary employment during economic transition, this study adopts a static labor supply framework. Since formal second jobs are generally not in the same occupation and informal secondary jobs are typically not dependent on one's primary

occupation,[14] primary and secondary labor supply decisions are assumed to be sequential rather than simultaneous. In addition, for an economy in transition, an individual's job is more likely to have been determined under the previous regime. Therefore, when focusing on the decision to participate in a second job, the primary job characteristics are treated as exogenous.

Consider a representative individual with well-behaved utility function $U(C, l)$, where C is a composite consumption good and l is leisure. Suppose each person holds a primary job and supplies h_1 hours of work at fixed wage rate w_1. The number of hours worked at secondary jobs, h_2, depends on the wage rate w_2. The worker faces a budget constraint restricting the level of consumption of C to the sum of all labor and non-labor income, V:

(1)
$$C \leq h_2 w_2 + R,$$

where the price of C is taken as the numeraire and R represents effective non-labor income equal to $h_1 w_1 + V$. Each worker is also subject to a time constraint limiting the number of hours available in a week, T, for work or leisure, l:

(2)
$$T = h_2 + h_1 + l$$

Maximizing $U(C, l)$ subject to (1) and (2) and non-negativity constraints $h_1 \geq 0$ and $h_2 \geq 0$ yields the following first-order conditions:

(3) $\qquad\qquad\qquad\qquad C = h_2 w_2 + R$
(4) $\qquad\qquad\qquad\qquad U_C - \lambda \geq 0$
(5) $\qquad\qquad\qquad\qquad U_l - \lambda w_2 \geq 0$

where U_C is the marginal utility of the composite consumption good, U_l is the marginal utility of non-labor time, and λ is the shadow value of second job income. Equations (4) and (5) imply that an individual will take on a second job if and only if the offered wage rate exceeds his or her marginal

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[14] Using the broad one-digit occupational classification, only 12.5 percent of multiple job holders held their second job in the same occupation as the primary one.

rate of substitution between consumption and leisure at zero hours of work on the second job , the

second-job "reservation wage" (MRS*). That is,

(6) $h_2 > 0$ if and only if $w_2 > \text{MRS}^*$ and
                                        $h_2 = 0$ if and only if $w_2 \leq \text{MRS}^*$.

Equation (6) implies a second-job participation equation with the marginal rate of substitution on the

right hand side which is assumed to be a function of demographic characteristics, non-labor income

sources, the primary job wage rate, variables reflecting the economic conditions which the individual

faces, and an unobservable component.[15]

Changes in the incidence of multiple job holding are likely to result from altered reservation

wages. How would one then expect multiple job holding behavior to change during economic

transition? The Soviet system affected reservation wages by maintaining control over prices and

wages and by providing significant social benefits through its enterprises, particularly subsidized child

care. Rationing and queuing were a part of everyday Soviet life (Millar, 1987), indicating a high value

of non-labor time. With limited real wages at state sector jobs, the shadow value of second-job income

was high, creating a lower second-job reservation wage. As noted, secondary employment was not

negligible during the Soviet period. Moreover, with women responsible for the primary care of

children, subsidized child care enabled high labor force participation and the reallocation of time from

the workplace to shop for scarce goods or engage in private economic activity (Gaddy, 1991).

The shift to a market economy involved the liberalization of prices and wages, a mass

privatization program for state enterprises, and more recently the divestiture of enterprise-provided

social benefits from the workplace. With the elimination of wage restrictions, some individuals,

particularly men in the financial sector (Mroz and Glinskaya, 1996), have earned high salaries during

economic transition, raising their second-job reservation wage and eliminating a potential need for

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[15] The marginal rate of substitution would also be a function of the second job wage and second job hours, but the reservation wage is obtained when these are zero.

additional employment. However, as noted, wage inequality has risen considerably during economic transition. Workers not enjoying increased earnings, and perhaps experiencing nonpayment of wages or forced administrative leave, will lower their second-job reservation wage, leading to greater participation. As the costs of child care increase with the divestiture of social benefits from state enterprises, the second job reservation wage increases for women with children since the shadow value of their non-labor time rises. In short, the overall effect on second-job participation rates of these institutional changes and specific economic developments in Russia during transition is ambiguous. It depends on the distribution of these factors among employed persons and is likely to differ by gender as indicated.

IV. Estimation Approach

This section seeks to identify the determinants of participation in secondary employment. Table 5 summarizes the relationship between labor supply (at primary and secondary jobs) and demographic/economic characteristics. The statistics are conditional upon holding a primary job.[16] Beginning with the overall unconditional rates, 10.2 percent of the people in the sample report working at an additional job, for an average of 12.0 hours per week in addition to 42.4 hours worked at the main job. The average second-job wage rate is nearly 8 times that earned at a primary job. Males, single individuals, urban residents, and higher educated individuals have the largest secondary employment participation rates. There is no discernible effect of age. A monotonic relationship exists between education and multiple job holding: more highly educated individuals are more likely to have second jobs. The sample was divided in eight regions with the outermost parts of Russia, Eastern Siberia and

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[16] Persons who reported having a primary job and not working at it during the last month are included since they are known to have worked zero hours; however, those who reported having a job at which they worked during the previous month (filter question), but subsequently had missing hours are excluded. They constitute 6.0 percent of the overall sample for both genders from Table 1 and there was no significant difference in the mean multiple job holding rate, age, educational attainment, or gender for the subset used in the regression analysis.

the Far East, the North and Northwest, and Moscow and St. Petersburg, exhibiting the highest incidence of multiple job holding.

Second-job participation rates and hours worked do not have an obvious relationship with the primary-job wage; however, there appears to be an underlying pattern when the wage is disaggregated into hours and earnings. Participation rates and hours worked in a secondary job tend to be inversely related to hours worked at the primary job until approximately 40 hours per week, or full-time employment, is reached. Beyond 40 hours, second-job participation rates and hours worked are positively related to primary-job hours. This suggests that there exists some degree of substitutability between hours on a main job versus second job, conditional upon less than full-time primary employment. Similarly, hours at primary and secondary jobs appear to be complementary for individuals working more than 40 hours per week at their main place of employment.

The bottom of Table 5 provides information on how economic realities specific to the present Russian labor market relate to labor supply. Over half of all individuals are owed back wages by their employer, yet the conditional multiple job holding rate is only slightly above the overall average. In contrast, 7.7 percent of the sample was put on forced administrative leave during the last year; and their multiple job holding rate is significantly above average at 16.5 percent. Ten percent of the sample held a primary job but did not work at it during the previous month. Their multiple job holding rate is slightly below average, possibly due to the timing of the questions. That is, people only recently put on leave have had less time before being interviewed to search for and obtain secondary employment. Finally, over one-quarter of individuals did not receive a salary in the previous month. Their below-average rate for second jobs likely suffers from similar timing issues.

Characteristics	% of sample	Dual Job Rate	Main Job Hours (H >0)	Main Job Wage (w>0/w≥0)	Second Job Hrs (H>0)	Second Job Wage (w>0 /w≥0)
Table 5			**Description of the Data**			
Total (N = 3,790)	100	10.2	42.4	17.1 / 15.3	12.0	135.3 / 112.5
Gender:						
Female	50.3	8.1	39.2	15.9 / 13.8	14.0	58.4 / 47.4
Male	49.7	12.3	45.4	18.2 / 16.9	10.6	188.1 / 159.0
Age:						
15-20	3.8	11.0	38.6	14.9 / 13.0	10.4	112.2 /88.1
21-29	22.7	10.8	42.8	18.0 / 15.0	9.2	175.0 / 142.2
30-39	30.3	10.6	42.8	17.5 / 15.9	13.1	138.1 / 125.8
40-49	30.9	10.1	42.2	17.2 / 16.1	12.3	84.9 / 67.1
50-59	12.3	7.5	42.3	14.6 / 13.1	15.3	201.0 / 150.8
Education completed:						
Higher	21.0	14.1	42.0	22.9 / 20.8	12.6	141.0 / 105.7
Special Secondary	41.7	10.3	41.6	16.9 / 15.0	11.2	136.0 / 118.9
Ordinary Secondary	20.1	8.4	44.5	13.0 / 11.9	10.2	91.4 / 74.5
Primary or less	17.2	7.1	42.2	15.0 / 13.4	15.7	174.4 / 153.6
Region:						
Moscow/St. Petersburg	9.4	16.2	42.3	31.5 / 29.4	9.6	227.6 / 209.7
North & Northwestern	7.8	13.5	42.0	21.5 / 18.4	8.7	266.3 / 161.2
Central & Central Black Earth	17.6	7.8	41.5	15.6 / 13.8	13.8	102.1 / 88.8
Volga V'atski & Volga Basin	17.7	8.3	42.1	8.8 / 8.0	12.2	126.3 / 116.2
North Caucasian	12.2	9.1	46.3	10.1 / 9.0	12.3	70.0 / 60.8
Ural	14.9	7.1	39.6	18.4 / 16.4	13.8	72.0 / 51.7
Western Siberian	10.4	12.2	42.0	24.8 / 22.4	11.8	136.1 / 114.0
Eastern Siberian & Far East	10.0	13.0	44.4	15.4 / 13.9	14.1	82.1 / 69.2
Type of Settlement:						
Urban	75.0	11.6	41.4	19.5 / 17.4	12.0	141.3 / 117.8
Rural	25.0	5.7	45.2	9.9 / 9.0	11.9	97.9 / 79.5
Marital Status:						
Married	76.1	9.8	42.9	17.2 / 15.2	12.0	142.0 / 120.5
Not Married	23.9	11.4	40.8	16.8 / 15.6	12.1	115.5 / 90.4
(continued next page)						

Table 5 [continued]	**Description of the Data**					
Characteristics	% of sample	Dual Job Rate	Main Job Hours (h > 0)	Main Job Wage (w >0/ w ≥0)	Second Job Hrs (h > 0)	Second Job Wage (w >0 / w ≥0)
Primary Job Wage [rubles/hour]:						
equal to zero	36.9	9.7	41.1	0	15.1	136.9 / 109.5
0^+-10	21.0	8.4	46.5	5.7	11.2	115.0 / 102.0
10-20	18.1	11.8	43.2	14.7	9.2	75.8 / 64.2
20-30	10.2	11.6	41.3	25.2	14.5	179.6 / 150.4
30-40	5.1	12.0	40.4	34.4	10.0	134.7 / 105.4
40 +	8.7	10.3	37.1	82.0	8.5	274.2 / 222.8
Primary Job Hours [per week]:						
equal to zero	10.2	9.0	0	0	18.9	42.6 / 38.1
0^+- 30	12.5	15.4	18.7	30.6	16.0	67.4 / 56.5
30-35	6.8	15.6	31.3	14.2	11.3	186.6 / 167.0
35-40	9.8	10.5	37.0	15.0	8.9	135.1 / 112.6
40-45	29.1	8.0	41.9	15.4	8.4	103.2 / 79.3
45-50	12.6	9.0	46.4	15.3	9.8	150.3 / 131.5
50 +	19.0	9.3	62.7	13.9	13.1	280.6 / 225.6
Primary Job Income [rubles/mo.]:						
equal to zero	36.9	9.7	41.1	0	15.1	136.9 / 109.5
0^+-1,000	11.9	9.3	41.1	4.6	11.5	75.0 / 67.1
1,000-2,000	14.5	11.4	42.0	10.6	11.5	103.2 / 88.0
2,000-3,000	10.5	11.6	41.7	18.0	9.7	97.6 / 82.4
3,000-4,000	7.1	10.0	43.2	22.9	13.8	87.9 / 73.8
4,000-5,000	6.5	6.5	44.5	28.6	11.9	66.1 / 60.5
5,000+	12.6	11.7	45.7	62.2	7.6	300.6 / 237.0
Owed Back Wages?	57.6	10.9	42.5	10.5 / 9.4	10.6	140.6 / 119.4
Forced Leave in Past Year ?	7.7	16.5	37.1	13.6 / 11.0	17.3	97.5 / 86.4
Zero Primary Job Hours?	10.0	9.2	0	0 / 0	18.9	42.6 / 38.1
Not Paid Last Month?	26.6	9.9	41.1	0 / 0	13.8	174.4 / 134.0

Notes: Wages are in June 1992 rubles per hour. Hours are weekly.
      h = hours ; w = wage
Source: Russian Longitudinal Monitoring Survey, 1996

An important factor in the decision to obtain an additional job is the offered wage. Since a second-job wage is only observed for persons choosing to take on secondary work, one is imputed for all workers from the estimated coefficients of equation (7):

(7) $$\ln W_i^* = \beta' \mathbf{X}_i + e_i$$

where $\boldsymbol{\beta}'$ is a vector of parameters, $\mathbf{X}_i$ is a vector of demographic variables plus other variables reflecting education, skill level,[17] region, and type of settlement. To correct for selection effects, the secondary employment participation decision is represented by an index function P_i with determinants $\mathbf{Z}_i$:

$$P_i = \boldsymbol{g}' \mathbf{Z}_i + \boldsymbol{m}_i \qquad \text{with}$$

(8)
$$P_i = 1 \ \ if \ \ W_i^* - W_i^{res} > 0,$$
$$P_i = 0 \ \ if \ \ W_i^* - W_i^{res} \le 0$$

where W_i^{res} is the second job reservation wage. Equations (7) and (8) are then estimated simultaneously using full maximum likelihood techniques, with identification attained through exclusion restrictions. Four variables thought to affect the participation decision but not the offered secondary wage are included in $\mathbf{Z}_i$ but not $\mathbf{X}_i$. These four are a dummy variable indicating whether the individual is owed back wages at his or her primary job, a dummy variable for having experienced an involuntary leave, non-labor income,[18] and an index of the level of household wealth equal to the number of consumer durables and major tangible assets owned.[19] Each of these affects the participation decision by influencing an individual's second-job reservation wage. Higher levels of wealth and non-labor income increase the reservation wage, lowering the propensity to obtain additional employment. Experiencing wage arrears or involuntary leave lowers the reservation wage by contributing to financial need, thereby increasing the probability of taking on a second job. The consistent estimates of $\boldsymbol{\beta}'$ from joint estimation of equations (7) and (8) are used to impute second-job

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[17] The International Standard Classification of Occupations (1988) categorization of skill levels from reported occupations was used. This entails four skill levels, from highest to lowest: Professionals, Technicians & Associate Professionals, Clerks/Service workers/Machine operators, and Elementary Occupations. Armed forces and Legislators are unclassified.

[18] Non-labor income is the sum of family allowances, alimony, financial help from relatives and organizations, fuel benefits, apartment benefits, investment income, insurance payouts, rental income, income from sale of property and jewelry, and pensions, if any.

[19] These include car, truck, motorcycle, television, video recorder, refrigerator, separate freezer, washing machine, tractor, garden cottage, dacha, and other real estate. Their value was unavailable.

wages.   Probit analysis is then used to estimate the effects of economic circumstances and demographic characteristics on the probability of holding a second job.

V. Empirical Results

Table 6 reports the estimation results from the selection-corrected earnings/participation equation. Although the participation probits are run separately for men and women, second-job earnings were predicted for the sample as a whole due to lack of significance when the joint earnings/participation models are estimated separately by gender.[20]   Therefore, the main result to notice in Table 6 is the highly significant gender coefficient in second-job wages and participation. Supporting the unconditional tabulations in Tables 1 and 2 , women are not only much less likely to engage in additional work, but those that do so receive significantly lower wages. The insignificant returns to education for second-job wages may be explained by a limited applicability of formal education to secondary job activities.[21]   That is, individuals are performing activities for their secondary employment which do not require an advanced degree or specific training. Turning to the issue of selection, there is evidence that persons taking on second jobs are systematically different than those who choose otherwise. The set of four identifying variables is jointly significant with a chi-squared statistic equal to 31.98.   The second column in Table 6 contains estimates from the participation equation. Discussion of the determinants of second-job participation is deferred to the subsequent regressions which are run on men and women separately and include the (predicted) second-job wage.[22]

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[20] Table 6A of the appendix reports the disaggregated earnings/participation models for men and women. The male model is significant as a whole (model χ^2 (41) = 124.14, p-value = 0.0000), and the subsequent determinants of second-job participation (not reported) were very similar to the estimates reported in Table 7. The female model is not significant overall (model χ^2 (41) = 50.38, p-value = 0.1495), at a reasonable level .

[21] The estimated education coefficients in the same equation for primary-job wages were significant and had greater magnitudes, indicating the relevance of education for primary earnings. Education level, coefficient (std. error): University, 0.1825 (.074); Special secondary,-0.0377 (.057), Ordinary secondary, -0.197 (.066), Primary or less excluded.

[22] Specification tests fail to accept the null hypothesis that the coefficient estimates on males and females are equal. χ^2(22) = 54.79, p-value = 0.0001 and for the model with fertility variables included χ^2(25) = 65.22, p-value = 0.0000.

The maximum likelihood estimates from Table 6 are used to impute second-job wages for men and women, which is included as an explanatory variable in the gender-specific participation probits to follow. Table 7 presents probit estimates for men, reported as the marginal effect of a change in the independent variable on the probability of participation.[23] Affirming the unconditional tabulations, there is no effect of age on participation in second jobs. Men with higher or special secondary education are significantly more likely to have a second job, relative to persons with primary education. Even though the positive and significant coefficient of 0.0785 for higher education is the marginal effect, another transformation will highlight the magnitude of the effect. Since this is a dummy variable, 0.0785 is the difference in the participation probability, evaluated at the mean values for other independent variables, for a person with higher education versus one without. In this instance, the 0.0785 percentage point difference is obtained from 0.1633 minus 0.0848. Therefore, having higher education nearly *doubles* the probability of second job participation. Similarly, special secondary education increases the likelihood by 56.1 percent, a smaller but still significant magnitude. Residing in an urban area adds 10.04 percentage points to the likelihood, which converts to a 301 percent increase over residents living in rural areas.

Of primary interest are the variables indicating a person's economic situation. As expected, higher offered second-job wages increase the probability of men working a second job, by 11.9 percentage points for a one ruble per hour increase. The opportunity cost of leisure time is greater as the second-job wage rises; therefore, men substitute away from relatively more expensive leisure time. Higher primary job wages decrease the probability of taking on additional employment, but the magnitude of the effect is quite small. The size of the effect is muted since the primary job variable includes persons whose wage was zero rubles because they were not paid during the previous month.

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[23] The predicted probability is evaluated at the means of the independent variables. For continuous variables, the marginal effect is for a one-unit change in the independent variable, rather than an infinitesimal change extrapolated out. For dummy variables, the marginal effect is for the discrete change in probability from 0 to 1. As mentioned, both types of marginal effects are relative to the predicted probability of holding a second job, rather than the observed probability.

Note that this is different than being owed back wages, which extends beyond one month of wage arrears.[24] This is important since there is a timing distinction involved. The subset of persons who are owed any money at all by their main place of employment is much greater than those who were not paid in the previous month. More time has passed since they were not paid, enabling them to seek and find additional work if desired. The significant positive coefficient on "owed back wages" is strong evidence that experiencing wage arrears creates an effective incentive for men to obtain additional employment. The 0.0368 percentage point difference translates into a 48.1 percent higher probability for those who are owed back wages compared to those who are not. Recall that the unconditional difference in Table 5 was only 0.7 percentage points (10.9 minus 10.2). Thus, once personal characteristics, regional variation, and other economic conditions are controlled for, men who are owed back wages behave differently than those who are not.

Having experienced an involuntary leave within the past year is also a strong indicator of secondary job activity. It increases the prospect of having two jobs by 5.65 percentage points, which is 60 percent higher compared to persons who did not endure involuntary leave. The average leave for men lasted approximately 52.1 days in 1996 up from 15.9 days in 1993. Furthermore, men working less than 40 hours per week at their primary job are 43 percent more likely than full-time workers to have additional employment. Finally, nonlabor income and wealth have unexpected positive signs, with more nonlabor income increasing the probability of second-job participation by men. A possible explanation is that a fraction of families need considerable income assistance,[25] more than they receive through public and private transfers. Consequently, their severe economic circumstances lead to multiple job holding, while families receiving less income assistance are less likely to take second jobs

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[24] Additional estimations, not reported here, included a variable for persons "not paid last month". It was negative and significant for men (negative and insignificant for women) supporting the conclusion that the timing distinction between being "owed back wages" and "not being paid last month" is important for eventual multiple job holding. The correlation between "owed back wages" and "not paid last month" is +0.311.

[25] The major components of nonlabor income are family allowances, private transfers, and sale of personal property and jewelry.

if the assistance, coupled with labor income, is adequate to meet their subsistence needs. The second column of Table 7 introduces variables for the presence of children in the household. Recognizing the endogeneity created by households making joint fertility and participation decisions, these variables are intended to give a rough idea of the influence that children have on secondary employment. For men, children do not affect the decision to acquire a second job.

Table 8 reports the same models for women. Women are influenced by different factors when making their second job decisions. For those factors which are the same as men, the magnitude of the effect is less. The two main factors which influence female but not male secondary employment are marriage and children. Married women are significantly less likely to take on second jobs, indicating a high shadow value of home production activities. Being married lowers the probability of multiple job holding by 33 percent, or 2.97 percentage points. Secondly, an extra child below age 3 decreases the probability a woman will take on additional work by 6.7 percentage points, a large effect given that the overall participation rate for women is only 8.1 percent.

Higher education raises the probability of second-job activity by 5.8 percentage points, or an increase of 98 percent, which is the same relative magnitude as men. Compulsory leave and less than full-time employment are also significant determinants for women, raising the probability of having another job by 83 and 97 percent, respectively. However, these are the only significant economic variables. Primary and secondary wages both have insignificant effects as does, interestingly, the wage arrears indicator variable, which was highly significant for men. The wealth index and non-labor income are insignificant, indicating that income effects are not important for female second-job participation decisions.

VI. Conclusion

This paper documents the patterns of multiple job holding and the characteristics of multiple job holders in Russia during economic transition. It also examines the determinants of second job

participation. On balance, the multiple job holding rate grew by 80 percent from 1992 to 1996, rising from 5.6 to 10.1 percent of prime-aged workers. Men, urban residents, and individuals with higher education are more likely to obtain a second job. The gender wage gap is 18.3 percent for primary jobs, but nearly 70 percent on second jobs. Higher second-job wages make men more likely to participate, while the second-job wage rate has no effect on female participation. In addition, most second jobs in Russia carry a greater wage rate than the individual's primary work, yet the trend is increasing for men and decreasing for women.

The economic environment facing many Russians during transition includes increasing poverty, rising inflation and unemployment, nonpayment of wages, and forced administrative leave. Each of these factors influences second-job reservation wages and thereby second-job participation rates. Experiencing involuntary leave raises the probability of participation by 60 percent for men and 83 percent for women. Men who are owed back wages are 48 percent more likely to take on additional work. Furthermore, men working less than 40 hours per week at their primary job are 43 percent more likely than full-time workers to have additional employment For women, the magnitude of this effect is more than twice as great at 97 percent. Finally, married women and women with young children are significantly less likely to have second jobs testifying to the high value of their home production activities. A next step in this research is to examine the dynamic aspect of multiple job holding, exploiting further the panel nature of the RLMS to identify which workers move into and out of second jobs and why.

Table 6   **Determinants of Second-Job Wages**

Independent Variable	Wage Equation	Participation Equation
Demographic		
Female ?	-0.980**	-0.289**
	(0.196)	(0.069)
Age	-0.027	0.028
	(0.047)	(0.022)
Age Squared (/100)	0.031	-0.050*
	(0.064)	(0.030)
Married?	0.055	-0.072
	(0.164)	(0.077)
Education (Primary or less excluded)		
University/Graduate	-0.027	0.154
	(0.268)	(0.124)
Special Secondary	0.093	0.199**
	(0.220)	(0.097)
Ordinary Secondary	-0.099	-0.030
	(0.249)	(0.113)
Region & Type of Settlement (Moscow & St. Petersburg excluded)		
North & Northwestern	-0.026	-0.336**
	(0.309)	(0.144)
Central & Central Black Earth	-0.452	-0.458**
	(0.301)	(0.117)
Volga Vyatski & Volga Basin	-0.513*	-0.397**
	(0.272)	(0.118)
North Caucasian	-0.478*	-0.263**
	(0.273)	(0.129)
Ural	-0.703**	-0.569**
	(0.337)	(0.127)
Western Siberian	-0.206	-0.232*
	(0.257)	(0.127)
Eastern Siberian & Far East	-0.475*	-0.228*
	(0.265)	(0.132)
Urban (relative to Rural)	-0.210	0.390**
	(0.262)	(0.088)

Table 6 [continued] **Determinants of Second-Job Wages**

Independent Variable	Wage Equation	Participation Equation
Skill Level (Clerks, Service workers, Machine operators excluded)		
Professionals	0.102	0.152
	(0.240)	(0.104)
Technicians & Associate Professionals	0.109	-0.045
	(0.214)	(0.099)
Elementary Occupations	-0.302	-0.027
	(0.232)	(0.107)
Unclassified	-0.114	-0.356
	(0.550)	(0.225)
constant	5.651**	-1.856**
	(1.426)	(0.412)
Identifying Variables		
Owed Back Wages?	...	0.213**
		(0.069)
Involuntary Leave?	...	0.392**
		(0.103)
Non-Labor Income ($/10^4$)	...	0.071**
		(0.035)
Wealth Index	...	-0.003
		(0.023)

Notes: Dependent Variable = ln(second job wage)
Standard errors in parentheses. * and ** indicate significance at the .10 and .05 levels respectively
Number of observations = 3,790 (285 positive second job wages)
Log-likelihood = -1383.40; ρ = -0.102, p-value = 0.844; σ = 1.097, p-value = 0.122
Model $\chi^2(43)$ = 135.44, p-value = 0.0000 ; $\chi^2(4)$ = 31.98, p-value = 0.0000 for the set of 4 identifying variables

Table 7　　　　　　　**Probit Estimation for Multiple Job Holding by Men**

Independent Variable	dF/dx	dF/dx
Demographic		
Age	0.0024	0.0020
	(0.0049)	(0.005)
Age^2 (/100)	-0.0063	-0.0056
	(0.0062)	(0.007)
Married?	-0.0028	-0.0062
	(0.0200)	(0.022)
Number of Children under 3	----	-0.0004
		(0.020)
Number of Children 3-5	----	0.0157
		(0.017)
Number of Children 6-15	----	0.0019
		(0.010)
Education (Primary or less excluded)		
University/Graduate	0.0785**	0.0783**
	(0.032)	(0.032)
Special Secondary	0.0462*	0.0467*
	(0.025)	(0.025)
Ordinary Secondary	0.0244	0.0246
	(0.026)	(0.026)
Region & Type of Settlement (Moscow & St. Petersburg excluded)		
Northern/North Western	-0.0102	-0.0108
	(0.028)	(0.028)
Central/Central Black Earth	-0.0514	-0.0514
	(0.031)	(0.030)
Volga-Vyatski/Volga Basin	-0.0160	-0.0164
	(0.037)	(0.039)
North Caucasian	0.0018	-0.0001
	(0.044)	(0.044)
Ural	-0.0673	-0.0674
	(0.034)	(0.034)
Western Siberian	-0.0135	-0.0141
	(0.028)	(0.028)
Eastern Siberian/Far Eastern	0.0386	0.0373
	(0.052)	(0.052)
Urban (Rural excluded)	0.1004**	0.1006**
	(0.016)	(0.015)

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Table 7 (continued)   **Probit Estimation for Multiple Job Holding by Men**

Independent Variable	dF/dx	dF/dx
Economic Variables		
Primary Job Wage (actual)	-0.000690**	-0.000692**
	(0.00029)	(0.00029)
Second Job Wage (imputed)	0.1187*	0.1181*
	(0.069)	(0.069)
Owed Back Wages?	0.0368**	0.0368**
	(0.014)	(0.014)
Experienced Involuntary Leave ?	0.0565**	0.0571**
	(0.033)	(0.033)
Nonlabor Income ($/10^4$)	0.0126*	0.0127*
	(0.007)	(0.007)
Wealth Index	0.0001	0.0004
	(0.005)	(0.005)
Primary Job Hours < 40 ?	0.0377**	0.0387**
	(0.016)	(0.017)
Log-Likelihood	-628.82	-628.41
Pseudo-R^2	0.1028	0.1034
Model $\chi^2(21)$, $\chi^2(24)$	144.15**	144.98**
$\chi^2(3)$ for inclusion of fertility variables, p-value		0.84, 0.8400
Observed vs. Predicted Probabilities (at means)	.1227 vs. .0971	.1227 vs. .0970

Notes: Standard errors of dF/dx in parentheses.
        * and ** denote a significant difference from zero of the *underlying coefficient*
          at .10 and .05 levels respectively
        For dummy variables, dF/dx refers to the change in probability for a discrete change from 0 to 1.
        Dependent Variable = 1 if individual holds a second job. N = 1,883 (231 multiple job holders)

Table 8   **Probit Estimation for Multiple Job Holding by Women**

Independent Variable	dF/dx	dF/dx
Demographic		
Age	0.0020	0.0017
	(0.005)	(0.006)
Age^2 (/100)	-0.0018	-0.0018
	(0.007)	(0.008)
Married?	-0.0334**	-0.0297**
	(0.015)	(0.015)
Number of Children under 3	----	-0.0669**
		(0.022)
Number of Children 3-5	----	0.0209
		(0.015)
Number of Children 6-15	----	-0.0085
		(0.009)
Education (Primary or less excluded)		
University/Graduate	0.0585**	0.0555**
	(0.027)	(0.026)
Special Secondary	0.0209	0.0190
	(0.020)	(0.019)
Ordinary Secondary	0.0248	0.0204
	(0.027)	(0.026)
Region & Type of Settlement (Moscow & St. Petersburg excluded)		
Northern/North Western	-0.0193	-0.0172
	(0.022)	(0.021)
Central/Central Black Earth	-0.0362	-0.0333
	(0.023)	(0.022)
Volga-Vyatski/Volga Basin	-0.0531**	-0.0517**
	(0.020)	(0.019)
North Caucasian	-0.0234	-0.0189
	(0.026)	(0.027)
Ural	-0.0277	-0.0272
	(0.032)	(0.031)
Western Siberian	-0.0191	-0.0192
	(0.022)	(0.021)
Eastern Siberian/Far Eastern	-0.0235	-0.0243
	(0.027)	(0.025)
Urban (Rural excluded)	0.0213	0.0195
	(0.016)	(0.015)

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Table 8 (continued)   **Probit Estimation for Multiple Job Holding by Women**

Independent Variable	dF/dx	dF/dx
Economic Variables		
Primary Job Wage (actual)	0.000197	0.000167
	(0.000195)	(0.000188)
Second Job Wage (imputed)	-0.0314	-0.0322
	(0.049)	(0.047)
Owed Back Wages?	0.0177	0.0157
	(0.012)	(0.012)
Experienced Involuntary Leave ?	0.0555**	0.0488**
	(0.027)	(0.026)
Nonlabor Income ($/10^4$)	0.0088	0.0089
	(0.006)	(0.006)
Wealth Index	0.0032	0.0037
	(0.004)	(0.004)
Primary Job Hours < 40 ?	0.0481**	0.0526**
	(0.012)	(0.012)
Log-Likelihood	-506.20	-499.42
Pseudo-R^2	0.0540	0.0667
Model $\chi^2(21)$, $\chi^2(24)$	57.84**	71.39**
$\chi^2(3)$ for inclusion of fertility variables, p-value		11.97, 0.0075
Observed vs. Predicted Probabilities (at means)	.0807 vs. .0702	.0807 vs. .0672

Notes: Standard errors of dF/dx in parentheses.
  * and ** denote a significant difference from zero of the *underlying coefficient*
      at .10 and .05 levels respectively
  For dummy variables, dF/dx refers to the change in probability for a discrete change from 0 to 1.
  Dependent Variable = 1 if individual holds a second job. N = 1,907 (154 multiple job holders)

Appendix

Table 6A   **Determinants of Second-Job Wages
                              Separated by Gender**

Independent Variable	Men		Women	
	Wage	Participation	Wage	Participation
Demographic				
Age	0.008	0.001	-0.178*	0.051
	(0.057)	(0.029)	(0.093)	(0.042)
Age Squared (/100)	-0.023	-0.023	0.270**	-0.072
	(0.073)	(0.037)	(0.131)	(0.057)
Married?	0.067	0.089	0.286	-0.189
	(0.280)	(0.124)	(0.247)	(0.104)
Education (Primary or less excluded)				
University/Graduate	-0.025	0.120	0.188	0.121
	(0.343)	(0.174)	(0.421)	(0.185)
Special Secondary	0.024	0.297**	0.244	0.138
	(0.318)	(0.135)	(0.326)	(0.145)
Ordinary Secondary	-0.514	0.040	0.733	-0.017
	(0.319)	(0.150)	(0.429)	(0.185)
Region & Type of Settlement (Moscow & St. Petersburg excluded)				
North & Northwestern	0.058	-0.259	0.262	-0.438*
	(0.365)	(0.154)	(0.572)	(0.226)
Central & Central Black Earth	-0.352	-0.583**	-0.342	-0.314*
	(0.453)	(0.163)	(0.409)	(0.172)
Volga Vyatski & Volga Basin	-0.491	-0.372**	-0.527	-0.455**
	(0.345)	(0.157)	(0.452)	(0.183)
North Caucasian	-0.672*	-0.339*	-0.297	-0.171
	(0.377)	(0.179)	(0.392)	(0.191)
Ural	-0.383	-0.871**	-0.885**	-0.304*
	(0.612)	(0.191)	(0.389)	(0.178)
Western Siberian	-0.324	-0.295*	0.094	-0.161
	(0.351)	(0.176)	(0.387)	(0.190)
Eastern Siberian & Far East	-0.532	-0.226	-0.087	-0.242
	(0.342)	(0.178)	(0.407)	(0.201)
Urban (relative to Rural)	-0.108	0.586**	-0.425	0.188
	(0.466)	(0.127)	(0.297)	(0.124)

Table 6A [continued]   **Determinants of Second-Job Wages**
                            Separated by Gender

Independent Variable	Men		Women	
	Wage	Participation	Wage	Participation
Skill Level (Clerks, Service workers, Machine operators excluded)				
Professionals	0.107	0.433**	0.055	-0.053
	(0.444)	(0.156)	(0.342)	(0.147)
Technicians & Associate Professionals	-0.061	0.170	0.233	-0.180
	(0.341)	(0.167)	(0.324)	(0.128)
Elementary Occupations	0.116	-0.043	-0.775**	-0.070
	(0.346)	(0.156)	(0.331)	(0.156)
Unclassified	-0.655	-0.341	1.233	-0.249
	(0.635)	(0.262)	(1.112)	(0.469)
constant	4.925**	-1.587**	7.162**	-2.377**
	(1.857)	(0.538)	(2.395)	(0.739)
Identifying Variables				
Owed Back Wages?	...	0.293**	...	0.157
		(0.095)		(0.103)
Involuntary Leave?	...	0.395**	...	0.358**
		(0.148)		(0.152)
Non-Labor Income ($/10^4$)	...	0.062	...	0.093*
		(0.046)		(0.050)
Wealth Index	...	-0.020	...	0.014
		(0.030)		(0.033)
Log-likelihood		-768.52		-586.93
Model χ^2(41)		124.14**		50.38
Model p-value		0.0000		0.1495
χ^2(4) (p-value) for set of 4 identifying variables		20.38 (0.0004)		13.62 (0.0086)
Number of observations		1,883		1,907
Number of positive second-job wages		169		116
ρ (p-value)		0.0598 (0.939)		-0.4042 (0.582)
σ (p-value)		1.0791 (0.247)		1.0806 (0.771)

Notes: Dependent Variable = ln(second job wage)
        Standard errors in parentheses. * and ** indicate significance at the .10 and .05 levels respectively.

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