Labour in Transition: Women and Men in Taganrog, Russia*

By

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Abstract

The paper discusses the effect of economic reforms on gender differences in participation rates and earnings in Russia in the early 1990s. Besides national statistics it uses survey data from the city Taganrog, 1989 and 1993/9. Although local, these repeated cross sections provide unique comparable data from Soviet and post-Soviet Russia. Results agree with national statistics in that participation has decreased and unemployment increased for both men and women. The female/male earnings ratio fell from 66% in 1989, to 61% in 1993, at a moment when real wages for the men too have decreased dramatically. Oaxaca-decompostions of the gender gap indicate that, in both years, the greater part is due to differential rewards but that gender differences in hours worked contribute more to the wage gap 1993 than in Soviet times.

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1. Introduction

Economic and social conditions in Russia have undergone very dramatic changes in the years following the collapse of the USSR. Freedom has increased, but so have poverty, social tension, stress and insecurity. The labour market is only a part of this scenario, but an essential one.

Russian workers have experienced drastic changes: Instead of job-security they face fear of unemployment. Instead of not being able to find goods, people are unable to afford them. Instead of an all-dominant state sector, in 1998, 43% of the employed population worked in the private sector and an additional 18% in enterprises with mixed ownership (Rossiiskii Statisticheskii Ezhegodnik 1999, p. 109). Yet, the privatised enterprises most often retain both their old management and much of their old behaviour. Firms are supposedly subject to "the discipline of the market" – yet they evade paying what they owe each other, their workers and the tax authorities for years on end. GNP has slumped, yet open unemployment is not higher than in Western Europe. Employers default on wage payments, yet hire new staff. Millions of employees do not get paid, yet do not quit their jobs. Wages do not cover the cost of bare essentials, yet people survive.[1]

The present paper will limit itself to certain aspects of the gender dimension of employment in Russia. There is, by now, quite an extensive literature in the field, but a shortage of solid empirical analysis, particularly quantitative. Since empirical knowledge beyond impressions, individual cases and anecdotes is a precondition for taking theoretical analysis further, what follows should be seen, not as an alternative, but as a complement to both Western and Russian studies in other social sciences, which analyse the topic of gender aspects of the transformation in Russia from differing perspectives.

Women in the former Soviet Union encountered the turmoil of post-Soviet economic reform from a relative position of disadvantage, of segregation and discrimination. In

[1] For an introduction to the Russian art of survival, see Alasheev & Kiblitskaya, (1996). People survive in the sense that there is no mass famine. Health and life expectancy however, have declined drastically.

section 2 that starting position, the Soviet gender order, is briefly described with emphasis on employment and wage issues. The following section outlines, also very briefly, the immediate impact on gender roles and gender ideology of the first years of reform and the fears they aroused of marginalisation of women on the labour market. The remainder of the paper will outline labour market outcomes for women and men in Russia in the 1990s, partly from analysis of published statistics and a survey of econometric studies, and partly using repeated cross-section survey data collected in the city Taganrog. Section 4 describes the Taganrog data and section 5 introduces other, widely used, Russian micro-economic data sets.

The main issues under discussion in sections 6 and 7 are gender differences in labour force participation and unemployment. The topic of section 8 is earnings and incomes dispersion - a large subject that is only touched on here as a background to sections 9 and 10, which focus on the gender gap in earnings. In section 10 wage and earnings equations are estimated and the gender differential decomposed according to the standard Oaxaca - Blinder method.

The conclusions to be drawn from a local sample have limitations. Nevertheless, the timing and sampling of the Taganrog data allow a unique comparison between the situation on the eve of the disintegration of the USSR and that in the midst of the market reforms. Official statistics are used to measure the local situation against the national, and to follow trends until 1998-1999. Analysis of wages will be mainly based on the Taganrog data. The study of changes in employment and unemployment will draw more extensively on the national statistics, since the number of observations of unemployed and of employed in smaller sectors are not large enough in the sample.

The study is limited to paid work even though this is unsatisfactory, particularly for a gender analysis. Since no fully-fledged time-use studies are made in Russia today, it would be difficult to pursue the issue of housework in any depth here.

2. The Soviet Legacy of Discrimination – a summary

Officially, women in the USSR enjoyed equal rights with men. “Equal pay for equal work”-legislation had been in force since almost immediately after the October

Revolution. Yet, the real situation in which Soviet women found themselves in was highly unequal, as has been documented in a number of studies. (Among these, see Atkinson et. al, 1977, McAuley, 1981, Katz, 1994, 2001, Liljeström, 1995.)

Labour force participation among women was high and practically all jobs were full-time, formally. (We will return to the issue of actual differences between the working hours of men and women. See also table A1.2.) In 1982 the right to maternity leave had been extended from one year to 18 months. 18 weeks of the leave were fully paid. Caregivers also had the right to leave to care for a sick child.[2] These rights, valuable as they were, however, also led to women workers being regarded by employers as less reliable and less committed to their careers than men. The same can be said for "protective legislation" which limited the tasks and work conditions that women could be assigned.[3]

Wages and fringe benefits in the USSR varied very much between sectors. Certain segments of the economy were given higher political priority and privileged access to resources. These sectors tended to be male dominated, while female dominated sectors like teaching, health-care and consumer goods industries were characterised by low pay. (For some econometric evidence, see Katz, 2001, chapter 5.) The level of sectoral segregation was high – about a quarter of employees in construction were women and a third in metallurgy, but 80% in health care and over 70% in light industry.

The prevailing priorities affected women both as workers and as consumers. Women bore the lion’s share of housework, child-care, cleaning, laundry, shopping. Thus, the ubiquitous shortages of consumer goods and services and their low quality affected women disproportionally. This drain on time and energy could not but affect careers.

[2] In principle, this leave could be taken by either parent or by another relative but a doctor's certificate was needed and - according to anecdotal evidence - doctors sometimes regarded fathers as unsuitable for the care of a sick child and refused permission.

Measured in years of schooling, the education of women was as high as that of men, but women predominated in fields of study that lead to low-paying areas of work. The ratio of female to male monthly wages was 65-70%. The difference was smaller for hourly wages, but quite as large, or larger, than in developed Western countries.

3. Women in post- reform Russia

3.1 "Backlash"

Early in the period of transition, scholars of different disciplines, in Russia itself and in the West noted indications that women were loosing out, economically, socially and ideologically. (Buckley, 1992, 1997, Fong, 1993, Posadskaya, 1994, Funk and Mueller, 1993, Malysheva, 1996) Already during Gorbachev's *perestroika*, influential and widespread voices argued that now it was time to free the "overemancipated" Soviet woman from her double burden and return her to her "natural" place in life, as the guardian of home and hearth (Buckley, 1992). The image of what women "ought" to be was either the good mother and wife or a sex object (Klimenkova, 1994, Kay, 1997). Commercials and job-advertisements were – and are - blatantly sexist. That women were primarily responsible for childcare and housework was taken as given and the idea that men might care for small children was not even raised until "*glasnost'*" (see e.g. Atkinson et. al., 1977, Buckley, 1981, Posadskaya, 1994).

During the Soviet period, the view that women are less suited for careers than men and have a "natural propensity" for devoting themselves above all to homes, husbands and children had been only barely covered under a thin veneer. During *glasnost'* and transition, politicians, employers and academic "experts" claimed openly that female unemployment did not merit concern so long as men were unemployed and women were better off not working, anyway.[4] According to Lissyutkina (1993, p. 277),

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[3] Women were not supposed to work underground or work night shifts in manufacturing, the limits for how much could be carried or lifted during a shift was lower than for men, mothers of young children could refuse business trips, and so on.

[4] Another sign of the times was that, with a real choice in elections, Soviet voters chose very few women. With the 1989 election to the USSR Supreme Soviet, the percentage of women deputies fell

patriarchal gender roles had become a protest against a ”totalitarian system built on force and the demise of individual differences including the differences between men and women”.

In fact, "the differences between men and women" were far from demised in the USSR. Thus, Bloomsma (1993) points to the continuity between post-Soviet ideology and longstanding Soviet views on the so-called “demographic problem”. Yet, it was perceived by most as a break with the Soviet past. As Waters (1993, p. 288) puts it: “When the propaganda claims concerning women’s emancipation were eventually challenged, it was less to expose their lack of substance than to deny the validity of the professed objectives.”

3.2 Marginalisation of women on the labour market?

At the beginning of transition, scholars emphasised a number of reasons why market reforms could disadvantage women on the labour market The concern in this early literature (Einhorn, 1993, Funk and Mueller, 1993, Fong, 1993, Posadskaya, 1994, Grapard, 1997) generally had to be based on theoretical arguments rather than by first-hand empirical studies.

- The notoriously overstaffed Soviet enterprises were expected to lay off millions of workers. First, it was no longer necessary for managers to protect themselves against inefficiencies in production and planning by “hoarding labour”. Second, funding for labour costs was no longer allocated by the centre but had to be born by the enterprise. Third, managers no longer had to find new jobs for those made redundant. Cuts in employment began, and the first to be affected were administrative staff, predominantly female.

- With a market economy, employers were expected to be more sensitive to costs connected with maternity leave, absence for family reasons, protective legislation for women and special rights for mothers. These were maintained or increased in

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from 33% to 19%. After the 1999 elections, 8% of the members of the State Duma (Russian Parliament) are women.

the reform period. (Fong, 1993, Mezentseva, 1994b, Khotkina, 1994, Grachev, 1996). Maternity leave, with the right to return to the same job was extended from 18 months to 36 in April 1991. Even though government pays the monetary benefits[5] employers might still find the leave a disincentive to hiring women of childbearing age. Women could be considered to be unreliable workers because they have to stay home when children, grandchildren or elderly relatives are ill.

- The demand for fiscal cuts threatened health-care, child-care, schools and culture that employed about a quarter of the female labour force. Substitution of imported for domestic consumer goods would hit female dominated light and food industries.

- Substitution of household production for previously cheap or free services and goods would increase the burden of housework and subsistence gardening and their negative effects on women's paid work.

- It was hard to believe that the discriminatory attitudes so frequently expressed by politicians, media and business would not have practical repercussions on employment practices and labour market policies.

- For the "noveaux riches" and those who wanted to emulate them it became a prestigious Veblenian symbol of "conspicuous consumption" to have a non-working wife.[6]

On the other hand, there were factors working in other directions too:

- Crisis in heavy industry and mining would lead to losses of more male than female jobs. Even though many women, particularly engineers and technicians, lost their jobs as military industry declined (Rzhanitsyna, 1993, Leontieva, 1994)

[5] As before, full compensation is paid no longer than until 10 weeks after the birth. From then, until the child is 18 months there is a low flat-rate benefit and from 18 months to three years none at all.

[6] In Roshin's and Roshina's (1994) small survey of Moscow managers and businessmen, the majority of the male respondents wanted their wives to devote themselves to the household, full-time.

there is no real evidence that it would not affect as many or more men. Budget cuts for the armed forces affected mainly men.

- Since consumer services were so underdeveloped in the USSR, expansion was expected. More retail shops, restaurants, launderettes as well as private child care and health care, beauty parlours, dressmakers and so on would provide employment opportunities for women.

- It was not necessarily less profitable to employ women. Juggling jobs and housework had taught Russian women efficiency and organising skills. They were more likely than men to stay home with a sick child, but less likely to be absent or inefficient because of drinking. [7]

- Women accepted lower wages than men did. This implied that rather than being unemployed they might still have jobs, but loose in terms of pay (Mezentseva, 1994a).

The impact of market reforms on the position of women relative to men, is, thus, not something that can be decided on first principles. It requires empirical research.

The question in this paper is whether inequality increased or decreased in the first years of transition, and in which ways. To ask if women and men have lost or gained equally much during the years of reform is not the same as asking whether Russian women have lost or gained. The real wages of many Russian women and men have declined since 1989. This paper asks whether the decrease has been the same, or different in size or form. Since male earnings have fallen, lower earnings for women are compatible with an unchanged or even increased gender ratio.

In studies of present day Russia, the problems of measurement that are always associated with quantitative studies are compounded by the size of the informal and ”shadowy” sector. Yet, while it is important to recognise the complexity of social and

[7] For some evidence on male and female drinking patterns and their effect on health, see Carlson (2000) and references therein.

economic relations, a quantitative “check” on the validity and generalisability of small-scale qualitative studies (which may be based on few and selective observations) or journalistic accounts is particularly urgent.

4 The Taganrog data

The data used in this study are from Taganrog in South Russia, an industrial city of 300 000 inhabitants. They originate from one survey made in 1989 and one from 1993/94, both designed and implemented by the Institute for Socio-Economic Population Studies, Russian Academy of Sciences. The 1989 data have been used for a detailed analysis of wages and gender discrimination, reported in Katz (1994, 1997, 2001). In both cases, a random sample of households was chosen from a stratified register of housing units. The 1989 sample included 1200 households and the 1993/94 one, 2095.

In both cases, a probability sample of addresses was selected from a housing register. The 1993/94 data included information about all adult members of the households, which means that respondents are a probability sample of the non-institutionalised adult population, except hostel residents and conscripts. In 1989 a limited amount of information was obtained about all members, but one main respondent was interviewed more extensively. The choice of this respondent was not properly randomised. Since most wage-models, in 1989, had to be estimated for this sub-sample, in the following, "respondents” in 1989 are these, unless it is specifically stated that reference is to all household-members.[8] The number of main respondents reporting a wage from the state sector for the preceding month in 1989 was 935, 868 of whom were between 18 years and pension age. Partial non-response was less than 3%.[9]

[8] See Katz (1994, 2001) for description of the sets of all household members and of main respondents and tests for selectivity. The tests indicated that estimates of wage functions are not substantially biased by this selection.

[9] For details on non-response and partial non-response in the 1989 sample see Katz (1994).

In 1993/94, 2725 respondents reported some form of non-zero labour income for the previous month. Of these, 207 received all or part of their earnings from self-employment or entrepreneurial activity. The coding of the data does not allow us to distinguish between people who did not receive a wage that was due to them, people who had not earned a wage the previous month and refusals to answer the question. Maximum possible non-response to this question is 6%. Non-response and partial non-response in the prime working age group is described in Table £A1.1.

Generalisation from a local sample to Russia as a whole was easier to justify in 1989 than in 1993/94. Although the Soviet system of centralised wage-setting allowed more circumvention than was officially admitted, it was nevertheless relatively uniform across regions (excepting the percentage additions paid to workers in the Far North). Wages would vary, but when wage-determinants like sector, education, type of job, experience and tenure were controlled for, wage-equations could, with some caution, be generalised from Taganrog to urban Russia, or to the urban population of the European parts of the USSR. In 1993/94, much greater qualifications must be made.

The present article will also use information not only on wage earners but on other forms of gainful employment as well. For 1993/94, I have information on income from wages in primary and second jobs, self-employment (ITD)[10] and entrepreneurial activity. Self-reported incomes always come with measurement errors. These are likely to be particularly grave in the Russian context, for several reasons. First, earnings vary greatly from month to month, even from week to week. A number of people have regular or irregular side-earnings, wages due may not have been paid, or paid only in part. Furthermore, the period of the survey was one of high inflation.[11] This may have made it difficult for respondents to recall incomes accurately. It is also reasonable to think that some incomes kept secret from the tax authorities were not disclosed to interviewers either. Although there are no reliable estimates of the extent

[10]"*Individual'naia trudovaia deiatal'nost'*", literally "individual labour activity". Respondents label their income as wages, ITD or entrepreneurial income themselves.

[11] Since I was primarily interested in wage-coefficients for different variables, i.e. relative wages of different categories, I used changes in the Russian average wage for indexation, rather than CPI. I was not able to take into account local or regional rates of price or wage change.

of tax evasion in Russia, it is generally believed to be quite large. (These problems should affect RLMS and VTsIOM or any other survey wage data as well as these.) I suspect that measurement error is larger for ITD, entrepreneurial incomes and wages from second jobs than for wages in primary job. To exclude those would, however, have been to disregard important components of earnings.

There are some data sets which cover a probability sample of Russian regions or localities, and in that respect are superior to these, but none of them go back further than 1991. The unique contribution of the Taganrog data is that we can compare a pre- and post-reform situation in, at least, this town. It can indicate some directions of change that apply in other places too, and raise issues for further research. Appendix 2 compares the sample with national data on employment and relative wages.

5. Other Russian labour market data[12]

The official statistical agency, Goskomstat, publishes wage data collected from enterprises, but until recently has not done it separately by gender[13]. Further, enterprise based statistics cannot take into account second jobs at other work places nor incomes from self-employment (nor, of course, informal, illegal or unregistered earnings). They provide information of how a job is paid, depending on sector and type of enterprise.

Goskomstat also conducts Labour Force Surveys[14], providing data on labour market status according to gender, education, socio-economic category and age. Some research teams have been allowed to add questions to a subsample of the survey (Lehmann, et al. 1999, Clarke, 1999). The Federal Employment Service publishes similar data, but these only cover those who turn to it for help and registration.

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[12] Clarke (1999) includes a more extensive description and discussion of the different data sources.

[13] The exceptions are booklets (Zhenshchiny i muzhchiny Rossii 1997, 1999), produced in co-operation with Statistics Sweden. The 1997 edition includes examples of gender wage ratios in occupations and sectors and the 1999 one the ratios in all major sectors of the economy and some branches of industry.

[14] *Obsledovanie naseleniia po problemam zaniatosti*

Four sources of household survey data will be referred to in the following: The All-Russian Centre for Study of Public Opinion (VTsIOM) has carried out regular all-Russian repeated cross-section surveys since 1991. The widely used Russian Longitudinal Monitoring Survey (RLMS) was started in 1992. Unlike the VTsIOM, the RLMS has been conducted as a panel study. At the time of writing, there have been eight waves of interviews, starting 1992 (with one change of panel) on a stratified all-Russian sample. There were 6 500 households in the first panel, 4 700 in the second. (Klugman & Braithwaite, 1997, describe these sources, as well as the Taganrog data and Goskomstat's Family Budget Surveys.) The Centre for Comparative Labour Studies, University of Warwick the and Institute for Comparative Labour Relations Research (ISITO), Moscow have carried out household surveys in four Russian cities (See e. g. Clarke, 1999. For brevity, I will refer to these as "the ISITO data".)[15]

6 Gender and employment in Russia

6.1 Labour force participation

Table #1 of self-defined labour market states shows that in 1989 the difference in participation rates between men and women in Taganrog from 16 years to pension age[16] was about 3 percentage points. Respondents who are at work, on maternity leave, "temporarily not working" (1989) or "temporarily not working, unemployed" (1993) are considered to be in the labour force.

TABLE #1 ABOUT HERE

In the age-bracket from 20 years to pension age, the difference is less than 2 percentage points in 1989[17], but in the wider 15-72-age group, 81% of men and only 72% of women were employed, due to the lower pension age for women. In the

[15] See also the studies cited in the following and the RLMS web-site, http://www.cpc.unc.edu/projects/rlms/rlms_home.html. and that of the University of Warwick (http://www.csv.warwick.ac.uk/fac/soc/complabstuds/russia/russint.htm)

[16] The standard pension age was, and is, 60 years for men and 55 years for women.

[17] But nearly 5% of the employed women are on leave.

1993/94 sample, in the 15-72-age range, male LFPR is 77% and the female 65%. Between age 20 and pension age, the difference between male and female rates has increased to over 3 percentage points. Comparing over time, we see that in Taganrog, the proportion of respondents aged 16 to pension age who are "economically active", is down by 4 percentage points for both men and women.[18] The proportion that defines itself as "working" has fallen by 7-8 percentage points.

TABLE #2 ABOUT HERE

Participation rates for the Taganrog samples of 1989 and 1993/94 are reported in Table #2. There has been a significant decrease in the participation rate between the two surveys, For both women and men the drop in the 20 years to pension age group is significant.[19] Male/female differences have increased, but not numerically by much. Note that there was a significant gender difference in the rate actually working also in 1989, although there was not in participation rates.

FIGURE #1 ABOUT HERE

Figure #1 indicates changes in participation and employment 1989-1998 in Russia as a whole.[20] It shows that the number of labour force participants has decreased for both genders. In 1989 the census registered 37.2 million employed women. In 1998, 31.5 million women were in the labour force, i.e. 5.7 million less. The number of employed women had fallen by nearly 10 million since four million were unemployed. While 39.7 million men were employed in 1989, 35.3 million were in the labour force in 1998, a decrease of 4.4 million. With nearly five million men unemployed, male employment had fallen by over 9 million. Thus, more women have

[18] Three percentage points if those "temporarily not employed" in 1989 are not considered economically active.

[19] Size and precision of changes in participation rates for more specific age groups can be calculated from the rates and standard deviations reported in tables A2.3 and A2.4.

[20] The census data for 1989 are of employment. Since there was no open and little hidden unemployment in urban Russia, I have equated employment and participation. From 1992 Goskomstat applied the international standard.

left the labour force, the fall in female employment was larger and more men were unemployed, but none of these gender differences are dramatic in size.

Admittedly, census data and (Labour Force) Survey data are not strictly comparable. On the other hand, there few alternatives if one wants to compare changes in male and female labour market status in Soviet and post-Soviet Russia, since the LFS only began in 1992. Redundancies started earlier than that, and there is reason to believe that the first cuts in staff were biased against women. Goskomstat publishes data on aggregate employment for earlier years too, but they are from register data, that is to say, reports from firms above a certain size, complemented by guesstimates for small firms, unregistered employment and self-employment which would otherwise not be included. According to these data, male employment decreased from 37.2 to 33.4 million from 1990 to 1998, and female from 38.1 to 30.3, that is to say, considerably more. Doubts about the quality of data makes me prefer the combination of census and LFS figures, although the latter are also open to criticism. The register-based numbers exceed estimates based on the LFS by several million - according to the latter male employment in 1998 was 30.5 million and the female 27.4 million.[21]

FIGURE #2 ABOUT HERE

Figure #2 shows rates of participation in Russia, in 1989-1998. There is a persistent decline over time. According to the Goskomstat Labour Force Survey on which Figure #2 is based, overall male and female participation rates have fallen almost equally much 1992-98 and the male employment rate slightly more than the female. (In 1992, large numbers of female office staff had already been made redundant.) The male employment rate remains eleven percentage points higher than the female, but only four points higher in "working age" because this ends at 54 years for women and 59 for men.[22]

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[21] Rossiiskii, … 1999, pp. 107 & 116-117. For a discussion of these sources, see Clarke (1999).

[22] These numbers are calculated from Rossiiskii…, 1999. In this edition the figures for earlier years had been revised compared to previous yearbooks, some numbers by more than two million people. This explains some of the inconsistencies in earlier publications but does not increase confidence in the statistics. See also Clarke (1999).

The decrease in female participation rates (measured in percentage points) is one and half to two times as large as that in male rates for age-groups between 20 and 39, that is to say at child bearing and child rearing age. If instead of participation we were to look at "at work rates", about 700 000 women on maternity leave would also be subtracted from the approximately 14 million employed women aged 20-39. (Obsledovanie,...2000) This means that actual "at work rates" for women of reproductive age should be some 10 percentage points lower than those of men.

In multivariate analysis of labour market transitions both Foley (1997b) and Grogan (2000) find that being a woman increases the likelihood of leaving the labour force.

Tables A2.1, A2.3 and A2.4 in Appendix 2, compare sample and national data on employment rates in 1989 and participation rates in 1993 in different age cohorts. In 1989 sample participation rates are lower than the national for men under 30 and women under 20 and over 50 years. They are high for men aged 55-59. In prime working age, the differences are quite small.[23]. In 1993 the rate is higher than the national average[24] in the core 30-49 age group and among older women, but if we exclude those who did not report earnings, average participation rates in Taganrog for men and women drop by three percentage point to rather close to the national figures.[25] The decrease in participation is smaller in Taganrog than in Russia as a whole, particularly for women.

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[23] Taganrog respondents define their "main occupation" themselves and their definitions are unlikely to be exactly those of the statistical authorities. I have considered as employed those who either define themselves as "working", "working pensioner" or "on maternity leave" or have reported earnings from the preceding month. A "labour force participant" in 1989 is self-defined as "employed", in 1993/94 it means self-defined employed or unemployed. The largest deviation from national statistics is in the 15-19 age group where the non-sampling of conscripts and hostel-dwellers creates a problem (see Katz, 1994, p. 156) and near or over pension age where employment rates in Taganrog appear to have been above average.

[24] About 3 percentage points and significantly at 5%.

[25] In the 30-49 group the difference from the national rates becomes less than one percentage point. On the other hand those who did "work for pay or profit" but did not receive the payment due should have been included. Thus, if we had been able to follow the Goskomstat definition exactly, the Taganrog rate would have been lower than the ones in Figure #A3 but less than three percentage points lower.

6.2 Mothers and work

As table #3 indicates, mothers of children aged one to three are much more likely, and mothers of children aged three to seven somewhat more likely, to be full-time home-makers in 1993/94 than they were in 1989. (The proportion of women who have young children is lower, however. Total fertility rate in Russia fell from 1.9 in 1990 to 1.4 in 1993[26].)

TABLE #3 ABOUT HERE

The extent to which Russian mothers actually want to be at home is hotly debated. Many resented what was perceived as Soviet "overemployment" of women, but exactly how many women preferred to stay home as long as three or seven years is another matter. There were considerable differences between educational and socio-economic groups. The conclusion of Ashwin and Bowers (1997), that this opinion was widespread among professionals while for women workers work and social life centred around the work-place and work and work-mates was an essential part of life makes good sense, even though it is based on a small number of interviews.[27]

On the one hand, women who wish to be at home may not be able to afford it. On the other, mothers may be under pressure from employers to stay away when there are redundancies or non-payment of wages. (Standing, 1997, p. 19, reports from an enterprise survey that the percentage of women on maternity leave was "substantially greater" in firms that had cut employment than in those which had not but his sample is not representative.)

[26] 1.2 in 1998. (Rossiiskii…., 1999)

[27] For reasons of space, I refer to Lissyutkina, (1993), Bodrova, (1995), Ashwin & Bowers, (1997) for different opinions on this issue.

6.3 Structure of employment

The Soviet economy was characterised by persistent excess demand of producer as well as consumer goods. In the so-called "shortage economy", human and material resources were directed towards “priority branches" - heavy and extractive industry, armaments, nuclear and space technology. Women dominated a number of low-priority sectors, such as health-care, trade, light industry and teaching and were underrepresented in high-priority spheres such as heavy industry, construction and mining.

Priorities were reflected in pay. Katz (1994) shows a strong statistical correlation between percent female in the work force and average wages in sectors of the economy and branches of industry. Within sectors, the percentage of women decreased with the level of qualification and prestige of the job (McAuley, 1981, Katz, 2001). In the wake of market reforms, the relative position of some sectors has changed, although certain former "priority branches" retain some of their advantage.

The proportion of the Russian work force employed in industry declined from 30% in 1990 to 27% in 1994. (By 1998 it was down to 22%.) The change was similar in Taganrog, although the total share of industry in employment was higher – it fell from 59% in 1989 to 54% in 1993/94, for men, and from 49% to 42% for women.[28] Table #A2.1 which compares the sector composition of employment in the Taganrog samples and in Russia 1990-1994 shows that most of the decrease in industrial employment was born by women nationally too. Female dominated light industry has lost most, in percentage terms. It was halved from 1990 to 1996 by a loss of 1.1 million jobs. The decline of 40% in engineering industry, however, implies a loss of 4 million jobs. This branch is male dominated (58% men in 1989), but we do not know the gender distribution of lost jobs.

In Russia as a whole, the share working in health-care, education, science, art and culture increased both for women and men, but not by much. In the Taganrog sample it has increased slightly for women and decreased a little for men. Employment in construction has declined nationally, but not in Taganrog. The proportion of the work

[28] Because of the oversampling of women in 1989 it is not meaningful to report totals.

force employed in finance, banking and insurance has doubled, but only from a half to one percent.

TABLE #4 ABOUT HERE

The percentage of women among the employed is shown in table #4. The average decline of three percentage points from 1990 to 1998 was unevenly distributed over sectors. The greatest fall in female employment in absolute numbers was in industry, over 5.5 million, or a drop in the proportion of women of ten percentage points. The greatest decline in share female was in trade and catering, in banking and finance and in administration. As these traditionally female-dominated sectors have became more attractive, more men have entered. (See table #A2.2 for changes in relative wages.)

Unfortunately, the statistics on employment in public institutions and enterprises, private enterprises, etc. are not divided by gender. Clarke & Kabalina (2000) find in case studies of new private enterprises that "...other things being equal, employers tended to prefer to employ younger men with higher levels of education and some work experience." As they note, such preferences are not unique to the new private sector but if these well-paid jobs are attractive and have many applicants, employers have more scope for discrimination. They also find, using the ISITO surveys, that a job change to a job in the new private sector is “significantly more likely to be associated with an increase in pay” than other job changes, while Grogan (2000) finds from the same data that – controlling for age, education and other characteristics – men are more likely to make moves into jobs in such firms.

Foley (1997b) uses RLMS data to study movements in and out of jobs 1992-93 and 1995-96. He finds that "...men are more likely to make a transition to non-state employment while women are more apt not only to move into the state sector but also to remain in a state sector job. Thus, it appears that men are more willing to move away from traditional employment and take on the more novel, market-oriented jobs.” (p. 21. There is no indication how he knows whether it is women who are not "willing" or prospective employers.)

Men predominate among the self-employed, another group that have above average earnings. According to the 1998 LFS, of those gainfully employed in non-wage labour (*nenaemnyi trud*), 62% were men. 5.4% of male employment and 3.7% of the female was in this category (Trud... 1999, pp. 84 & 215.[29]). Grogan (2000) finds that controlling for age, education and other characteristics, men are more likely to move into self-employment. In Taganrog 1993/94 2790 respondents, aged 15 or older reported labour income for the previous month. Of these, 349 received all or part of their earnings from self-employment. Among these are more male than female respondents, but nearly as many women as men do it as their sole employment. Table #5 indicates the proportions.

TABLE #5 ABOUT HERE

The forms and mores of "New Russian" business combined with the predominant gender stereotypes, did not encourage women to become entrepreneurs They might, however, have some advantage from their experience of managing the conflicting demands of employment, housekeeping and child-care and of informal networking.[30] It is a common assumption in the literature that women's commercial activities are smaller and less "ugly *biznis*" than men's and also that this is the general opinion among the public.[31]

Yet, most Russians with non-wage earnings are not "new rich". Much ”business” is rather modest, like going abroad to buy a couple of suitcases of cheap clothing to sell, or doing odd jobs in the neighbourhood. People who engage in such small scale self-

[29] Zhenshchiny i muzhchiny, 1997 reported much higher figures for 1996 but a similar gender proportion. Foley (1997, b) finds that just under 3% of employed respondents in 1995 and 1996 are self-employed.

[30] Bruno (1996) describes some examples.

[31] " Male street vendors are seen as greedy speculators while female are poor mothers struggling to support their families" according to Bruno (1996). A number of authors discuss to what extent female entrepreneurs in Russia differ from the male, in terms of the sphere and size of activity and of manner, motives and ethos. (See inter alias, Bruno, 1997, Roshin & Roshina, 1994, Babaeva & Chirikova, 1995, Marchenko & Tetrenko, 1994).

employment activities are more likely to describe it by the traditional concept of “individual labour activity” (ITD) than as "entrepreneurship". Many women combine knitting, sewing, pickling and jam-making for sale with home-making, while men with such very small scale non-wage earnings would be more likely to combine it with wage work (Babaeva & Chirikova, 1995).

6.4 Multiple jobs and hours of work

In the 1993/94 Taganrog sample, 13% of women earning a wage[32] said that they had more than one job and an additional 4% reported at least two sources of labour income for the preceding month. For men, the figures were 12% and 5%. It is worth noting that among women working in the "socio-cultural sphere", the numbers are higher - 24% answer that they have more than one job and another 3% report other earnings in addition to their primary wage.

Roshin (1995) also finds, in two local samples, that many of the women who have second jobs are employed in the government-funded (“budget”) sector. Supplementary work may be the means whereby these women can stay in their public sector jobs, despite the very low wages. (Although in 1994, the ratio between the average wages in these sectors and that in the economy as a whole had not changed much yet, it was the same percentage of a much lower wage.)

The Taganrog figures are relatively high compared to the frequency of regular and irregular secondary employment found in other surveys. According to Khibovskaya (1995b), in 1993-94 the frequency varied between 14-20 percent.[33] Of these about two thirds worked extra irregularly and may well have replied no to the question as it was formulated in the Taganrog questionnaire. The VTsIOM figures include earnings of students and pensionersas " secondary", unlike the Taganrog data or the RLMS.[34] According to the RLMS, about 5% of working respondents held multiple jobs in 1992

[32] The percentages of those with any labour income or of self-defined working are the same.

[33] This average may conceal large regional differences. Roshin (1995) finds a frequency of secondary employment of 18% in Ivanovo, and 9% in Nizhniy Novgorod.

[34] Rimashevskaya (ed., 1998, pp. 121-136) provides a useful discussion of the different estimates of the share of the population with secondary earnings and the different definitions.

and twice as many in 1996 (Foley, 1997c). Foley finds that women are less likely than men to hold multiple jobs, in particular if they are married or have children, and the gender difference increases over time. In 1996 among working age respondents, 12% of men and 8% of women held multiple jobs. He also finds that the gender wage gap is substantially larger in second jobs - while according to his estimates the ratio of female to male hourly wages was 82% in primary jobs, it was 31% (!) in second jobs, in 1996. Note that among those who do have second jobs, women do not work fewer hours per week than men do.

Thus, multiple job holding increases the gender earnings differential in three ways: First, men more often have such earnings (work more total hours); second, hours in second jobs pay better; third, the gender gap in earnings per hour is larger.

All survey studies of second jobs are likely to suffer from under-reporting Khibovskaya's estimate is that the real figure is about twice as large as the one that the VTsIOM studies report. Both Khibovskaya (1995b, 1996), and Roshin (1995) find a higher frequency of second jobs among men than among women.

According to the VTsIOM data average hours per week in secondary jobs varied between the different bi-monthly surveys, from 13 to 21 hours. The 1993/94 Taganrog survey only included a question about total usual hours of work per week. Average hours of work per week (crudely measured) decreased by about an hour for both men and women, from 1989 to 1993/94. Standard deviation increased, but the numbers with very short workweeks do not indicate that many work part-time, particularly since some of the women with short workweeks are teachers and probably report hours in class. There is more to indicate multiple jobs, or large amounts of overtime among men, but still a minority. (See table #A1.2.)

According to official statistics, the hours worked per week of employed women increased from 34.8 to 36.0 between 1992 and 1999 and decreased from just over to just under 39 hours for men (Trud...1999, p. 211). According to RLMS 1996 (Foley, 1997c), among those who report positive hours of work at their primary job the preceding month, men report an average of 45 hours and women one of only 39. The

Taganrog figures for average total hours per week, 42 for men and 38 for women are in between the RLMS and Goskomstat data.

7. Unemployment

7.1 Open unemployment

From 1991 onwards, media reports as well as case studies indicated that when layoffs began, 70-80 % of those affected were women. In the middle of 1991, when the recently established Federal Employment Service began to publish data on those registered as unemployed, the share of women among them was 69% (Trud…, 1995, p. 84). Researchers wrote that "unemployment is a female problem" and of the "female face of unemployment" (Khotkina, 1994, p. 98). Rimashevskaya (1996, p. 39) concluded that women were losing in "competitive force" and, therefore, more women than men were unemployed and the gender differential in wages increased. According to Posadskaya (1996, p. 16) the "prognosis of great losses which women would have to carry in the sphere of employment in the reform period, have come true".

TABLE #6 ABOUT HERE

In 1992, the Goskomstat labour force surveys began. These showed that, when "unemployment" was measured according to the standard ILO-definition[35] 51% of the unemployed were women. The number of registered unemployed has remained well below that of "ILO-unemployed" and with a larger proportion of women. (Table #6 shows 1992-98 data.) Reasons for non-registration could be the bureaucratic hassle it involves, the restrictive conditions and low rates of benefits and low expectations that the Employment Service will be of help in finding a suitable job.

Among both men and women, the higher the education, the lower the unemployment rate. In 1993, overall unemployment rates for both men and women were just under 6

[35] A person is unemployed if he/she has not worked for pay or profit the last seven days, is willing and able to accept a job offer and has actively searched for work the last 4 weeks.

percent whereas for those with higher education they were 3.1 % for men and 3.9 % for women. In 1998, the unemployment rate for women with higher education was 6.9% and for men 7.3% - a little more than half the average.[36] Rates for those with specialised secondary education were slightly below the average. The widespread claim that "the typical unemployed" is a woman with university or specialised secondary education (Vlasova et. al., 1994, Khotkina, 1994) was a misconception, due partly to the greater propensity of the highly educated to register.[37]

Although there are more unemployed men than women, the average duration of unemployment spells is longer for women. According to the 1998 LFS, unemployed men had been unemployed 0.4 months less than unemployed women had.[38] This is consistent with the results of duration analysis in Foley (1997a) but not with Grogan & van den Berg (2000), although both are based on the RLMS. The RLMS is not, however, ideal for quantifying unemployment spells.

Foley (1997b) estimates the probability that a person who is employed at a given time is unemployed a year later comparing responses to the RLMS survey in 1992 and 1993, and in 1995 and 1996 respectively. Of those employed in 1992, married men ran the smallest risk of being unemployed in 1993, single women the second lowest and married women the highest. In 1995/96, the order of likelihood has shifted between married women and single men so that the latter run the highest risk. In this case, however, while the parameter for "female" is negative and significant, those for "married" and "married and female" are not significant. At both points in time, employed women, particularly married women, ran greater risk of leaving the labour force than employed men.

Among the unemployed, married men were the most likely to have found a job a year later, and married women the most likely to have left the labour force. Non-married women are more likely to find employment than single men are but also more likely

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[36] Calculated from Trud..., 1999, pp. 37, 118 and 145.

[37] Rzhanitsyna (1993, p. 16) and Bodrova (1994, p. 41), however, emphasised the risks of the unemployment of the least qualified manual workers.

[38] These are, of course right-censored unemployment spells.

to leave the labour force. Grogan & van den Berg (2001), however, find a downward effect on unemployment duration of being female.

A larger percentage of unemployed men than of unemployed women have quit their previous jobs themselves, while a larger percentage of women have been made redundant (Rossiiskii…, 1997). This is an issue requiring more research.

7.2 "Hidden" unemployment

Depending on the definition of "unemployment" chosen, one may consider the LFS figures as exaggerated or as an underestimate. Probably, some persons are wrongly classified as "ILO-unemployed" because they do not disclose earnings from the informal sector or from more or less illegal activities to the LFS interviewer.

According to Khibovskaya (1995a), in VTsIOM surveys of 1994 and 1995, among 1434 individuals, defining themselves as "temporarily not working, unemployed", 24% reported some kind of income-raising activity. In addition, as with second jobs, there are probably individuals who have such income but do not tell the interviewer.

Commander & Yemtsov (1997) differentiate among the unemployed, using VTsIOM data from 1994. Those whom they call “true unemployed” make up 3.5 % of the sample. 59% of them are women. An additional 1.2 % are passively waiting for re-employment, half of them because they expect to be re-employed by their previous employer. Of these 70% are women. Another 4.3% are subject to involuntary reductions in work-time, but most of them to a relatively small extent. Another 1.6 %, a small majority of them male, define themselves as unemployed, but have some “secondary employment”.

In the Taganrog 1993/94 sample, 24% of unemployed women reported some self-employment or entrepreneurial incomes the preceeding months, as did 16% of the unemployed men and 15% of women who defined themselves as "housewives".[39]

[39] These are very small sub-samples so figures should be taken with caution. For some individuals there could be a difference between employment status at the time of the interview and the previous month.

On the other hand, these "false unemployed", who have some labour income, but not a regular full-time job, may have good reason to consider themselves unemployed even though they do not satisfy the ILO-definition of unemployment. They may have very low earnings and they may well have wanted to work more hours than they did, and, therefore, be under-employed according to standard definitions. Even those who reported relatively high earnings may have considered themselves unemployed because they did not have a reasonably permanent job with a reasonably stable income.[40]

Another group to note are the discouraged job-seekers, people who would accept a reasonable job-offer, but who have given up actively seeking work, because they are convinced that they will not find any, perhaps after many attempts.

In October 1993 the unemployment rates for men and women were about 5%, both in Russia and in Rostov *oblast' to* which Taganrog belongs. Yet, in the sample, the rate of self-defined unemployment is 4.9% among men, but only 1.9% among women.[41] At the same time, among prime working age women, nearly 6% define themselves as "housewives", or about three times as many as in 1989. This is even though in 1993/94 most women at home with children less than three years old describe themselves as on maternity leave, not as housewives, while in 1989 the maximum maternity leave was 18 months. Could some of them be "ILO-unemployed" or "discouraged job-seekers" in the terminology of labour economics but “housewives" in their own? According to Grogan and van den Berg (2000), in the 1994-96 RLMS surveys, about one in six self-defined housewives had actively searched for a job the last month (as had a fifth of university-students and more than a tenth of pensioners).

[40] Khibovskaya (1995a, p. 39) finds that among the unemployed in VTsIOM samples more women (65%) than men (48%) would prefer lower income with more security to higher income and less security.

[41] Number unemployed divided by the sum of working, unemployed and on maternity leave.

Probit estimates of the likelihood of being unemployed were made for men, and of being unemployed or of being a housewife were made for women.[42] Results are reported in Table #7. They should be interpreted with caution, because of the smallness of the sample.

TABLE 7# ABOUT HERE

In the 1993/94 sample, 67 men and 28 women of working age[43] defined themselves as "unemployed". Both men and women are significantly more likely to be unemployed if they are under than over 35. We find no significant effect of the number of children in any age groups. (Models included the number of children under three years, three or older but not yet in school and school-children aged 15 or less.) Since most women with children less than three years are on maternity leave it would require a much larger sample to see whether job-seeking women with young children are particularly vulnerable to unemployment.

For men, the estimated probability of unemployment falls monotonously with levels of education. With general secondary school as the reference, the effect of university education is significant at 1%-level. Specialised secondary education decreases the risk and having and eight years or less of school increases it significantly at 20%-level. This agrees with the national statistics (see above) and with Foley (1999b). For women we find no significant education effects, but this may be due to the small number of observations.

Women aged 45-54 are less likely, and those aged 25-34 more likely than the 35-44-age group to be housewives. The first coefficient is significant at the 5%-level, the second at 10%. Mothers of children under three years usually define themselves as “being on maternity leave" not as housewives. Therefore the coefficient for having children of this age is negative. The effects of having older children have low precision.

[42] Estimates included respondents 18- pension age.

[43] Men age 18-59, women age 18-54

The likelihood of being a housewife is higher with general secondary education than with any other level, significantly higher than in comparison with university or specialised secondary. No other differences between education levels are significant. The likelihood of being a housewife increases with the education of the husband, but parameters are not significant. The likelihood of being a housewife is smaller if the husband has low education - vocational (PTU) or not complete secondary. Whether he has general or specialised secondary or university education makes no difference. The aggregate income of other household members increases the likelihood (probability-value below 0.1%!) while this variable is not associated with increased probability of unemployment for either men or women.

A negative correlation between household income and female employment agrees with neo-classical economic theory, according to which the marginal utility of the woman's wage decreases and that of leisure or her time in household production increases when other household income is higher. Yet, when conflicts of interest, in the household and work place are allowed for, interpretations of the "choice to stay at home" are more complex. A woman in a high-income household may be happy "not to have to work". Yet, if she is not happy, she might find it more difficult to convince her husband that she wants to work, than if household income were lower.

7.3 Unpaid leave and unpaid work

Even among the "employed" we find hidden unemployment. Both wage arrears (non-payment of wages by employers), forced part-time and involuntary temporary redundancies with loss of part or the whole of the wage have affected large numbers of workers. Part of the reason why employment has not decreased in proportion to output is that low wages have made it relatively cheap to keep staff. In addition, employers can refrain from paying even these depreciated wages, while avoiding statutory severance pay. The Taganrog survey has no data on wage arrears. Both Earle and Sabirianova (1998) and Lehmann et. al. (1999) study wage arrears using the RLMS data. They find that men are more likely to have experienced non-payment of wages. The gender difference is small, but significant in multivariate (probit) estimates. In the RLMS sample, about 40% were owed wages at their place of work in 1994 and 1995, with the share rising to 60% in 1996 (Earle & Sabirianova, 1998). It

is, thus, a widespread practise, even though the incidence in a given month must be considerably lower than this.

Grogan (1998) estimates the probability of compulsory temporary redundancies ("administrative leave"). She controls both for the gender of the individual and for percent female in occupation. Being female increases the likelihood of experiencing unpaid leave, given occupation, but working in a female-dominated occupation decreases it, given gender. The numbers on unpaid or partly paid compulsory leave at any one moment in time was under 2% according to the 1995 RLMS.

8. Poverty and wage dispersion

To estimate the development of real standard of living and analyse poverty in Russia is beyond this paper. (See, for instance, Klugman, 1997, Silverman &Yanowitch, 1997 and Rimashevskaya, 1998.) There is no doubt that severe hardship has both widened and deepened since the late 1980s. The officially recorded falls in average real wage, GNP and consumption are exaggerated, because of the growth of the informal and illegal sectors and of non-reporting of incomes and economic activity, yet, by no stretch of the imagination could living standards be believed to be maintained. Health has deteriorated and male life expectancy dropped from 65 years in 1989 to 58 in 1994, partially recovering to 61 years in 1998. The female went from 74 in 1989 to 71 in 1994 and 73 in 1998. (For further data on health trends, see Carlsson, 2000.)

Inequality has increased, from more or less Western European levels to a much higher one. According to Brainerd (1996) wage inequality doubled from 1991 to 1994 and Russia "appears to have won the dubious distinction of achieving the most unequal wage distribution in the shortest period of time of any industrialised country for which reliable data are available" (ibid. p. 34).

Table #8 and gives an indication of the increase in inequality in Taganrog. (Table #8 includes all earners aged 16+ , while in the following section we analyse the wages of prime-age workers only.) The first and third columns are for wages in main job in

1989 and 1993/94. [44] These would be the closest equivalent to official wage data (since these are collected from employers). The second, fourth and fifth columns show total earnings, including second jobs, ITD and entrepreneurial income. For 1993/94 there is again the problem that we cannot distinguish non-response from non-payment of wages.

In both years dispersion was greater when income from self-employment or entrepreneurial activity are included and larger among men than among women. All measures of dispersion increase very substantially between the two years. The coefficient of variation for post-reform earnings is twice as large as that for state sector wages in 1989. The decile ratio (P90/P10) has doubled too. The "middle band" between P75 and P25 has widened, but the most striking change is the increase in the share of the highest decile of earners, from 20% to 30% of total earnings and the fall in that of the lowest. Both tails of the distribution have been extended.

TABLE #8 ABOUT HERE

In the Taganrog sample the share living in poor households is 35% among women, 32% among men, and 44% among children under 18. Among adult women who do not live with a husband or with working parents, 49% are poor.[45] ("Poor" here means that reported household income is below the national official subsistence level.)

[44] Since I was primarily interested in the relative wage-effects of characteristics, 1993/94 earnings are indexed month by month in accordance with the Russian average wage, rather than with the CPI. I was not able to take into account local or regional rates of price or wage change. See Table A1.1 on loss of observations due to problems with interview dates and indexation.

[45] See Rimashevskaya (1997) for more information on poverty in Taganrog.

9. The gender earnings gap

9.1. Previous studies

Brainerd (1996, 1998, 2000)[46] uses VTsIOM-data to compare male and female wages in 1991 (1695 observations) and 1994 (4827 observations). She estimates equations for monthly wages, unadjusted for hours, and not including earnings from ITD, entrepreneurial activity or the informal sector.

Brainerd (2000) finds that the female/male ratio of mean monthly wages has fallen from 80% in 1991 to 68% in 1994 in Russia, while it has actually increased in five Eastern European countries for which she has data. (In the Ukraine, like in Russia, she finds a decrease.) The 80% figure for 1991 raises some concern about the reliability of the data. All Soviet period evidence indicates a gender ratio of 65-70% for monthly wages (see Katz, 1994). Newell and Reilly (1996) find one of 65% in 1992 and according to the present study - albeit in a local sample - it was 66% in 1989 and approximately 62%[47] in 1993.

Brainerd finds increases in the returns to university education relative to both secondary and vocational schooling, for both men and women and a flattening of the wage-potential experience[48] profile.

Newell and Reilly (1996, 2000), Glinskaya and Mroz (2000), Sheidvasser &Benítez-Silva (1999) as well as Ogloblin (1999) use the RLMS data but with some differences of years, models and focus. Newell and Reilly (1996) find a larger female/male wage ratio for hourly (71%) than for monthly (65%) wages in 1992. (This is very close to the 1989 estimates of Katz, 2001, for Taganrog.) Their study, as well as that of Glinskaya and Mroz (2000) finds that bulk of the gender gap is attributable to difference in rewards to particular labour market characteristics, rather than to different endowments of these characteristics. Ogloblin uses a model which accounts

[46] Both papers are based on Brainerd's dissertation, "Distributional Consequences of Economic Reform in Russia and Eastern Europe", Harvard University, 1996.

[47] Monthly wage in primary job. For other wage-measures, see below.

[48] Age minus years of schooling minus school-starting age.

for three-quarters of the gross wage gap (more when a selectivity adjustment is made). Among his explanatory factors are a number of dummies for being in female or male dominated occupation within broader categories. To include these variables in the regression gives valuable information on the relation between gendering and wages but for the decomposition it means that a discrimination which takes the form of lower wages in occupations constructed as "female" will be included in the "endowment term". He only reports a decomposition using the pooled OLS parameters, which will produce a spuriously large "explained" part (Katz, 1997).

Glinskaya and Mroz (2000) compare gender wage-ratios for each year from 1992 to 1995, overall and at corresponding points in the male and female wage-distributions. For the ratio of mean hourly wages, there is oscillation, rather than a clear trend. (The female to male ratio was 75% in 1992, increased to 80% in 1993, fell again to 71% in 1994 and increased to 75% in 1995.) The most striking result is that the ten or twenty percent of men with highest wages have increased their relative advantage noticeably, both relative to lower-paid men and to all women, including those in the corresponding percentiles.

Ogloblin (1999) using 1994-96 RLMS data finds a ratio for monthly earnings in primary place of work of 67% for those who were not owed back wages. Correcting for hours of work increases the ratio to 72%. Sheidvasser & Benítez-Silva use 1996-98 RLMS data and find a female/male ratio for monthly wages of 63%, somewhat lower than in the earlier rounds of the RLMS. Controlling for education, region and potential experience they find an adjusted ratio of 66%. Newell & Reilly (2000) find a gender ratio for monthly wages of 69% in 1992 and 70% in 1996 and of 78% for hourly wages in both years.

9.2 The gender wage gap in Taganrog

Informative as they are, these studies only partly describe the transition from a Soviet to a post-Soviet economy, since the earliest data in the VTsIOM and RLMS data sets are from 1991 and 1992 respectively. At these times, the centralised wage-setting

system of the USSR was already gone. In orderto compare Soviet and post-Soviet societies, 1989 state sector wages[49] are compared to two different measures of earnings for 1993/94: Wages (from state and non-state employment) and total labour incomes (from wage-labour, self-employment and entrepreneurial activity[50]).

TABLE #9 ABOUT HERE

Irrespective of whether we include non-wage earnings or not, the gender gap increased relative to that in the Soviet period. Table #9 shows female/male wage ratios. In 1989 the female/male wage ratio was 66%, for monthly wages.[51] The earnings ratio in the 1993/94 sample was 61%, and 62% for wages in primary job. Among the small sub-sample whose earnings were entirely from ITD or entrepreneurial activity the ratio was 59%.

A major factor behind the Soviet gender differential was the low wages in the "socio-cultural sphere". Given the Russian fiscal crisis, one would expect wages in sectors dependent on public funding to have fallen even further behind. Surprisingly, until 1996 the ratios between average wages in health-care and schools and the national average remained in the range within which they oscillated in the later Soviet period. There seems, however, to have been a drastic turn for the worse in late 1996. (See table A2.2.) In Taganrog the gender wage ratio dropped by some 4-5 percentage points in the less than five years between the surveys, even though relative wages in these female-dominated sectors kept up. If that was the case in Russia generally, the increase in the gender gap from 1989 to the present must be larger, given how

[49] I. e. excluding earnings from ITD, private plots or co-operatives.

[50] Respondents themselves categorise income as wages, ITD or entrepreneurial income.

[51] The coding of the data does not allow us to distinguish between people who did not receive a wage that was due to them; people who have a job at the date of interview but had not earned a wage the previous month; and refusals to answer the question. The ratios in table #9 include only those who report earnings, assuming that all others either did not work the preceding month or refused to respond. The opposite assumption, that all who identify themselves as working but did not report earnings for the previous month were victims of non-payment, produces ratios that differ by a few tenths of a percentage point.

dramatically these sectors have fallen behind since 1997. Remember also, that the male average we compare women's wages with has slumped, in real terms.

10. Estimates of wage and earnings models.

In this section, equations for total monthly earnings as well as monthly wage in main job in 1993/94 will be analysed. "Earnings" include wages in primary and secondary jobs, entrepreneurial and self-employment incomes. The estimates are compared with those from an analogous model applied to monthly wages from the state sector in the 1989 data.[52] The estimates reported here are for prime working age individuals, 18 to pension age. (Table £A1.1 shows numbers of respondent in this age group not included in regressions.) In all models, the natural logarithm of wages or earnings is used as dependent variable.

Earnings from individual labour activity and entrepreneurial incomes are probably less openly and accurately reported than wages. They are, on the other hand, an important component of earnings, and contribute to the gender gap as well as to overall differentiation. I therefore chose to include them in the analysis. (I will call them "non-wage earnings", for short.)

The 1993/94 data did not include actual work experience or tenure. Therefore the estimated equations include only age and age squared.[53] They also control for age groups and for levels of education,[54] sectors and conditions of work. Those for monthly wage/earnings includes the logarithm of usual hours of work per week. For 1993/94 the model of total earnings includes dummies for ITD and entrepreneurial activity.[55] (See table A1.3 for definitions and means of variables.)

In the 1989 sample, labour force participation was too high to call for a Heckman-type correction for selectivity but the method was tried with the 1993/94 data. The

[52] Estimates of a smaller, "Mincer-type" model are available from the author.

[53] Estimates were made with potential experience, but it had lower precision than age.

[54] Models including years of education and job-types were also tried.

[55] Estimates without these variables are available from the author.

results, which are reported in Appendix 3, led to the conclusion that uncorrected OLS-estimates were to be preferred.

TABLE £10 ABOUT HERE

As table £10 shows, the negative coefficients for the age groups 18-24 and 25-34, relative to 35-44 year olds, have declined in size and precision from 1989 to 1993/94. The reverse is true for those aged 45 and over. The shifts are similar for hourly and monthly wages/earnings. This agrees with Brainerd (1998) and with Glinskaya and Mroz (2000) who find insignificant age-parameters. That age is unimportant for earnings could mean that experience acquired under Soviet conditions is not valued by employers. Changes in output structure may have outmoded some skills and created demand for new ones. Clarke & Kabalina (2000) find almost twice as high wage premia for higher education in 1998 if it has been acquired after 1991.

The premium for higher and specialised secondary education has increased. This does not increase the gender gap since the level of education of employed women is as high as that of men. In the model for monthly 1989 wages and 1993/94 earnings, the premium for university education has increased from 17 % to 23 % for men and from 26 % to 48 % for women. In terms of hourly rates there is a similar increase for women, but not for men. The increase for specialised secondary schooling is smaller. The coefficients for PTU have dropped by 15-20 percentage points, from positive to (insignificantly) negative for men. This reflects the decrease in relative pay for skilled, male workers in heavy industry. For women the change is smaller.

Sheidvasser & Benítez- Silva (1999), in a “human capital”-type model find returns to university education of 38% for women and 23% for men, in terms of monthly wages in 1992-98. They do not report separate estimates for returns to level of education for each year, but estimating wage premia for years of schooling they find no increasing trend over the period. Ogloblin (1999) finds a “university premium” of 48% for women in a similar model (but he does not control for regions) and 37% in one with detailed controls for sector and occupation. For men the premia are 19% and 11%.

The increase in most sector coefficients is better described as a drop for the reference category, industry. The military-industrial sector was in deep crisis in 1993. That this type of industry was so dominant in Taganrog explains why industrial wages have fallen more (relative to other sectors) here than in Russia as a whole. While wages in the education sector have fallen about as much as those in industry, those in health-care have not. The parameter for health care is higher in the equation for total earnings. Banking and finance stands out as the highest paying sector, particularly for men, both in terms of monthly and hourly earnings. Trade and catering is no longer a low pay sector.

Note that the coefficients for the logarithm of hours of work (technically, the hours elasticities of earnings) were small and not significant in 1989. In 1993/94, by contrast, the coefficient is large and has high precision for both men and women. Part of the explanation could be the way monthly wages and statutory workweeks for specific occupations were set in the Soviet system: in certain female-dominated professions, such as physician, nurse, child-care worker or teacher, work weeks were shorter than in other jobs. These reduced work weeks were an incentive for women to acquire higher education and to do it for jobs considered to be ”appropriately feminine” despite the low pay. In the short-run this arrangement alleviated the ”double burden” for these women, but it contributed to cementing a system where women had an inferior position on the labour market and the main responsibility for unpaid work in the home.

The premia for having earnings of other kinds than wages are high, except for women with all their earnings from entrepreneurial activity. (A coefficient of 0.5 implies an addition of 65% and one of 0.7 implies a doubling.) Note, however, that about a quarter of respondents with non-wage earnings are not included in the estimates because they do not report hours of work. Earnings of these respondents are about half as high as for men and women with non-wage earnings who do report hours. Thus, we are likely to be selective in the direction of those with more regular ITD and business activity.

TABLE £11 ABOUT HERE

The estimates for hourly wages/earnings, in Table 11, do not differ strikingly from those of monthly. This is not surprising, since the latter include a control for hours of work.

Oaxaca-decompositions were made for monthly and hourly wages, for 1989, monthly and hourly labour income for 1993/94. The parameters from the male and female equations were used as weights. Results are reported in Table £12. In 1993/94 characteristics account for a quarter of the gender gap in monthly earnings, as compared to one sixth or one seventh in 1989. 5-7 % are attributable to the dummy variables for non-wage labour and 15-16% to difference in hours of work. Branch variables are less important than they were in 1989. In the decompositions of the difference in hourly earnings 13 or 9% are accounted for by characteristics in 1993/4, depending on weighting, - some 4 percentage points more than in 1989. Non-wage earnings contribute more to the wage gap in terms of hourly than of monthly earnings.

TABLE £12 ABOUT HERE

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Appendices

Appendix 1 Data and variables

Table A1.1 Non-response of men and women aged 18 to pension age 1993/94

	Men	**Women**
Total number in age-group	1516	1579
Not working at time of interview	211	343
Do no report any earnings	40	35
Date missing or not Nov. 1993- March 1994*	30	25
Do not report hours of work per week	43	61
Other partial non-response (sector, education, etc.)	9	17
Included in earnings-function estimates	1183	1098

* Since the income of individuals for whom this month of interview is missing or misspunched could not be indexed for inflation, they are not included in the analysis. 14 respondents who had been interviewed before November 1993 or after March 1994 were also excluded.

Table A1.2 Usual hours of work per week of men and women 1989 and 1993/94

	Women			**Men**		
	State 1989	**Total 1989**	**Total 1993/94**	**State 1989**	**Total 1989**	**Total 1993/94**
1-19	3.3	3.5	2.7	-	-	0.9
21-29	4.7	4.6	8.8	2.1	2.1	3.6
30-35	5.1	5.0	12.1	2.4	2.4	6.8
36-39	6.0	5.9	2.2	3.3	2.9	0.4
40-42	65.5	65.3	62.0	61.1	58.9	67.0
43-48	11.1	11.1	4.4	19.2	19.1	4.9
49-	4.1	4.6	5.1	12.0	14.6	16.9
Range	4-84	4-84	8-99	20-76	20-80	10-99
Mean	39.5	39.6	38.1	42.6	43.2	42.3
Std. Dev.	7.68	7.85	8.99	6.22	7.03	10.27
N	540	541	1363	375	377	1370

Note: The 1989 observations exclude 32 individuals who are employed but only in “cooperatives” or self-employment which had not been possible earlier in the Soviet period. Thus the 1989 “total” includes such work only as a complement to state sector work.

Table A1.3 Definition and means of variables

Variable	Definition	Men 1989	Women 1989	Men 1993	Women 1993
	Variables in wage equations				
WAGE	Wages previous month*	245	162	60506	38663
W	Wage/h	1.35	0.98		
EARN	All earnings previous month			69627	41772
EARNH	Earn/h			1626	1116
H	Usual hours of work/week	42.7	39.9	42.8	38.6
AGE18_24	Age 18-24	0.06	0.04	0.12	0.10
AGE25_34	Age 25-34	0.22	0.30	0.26	0.23
AGE35_44	Age 35-44	0.33	0.41	0.32	0.39
AGE45_59	Age 44-pension age	0.39	0.25	0.30	0.28
HIGHED	University degree	0.30	0.27	0.26	0.27
SPEC2	Spec. sec. or some univ.	0.33	0.34	0.34	0.40
GENSEC	General secondary school	0.16	0.26	0.22	0.23
INCSEC	Incompl. secondary school	0.08	0.07	0.06	0.03
PTU	Vocational school	0.12	0.06	0.11	0.06
LOWED	Less than 8 yrs of school	0.01	0.00	0.01	0.00
INDUSTRY	Industry	0.59	0.50	0.53	0.41
CONSTR	Construction	0.07	0.04	0.08	0.03
TRANSP	Transport & communications	0.08	0.04	0.10	0.04
TRADE	Trade and catering	0.01	0.07	0.06	0.11
SERV	Housing, munic.& cons. services	0.05	0.06		
MUNSERV	Municipal services			0.02	0.04
OTHSERV	Other services			0.04	0.05
HEALTH	Health care	0.02	0.05	0.02	0.09
SCEDCULT	Schools, culture, science			0.06	0.18
TEACH	Schools	0.05	0.12		
ART	Art and culture	0.01	0.01		
SCIENCE	Science	0.06	0.05		
FINANCE	Finance, insurance, banking			0.01	0.02
ARMYMILI	Army, police			0.04	0.01
ADMIN	Public administration	0.01	0.02	0.01	0.01
OTHER	Other sector	0.06	0.04	0.04	0.01

AIR	Dust, fumes, gas	0.16	0.07	0.23	0.10
HEAT	Heat	0.20	0.13	0.05	0.04
HARDPHYS	Physically hard work	0.16	0.07	0.16	0.06
NOICEVIB	Noice or vibrations	0.16	0.07	0.18	0.09
MTS	Married	0.87	0.75	0.83	0.68
PARTITD	Part of earnings come from ITD			0.06	0.04
PARTENT	Part of earnings come from entrepreneurial activity			0.03	0.02
ONLYITD	All earnings come from ITD			0.02	0.01
ONLYENT	All earnings from entr. activity			0.01	0.01
	Variables in probits				
HWIFE	Self-defined as "housewife"			0,00	0,06
UNEMP	Self defined as "temporarily not working, unemployed"			0,96	0,98
AGE18_24	Age 18-24			0,17	0,18
AGE25_34	Age 25-34			0,25	0,25
AGE35_44	Age 35-44			0,28	0,33
AGE45_59	Age 44-pension age			0,31	0,24
SMALLCH	Number of children aged 0-2 yrs			0,08	0,09
NRPRE3	Nr of pre-school children aged 3+			0,17	0,20
NRSCHCH	Nr of school children under 16			0,36	0,42
HIGHED	University degree			0,23	0,24
SPEC2	Spec. sec. or some univ.			0,35	0,41
GENSEC	General secondary school			0,22	0,24
8ORLESS	Eight years or less of school			0,08	0,05
PTU	Vocational school			0,12	0,06
MARR	Married			0,77	0,68
HIGHEDSP	Spouse has university education			0,18	0,17
LOWEDSP	Spouse has PTU, or not secondary			0,10	0,11
YOTHMEM	Household income minus earnings of respondent			72830	85710
MULTGEN	> 2 household members aged 16+			0,56	0,49
Nr in earnings eqs		354	488	1183	1098
Nr. in prob. est.				1516	1579

Appendix 2 Comparison of sample with national statistics

Table A2.1 Distribution of male and female work force by sector in Taganrog sample and the RSFSR/Russian Federation (in percent)

	Sample 1989		Sample 1993/94		RSFSR 1990		RF 1994	
Branch	**Men**	**Women**	**Men**	**Wom.**	**Men**	**Wom.**	**Men**	**Wom.**
Industry	58.5	49.0	54.5	41.8	32.0	28.6	30.1	23.9
Agricult, forestry	-	-	-	-	16.5	10.1	19.5	11.0
Transport, communication	8.0	3.9	9.0	3.4	10.6	4.9	10.1	5.4
Construction	6.4	4.2	8.0	3.3	17.8	6.3	14.5	4.9
Trade, catering	2.1	7.2	5.8	10.5	3.2	12.2	6.4	12.8
Services	4.8	6.1	6. 2	8.9	4.2	4.3	4.8	4.0
Healthcare, sports	2.1	5.9	1.6	9.5	2.0	9.2	2.3	10.8
Science, education, culture	12.2	18.2	6.2	17.8				
Education and culture					4.4	14.7	4.5	17.5
Science					3.6	3.9	2.5	2.9
Public administr.	0.5	1.7	0.5	0.7	1.4	2.8	1.3	3.2
Banking finance, insurance			0.9	1.5	0.1	0.9	0.5	1.7
Other	5.6	4.0	7.4	1.7	4.2	2.1	3.5	1.8
Total	100	100	100	100	100	100	100	100
Number (1000s)					37211	38114	35466	33018

Source: Samples and Rossiiskii Statisticheskii Ezhegodnik 1996 p. 85

Table A2.2. Average monthly wages for workers and employees in different branches in percent of the average wage and female/male wage ratio 1998 (%)[a]

Branch	USSR 1989[b]	Sample 1989[c]	Russia 1993 [d]	Sample 1993 /94[e]	Russia 1996	Russia 1998	f/m ratio 1998
Industry	109.7	110.5	108.2	89.2	110	115	69
Construction	131.5	110.5	132.9	103.0	122	127	79
Transport			150.6		144	144	77
Communic.			107.3		130	140	70
Transp.&com	111.9	110.5		141.2			
Trade and catering	77.8	65.8	79.7	98.2	77	82	73
Service	75.1	82.7[f]	92.1	87.2	106	105	78
Health care	67.9	81.7	76.0	92.0	77	69	79
Science, educ. & culture				89.3			
Education	73.0	94.1	68.4		70	63	83
Science	126.1	104.1	67.6		83	99	74
Culture &art	59.5	73.1	62.0		65	62	81
Administr.	97.9	92.3[f]	115.4	102.9	120	129	84
Banking, finance, insur.	97.9		243.0	196.9	192	199	77
All (roubles)	240.4	219	58 663	65 140	790210	1051[g]	70

Sources: Taganrog samples, Nar. Khoz.,1989 g. pp 76-77, Trud ... 1995 p. 49, Rossiiskii…, 1997 p.144, 145, 147, , Rossiiskii, 1999, p. 156, Zhenshchiny i muzhiny Rossii, 1999 p. 71

Notes: [a] In medium and large enterprises. (Multiple jobs not included.)

[b] Average gross wage over the year, including bonuses for workers and employees in one job.

[c] Imputed gross wages including monthly bonus in all state sector jobs, month preceding interview, Male and female averages weighted by proportion male and female in sector in the USSR.

[d] Average monthly gross wage in one job for those employed in enterprises and organisations.

[e] Net wage in month preceding interview

[f] Unweighted (weights not available).

[h] New rubles equivalent to 1000 old.

Table A2.3 Participation rates in RSFSR and sample 1989 in percent. (Standard deviations in brackets.)

Age	Men RSFSR	Women, RSFSR	Men, sample	N men	Women, sample	N Wom
15-19	31.0	24.6	8.2* (27.6)	134	19.0* (39.3)	195
20-29	89.7	85.0	83.7* (37.0)	337	85.3 (35.4)	348
30-49	97.1	94.3	98.3* (12.8)	721	94.9 (22.0)	825
50-54	91.8	82.5	94.7 (22.5)	150	89.7* (30.5)	165
55-59	79.0	34.2	89.9* (30.3)	99	46.0* (50.0)	137
60-72			43.4 (49.7)	159	19.1 (39.4)	241
15-72			81.4 (38.9)	1600	71.9 (45.0)	1911
15-69	82.1	71.6	82.5 (38.0)	1574	73.4 (44.2)	1873

Table A2.4. Participation rates in RSFSR 1993 and 1995 compared with sample 1993 in percent. (Standard deviations in brackets.)

Age	Men 1993	Men 1998	Wom 1993	Wom 1998	Men, 1993 sample	*N men*	Women, 1993 sample	*N Wom*
15-19	31.7	14.1	26.9	14.6	24.1* (42.9)	*170*	25.0 (43.4)	*192*
20-29	87.8	82.2	78.1	79.7	90.1 (29.9)	*364*	80.2 (40.0)	*358*
30-49	94.4	90.1	89.8	85.0	97.2 *(16.5)	*754*	92.7* (26.0)	*937*
50-54	87.9	83.1	77.7	75.1	89.8 (36.8)	*157*	83.9* (36.8)	*205*
55-59	76.6	65.2	37.4	27.8	73.5 (44.3)	*181*	46.3* (50.0)	*259*
60-72	23.2	14.1	10.4	6.0	36.9* (48.3)	*306*	17.0* (37.6)	*466*
15-72	75.6	68.1	61.3	54.7	77.1 (42.0)	*1932*	65.2* (47.7)	*2417*
15-69					78.5 (41.1)	*1890*	67.7 (46.8)	*2310*

* Difference between sample and national figure significant at 5% level

Note: For 1989 participation is assumed equal to employment (including those on leave). Numbers for RSFSR calculated from census, vol. 10, tables 1 and 2. 1993 and 1995 figures from Trud i..., 1996. Rates for 15-72 are not available in 1989 census. Rates for 15-69 are not available in 1993 and 1995 statistical publications.

Appendix 3 Correction for selectivity in wage equations

A Heckman-type two-stage procedure was tried to see self-selection into employment caused a bias in wage estimates in the 1993/94 sample. Table A3.1 shows number of participants and non-participants.

TABLE A3.1 ABOUT HERE

Four models were estimated for men and women of working age (18-54/59 years.). In the first two models, the selection criterion in the first stage was reporting any labour income the preceding month, and OLS estimates were made of total labour income last month and estimated hourly earnings, respectively. The wage equations were the same as in tables 9 and 10 above.

In the last two, the criterion was having received a wage last month and estimates were made for wage last month and wage divided by total work hours. Since hours in main job only was not available for those with second jobs, the measurement of hourly wage rates is poor. For this reason, while hours of work were used as a control in the total earnings model, it was not in the model of wage in primary job. The independent variables in the selection equation were the same in all four models

TABLE A3.2 ABOUT HERE

Conclusions were very similar for all models and, therefore, estimates are reported in full only for the total earnings equation. Definitions and means of variables used in the selection equation are reported in Table A3.2 and estimates of the equation are in Table A3.3[56] Table A3.4, finally shows earnings models with and without correction for selectivity. Since partial non-response to variables included in the selection stage decreased the number of observations available, results without selection correction are reported for the same observations. This is why number of observations and parameters differ slightly from tables 10 and 11.

[56] Since I want to draw only qualitative conclusion , it is precision rather than size of effects that is important and I have not calculated effects at sample mean.

TABLE A3.3 ABOUT HERE

As table A3.4 indicates, lambda (the inverse of the Mill's ratio) has low precision and including it has a minimal effect on other parameter estimates. It is well known that specification of the selection equation is problematic. With this specification (and some variants that were tried), selection into employment does not appear to bias earnings functions.

TABLE A3.4 ABOUT HERE

Most parameters in the selection equation have the expected signs. The youngest men and women (18-24 years) are significantly less likely than thos 35-44 years old to be at work, and so are women of prime childbearing age (25-34), even though we control for, and find a significant negative effect of having children under 3 years of age. For men, there is no effect of children in the youngest age group, but there is, oddly, one for children aged 3-6, while the latter variable is not significant for women. Income of other family members decrease the at work-probability for both women and men, but the effect has higher precision for women. Married men are more likely to work, as are divorced or widowed women. Repondents with eight years or less of school are less likely to work but while university educated men are more likely than those with only secondary education, the difference is not significant for women. As to alcohol consumption, the only significant estimate is a negative parameter for men who practically never drink - perhaps those out of work cannot afford drink Having a garden or allotment does not seem to compete with paid work, for women it is rather the opposite.

Table A3.1 Number of observations without non-response.
Men aged 18-59, women aged 18-54

	Total	Earners	Non-earners	With wage	No wage
Men	1398	1160	238	1121	277
Women	1428	1075	353	1058	370

Table A3.2 Variables used in the selection equations

Variable	Definition	Men	Women
AGE_24	Age 18-24	0,160	0,174
AGE_34	Age 25-34	0,241	0,246
AGE_44	Age 35-44 (ref.)	0,283	0,330
AGE_59	Age 45-59 (men), 45-54 (women)	0,315	0,250
HIGHED	Completed university education	0,229	0,247
SPEC2	Incomplete univ. education or specialised secondary school	0,347	0,408
GENSEC	General secondary education (ref.)	0,227	0,240
INCSEC	Incomplete secondary education (8 years)	0,069	0,041
PTU	PTU with or without secondary school	0,116	0,057
LOWED	Less than 8 years of school	0,012	0,006
NRBABY	Number of children aged 1-2 in household	0,102	0,110
NRPRESCH	Number of children aged 3-6 in household	0,198	0,230
NRSCHOOL	Number of children aged 7-16 in househ.	0,418	0,463
MTS	=1 if married, =0 otherwise	0,777	0,680
SEP	Divorced or widowed	0,062	0,181
NEVMARR	Never married (ref.)	0,162	0,139
NEVALC	Resp. "practically never" drinks alcohol	0,146	0,278
SELDALC	Drinks alc. on holidays or 1-2 times/month	0,626	0,665
WEEKALC	Drinks alc.once a week	0,170	0,049
OFTALC	Drinks alc. several times per week	0,059	0,008
LPKH	=1 if access to garden/plot, else = 0	0,483	0,440
YOTHMEM	Household income minus earnings of respondent	73025	86493

Table A3.3 Selection equation (probit). Men aged 18-59, women aged 18-54

Variable	Par. Men	Prob. value	Par. Women	Prob. value
INTERCEPT	0,9002	0.0001	1,275	0,0001
AGE_24	-0,4900	0.0045	-1,169	0,0001
AGE_34	-0,1404	0.3184	-0,507	0,0001
AGE_44				
AGE_59	-0,5942	0.0001	-0,023	0,8574
HIGHED	0,6237	0.0001	0,158	0,1923
SPEC2	0,0980	0.3881	0,020	0,8514
GENSEC				
INCSEC	-0,3611	0.0274	-0,436	0,0302
PTU	0,0731	0.6251	0,340	0,0801
LOWED	-0,3669	0.2676	-1,157	0,0152
NRBABY	-0,1349	0.3728	-1,188	0,0001
NRPRESCH	-0,2664	0.0118	-0,057	0,5338
NRSCHOOL	-0,0490	0.5392	-0,093	0,1922
MTS	0,7481	0.0001	0,105	0,4303
SEP	0,1092	0.5956	0,332	0,0397
NEVMARR				
NEVALC	-0,3058	0.0468	-0,241	0,2128
SELDALC	-0,0846	0.5009	0,153	0,4051
WEEKALC				
OFTALC	-0,0155	0.9415	0,317	0,5586
LPKH	0,1670	0.0638	0,176	0,0426
YFAM	$-2*10^{-6}$	0.0104	$-3*10^{-6}$	0,0001

Table A3.4 Estimates of logged total monthly earnings for men, with and without selection correction. T-values are corrected for heteroscedasticity

	Men				**Women**			
	Corrected		**Not corrected**		**Corrected**		**Not corrected**	
	Par.	*t-value*	**Par.**	*t-value*	**Par.**	*t-value*	**Par.**	*t-value*
INTERCEP	**8,031**	*26,24*	**8,042**	*27,58*	**7,812**	*34,55*	**7,824**	*34,74*
AGE_24	**-0,122**	*-1,51*	**-0,116**	*-1,79*	**-0,179**	*-2,10*	**-0,144**	*-2,34*
AGE_34	**0,005**	*0,09*	**0,006**	*0,13*	**-0,034**	*-0,72*	**-0,022**	*-0,52*
AGE_59	**-0,080**	*-1,40*	**-0,076**	*-1,70*	**-0,050**	*-1,23*	**-0,049**	*-1,22*
HIGHED	**0,221**	*3,39*	**0,216**	*4,05*	**0,400**	*7,91*	**0,397**	*7,90*
SPEC2	**0,087**	*1,84*	**0,086**	*1,82*	**0,112**	*2,54*	**0,110**	*2,51*
INCSEC	**-0,161**	*-1,78*	**-0,157**	*-1,89*	**-0,027**	*-0,28*	**-0,015**	*-0,16*
PTU	**-0,079**	*-1,25*	**-0,080**	*-1,24*	**0,045**	*0,58*	**0,036**	*0,47*
LOWED	**-0,160**	*-0,87*	**-0,156**	*-0,86*	**-0,095**	*-0,35*	**-0,066**	*-0,24*
CONSTR	**0,089**	*1,22*	**0,089**	*1,36*	**0,136**	*1,47*	**0,137**	*1,48*
TRANS	**0,238**	*3,70*	**0,239**	*3,87*	**0,342**	*3,83*	**0,349**	*3,94*
TRADE	**0,133**	*2,18*	**0,133**	*1,64*	**0,116**	*2,00*	**0,117**	*2,03*
MUNSERV	**0,024**	*0,30*	**0,024**	*0,21*	**-0,121**	*-1,39*	**-0,121**	*-1,39*
OTHSERV	**0,253**	*2,25*	**0,253**	*2,80*	**0,154**	*1,93*	**0,153**	*1,93*
HEALTH	**0,446**	*5,00*	**0,446**	*3,33*	**0,195**	*3,17*	**0,197**	*3,19*
SCEDCULT	**-0,086**	*-0,65*	**-0,086**	*-1,07*	**0,044**	*0,90*	**0,045**	*0,91*
FINANCE	**0,710**	*8,95*	**0,710**	*3,96*	**0,505**	*4,05*	**0,505**	*4,05*
ARMYMILI	**0,469**	*2,65*	**0,469**	*5,35*	**0,338**	*2,33*	**0,339**	*2,34*
ADMIN	**0,278**	*3,22*	**0,279**	*1,06*	**0,121**	*0,68*	**0,121**	*0,67*
OTHER	**0,383**	*1,48*	**0,383**	*4,09*	**0,220**	*1,53*	**0,222**	*1,55*
AIR	**0,070**	*0,76*	**0,070**	*1,60*	**-0,006**	*-0,10*	**-0,005**	*-0,08*
COND_9	**0,172**	*3,98*	**0,172**	*2,15*	**0,002**	*0,02*	**0,001**	*0,01*
HARDPHYS	**0,009**	*0,11*	**0,008**	*0,17*	**-0,058**	*-0,80*	**-0,059**	*-0,81*
NOICEVIB	**0,122**	*2,52*	**0,122**	*2,59*	**-0,010**	*-0,17*	**-0,010**	*-0,17*
MTS	**0,070**	*1,51*	**0,064**	*1,28*	**0,069**	*1,86*	**0,072**	*1,98*
LNH	**0,696**	*9,08*	**0,695**	*8,96*	**0,649**	*10,81*	**0,649**	*10,81*
PARTITD	**0,499**	*7,03*	**0,499**	*6,94*	**0,549**	*6,67*	**0,546**	*6,65*
PARTENTR	**0,553**	*5,49*	**0,553**	*5,42*	**0,800**	*6,10*	**0,799**	*6,09*
ONLYITD	**0,112**	*0,88*	**0,112**	*0,88*	**0,703**	*3,63*	**0,699**	*3,61*
ONLYENTR	**0,686**	*4,72*	**0,686**	*4,67*	**0,354**	*1,97*	**0,361**	*2,01*
LAMBDA	**0,024**	*0,11*			**0,059**	*0,61*		
N	**1160**		**1160**		**1075**		**1075**	
adj. R2	**0.24**		**0.24**		**0.25**		**0.24**	

Tables

Table 1 Self-reported main occupation of men aged 16-59 and women aged 16-54 in the samples of 1989* and 1993/94. (Percent. Standard dev. in brackets)

Occupation	**Men 1989**	**Men 1993/94**	**Women 1989**	**Women 1993/94**
Working	87.5	79.8	79.4	72.4
	(0.33)	(0.40)	(0.40)	(0.45)
Non-working pensioner	0.6	3.7	0.7	1.7
	(0.08)	(0.19)	(0.08)	(0.13)
Disabled	0.4	1.9	0.7	1.4
	(0.10)	(0.14)	(0.11)	(0.12)
Housewife	0	0.1	1.9	5.8
	0	(0.04)	(0.14)	(0.23)
Temporarily not employed	0.5		0.7	
	(0.07)		(0.08)	
Unemployed		4.5		1.8
		(0.21)		(0.13)
Leave- for pregnancy/childbirth/paid or unpaid	0.1	0	5.2	7.2
maternity leave	(0.03)	0	(0.22)	(0.26)
Student	8.8	7.4	11.1	8.7
	(0.28)	(0.26)	(0.31)	(0.28)
Other	2.2	2.6	0.4	1.0
	(0.14)	(0.16)	(0.07)	(0.10)
N	**1120**	**1591**	**1185**	**1647**
Non-response	**3**	**2**	**7**	**3**

Table 2 Labour force participation in sample, percent

Age	Men 1989[b]	Women 1989[b]	Men 1993/94	Wom.1993/94
15-72	81.4**¤¤	71.9**¤¤	77.1**¤¤	65.2**¤¤
15-24	38.0**	42.6*	55.9**	51.1*
20 – 54/59	93.5**	91.8**	91.7**¤¤	88.5**¤¤
25-49	98.1¤¤	94.7**¤¤	97.3¤¤	91.9**¤¤
50- 54/59	92.8**	89.7	81.1**	83.9
54/59 - 72	50.0**¤¤	31.7¤¤	37.7**¤	31.4¤

Notes: [a] 15-72 is the age interval in standard in labour statistics, normal pension age in USSR/Russia is 60 for men and 55 for women [b] All household members

** Difference between 1989 and 1993 significant at 1%-level

* Difference between 1989 and 1993 significant at 5% but not at 1 %-level

¤¤ Male/female difference significant at 1% level

¤ Male/female difference significant at 5% level but not at 1% level

LFP includes those at work, unemployed (self-defined) or on maternity leave

Table 3 Occupation of mothers according to age of youngest child (percent)

	Age<1yr 1989	Age <1yr 1993	1<age<3 1989	1<age<3 1993	3<age<7 1989	3<age<7 1993
Working	0	7	65	20	93	80
Student	0	10	4	1	1	0
Unempl.	0	2	0	0	0	4
At home*	100	80	26	77	4	14
Other or missing	0	0	5	2	2	3
N	**41**	**41**	**76**	**97**	**164**	**250**

Note: Only mothers who live in the same household as the child are included.

* Those who describe their occupation either as ”on maternity leave” or as ”housewife

Table 4 Percentage women among the employed in economic sectors

Sector	1990	1993	1996	1998
Industry	48	44	41	38
Agriculture and forestry	39	35	34	31
Transport	25	26	26	26
Communications	71	70	62	60
Construction	27	25	24	24
Trade, catering	80	66	62	62
Services	52	46	47	46
Health care & sports	83	82	82	81
Education	79	80	82	80
Art & culture	71	68	69	68
Science	53	53	51	50
Public administration	67	68	62[a]	48
Banking finance, insurance	90	78	74	71
Total	**51**	**48**	**48[b]**	**48**

Source: Rossiiskii..., 1996, p. 89, 1997 p. 115 and, for 1998 figures, 1999, p. 115

[a] In Rossiiskii..., 1998 this figure is reported as 50%.

[b] In Rossiiskii..., 1998 this figure is reported as 47%.

Table 5 Percentage men and women with entrepreneurial or ITD incomes, Taganrog 1993/4 (of all with earnings previous month, aged 15+)

	With any ITD-earnings	Earnings only from ITD	With any entrepreneurial earnings	Only entrepreneurial earnings
Men	9.0	3.0	5.6	2.8
Women	6.3	2.6	4.2	2.9

Table 6 Unemployment rates 1992-1998 (%)

	Labour Force Survey			Registered		
	1992	**1994**	**1998**	**1992**	**1994**	**1998**
Men	**5.2**	**8.3**	**13.6**	**0.4**	**1.6**	**1.9**
Women	**5.2**	**7.9**	**13.0**	**1.2**	**3.2**	**4.0**

Source: Rossiiskii...,1999, p. 107. For population aged 15-72.

Table 7 Probability of being a housewife or unemployed*. Probit estimates for men aged 18-59, women aged 18-54

	Housewife Women	Prob >Chi	Unempl. Men	Prob >Chi	Unempl. Women	Prob >Chi
INTERCPT	-1.84	0.00	-1.49	0.00	-2.42	0.00
AGEGR18_24	0.17	0.36	0.22	0.31	0.74	0.01
AGEGR25_34	0.28	0.05	0.53	0.00	0.63	0.02
AGEGR45_59	-0.44	0.02	-0.22	0.35	0.32	0.28
SMALLCH	-0.53	0.02	0.05	0.85	-5.18	1.00
NRPRE3	0.10	0.44	0.16	0.34	0.22	0.23
NRSCHCH	-0.03	0.78	-0.07	0.62	0.04	0.79
HIGHED	-0.46	0.01	-0.86	0.00	0.10	0.71
SPECSEC	-0.38	0.00	-0.22	0.18	0.08	0.72
INCSEC	-0.28	0.38	0.29	0.21	0.39	0.26
PTU	-0.23	0.37	0.05	0.80	-0.31	0.49
MARRIED	0.45	0.00	-0.36	0.05	-0.10	0.63
HIGHEDSP	-0.02	0.89	0.13	0.56	-0.27	0.40
LOWEDSP	-0.38	0.07	-0.54	0.08	-0.23	0.50
YOTHMEM	3.5E-06	0.00	-1.4E-06	0.35	-2.0E-06	0.26
MULTGEN	-0.20	0.11	0.19	0.23	0.09	0.62
Nr hwives/unemp	91		65		27	
Others	1420		1388		1484	
Log likelihood	-303		-232		-123	

Note: Excluded due to missing values: 68 women and 63 men, of which 5 housewives and 3 unemployed. Of these, 63 women and 59 men have missing value for income of other household members.

* Occupational status self-defined

Table 8 Earnings dispersion in Taganrog 1989 and 1993/94

	State sector wages 1989	All earnings 1989	Wage in primary job[a] 1993/94	*All earnings incl. zeroes.*[b] *1993/94*	All earnings, excl. zeroes 1993/94
C.V[c]	40.4	53.7	83.9	*93.7*	88.0
P90/P10	2.9	3.0	5.4	*7.8*	5.5
P75/P25	1.7	1.8	2.3	*2.5*	2.3
P95/P50	1.9	2.0	3.0	*3.2*	3.3
Share of lowest 10%	4.4%	4.2%	2.5%	*0.8%*	2.3%
Share of highest 10%	18%	20%	28%	*30%*	30%
Mean	*195.1*	*202.1*	*45.0*	*47.8*	*50.5*
Std dev.	*78.9*	*108.6*	*3.8*	*44.7*	*44.4*
N	*2012*	*2061*	*2564*	*2884*	*2725*

[a] 1993/94 wages and earning in thousands of October 1993 roubles (indexed by CPI)

.[b] In this column we assume that there was no partial non-response to earnings questions, i.e. all earnings not reported are assumed to have been zero.

[c] 100*Standard deviation/mean

[d] Figures for 1989 refer to all household members

Table 9 Ratio of female to male earnings (percent)

1989	**Monthly wage (all household members)**	**Monthly wage (main respondents*)**	**Hourly wage (main respondents)**
At mean	66.1	65.6	73.3
At median	68.2	71.4	72.7
1993/94*	**Wage at primary job**	**All earnings**	**Earnings/hour**
At mean	62.1	60.8	69.7
At median	67.1	66.1	72.4

*Respondents who did not report wages/earnings the previous month were excluded. Some of these may have worked but not received their wages. Including respondents who define themselves as working but do not report any earnings as if their earnings were zero, only shifted the ratios by 0.2-0.3 percentage points.

Table 10 Estimates of wages from state sector in 1989, of wages in primary job in 1993/94 and total labour income 1993/94

	Log of wages 1989				**Log of wages 1993/94**				**Log of total earnings 1993/94**			
	Men	*t-value*	**Women**	*t-value*	**Men**	*t-value*	**Women**	*t-value*	**Men**	*t-value*	**Women**	*t-value*
INTERCEP	**5.10**	*9.64*	**4.64**	*18.5*	**8.44**	*25.29*	**7.93**	27.60	**8.07**	*26.0*	**7.85**	*27.3*
AGE_18_24	**-0.16***	*-2.17*	**-0.24****	*-3.9*	**-0.14**	*-2.28*	**-0.10**	-1.63	**-0.12¤**	*-1.9*	**-0.14***	*-2.2*
AGE_25_34	**-0.10***	*-2.39*	**-0.12****	*-4.1*	**-0.03**	*-0.67*	**-0.03**	-0.77	**-0.02**	*-0.3*	**-0.03**	*-0.7*
AGE_45_59	**-0.01**	*-0.14*	**0.00**	*0.1*	**-0.08**	*-1.68*	**-0.03**	-0.82	**-0.08¤**	*-1.8*	**-0.05**	*-1.3*
HIGHED	**0.16****	*3.02*	**0.23****	*6.4*	**0.19**	*3.49*	**0.41**	8.16	**0.21****	*3.8*	**0.39****	*7.6*
SPEC2	**0.04**	*0.94*	**0.08****	*2.8*	**0.06**	*1.27*	**0.11**	2.62	**0.08¤**	*1.7*	**0.11***	*2.5*
INCSEC	**-0.15****	*-3.49*	**-0.04**	*-0.6*	**-0.23**	*-2.85*	**-0.01**	-0.07	**-0.18***	*-2.2*	**-0.03**	*-0.3*
PTU	**0.08**	*1.59*	**0.07**	*1.0*	**-0.08**	*-1.17*	**0.03**	0.36	**-0.07**	*-1.0*	**0.03**	*0.4*
LOWED	**-0.08**	*-0.94*	**-0.01**	*-0.1*	**-0.15**	*-1.26*	**-0.02**	-0.15	**-0.15**	*-1.3*	**-0.08**	*-0.5*
CONSTR	**-0.09**	*-1.28*	**-0.03**	*-0.4*	**0.07**	*1.20*	**0.21**	2.36	**0.09**	*1.6*	**0.16¤**	*1.8*
TRANS	**-0.02**	*-0.37*	**-0.10***	*-2.2*	**0.19**	*2.77*	**0.40**	4.54	**0.23****	*3.6*	**0.35****	*4.2*
TRADE	**-0.38****	*-2.65*	**-0.25****	*-4.8*	**0.10**	*1.10*	**0.16**	2.90	**0.13**	*1.5*	**0.12***	*2.1*
SERV	**-0.29****	*-3.42*	**0.05**	*1.1*								
MUNSERV					**-0.11**	*-1.05*	**-0.16**	-1.32	**-0.01**	*-0.1*	**-0.12**	*-1.3*
OTHSERV					**0.13**	*1.09*	**0.14**	1.90	**0.25***	*2.2*	**0.15¤**	*1.9*
HEALTH	**0.00**	*0.00*	**-0.18**	*-3.0*	**0.37**	*3.25*	**0.14**	2.73	**0.44****	*3.4*	**0.19****	*3.5*
SCEDCULT					**-0.11**	*-1.33*	**0.04**	0.70	**-0.08**	*-1.0*	**0.04**	*0.8*
TEACH	**-0.10**	*-1.60*	**-0.02**	*-0.4*								

ART	**-0.04**	*-0.44*	**-0.35*'**	*-3.1*								
SCIENCE	**-0.11**	*-1.46*	**-0.11**	*-1.9*								
FINANCE					**0.77**	*3.21*	**0.57**	4.85	**0.70****	*2.9*	**0.51****	*4.3*
ARMYMILI					**0.52**	*7.06*	**0.28**	1.67	**0.47****	*6.6*	**0.34¤**	*1.9*
ADMIN	**-0.04**	*-0.24*	**-0.14**	*-1.5*	**0.09**	*0.35*	**0.18**	1.46	**0.04**	*0.2*	**0.12**	*1.0*
OTHER	**-0.11**	*-1.37*	**-0.01**	*-0.1*	**0.48**	*3.72*	**0.00**	0.02	**0.40****	*3.3*	**0.24**	*1.5*
AIR	**0.04**	*0.90*	**0.08**	*1.6*	**0.04**	*1.09*	**0.05**	0.88	**0.06**	*1.4*	**0.00**	*0.0*
HEAT[a]	**0.07**	*1.30*	**0.02**	*0.4*	**0.16**	*1.98*	**0.01**	0.12	**0.18***	*2.3*	**0.00**	*0.0*
HARDPHYS	**-0.01**	*-0.28*	**0.13**	*2.2*	**-0.02**	*-0.43*	**-0.06**	-0.86	**0.01**	*0.2*	**-0.06**	*-0.9*
NOICEVIB	**-0.01**	*-0.12*	**0.09**	*1.4*	**0.14**	*3.08*	**-0.01**	-0.16	**0.11****	*2.6*	**0.01**	*0.2*
MTS	**0.08**	*1.45*	**0.05¤**	*1.9*	**0.10**	*2.15*	**0.07**	2.01	**0.06**	*1.3*	**0.07***	*2.0*
LNH	**0.08**	*0.57*	**0.10**	*1.5*	**0.58**	*6.46*	**0.60**	*7.74*	**0.69****	*8.3*	**0.64****	*8.3*
PARTITD									**0.50****	*7.0*	**0.55*'**	*7.4*
PARTENTR									**0.55****	*5.4*	**0.80****	*5.3*
ONLYITD									**0.11**	*0.6*	**0.72****	*2.6*
ONLYENTR									**0.68****	*5.5*	**0.36**	*1.5*
adj. R2	**0.08**		**0.19**		**0.16**		**0.19**		**0.24**		**0.26**	
N	**354**		**488**		**1141**		**1077**		**1183**		**1098**	
Dep. mean	**5.45**		**5.05**		**10.80**		**10.36**		**10.92**		**10.46**	
Prob>W#	**0.98**		**0.26**		**0.76**		**0.99**		**0.53**		**0.62**	

Notes: See notes to table 1

Table 11 Logged hourly wages in main job 1989 and total hourly earnings 1993/94

	Men 1989	***adj. t-value***	**Women 1989**	***adj t-value***	**Men 93/94**	***adj. t-value***	**Women 93/94**	***adj t-value***
INTERCEP	0.18	*2.36*	-0.20	*-4.73*	6.95	*106.06*	6.55	*116.76*
AGE18_24	-0.17	*-2.07*	-0.26	*-3.70*	-0.11	*-1.67*	-0.11	*-1.67*
AGE25_34	-0.10	*-2.03*	-0.04	*-1.08*	-0.02	*-0.32*	-0.02	*-0.57*
AGE45_59	-0.01	*-0.28*	0.01	*0.17*	-0.07	*-1.68*	-0.05	*-1.41*
HIGHED	0.20	*3.28*	0.22	*4.78*	0.20	*3.58*	0.39	*7.37*
SPEC2	0.04	*0.77*	0.02	*0.64*	0.08	*1.60*	0.10	*2.25*
INCSEC	-0.14	*-1.97*	-0.04	*-0.59*	-0.18	*-2.19*	0.02	*0.18*
PTU	0.09	*1.74*	0.06	*0.73*	-0.09	*-1.19*	0.02	*0.26*
LOWED	-0.01	*-0.11*	-0.02	*-0.25*	-0.15	*-1.26*	-0.07	*-0.46*
CONSTR	-0.04	*-0.63*	-0.08	*-0.87*	0.07	*1.35*	0.16	*1.85*
TRANS	-0.05	*-0.73*	-0.10	*-2.24*	0.20	*3.05*	0.32	*3.80*
TRADE	-0.34	*-2.45*	-0.32	*-5.17*	0.09	*1.05*	0.09	*1.45*
SERV	-0.28	*-3.00*	0.09	*1.95*				
MUNSERV					-0.03	*-0.32*	-0.11	*-1.19*
OTHSERV					0.24	*2.16*	0.15	*1.89*
HEALTH	0.02	*0.09*	-0.11	*-1.37*	0.46	*3.47*	0.18	*3.14*
SCEDCULT					-0.07	*-0.98*	0.06	*1.08*
TEACH	-0.04	*-0.60*	0.16	*2.60*				
ART	0.06	*0.71*	0.00	*0.00*				
SCIENCE	-0.13	*-1.53*	-0.13	*-1.91*				
FINANCE					0.68	*2.88*	0.49	*4.15*
ARMYMILI					0.41	*5.79*	0.31	*1.71*
ADMIN	-0.32	*-2.61*	-0.17	*-1.81*	0.02	*0.09*	0.10	*0.79*
OTHER	-0.08	*-0.94*	0.20	*1.40*	0.35	*2.86*	0.23	*1.43*
AIR	0.03	*0.62*	0.04	*0.68*	0.05	*1.34*	0.02	*0.41*
HEAT[a]	0.12	*1.80*	0.17	*2.17*	0.17	*2.32*	0.02	*0.18*
HARDPHYS	0.00	*-0.02*	0.17	*1.62*	0.01	*0.26*	-0.05	*-0.74*
NOICEVIB	-0.04	*-0.73*	0.04	*0.67*	0.12	*2.62*	0.01	*0.19*

MTS	0.07	*1.27*	0.10	*2.71*	0.05	*1.03*	0.09	*2.31*
PARTITD					0.48	*6.53*	0.52	*6.72*
PARTENTR					0.52	*5.25*	0.77	*4.86*
ONLYITD					0.11	*0.57*	0.85	*2.65*
ONLYENTR					0.67	*5.28*	0.33	*1.23*
adj R2	0.08		0.17		0.13		0.15	
N	354		488		1183		1098	
Dep. mean	0.234		-0.087		7.19		6.84	
Prob>W[b]	0.36		0.0001		0.72		0.46	

**Significant at 1% *Significant at 5% but not 1% ¤Significant at 10% but not 5%

[a] The parameter for this variable is not comparable over years because the definitions are not identical.

[b] W is the Shapiro-Wilks statistic for normal distribution of residuals

T-values corrected for heteroscedasticity in italics

Table 12 Decomposition of the gender gap in logged monthly and hourly wages 1989 and earnings 1993 (percent of differential).

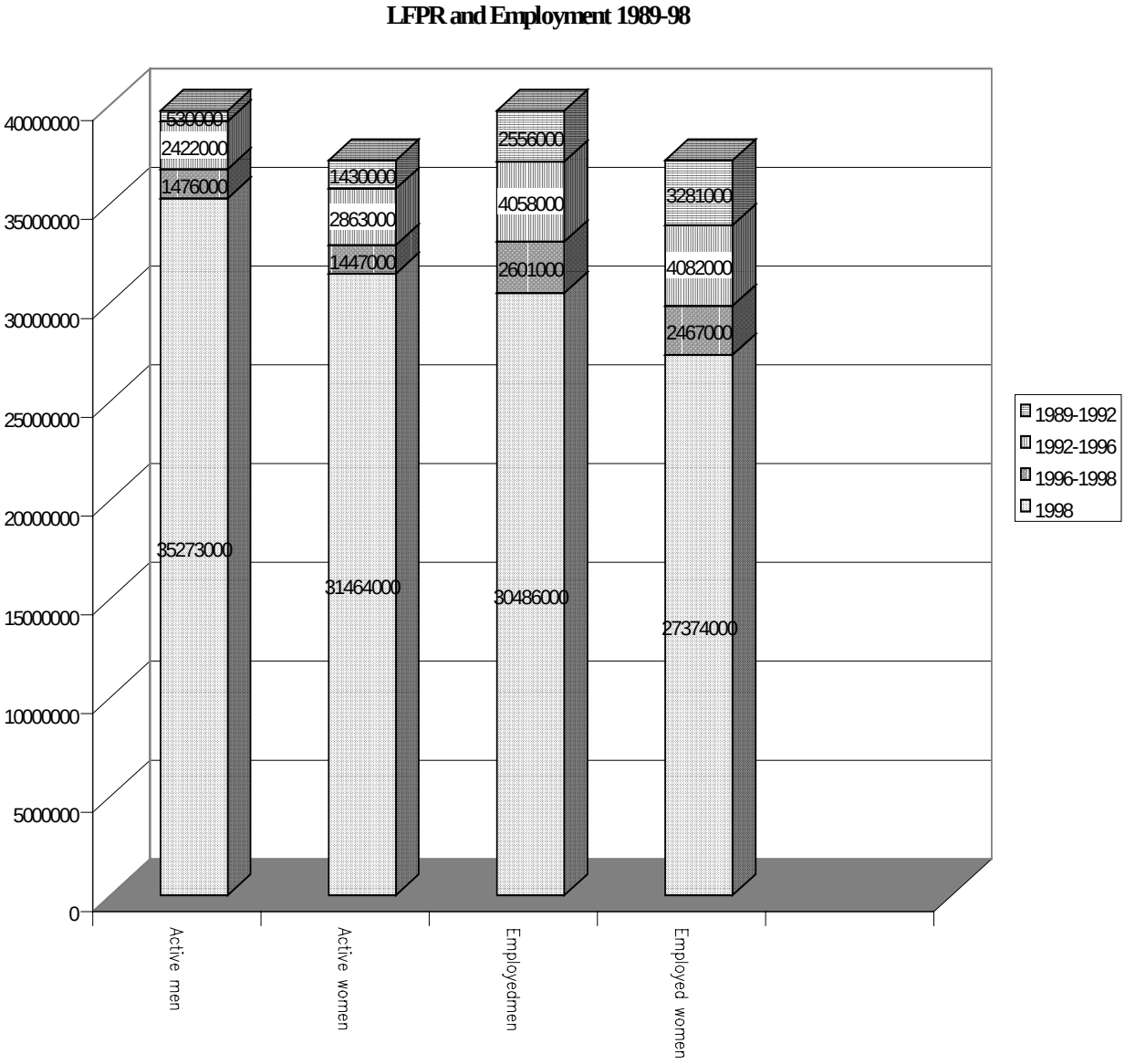
Monthly	**Weights**			
	"Female" parameters		**"Male" parameters**	
	1989	**1993/4**	**1989**	**1993/4**
Unexplained	**82.7**	**76.0**	**85.7**	**75.5**
Explained	**17.3**	**24.0**	**14.3**	**24.5**
Of which				
Age	1.1	-1.2	0.9	-1.2
Education	1.3	-2.0	1.2	-3.3
Sector (Branch)	4.5	3.5	6.8	1.1
Work conditions	6.9	-1.3	1.5	4.4
Hours of work	1.9	15.3	1.5	16.3
Marital status	1.6	2.4	2.4	1.9
Entrepreneurial activity	-	3.0	-	2.7
Self employment	-	4.3	-	2.6
Hourly				
Unexplained	**83.1**	**86.9**	**86.4**	**91.4**
Explained	**16.9**	**13.1**	**13.6**	**8.6**
Of which				
Age	-0.6	-1.2	0.9	-1.3
Education	1.9	-2.4	2.0	-4.4
Sector (Branch)	3.7	3.8	7.2	-0.2
Work conditions	8.2	-0.5	0.9	5.9
Marital status	3.8	3.6	2.8	2.0
Entrepreneurial activity	-	3.9	-	3.4
Self employment	-	5.9	-	3.3

Total log differential monthly wage/earnings 1989: 0.40; 1993/94: 0.46

Total log hourly wage/earnings differential 1989: 0.32; 1993/94: 0.35

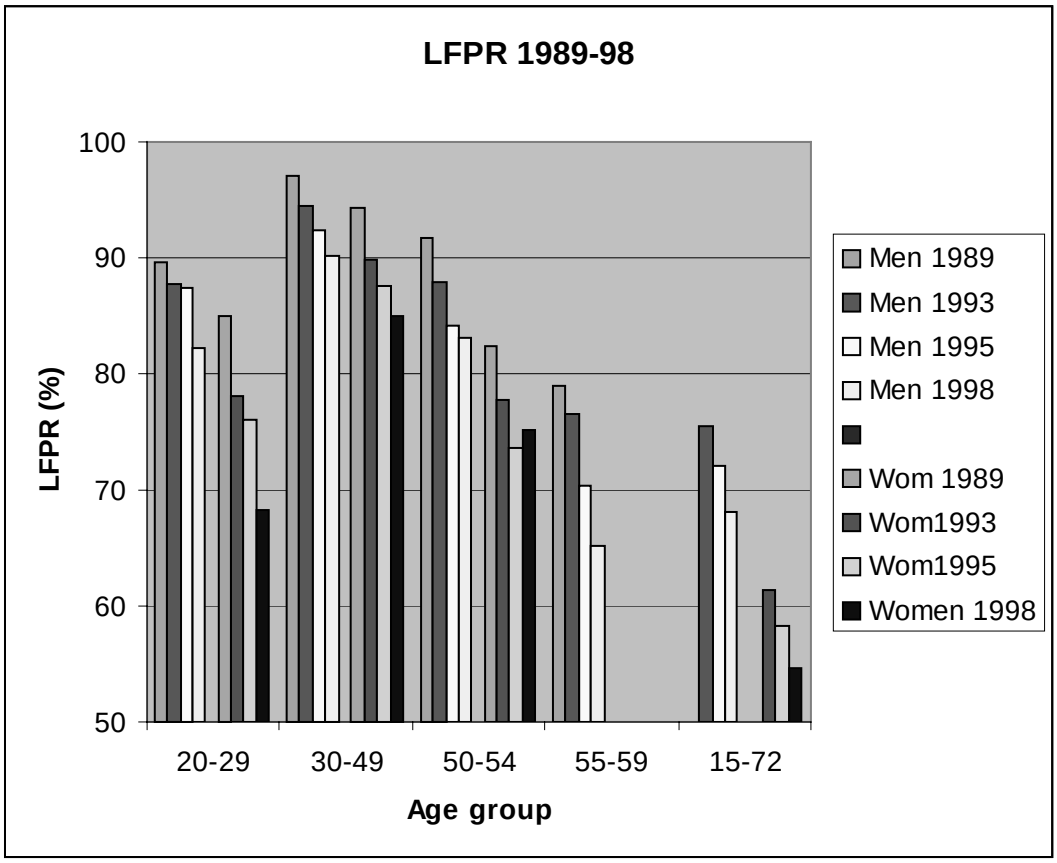
Figures

Fig 1 Numbers of men and women employed in 1989 and change in economically active population 1989-98



Source:1989 census and Rossiiskii… 1999. p. 107. (1992-1998 figures are based on LFS.)

Figure 7.3 Male and female participation rates. Russia 1989-98



Sources: For 1989 participation is assumed equal to employment. Numbers for RSFSR calculated from census. vol. 10. tables 1 and 2.

Note: Rates for 15-72 years are not available in 1989 census. 1993. 1995 and 1998 figures are based on LFS (Trud i..... 1999. p.35.) For women aged 55-59. the numbers are 34% in 1989. 37% in 1993. 30% in 1995 and 28% in 1998.