

# Web-Appendix:

## On the Demographic Adjustment of Unemployment <sup>\*</sup>

Regis Barnichon<sup>†</sup> and Geert Mesters<sup>‡</sup>

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### Abstract

In this web-appendix we present additional details for the empirical study in Barnichon & Mesters (2017). In particular, we discuss the construction of the worker transition rates and various ways to study the potential classification error in these transition rates. Finally, we show tables that describe the information from figures 4-8 in Barnichon & Mesters (2017).

*JEL classification:* J6, E24

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<sup>\*†</sup> Regis Barnichon: San Francisco Fed, CREI, Universitat Pompeu Fabra and CEPR, email: rbar-nichon@crei.cat. Barnichon acknowledges financial support from the Spanish Ministerio de Economía y Competitividad (grant ECO2011-23188), the Generalitat de Catalunya (grant 2009SGR1157) and the Barcelona GSE Research Network. <sup>‡</sup> Geert Mesters: Universitat Pompeu Fabra and Barcelona GSE, email: geert.mesters@upf.edu. Mesters acknowledges support from the Marie Curie FP7-PEOPLE-2012-COFUND Action. Grant agreement no: 600387. The views expressed in this paper are those of the authors and do not necessarily reflect those of the Federal Reserve Banks of San Francisco or the Federal Reserve System. Any errors are our own.

# 1 Introduction

In this web-appendix we present additional details for the empirical study in Barnichon & Mesters (2017). In particular, we discuss the construction of the worker transition rates and various ways to study the potential classification error in these transition rates.

## 2 Construction of worker transition rates

This appendix describes our procedure to construct time series for the six hazard rates of each demographic group. Since the procedure is identical for each group, we omit demographic subscript for clarity of exposition.

After matching the CPS micro files over consecutive months, we can construct monthly transition probabilities for the six flows. We then operate three corrections to these transition probabilities. First, we correct the transition probabilities for 1994 CPS redesign, then for time-aggregation bias following Shimer (2012) and Elsby, Hobijn & ahin (2015), and finally we correct for margin error following Poterba & Summers (1986).<sup>1</sup> We do not correct for classification error in our baseline specification (given the absence of a preferred correction method), but in the next section we explore the sensitivity of our results to using a classification error correction procedure.

As shown by Abraham and Shimer (2001), the 1994 redesign of the CPS (see e.g., Polivka & Miller (1998)) caused a discontinuity in some of the transition probabilities in the first month of 1994. To adjust the series for the redesign, we proceed as follows. We start from the monthly transition probabilities obtained from matched data for each demographic group, and we take the post-redesign transition probabilities as the correct ones. The goal is then to correct the pre-94 value for the redesign. To do so, we estimate a VAR with the six hazard transition probabilities in logs estimated over 1994m1-2010m12, and we use the model to back-cast the 1993m12 transition probabilities.<sup>2</sup> With these 1993m12 values in hand, we obtain corrected transition probabilities over 1976m2-1993m12 by adding to the original probability series the difference between the original value in 1993m12 and the

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<sup>1</sup>The correction for margin error restricts the estimates of worker flows to be consistent with the evolution of the corresponding labor market stocks.

<sup>2</sup>The number of lags were chosen to maximize out-of-sample forecasting performances. A similar VAR is used in Barnichon & Nekarda (2012) to forecast the six flow rates.

inferred 1993m12 value.

By eliminating the jumps in the transition probabilities in 1993m12, we are assuming that the discontinuities were solely caused by the CPS redesign. Thus, the validity of our approach rests on the fact that 1994m1 was not a month with large “genuine” shocks to the transition probabilities. Reassuringly, looking at other dataset that were not affected by the CPS redesign shows indeed no major discontinuity in 1994m1. First, the unemployment exit rate and unemployment entry rate computed from unemployment duration data, which were not affected by the CPS redesign (Shimer (2012) and Solon, Michaels & Elsby (2009), show no major discontinuity in 1994m1.<sup>3</sup> Second, the employment-population ratio computed with data from the Census Employment Survey (which was unaffected by the CPS redesign) shows no evidence of any discontinuity in 1994m1 (Abraham and Shimer, 2001).

### 3 Adjustments for classification error

As emphasized by Abowd & Zellner (1985), Poterba & Summers (1986) and more recently Elsby et al. (2015), gross worker flows are sensitive to classification error in the observed labor market states, since classification errors can lead to spurious transitions and thus errors in the measured transition rates. Since our demographic-adjustment procedure is based on worker flows, it is important to assess the sensitivity of our conclusions to classification error. In this section, we consider the effect of adding a classification error adjustment step in our demographic-adjustment procedure. Specifically, when constructing the worker flows from micro data, we include a classification error correction step in conjunction with our margin error adjustment.

The literature has come up with three main approaches to correct for classification errors: (i) relying on re-interview surveys to measure the classification error rate (Abowd & Zellner (1985), Poterba & Summers (1986)), (ii) recoding the back-and-forth transitions between N and U (Elsby et al. (2015)), and (iii) using a general measurement error approach (Feng & Hu (2013)).

We subsequently follow Elsby et al. (2015) and consider the effects of using methods (i)

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<sup>3</sup>Specifically, Shimer (2012) and Solon et al. (2009) use data from the first and fifth rotation group, for which the unemployment duration measure (and thus their transition probability measures) was unaffected by the redesign.

and (ii). While (iii) is arguably superior to (i) and (ii), the procedure is too demanding in terms of data availability for correcting worker flows disaggregated by demographic groups.<sup>4</sup>

### Abowd and Zellner (AZ) correction

Using data from a sub-sample of the individuals in the CPS that were re-interviewed one month after the initial survey,<sup>5</sup> Abowd & Zellner (1985) and Poterba & Summers (1986) estimated the classification error matrix  $\mathbf{E}$  that contains the probability that an individual with true labor market state  $i$  is recorded as being in state  $j$ . Denoting  $\hat{E}, \hat{U}$  and  $\hat{N}$  the measured number of employed, unemployed and nonparticipants, and  $E, U$  and  $N$  their true counterparts, they posit that

$$\begin{pmatrix} \hat{E} \\ \hat{U} \\ \hat{N} \end{pmatrix}_t = \underbrace{\begin{pmatrix} 1 - \varepsilon_{EU} - \varepsilon_{EN} & \varepsilon_{UE} & \varepsilon_{NE} \\ \varepsilon_{EU} & 1 - \varepsilon_{UE} - \varepsilon_{UN} & \varepsilon_{NU} \\ \varepsilon_{EN} & \varepsilon_{UN} & 1 - \varepsilon_{NE} - \varepsilon_{NU} \end{pmatrix}}_{\mathbf{E}} \begin{pmatrix} E \\ U \\ N \end{pmatrix}_t.$$

Then, with the matrix of the true number of workers transiting from state  $A$  to  $B$  in  $\{E, U, N\}$  in month  $t$  given by

$$\mathbf{N}_t = \begin{bmatrix} EE & UE & NE \\ EU & UU & NU \\ EN & UN & NN \end{bmatrix}_t,$$

the measured flows  $\hat{\mathbf{N}}_t$  satisfy  $\hat{\mathbf{N}}_t = \mathbf{E}\mathbf{N}_t\mathbf{E}'$ , so that one can infer the matrix of corrected flows from

$$\mathbf{N}_t = \mathbf{E}^{-1}\hat{\mathbf{N}}_t(\mathbf{E}^{-1})'.$$

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<sup>4</sup> Although Feng and Hu's method focuses on the measurement of stocks (e.g., unemployment rate and participation rate), it can be extended to the measurement of flows. Unfortunately, the approach then becomes very demanding in terms of transition data –requiring notably information on worker transitions over 8 month intervals–, which make its implementation difficult with CPS worker flow data disaggregated in 11 demographic groups.

<sup>5</sup>The re-interview survey only covers December 1976 through December 1982.

## DeNUNification

The AZ correction method makes the strong assumption that the classification error matrix is time invariant and is the same today as it was 35 years ago. We thus consider an alternative procedure from Elsby et al. (2015) that does not make this assumption.

Elsby et al. propose to recode the individuals that alternate between unemployment and non-participation. Specifically, drawing on Abowd and Zellner’s insight that the bulk of misclassification error occurs between unemployment and non-participation, their approach identifies individuals whose measured labor market state cycles between unemployment and nonparticipation from month to month. By using the panel dimension of the CPS, it is possible to follow an individual for four consecutive months and observe transitions that involve such cycles; in particular, the reversal of a transition from U to N or from N to U. The procedure of Elsby et al. (2015) then consists of “deNUNifying” the worker flows, by recoding suspicious labor market states in order to eliminate cycles between U and N. <sup>6</sup>

## Results

As a preliminary step, Figure A1 plots the unemployment rates obtained with the different classification error correction methods (before any demographic adjustment) and contrasts it with the published unemployment rate. As previously found by Elsby et al. (2015), the AZ correction method induces a modest adjustment of the level of the unemployment rate, while the deNUNification procedure leaves the unemployment rate basically unchanged. Note also that the cyclical or low-frequency fluctuations are little affected by the correction procedures.

Next, Figure A2 plots the demographic-adjusted unemployment rate for (i) our baseline demographic-adjustment without classification error correction (the case presented in the paper), (ii) a demographic-adjustment procedure that incorporates an AZ correction step, and (iii) a demographic-adjustment procedure that includes a deNUNification step. To put into perspective the effects of the classification error procedures, Figure A2 also shows the actual unemployment rate. In Figure A2, all the unemployment rates are demeaned to ease comparability across the different correction methods. We can see that the classification error

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<sup>6</sup>Specifically, the procedure recodes the following sequence of four months transitions: NNUN as NNNN, NUNN as NNNN, ENUN as ENNN, .NUN as .NNN, NUN. as NNN., UUNU as UUUU, UNUU as UUUU, EUNU as EUUU, UNUE as UUUE, .UNU as .UUU and UNU. as UUU., where a “.” denote a missing observation.

methods have little effect on our demographic-adjusted unemployment rate. The reason is that while spurious transitions can affect the level of the flows, they have overall little effect on their low-frequency movements, and as a result our procedure identifies the same slow-moving group changes regardless of whether we correct for classification error or not.

## 4 Tables from Barnichon & Mesters (2017)

In Tables 1-6 show the numbers for the figures 4-8 in Barnichon & Mesters (2017). All details for their construction are discussed in Barnichon & Mesters (2017).

## References

- Abowd, J. M. & Zellner, A. (1985), ‘Estimating gross labor-force flows’, *Journal of Business and Economic Statistics* **3**, 254–283.
- Barnichon, R. & Mesters, G. (2017), ‘On the demographic adjustment of unemployment’. Working paper.
- Barnichon, R. & Nekarda, C. (2012), ‘The ins and outs of forecasting unemployment: Using labor force flows to forecast the labor market’, *Brookings Papers on Economic Activity* .
- Elsby, M. W., Hobijn, B. & ahin, A. (2015), ‘On the importance of the participation margin for labor market fluctuations’, *Journal of Monetary Economics* **72**, 64 – 82.
- Feng, S. & Hu, Y. (2013), ‘Misclassification Errors and the Underestimation of the US Unemployment Rate’, *American Economic Review* **103**, 1054–1070.
- Polivka, A. & Miller, S. (1998), The CPS After the Redesign: Refocusing the Economic Lens, *in* J. Haltiwanger, M. Manser & R. Topel, eds, ‘Labor Statistics and Measurement Issues’, University of Chicago Press, Chicago.
- Poterba, J. M. & Summers, L. H. (1986), ‘Reporting Errors and Labor Market Dynamics’, *Econometrica* **54**(6), 1319–38.

Shimer, R. (2012), 'Reassessing the Ins and Outs of Unemployment', *Review of Economic Dynamics* **15**, 127–148.

Solon, G., Michaels, R. & Elsby, M. W. L. (2009), 'The Ins and Outs of Cyclical Unemployment', *American Economic Journal: Macroeconomics* **1**(1), 84–110.

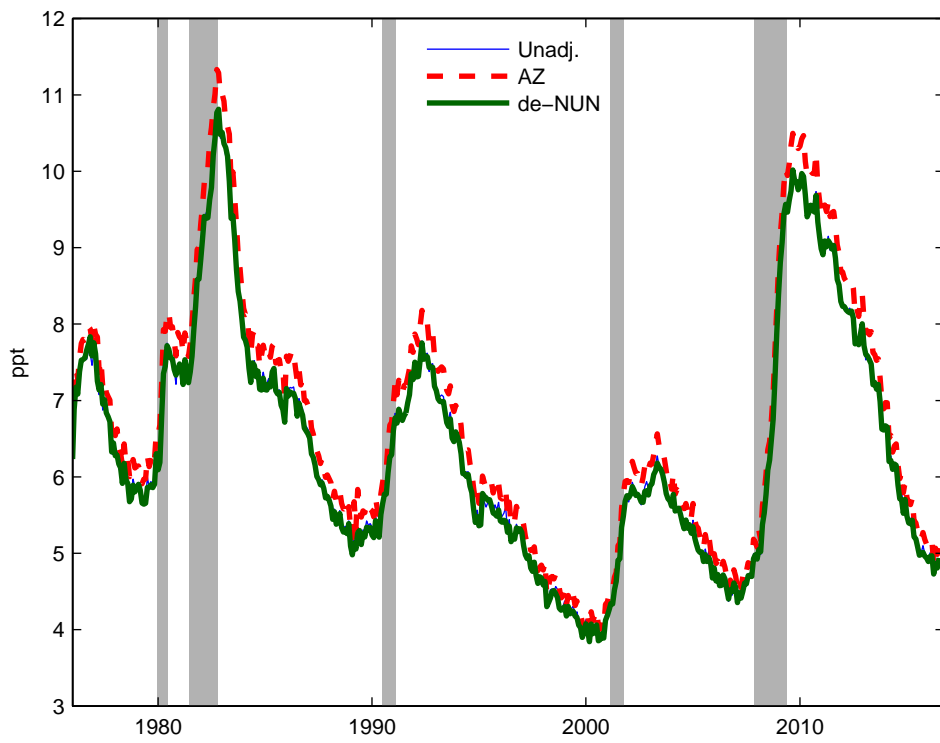


Figure 1: Unemployment rate: unadjusted and adjusted for spurious transitions.



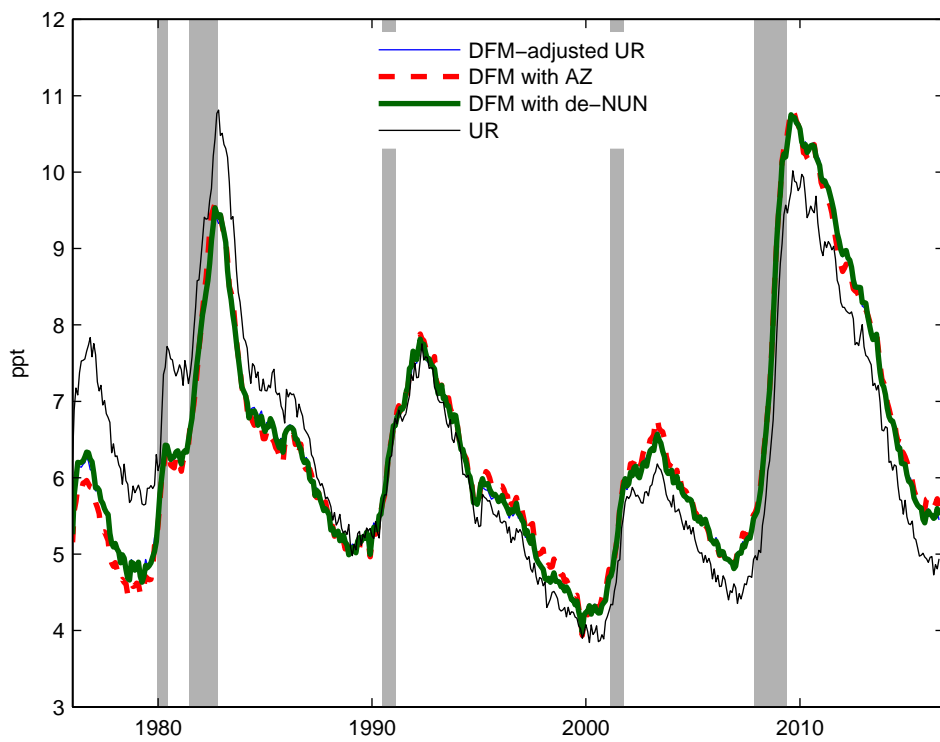


Figure 2: Demographic-adjusted unemployment rate: unadjusted and adjusted for spurious transitions.

Table 1: FIGURE 4 IN BARNICHON &amp; MESTERS (2017)

date	ur	ur_dfm	ur_lfs	date	ur	ur_dfm	ur_lfs	date	ur	ur_dfm	ur_lfs
1976Q1	6.809	5.7047	6.2472	1976Q2	7.3578	6.1964	6.7435	1976Q3	7.5564	6.2518	6.9441
1976Q4	7.5847	6.1752	6.9615	1977Q1	7.4167	5.9259	6.82	1977Q2	7.0573	5.7335	6.4506
1977Q3	6.8141	5.5432	6.2213	1977Q4	6.4722	5.2164	5.9186	1978Q1	6.2378	5.092	5.6424
1978Q2	6.0284	4.9868	5.4756	1978Q3	5.9009	4.8193	5.3435	1978Q4	5.8774	4.892	5.327
1979Q1	5.8442	4.8545	5.3064	1979Q2	5.7389	4.8328	5.1905	1979Q3	5.8962	4.9323	5.3425
1979Q4	6.0196	5.2101	5.4522	1980Q1	6.5659	5.8386	5.967	1980Q2	7.5482	6.3511	6.853
1980Q3	7.5972	6.293	6.9188	1980Q4	7.3768	6.3157	6.7227	1981Q1	7.377	6.2996	6.7156
1981Q2	7.3543	6.4716	6.6999	1981Q3	7.6498	6.9116	7.0008	1981Q4	8.4684	7.5629	7.7867
1982Q1	9.0935	8.1335	8.3963	1982Q2	9.5634	8.7003	8.8612	1982Q3	10.1815	9.2927	9.4635
1982Q4	10.644	9.4117	9.9337	1983Q1	10.3366	9.1625	9.6753	1983Q2	9.8484	8.5807	9.2378
1983Q3	9.1233	8.0369	8.5431	1983Q4	8.2668	7.4404	7.7576	1984Q1	7.7501	7.115	7.2755
1984Q2	7.4283	6.9347	7.0032	1984Q3	7.3808	6.8883	6.9877	1984Q4	7.2654	6.836	6.8766
1985Q1	7.2558	6.7386	6.883	1985Q2	7.2894	6.7407	6.9191	1985Q3	7.1436	6.5689	6.774
1985Q4	6.9467	6.5261	6.5958	1986Q1	7.1266	6.7098	6.777	1986Q2	7.1134	6.6712	6.7766
1986Q3	6.9535	6.4943	6.6261	1986Q4	6.7423	6.3062	6.414	1987Q1	6.5135	6.1113	6.2204
1987Q2	6.1772	5.9138	5.9201	1987Q3	5.9572	5.7663	5.7329	1987Q4	5.7931	5.6244	5.5807
1988Q1	5.6296	5.4487	5.4325	1988Q2	5.4875	5.3134	5.3004	1988Q3	5.4272	5.2674	5.2513
1988Q4	5.3354	5.1669	5.1952	1989Q1	5.1585	5.1172	5.0318	1989Q2	5.2349	5.1836	5.098
1989Q3	5.2866	5.2598	5.164	1989Q4	5.3778	5.2375	5.2742	1990Q1	5.3548	5.3646	5.2179
1990Q2	5.4028	5.5106	5.2661	1990Q3	5.7738	5.8731	5.6523	1990Q4	6.2654	6.3982	6.144
1991Q1	6.7245	6.7237	6.6102	1991Q2	6.8394	6.8968	6.7482	1991Q3	6.8782	7.0826	6.7912
1991Q4	7.2259	7.445	7.1466	1992Q1	7.431	7.6282	7.3799	1992Q2	7.646	7.7387	7.611
1992Q3	7.5537	7.5968	7.5106	1992Q4	7.3694	7.4571	7.3196	1993Q1	7.0905	7.1944	7.0667
1993Q2	6.99	7.1047	6.9733	1993Q3	6.7842	6.9587	6.7856	1993Q4	6.6047	6.8069	6.6169
1994Q1	6.4524	6.5272	6.4852	1994Q2	6.093	6.2809	6.1289	1994Q3	5.9021	5.9992	5.9398
1994Q4	5.5361	5.7201	5.5806	1995Q1	5.5294	5.8118	5.576	1995Q2	5.6597	5.8823	5.7109
1995Q3	5.6356	5.7913	5.706	1995Q4	5.599	5.7724	5.6937	1996Q1	5.5276	5.7562	5.6333
1996Q2	5.411	5.5921	5.5238	1996Q3	5.2336	5.5643	5.3333	1996Q4	5.3167	5.5514	5.4137
1997Q1	5.1443	5.3929	5.2519	1997Q2	4.928	5.2365	5.046	1997Q3	4.8076	5.0784	4.9289
1997Q4	4.6484	4.8832	4.7503	1998Q1	4.5526	4.7743	4.6521	1998Q2	4.4799	4.7045	4.5882
1998Q3	4.5244	4.7283	4.6422	1998Q4	4.3438	4.6347	4.4602	1999Q1	4.2744	4.5562	4.3924
1999Q2	4.2602	4.4623	4.3757	1999Q3	4.1886	4.3726	4.3042	1999Q4	4.0472	4.1685	4.1638
2000Q1	4.033	4.294	4.1584	2000Q2	4.0299	4.3341	4.148	2000Q3	3.9742	4.2856	4.0936
2000Q4	4.0076	4.4194	4.1342	2001Q1	4.2955	4.6818	4.4376	2001Q2	4.5139	4.9608	4.6739
2001Q3	5.0592	5.5386	5.2294	2001Q4	5.6235	5.9117	5.8169	2002Q1	5.802	6.0586	6.0023
2002Q2	5.8107	6.1397	6.0029	2002Q3	5.7146	6.1488	5.9181	2002Q4	5.8724	6.2993	6.0899
2003Q1	5.9569	6.4359	6.185	2003Q2	6.1713	6.5735	6.4314	2003Q3	6.0277	6.4097	6.2871
2003Q4	5.7464	6.1508	5.9907	2004Q1	5.6543	6.046	5.8857	2004Q2	5.5422	5.9717	5.7766
2004Q3	5.4038	5.84	5.6448	2004Q4	5.3592	5.7538	5.606	2005Q1	5.2577	5.5841	5.5219
2005Q2	5.0276	5.5024	5.2785	2005Q3	4.9694	5.4629	5.2123	2005Q4	4.8687	5.2792	5.1108
2006Q1	4.7227	5.2064	4.9751	2006Q2	4.6583	5.0758	4.9014	2006Q3	4.536	4.9658	4.7909
2006Q4	4.5064	4.9009	4.7585	2007Q1	4.4899	5.0117	4.7362	2007Q2	4.5427	5.1571	4.8094
2007Q3	4.6731	5.2538	4.9565	2007Q4	4.8748	5.4581	5.1767	2008Q1	5.0348	5.7687	5.3502
2008Q2	5.5647	6.3934	5.9123	2008Q3	6.2382	7.2493	6.6122	2008Q4	7.3192	8.6232	7.7369
2009Q1	8.6884	9.7641	9.1644	2009Q2	9.4356	10.3295	9.9549	2009Q3	9.7748	10.7234	10.3479
2009Q4	9.8426	10.7304	10.4339	2010Q1	9.8521	10.4785	10.4258	2010Q2	9.5433	10.3624	10.0914
2010Q3	9.5071	10.4	10.03	2010Q4	9.3712	10.2519	9.899	2011Q1	9.0313	9.9846	9.547
2011Q2	9.0575	9.8188	9.5585	2011Q3	8.94	9.5286	9.4261	2011Q4	8.4832	9.1107	8.9701
2012Q1	8.2182	8.9698	8.6892	2012Q2	8.1739	8.874	8.6228	2012Q3	7.8941	8.5996	8.3589
2012Q4	7.8573	8.4246	8.3202	2013Q1	7.6237	8.2018	8.0955	2013Q2	7.4402	7.9685	7.9168
2013Q3	7.209	7.7957	7.6568	2013Q4	6.7938	7.3245	7.2209	2014Q1	6.5123	7.0016	6.9445
2014Q2	6.1713	6.7338	6.5774	2014Q3	5.9438	6.4626	6.3549	2014Q4	5.681	6.2564	6.0578
2015Q1	5.4937	6.0661	5.8734	2015Q2	5.3014	5.8222	5.6786	2015Q3	5.0592	5.6612	5.4149
2015Q4	5.0062	5.5572	5.3747	2016Q1	4.9494	5.5648	5.2784	2016Q2	4.8456	5.5335	5.1785

The table reports the unemployment rate, the dfm-adjusted unemployment rate and the lfs adjusted unemployment rate. The table is graphically displayed in Figure 4.

Table 2: FIGURE 5 IN BARNICHON & MESTERS (2017)

date	pop	dfm	lfs	date	pop	dfm	lfs	date	pop	dfm	lfs
1976Q1	0.4427	1.3563	0.6924	1976Q2	0.4417	1.3348	0.6861	1976Q3	0.4408	1.3134	0.6797
1976Q4	0.4398	1.2919	0.6733	1977Q1	0.4388	1.2704	0.6669	1977Q2	0.4377	1.2489	0.6605
1977Q3	0.4365	1.2274	0.6541	1977Q4	0.4352	1.2058	0.6476	1978Q1	0.4336	1.1842	0.6411
1978Q2	0.4319	1.1626	0.6346	1978Q3	0.43	1.141	0.628	1978Q4	0.4277	1.1193	0.6213
1979Q1	0.4251	1.0976	0.6146	1979Q2	0.4222	1.0759	0.6077	1979Q3	0.4189	1.0542	0.6008
1979Q4	0.4151	1.0324	0.5937	1980Q1	0.4109	1.0105	0.5865	1980Q2	0.4062	0.9886	0.5791
1980Q3	0.401	0.9666	0.5715	1980Q4	0.3953	0.9444	0.5638	1981Q1	0.389	0.9222	0.5558
1981Q2	0.3822	0.8998	0.5476	1981Q3	0.3749	0.8773	0.5392	1981Q4	0.3671	0.8547	0.5305
1982Q1	0.3587	0.8319	0.5216	1982Q2	0.3499	0.809	0.5125	1982Q3	0.3407	0.786	0.5031
1982Q4	0.331	0.7627	0.4934	1983Q1	0.321	0.7393	0.4835	1983Q2	0.3106	0.7158	0.4734
1983Q3	0.3	0.6921	0.463	1983Q4	0.2891	0.6683	0.4524	1984Q1	0.2781	0.6444	0.4416
1984Q2	0.2669	0.6204	0.4307	1984Q3	0.2556	0.5964	0.4196	1984Q4	0.2442	0.5724	0.4083
1985Q1	0.2328	0.5484	0.3969	1985Q2	0.2215	0.5244	0.3854	1985Q3	0.2103	0.5005	0.3738
1985Q4	0.1991	0.4767	0.3621	1986Q1	0.1881	0.453	0.3503	1986Q2	0.1773	0.4295	0.3385
1986Q3	0.1667	0.4061	0.3266	1986Q4	0.1563	0.3829	0.3147	1987Q1	0.1462	0.3599	0.3028
1987Q2	0.1363	0.3371	0.2909	1987Q3	0.1267	0.3146	0.279	1987Q4	0.1174	0.2924	0.2672
1988Q1	0.1085	0.2705	0.2554	1988Q2	0.0999	0.2489	0.2437	1988Q3	0.0916	0.2277	0.2321
1988Q4	0.0837	0.2068	0.2205	1989Q1	0.0762	0.1863	0.2091	1989Q2	0.069	0.1663	0.1977
1989Q3	0.0621	0.1466	0.1864	1989Q4	0.0554	0.1273	0.1753	1990Q1	0.0489	0.1085	0.1643
1990Q2	0.0424	0.0902	0.1534	1990Q3	0.0359	0.0723	0.1427	1990Q4	0.0293	0.0548	0.1321
1991Q1	0.0227	0.0378	0.1216	1991Q2	0.0159	0.0213	0.1113	1991Q3	0.009	0.0053	0.1011
1991Q4	0.0019	-0.0103	0.0911	1992Q1	-0.0052	-0.0255	0.0812	1992Q2	-0.0125	-0.0402	0.0715
1992Q3	-0.0198	-0.0545	0.0619	1992Q4	-0.0271	-0.0683	0.0525	1993Q1	-0.0344	-0.0818	0.0432
1993Q2	-0.0418	-0.0948	0.0341	1993Q3	-0.049	-0.1075	0.0251	1993Q4	-0.0562	-0.1198	0.0163
1994Q1	-0.0633	-0.1317	0.0077	1994Q2	-0.0703	-0.1433	-0.0008	1994Q3	-0.0771	-0.1546	-0.0091
1994Q4	-0.0838	-0.1656	-0.0173	1995Q1	-0.0903	-0.1763	-0.0253	1995Q2	-0.0966	-0.1867	-0.0332
1995Q3	-0.1026	-0.1969	-0.041	1995Q4	-0.1084	-0.2068	-0.0486	1996Q1	-0.1139	-0.2165	-0.056
1996Q2	-0.1191	-0.226	-0.0633	1996Q3	-0.124	-0.2353	-0.0705	1996Q4	-0.1286	-0.2444	-0.0776
1997Q1	-0.1329	-0.2533	-0.0846	1997Q2	-0.137	-0.2621	-0.0915	1997Q3	-0.1408	-0.2708	-0.0982
1997Q4	-0.1444	-0.2794	-0.1049	1998Q1	-0.1477	-0.2879	-0.1115	1998Q2	-0.1509	-0.2963	-0.118
1998Q3	-0.1539	-0.3047	-0.1245	1998Q4	-0.1567	-0.313	-0.1309	1999Q1	-0.1594	-0.3213	-0.1372
1999Q2	-0.162	-0.3296	-0.1435	1999Q3	-0.1644	-0.3379	-0.1498	1999Q4	-0.1668	-0.3461	-0.156
2000Q1	-0.1691	-0.3544	-0.1623	2000Q2	-0.1712	-0.3627	-0.1685	2000Q3	-0.1732	-0.3711	-0.1746
2000Q4	-0.175	-0.3794	-0.1808	2001Q1	-0.1767	-0.3878	-0.187	2001Q2	-0.1783	-0.3962	-0.1932
2001Q3	-0.1798	-0.4046	-0.1994	2001Q4	-0.1812	-0.4131	-0.2055	2002Q1	-0.1825	-0.4216	-0.2117
2002Q2	-0.1837	-0.4301	-0.2179	2002Q3	-0.1849	-0.4386	-0.2241	2002Q4	-0.1861	-0.4472	-0.2303
2003Q1	-0.1872	-0.4558	-0.2364	2003Q2	-0.1883	-0.4644	-0.2426	2003Q3	-0.1895	-0.4731	-0.2488
2003Q4	-0.1907	-0.4817	-0.255	2004Q1	-0.1919	-0.4904	-0.2612	2004Q2	-0.1931	-0.499	-0.2674
2004Q3	-0.1944	-0.5076	-0.2736	2004Q4	-0.1957	-0.5163	-0.2798	2005Q1	-0.1971	-0.5248	-0.2859
2005Q2	-0.1985	-0.5334	-0.2921	2005Q3	-0.1998	-0.5419	-0.2983	2005Q4	-0.2012	-0.5503	-0.3044
2006Q1	-0.2025	-0.5586	-0.3105	2006Q2	-0.2038	-0.5668	-0.3166	2006Q3	-0.205	-0.5749	-0.3227
2006Q4	-0.2061	-0.5828	-0.3287	2007Q1	-0.2072	-0.5905	-0.3347	2007Q2	-0.2082	-0.598	-0.3406
2007Q3	-0.209	-0.6053	-0.3465	2007Q4	-0.2098	-0.6123	-0.3522	2008Q1	-0.2104	-0.6189	-0.3579
2008Q2	-0.211	-0.6253	-0.3635	2008Q3	-0.2113	-0.6313	-0.3689	2008Q4	-0.2116	-0.6369	-0.3742
2009Q1	-0.2117	-0.6421	-0.3794	2009Q2	-0.2116	-0.6468	-0.3844	2009Q3	-0.2114	-0.6512	-0.3891
2009Q4	-0.2111	-0.6551	-0.3938	2010Q1	-0.2107	-0.6586	-0.3981	2010Q2	-0.2102	-0.6618	-0.4023
2010Q3	-0.2097	-0.6645	-0.4063	2010Q4	-0.2091	-0.6669	-0.4101	2011Q1	-0.2086	-0.6689	-0.4137
2011Q2	-0.208	-0.6705	-0.417	2011Q3	-0.2076	-0.6719	-0.4202	2011Q4	-0.2072	-0.6729	-0.4232
2012Q1	-0.2069	-0.6737	-0.426	2012Q2	-0.2068	-0.6743	-0.4287	2012Q3	-0.2068	-0.6746	-0.4311
2012Q4	-0.207	-0.6748	-0.4335	2013Q1	-0.2073	-0.6748	-0.4357	2013Q2	-0.2078	-0.6746	-0.4377
2013Q3	-0.2085	-0.6744	-0.4397	2013Q4	-0.2093	-0.674	-0.4415	2014Q1	-0.2103	-0.6736	-0.4433
2014Q2	-0.2114	-0.6731	-0.445	2014Q3	-0.2126	-0.6726	-0.4466	2014Q4	-0.2139	-0.672	-0.4481
2015Q1	-0.2153	-0.6714	-0.4497	2015Q2	-0.2168	-0.6708	-0.4512	2015Q3	-0.2184	-0.6702	-0.4526
2015Q4	-0.2199	-0.6696	-0.4541	2016Q1	-0.2215	-0.669	-0.4555	2016Q2	-0.2231	-0.6684	-0.457

The table reports the Population aging (pop), Demographics from DFM (dfm), Demographics from LFSS (lfs) results from Figure 5.

Table 3: BOTTOM PANELS FIGURES 6-7 IN BARNICHON & MESTERS (2017)

date	female	young	date	female	young	date	female	young
1976Q1	1.589	1.3779	1976Q2	1.5747	1.3455	1976Q3	1.5603	1.3131
1976Q4	1.5459	1.2807	1977Q1	1.5312	1.2481	1977Q2	1.5162	1.2153
1977Q3	1.5009	1.1824	1977Q4	1.4852	1.1493	1978Q1	1.469	1.116
1978Q2	1.4522	1.0827	1978Q3	1.4349	1.0492	1978Q4	1.417	1.0157
1979Q1	1.3985	0.9822	1979Q2	1.3792	0.9488	1979Q3	1.3591	0.9155
1979Q4	1.3381	0.8825	1980Q1	1.3162	0.8497	1980Q2	1.2932	0.8172
1980Q3	1.269	0.7851	1980Q4	1.2436	0.7534	1981Q1	1.2169	0.7221
1981Q2	1.1888	0.6913	1981Q3	1.1594	0.661	1981Q4	1.1285	0.6312
1982Q1	1.0962	0.602	1982Q2	1.0627	0.5734	1982Q3	1.0278	0.5454
1982Q4	0.9918	0.5179	1983Q1	0.9548	0.4909	1983Q2	0.9167	0.4644
1983Q3	0.8778	0.4384	1983Q4	0.8383	0.4128	1984Q1	0.7983	0.3876
1984Q2	0.758	0.3628	1984Q3	0.7176	0.3383	1984Q4	0.6772	0.3142
1985Q1	0.6369	0.2903	1985Q2	0.5969	0.2665	1985Q3	0.5571	0.243
1985Q4	0.5176	0.2197	1986Q1	0.4785	0.1966	1986Q2	0.4398	0.1737
1986Q3	0.4015	0.1511	1986Q4	0.3637	0.1288	1987Q1	0.3265	0.1069
1987Q2	0.2899	0.0853	1987Q3	0.254	0.0641	1987Q4	0.219	0.0435
1988Q1	0.1849	0.0233	1988Q2	0.1517	0.0036	1988Q3	0.1196	-0.0156
1988Q4	0.0886	-0.0341	1989Q1	0.0589	-0.0522	1989Q2	0.0304	-0.0696
1989Q3	0.0033	-0.0863	1989Q4	-0.0222	-0.1024	1990Q1	-0.0462	-0.1178
1990Q2	-0.0683	-0.1325	1990Q3	-0.0885	-0.1464	1990Q4	-0.1067	-0.1594
1991Q1	-0.1229	-0.1715	1991Q2	-0.137	-0.1828	1991Q3	-0.149	-0.193
1991Q4	-0.1589	-0.2024	1992Q1	-0.1668	-0.2107	1992Q2	-0.1726	-0.2181
1992Q3	-0.1765	-0.2246	1992Q4	-0.1785	-0.2302	1993Q1	-0.1787	-0.235
1993Q2	-0.1772	-0.239	1993Q3	-0.1741	-0.2424	1993Q4	-0.1695	-0.2452
1994Q1	-0.1637	-0.2475	1994Q2	-0.1567	-0.2492	1994Q3	-0.1489	-0.2505
1994Q4	-0.1404	-0.2514	1995Q1	-0.1315	-0.2518	1995Q2	-0.1225	-0.2519
1995Q3	-0.1135	-0.2515	1995Q4	-0.1049	-0.2508	1996Q1	-0.0969	-0.2498
1996Q2	-0.0897	-0.2484	1996Q3	-0.0833	-0.2468	1996Q4	-0.0779	-0.2449
1997Q1	-0.0737	-0.243	1997Q2	-0.0706	-0.2409	1997Q3	-0.0688	-0.2389
1997Q4	-0.0683	-0.2369	1998Q1	-0.0691	-0.2349	1998Q2	-0.0712	-0.2331
1998Q3	-0.0747	-0.2315	1998Q4	-0.0795	-0.2301	1999Q1	-0.0855	-0.2289
1999Q2	-0.0929	-0.2279	1999Q3	-0.1014	-0.2272	1999Q4	-0.111	-0.2268
2000Q1	-0.1217	-0.2266	2000Q2	-0.1333	-0.2267	2000Q3	-0.1456	-0.2271
2000Q4	-0.1585	-0.2279	2001Q1	-0.1717	-0.2289	2001Q2	-0.1853	-0.2303
2001Q3	-0.199	-0.2321	2001Q4	-0.2127	-0.2343	2002Q1	-0.2263	-0.2369
2002Q2	-0.2398	-0.24	2002Q3	-0.253	-0.2435	2002Q4	-0.2658	-0.2475
2003Q1	-0.2781	-0.2518	2003Q2	-0.29	-0.2566	2003Q3	-0.3013	-0.2618
2003Q4	-0.3121	-0.2674	2004Q1	-0.3223	-0.2734	2004Q2	-0.332	-0.2798
2004Q3	-0.3412	-0.2867	2004Q4	-0.35	-0.294	2005Q1	-0.3583	-0.3017
2005Q2	-0.3663	-0.3098	2005Q3	-0.3739	-0.3182	2005Q4	-0.3811	-0.327
2006Q1	-0.3879	-0.336	2006Q2	-0.3943	-0.3452	2006Q3	-0.4004	-0.3545
2006Q4	-0.4061	-0.3638	2007Q1	-0.4115	-0.3728	2007Q2	-0.4165	-0.3815
2007Q3	-0.4212	-0.3897	2007Q4	-0.4255	-0.3972	2008Q1	-0.4294	-0.4039
2008Q2	-0.4328	-0.4097	2008Q3	-0.4357	-0.4143	2008Q4	-0.4382	-0.4177
2009Q1	-0.4401	-0.4199	2009Q2	-0.4416	-0.4207	2009Q3	-0.4428	-0.4201
2009Q4	-0.4437	-0.4183	2010Q1	-0.4445	-0.4153	2010Q2	-0.4452	-0.4111
2010Q3	-0.4458	-0.406	2010Q4	-0.4463	-0.4	2011Q1	-0.4468	-0.3932
2011Q2	-0.4474	-0.3859	2011Q3	-0.4481	-0.3782	2011Q4	-0.4489	-0.3701
2012Q1	-0.45	-0.3618	2012Q2	-0.4514	-0.3534	2012Q3	-0.4532	-0.345
2012Q4	-0.4556	-0.3366	2013Q1	-0.4586	-0.3282	2013Q2	-0.4623	-0.3199
2013Q3	-0.4668	-0.3117	2013Q4	-0.472	-0.3035	2014Q1	-0.4779	-0.2955
2014Q2	-0.4846	-0.2875	2014Q3	-0.4919	-0.2797	2014Q4	-0.4998	-0.272
2015Q1	-0.5083	-0.2643	2015Q2	-0.5173	-0.2567	2015Q3	-0.5267	-0.2492
2015Q4	-0.5364	-0.2417	2016Q1	-0.5462	-0.2342	2016Q2	-0.556	-0.2267

The table reports the demographic adjustment details for prime-age females corresponding to the bottom panel of Figure 6 (female) and the demographic adjustment details for young individuals corresponding to the bottom panel of Figure 7 (young).

Table 4: FIGURES 8 IN BARNICHON & MESTERS (2017) (PART 1)

date	NU-f	NU-f dfm	EN-f	EN-f dfm	NU-y	NU-y dfm	UN-y	UN-y dfm
1976Q1	0.1175	0.1485	0.1321	0.0786	0.1256	0.1078	0.4484	0.5134
1976Q2	0.1194	0.1475	0.1297	0.0783	0.1263	0.1074	0.4541	0.5167
1976Q3	0.1213	0.1465	0.1272	0.0779	0.1269	0.107	0.4586	0.5202
1976Q4	0.1224	0.1457	0.1249	0.0774	0.1276	0.1066	0.4624	0.5241
1977Q1	0.1234	0.1451	0.1231	0.0771	0.1286	0.1064	0.4674	0.529
1977Q2	0.1237	0.1444	0.1218	0.0769	0.1293	0.106	0.474	0.5341
1977Q3	0.1236	0.1433	0.1201	0.0768	0.1296	0.1056	0.4814	0.5389
1977Q4	0.1231	0.142	0.1181	0.0766	0.1296	0.105	0.4899	0.5432
1978Q1	0.1224	0.141	0.1163	0.0766	0.1297	0.1045	0.4979	0.547
1978Q2	0.1219	0.1402	0.1151	0.0767	0.1293	0.1042	0.5032	0.5501
1978Q3	0.1219	0.1396	0.1143	0.0768	0.1284	0.1039	0.5051	0.5519
1978Q4	0.1225	0.1393	0.1134	0.0769	0.127	0.1038	0.5046	0.5526
1979Q1	0.124	0.1394	0.1127	0.0771	0.1261	0.1038	0.504	0.5522
1979Q2	0.1257	0.1397	0.1118	0.0772	0.1255	0.104	0.5012	0.5499
1979Q3	0.1274	0.1401	0.1104	0.0771	0.1254	0.1041	0.4948	0.5454
1979Q4	0.1291	0.1408	0.1083	0.0768	0.1256	0.1045	0.4863	0.539
1980Q1	0.1307	0.142	0.1061	0.0767	0.1265	0.105	0.476	0.5316
1980Q2	0.1321	0.1438	0.1039	0.0766	0.1282	0.1058	0.4663	0.5244
1980Q3	0.1334	0.1458	0.1013	0.0765	0.1299	0.1067	0.4599	0.5184
1980Q4	0.1346	0.1481	0.0985	0.0764	0.1311	0.1077	0.4559	0.5138
1981Q1	0.1363	0.1507	0.0962	0.0764	0.1319	0.1088	0.4538	0.51
1981Q2	0.1388	0.1537	0.0946	0.0763	0.1326	0.1102	0.4532	0.5056
1981Q3	0.1416	0.1571	0.0932	0.0762	0.1336	0.1116	0.4509	0.4994
1981Q4	0.1444	0.1604	0.092	0.0758	0.1348	0.1131	0.4459	0.4914
1982Q1	0.1474	0.1635	0.0912	0.0755	0.1361	0.1145	0.4385	0.483
1982Q2	0.1503	0.1663	0.0909	0.0754	0.1371	0.1157	0.4306	0.4758
1982Q3	0.1531	0.1686	0.0908	0.0753	0.1377	0.1167	0.4233	0.4713
1982Q4	0.1558	0.1703	0.0905	0.0752	0.1376	0.1175	0.4193	0.4703
1983Q1	0.1582	0.1713	0.0904	0.0753	0.1372	0.1179	0.4211	0.4731
1983Q2	0.1603	0.1716	0.0905	0.0755	0.1369	0.1181	0.4287	0.479
1983Q3	0.1618	0.1716	0.0908	0.0759	0.136	0.1181	0.4393	0.487
1983Q4	0.1635	0.172	0.0909	0.0765	0.1346	0.1182	0.4509	0.4958
1984Q1	0.1659	0.1731	0.0911	0.077	0.1334	0.1187	0.4629	0.5047
1984Q2	0.1684	0.1747	0.0912	0.0775	0.1329	0.1194	0.4756	0.5128
1984Q3	0.1703	0.176	0.091	0.0778	0.1332	0.12	0.4872	0.5193
1984Q4	0.1716	0.1769	0.0906	0.0779	0.1338	0.1204	0.497	0.5236
1985Q1	0.1725	0.1774	0.09	0.0779	0.1344	0.1206	0.5046	0.5266
1985Q2	0.1733	0.1773	0.0894	0.0776	0.1344	0.1206	0.5092	0.5285
1985Q3	0.1739	0.1766	0.0882	0.0771	0.1338	0.1203	0.5099	0.5294
1985Q4	0.1739	0.1754	0.0865	0.0766	0.1328	0.1198	0.506	0.5293
1986Q1	0.1731	0.1737	0.085	0.0763	0.1315	0.119	0.4994	0.5289
1986Q2	0.1711	0.1715	0.0836	0.0762	0.1299	0.118	0.4942	0.5292
1986Q3	0.1683	0.1691	0.0823	0.0761	0.1284	0.1169	0.4919	0.5306
1986Q4	0.1647	0.1666	0.081	0.0761	0.1268	0.1158	0.4942	0.5331
1987Q1	0.1616	0.164	0.0799	0.0763	0.1253	0.1147	0.5008	0.536
1987Q2	0.1588	0.1611	0.0794	0.0766	0.1236	0.1134	0.5094	0.5389
1987Q3	0.1562	0.1583	0.0791	0.0769	0.1215	0.1122	0.5176	0.5416
1987Q4	0.1542	0.1557	0.0787	0.077	0.1192	0.111	0.5245	0.5442
1988Q1	0.153	0.1538	0.0784	0.0771	0.117	0.1102	0.5282	0.5469
1988Q2	0.153	0.1527	0.0781	0.077	0.1156	0.1097	0.5324	0.5496
1988Q3	0.1532	0.1525	0.0775	0.077	0.115	0.1096	0.5366	0.5523
1988Q4	0.1536	0.1527	0.0769	0.0769	0.1149	0.1097	0.5389	0.5546
1989Q1	0.1549	0.1535	0.0765	0.0769	0.1153	0.1101	0.5388	0.5559
1989Q2	0.1566	0.1543	0.0766	0.0771	0.1158	0.1104	0.5347	0.5556

Selected transition rates for prime-age females (NU and EN) and young individuals (NU and UN). The abbreviation dfm indicates the counterfactual rate. Each transition rate is shown in Figure 8.

Table 5: FIGURES 8 IN BARNICHON & MESTERS (2017) (PART 2)

date	NU-f	NU-f dfm	EN-f	EN-f dfm	NU-y	NU-y dfm	UN-y	UN-y dfm
1989Q3	0.1573	0.1548	0.0767	0.0773	0.1157	0.1106	0.5294	0.5538
1989Q4	0.1574	0.1549	0.0764	0.0775	0.1145	0.1107	0.5251	0.5505
1990Q1	0.1578	0.155	0.076	0.0775	0.1126	0.1107	0.5246	0.5454
1990Q2	0.1589	0.1557	0.0751	0.0775	0.1111	0.111	0.5246	0.5388
1990Q3	0.1613	0.1574	0.0739	0.0773	0.1107	0.1118	0.522	0.5313
1990Q4	0.1647	0.1599	0.0724	0.0769	0.1115	0.1129	0.5188	0.5236
1991Q1	0.1682	0.163	0.0708	0.0765	0.1133	0.1143	0.5148	0.5162
1991Q2	0.1714	0.1663	0.0695	0.0762	0.116	0.1157	0.5127	0.5097
1991Q3	0.1743	0.1697	0.0682	0.0758	0.119	0.1172	0.5099	0.5041
1991Q4	0.1765	0.1726	0.0671	0.0757	0.1217	0.1185	0.5059	0.4996
1992Q1	0.1782	0.1748	0.0664	0.0758	0.124	0.1195	0.5017	0.4971
1992Q2	0.179	0.1758	0.0661	0.0761	0.1257	0.1199	0.4991	0.4966
1992Q3	0.1784	0.1754	0.066	0.0764	0.1264	0.1197	0.4992	0.4977
1992Q4	0.1769	0.1739	0.0659	0.0766	0.1263	0.1191	0.502	0.4996
1993Q1	0.1754	0.1718	0.0657	0.0768	0.1252	0.1182	0.507	0.5022
1993Q2	0.1736	0.1696	0.0653	0.0768	0.1235	0.1172	0.512	0.5056
1993Q3	0.1721	0.1672	0.0646	0.0768	0.1214	0.1161	0.5163	0.5097
1993Q4	0.1699	0.1646	0.0639	0.0768	0.1197	0.115	0.5188	0.5143
1994Q1	0.1674	0.1618	0.0635	0.0767	0.1185	0.1137	0.5194	0.5186
1994Q2	0.1645	0.1587	0.0631	0.0766	0.1173	0.1123	0.5196	0.5218
1994Q3	0.1613	0.1554	0.0628	0.0765	0.1163	0.1109	0.5182	0.5231
1994Q4	0.1585	0.1525	0.0626	0.0764	0.1158	0.1096	0.5155	0.5228
1995Q1	0.1567	0.1502	0.0625	0.0764	0.1162	0.1086	0.5108	0.5213
1995Q2	0.1553	0.1485	0.0624	0.0763	0.1173	0.1079	0.5076	0.5198
1995Q3	0.1536	0.1473	0.062	0.0764	0.1185	0.1073	0.5086	0.5189
1995Q4	0.1523	0.1464	0.0614	0.0764	0.1188	0.1069	0.512	0.5185
1996Q1	0.1521	0.1458	0.0607	0.0762	0.1183	0.1066	0.5171	0.5183
1996Q2	0.1524	0.145	0.0602	0.0761	0.1174	0.1063	0.5236	0.518
1996Q3	0.1522	0.1439	0.0601	0.0759	0.1158	0.1058	0.5267	0.5181
1996Q4	0.1512	0.1424	0.0603	0.0758	0.1142	0.1052	0.5274	0.519
1997Q1	0.1493	0.1403	0.0606	0.0758	0.1122	0.1042	0.5272	0.5211
1997Q2	0.1468	0.1378	0.0613	0.0758	0.1103	0.1031	0.5287	0.5238
1997Q3	0.1434	0.1349	0.0623	0.0759	0.1086	0.1018	0.5316	0.5262
1997Q4	0.1397	0.1322	0.0633	0.0761	0.1071	0.1007	0.5345	0.528
1998Q1	0.1365	0.13	0.0641	0.0765	0.1057	0.0997	0.5374	0.5288
1998Q2	0.1336	0.1283	0.0647	0.0769	0.1043	0.0989	0.5396	0.529
1998Q3	0.1318	0.127	0.0652	0.0773	0.1027	0.0984	0.5441	0.5291
1998Q4	0.1306	0.1261	0.0655	0.0774	0.101	0.098	0.5492	0.5292
1999Q1	0.1293	0.1254	0.0655	0.0774	0.0993	0.0976	0.5484	0.5292
1999Q2	0.1281	0.1249	0.0647	0.0773	0.0977	0.0974	0.5443	0.5294
1999Q3	0.1272	0.1246	0.0639	0.077	0.0965	0.0973	0.5419	0.53
1999Q4	0.1265	0.1242	0.0636	0.0768	0.0955	0.0971	0.5425	0.5305
2000Q1	0.1252	0.1235	0.0644	0.0768	0.0943	0.0968	0.5451	0.5303
2000Q2	0.1231	0.1227	0.0661	0.0769	0.0935	0.0964	0.5481	0.528
2000Q3	0.1215	0.1226	0.0683	0.0773	0.0932	0.0964	0.551	0.5234
2000Q4	0.1216	0.1236	0.0705	0.0776	0.0934	0.0969	0.5507	0.5168
2001Q1	0.1233	0.1258	0.0723	0.0778	0.0942	0.0978	0.5469	0.5086
2001Q2	0.126	0.1287	0.0733	0.0777	0.0954	0.0991	0.5388	0.4992
2001Q3	0.1289	0.1317	0.0737	0.0774	0.0971	0.1004	0.5287	0.4898
2001Q4	0.1311	0.1341	0.0733	0.0771	0.0983	0.1015	0.5192	0.4815
2002Q1	0.1316	0.1355	0.0725	0.0768	0.0986	0.1021	0.5135	0.4755
2002Q2	0.1312	0.1362	0.0717	0.0765	0.0981	0.1024	0.5124	0.4721
2002Q3	0.1306	0.1365	0.0707	0.0763	0.0974	0.1026	0.5145	0.4707

Selected transition rates for prime-age females (NU and EN) and young individuals (NU and UN). The abbreviation dfm indicates the counterfactual rate. Each transition rate is shown in Figure 8.

Table 6: FIGURES 8 IN BARNICHON & MESTERS (2017) (PART 3)

date	NU-f	NU-f dfm	EN-f	EN-f dfm	NU-y	NU-y dfm	UN-y	UN-y dfm
2002Q4	0.1302	0.1366	0.0699	0.0762	0.0969	0.1026	0.5202	0.4704
2003Q1	0.1297	0.1365	0.0695	0.0763	0.0967	0.1025	0.5282	0.4707
2003Q2	0.1295	0.1361	0.0697	0.0766	0.0966	0.1024	0.5362	0.4714
2003Q3	0.1297	0.1358	0.0701	0.0769	0.0959	0.1022	0.5419	0.4725
2003Q4	0.1303	0.1356	0.0702	0.077	0.0948	0.1022	0.5431	0.4742
2004Q1	0.131	0.1355	0.07	0.077	0.0931	0.1021	0.5418	0.4764
2004Q2	0.1314	0.1355	0.0698	0.0768	0.0915	0.1021	0.5407	0.4792
2004Q3	0.1313	0.1353	0.0697	0.0767	0.0899	0.102	0.5419	0.4824
2004Q4	0.131	0.135	0.0698	0.0765	0.0886	0.1019	0.5471	0.4864
2005Q1	0.1306	0.1348	0.0701	0.0765	0.0876	0.1018	0.5557	0.4916
2005Q2	0.1304	0.1346	0.0705	0.0765	0.0867	0.1017	0.566	0.4981
2005Q3	0.1307	0.1343	0.0713	0.0768	0.0857	0.1016	0.5735	0.5048
2005Q4	0.1303	0.1335	0.0722	0.0771	0.0849	0.1012	0.5754	0.5106
2006Q1	0.1282	0.1318	0.073	0.0775	0.0835	0.1005	0.5711	0.5144
2006Q2	0.1251	0.1295	0.0732	0.0778	0.0818	0.0994	0.5633	0.5154
2006Q3	0.122	0.127	0.0732	0.0781	0.0799	0.0984	0.5526	0.5137
2006Q4	0.1196	0.1249	0.0728	0.0783	0.0783	0.0974	0.5416	0.5099
2007Q1	0.1188	0.1236	0.0718	0.0782	0.0769	0.0968	0.5318	0.5047
2007Q2	0.1197	0.1236	0.0702	0.0778	0.0762	0.0968	0.5236	0.4986
2007Q3	0.1218	0.1252	0.0686	0.0773	0.0765	0.0976	0.5164	0.4922
2007Q4	0.1252	0.1287	0.0673	0.0769	0.0779	0.0991	0.5113	0.4856
2008Q1	0.1296	0.134	0.0663	0.0764	0.08	0.1015	0.5051	0.4783
2008Q2	0.1355	0.1407	0.0653	0.0759	0.0823	0.1044	0.494	0.4701
2008Q3	0.1429	0.1483	0.0645	0.0755	0.0844	0.1078	0.483	0.4615
2008Q4	0.1509	0.156	0.0637	0.0752	0.0863	0.1112	0.4724	0.453
2009Q1	0.1584	0.1631	0.0628	0.0752	0.0885	0.1143	0.4629	0.4457
2009Q2	0.1652	0.169	0.0621	0.0754	0.0907	0.1169	0.4561	0.4405
2009Q3	0.1707	0.1735	0.0618	0.0758	0.0927	0.1189	0.4536	0.4379
2009Q4	0.1751	0.1769	0.0617	0.0762	0.0943	0.1204	0.4543	0.4378
2010Q1	0.1782	0.1789	0.0619	0.0764	0.095	0.1213	0.4574	0.4396
2010Q2	0.1797	0.1796	0.0622	0.0766	0.0945	0.1216	0.4613	0.4426
2010Q3	0.1806	0.1794	0.0625	0.0766	0.0931	0.1215	0.4642	0.446
2010Q4	0.1814	0.1787	0.0629	0.0765	0.0912	0.1212	0.4661	0.4494
2011Q1	0.1817	0.1779	0.0629	0.0764	0.0893	0.1209	0.4666	0.4525
2011Q2	0.1814	0.1769	0.0626	0.0764	0.0879	0.1204	0.466	0.4552
2011Q3	0.1807	0.1756	0.0622	0.0765	0.0871	0.1198	0.4656	0.4578
2011Q4	0.1798	0.1741	0.0621	0.0766	0.0869	0.1192	0.4677	0.4605
2012Q1	0.1781	0.1722	0.0622	0.0766	0.0869	0.1183	0.4718	0.4632
2012Q2	0.1755	0.1697	0.0623	0.0765	0.087	0.1172	0.4766	0.4658
2012Q3	0.1719	0.1664	0.0625	0.0764	0.0871	0.1158	0.4809	0.4681
2012Q4	0.1673	0.1625	0.0632	0.0764	0.0868	0.114	0.4823	0.4702
2013Q1	0.1619	0.1582	0.0641	0.0763	0.0859	0.1121	0.4835	0.4725
2013Q2	0.1565	0.154	0.0648	0.0763	0.0844	0.1103	0.4853	0.4755
2013Q3	0.152	0.1502	0.0652	0.0762	0.0822	0.1086	0.4887	0.4795
2013Q4	0.1482	0.1467	0.0655	0.0763	0.0801	0.107	0.4932	0.4842
2014Q1	0.144	0.1434	0.0656	0.0763	0.0782	0.1056	0.497	0.4889
2014Q2	0.1398	0.1405	0.0658	0.0766	0.0763	0.1043	0.4998	0.4933
2014Q3	0.136	0.1379	0.0665	0.0772	0.0743	0.1032	0.5009	0.4972
2014Q4	0.132	0.1354	0.0679	0.0779	0.0722	0.1021	0.5012	0.5005
2015Q1	0.1285	0.1328	0.0692	0.0785	0.0699	0.1009	0.5004	0.5025
2015Q2	0.1255	0.13	0.0699	0.0786	0.0675	0.0997	0.4991	0.5031
2015Q3	0.1228	0.1272	0.0701	0.0784	0.0651	0.0985	0.5027	0.5024
2015Q4	0.1207	0.1246	0.0697	0.078	0.063	0.0973	0.512	0.5006
2016Q1	0.1189	0.1221	0.0686	0.0771	0.061	0.0962	0.5261	0.4979
2016Q2	0.1169	0.1196	0.0669	0.076	0.059	0.0951	0.5421	0.4945

Selected transition rates for prime-age females (NU and EN) and young individuals (NU and UN). The abbreviation dfm indicates the counterfactual rate. Each transition rate is shown in Figure 8.