The cost of job loss in a transition economy. Evidence from Ukraine

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Abstract* – *The first part of the paper presents the costs for displaced workers as they are depicted in the western labor economics literature and the possible implication of the transition on them. The second part of the paper follows Lehman ET all (2005) in order to identify the incidence and costs of displacement in Ukraine. Using ULMS (2003), I have found that around one third of the displaced find re-employment immediately while the majority continues into long term non-employment. The main cost for displaced workers in Ukraine is the income loss due to long non-employment spells experienced by the average worker after layoff.

Keywords: ***job loss, unemployment, transition economy***

I. INTRODUCTION

There is an extensive economic literature on the costs of job loss for individuals. This literature is summarized by Kletzer (1998) and Kuhn (2002). An influential study on the costs of displacement was conducted by Farber (1997). He uses the Displaced Workers survey from 1984 to 1996 to provide a comprehensive picture on the incidence and consequences of the job loss in US between 81 and 95. Thus, Farber (1997) points out that a large portion of the displaced workers experience long non-employment spells, that the reemployment probabilities were cyclical, rising with the overall economic health in the 1980s and that the probability of employment is monolithically increasing with the level of educational attainment. The author also reports that over the investigated period real-weakly post displacement earnings were 13% lower than pre-displacement earnings with considerable heterogeneity for workers with different skills.

The Displaced Workers Survey lacks information on both long-term earnings and how earnings would have grown if the displaced had not lost its job. Jacobson ET all (1993) methodology has had a significant impact on how economists study earnings losses following displacement. Using RDD they were able to document long term earnings losses of displaced workers. They also show that earnings losses are higher with the tenure. Understanding earning losses requires drawing on theories of human capital and wage determination (Kletzer, 1998). Labor economics studies tries to identify the factors responsible for the above reported wage premium. Among most cites candidates are the development of non-transferable human capital in a job, unionization, job matches, efficiency wages, internal labor markets and incentive pay mechanism.

Job displacement in the context of transition to market economy

The incidence, patterns of job displacement and the cost associated with it gain additional dimensions in the context of a transition economy. After the collapse of eastern block starting with 1989, ex-communist countries have begun a transitional period to the market economy. Lehman ET all (2002, 2005) shows that a transition economy knows more rapid restructuring and labor reallocation than in the West. Consequently, the nature of the transition economies could create a sufficiently dynamic environment where the newly created sectors could absorb a large proportion of the displaced workers in the distress sectors, offering at the same time higher wages due to the increased productivity (Lehman ET all 2002, 2005). In this case the welfare cost of job loss is small.

Other things being equal, if employment protection legislation is comparable to that in western countries, we expect that the incidence and costs of job loss should also be comparable.

Data and Variables

Fallowing Lehmann ET all (2005) I use the 2003 Ukrainian Longitudinal Monitoring Survey. ULMS covers around 4000 households and 8000 individuals, providing information about the employment in 86, 91, 97, 1998-2003. After restricting the sample to include only individuals of age 15-59, the sample decreases to 6389 observations. The ULMS allows for estimating

annual separations, displacement and quits. The data also allows for determining the unemployment spells in months.

I distinguish between quits and displaced. Following Lehmann ET all (2005) I considered as displaced those who loose their job due to closing down, reorganization, bankruptcy, privatization or reduction of personnel. In the quits category I include those who left due to expiring of contract, military service, studies, imprisonment, own illness, retirement, early retirement, marriage, parental leave, change of residence, another job or in order to start a new business.

As mentioned in previous studies on displacement's costs, all survey data on displacement are plagued to some extent by bias (Lehmann ET all, 2005). Thus, if workers have rational expectations about their job, the better qualified workers may quit before the firm lays them off. Or, equally possible, more qualified workers are likely to stay in anticipation of future increases in wages due to increased productivity as a result of restructuring of the firm. (Lehmann et al. 2005). I also mentioned already that a transition economy might experience a dynamics which will further amplify the bias (Lehmann, 2005).

II. PRIVATIZATION, A NECESSARY STEP IN THE TRANSITION TO A MARKET ECONOMY

Empirical strategy and main results

In computing the Ukrainian Worker Separation Rates, I use the Individual Questionnaire, Section C. This section allows identifying the work status of an individual in December 86, 91 and 97 and the main jobs in the period 1998-2003. I have determined the main reasons for separation, subject to the criteria of avoiding redundancies and at the same time controlling for as many separation reasons as possible (Figure 1).

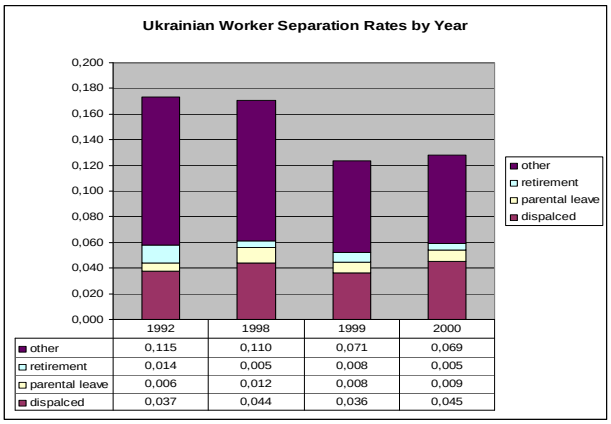

Figure 1. Main reasons for separation

Results showlthat the layoff rates are on average 5%. Quits exceed displacement rates, for all the investigated period. I have considered more instructive to analyze the entire sample, not separate samples for quits and displaced. I report in the Table 1 the Job Displacement Rates for the period 1992 -2000, working age 15-59.

Table 1. Job Displacement Rates (%), 1992-2000, working age 15-59

	1992	*1998*	*1999*	2000
Males	3,9	3,7	2,5	3,6
Females	2.1	3,3	4,2	4,5
Ukrainian	2.8	4,3	2,9	3,2
Russian	2.4	5,2	4,3	3,8
AGE				
15-24	3.8	5,3	4,8	3,2
25-39	3.1	4,4	3,7	5,2
40-54	1.9	2,3	3,4	4,2
55+	2.0	3,4	3,7	4,5
Education				
General	2.8	3,4	4,3	6,2
Vocational	2.5	4,2	5,4	4,6
University	2.1	3,5	3,1	2,7
Job Tenure				
1 year	2.6	5,3	5,6	4,3
1-5 years	3.2	4,7	5,3	4,6
6-10 years	2.1	3,2	4,2	3,7
>10 years	1.8	3,5	3,7	3,2
Occupation				
Senior managers, Legislators	1.2	2,4	2,6	3
Professionals	1.5	2,6	3,6	3,5
Unskilled occupations	2.7	5,4	5,9	4,8
Industry				
Manufacturing	3.6	6,4	5,7	5,2
Constructions	3.8	8	7,8	3,2
Wholesale, retail, hotels	4.3	9,2	8,6	6,5
Total	3.7	4.4	3.6	4.5

I find that the incidence of displacement is relatively low at the beginning of the investigated period (89, 90) but rises in 92, 93.

Next I model the probabilities of being displaced using a Logit model. My results are in concordance with the theoretical predictions (Table 2).

Table 2. Probabilities of displacement

Dependent Variable: DISPLACED
Sample (adjusted): 1 23870

Variable	Coefficient	Std. Error
FEMALE	0.03	0.20
UKRAINIAN	0.44	0.10
RUSSIAN	0.53	0.12
AGE 16-24	-0.12	0.23
AGE 25-34	-0.01	0.45
AGE 35-44	0.08	0.02
General Education	0.20	0.42
University Education	0.09	0.10
Vocational Education	0.15	0.14
New Firm	0.07	0.09
Private firm	0.15	0.12
State owned firm	0.03	0.22
Tenure less than 1	-0.07	0.17
Tenure 1	0.37	0.32
Tenure 2-5	0.31	0.09
Tenure 6-10	0.13	0.10
Agriculture	-0.23	0.09
Construction	-0.12	0.00
Finance	-0.27	0.01
Size 50-99	-0.00	0.13
Size 100-250	-0.01	0.21
Size larger than 251	-0.04	0.07

I have obtained a small and insignificant (yet negative) coefficient on the Tenure less than 1 year. My results show a positive coefficient (yet small) on new firms. A positive coefficient makes sense in the light of the statistics shown by the data as the interpretation that restructuring was slow and late in Ukraine.

I have studies the hazard rates for displaced workers. My results show that the hazard rates are higher for the first three months. After that they fall and stay low. Thus I find that 1/3 of those displaced find a job in the first there months. Half of those who lose their job experience long unemployment spell.

Then I focus on earnings losses of displacement. I have determined the characteristics that explain the log wage for displaced workers who find a new job. Real wages are observed immediately before displacement and after finding a job. I have shown that only a part of those displaced return to work during the investigated period. I employ Tobit estimation. Results are presented in Table.3.

Table 3 Probabilities of being displaced.
Tobit estimation for 1992-2000.

Dependent Variable: DISPLACED
Date Time
Sample (adjusted): 1 23870

Variable	Coefficient	Std. Error
FEMALE	0.03	0.20
UKRAINIAN	0.44	0.10
RUSSIAN	0.53	0.12
AGE 16-24	-0.12	0.23
AGE 25-34	-0.01	0.45
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They show that women suffer a wage penalty after being displaced. Higher wages after displacement are paid to better qualified workers, either with vocational training or with university studies.

III. CONCLUSIONS

I have chosen to use ULMS (2003) for several reasons. First Romanian data does not afford such analysis – this explaining certainly why similar studies have not already been performed. I find evidence for the claims of Lehmann ET all (2002, 2005) that considers Ukraine as lagging behind. Besides this, the signs of the estimates accords with the previous findings. However the magnitudes are different because of constructing not exactly the same control groups.

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