Internet Appendixes A-2 and A-3 of the Paper "Are Short-Lived Jobs Stepping Stones to Long-Lasting Jobs?"

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A-2 The Simulation Procedures

We now describe the steps involved in both the simulation to construct the goodness-of-fit statistics (Subsection 5.1) and the one to check the stepping stone hypothesis of short-lived jobs (Subsection 5.3).

A-2.1 The Simulation with regard to the Goodness-of-Fit

We first discuss a complication induced by the stock sampling of the data. This affects the specification of the distribution of unobserved heterogeneity from which vector-values are drawn and assigned to each sampled individual at the start of each simulation loop. Since all sampled individuals have already been unemployed for three quarters at the start of the observation period, the distribution of unobserved heterogeneity must be modified along the lines of the adjustment of the likelihood function. This means that the probability p_{im} that individual i is of type m and is therefore assigned the vector of location points $\hat{\mathbf{v}}_m \equiv [\hat{v}_{uem}, \hat{v}_{uam}, \hat{v}_{eem}, \hat{v}_{eum}, \hat{v}_{eam}]$ for $m = 1, \ldots, \widehat{M}$ can be estimated by

$$\hat{p}_{im} = \frac{\widehat{S}_u(3|\mathbf{x}_{ui}; \widehat{\Theta}_u, \hat{\mathbf{v}}^1_{um})\hat{p}_m}{\sum_{r=1}^{\widehat{M}} \widehat{S}_u(3|\mathbf{x}_{ui}; \widehat{\Theta}_u, \hat{\mathbf{v}}^1_{ur})\hat{p}_r}, \tag{A-5}$$

where $\widehat{M} = 4$ for men and $\widehat{M} = 5$ for women. Observe that this distribution depends on the values of the observed explanatory variables at the sampling date.

The simulation then proceeds according to the following steps:

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1. Draw a vector of parameter estimates assuming that the estimator is Normally distributed around the point estimates with a variance-covariance matrix equal to the estimated one.

2. Assign to each individual the value of the observed explanatory variables at the sampling date and a vector of unobserved characteristics drawn with the probability as given in Equation (A-5).

3. Simulate the transition from unemployment (u) to employment (e) and the endogenous censoring state (a) by a sequence of quarterly transition lotteries starting from the 4^{th} quarter, which corresponds to the start of the observation period. These transition lotteries are based on the empirical counterparts of the probability of leaving state u for k ($k = e, a$), conditional on surviving in state u until the end of the previous quarter. Their form is given by Equation (A-4). In this process, the time-varying variables, for example the local unemployment rate, are adjusted to their new values at the beginning of each quarter.

4. If a transition to the censoring state a occurs, the simulation for that individual is halted. If there is a transition to employment e, assign new values to the unemployment rate and the spell specific time-varying variables. The age, quarter of entry, and household position of each individual are assigned the values as reported at the calendar time corresponding to the quarter of entry in the simulated employment spell. The vector of firm characteristics corresponds to that of the firm that was randomly drawn from the set of firms that hired workers with the same origin state (u or e) and elapsed duration in that origin state.[1]

5. Simulate the transitions from the employment state and from all subsequent states according to a similar sequence of quarterly lotteries as described for the unemployment state in point 3 and adjust the time-varying explanatory variables according to the procedure described in point 4. In addition, in each new unemployment spell the amount of unemployment benefits is adjusted according to the rules, using information on the corresponding household position, age, and labour market history.

6. The simulation procedure is halted once the end of the observation period is reached, i.e. in December 2001, 13 to 16 quarters after the sampling date.

7. Repeat for each individual points 1 to 6 999 times to obtain 999 independent labour market histories for each sampled individual.

A-2.2 The Simulation with regard to the Stepping Stone Hypothesis

The simulation procedure goes as follows:

[1] We also tried an alternative procedure in which we drew firm size and sector randomly from the corresponding marginal empirical distributions, but this resulted in very poor goodness-of-fit statistics.

1. Simulate the labour market history for all individuals in the sample as in Appendix A-2.1.

2. Retain only those individuals who entered a short-lived job within the first m quarters after graduation and who were not endogenously censored within d quarters after entering a short-lived job.

3. For each retained individual we re-simulate, conditional on not being endogenously censored,[2] $J = 100$ times the labour market history until the end of the observation window, once with and once without imposing the counterfactual job search strategy in which all short-lived jobs are rejected as a way out of the first unemployment spell after graduation. In the counterfactual case, the job-seeker who is imposed the rejection of a short-lived job is allowed to continue searching for new jobs in the same quarter.[3]

4. Calculate for each d up to $D = 8$ the empirical counterpart of the CAITT for each retained individual by taking the difference in the outcome variable between the two counterfactuals. This provides us with one estimation of the CAITT distribution.

5. Calculate and store the mean of the CAITT (which is an estimate of the CATT) and a number of selected percentiles of the CAITT distribution.

6. As to construct 95% empirical confidence intervals of the CATT and the selected percentiles of the CAITT distribution, we repeat steps 1 to 5 119 independent times.[4]

A-3 Further Descriptive Statistics and Estimation Results

This appendix displays descriptive statistics and estimation results not presented in the main text of our paper for the sake of brevity. Figure A-1 provides by gender an overview of the absolute frequencies of the first four labour market transitions, whereas Figure A-2 decomposes these absolute frequencies according to job durations. Table A-1 contains means and standard deviations of the time-varying variables at the beginning of the first five labour market spells. Tables A-2 and A-3 present descriptive statistics of short-lived jobs and long-lasting jobs. Tables A-4–A-8 comprise estimated parameters of the benchmark model not reported in the text. Table A-9 reports in panel (a) the mean and selected percentiles of the CAITT distribution for $m = 11$ and $d = 4$. Panel (b) displays the CAITT distribution when a long-lasting job is defined as a job lasting at least five quarters, with $m = 7$ and evaluation carried

[2] This conditioning is realized by adjusting the transition probability in Equation (A-4) in the following way

$$\frac{\left[1-\exp\left\{-\sum_{(j,k)\in\mathscr{J}}\theta^s_{jk}(t_s)\right\}\right]\times\frac{\theta^s_{jk}(t_s)}{\sum_{(b,c)\in\mathscr{J}}\theta^s_{bc}(t_s)}}{1-\left[1-\exp\left\{-\sum_{(j,k)\in\mathscr{J}}\theta^s_{jk}(t_s)\right\}\right]\times\frac{\theta^s_{ja}(t_s)}{\sum_{(b,c)\in\mathscr{J}}\theta^s_{bc}(t_s)}},$$

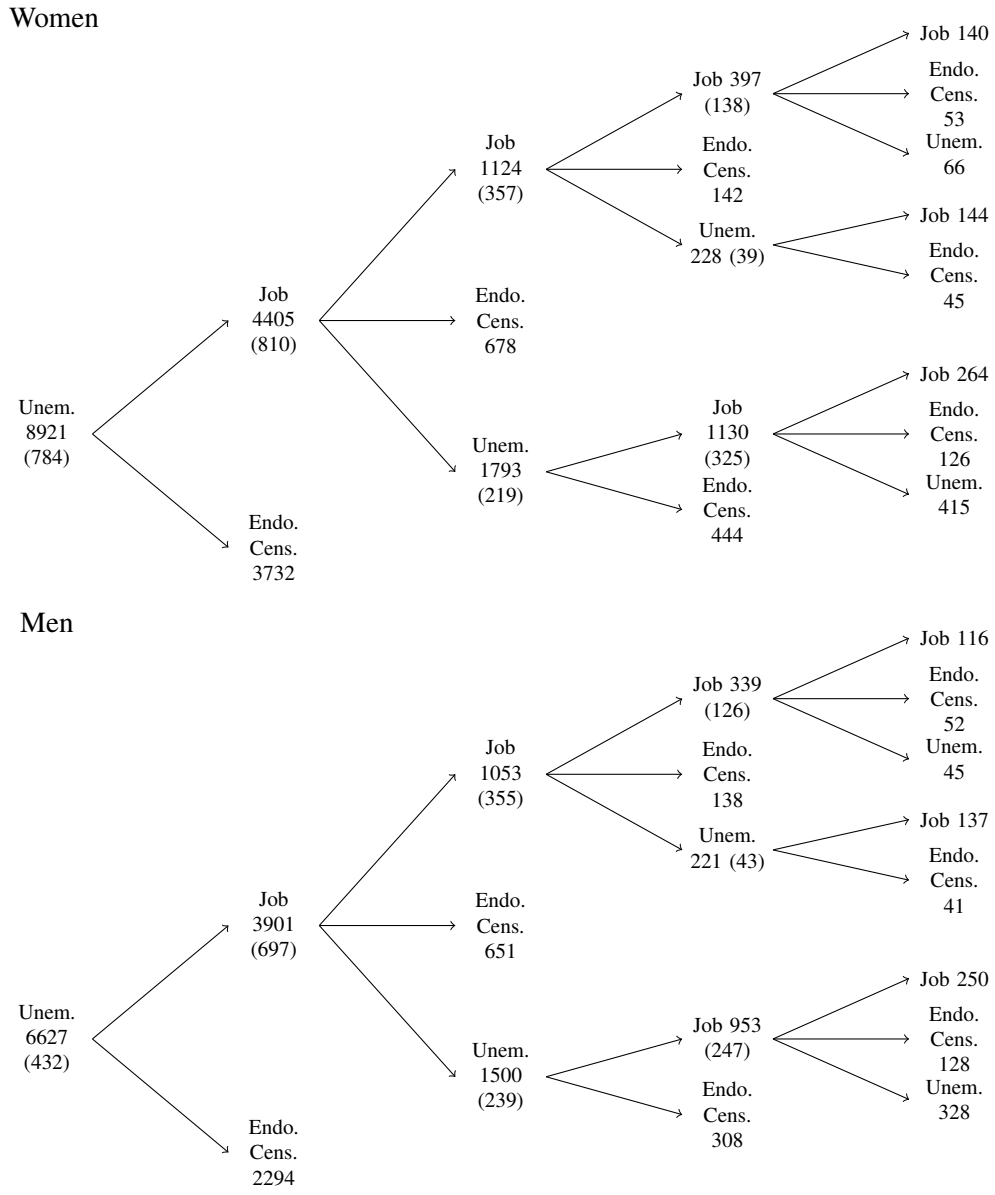
where the denominator is the conditional set, i.e. the conditional probability of not ending the quarter in the endogenous censoring absorbing state a.

[3] Note that in these simulations we retain the parameter draw of the first step, so that over these simulations both observed and unobserved characteristics are fixed at individual level.

[4] We follow Davidson and Mackinnon (2004, § 4.6) to construct these confidence intervals.

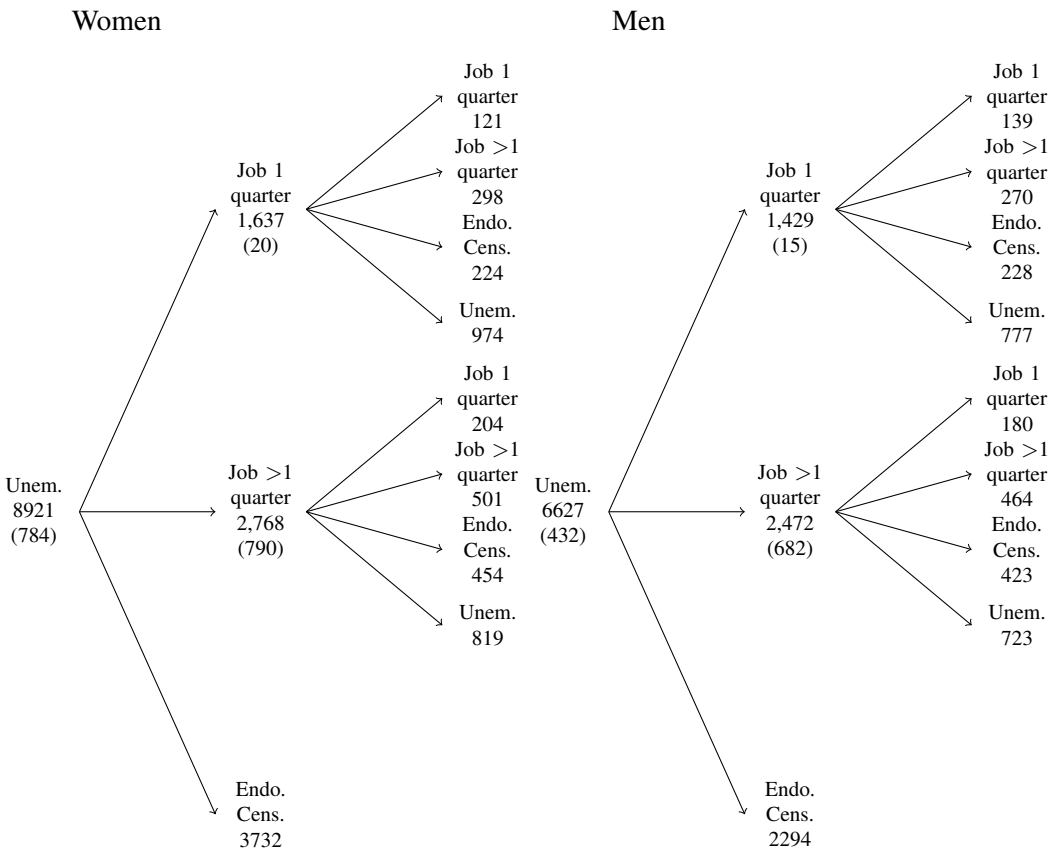
out $d = 4, 7$ quarters after the beginning of the short-lived job. Table A-10 includes OLS estimation results of the empirical counterpart of $\tilde{\Delta}_{8i}(7)$ (stacked over the 119 replications of the simulation algorithm) on the observed and unobserved characteristics fixed at the beginning of the observation period. Table A-11 and Figure A-3 report the CAITT distributions when the treated are those who exited the post-school unemployment event through a job lasting maximum one quarter, independently on whether it ended in unemployment or in a new job. Table A-12 and Figure A-4 show the CAITT distributions when a job lasting one quarter is imposed on *all* the individuals who are still unemployed after one year since graduation. Table A-13 displays estimation results of lagged duration and occurrence dependence of the model where the initial conditions problem is approximated following Heckman (1981). Tables A-14–A-19 contain all the other estimated coefficients of the model where the initial conditions problem is approximated following Heckman (1981). Finally, Tables A-20–A-24 comprise all the estimation results of the benchmark model when individual heterogeneity is neglected.

Figure A-1: Absolute Frequencies of the First Four Transitions by Gender



Note: In brackets are the numbers of right-censored censored spells.

Figure A-2: Absolute Frequencies of the First Two Transitions by Job Length and Gender



Note: In brackets are the numbers of right-censored censored spells.

Table A-1: Means and Standard Deviations by Gender of Spell-Specific Variables until the Fifth Spell

Spell	2nd		3rd		4th		5th	
Variable	Men	Women	Men	Women	Men	Women	Men	Women
Age	21.5(2.1)	21.6(2.1)	22.1(2.1)	22.2(2.1)	22.5(2.1)	22.7(2.2)	22.7(2.4)	22.9(2.4)
Monthly unemployment benefits (in €)	–	–	426.1(193.5)	389.9(175.5)	498.3(229.1)	437.2(200.1)	484.5(215.5)	423.3(195.1)
Declining benefits	–	–	.138(.35)	.098(.30)	.317(.47)	.232(.42)	.209(.41)	.175(.38)
Quarter of entry in the spell								
January-February-March	.233(.42)	.250(.43)	.286(.45)	.256(.44)	.266(.44)	.269(.44)	.234(.42)	.259(.44)
April-May-June	.158(.36)	.157(.36)	.264(.44)	.270(.44)	.246(.43)	.227(.42)	.237(.43)	.244(.43)
July-August-September	.303(.46)	.301(.46)	.172(.38)	.165(.37)	.279(.45)	.280(.45)	.221(.41)	.220(.41)
October-November-December	.306(.46)	.292(.45)	.279(.45)	.310(.46)	.210(.41)	.223(.42)	.308(.46)	.276(.45)
Household position								
Head of Household	.061(.24)	.059(.24)	.088(.28)	.073(.26)	.087(.28)	.058(.23)	.107(.31)	.064(.25)
Single	.121(.33)	.097(.30)	.170(.38)	.124(.33)	.167(.37)	.142(.35)	.187(.39)	.135(.34)
Cohabitant	.818(.39)	.844(.36)	.742(.44)	.802(.40)	.746(.44)	.800(.40)	.706(.46)	.801(.40)
Firm size								
$[1, 20)$ employees	.272(.45)	.254(.44)	.280(.45)	.272(.45)	.241(.43)	.236(.42)	.237(.43)	.265(.44)
$[20, 50)$ employees	.063(.24)	.071(.26)	.101(.30)	.096(.29)	.072(.26)	.090(.29)	.105(.31)	.089(.29)
$[50, 100)$ employees	.044(.21)	.044(.20)	.057(.23)	.062(.24)	.044(.21)	.047(.21)	.062(.24)	.051(.22)
$[100, 500)$ employees	.135(.34)	.142(.35)	.148(.36)	.138(.34)	.142(.35)	.136(.34)	.167(.37)	.113(.32)
500 or more employees	.486(.50)	.489(.50)	.414(.49)	.434(.50)	.500(.50)	.492(.50)	.433(.50)	.488(.50)
Sector								
Agriculture	.029(.17)	.018(.13)	.013(.11)	.006(.08)	.018(.13)	.009(.01)	.014(.12)	.011(.10)
Industry & Mining	.086(.28)	.039(.19)	.157(.36)	.070(.26)	.095(.29)	.046(.21)	.163(.37)	.100(.30)
Building & Energy	.082(.27)	.011(.10)	.103(.30)	.005(.07)	.064(.25)	.009(.09)	.084(.28)	.007(.09)
Wholesale & Retail trade	.164(.37)	.183(.39)	.192(.39)	.225(.42)	.190(.39)	.186(.39)	.185(.39)	.214(.41)
Credit & Insurance	.014(.12)	.017(.13)	.026(.16)	.037(.19)	.013(.11)	.020(.14)	.024(.15)	.018(.13)
Business services	.420(.49)	.343(.47)	.356(.48)	.313(.46)	.418(.49)	.367(.48)	.380(.49)	.330(.47)
Other services & Public administration	.205(.40)	.390(.49)	.154(.36)	.341(.47)	.201(.40)	.364(.48)	.147(.35)	.318(.40)
Unemployment rate	.174(.07)	.251(.09)	.168(.07)	.236(.10)	.163(.07)	.227(.10)	.216(.09)	.160(.07)

Notes: Standard deviations in parenthesis. Means and standard deviations of spell-specific variables for the first spell are displayed in the main text, Table 2.

Table A-2: Descriptive Statistics of the First Job, of Short-Lived Jobs, and of the First Long-Lasting Job – Men

	All jobs		Short-lived jobs		Long-lasting jobs	
	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Time-invariant covariates						
Nationality						
Belgian	.894	.308	.862	.345	.917	.276
Non-Belgian EU	.054	.226	.060	.239	.046	.211
Non EU	.053	.223	.077	.267	.037	.188
Education						
Primary	.101	.301	.158	.365	.058	.234
Lower secondary	.255	.436	.315	.465	.196	.397
Higher secondary	.446	.497	.394	.489	.494	.500
Higher education	.138	.345	.108	.311	.168	.374
Other	.008	.090	.013	.113	.008	.089
Unknown	.052	.221	.012	.107	.076	.266
Region of residence						
Wallonia	.668	.471	.708	.455	.667	.472
Flanders	.211	.408	175	.380	.221	.415
Brussels	.121	.326	.117	.322	.113	.316
Time-variant spell-specific covariates at the start of job spell						
Age	21.499	2.054	21.255	2.047	21.917	2.016
Quarter of entry						
January-February-March	.233	.423	.254	.435	.243	.429
April-May-June	.158	.365	.118	.323	.195	.396
July-August-September	.303	.460	.324	.468	.250	.433
October-November-December	.306	.461	.304	.460	.313	.464
Household position						
Head of household	.061	.239	.071	.257	.056	.231
Single	.121	.326	.153	.360	.101	.301
Cohabitant	.819	.385	.776	.417	.843	.364
Firm size						
$[1, 20)$ employees	.272	.445	.270	.444	.292	.455
$[20, 50)$ employees	.063	.243	.048	.213	.085	.279
$[50, 100)$ employees	.044	.205	.031	.173	.053	.224
$[100, 500)$ employees	.135	.342	.111	.314	.160	.367
500 or more employees	.486	.500	.541	.499	.410	.492
Sector						
Agriculture	.029	.168	.060	.239	.017	.129
Industry & Mining	.086	.281	.064	.246	.143	.350
Building & Energy	.082	.274	.060	.239	.101	.301
Wholesale & Retail trade	.164	.370	.081	.273	.237	.425
Credit & Insurance	.014	.119	.003	.051	.027	.162
Business services	.420	.494	.623	.485	.198	.399
Other services & Public admin.	.205	.403	.108	.311	.277	.448
Observations	3,901		777		2,238	

Table A-3: Descriptive Statistics of the First Job, of Short-Lived Jobs, and of the First Long-Lasting Job – Women

	All jobs		Short-lived jobs		Long-lasting jobs	
	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Time-invariant covariates						
Nationality						
Belgian	.903	.296	.898	.302	.915	.280
Non-Belgian EU	.051	.221	.051	.221	.049	.216
Non EU	.046	.209	.050	.219	.036	.187
Education						
Primary	.044	.206	.073	.260	.023	.151
Lower secondary	.151	.358	.198	.399	.111	.314
Higher secondary	.519	.500	.497	.500	.527	.499
Higher education	.234	.424	.205	.404	.267	.443
Other	.005	.072	.007	.085	.004	.064
Unknown	.046	.210	.020	.138	.068	.252
Region of residence						
Wallonia	.622	.485	.645	.479	.619	.486
Flanders	.277	.447	.273	.446	.283	.450
Brussels	.101	.302	.082	.275	.099	.298
Time-variant spell-specific covariates at the start of job spell						
Age	21.550	2.078	21.206	2.008	21.916	2.076
Quarter of entry						
January-February-March	.250	.433	.271	.445	.245	.430
April-May-June	.157	.364	.112	.315	.204	.403
July-August-September	.301	.459	.355	.479	.251	.434
October-November-December	.292	.455	.262	.440	.299	.458
Household position						
Head of household	.059	.236	.075	.263	.047	.212
Single	.096	.295	.098	.297	.097	.297
Cohabitant	.844	.362	.828	.378	.855	.352
Firm size						
$[1, 20)$ employees	.254	.435	.230	.421	.278	.448
$[20, 50)$ employees	.071	.257	.071	.257	.089	.285
$[50, 100)$ employees	.044	.205	.043	.203	.056	.230
$[100, 500)$ employees	.142	.349	.114	.318	.161	.368
500 or more employees	.489	.500	.542	.498	.415	.493
Sector						
Agriculture	.018	.133	.045	.208	.004	.067
Industry & Mining	.039	.193	.032	.176	.063	.242
Building & Energy	.011	.103	.002	.045	.019	.136
Wholesale & Retail trade	.183	.387	.150	.357	.231	.422
Credit & Insurance	.017	.130	.000	.000	.033	.178
Business services	.343	.475	.493	.500	.180	.384
Other services & Public admin.	.390	.488	.278	.448	.471	.499
Observations	4,405		974		2,667	

Table A-4: Estimation Results of the Baseline Hazards by Gender

Transition	(u,e)		(u,a)			(e,e)		(e,u)		(e,a)	
Quarters	Coeff.	S.E.	Coeff.	S.E.	Quarters	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
					Men						
2nd	-.206***	.076	-.074	.137	2nd	-.110	.068	-.298***	.062	-.236**	.092
3rd	-.254***	.092	.134	.152	3rd	-.372***	.083	-.766***	.093	-.245**	.112
4th	-.428***	.093	-.138	.124	4th	-.185***	.092	-.302***	.093	-.106	.128
5th	-.581***	.098	.265**	.122	5-6th	-.606***	.097	-1.386***	.130	-.559***	.139
6th	-.715***	.103	.267**	.127	7-9th	-.810***	.112	-1.057***	.130	-.661***	.156
7th	-.887***	.112	.106	.134	10-15th	-1.025***	.157	-1.160***	.192	-.735***	.211
8-9th	-.639***	.110	-.087	.136							
10-12th	-.753***	.120	-.043	.143							
13-19th	-.861***	.134	.036	.156							
					Women						
2nd	-.196***	.070	.202*	.111	2nd	-.185***	.061	-.476***	.057	-.067	.100
3rd	-.101	.089	.441***	.122	3rd	-.580***	.082	-.932***	.078	.221*	.120
4th	-.373***	.093	-.021	.102	4th	-.368***	.085	-.439***	.078	.160	.147
5th	-.519***	.099	.396***	.101	5-6th	-.729***	.093	-1.489***	.105	-.026	.164
6th	-.504***	.105	.285***	.107	7-9th	-1.002***	.107	-1.543***	.118	-.061	.187
7th	-.644***	.112	.222**	.112	10-15th	-.987***	.137	-2.291***	.212	.097	.229
8-9th	-.585***	.114	.147	.114							
10-12th	-.655***	.122	.136	.120							
13-19th	-.995***	.134	.138	.130							

Notes: * Significant at the 10% level; ** significant at the 5% level; *** significant at the 1% level.

Table A-5: Estimation Results of Systematic Parts and Individual Heterogeneity Distribution – Men

Transition	(u,e)		(e,e)		(e,u)	
Variable	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
Time-invariant covariates $\mathbf{x}_{jk}^0$						
Nationality - Reference: Belgian						
Non-Belgian EU	-.037	.083	.003	.122	.121	.110
Non EU	-.110	.079	.089	.124	.264**	.114
Education - Reference: Higher secondary						
Primary school	-.711***	.068	-.049	.106	.701***	.114
Lower secondary	-.503***	.052	-.048	.070	.477***	.083
Higher education	.448***	.085	.209**	.087	-.395***	.115
Other	-.666***	.194	-.211	.343	.524**	.246
Unknown	1.381***	.133	.138	.287	-3.363***	.338
Region of residence - Reference: Wallonia						
Flanders	.312***	.083	.343***	.098	-.017	.120
Brussels	.073	.061	-.172*	.092	-.071	.083
Time-variant spell-specific covariates $\mathbf{x}_{jk}^1$						
Age	-.024**	.012	-.052***	.016	-.016	.017
Household position - Reference: Cohabitant						
Head of household	-.082	.149	-.021	.102	.339***	.099
Single	-.140**	.061	.104	.069	.400***	.074
Quarter of entry in the spell - Reference: April-May-June						
January-February-March	-.055	.059	.028	.071	.355***	.076
July-August-September	-.118**	.054	.014	.067	.234***	.075
October-November-December	-.189***	.058	-.050	.071	.215***	.076
Firm size - Reference: 500 or more employees						
$[1,20)$ employees	–	–	-.200***	.063	-.335***	.066
$[20,50)$ employees	–	–	-.217**	.094	-.268***	.100
$[50,100)$ employees	–	–	-.268**	.119	-.218*	.122
$[100,500)$ employees	–	–	-.206***	.072	-.241***	.076
Sector - Reference: Business services						
Agriculture	–	–	-.624***	.182	.400***	.141
Industry & Mining	–	–	-1.152***	.089	-.812***	.094
Building & Energy	–	–	-.888***	.092	-.994***	.110
Wholesale & Retail trade	–	–	-1.119***	.076	-.923***	.077
Credit & Insurance	–	–	-1.048***	.194	-1.177***	.272
Other services & Pub. Adm.	–	–	-1.430***	.078	-.912***	.076
Log unemployment benefits	-.467***	.131	–	–	–	–
Declining benefits	.246	.362	–	–	–	–
Time-variant covariates $\mathbf{x}_{jk}^2$						
Local unemployment rate	-1.440***	.407	.238	.572	1.323**	.628
Quarters away of a decline in the unemployment benefit amount						
$UI\ 4$	-.075	.371	–	–	–	–
$UI\ 3$	.127	.191	–	–	–	–
$UI\ 2$	-.294	.278	–	–	–	–
$UI\ 1$	.434	.360	–	–	–	–
Individual heterogeneity distribution – $M = 4$						
Support points						
$\ln v_{jk1}$	.183	.225	-1.146***	.224	-2.639***	.280
$\ln v_{jk2}$	-.797***	.262	-1.477***	.353	-.504*	.273
$\ln v_{jk3}$	.301	.215	-.504**	.198	-1.299***	.237
$\ln v_{jk4}$	-.258	.260	.874	.558	.925*	.482
Probability masses (logistic transform)				Resulting probabilities		
λ_1	5.563***	.766		p_1	.372	
λ_2	3.670***	.734		p_2	.056	
λ_3	5.988***	.706		p_3	.570	
λ_4	.000	–		p_4	.001	

Notes: * Significant at the 10% level; ** at the 5% level; *** at the 1% level.

Table A-6: Continuing Table A-5

Transition	(u,a)		(e,a)	
Variable	Coeff.	S.E.	Coeff.	S.E.
Time-invariant covariates $\mathbf{x}_{jk}^0$				
Nationality - Reference: Belgian				
Non-Belgian EU	-.090	.094	-.069	.147
Non EU	-.144	.093	.126	.137
Education - Reference: Higher secondary				
Primary school	-.420***	.080	.685***	.123
Lower secondary	-.311***	.062	.456***	.092
Higher education	.310***	.085	-.229*	.127
Other	-.416*	.214	.302	.386
Unknown	.709***	.171	-.911***	.270
Region of residence - Reference: Wallonia				
Flanders	.287***	.089	.047	.130
Brussels	.082	.067	.146	.102
Time-variant spell-specific covariates $\mathbf{x}_{jk}^1$				
Age	-.029**	.013	.006	.020
Household position - Reference: Cohabitant				
Head of household	.055	.186	.145	.133
Single	.097	.072	.176*	.096
Quarter of entry in the spell - Reference: April-May-June				
January-February-March	.008	.084	.144	.096
July-August-September	-.134*	.071	.101	.094
October-November-December	.109	.076	.184**	.093
Firm size - Reference: 500 or more employees				
$[1, 20)$ employees	–	–	-.084	.081
$[20, 50)$ employees	–	–	-.285**	.135
$[50, 100)$ employees	–	–	-.189	.147
$[100, 500)$ employees	–	–	-.250**	.101
Sector - Reference: Business services				
Agriculture	–	–	-.111	.211
Industry & Mining	–	–	-.707***	.120
Building & Energy	–	–	-.773***	.132
Wholesale & Retail trade	–	–	-.940***	.102
Credit & Insurance	–	–	-.711**	.276
Other services & Pub. Adm.	–	–	-.755***	.095
Log unemployment benefits	-.404**	.185	–	–
Time-variant covariates $\mathbf{x}_{jk}^2$				
Local unemployment rate	-2.247***	.470	-1.572**	.756
Lagged duration and occurrence dependence				
Lagged unemployment duration	–	–	.021*	.012
Previous state: unemployment	–	–	.120	.129
Lagged job tenure	.053	.034	.033	.033
Individual heterogeneity distribution – $M = 4$				
Support points				
$\ln v_{jk1}$	-1.263***	.357*	-2.888***	.322
$\ln v_{jk2}$	-1.721***	.303	-1.993***	.332
$\ln v_{jk3}$	-1.157***	.304	-2.163***	.244
$\ln v_{jk4}$	$-\infty$	–	$-\infty$	–

Notes: * Significant at the 10% level; ** at the 5% level; *** at the 1% level.

Table A-7: Estimation Results of Systematic Parts and Individual Heterogeneity Distribution – Women

Transition	(u,e)		(e,e)		(e,u)	
Variable	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
Time-invariant covariates $\mathbf{x}_{jk}^0$						
Nationality - Reference: Belgian						
Non-Belgian EU	-.063	.072	-.102	.129	-.003	.113
Non EU	-.757***	.078	-.375***	.136	.154	.110
Education - Reference: Higher secondary						
Primary school	-.969***	.083	-.166	.143	.521***	.113
Lower secondary	-.727***	.054	-.185**	.089	.329***	.069
Higher education	.774***	.059	.192***	.073	-.236***	.077
Other	-.677***	.188	-.031	.429	.823***	.253
Unknown	1.089***	.130	-.288**	.118	-2.021***	.247
Region of residence - Reference: Wallonia						
Flanders	.451***	.065	.248***	.094	-.096	.086
Brussels	.085	.061	.177**	.085	-.173**	.085
Time-variant spell-specific covariates $\mathbf{x}_{jk}^1$						
Age	-.006	.010	.005	.015	-.037**	.016
Household position - Reference: Cohabitant						
Head of household	-1.358***	.202	-.213*	.110	.224***	.087
Single	-.235***	.072	-.048	.081	-.005	.072
Quarter of entry in the spell - Reference: April-May-June						
January-February-March	-.217***	.062	.077	.067	.163**	.067
July-August-September	-.073	.052	.055	.066	.204***	.065
October-November-December	-.215***	.054	-.006	.067	-.004	.068
Firm size - Reference: 500 or more employees						
$[1,20)$ employees	–	–	-.362***	.059	-.422***	.056
$[20,50)$ employees	–	–	-.243***	.082	-.428***	.086
$[50,100)$ employees	–	–	-.177	.109	-.195*	.106
$[100,500)$ employees	–	–	-.083	.070	-.274***	.068
Sector - Reference: Business services						
Agriculture	–	–	.075	.224	.881***	.134
Industry & Mining	–	–	-1.321***	.120	-.528***	.111
Building & Energy	–	–	-1.079***	.255	-.764***	.278
Wholesale & Retail trade	–	–	-1.062***	.069	-.646***	.067
Credit & Insurance	–	–	-1.143***	.161	-1.408***	.233
Other services & Pub. Adm.	–	–	-1.238***	.059	-.688***	.057
Log unemployment benefits	.519**	.207	–	–	–	–
Declining benefits	.009	.369	–	–	–	–
Time-variant covariates $\mathbf{x}_{jk}^2$						
Local unemployment rate	-1.423***	.281	-1.233***	.434	.642*	.371
Quarters away of a decline in the unemployment benefit amount						
$UI\ 4$	-.475	.359	–	–	–	–
$UI\ 3$	-.223	.211	–	–	–	–
$UI\ 2$	-.723**	.353	–	–	–	–
$UI\ 1$	1.093***	.418	–	–	–	–
Individual heterogeneity distribution – $M = 5$						
Support points						
$\ln v_{jk1}$	-1.477***	.300	-1.068***	.228	-1.361***	.214
$\ln v_{jk2}$	-2.387***	.326	-.673***	.241	.005	.244
$\ln v_{jk3}$	-1.190***	.356	$-\infty$	–	.005	.271
$\ln v_{jk4}$	-.632**	.300	-.045	.221	-1.060***	.223
$\ln v_{jk5}$	-1.817***	.395	-.468	.317	$-\infty$	–
Probability masses (logistic transform)				Resulting probabilities		
λ_1	2.404***	.449		p_1	.507	
λ_2	1.549***	.463		p_2	.216	
λ_3	-.135	.694		p_3	.040	
λ_4	1.431**	.580		p_4	.191	
λ_5	.000	–		p_5	.046	

Notes: * Significant at the 10% level; ** at the 5% level; *** at the 1% level.

Table A-8: Continuing Table A-7

Transition	(u,a)		(e,a)	
Variable	Coeff.	S.E.	Coeff.	S.E.
Time-invariant covariates $\mathbf{x}_{jk}^0$				
Nationality - Reference: Belgian				
Non-Belgian EU	-.191***	.072	-.031	.169
Non EU	-.290***	.069	-.490**	.223
Education - Reference: Higher secondary				
Primary school	-.184***	.065	.687***	.189
Lower secondary	.046	.044	.269**	.127
Higher education	.359***	.060	-.281**	.126
Other	-.422**	.190	.785*	.410
Unknown	.723***	.131	-1.436***	.306
Region of residence - Reference: Wallonia				
Flanders	.247***	.062	.130	.136
Brussels	.068	.055	.099	.131
Time-variant spell-specific covariates $\mathbf{x}_{jk}^1$				
Age	-.022**	.010	.035	.024
Household position - Reference: Cohabitant				
Head of household	.033	.164	.076	.172
Single	.043	.064	.325***	.113
Quarter of entry in the spell - Reference: April-May-June				
January-February-March	.039	.068	.111	.111
July-August-September	-.167***	.057	.215**	.108
October-November-December	.133**	.060	.010	.110
Firm size - Reference: 500 or more employees				
$[1, 20)$ employees	–	–	-.207**	.093
$[20, 50)$ employees	–	–	-.476***	.148
$[50, 100)$ employees	–	–	-.036	.171
$[100, 500)$ employees	–	–	-.211*	.115
Sector - Reference: Business services				
Agriculture	–	–	-.200	.472
Industry & Mining	–	–	-.774***	.185
Building & Energy	–	–	-1.253***	.443
Wholesale & Retail trade	–	–	-.541***	.112
Credit & Insurance	–	–	-.987***	.301
Other services & Pub. Adm.	–	–	-.534***	.100
Log unemployment benefits	-.217	.165	–	–
Time-variant covariates $\mathbf{x}_{jk}^2$				
Local unemployment rate	-1.164***	.273	-.863	.625
Lagged duration and occurrence dependence				
Lagged unemployment duration	–	–	-.023	.021
Previous state: unemployment	–	–	.214	.186
Lagged job tenure	.051	.025	.027	.035
Individual heterogeneity distribution – $M = 5$				
Support points				
$\ln v_{jk1}$	-1.835***	.280	-3.302***	.334
$\ln v_{jk2}$	-1.904***	.270	-3.140***	.507
$\ln v_{jk3}$	-2.118***	.604	-1.557***	.447
$\ln v_{jk4}$	-1.445***	.360	-2.874***	.349
$\ln v_{jk5}$	-2.539***	.787	-.543	.352

Notes: * Significant at the 10% level; ** at the 5% level; *** at the 1% level.

Table A-9: Robustness of the CAITT Distributions: (a) $m = 11$ and $d = 4$; (b) long-lasting jobs are defined as jobs lasting at least 5 quarters, $m = 7$, and $d = 4, 7$

	(a)			(b)					
	Distribution of $\tilde{\Delta}_{4i}(11)$			Distribution of $\tilde{\Delta}_{4i}(7)$			Distribution of $\tilde{\Delta}_{7i}(7)$		
Statistics	Mean	95% conf. int.		Mean	95% conf. int.		Mean	95% conf. int.	
					Men				
CATT	.053	.020	.080	.038	.010	.070	.079	.033	.115
Selected percentiles									
Minimum	-.501	-.610	-.410	-.409	-.520	-.320	-.330	-.480	-.250
5th	-.295	-.330	-.250	-.246	-.282	-.203	-.186	-.221	-.140
10th	-.241	-.280	-.190	-.197	-.240	-.160	-.144	-.178	-.102
25th	-.140	-.180	-.095	-.110	-.160	-.070	-.071	-.100	-.030
50th	.036	.000	.070	.020	-.020	.060	.028	-.010	.070
75th	.216	.173	.265	.163	.130	.210	.176	.120	.230
90th	.379	.330	.420	.308	.260	.360	.406	.304	.490
95th	.461	.410	.514	.385	.330	.460	.531	.439	.620
Maximum	.728	.620	.830	.638	.530	.770	.816	.660	.930
# obs[(a)]		508.1			332.4			276.3	
					Women				
CATT	.054	.023	.088	.038	.007	.076	.071	.036	.113
Selected percentiles									
Minimum	-.525	-.680	-.440	-.423	-.550	-.350	-.370	-.510	-.270
5th	-.298	-.344	-.260	-.250	-.290	-.210	-.190	-.231	-.150
10th	-.240	-.271	-.209	-.200	-.240	-.157	-.145	-.189	-.080
25th	-.137	-.170	-.110	-.112	-.160	-.068	-.074	-.110	-.040
50th	.042	.020	.070	.019	-.010	.050	.020	-.020	.050
75th	.203	.160	.260	.151	.110	.213	.153	.108	.208
90th	.411	.370	.460	.343	.300	.400	.409	.290	.530
95th	.495	.435	.560	.425	.370	.480	.555	.474	.622
Maximum	.733	.660	.890	.628	.530	.780	.796	.710	.880
# obs[(a)]		639.0			428.0			353.7	

[(a)] It indicates the average number of individuals satisfying the conditioning set in (9), i.e. the average number of treated individuals.

Table A-10: OLS Estimation Results of $\tilde{\Delta}_{8i}(7)$ on Individual Characteristics

Dependent variable: $\Delta_{i8}(7)$	Men		Women	
Variable	Coeff	S.E.	Coeff	S.E.
Nationality - Ref: Belgian				
Non Belgian UE	-.010	.006	-.004	.006
Non Belgian non UE	-.013**	.006	.006	.007
Education - Ref: Higher secondary school				
Primary education	-.018***	.004	-.025***	.006
Lower secondary education	-.006*	.004	-.001	.004
University or more	-.035***	.004	-.043***	.003
Other	.021	.015	-.046***	.011
Unkonwn education	-.101***	.010	-.058***	.006
Region of residence - Ref: Wallonia				
Flanders	-.028***	.006	-.024***	.005
Brussels	-.002	.005	-.004	.005
Household position - Ref: Cohabitant				
Head of household	.025***	.006	.009	.006
Single	.022***	.004	.009**	.005
Pre-treatment unem. duration	-.003	.002	.014***	.002
Local unemployment rate	.067*	.037	.064***	.024
Individual heterogeneity type - Ref: Type 1				
Type 2	-.065***	.005	-.052***	.003
Type 3	-.048***	.005	-.081***	.004
Type 4	-.131***	.005	-.085***	.003
Type 5[(a)]	–	–	–	–
Constant	.163	.006	.106***	.009
Observations	31,054		39,317	
R^2	.159		.149	

Notes: * Significant at the 10% level; ** significant at the 5% level; *** significant at the 1% level. The reference individual is Belgian, cohabitant, has higher secondary school degree, lives in Wallonia and in a district with average unemployment rate, has individual heterogeneity of type 1 and an average pre-treatment duration of unemployment.

[(a)] The dummy indicator for being of individual heterogeneity of type 5 is not included among the regressors, since no treated women belonged to this group and the distribution for men was found to have 4 support points.

Table A-11: Simulated CAITT Distributions for $m = 7$, $d = 2, 4, 8$, and "Short-Lived" Jobs Defined as Jobs Lasting Maximum One Quarter

	Distribution of $\tilde{\Delta}_{2i}(7)$			Distribution of $\tilde{\Delta}_{4i}(7)$			Distribution $\tilde{\Delta}_{8i}(7)$		
Statistics	Mean	95% conf int		Mean	95% conf int		Mean	95% conf int	
					Men				
CATT	.095	.069	.130	.142	.104	.183	.193	.138	.245
	(.271)			(.454)			(.682)		
Selected percentiles									
Minimum	-.423	-.540	-.340	-.355	-.490	-.270	-.298	-.430	-.210
5th	-.238	-.200	-.277	-.180	-.220	-.150	-.117	-.160	-.080
10th	-.190	-.230	-.150	-.133	-.170	-.090	-.076	-.110	-.040
25th	-.091	-.130	-.050	-.047	-.087	-.010	-.016	-.050	.010
50th	.091	.060	.130	.077	.040	.120	.073	.040	.120
75th	.252	.218	.290	.299	.220	.390	.248	.190	.310
90th	.398	.350	.470	.532	.473	.600	.562	.420	.690
95th	.496	.440	.560	.652	.570	.734	.750	.657	.830
Maximum	.732	.620	.830	.886	.800	.960	.972	.930	1.000
# obs[(a)]		709.6			630.3			511.0	
					Women				
CATT	.086	.058	.118	.131	.096	.164	.136	.091	.180
	(.272)			(.457)			(.673)		
Selected percentiles									
Minimum	-.478	-.570	-.400	-.414	-.550	-.320	-.348	-.490	-.250
5th	-.263	-.310	-.230	-.197	-.240	-.160	-.135	-.180	-.100
10th	-.205	-.246	-.170	-.145	-.180	-.110	-.089	-.120	-.060
25th	-.092	-.130	-.050	-.055	-.090	-.020	-.023	-.050	-.000
50th	.071	.040	.100	.072	.030	.110	.056	.020	.100
75th	.259	.220	.300	.271	.210	.360	.217	.158	.278
90th	.394	.350	.430	.537	.476	.590	.537	.400	.700
95th	.461	.410	.513	.639	.580	.700	.735	.654	.810
Maximum	.770	.580	.860	.890	.790	.970	.959	.910	1.000
# obs[(a)]		803.7			702.8			565.8	

Notes: In parentheses we report the average probability of having entered a long-lasting job d quarters after a jobs lasting maximum one quarter, conditional on not being endogenously censored yet in the evaluation period and on having entered a job lasting maximum one quarter between the start of the observation window (4 quarters after graduation) and m quarters after graduation.

[(a)] See footnote [(a)] of Table 5.

Figure A-3: Simulated CAITT Distributions for $m = 7$, $d = 2, 4, 8$, and "Short-Lived" Jobs Defined as Jobs Lasting Maximum One Quarter

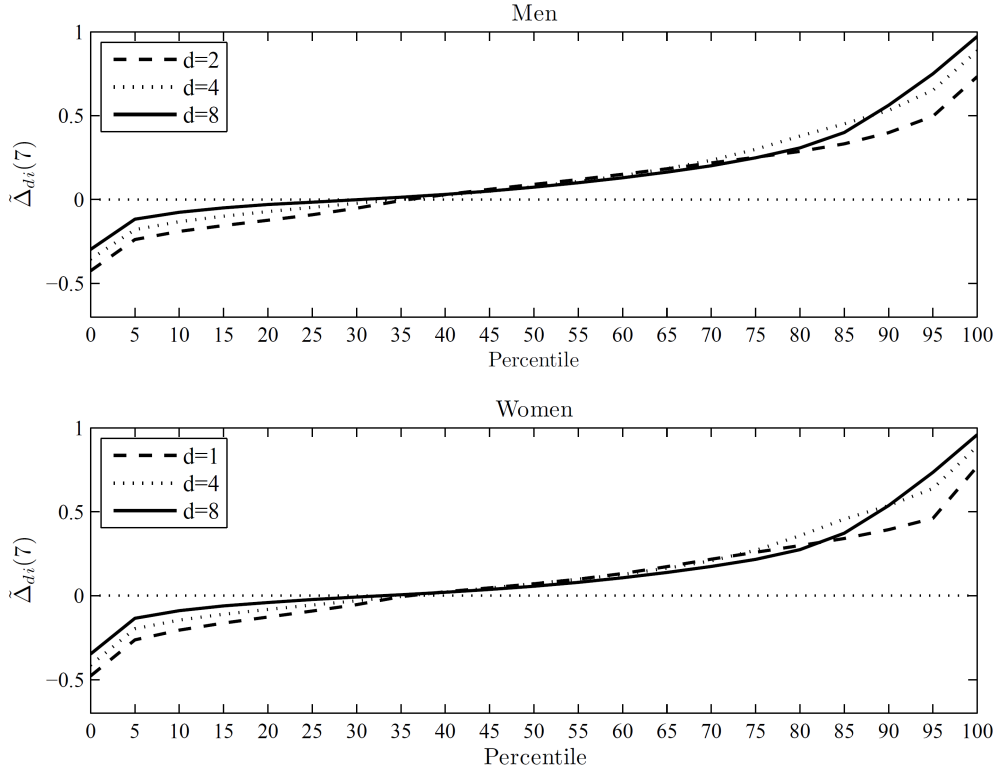


Table A-12: Simulated CAITT Distributions for $d = 2, 4, 8$ when a Job Lasting One Quarter Is Imposed on *All* the Long-Term Unemployed School-Leavers

	Distribution of $\tilde{\Delta}_{2i}$			Distribution of $\tilde{\Delta}_{4i}$			Distribution $\tilde{\Delta}_{8i}$		
Statistics	Mean	95% conf int		Mean	95% conf int		Mean	95% conf int	
					Men				
CATT	.116	.081	.159	.169	.126	.218	.170	.121	.224
Selected percentiles									
Minimum	-.261	-.330	-.170	-.211	-.280	-.140	-.143	-.200	-.080
5th	-.030	-.060	-.000	-.006	-.030	.020	.001	-.020	.020
10th	-.004	-.020	.020	.024	-.000	.050	.031	.000	.060
25th	.036	.010	.060	.083	.050	.130	.092	.050	.014
50th	.099	.060	.140	.160	.110	.210	.165	.110	.220
75th	.190	.140	.260	.249	.190	.320	.240	.180	.310
90th	.271	.220	.340	.330	.270	.410	.315	.250	.400
95th	.313	.260	.380	.374	.310	.460	.359	.280	.450
Maximum	.507	.430	.600	.576	.490	.670	.568	.480	.690
# obs		6,627			6,627			6,627	
					Women				
CATT	.043	-.016	.085	.073	-.000	.119	.071	.006	.126
Selected percentiles									
Minimum	-.353	-.460	-.250	-.352	-.510	-.230	-.389	-.560	-.230
5th	-.117	-.220	-.060	-.105	-.210	-.040	-.102	-.200	-.030
10th	-.079	-.170	-.030	-.065	-.160	-.010	-.057	-.140	-.010
25th	-.021	-.080	.010	-.006	-.070	.030	-.002	-.060	.040
50th	.025	-.010	.060	.053	.000	.100	.057	.010	.110
75th	.080	.040	.120	.125	.060	.180	.129	.070	.180
90th	.159	.100	.270	.212	.140	.310	.206	.130	.264
95th	.291	.140	.530	.328	.190	.540	.283	.190	.460
Maximum	.786	.650	.890	.877	.760	.950	.851	.750	.940
# obs		8,921			8,921			8,921	

Table A-13: The Impact of the Past on Transition Intensities – Heckman's (1981) Correction of Initial Conditions

Transition	(u, e)		(e, e)		(e, u)	
Variable	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
		Men				
Lagged unemployment duration	–	–	-.023	.015	-.041***	.013
Previous state: unemployment	–	–	-.139	.104	.196	.135
Lagged job tenure	-.018	.024	-.036	.023	-.137***	.037
# of individuals	6,627		# of spells		16,447	
# of parameters	232		Log-likelihood		-41,146.7	
Vuong's LR test of nonnested models:[(a)]			T_{LR}=1.025		p-value=0.305	
		Women				
Lagged unemployment duration	–	–	-.048***	.015	-.042***	.012
Previous state: unemployment	–	–	-.190**	.086	.334***	.115
Lagged job tenure	-.045**	.020	-.059***	.019	-.058**	.028
# of individuals	8,921		# of spells		20,275	
# of parameters	239		Log-likelihood		-51,186.4	
Vuong's LR test of nonnested models:[(a)]			T_{LR}=-1.477		p-value=0.140	

Notes: ** Significant at the 5% level; *** significant at the 1% level.

[(a)] Vuong's (1989) test of strictly nonnested models is used here to compare the benchmark model to Heckman's (1981) correction of initial conditions. The test was modified to permit AIC log-likelihood penalties.

Figure A-4: Simulated CAITT Distributions for $d = 2, 4, 8$ when a Job Lasting One Quarter Is Imposed on *All* the Long-Term Unemployed School-Leavers

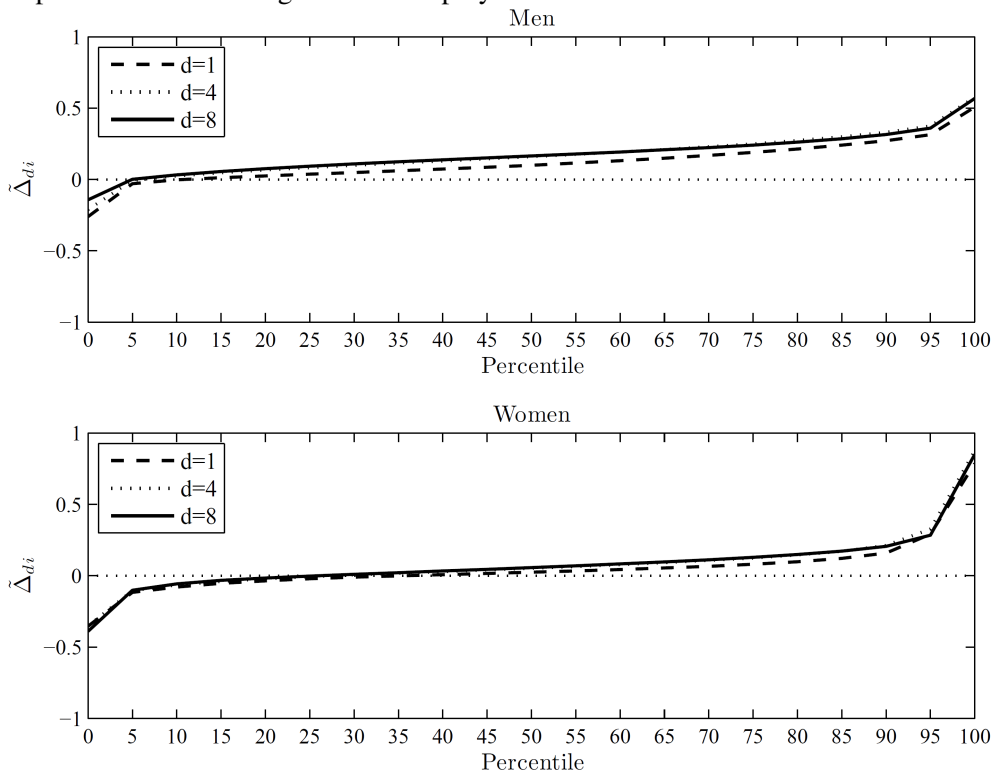


Table A-14: Estimation Results of the Baseline Hazards by Gender – Heckman's (1981) Correction of Initial Conditions

Transition	(u,e)			(u,a)				(e,e)			(e,u)			(e,a)		
Quarters	Coeff.	S.E.		Coeff.	S.E.		Quarters	Coeff.	S.E.		Coeff.	S.E.		Coeff.	S.E.	
							Men									
				Initial unemployment spell												
5th	-.113	.055	**	.440	.080	***	2nd	-.134	.067	**	-.318	.062	***	-.206	.091	**
6rd	-.207	.068	***	.466	.089	***	3rd	-.404	.083	***	-.791	.093	***	-.191	.110	*
7th	-.355	.082	***	.309	.102	***	4th	-.219	.089	**	-.327	.093	***	-.030	.125	
8th-9th	-.065	.087		.117	.109		5th-6th	-.635	.096	***	-1.408	.131	***	-.460	.138	***
10th-12th	-.134	.113		.186	.133		7th-9th	-.832	.113	***	-1.072	.132	***	-.535	.154	***
13th-19th	-.187	.139		.336	.182	*	10th-15th	-1.039	.160	***	-1.162	.192	***	-.568	.212	***
				Subsequent unemployment spells												
2nd	-.205	.078	***	-.098	.142											
3rd	-.275	.096	***	.102	.161											
4th	-.513	.127	***	.069	.194											
5th	-.684	.164	***	.077	.226											
6th	-.785	.198	***	-.197	.290											
7th	-1.004	.261	***	-.000	.315											
8th-9th	-.867	.254	***	.020	.308											
10th-15th	-.418	.295		.076	.429											
							Women									
				Initial unemployment spell												
5th	.153	.073	**	.481	.065	***	2nd	-.230	.060	***	-.480	.056	***	-.155	.093	*
6rd	.217	.088	***	.373	.076	***	3rd	-.651	.079	***	-.942	.076	***	.038	.099	
7th	.078	.101		.289	.086	***	4th	-.462	.081	***	-.445	.076	***	-.111	.116	
8th-9th	.182	.107	*	.228	.091	**	5th-6th	-.845	.085	***	-1.492	.104	***	-.374	.117	***
10th-12th	.128	.123		.231	.107	**	7th-9th	-1.141	.098	***	-1.535	.116	***	-.498	.129	***
13th-19th	-.194	.142		.238	.127	*	10th-15th	-1.152	.128	***	-2.267	.210	***	-.424	.166	**
				Subsequent unemployment spells												
2nd	-.197	.074	***	.198	.114	*										
3rd	-.127	.096		.434	.131	***										
4th	-.416	.136	***	.393	.158	**										
5th	-.604	.177	***	.112	.210											
6th	-.623	.203	***	-.008	.270											
7th	-.493	.230	**	.526	.246	**										
8th-9th	-1.219	.322	***	.294	.274											
10th-15th	-.687	.348	**	-.278	.474											

Notes: * Significant at the 10% level; ** significant at the 5% level; *** significant at the 1% level.

Table A-15: Estimation Results by Gender of the Systematic Part and Individual Heterogeneity Distribution of the Initial Conditions Transition Intensities of the First Unemployment Spell – Heckman's (1981) Correction of Initial Conditions

	Men						Women					
Transition	(u,e)			(u,a)			(u,e)			(u,a)		
Variable	Coeff.	S.E.		Coeff.	S.E.		Coeff.	S.E.		Coeff.	S.E.	
Time-invariant covariates $\mathbf{x}_{jk}^0$												
Nationality - Reference: Belgian												
Non-Belgian EU	.074	.094		-.118	.117		-.088	.079		-.204	.076	***
Non EU	-.133	.095		-.211	.120	*	-.810	.090	***	-.287	.070	***
Education - Reference: Higher secondary												
Primary school	-.668	.082	***	-.314	.094	***	-1.004	.097	***	-.189	.065	***
Lower secondary	-.478	.057	***	-.237	.070	***	-.689	.058	***	.034	.045	
Higher education	.330	.068	***	.284	.089	***	.753	.056	***	.376	.061	***
Other	-.530	.239	**	-.314	.265		-.964	.259	***	-.304	.188	
Unknown	.783	.130	***	.276	.153	*	.931	.098	***	.651	.128	***
Region of residence - Reference: Wallonia												
Flanders	.272	.084	***	.283	.103	***	.357	.070	***	.256	.067	***
Brussels	.161	.066	**	.161	.085	*	.085	.065		.076	.058	
Time-variant spell-specific covariates $\mathbf{x}_{jk}^1$												
Age	-.022	.013		-.039	.017	**	-.002	.011		-.028	.010	***
Household position - Reference: Cohabitant												
Head of household	-.654	.089	***	-.328	.095	***	-.916	.080	***	-.183	.054	***
Single	-.279	.065	***	.032	.078		-.028	.061		.072	.056	
Quarter of entry in the spell - Reference: April-May-June												
Janu.-Febr.-March	-.139	.103		-.061	.124		-.224	.103	**	.092	.081	
July-August-Sept.	-.091	.082		-.173	.098	*	.011	.075		-.155	.065	**
Octo.-Nove.-Dece.	-.319	.097	***	.248	.111	**	-.234	.088	***	.141	.071	**
Time-variant covariates $\mathbf{x}_{jk}^2$												
Local unemp. rate	-1.509	.464	***	-2.040	.555	***	-1.946	.314	***	-1.072	.292	***
Individual heterogeneity distribution – $M = 3$ for men, $M = 4$ for women												
Support points												
$\ln v_{jk}^1$	-1.700	.197	***	-2.709	.320	***	-2.148	.179	***	-2.393	.195	***
$\ln v_{jk}^2$	-1.403	.217	***	-1.378	.190	***	-1.036	.170	***	-2.082	.190	***
$\ln v_{jk}^3$	-.129	.162		$-\infty$	–		4.854	3.381		$-\infty$	–	
$\ln v_{jk}^4$	–	–		–	–		2.620	.455	***	$-\infty$	–	

Notes: * Significant at the 10% level; ** significant at the 5% level; *** significant at the 1% level.

Table A-16: Estimation Results of Systematic Parts and Individual Heterogeneity Distribution – Heckman's (1981) Correction of Initial Conditions – Men

Transition	(u,e)			(e,e)			(e,u)		
Variable	Coeff.	S.E.		Coeff.	S.E.		Coeff.	S.E.	
Time-invariant covariates $\mathbf{x}_{jk}^0$									
Nationality - Reference: Belgian									
Non-Belgian EU	-.183	.133		.004	.123		.124	.113	
Non EU	.009	.134		.105	.124		.273	.116	**
Education - Reference: Higher secondary									
Primary school	-.389	.109	***	-.051	.103		.597	.100	***
Lower secondary	-.210	.077	***	-.043	.066		.388	.070	***
Higher education	.346	.101	***	.155	.079	**	-.230	.090	**
Other	-.613	.378		-.210	.359		.402	.260	
Unknown	.737	.468		-.277	.116	**	-2.615	.322	***
Region of residence - Reference: Wallonia									
Flanders	-.132	.123		.271	.095	***	.120	.106	
Brussels	-.243	.101	**	-.175	.092	*	-.046	.081	
Time-variant spell-specific covariates $\mathbf{x}_{jk}^1$									
Age	.001	.020		-.047	.016	***	-.020	.017	
Household position - Reference: Cohabitant									
Head of household	.317	.424		-.043	.104		.357	.098	***
Single	-.030	.132		.083	.069		.383	.073	***
Quarter of entry in the spell - Reference: April-May-June									
January-February-March	-.003	.076		.029	.071		.365	.076	***
July-August-September	-.151	.092		.026	.067		.245	.075	***
October-November-December	-.135	.079	*	-.038	.071		.231	.076	***
Firm size - Reference: 500 or more employees									
$[1,20)$ employees	–	–		-.202	.063	***	-.327	.065	***
$[20,50)$ employees	–	–		-.217	.095	**	-.266	.101	***
$[50,100)$ employees	–	–		-.253	.121	**	-.216	.124	*
$[100,500)$ employees	–	–		-.204	.071	***	-.247	.076	***
Sector - Reference: Business services									
Agriculture	–	–		-.630	.184	***	.368	.142	***
Industry & Mining	–	–		-1.148	.089	***	-.814	.095	***
Building & Energy	–	–		-.875	.091	***	-.968	.110	***
Wholesale & Retail trade	–	–		-1.107	.076	***	-.929	.077	***
Credit & Insurance	–	–		-1.043	.193	***	-1.180	.266	***
Other services & Pub. Adm.	–	–		-1.383	.075	***	-.876	.077	***
Log unemployment benefits	-.816	.435	*	–	–		–	–	
Declining benefits	.543	.487		–	–		–	–	
Time-variant covariates $\mathbf{x}_{jk}^2$									
Local unemployment rate	-.688	.734		.254	.578		1.225	.607	**
Quarters away of a decline in the unemployment benefit amount[(a)]									
$UI\,4$	-.035	.377		–	–		–	–	
$UI\,3$	.116	.190		–	–		–	–	
$UI\,2$	-.277	.280		–	–		–	–	
$UI\,1$	.472	.371		–	–		–	–	
Individual heterogeneity distribution – $M=3$									
Support points									
$\ln v_{jk}^1$	.118	.603		-1.281	.306	***	-.442	.262	*
$\ln v_{jk}^2$	1.157	.636	*	-1.303	.246	***	-2.598	.278	***
$\ln v_{jk}^3$	.734	.603		-.604	.193	***	-1.384	.225	***
Probability masses (logistic transform)					Resulting probabilities				
λ_1	.123	.238			p_1	.308			
λ_2	.431	.176	**		p_2	.419			
λ_3	.000	–			p_3	.272			

Notes: * Significant at the 10% level; ** at the 5% level; *** at the 1% level.

Table A-17: Continuing Table A-16

Transition	(u,a)			(e,a)		
Variable	Coeff.	S.E.		Coeff.	S.E.	
Time-invariant covariates $\mathbf{x}^0_{jk}$						
Nationality - Reference: Belgian						
Non-Belgian EU	-.035	.213		-.053	.151	
Non EU	.011	.225		.165	.144	
Education - Reference: Higher secondary						
Primary school	-.091	.177		.659	.121	***
Lower secondary	.012	.133		.434	.089	***
Higher education	.188	.184		-.195	.115	*
Other	-.062	.657		.251	.423	
Unknown	1.334	.531	**	-.575	.175	***
Region of residence - Reference: Wallonia						
Flanders	-.137	.202		.079	.128	
Brussels	-.390	.178	**	.148	.106	
Time-variant spell-specific covariates $\mathbf{x}^1_{jk}$						
Age	-.042	.034		.006	.021	
Household position - Reference: Cohabitant						
Head of household	-.040	.251		.134	.140	
Single	.151	.133		.156	.099	
Quarter of entry in the spell - Reference: April-May-June						
January-February-March	.121	.144		.166	.098	*
July-August-September	.058	.163		.119	.096	
October-November-December	.002	.141		.213	.095	**
Firm size - Reference: 500 or more employees						
$[1, 20)$ employees	–	–		-.079	.082	
$[20, 50)$ employees	–	–		-.283	.138	**
$[50, 100)$ employees	–	–		-.174	.149	
$[100, 500)$ employees	–	–		-.256	.102	**
Sector - Reference: Business services						
Agriculture	–	–		-.105	.219	
Industry & Mining	–	–		-.764	.121	***
Building & Energy	–	–		-.832	.133	***
Wholesale & Retail trade	–	–		-1.010	.103	***
Credit & Insurance	–	–		-.764	.281	***
Other services & Pub. Adm.	–	–		-.809	.096	***
Log unemployment benefits	-.177	.230		–	–	
Time-variant covariates $\mathbf{x}^2_{jk}$						
Local unemployment rate	-3.486	1.282	***	-1.636	.771	**
Lagged duration and occurrence dependence						
Lagged unemployment duration	–	–		.016	.013	
Previous state: unemployment	–	–		.188	.134	
Lagged job tenure	.076	.044	*	.045	.032	
Individual heterogeneity distribution – $M = 3$						
Support points						
$\ln v^1_{jk}$	-1.615	.440	***	-2.072	.295	***
$\ln v^2_{jk}$	$-\infty$	–		-3.414	.396	***
$\ln v^3_{jk}$	-1.236	.470	***	-2.203	.244	***

Notes: * Significant at the 10% level; ** at the 5% level; *** at the 1% level.

Table A-18: Estimation Results of Systematic Parts and Individual Heterogeneity Distribution – Heckman's (1981) Correction of Initial Conditions – Women

Transition	(u,e)			(e,e)			(e,u)		
Variable	Coeff.	S.E.		Coeff.	S.E.		Coeff.	S.E.	
Time-invariant covariates $\mathbf{x}_{jk}^0$									
Nationality - Reference: Belgian									
Non-Belgian EU	.084	.130		-.050	.122		.007	.117	
Non EU	-.489	.144	***	-.324	.131	**	.108	.110	
Education - Reference: Higher secondary									
Primary school	-.683	.153	***	-.045	.119		.558	.121	***
Lower secondary	-.668	.096	***	-.133	.075	*	.337	.070	***
Higher education	.417	.085	***	.117	.060	*	-.185	.068	***
Other	-.091	.443		.030	.398		.700	.303	**
Unknown	.838	.317	***	-.227	.101	**	-1.787	.217	***
Region of residence - Reference: Wallonia									
Flanders	.458	.102	***	.179	.086	**	-.064	.082	
Brussels	-.189	.117		.140	.080	*	-.154	.084	*
Time-variant spell-specific covariates $\mathbf{x}_{jk}^1$									
Age	.005	.019		.007	.013		-.031	.015	**
Household position - Reference: Cohabitant									
Head of household	-.652	.423		-.157	.098		.220	.089	**
Single	-.226	.140		-.038	.076		-.002	.072	
Quarter of entry in the spell - Reference: April-May-June									
January-February-March	-.210	.077	***	.069	.065		.153	.066	**
July-August-September	-.283	.090	***	.036	.064		.159	.064	**
October-November-December	-.155	.072	**	-.016	.064		-.000	.067	
Firm size - Reference: 500 or more employees									
$[1,20)$ employees	–	–		-.334	.056	***	-.416	.056	***
$[20,50)$ employees	–	–		-.252	.079	***	-.421	.086	***
$[50,100)$ employees	–	–		-.181	.106	*	-.214	.106	**
$[100,500)$ employees	–	–		-.089	.067		-.294	.067	***
Sector - Reference: Business services									
Agriculture	–	–		.055	.209		.863	.146	***
Industry & Mining	–	–		-1.260	.116	***	-.504	.110	***
Building & Energy	–	–		-1.017	.244	***	-.749	.263	***
Wholesale & Retail trade	–	–		-.998	.065	***	-.632	.066	***
Credit & Insurance	–	–		-1.051	.157	***	-1.370	.226	***
Other services & Pub. Adm.	–	–		-1.161	.052	***	-.660	.055	***
Log unemployment benefits	-.019	.434		–	–		–	–	
Declining benefits	.537	.453		–	–		–	–	
Time-variant covariates $\mathbf{x}_{jk}^2$									
Local unemployment rate	.294	.474		-1.070	.398	***	.591	.364	
Quarters away of a decline in the unemployment benefit amount[(a)]									
$UI\,4$	-.474	.373		–	–		–	–	
$UI\,3$	-.211	.212		–	–		–	–	
$UI\,2$	-.773	.352	**	–	–		–	–	
$UI\,1$	1.159	.425	***	–	–		–	–	
Individual heterogeneity distribution – $M=4$									
Support points									
$\ln v_{jk}^1$	-1.143	.603	*	-.739	.242	***	-.376	.232	
$\ln v_{jk}^2$	-.107	.602		-.610	.187	***	-1.545	.205	***
$\ln v_{jk}^3$	-.386	.636		.179	.221		-.783	.240	***
$\ln v_{jk}^4$	-1.324	.630	**	$-\infty$	–		.410	.327	
Probability masses (logistic transform)						Resulting probabilities			
λ_1	3.644	.257	***			p_1 .521			
λ_2	3.502	.280	***			p_2 .452			
λ_3	-.000	.379				p_3 .014			
λ_4	.000	–				p_4 .014			

Notes: * Significant at the 10% level; ** at the 5% level; *** at the 1% level.

Table A-19: Continuing Table A-18

Transition	(u,a)			(e,a)		
Variable	Coeff.	S.E.		Coeff.	S.E.	
Time-invariant covariates $\mathbf{x}_{jk}^0$						
Nationality - Reference: Belgian						
Non-Belgian EU	-.082	.201		-.059	.139	
Non EU	-.219	.191		-.394	.177	**
Education - Reference: Higher secondary						
Primary school	-.096	.198		.578	.149	***
Lower secondary	.189	.123		.224	.096	**
Higher education	.125	.137		-.156	.087	*
Other	-1.939	1.240		.617	.361	*
Unknown	1.300	.432	***	-.988	.188	***
Region of residence - Reference: Wallonia						
Flanders	.250	.150		.169	.107	
Brussels	.015	.151		.101	.106	
Time-variant spell-specific covariates $\mathbf{x}_{jk}^1$						
Age	.021	.029		.013	.019	
Household position - Reference: Cohabitant						
Head of household	-.155	.206		.080	.137	
Single	-.355	.136	***	.255	.092	***
Quarter of entry in the spell - Reference: April-May-June						
January-February-March	-.101	.124		.123	.094	
July-August-September	.002	.138		.169	.092	*
October-November-December	.111	.113		-.001	.094	
Firm size - Reference: 500 or more employees						
$[1, 20)$ employees	–	–		-.175	.077	**
$[20, 50)$ employees	–	–		-.412	.127	***
$[50, 100)$ employees	–	–		-.043	.139	
$[100, 500)$ employees	–	–		-.198	.097	**
Sector - Reference: Business services						
Agriculture	–	–		-.102	.388	
Industry & Mining	–	–		-.687	.157	***
Building & Energy	–	–		-1.082	.383	***
Wholesale & Retail trade	–	–		-.457	.093	***
Credit & Insurance	–	–		-.830	.246	***
Other services & Pub. Adm.	–	–		-.424	.079	***
Log unemployment benefits	.128	.187		–	–	
Time-variant covariates $\mathbf{x}_{jk}^2$						
Local unemployment rate	-1.109	.682		-.508	.513	
Lagged duration and occurrence dependence						
Lagged unemployment duration	–	–		.013	.013	
Previous state: unemployment	–	–		-.083	.127	
Lagged job tenure	.031	.032		-.028	.031	
Individual heterogeneity distribution – $M = 4$						
Support points						
$\ln v_{jk}^1$	-2.514	.368	***	-2.526	.274	***
$\ln v_{jk}^2$	-2.526	.467	***	-2.655	.235	***
$\ln v_{jk}^3$	-3.012	.700	***	-2.861	.506	***
$\ln v_{jk}^3$	-1.618	.414	***	-.997	.455	**

Notes: * Significant at the 10% level; ** at the 5% level; *** at the 1% level.

Table A-20: Estimation Results of the Baseline Hazards by Gender (Without Heterogeneity)

Transition	(u,e)			(u,a)				(e,e)			(e,u)			(e,a)		
Quarters	Coeff.	S.E.		Coeff.	S.E.		Quarters	Coeff.	S.E.		Coeff.	S.E.		Coeff.	S.E.	
							Men									
2nd	-.247	.075	***	-.097	.137		2nd	-.168	.064	***	-.481	.056	***	-.312	.088	***
3rd	-.344	.090	***	.083	.151		3rd	-.468	.077	***	-1.049	.082	***	-.364	.102	***
4th	-.596	.087	***	-.195	.132		4th	-.308	.081	***	-.665	.080	***	-.260	.111	**
5th	-.775	.090	***	.196	.131		5th-6th	-.752	.085	***	-1.818	.115	***	-.748	.117	***
6th	-.946	.093	***	.178	.134		7th-9th	-.981	.099	***	-1.575	.108	***	-.895	.131	***
7th	-1.147	.100	***	.001	.138		10th-15th	-1.229	.144	***	-1.804	.159	***	-1.037	.182	***
8th-9th	-.941	.094	***	-.215	.137											
10th-12th	-1.122	.098	***	-.205	.140											
13th-19th	-1.324	.102	***	-.178	.144											
							Women									
2nd	-.308	.067	***	.191	.109	*	2nd	-.224	.058	***	-.584	.052	***	-.185	.091	**
3rd	-.283	.082	***	.418	.121	***	3rd	-.646	.077	***	-1.087	.071	***	.001	.095	
4th	-.622	.083	***	.044	.111		4th	-.458	.079	***	-.628	.068	***	-.157	.111	
5th	-.815	.085	***	.457	.112	***	5th-6th	-.838	.081	***	-1.713	.094	***	-.430	.108	***
6th	-.864	.088	***	.335	.116	***	7th-9th	-1.129	.095	***	-1.800	.102	***	-.561	.119	***
7th	-1.041	.093	***	.265	.118	**	10th-15th	-1.116	.124	***	-2.577	.196	***	-.500	.153	***
8th-9th	-1.035	.091	***	.181	.117											
10th-12th	-1.172	.093	***	.156	.118											
13th-19th	-1.585	.100	***	.141	.120											

Notes: * Significant at the 10% level; ** significant at the 5% level; *** significant at the 1% level.

Table A-21: Estimation Results of the Systematic Part and State Dependence – Men (Without Heterogeneity)

Transition	(u,e)			(e,e)			(e,u)		
Variable	Coeff.	S.E.		Coeff.	S.E.		Coeff.	S.E.	
Time-invariant covariates $\mathbf{x}_{jk}^0$									
Constant	.708	.371	*	-.806	.153	***	-1.424	.160	***
Nationality - Reference: Belgian									
Non-Belgian EU	-.012	.064		.004	.116		.111	.086	
Non EU	-.063	.065		.064	.115		.167	.086	*
Education - Reference: Higher secondary									
Primary school	-.483	.051	***	.002	.090		.443	.072	***
Lower secondary	-.327	.036	***	-.008	.059		.282	.052	***
Higher education	.276	.045	***	.135	.071	*	-.185	.073	**
Other	-.454	.170	***	-.158	.333		.301	.191	
Unknown	.789	.094	***	-.340	.105	***	-2.345	.310	***
Region of residence - Reference: Wallonia									
Flanders	.123	.056	**	.248	.087	***	.120	.083	
Brussels	.031	.046		-.187	.086	**	-.045	.064	
Time-variant spell-specific covariates $\mathbf{x}_{jk}^1$									
Age	-.016	.009	*	-.044	.014	***	-.018	.013	
Household position - Reference: Cohabitant									
Head of household	.387	.265		-.018	.097		.270	.077	***
Single	.009	.077		.110	.063	*	.321	.057	***
Quarter of entry in the spell - Reference: April-May-June									
January-February-March	-.046	.052		.013	.068		.275	.067	***
July-August-September	-.070	.047		.010	.065		.184	.067	***
October-November-December	-.173	.051	***	-.060	.068		.139	.068	**
Firm size - Reference: 500 or more employees									
$[1,20)$ employees	–	–		-.206	.060	***	-.320	.056	***
$[20,50)$ employees	–	–		-.228	.090	**	-.268	.087	***
$[50,100)$ employees	–	–		-.271	.115	**	-.206	.106	*
$[100,500)$ employees	–	–		-.205	.069	***	-.218	.065	***
Sector - Reference: Business services									
Agriculture	–	–		-.621	.177	***	.295	.117	**
Industry & Mining	–	–		-1.074	.085	***	-.640	.081	***
Building & Energy	–	–		-.790	.085	***	-.785	.095	***
Wholesale & Retail trade	–	–		-1.021	.070	***	-.729	.065	***
Credit & Insurance	–	–		-.965	.188	***	-.967	.243	***
Other services & Pub. Adm.	–	–		-1.305	.068	***	-.670	.061	***
Log unemployment benefits	-.928	.275	***	–	–		–	–	
Declining benefits	.566	.392		–	–		–	–	
Time-variant covariates $\mathbf{x}_{jk}^2$									
Local unemployment rate	-1.045	.315	***	.203	.525		.732	.483	
Quarters away of a decline in the unemployment benefit amount									
$UI\ 4$	.020	.353		–	–		–	–	
$UI\ 3$	.102	.186		–	–		–	–	
$UI\ 2$	-.306	.276		–	–		–	–	
$UI\ 1$	.437	.358		–	–		–	–	
Lagged duration and occurrence dependence									
Lagged job tenure	.015	.021		-.059	.021	***	-.194	.034	***
Lagged unemployment duration	–	–		-.047	.009	***	.004	.007	
Previous state: unemployment	–	–		-.121	.082		.142	.098	
Scaling factors – $\ln c_{ue}^1$s normalized to zero									
$\ln c_{ue}^2$	.046	.085		–	–		–	–	
$\ln c_{ue}^3$	.347	.093	***	–	–		–	–	
# of observations	6,627			# of spells			16,447		
# of parameters	173			Log-likelihood			-41,273.0		

Notes: * Significant at the 10% level; ** significant at the 5% level; *** significant at the 1% level.

Table A-22: Continuing Table A-21

Transition	(u,a)			(e,a)		
Variable	Coeff.	S.E.		Coeff.	S.E.	
Time-invariant covariates $\mathbf{x}_{jk}^0$						
Constant	-1.351	.298	***	-2.327	.217	***
Nationality - Reference: Belgian						
Non-Belgian EU	-.081	.090		-.072	.143	
Non EU	-.115	.089		.074	.132	
Education - Reference: Higher secondary						
Primary school	-.294	.069	***	.644	.108	***
Lower secondary	-.213	.051	***	.418	.080	***
Higher education	.205	.067	***	-.201	.109	*
Other	-.292	.206		.253	.367	
Unknown	.444	.128	***	-.482	.165	***
Region of residence - Reference: Wallonia						
Flanders	.192	.077	**	.059	.119	
Brussels	.060	.064		.142	.098	
Time-variant spell-specific covariates $\mathbf{x}_{jk}^1$						
Age	-.028	.013	**	.018	.019	
Household position - Reference: Cohabitant						
Head of household	.056	.190		.135	.128	
Single	.114	.071		.152	.091	*
Quarter of entry in the spell - Reference: April-May-June						
January-February-March	.010	.082		.098	.094	
July-August-September	-.114	.069	*	.074	.092	
October-November-December	.117	.074		.136	.091	
Firm size - Reference: 500 or more employees						
$[1,20)$ employees	–	–		-.081	.079	
$[20,50)$ employees	–	–		-.284	.132	**
$[50,100)$ employees	–	–		-.184	.145	
$[100,500)$ employees	–	–		-.243	.099	**
Sector - Reference: Business services						
Agriculture	–	–		-.156	.206	
Industry & Mining	–	–		-.601	.114	***
Building & Energy	–	–		-.648	.125	***
Wholesale & Retail trade	–	–		-.826	.095	***
Credit & Insurance	–	–		-.593	.268	**
Other services & Pub. Adm.	–	–		-.630	.087	***
Log unemployment benefits	-.385	.193	**	–	–	
Time-variant covariates $\mathbf{x}_{jk}^2$						
Local unemployment rate	-2.021	.443	***	-1.887	.720	***
Lagged duration and occurrence dependence						
Lagged job tenure	.062	.037	*	.000	.029	
Lagged unemployment duration	–	–		.012	.010	
Previous state: unemployment	–	–		.123	.122	

Notes: * Significant at the 10% level; ** significant at the 5% level; *** significant at the 1% level.

Table A-23: Estimation Results of the Systematic Part and State Dependence – Women (Without Heterogeneity)

Transition	(u,e)			(e,e)			(e,u)		
Variable	Coeff.	S.E.		Coeff.	S.E.		Coeff.	S.E.	
Time-invariant covariates $\mathbf{x}_{jk}^0$									
Constant	-.472	.377		-.705	.154	***	-1.216	.146	***
Nationality - Reference: Belgian									
Non-Belgian EU	-.043	.055		-.044	.114		-.023	.097	
Non EU	-.624	.061	***	-.249	.119	**	.065	.091	
Education - Reference: Higher secondary									
Primary school	-.787	.064	***	-.058	.112		.369	.095	***
Lower secondary	-.597	.039	***	-.105	.067		.225	.056	***
Higher education	.555	.036	***	.124	.056	**	-.096	.055	*
Other	-.475	.145	***	.083	.375		.599	.233	**
Unknown	.792	.074	***	-.248	.094	***	-1.608	.207	***
Region of residence - Reference: Wallonia									
Flanders	.360	.048	***	.185	.080	**	-.045	.070	
Brussels	.043	.048		.157	.072	**	-.121	.071	*
Time-variant spell-specific covariates $\mathbf{x}_{jk}^1$									
Age	-.007	.008		-.001	.012		-.031	.012	***
Household position - Reference: Cohabitant									
Head of household	-.560	.263	**	-.143	.092		.148	.074	**
Single	-.051	.081		-.046	.072		-.019	.062	
Quarter of entry in the spell - Reference: April-May-June									
January-February-March	-.195	.053	***	.082	.064		.140	.059	**
July-August-September	-.044	.044		.063	.063		.184	.058	***
October-November-December	-.197	.046	***	-.003	.063		-.010	.061	
Firm size - Reference: 500 or more employees									
$[1,20)$ employees	–	–		-.336	.055	***	-.373	.049	***
$[20,50)$ employees	–	–		-.265	.077	***	-.392	.078	***
$[50,100)$ employees	–	–		-.194	.103	*	-.189	.096	**
$[100,500)$ employees	–	–		-.087	.065		-.263	.061	***
Sector - Reference: Business services									
Agriculture	–	–		.054	.209		.795	.112	***
Industry & Mining	–	–		-1.260	.110	***	-.451	.099	***
Building & Energy	–	–		-1.038	.244	***	-.613	.241	**
Wholesale & Retail trade	–	–		-.988	.064	***	-.581	.058	***
Credit & Insurance	–	–		-1.051	.151	***	-1.251	.212	***
Other services & Pub. Adm.	–	–		-1.155	.051	***	-.600	.047	***
Log unemployment benefits	-.194	.275		–	–		–	–	
Declining benefits	.628	.367	*	–	–		–	–	
Time-variant covariates $\mathbf{x}_{jk}^2$									
Local unemployment rate	-.972	.221	***	-.955	.376	**	.302	.311	
Quarters away of a decline in the unemployment benefit amount[(a)]									
$UI\ 4$	-.409	.335		–	–		–	–	
$UI\ 3$	-.246	.205		–	–		–	–	
$UI\ 2$	-.708	.344	**	–	–		–	–	
$UI\ 1$	1.078	.412	***	–	–		–	–	
Lagged duration and occurrence dependence									
Lagged job tenure	-.014	.016		-.064	.018	***	-.092	.026	***
Lagged unemployment duration	–	–		-.042	.009	***	-.006	.006	
Previous state: unemployment	–	–		-.201	.074	***	.428	.087	***
Scaling factors – $\ln c_{ue}^1$s normalized to zero									
$\ln c_{ue}^2$	.258	.082	***	–	–		–	–	
$\ln c_{ue}^3$	.430	.089	***	–	–		–	–	
# of observations	8,921			# of spells			20,275		
# of parameters	173			Log-likelihood			-51,368.7		

Notes: * Significant at the 10% level; ** significant at the 5% level; *** significant at the 1% level.

Table A-24: Continuing Table A-23

Transition	(u,a)			(e,a)		
Variable	Coeff.	S.E.		Coeff.	S.E.	
Time-invariant covariates $\mathbf{x}_{jk}^0$						
Constant	-2.139	.270	***	-2.615	.217	***
Nationality - Reference: Belgian						
Non-Belgian EU	-.185	.070	***	-.068	.138	
Non EU	-.260	.062	***	-.414	.173	**
Education - Reference: Higher secondary						
Primary school	-.148	.057	***	.552	.145	***
Lower secondary	.068	.039	*	.204	.093	**
Higher education	.326	.051	***	-.144	.084	*
Other	-.377	.183	**	.592	.351	*
Unknown	.673	.119	***	-.940	.180	***
Region of residence - Reference: Wallonia						
Flanders	.235	.059	***	s .168453	.106	
Brussels	.064	.053		.109	.105	
Time-variant spell-specific covariates $\mathbf{x}_{jk}^1$						
Age	-.024	.010	**	.013	.018	
Household position - Reference: Cohabitant						
Head of household	-.068	.164		.079	.132	
Single	.019	.063		.253	.091	***
Quarter of entry in the spell - Reference: April-May-June						
January-February-March	.042	.067		.118	.093	
July-August-September	-.149	.055	***	.182	.091	**
October-November-December	.139	.058	**	-.010	.092	
Firm size - Reference: 500 or more employees						
$[1, 20)$ employees	–	–		-.163	.076	**
$[20, 50)$ employees	–	–		-.403	.125	***
$[50, 100)$ employees	–	–		-.030	.138	
$[100, 500)$ employees	–	–		-.182	.095	*
Sector - Reference: Business services						
Agriculture	–	–		-.113	.379	
Industry & Mining	–	–		-.679	.155	***
Building & Energy	–	–		-1.061	.382	***
Wholesale & Retail trade	–	–		-.449	.091	***
Credit & Insurance	–	–		-.798	.243	***
Other services & Pub. Adm.	–	–		-.415	.077	***
Log unemployment benefits	-.089	.169		–	–	
Time-variant covariates $\mathbf{x}_{jk}^2$						
Local unemployment rate	-1.054	.260	***	-.512	.498	
Lagged duration and occurrence dependence						
Lagged job tenure	.062	.037	*	.030	.030	
Lagged unemployment duration	–	–		.010	.011	
Previous state: unemployment	–	–		-.006	.121	

Notes: * Significant at the 10% level; ** significant at the 5% level; *** significant at the 1% level.

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