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Male-Female Differences in Labor Market Outcomes during the Early Transition to Market

The Case of Estonia and Slovenia

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Estonia adopted liberal labor market policies during the transition, and Slovenia took an interventionist approach. Even so, relative wages for women rose in both countries. Women were less mobile across jobs in both countries, so men disproportionately filled new jobs in expanding sectors.

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Summary findings

Orazem and Vodopivec analyze changes in women's relative wages, using social security data from Slovenia (1987–92) and a retrospective survey of Estonia's labor force (1989–94).

Estonia adopted liberal labor market policies. Slovenia took an interventionist approach. Nevertheless, relative wages for women rose in both countries. Actually, real wages fell for both men and women, but women lost less than men did.

Certain factors favored women:

- Returns to human capital rose during the transition.
- Relative labor demand shifted toward predominantly female sectors (health, education, financial services, retail trade) and away from traditionally male sectors (agriculture, manufacturing, mining, transportation).
- Women with low wages had a disproportionate incentive to exit the labor market, especially in Estonia.

Women were less mobile across jobs in both countries, however, so men disproportionately filled new jobs in expanding sectors. Women who remained employed had higher average education levels. Women's relative immobility will tend to reduce their early relative gains. Their relative wages will also continue to fall if their share of the expanding sectors continues to fall.

This paper — a product of Poverty and Human Resources, Development Research Group — is part of a larger effort in the group to investigate gender outcomes in transition economies. The study was funded by the Bank's Research Support Budget under research project "Labor Market Adjustment in Estonia" (RPO 679-71). Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Sheila Fallon, room MC3-638, telephone 202-473-8009, fax 202-522-1153, Internet address sfallon@worldbank.org. Policy Research Working Papers are also posted on the Web at http://www.worldbank.org/html/dec/Publications/Workpapers/home.html. Milan Vodopivec may be contacted at mvodopivec@worldbank.org. March 1999. (41 pages)

Male-Female Differences in Labor Market Outcomes during the Early Transition to Market: The Case of Estonia and Slovenia[a]

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Centrally-planned employment and wage policies limited variation in labor market outcomes across individuals. As a consequence of transition toward market systems, wage inequality has increased to varying degrees in all Central and Eastern European countries.[1] Unemployment, which was virtually unknown in socialist economies, now represents a significant share of the labor force in all of these economies. Relative wages and employment for the least educated have fallen, while the most skilled have lost the least during transition.

Blau and Khan (1994) found that rising earnings inequality increased wage differentials between women and men in the western economies. Therefore, increased wage inequality associated with transition would presumably disadvantage women. Women might be further disadvantaged by the abandonment of centrally dictated wages because these policies which reduced wage inequality across workers under central planning would presumably have reduced inequality between men and women as well. It is also plausible that women would be further disadvantaged if men were given favored treatment in the competition for more limited job opportunities in transition. Women would then face a higher probability of transition out of employment and a lower probability of transition out of unemployment.

This study examines whether women are disadvantaged in earnings and employment relative to men over the first five years of transition in Slovenia and Estonia. For Slovenia, we cover the period from 1987 to 1992 with the transition beginning in late

1988. The Estonian transition began two years later in 1990, so the Estonia analysis covers the period from 1989 to 1994. The comparison of these two countries is particularly useful because it presents two different policy strategies. Slovenia took an interventionist approach in an effort to shield workers from labor market shocks, while Estonia took a very liberal approach in embracing a more free market oriented strategy. It was not clear a priori whether women would fare better under a free or a regulated labor market.

Slovenia entered transition in much better shape than Estonia. Slovenia's pretransition GDP per capita was nearly $9,000, nearly 2 to 4 times the level in Estonia.[2] A major factor explaining why Estonia did not create a large social safety net as did Slovenia was that Estonia could not afford it. Because of its relative wealth, Slovenia could better afford to support pensioners, the unemployed, and jobs in failing sectors. A second advantage Slovenia had was its prior trade relationships with the West. Estonia's trade relationships were primarily with Eastern bloc countries who were not strong prospects for continued trade in transition. One particular trade disruption, the cutoff of subsidized petroleum from Russia, forced Estonia to seek new energy sources on the world market and, as a result, forced Estonia to seek alternative sources of foreign exchange.

In both countries, transition was accompanied by large reductions in output. Consequently, the newly emerging labor markets were given the task of absorbing a huge drop in demand for inputs including labor. In Estonia, real output fell 25 percent in 1991 and 1992. However, the unemployment rate stayed below 5 percent until 1993 when the recovery began. To accommodate the huge decline in output without significant increase

in unemployment, real wages fell nearly 50 percent before beginning to increase in 1993. In Slovenia, real output fell 17 percent by 1992 relative to pretransition levels. Real wages fell 30 percent, but recovered to 92 percent of pretransition levels by 1995. The unemployment rate rose quickly after layoffs were legalized, holding at or above 10 percent since mid 1991.

Despite the differences in policy orientation, there are more similarities than differences in the relative labor market experiences of women and men in the two countries. Women represented a large share of the pretransition employed in both countries: 51 percent in Estonia and 47 percent in Slovenia. During early transition, women gained in relative pay in both countries.[3] The gains to women are related to a general increase in relative returns to skill during the transition, and women in both countries began the transition with higher levels of education than men. The gains to women are also related to the composition of demand for goods and services in transition: labor demand fell the most in predominantly male sectors in both countries, while predominantly female sectors either declined very little or expanded. The biggest difference between the two countries is that women's employment share rose initially in Slovenia, but fell in Estonia. Ironically, men appear to have lost employment in Slovenia because the predominantly female sectors (which were underdeveloped under the socialist system) did not expand to employ displaced men. In Estonia, predominantly female sectors gained employment, but men disproportionately filled the new openings.

I. Review of Transition Labor Market Policies

Estonia and Slovenia took sharply differing labor market policy approaches in their initial years of transition. Table 1 reports summary information on the policies of

the two countries. The table shows that Slovenia took an interventionist approach, with significant barriers to job dislocation, generous support for unemployed workers and pensioners, and efforts to prevent reductions in real wages below a base level of consumption. Estonia took a very liberal approach, with few barriers to labor market dislocations or new job creation, meager support of the unemployed, and no effective wage floor. These policies were applied generally in the labor market, but as we will demonstrate, they did not have neutral effects on women's relative wages or employment. Other policies regarding maternity leave and day care had a more direct influence on women's labor market outcomes.

One major difference between the two countries is in the treatment of workers who became redundant in the transition. In Estonia, there have been modest restrictions on layoffs from the beginning. Layoffs require a two month advance notice and a severance package equal to two to four months of wages, depending on the length of service with the employer. The firm is not liable for other mandated benefits for its fired workers such as job placement or retraining. In fact, during the period studied, unemployment benefits were paid out of general tax revenues rather than experience-rated insurance premiums.[4] All of these policies implied that Estonian firms faced an unusually low marginal cost of layoffs. Layoffs were allowed in Slovenia, but at a large expense to firms. For each dismissal, firms must provide 6 months advance notice (even 24 months before 1991), and are liable for reassignment, retraining, or early retirement of the fired worker. If none of these options is available, workers are entitled to severance pay of one monthly wage for each year of services with the firm. Clearly these costs serve to reduce firm incentives to initiate layoffs.

Once unemployed, Estonia's policies have encouraged reemployment. The unemployment benefit is very low with benefits averaging about one-tenth of average monthly earnings. Benefits last six months, with an additional three months of benefits possible only if the individual has at least three children and has an income below a poverty threshold. The unemployed lose benefits if they do not search, and have only limited rights to refuse employment if offered.[5] Workers for whom no suitable jobs exist are eligible for up to six months of free training, and almost 40 percent undergo such training. In contrast, unemployment insurance in Slovenia is much more generous. Unemployment benefits replace up to 70 percent of previous earnings in Slovenia and benefits can last up to 24 months. Thereafter, unemployed individuals may qualify for means tested welfare benefits. Individuals may lose benefits if they refuse a job offer or training, but there is no requirement of active job search. The lack of a job search requirement and lax enforcement of the provisions for continuation of unemployment benefits have resulted in relatively little incentive to exit unemployment.

For those who were employed in Estonia, there were few distortions in setting wages or the number employed by sector. Minimum wages were imposed, but were so low as to be almost irrelevant--less than one percent of the labor force were paid the minimum wage in 1995. There was no program to subsidize failing firms or to use trade protection to preserve jobs, so growing sectors were not taxed to shore up shrinking sectors. Pensions were very low (the average pension was about one third of the average wage), so the tax burden for funding pensions represented only 5 percent of Estonia's GDP. In Slovenia, minimum wages were much higher, and the minimum was indexed to inflation at least twice yearly. Consequently, about ten percent of the employed were at

the minimum, suggesting that there was a binding wage floor to hire the least skilled. Pensions were indexed to the growth of average wages on a monthly basis, with the average pension amounting to about 75 percent of the average wage. For many workers, particularly low-skilled workers whose wage increases were below average, retirement was an attractive option. The implicit tax burden for funding the pensions' 15 percent share of GDP is a serious drain on the Slovenian economy. An additional implicit tax on growing sectors of the economy was the use of subsidies and tariffs to maintain employment in failing sectors. These subsidies represented nearly 1 percent of GDP.

Both countries faced sharply changing trade patterns in transition. In Slovenia, the war among the republics of former Yugoslavia disrupted trading patterns for many sectors. In Estonia, the disruption of trade with the former Soviet Union also created large shifts in the composition of final demand for sectoral outputs. As a consequence, in both countries there were sectors which faced large disruptions in labor demand. At the same time, sectors that were underdeveloped under central planning such as financial services and retail trade might be expected to expand, partially mitigating the adverse effects of the employment problems elsewhere. The extent to which these underdeveloped sectors grew depended upon the existence of capital to finance their expansion, and the potential for profit after taxes.

We have already shown that Slovenian firms faced the greater tax burden. Slovenian firms also faced more restricted access to capital. In Estonia, there were no restrictions placed on foreign ownership of former state enterprises or on new foreign investment. As a consequence, there was a tremendous flow of foreign capital into Estonia. By 1995, 9.1 percent of employed Estonians worked for foreign-owned firms

and cumulative foreign direct investment was over 5 percent of GDP. Resources flowed toward expanding sectors, financing employment growth of 25 percent in utilities, 57 percent in retail trade, 11 percent in hotels and restaurants, and 142 percent in financial services. In Slovenia, there were large barriers to foreign investment initially, and there are still restrictions on foreign ownership of land and equity. As a result, foreign direct investment in Slovenia lagged behind Estonia, even though the Slovenia transition began two years earlier and the per capita income in Slovenia was much higher than in Estonia. Five years into the Slovenian transition, no sector had greater employment than before the transition began.

Studies on job creation and job destruction document different adjustment paths of the two economies. The transition in Estonia led to a massive increase in worker flows out of some jobs and into others. The study by Haltiwanger and Vodopivec (1998), covering the period 1989-95, shows that reallocations of jobs were led by job destruction, which peaked at over 10 percent per year in 1992 and 1993. With a lag of approximately one year, job creation also surged to a 10 percent yearly rate. By 1994, the job creation rate exceeded the job destruction rate. In contrast, Bojnec and Konings (1998) report much lower job flows for Slovenia for the period 1991-96. Except for 1994, job creation rates were at or below one percent per year, while job destruction rates ranged from 3 to 8 percent.

How do these labor market policies affect the relative treatment of women in the two economies? Most of these policies are implemented uniformly for both men and women, so their relative impacts are not obvious. However, these policies will affect women and men differentially to the extent that women and men were employed in

different sectors of the economy at the start of the transition. In both countries, labor demand shocks disproportionately affected sectors that employed males such as manufacturing, agriculture, transportation and construction. Attempting to preserve jobs in these sectors, as was done in Slovenia, might be expected to have disproportionately benefited men. However, the cost of job preservation in these predominantly male sectors had to be borne by the other sectors of the economy. Consequently, the attempts to retain jobs in the shrinking sectors may have retarded the creation of alternative jobs in expanding sectors. If this scenario is accurate, then interventionist policies may have led to relative employment gains by women because the disproportionate male job loss in the shrinking sectors was inevitable, and flexible labor market policies were necessary if men were to gain employment elsewhere. In addition, Slovenia's imposition of interventionist policies may have slowed the overall recovery of the economy, both in GDP and in employment. The empirical work that follows is consistent with this assessment.

There are other policies which have more direct implications for female employment in transition. Both countries had very liberal policies regarding maternity leave and access to child care. In Slovenia, these programs remained unchanged during transition. In Estonia, however, the available maternity leave doubled in length. In addition, women with young children were offered up to four years of additional unemployment benefits. At the same time, the number of public day care centers decreased 14 percent from 761 to 656, partly in response to the decrease in number of births. Consequently, the cost of labor force participation rose for women with young children, the return to exiting the labor force increased, and the real wage fell. Therefore, these policies led to a greater incentive for women with children to leave the labor force

in Estonia, while these policies remained unchanged in Slovenia. The empirical work below bears out this prediction as well.

II. Data Sources

We make use of two data sets to monitor the progress of the transition in the two countries. For Slovenia, the primary data source was a 5 percent random sample of workers making payments into the Slovenian Pension and Invalid Fund (SPIF). These formal sector jobs include employees in state firms and in incorporated private firms. Privatization progressed slowly in Slovenia, so that for the period studied (January 1, 1987 through January 1, 1992) the social sector represented roughly 9 of 10 workers in the economy. The most important sectors excluded from this data base are the self-employed and workers in the "gray economy" who do not report their earnings to the SPIF. Workers in these gray economy jobs are considered out of the labor force in official government statistics.[6]

The Estonia data set is based on approximately a 1 percent random sample of the 1989 Census of the Estonia population.[7] Our analysis concentrates on the subsample who worked for wages in 1989 or 1994. In the survey conducted in 1995, individuals were asked to provide employment and earnings information retrospectively for the years 1989-1995. While recall bias may create measurement error problems in retrospective data, the survey methodology has the advantage of covering private sector and gray economy jobs as well as jobs in state-owned firms. Because Estonia moved much more aggressively than most formerly planned economies to encourage expansion of private sector, it was critical to base the analysis on the full labor market. As shown in Noorkoiv