

Does Wage Persistence Matter for Employment Fluctuations? Evidence from Displaced Workers

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WEB APPENDIX

Table A-1 : Sample Means - SIPP

	(1) SIPP
Number of observations	86703
Panel A: Outcome variables	
Layoff or fired	0.060
Quit	0.067
Job ends	0.18
Industry switch between first and last month	0.22
Occupation switch between first and last month	0.24
Hourly wage first month	14.0
	[11.9]
Hourly wage last month	15.8
	[19.7]
Panel B: Demographics	
Tenure	8.29
	[8.27]
Age	39.1
	[11.0]
High School Grad	0.33
Some College	0.28
College Degree	0.24
Post-College	0.047
Married	0.65
Non-White	0.23
Panel C: Unemployment Rates	
Unemployment at beginning of job	6.27
held in first month of panel	[1.88]
Contemporaneous unemployment	5.66
(first month of panel)	[1.56]
Min unemployment during job	4.83
(until first month of panel)	[1.23]

Data: SIPP Panels 1990 - 2001. Estimation Sample used in paper. All demographics refer to first month in which the worker is observed.

Table A-2 : Effect of Past Labor Market Conditions on Wages

SIPP	Job Losers			Full Sample
	(1) $\ln(w_{t=1})$	(2) $\ln(w_{t=32})$	(3) $\ln(w_{t=32}) - \ln(w_{t=1})$	(4) $\ln(w_{t=1})$
Unemployment at $t = 1$	0.0007 (0.0116)	-0.0223 (0.0163)	-0.0081 (0.0162)	0.0121* (0.0050)
Unemployment at beginning of job held at $t = 1$	-0.0010 (0.0064)	-0.0177** (0.0056)	-0.0046 (0.0089)	0.0007 (0.0011)
Min unemployment during job held at $t = 1$ up to $t = 1$	-0.0219 (0.0116)	0.0213 (0.0162)	0.0160 (0.0173)	-0.0259** (0.0029)
Unemployment at $t = 32$		-0.0023 (0.0162)	-0.0127 (0.0141)	
Observations	6078	3154	3154	111717

Significance Levels: * $p < .05$ ** $p < .01$, standard errors clustered on state level. Data: SIPP Panels 1990-2001. $t = 1$ and $t = 32$ are the 1st and 32nd month a worker is observed in the panel. Job Losers are all workers who hold a job at $t = 1$ and who are displaced within the next 32 months. The full sample consists of all workers employed at $t = 1$. See Table 2 and main text for additional comments on the specification.

Table A-3 : Effect of Past Labor Market Conditions on Wages using Level of Wages and Including Non-employed Individuals as Zeros

Panel A: Dependent variable: Level of wage at lost job				
	(1)	(2)	(3)	(4)
	w_{t_d}	w_{t_d}	w_{t_d}	w_{t_d}
Unemployment at job loss	-0.101 (0.924)			2.232* (1.103)
Unemployment at beginning of lost job		-3.051** (0.554)		-0.338 (1.015)
Min unemployment during lost job			-5.852** (1.112)	-6.825** (2.137)
Observations	50316	50316	50316	50316

Panel B: Dependent variable: Level of wage at current job and change in wage levels					
	(1)	(2)	(3)	(4)	(5)
	w_t	w_t	w_t	w_t	$w_t - w_{t_d}$
Unemployment at job loss	-2.237** (0.813)			-2.408** (0.827)	-2.086 (1.414)
Unemployment at beginning of lost job		0.232 (0.609)		0.480 (0.771)	0.630 (1.197)
Min unemployment during lost job			-0.806 (1.017)	0.0816 (1.297)	5.787* (2.280)
Contemporaneous unemployment	-4.337** (1.241)	-5.573** (1.157)	-5.540** (1.143)	-4.225** (1.248)	-13.61** (1.300)
Observations	50316	50316	50316	50316	50316

Significance Levels: * $p < .05$ ** $p < .01$, standard errors clustered on state level. Specification is the same as Table 2 with the difference that the dependent variable is measured in levels rather than logs and that wages of workers who do not hold a job at time t , the interview time, are set to zero and included in the sample.

Table A-4 : Effect of Past Labor Market Conditions on Wages

Panel A: CPS DWS - Only workers reemployed in same occupation			
	(1)	(2)	(3)
	$\ln(w_{t_d})$	$\ln(w_t)$	$\ln(w_t) - \ln(w_{t_d})$
Unemployment at job loss	0.0053 (0.0058)	-0.0163 (0.0093)	-0.0264* (0.0099)
Unemployment at beginning of lost job	-0.0066 (0.0050)	-0.0107 (0.0060)	-0.0054 (0.0054)
Min unemployment during lost job	-0.0145 (0.0105)	0.0013 (0.0115)	0.0171 (0.0120)
Contemporaneous unemployment		-0.0047 (0.0086)	-0.0032 (0.0096)
Observations	7851	9203	7851
Panel B: CPS DWS - Only workers reemployed in same industry			
	(1)	(2)	(3)
	$\ln(w_{t_d})$	$\ln(w_t)$	$\ln(w_t) - \ln(w_{t_d})$
Unemployment at job loss	0.0070 (0.0079)	-0.0070 (0.0107)	-0.0129 (0.0109)
Unemployment at beginning of lost job	-0.0039 (0.0057)	-0.0131 (0.0083)	-0.0116 (0.0089)
Min unemployment during lost job	-0.0301* (0.0116)	0.0033 (0.0143)	0.0280 (0.0166)
Contemporaneous unemployment		-0.0065 (0.0102)	-0.0100 (0.0097)
Observations	6302	7336	6302

Significance Levels: * $p < .05$ ** $p < .01$, standard errors clustered on state level. Data: CPS Displaced Worker Survey 1984 - 2006. Unemployment is measured yearly on state level

Table A-5 : Effect of Max Unemployment Rate on Wages

Panel A: Log of wage at lost job		
	(1)	(2)
	$\ln(w_{t_d})$	$\ln(w_{t_d})$
Unemployment at job loss		0.0024 (0.0033)
Unemployment at beginning of lost job		-0.0037 (0.0023)
Min unemployment during lost job		-0.0252** (0.0044)
Max unemployment during lost job	-0.0088** (0.0029)	0.0040 (0.0029)
Observations	44091	44091
Panel B: Log of wage at current job		
	(1)	(2)
	$\ln(w_t)$	$\ln(w_t)$
Unemployment at job loss		-0.0112** (0.0040)
Unemployment at beginning of lost job		-0.0026 (0.0037)
Min unemployment during lost job		0.0055 (0.0062)
Max unemployment during lost job	-0.0085* (0.0032)	-0.0037 (0.0047)
Contemporaneous unemployment	-0.0001 (0.0039)	0.0041 (0.0040)
Observations	31109	31109

Notes: See Table 2.

Table A-6 : Effect of Unemployment on Post-Displacement Wage by Subgroups

Panel A: Log of wage at lost job					
	Female	More than high school	Subgroup Age \geq 40	Tenure > 3 years	Job unionized
	(1)	(2)	(3)	(4)	(5)
	$\ln(w_{t_d})$	$\ln(w_{t_d})$	$\ln(w_{t_d})$	$\ln(w_{t_d})$	$\ln(w_{t_d})$
Unemployment at job loss	0.0042 (0.0031)	0.0042 (0.0031)	0.0041 (0.0031)	0.0044 (0.0031)	0.0045 (0.0032)
Unemployment at beginning of lost job	-0.0009 (0.0028)	-0.0055* (0.0025)	-0.0029 (0.0031)	0.0027 (0.0071)	-0.0007 (0.0024)
Unemployment at beginning of lost job if in subgroup	-0.0046 (0.0043)	0.0069* (0.0030)	0.0004 (0.0040)	-0.0060 (0.0079)	-0.0245** (0.0057)
Min unemployment during lost job	-0.0195** (0.0047)	-0.0185** (0.0043)	-0.0224** (0.0050)	-0.0307** (0.0081)	-0.0264** (0.0045)
Min unemployment during lost job if in subgroup	-0.0127* (0.0049)	-0.0138** (0.0035)	-0.0044 (0.0051)	0.0109 (0.0086)	0.0441* (0.0184)
Observations	44091	44091	44091	44091	44091
Panel B: Log of wage at current job					
	(1)	(2)	(3)	(4)	(5)
	$\ln(w_t)$	$\ln(w_t)$	$\ln(w_t)$	$\ln(w_t)$	$\ln(w_t)$
Unemployment at job loss	-0.0129** (0.0034)	-0.0128** (0.0034)	-0.0129** (0.0034)	-0.0120** (0.0034)	-0.0126** (0.0034)
Unemployment at beginning of lost job	-0.0045 (0.0041)	-0.0054 (0.0041)	-0.0043 (0.0053)	0.0196** (0.0062)	-0.0023 (0.0034)
Unemployment at beginning of lost job if in subgroup	0.0021 (0.0062)	0.0037 (0.0052)	0.0010 (0.0062)	-0.0263** (0.0070)	-0.0186 (0.0098)
Min unemployment during lost job	0.0079 (0.0075)	0.0099 (0.0074)	0.0049 (0.0082)	-0.0212* (0.0090)	0.0025 (0.0069)
Min unemployment during lost job if in subgroup	-0.0100 (0.0093)	-0.0123 (0.0067)	-0.0006 (0.0073)	0.0298** (0.0084)	0.0375 (0.0196)
Contemporaneous unemployment	0.0041 (0.0041)	0.0038 (0.0040)	0.0042 (0.0040)	0.0048 (0.0040)	0.0042 (0.0041)
Observations	31109	31109	31109	31109	27073

Regressions also control for current unemployment and unemployment at time of job loss. Other controls are education, experience, tenure, union at lost job, nonwhite, female, married, years since jobloss, reason for jobloss, parttime at lost job, state, year, and industry Data: CPS Displaced Worker Survey 1984 - 2006, Unemployment is measured yearly on state level Significance Levels: * p<.05 ** p<.01, standard errors clustered on state level.

Table A-7 : Effect of Unemployment - Including Interaction of Current and Minimum Unemployment Rate

Dep. variable: Log of wages at current job				
	(1)	(2)	(3)	(4)
	$\ln(w_t)$	$\ln(w_t)$	$\ln(w_t)$	$\ln(w_t)$
Unemployment at job loss	-0.0134** (0.0030)			-0.0125** (0.0034)
Unemployment at beginning of lost job		-0.0040 (0.0027)		-0.0038 (0.0031)
Min unemployment during lost job			-0.0355** (0.0104)	-0.0229 (0.0125)
Contemporaneous unemployment	0.0015 (0.0044)	-0.0033 (0.0055)	-0.0247* (0.0104)	-0.0185 (0.0106)
Min. unemployment × contemporaneous unemployment	0.0006 (0.0005)	0.0002 (0.0007)	0.0039** (0.0012)	0.0038** (0.0012)
Observations	31119	31109	31119	31109
Dep. variable: Change in log wage				
	(1)	(2)	(3)	(4)
	$\ln(w_t) - \ln(w_{t_d})$	$\ln(w_t) - \ln(w_{t_d})$	$\ln(w_t) - \ln(w_{t_d})$	$\ln(w_t) - \ln(w_{t_d})$
Unemployment at job loss	-0.0064 (0.0038)			-0.0094* (0.0043)
Unemployment at beginning of lost job		0.0032 (0.0029)		-0.0011 (0.0033)
Min unemployment during lost job			0.0225* (0.0109)	0.0302* (0.0119)
Contemporaneous unemployment	-0.0385** (0.0039)	-0.0361** (0.0043)	-0.0230* (0.0087)	-0.0180* (0.0087)
Min. unemployment × contemporaneous unemployment	0.0021** (0.0005)	0.0012* (0.0005)	-0.0011 (0.0013)	-0.0012 (0.0013)
Observations	27081	27073	27081	27073

Regressions also control for education, experience, tenure, union at lost job, nonwhite, female, married, years since jobloss, reason for jobloss, parttime at lost job, state, year, and industry Data: CPS Displaced Worker Survey 1984 - 2006. Unemployment is measured yearly on state level Significance Levels: * p<.05 ** p<.01, standard errors clustered on state level.

Table A-8 : Effect of Past Labor Market Conditions on Wages - Proxying Labor Market Tightness with Log-Deviations from Industry Employment Trend

Panel A: Dependent variable: Log of wage at lost job - Beaudry DiNardo Specification				
	(1)	(2)	(3)	(4)
	$\ln(w_{t_d})$	$\ln(w_{t_d})$	$\ln(w_{t_d})$	$\ln(w_{t_d})$
Industry employment at job loss	0.0034* (0.0014)			-0.0018 (0.0014)
Industry employment at beginning of lost job		0.0038** (0.0012)		-0.0057** (0.0015)
Maximum industry employment during lost job			0.0262** (0.0021)	0.0303** (0.0025)
Observations	43037	43037	43037	43037

Panel B: Dependent variable: Log of wage at current job and change in log wage					
	(1)	(2)	(3)	(4)	(5)
	$\ln(w_t)$	$\ln(w_t)$	$\ln(w_t)$	$\ln(w_t)$	$\ln(w_t) - \ln(w_{t_d})$
Industry employment at job loss	-0.0007 (0.0020)			-0.0016 (0.0021)	0.0010 (0.0019)
Industry employment at beginning of lost job		-0.0006 (0.0015)		-0.0022 (0.0020)	0.0024 (0.0022)
Maximum industry employment during lost job			0.0029 (0.0024)	0.0048 (0.0032)	-0.0252** (0.0039)
Contemporaneous industry employment	-0.0023 (0.0042)	-0.0024 (0.0042)	-0.0021 (0.0043)	-0.0021 (0.0042)	-0.0011 (0.0043)
Observations	29966	29966	29966	29966	26128

Significance Levels: * $p < .05$ ** $p < .01$, standard errors clustered on state level. The specifications are the same as in Table 2 except (log) deviations from industry employment trend rather than the unemployment rate is used as the measure for labor market tightness. Industry employment is on the level of the 9 BLS super sectors. Industry employment is measured as log deviations from trend employment (i.e. the Hodrick-Prescott smoothed employment series) multiplied with 100, so the coefficients are on the same scale as Table 2.

Table A-9 : Selection - The Correlation of Observables with Labor Market History

	(1) Education	(2) Experience	(3) Married	(4) Nonwhite	(5) Female	(6) Lost/Left Job Unionized
Unemp at job loss	0.0067 (0.0115)	0.0591 (0.0473)	-0.0003 (0.0018)	0.0009 (0.0016)	-0.0031 (0.0017)	-0.0025 (0.0015)
Unemp at beginning of lost job	0.0098 (0.0085)	0.0472 (0.0451)	-0.0006 (0.0016)	-0.0011 (0.0013)	0.0025 (0.0020)	0.0020 (0.0012)
Min unemp during lost job	-0.0207 (0.0192)	-0.1416 (0.0885)	-0.0003 (0.0028)	-0.0029 (0.0022)	-0.0014 (0.0026)	-0.0002 (0.0024)
Contemporaneous Unemployment	-0.0416** (0.0126)	-0.1249* (0.0603)	0.0012 (0.0024)	0.0003 (0.0017)	-0.0035 (0.0024)	-0.0001 (0.0018)
Observations	50738	50738	50738	50738	50738	50738

Significance Levels: * p<.05 ** p<.01, standard errors clustered on state level. The specifications are the same as in Table 2 except the dependent variables are changed. The dependent variable in each column is dropped from the controls.