



Unemployment Duration and Exit States of Women in Romania and Hungary

Daniela-Emanuela Dănașică

Post-Doctoral Researcher, National Institute for Economic Research
Costin.C. Kirișescu, Romanian Academy
Faculty of Economics, Constantin Brâncuși University of Tîrgu-Jiu, Romania
Email: danadde@yahoo.com

Abstract: The aim of this research is to investigate women unemployment duration and exit destinations in Romania and Hungary. 1047172 registered Romanian women spells and 259293 registered Hungarian women spells were analyzed. Individual data were offered by the National Agency of Employment Romania and Institute of Economics, Hungarian Academy of Sciences. The effect of age, education, region, area of residence, marital status, unemployment allowance, labor market history and health status on the women unemployment duration and exit destinations was estimated.

Keywords: unemployment spells, events, survival, hazard

JEL Classification: J64, J21

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1 Introduction

The aim of this paper is to analyze the women unemployment spells and exit destinations in Romania and Hungary. Unemployment duration and re-employment probabilities were and still are an interest subject for policy makers, economists and sociologists. Numerous studies have examined the economical (Reyher, 1979; Klugman

and Kolev, 2001; Arulampalan, 2001; Fitzenberger and Wilke, 2007), social (Fajnylber et al., 1998; Fedorov and Sahn, 2005, Fougère et al., 2006) and individual (e.g. Lewis and Sloggett, 1998; Stakunas, Kalediene, Starkuviene and Kapustinskiene, 2006; Tansel and Tasci, 2010) consequences that unemployment induces in both developed and developing countries. It has been proved that unemployment affect differently men and women, due to their different social roles and different behavior on the labor market (Rubery et al, 1996, Wadsworth, 1991). Gender differences regarding unemployment duration, exit destinations and re-employment hazard were founded in many developed or developing countries (Kulik, 2000, Gonzalo and Saarela, 2000, Olliakainen, 2006, D'Agostino and Mealli, 2000, Borsic and Kavkler, 2009). Usually, women have a longer duration of unemployment and a lower hazard of exit to a job than men. However, studies focused only on unemployment duration and exit destinations of women are rare (Lynch, 1989, Hildreth, 1998). Thus, my study is trying to fill a gap in the empirical literature. There is no similar papers investigating the women unemployment duration and exit to a job hazard for both Romania and Hungary. It is very important to determine factors influencing women unemployment spells and exit destinations and to estimate their impact, helping the policy makers from both analyzed countries to promote viable policies targeted on unemployed women.

In previous two studies I proved that: Romanian women have a 14% lower hazard rate of exit to a job than men, and a slightly longer duration of unemployment; Hungarian women have a 21.2% lower hazard rate of exit to a job than men and a median survival time until employment occurs longer with 105 days. In this paper I am focusing only on women unemployment spells and exit destinations in these two countries.

The empirical analysis of my paper is based on two large nationally representative datasets, one for Romania and another one for Hungary. For Romania data were gathered from National Agency of Employment Bucharest (NAE). For Hungary the data were gathered from Institute of Economics, Hungarian Academy of Science.

Romanian dataset consist in 1047172 women spells registered at NAE during January 1st 2008- December 31st 2010. For each spell I have information about age of the women at the start of spell, education, region of residence, area of residence (urban/rural), if the women received unemployment allowance or not during her current spell (UI), the reason of exit from unemployment for every registered individual, if women had previous work experience on the Romanian labor market before entering into unemployment and health status of women at the registration time. The analyzed women spells represent 44.1% from the total registered spells in Romania during the analyzed period. Out of all 1047172 women spells, 11.5% are ongoing spells.

The Hungarian dataset contains 259293 women spells registered at the Hungarian National Employment Service during 1st January 2006 until 31 December 2008. The sample contains only half of the registered unemployed women during the specified period, who were eligible for unemployment allowance on 1st January, 2006 or later since, until 31st December, 2008. There are no recent available data (e.g. for the period January 1st 2008 – December 31st 2010) for Hungary. For Hungary there is a dataset of registered unemployed who are not entitled to benefits, but these records do not include an “exit code”, and these spells are very unreliable. The analyzed women spells

represents 45.2% from the total dataset. There are not ongoing spells in the database, all the spells are completed.

Due to confidentiality law regarding registered unemployed, I did not receive the names of Romanian registered unemployed, or an identification number for each of them. As a consequence, I could not identify multiple spells for the same subject and unite them for the Romanian dataset. Having multiple spells for the same subject can generate intra-person correlation and led to bias results. After I investigated the coding used by Agency of Employment, I noticed that a particular category of individuals, being in a sort of transitional state of unemployment and having “4-request for registration without unemployment allowance” as a reason for the end of spell are a potential source of multiple spells existence. A part of these subjects (especially young graduates) changed their status from being registered as unemployed without allowance into unemployed with allowance in a few days, and implicit a new spell for the same subject appears. Due to the unclear exit destination of these subjects I decided to censor all the spells having “4” as a reason for unemployment spell end and avoid the intra-person correlation. In the Hungarian dataset there are no multiple spells for same subject because this problem was solved from the initial filter of the data.

2 Variables of the study

Duration of an unemployment spell, calculated as the difference between first and last day of registered spell and measured in days is the endogenous variable of my study for both countries. Women with negative unemployment duration or those unemployment spells begun and ended on the same day were removed from the analysis.

For the Romanian dataset I have the following exogenous variables included in the analysis:

- ✓ *Age of women at the start of unemployment spell.* Age has values in between [15-65] years and was divided into the following intervals: [15-24], [25-34], [35-44], [45-54], [55-65] years.
- ✓ *Education at the start of spell.* The education includes the following categories: unknown education, primary education or none, gymnasium, apprenticeship complementary education, professional school, theoretical high-school, vocational high-school, special education (for people with disability, compatible with theoretical high-school in numbers of study years), foremen school, post-high-school, college and university. In the econometrical analysis was coded as follows: 0- primary education or none, 1- gymnasium, 2- apprenticeship complementary education, 3- professional school, 4- theoretical high-school and vocational high-school, 5- special education, 6- foremen school, 7- post-high-school, 8-university education and 9- unknown education.

- ✓ *Region of residence* has the following categories: North-East Region, West Region, North-West Region, Central Region, South-East Region, South-Muntenia, Bucharest-Ilfov Region and South-West Oltenia Region.
- ✓ *Area of living (urban or rural)*, coded as follows: 0 for rural area and 1 for urban area.
- ✓ *Unemployment allowance during the current spell*. For this variable I had only information if an individual has received unemployment allowance during his/her current unemployment spell or not (0- if he/she did not receive UI during their current spell, 1- if UI is present). I would like to underline that I estimated the impact of receiving or not UI during the current spell on the unemployment duration and exit destination. This mention is very important since I have in my database individuals that received unemployment allowance at one point, found a job, lost their job and came back in the NAE registration as an unemployed person without receiving benefit and with a new spell different from the first one.
- ✓ *Labor history of women*. About this variable I know that I have 0- if an women did not have previous work experience before unemployment and 1- if she had previous work experience.
- ✓ Same situation I had for *health status*, (0- normal health condition, 1- subject with disability).

For the Hungarian women spells I have the following information: *start of the registered unemployment spell* (day/month/year), *end of the registered unemployment spell* (day/month/year), *reason of end of the spell*, *year of birth*, *education at the registration*, *region of residence at the registration date*, *occupational code (FEOR) of the job looking for*.

Gender variable was coded in the Hungarian dataset as 1 for men and 2 for women.

Age at the start of the unemployment spell was extracted from the year of birth for each individual, and it has values in between 19 years and 65 years. Age was divided in the empirical analysis as follows: [15-24], [25-34], [35-44], [45-54], [55-65] years.

Education at the registration time has the following codes: 1- less than 8 grades of primary school, 2- completed primary school (8 years of education), 3- special vocational school, 4-vocational school, 5- general secondary school, 6- vocational secondary school, 7- technical school, 8- college and 9 – university.

Region of residence has the following categories: Budapest, Northern Hungary, Northern Great Plain, Southern Great Plain, Central Hungary, Central Transdanubia, Western Transdanubia and Southern Transdanubia.

The variable *reason of end spell* has the following codes: 40001 for all the spells that ended in employment, 40002 for all the spells ended due to labor-market training (ALMP), 40003 for all the spells ended due to becoming eligible for childcare allowance, 40007 for all the spells ended due to fostered employment, 40010 for all the spells ended due to becoming eligible for old-age retirement pension, 40011 for all the

spells ended due to becoming eligible for disability pension, 40014 for all the spells ended due to enrollment in a form of education, 40015 for all the spells with "other" as exit reason, 40016 for all the spells ended due to extortion of eligibility of unemployment provision, 40017 for all the spells with "doesn't co-operate" as the exit reason, and 40018 for all the spells with the mention "delete from the registration" for exit reason.

Occupational code (FEOR) of the job looking for variable has hundreds different codes in the dataset received for Hungary. But first digit of the codes has a particular meaning: if the occupational codes has the first digit code in between 1 and 4, it shows that the unemployed is looking for a white collar job (professional, managerial, or administrative work), and if the codes has the first digit in between 5 and 9, it shows that the unemployed is looking for a blue collar job (manual labor). In the econometrical analysis I put all the codes with the first digit in between 1 and 4 into category 1, and the other into category 2.

3 Descriptive statistics

First I will concentrate on presenting descriptive statistics for women unemployment duration in Romania and Hungary; after, I will analyze the distribution of spells and mean duration of unemployment by impact factors. In table 1 I presented the distribution of women unemployment spells by exit destinations for both analyzed countries. Out of all 1047172 Romanian women spells, only 25.7% ended in employment, 26.7% ended due to expiry of the legal period for receiving unemployment allowance, 2.6 ended in inactivity, and 45% are censored. Unfortunately, I did not received information about unemployed women spells ended due to participation in active labor market programs, like for Hungary. Out of all 259293 Hungarian women spells, 24.5% ended in employment, almost the same percent like the Romanian dataset, even the Hungarian dataset consist in half of the registered unemployed with the right to receive unemployment allowance. Of course we have to take account by the different period, and by the fact that the analyzed period for Romania coincide with the beginning of the economical crises. Mean duration of unemployment until employment occurs in lower with 1 day for Romanian women compared with men, and higher with 12 days for Hungarian women, than men.

Exit destinations	Women			Total		
	%	Mean	Median	%	Mean	Median
Romania						
Employment	25.7	160.41	66	29	161.59	43
Expiry of legal UI	26.7	311	273	24.1	335.12	344
Inactivity	2.6	342.70	349	2.1	385.42	428
Censored	45	221.80	182	44.8	-	-
Total	100	234.78	184	100	244.81	192
Hungary						
Employment	24.5	115.22	82	25.6	108.55	80
ALMP	3.1	114.94	83	2.4	106.61	76
Expiry of legal UI	43	176.41	103	42.8	160.14	89
Inactivity	0.9	207.66	166	0.8	307.51	203
Censored	28.5	127.17	89	28.4	125.76	85
Total	100	145.75	91	100	136.98	89

Table 1

Duration of unemployment (days) of women spells in Romania and Hungary, by exit destinations

The average age for Romanian women spells is 35 years, and the average age for Hungarian women is 38 years. In table 2 are presented descriptive statistics about women duration of unemployment by age groups in Romania and Hungary. From the below presented data we can clearly notice for both countries a direct association between age of women and duration of unemployment spells. With the increase of age women duration of unemployment increase too.

Age	<i>N</i>	Mean (days)	Std. deviation	95% Confidence interval for the mean
Romania				
15-24 years	261074	152.49	119,204	(152.02, 152.95)
25-34 years	249925	214,10	153,788	(213.46, 214.73)
35-44 years	285286	276,25	178,166	(275.54,276.96)
45-54 years	213810	312,12	189,826	(311.24, 313.01)
55-65 years	37077	290,36	194,129	(288.14,292.58)
Total	1047172	234.78	172,193	(234.43,235.13)
Hungary				
19-24 years	21993	100,35	73,489	(99.38, 101.32)
25-34 years	86854	138,74	105,894	(138.04,139.45)
35-44 years	71473	143,21	108,600	(142.41, 144.01)
45-54 years	62556	159,12	129,597	(158.11, 160.14)
55-65 years	16417	203,73	223,010	(200.32, 207.15)
Total	259293	145,75	122,942	(145.28, 146.22)

Table 2

Women unemployment duration (days) in Romania and Hungary by age groups

In table 3 are presented descriptive statistics about women duration of unemployment by education groups in Romania and Hungary.

Education	N	Mean (days)	Std. deviation	95% Confidence interval for the mean
Romania				
Primary education or none	100215	289,31	216,213	(287,81.290,82)
Gymnasium	242698	253,77	183,896	(252,98. 254,55)
Apprenticeship complementary education	41242	208,25	161,306	(206,63. 209,88)
Vocational school	106989	261,43	171,071	(260,35. 262,52)
High-school	287256	228,51	157,842	(227,90.229,11)
Special education	1651	202,17	128,365	(195,65. 208,69)
Foremen school	2831	289,85	164,192	(283,35. 296,35)
Post-high-school	21630	198,80	141,394	(196,83.200,76)
University education	1559	221,46	144,834	(213,92.229,00)
Unknown	129969	183,27	132,005	(182,52. 184,03)
Total	1047172	234,78	172,193	(234.43,235.13)
Hungary				
Less than 8 grades of primary school	4889	121,83	133,101	(118,09. 125,56)
Completed primary school (8 grades)	68804	146,07	136,621	(145,05. 147,09)
Special vocational school	7837	151,06	119,658	(148,41. 153,71)
Vocational school	64843	149,27	118,033	(148,37. 150,18)
General secondary school	36493	148,55	121,241	(147,31. 149,80)
Vocational secondary school	44971	146,70	114,892	(145,64. 147,76)
Technical school	6862	143,33	121,998	(140,45. 146,22)
College	19213	131,97	108,099	(130,44. 133,50)
University	5381	138,56	112,441	(135,55. 141,56)
Total	259293	145,75	122,942	(145.28, 146.22)

Table 3

Women unemployment duration (days) in Romania and Hungary by education

As we can see, different type of education influence the unemployment duration for both countries. However we can take account by different end destinations, and by the fact that durations presented in this table represents the end of spells, not reemployment.

In table 4 I presented descriptive statistics about women duration of unemployment by regions of residence in Romania and Hungary. For both countries the data suggests an effect of region variable on the unemployment duration of women.

Region	N	Mean (days)	Std. deviation	95% Confidence interval for the mean
Romania				
North-East	178706	213,98	168,147	(213,16. 214,80)
West	107185	228,26	170,239	(227,19. 229,33)
North-West	127598	230,14	163,033	(229,20. 231,09)
Central	144800	252,01	161,876	(251,12. 252,89)
South- East	117757	263,17	187,257	(262,01. 264,34)
South-Muntenia	179024	221,76	170,108	(220,92. 222,60)
Bucharest- Ilfov	56566	266,61	173,815	(265,97. 268,15)
South Oltenia	135536	234,62	180,670	(233,60. 235,65)
Total	1047172	234,78	172,193	(234,43.235,13)
Hungary				
Budapest	25388	160,09	124,137	(158,56. 161,62)
Northern Hungary	35091	146,13	124,348	(144,83.147,43)
Northern Great Plain	40574	133,12	111,913	(132,03. 134,21)
Southern Great Plain	33751	151,28	132,992	(149,86.152,70)
Central Hungary	23114	160,45	120,031	(158,91.162,00)
Central Transdanubia	33517	139,43	122,163	(138,13.140,74)
Western Transdanubia	29674	137,65	125,803	(136,22.139,08)
Southern Transdanubia	25864	145,60	120,365	(144,13.147,06)
Missing system	12320	-	-	-
Total	259293	259293	145,75	122,942

Table 4
Women unemployment duration (days) in Romania and Hungary by region

These three variables were common for both countries. Beside them, there are different exogenous variables those impacts on unemployment duration I want to analyze it. Out of all 1047172 Romanian women spells, 53.8% come from urban area, and 46.2% come from rural area. An interesting fact is that situation for men spells is the opposite, there are more men rural spells than women urban spells. Mean duration of women urban spells is 236.07 days, and mean duration for rural women spells is 233.22 days. 11.1% from Romanian women spells have the marital status unknown, 29.8% are unmarried, 54.3% are married, 3.4% are widowed and 1.4% are divorced. 48.7% from the Romanian analyzed spells belongs to women that are receiving unemployment allowance (UI) during their current spell, and 51.3% are non-UI spells. All the Hungarian spells are with unemployment allowance. 44.9% from total analyzed Romanian spells belong to women with previous work experience, and 55.1% are spells of inexperienced women. Regarding, the health status of Romanian women, only 0.1% spells belong to women with a disability. For Hungarian women I have other exogenous variables, as I already specified in the section 2 of my paper. Out of all 259293 registered unemployed women, 35% are looking for a white collar job, and 65% are looking for a blue collar job. Mean duration of women spells looking for a white collar job is 147.74 days, compared with 144.66 for blue collar job looking for.

4 Results of the econometrical analysis

In order to estimate the impact of the above presented variables on the women unemployment duration in both countries, I used non-parametric techniques and the semi-parametric Cox model in a competing-risks approach. The data received gave me the information about the exit destinations of each spells ended. Thus, I could analyze and estimate the women hazard of exit in different destinations, depending on the impact factors. For the Romanian dataset I had 26 different reason of ending an unemployment spell, according to NAE Romania codes. I grouped all these different reasons into three main exit destinations: 1- reemployment, 2- expiry of the legal period for receiving the unemployment allowance, and 3- non-participation (inactivity). All the spells without an end date or with an unclear reason of ending were right-censored. For the Hungarian dataset I had 12 different reason of ending a spell, according to Hungarian Employment Office codes. In the econometrical analysis I created four main exist destinations: 1- reemployment, 2- involvement in active labor market programs (ALMP), 3- expiry of the legal eligibility to receive UI and 4 – - non-participation (inactivity). All the spells without an end date or with an unclear exit destination were right-censored, like the Romanian data. 25.7% from the total analyzed spells ended due to re-employment in Romania, 26.7% ended due to expiry of the legal period for receiving UI, 2.6% ended in inactivity and 45% of spells were censored. For Hungary, I have the following situation: 24.5% spells ended due to re-employment, 3.1% ended due to involvement in the active labor market programs, 43% ended due to expiry of the legal period for receiving UI, 0.9% ended due to inactivity on the labor market and 28.5% spells are censored.

Unlike the single-risks model, the probability of leaving unemployment in a competing risks model is given by the sum of two or more transition probabilities. In my study a transition probability is defined as the probability of going to one of the three potential exit destinations for the Romanian women and one of the four exit destinations for the Hungarian women.

For the econometrical analysis I used the SPSS 17.0 statistical package. The estimated impact of the explanatory variables on the women duration unemployment spells for Romania is presented in table 5, 6 and 7 in the Appendix; for Hungary the results are presented in table 8, 9, 10 and 11 in the Appendix. For Romania, the reference category is the first category for education, and the last category for all the other explanatory variables. For Hungary we have the same situation. Enter method is used.

Analyzing the results of the competing-risks analysis below presented, we can draw the following conclusions:

- Median survival time until employment occurs is 438 days for Hungarian women and 456 days for Romanian women. Both values are above the median survival time until employment occurs for Hungarian and Romanian men. The difference is more pronounced for Hungary;
- For both Romanian and Hungarian women the age regression coefficients are positive, meaning an increase of the hazard of exit to a job, comparing with the

oldest group, 55-65 years. Duration of unemployment is the longest for this group too, for both countries. However, for young Romanian women aged in between 15 and 24 years old the hazard rate of exit to a job is lower than the 25-34 years group. Several reasons can be behind this result: high incidence of youth unemployment in Romania, young age can be related with unfinished or a poor education and rural women at this age usually become mothers. For Hungary, as younger a women is, as better is her chances to exit to a job. Very young Romanian unemployed women are most prone to exit from unemployment due to expiry of the legal period for UI, or in inactivity;

- For both analyzed countries education played a significant role on the duration of spells and exit destinations. Median survival time until reemployment occurs for Romanian women have the highest value for primary or uneducated women, and the lowest value, 428 days, for university educated women, followed by post-high-school graduated women, 430 days, and vocational school graduated women, 448 days. Hungarian poor educated women have the longest median survival time until employment occurs too, and college graduated women and university graduated women the shortest, 320 days, respectively 330 days. For both Romania and Hungary the regression coefficients for all education groups are positive, meaning an increase of the exit to a job hazard, comparing with the references category, poor educated women. For Romanian women, best hazard rate of exit to a job is registered for women with a post-high-school education, followed by women with vocational school and university graduated women. I already proved in my previous studies that for Romania, an education focused on getting practical skills at the end of studies gives better chances on reemployment on the labor market. For Hungary, the highest hazard of exit to a job has the college graduated women and university graduated women, although if we are looking at the confidence intervals we can notice no statistical significant differences between these two categories. For Romania, poor educated women are most prone to exit due to losing the UI support or to exit from unemployment in inactivity. For Hungary, same category is most prone to exit in inactivity, or involvement in ALMP. An interesting fact is that for Hungary, women with a higher education (college and university) have a higher hazard rate of exit from unemployment due to involvement in ALMP than poor educated women. Looks like a higher education gives not just better chances of reemployment, but also a better motivation to change the unemployed status when it happen.
- Regarding the disparities between regions, for Romania the lowest median survival time until employment occurs is obtained for West region and for Bucharest region. These two regions have also the highest hazard rate of exit to a job and are considered the most developed from Romania. The worst position is occupied by the women from South-West region. For Hungary the lowest level for median survival time until employment occurs is registered for Central Transdanubia region that has the highest hazard rate of exit to a job too. In worst position regarding reemployment are women from Northern Hungary, Northern Great Plain and Southern Great Plain regions.

- The regression coefficient for rural women is negative, meaning a decrease of the probability of exit from unemployment due to re-employment. I introduced an interaction between education and area of residence, and it shows that poor educated women from rural area are in the worst position. The presence of a higher-education is reducing the gap between rural and urban women. Unfortunately, for Hungary I did not have information about urban and rural area and its impact on unemployment duration of women.
- Receiving unemployment allowance during the current spell led to a decrease of exit to a job hazard of Romanian women. All the spells ended due expiry of the legal period for receiving support are UI spells, and more than 90% from the spells ended in inactivity are UI spells.
- Lack of a previous work experience on labor market decreased the hazard of exit to a job for Romanian women with 13.8%. Poor educated women without previous work experience are in the worst position, being most prone to exit in inactivity; the presence of a higher education is reducing the gap between women with and without previous work experience.
- A normal health condition is increasing the hazard to exit to a job for Romanian women. Unemployed women with disability are most prone to exit in inactivity or due to expiry of legal period for UI support. Poor educated women, with a disability from rural area are in the worst position regarding reemployment;
- Hungarian women that are looking for a blue collar job have a slight higher hazard rate of exit to a job than women looking for a white collar job and a slightly higher median survival time until reemployment. Seems that high expectation of women looking for a white collar job led to a rigidity of this group on the labor market, and thus a lower reemployment hazard compared with the reference category.

5 Main conclusions

The aim of this paper was to analyze unemployment spells and exit states of women in Romania and Hungary. 1047172 Romanian spells and 259293 Hungarian spells were analyzed using non-parametric estimation and semi-parametric estimation, namely Cox proportional hazard model in a competing risks approach. The obtained results show that age has a significant role on the women unemployment spells and exit states in both countries. In Hungary, as younger an unemployed woman is, as higher is her chances to exit to a job. In Romania women aged in between 15 and 19 years is a vulnerable category, like the 55-65 age groups. Duration of unemployment and reemployment hazard is significantly influenced by education of women. For both countries poor educated women have the longest median survival time until reemployment occurs. Women with a higher education have the lowest median survival time until employment occurs in both countries. Therefore, policy makers from Romanian and Hungary must focus on increasing the level of education of women, in order to shortening the

unemployment duration and give better opportunities on the labor market to women. Also, the presence of a higher education led to a decrease of the gender gap regarding unemployment duration and reemployment hazard in both countries.

Both analyzed countries have region disparities for unemployment duration and exit states. Unemployed women living in the most two developed regions from Romania, West region and Bucharest region have the lowest median survival time until reemployment and the highest hazard of reemployment. Unemployed women living in the Central Transdanubia region have the highest hazard rate of exit to a job. There is a direct association between economical development of a region and reemployment hazard of individuals living there. A future study will focus on regional disparities regarding unemployment duration and reemployment hazard in Romania and Hungary.

Romanian has also a significant rural-urban gap. Poor educated women from rural area are in the worst position on the labor market. The lack of previous work experience and the presence of a disability significantly reduce the hazard of reemployment for Romanian women. The results of this research emphasize that the presence of a higher education is reducing the gap between urban and rural area, between women with and without previous work experience and between women with a normal health condition and disabled women, in terms of unemployment duration and reemployment hazard in Romania.

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Appendix

Variables in the Equation								
Explanatory variables	B	SE	Wald	df	Sig.	Exp(B)	95,0% CI for Exp(B)	
							Lower	Upper
Education								
Primary edu. or none	Reference category							
Gymnasium	1,315	,011	14037,390	1	,000	3,726	3,645	3,807
Apprent. compl. educ.	1,521	,014	11255,282	1	,000	4,575	4,448	4,705
Voc. school	1,614	,012	18074,333	1	,000	5,023	4,906	5,142
High-school	1,553	,011	18695,926	1	,000	4,727	4,623	4,833
Special education	1,456	,054	723,293	1	,000	4,290	3,858	4,770
Foremen school	1,603	,036	1960,480	1	,000	4,970	4,629	5,336
Post-high-school	1,639	,017	9317,188	1	,000	5,148	4,980	5,322
University edu.	1,589	,012	16803,050	1	,000	4,898	4,781	5,017
Unknown	1,351	,012	12883,707	1	,000	3,861	3,772	3,952
Age								
15-24 years	,686	,016	1921,246	1	,000	1,986	1,926	2,048
25- 34 years	,924	,015	3799,421	1	,000	2,519	2,446	2,594
35-44 years	,657	,015	1948,610	1	,000	1,930	1,874	1,987
45-54 years	,433	,015	824,906	1	,000	1,542	1,497	1,588
55- 65 years	Reference category							
Region								
North-East	,294	,008	1440,304	1	,000	1,341	1,321	1,362
West	,558	,008	4702,385	1	,000	1,746	1,719	1,775
North-West	,244	,009	818,486	1	,000	1,277	1,256	1,298
Central	,245	,008	870,538	1	,000	1,278	1,258	1,299
South- East	,136	,009	234,440	1	,000	1,145	1,125	1,165
South-Muntenia	,342	,008	1950,899	1	,000	1,407	1,386	1,429
Bucharest- Ilfov	,157	,010	258,930	1	,000	1,171	1,148	1,193
South-Oltenia	Reference category							
Urban/Rural area								
Rural	-,485	,005	11223,693	1	,000	,616	,610	,621
Urban	Reference category							
Unemployment allowance								
Without UI	1,423	,007	37837,343	1	,000	4,151	4,092	4,211
With UI	Reference category							
Labor market history								
Without work exp.	-,148	,007	412,829	1	,000	,862	,850	,875
With work exp.	Reference category							
Health status								
Without disab.	,250	,053	22,393	1	,000	1,284	1,158	1,423
With disability	Reference category							

Marital status								
Unknown	,340	,020	275,955	1	,000	1,405	1,350	1,463
Unmarried	,043	,020	4,465	1	,035	1,044	1,003	1,086
Married	,261	,020	174,805	1	,000	1,298	1,248	1,349
Widowed	,183	,022	69,559	1	,000	1,201	1,151	1,254
Divorced	Reference category							

Table 5
Results of the Cox proportional hazard model in a competing-risks framework, event employment, Romanian women spells

Variables in the Equation								
Explanatory variables	B	SE	Wald	df	Sig.	Exp(B)	95,0% CI for Exp(B)	
							Lower	Upper
Education								
Primary educ. or none	Reference category							
Gymnasium	,884	,012	5354,361	1	,000	2,420	2,363	2,478
Apprent. compl. educ.	,930	,015	4075,918	1	,000	2,534	2,463	2,607
Vocational school	,865	,013	4605,583	1	,000	2,376	2,317	2,436
High-school	1,001	,012	6909,131	1	,000	2,722	2,658	2,787
Special education	1,240	,044	794,629	1	,000	3,456	3,171	3,768
Foremen school	,806	,034	564,874	1	,000	2,239	2,095	2,393
Post-high-school	1,056	,017	3702,360	1	,000	2,874	2,778	2,973
University educ.	1,186	,013	8565,234	1	,000	3,275	3,193	3,358
Unknown	,960	,013	5377,059	1	,000	2,610	2,544	2,678
Age								
15-24 years	1,859	,015	15605,713	1	,000	6,418	6,233	6,608
25- 34 years	,990	,014	4805,653	1	,000	2,690	2,616	2,766
35-44 years	,234	,014	271,915	1	,000	1,263	1,228	1,299
45-54 years	-,063	,014	19,603	1	,000	,939	,913	,965
55- 65 years	Reference category							
Region								
North-East	-,018	,007	6,431	1	,011	,982	,968	,996
West	-,160	,008	413,744	1	,000	,852	,839	,865
North-West	-,108	,007	207,173	1	,000	,898	,885	,911
Central	-,219	,007	910,740	1	,000	,804	,792	,815
South- East	-,042	,008	30,451	1	,000	,959	,944	,973
South-Muntenia	-,061	,007	74,856	1	,000	,941	,928	,954
Bucharest- Ilfov	-,338	,010	1219,826	1	,000	,713	,700	,727
South-Oltenia	Reference category							
Urban/Rural area								
Rural	,142	,004	1154,256	1	,000	1,153	1,144	1,163
Urban	Reference category							
Labor market history								
Without work exp.	-1,422	,006	56571,709	1	,000	,241	,238	,244
With work exp.	Reference category							
Health status								
Without disability	-,279	,050	31,680	1	,000	,757	,687	,834
With disability	Reference category							

Marital status								
Unknown	,050	,021	5,947	1	,015	1,052	1,010	1,095
Unmarried	,256	,020	167,909	1	,000	1,291	1,242	1,342
Married	,111	,019	33,692	1	,000	1,118	1,076	1,161
Widowed	,016	,021	,558	1	,455	1,016	,974	1,059
Divorced	Reference category							

Table 6
Results of the Cox proportional hazard model in a competing-risks framework, event expiry of the legal eligibility for UI, Romanian women spells

Explanatory variables	Variables in the Equation							
	B	SE	Wald	df	Sig.	Exp(B)	95,0% CI for Exp(B)	
							Lower	Upper
Education								
Primary educ. or none	Reference category							
Gymnasium	1,046	,041	649,206	1	,000	2,847	2,627	3,086
Apprent. compl. Educ.	1,110	,051	472,357	1	,000	3,033	2,744	3,352
Voc. school	1,260	,043	848,685	1	,000	3,525	3,238	3,837
High-school	1,395	,041	1153,748	1	,000	4,035	3,723	4,373
Special education	1,558	,149	109,997	1	,000	4,748	3,549	6,353
Foremen school	1,471	,094	243,410	1	,000	4,355	3,620	5,240
Post-high-school	1,587	,056	804,346	1	,000	4,887	4,379	5,453
University edu.	1,636	,043	1428,838	1	,000	5,137	4,719	5,592
Unknown	,395	,050	61,315	1	,000	1,484	1,344	1,638
Age								
15-24 years	,895	,030	889,753	1	,000	2,447	2,307	2,595
25- 34 years	-,436	,027	261,986	1	,000	,647	,613	,682
35-44 years	-2,341	,031	5884,635	1	,000	,096	,091	,102
45-54 years	-1,094	,025	1853,714	1	,000	,335	,319	,352
55- 65 years	Reference category							
Region								
North-East	,164	,026	40,035	1	,000	1,179	1,120	1,240
West	-,030	,028	1,110	1	,292	,971	,918	1,026
North-West	,089	,027	10,792	1	,001	1,093	1,036	1,152
Central	,214	,025	74,498	1	,000	1,238	1,180	1,300
South- East	,115	,027	17,966	1	,000	1,122	1,064	1,184
South-Muntenia	,168	,026	42,798	1	,000	1,183	1,125	1,244
Bucharest- Ilfov	,044	,031	2,082	1	,149	1,045	,984	1,110
South-Oltenia	Reference category							
Urban/Rural area								
Rural	-,248	,015	270,647	1	,000	,780	,758	,804
Urban	Reference category							
Labor market history								
Without work exp.	- 1,354	,020	4504,573	1	,000	,258	,248	,269
With work exp.	Reference category							
Health status								
Without disability	-,317	,157	4,081	1	,043	,728	,536	,991
With disability	Reference category							

Marital status								
Unknown	-,245	,054	20,879	1	,000	,783	,705	,870
Unmarried	-,377	,049	58,533	1	,000	,686	,623	,755
Married	-,083	,046	3,274	1	,070	,920	,841	1,007
Widowed	-,210	,055	14,721	1	,000	,810	,728	,902
Divorced	Reference category							

Table 7
Results of the Cox proportional hazard model in a competing-risks framework, event inactivity, Romanian women spells

Variables in the Equation								
Explanatory variables	B	SE	Wald	df	Sig.	Exp(B)	95,0% CI for Exp(B)	
							Lower	Upper
Education								
Less than 8 grades of primary school	Reference category							
Completed primary school	,439	,047	88,320	1	,000	1,551	1,415	1,700
Special voc. school	,449	,052	73,987	1	,000	1,566	1,414	1,735
Vocational school	,563	,047	145,635	1	,000	1,756	1,603	1,925
General sec. school	,592	,048	153,929	1	,000	1,808	1,647	1,986
Vocat. sec. school	,663	,047	195,013	1	,000	1,940	1,768	2,130
Technical school	,727	,052	192,456	1	,000	2,070	1,868	2,294
College	,918	,049	348,785	1	,000	2,504	2,274	2,757
University	,889	,054	271,609	1	,000	2,433	2,189	2,704
Age								
19-24 years	1,177	,027	1950,201	1	,000	3,245	3,080	3,419
25- 34 years	,933	,024	1573,219	1	,000	2,541	2,427	2,661
35-44 years	,892	,024	1418,501	1	,000	2,441	2,330	2,557
45-54 years	,823	,024	1206,824	1	,000	2,276	2,173	2,385
55- 65 years	Reference category							
Region								
Budapest	,088	,018	25,120	1	,000	1,092	1,055	1,130
Northern Hungary	-,226	,018	160,580	1	,000	,798	,771	,826
Northern Great Plain	-,158	,017	83,543	1	,000	,854	,826	,884
Southern Great Plain	-,069	,017	16,020	1	,000	,934	,903	,966
Central Hungary	,028	,018	2,397	1	,122	1,028	,993	1,065
Central Transdanubia	,350	,016	472,736	1	,000	1,419	1,375	1,465
Western Transdanubia	,247	,017	213,870	1	,000	1,281	1,239	1,324
Southern Transdanubia	Reference category							
Type of the job looking for								
White collar job	-,051	,011	20,492	1	,000	,950	,929	,971
Blue collar job	Reference category							

Table 8
Results of the Cox proportional hazard model in a competing-risks framework, event employment, Hungarian women spells

Variables in the Equation								
Explanatory variables	B	SE	Wald	df	Sig.	Exp(B)	95,0% CI for Exp(B)	
							Lower	Upper
Education								
Less than 8 grades of primary school	Reference category							
Completed primary school	-,093	,109	,727	1	,394	,911	,735	1,129
Special vocational school	-,213	,132	2,599	1	,107	,808	,624	1,047
Vocational school	-,163	,110	2,193	1	,139	,850	,686	1,054
General secondary school	,402	,112	12,967	1	,000	1,495	1,201	1,861
Vocational secondary school	,339	,111	9,299	1	,002	1,404	1,129	1,746
Technical school	,361	,127	8,137	1	,004	1,435	1,120	1,839
College	,587	,116	25,723	1	,000	1,799	1,434	2,258
University	,329	,135	5,944	1	,015	1,389	1,067	1,809
Age								
19-24 years	1,146	,082	196,622	1	,000	3,146	2,680	3,693
25- 34 years	1,086	,072	228,173	1	,000	2,962	2,572	3,410
35-44 years	1,216	,072	285,779	1	,000	3,373	2,929	3,883
45-54 years	,908	,073	155,772	1	,000	2,480	2,150	2,860
55- 65 years	Reference category							
Region								
Budapest	-,543	,055	95,976	1	,000	,581	,521	,648
Northern Hungary	,062	,046	1,812	1	,178	1,064	,972	1,165
Northern Great Plain	-,294	,049	35,512	1	,000	,745	,677	,821
Southern Great Plain	-,064	,048	1,812	1	,178	,938	,855	1,030
Central Hungary	-,130	,052	6,344	1	,012	,878	,794	,972
Central Transdanubia	,363	,045	65,932	1	,000	1,438	1,317	1,569
Western Transdanubia	,252	,047	28,775	1	,000	1,287	1,174	1,412
Southern Transdanubia	Reference category							
Type of the job looking for								
White collar job	,190	,031	37,776	1	,000	1,210	1,138	1,285
Blue collar job	Reference category							

Table 9
Results of the Cox proportional hazard model in a competing-risks framework, event ALMP, Hungarian women spells

Variables in the Equation								
Explanatory variables	B	SE	Wald	df	Sig.	Exp(B)	95,0% CI for Exp(B)	
							Lower	Upper
Education								
Less than 8 grades of primary school	Reference category							
Completed primary school	-,597	,019	1040,486	1	,000	,550	,531	,571
Special vocational school	-,726	,025	843,793	1	,000	,484	,461	,508
Vocational school	-,830	,019	1936,890	1	,000	,436	,420	,452
General secondary school	-,787	,020	1487,713	1	,000	,455	,437	,474
Vocational secondary school	-,859	,020	1798,938	1	,000	,423	,407	,441
Technical school	-,847	,028	935,489	1	,000	,429	,406	,453
College	-,854	,024	1280,679	1	,000	,426	,406	,446
University	-,831	,032	657,937	1	,000	,436	,409	,464
Age								
19-24 years	1,538	,018	7710,366	1	,000	4,655	4,497	4,817
25- 34 years	,940	,015	3788,801	1	,000	2,560	2,484	2,638
35-44 years	,924	,015	3657,908	1	,000	2,518	2,444	2,595
45-54 years	,588	,015	1542,489	1	,000	1,801	1,749	1,855
55- 65 years	Reference category							
Region								
Budapest	-,202	,014	218,171	1	,000	,817	,796	,839
Northern Hungary	,038	,012	10,340	1	,001	1,039	1,015	1,063
Northern Great Plain	,139	,011	148,188	1	,000	1,149	1,124	1,175
Southern Great Plain	-,078	,012	41,836	1	,000	,925	,903	,947
Central Hungary	-,198	,014	210,528	1	,000	,820	,798	,842
Central Transdanubia	-,160	,013	157,705	1	,000	,852	,831	,874
Western Transdanubia	-,266	,014	379,781	1	,000	,767	,746	,787
Southern Transdanubia	Reference category							
Type of the job looking for								
White collar job	-,075	,009	71,100	1	,000	,927	,911	,944
Blue collar job	Reference category							

Table 10
Results of the Cox proportional hazard model in a competing-risks framework, event expiry of the eligibility for UI, Hungarian women spells

Variables in the Equation								
Explanatory variables	B	SE	Wald	df	Sig.	Exp(B)	95,0% CI for Exp(B)	
							Lower	Upper
Education								
Less than 8 grades of primary school	Reference category							
Completed primary school	,782	,212	13,585	1	,000	2,186	1,442	3,313
Special vocational school	,848	,247	11,797	1	,001	2,335	1,439	3,787
Vocational school	,918	,216	18,043	1	,000	2,504	1,639	3,824
General secondary school	,927	,220	17,797	1	,000	2,527	1,643	3,888
Vocational secondary school	,957	,221	18,679	1	,000	2,604	1,687	4,020
Technical school	1,031	,233	19,521	1	,000	2,803	1,774	4,428
College	1,258	,232	29,283	1	,000	3,517	2,230	5,546
University	1,035	,261	15,676	1	,000	2,814	1,686	4,697
Age								
19-24 years	-2,725	,130	436,576	1	,000	,066	,051	,085
25- 34 years	-3,329	,074	2002,152	1	,000	,036	,031	,041
35-44 years	-4,344	,127	1162,849	1	,000	,013	,010	,017
45-54 years	-3,570	,089	1626,717	1	,000	,028	,024	,033
55- 65 years	Reference category							
Region								
Budapest	,179	,107	2,783	1	,095	1,196	,969	1,476
Northern Hungary	,074	,110	,448	1	,503	1,077	,867	1,336
Northern Great Plain	-,176	,121	2,109	1	,146	,839	,662	1,063
Southern Great Plain	,263	,107	6,079	1	,014	1,301	1,055	1,603
Central Hungary	,431	,109	15,648	1	,000	1,539	1,243	1,906
Central Transdanubia	,865	,098	78,306	1	,000	2,376	1,961	2,878
Western Transdanubia	,721	,099	53,129	1	,000	2,057	1,695	2,498
Southern Transdanubia	Reference category							
Type of the job looking for								
White collar job	,323	,061	28,478	1	,000	1,382	1,227	1,556
Blue collar job	Reference category							

Table 11
Results of the Cox proportional hazard model in a competing-risks framework, event inactivity, Hungarian women spells

