Appendix A: State UI Information

Information on state UI laws come from the *Significant Provisions of State Unemployment Insurance Laws*, published bi-annually by the US Dept of Labor, Employment and Training Administration. I consulted state laws and state employment agencies for more detailed information on benefit schedule variations[28].

Idaho

In Idaho, the fraction of highest quarter of earnings to compute the weekly benefit amount is $1/26$ for the whole period 1976 to 1984.

Maximum benefit amount

The maximum benefit amount in Idaho in January 1976 is $b_{max} = \$90$.
It was then increased seven times until December 1983:
\$99 for claims filed after 04jul1976
\$110 for claims filed after 01jul1977
\$116 for claims filed after 01jul1978
\$121 for claims filed after 01jul1979
\$132 for claims filed after 01jul1980
\$145 for claims filed after 01jul1981
\$159 for claims filed after 20jun1982.

Minimum benefit amount

The minimum benefit amount in Idaho in January 1976 is $b_{min} = \$17$.
It was then increased twice times until December 1983:
\$36 for claims filed after 01jul1980
\$45 for claims filed after 01jan1984.

Duration of Benefits

Idaho has a special determination rule for potential duration described in table A1.

[28] CWBH has exhaustive information in Georgia on unemployment spells and wage records. But because of the parameters of the UI system in Georgia, the RK design was inoperable. $\tau_1 = 1/25$, $D_{max} = 26$, $\tau_2 = 1/4$ so that $D_{max} \cdot \frac{\tau_1}{\tau_1} > 4$ always larger than $\frac{bpw}{hqw}$ for all individuals on the left side of the benefit level kink. I don't have any observation with only kink in benefit level at the kink.

Table A1: Determination of Potential Duration 1st tier UI Idaho: 1976-1984

Ratio of bqw/hpw		UI Duration	
At Least...	Less Than...	before Jul 1st 1983	after Jul 1st 1983
1.25	1.50	10	
1.50	1.750	12	10
1.750	2.00	14	12
2.00	2.250	16	14
2.250	2.500	18	16
2.500	2.750	20	18
2.750	3.000	22	20
3.000	3.250	24	22
3.250	3.500	26	24
3.500	–	26	26

Louisiana

In Louisiana, the fraction of highest quarter of earnings to compute the weekly benefit amount is $1/25$ for the whole period 1979 to 1984.

Maximum benefit amount
The maximum benefit amount in Louisiana in January 1979 is $b_{max} = \$141$.
It was then increased four times until December 1983:
\$149 for claims filed after 02sep1979
\$164 for claims filed after 07sep1980
\$183 for claims filed after 06sep1981
\$205 for claims filed after 05sep1982

Minimum benefit amount
The minimum benefit amount in Louisiana from January 1979 until December 1983 is always \$10.

Duration of Benefits
The fraction of base period earnings to determine the total amount of benefits payable for a given benefit year is 2/5. The maximum duration of benefits was set at 28 weeks. It was reduced to 26 weeks for claims filed after 03apr1983.

Missouri

In Missouri, the fraction of highest quarter of earnings to compute the weekly benefit amount is $1/20$ from the beginning of the period covered by the CWBh data (January 1978) until December 2nd, 1979 when it becomes .045.

Maximum benefit amount
The maximum benefit amount in Missouri in January 1978 is $b_{max} = \$85$.
It was then increased only once until December 1983:
$105 for claims filed after02dec1979.

Minimum benefit amount
The minimum benefit amount in Missouri from January 1979 until December 1983 is always $15.

Duration of Benefits
The fraction of base period earnings to determine the total amount of benefits payable for a given benefit year is 1/3. The maximum duration of benefits is 26 weeks for the whole period covered by the CWBH data.

New Mexico

In New Mexico, the fraction of highest quarter of earnings to compute the weekly benefit amount is $1/26$ for the whole period covered by the CWBh data (January 1980 to December 1983).

Maximum benefit amount
The maximum benefit amount in New Mexico in January 1980 is $b_{max} = \$106$.
It was then increased three times until December 1983:
$105 for claims filed after02dec1979.
$117 for claims filed after 01jan1981
$130 for claims filed after 01jan1982
$142 for claims filed after 01jan1983

Minimum benefit amount
The minimum benefit amount in New Mexico in January 1980 is $22.
It was then increased to: $24 for claims filed after 01jan1981
$26 for claims filed after 01jan1982
$29 for claims filed after 01jan1983

Duration of Benefits
The fraction of base period earnings to determine the total amount of benefits payable for a given benefit year is 3/5. The maximum duration of benefits is 26 weeks for the whole period covered by the CWBH data.

Washington

In Washington, the weekly benefit amount is computed as a fraction of the average of the two highest quarters of earnings. The fraction to compute the weekly benefit amount is $1/25$ for the whole period covered by the CWBh data (June 1979 to December 1983).

Maximum benefit amount

The maximum benefit amount in Washington in June 1st, 1979 is $b_{max} = \$128$.
It was then increased to:
\$137 for claims filed after 25jun1979
\$150 for claims filed after 06jul1980
\$163 for claims filed after 01jul1981
\$178 for claims filed after 01jul1982
\$185 for claims filed after 01jul1983

Minimum benefit amount

The minimum benefit amount in in Washington in June 1979 is always \$17.
It was then increased to: \$41 for claims filed after 06jul1980
\$45 for claims filed after 01jul1981
\$49 for claims filed after 01jul1982
\$51 for claims filed after 01jul1983

Duration of Benefits

The fraction of base period earnings to determine the total amount of benefits payable for a given benefit year is 1/3. The maximum duration of benefits is 30 weeks for the whole period covered by the CWBH data.
Note that until February 26, 1983, the state of Washington provides for 13 weeks of State-funded additional benefits for individuals who have exhausted their regular and Federal-State Extended Benefits[29]. However, no additional benefit period was paid while a Federal program was in effect.

[29]The additional benefits correspond to an *ad hoc* program which is triggered on only if the Governor determines it necessary.

EB trigger dates

Information on national and state triggers and trigger dates comes from the weekly trigger notice reports of the Bureau of Labor Statistics. Note that in the weekly trigger notice reports, there are sometimes some slight adjustments ex-post because of lags in the computation of the IUR triggers. I therefore rely on ex post trigger notices where the starting and ending dates of each episodes of EB are indicated.

National Trigger Dates

Until the Omnibus Budget Reconciliation Act of 1981, (effective July 1st 1981), the EB system had two triggers. A national trigger and state specific triggers. During the period 1976 to 1981, the national trigger was on three times, from 2/23/1975 to 7/2/1977, from 8/28/1977 to 01/28/1978, and from 7/20/1980 to 1/24/1981, automatically triggering periods of EB in all US states.

Idaho Trigger Dates

During the period 1976 to 1984, and on top of national EB periods, the EB trigger for Idaho was on four times: from 4/30/1978 to 7/29/1978, from 2/25/79 to 6/6/1979, from 2/17/80 to 7/18/81, and finally from 10/18/81 to the end of the period covered by the CWBH data.

Louisiana Trigger Dates

During the period 1979 to 1984, and on top of national EB periods, the EB trigger for Louisiana was on three times: from 7/20/1980 to 1/24/1981, from 9/12/1981 to 10/23/1982, and finally from 1/23/83 to the end of the period covered by the CWBH data.

Missouri Trigger Dates

During the period 1978 to 1984, and on top of national EB periods, the EB trigger for Missouri was on twice: from 6/1/80 to 7/25/1981, and from 3/26/1982 to 6/19/82.

New Mexico Trigger Dates

During the period 1980 to 1984, and on top of national EB periods, the EB trigger for New Mexico was on only once from 8/29/82 to 11/27/82

Washington Trigger Dates

During the period 1979 to 1984, and on top of national EB periods, the EB trigger for Washington was on without interruption from 7/6/1980 to 7/2/83.

Appendix B: Additional Figures and Tables

Table B1: BASELINE RKD ESTIMATES OF THE EFFECT OF BENEFIT LEVEL, IDAHO JAN 1976 - DEC 1983

	(1) Duration of Initial Spell	(2) Duration UI Claimed	(3) Duration UI Paid	(4) Age	(5) Male
	Period 1: jan1976 to jul1978				
α	.037	.037	.043	-.012	.004
	(.009)	(.008)	(.009)	(.013)	(.012)
p-value	.22	.17	.3	.27	.35
N	7487	7487	7487	7483	7487
Opt. Poly	1	1	1	1	1
	Period 2: jul1978 to jul1981				
α	.081	.068	.082	-.003	.004
	(.008)	(.007)	(.008)	(.009)	(.009)
p-value	.31	.24	.23	.672	.45
N	11739	11739	11739	11739	11737
Opt. Poly	1	1	1	1	1
	Period 3: jul1981 to dec1983				
α	.003	.009	.01	.011	.003
	(.012)	(.01)	(.011)	(.009)	(.009)
p-value	.21	.25	.17	.922	0
N	9400	9400	9400	9400	9398
Opt. Poly	1	1	1	1	1

Notes: Duration outcomes are expressed in weeks. α is the RK estimate of the average treatment effect of benefit level on the outcome. Standard errors for the estimates of α are in parentheses. P-values are from a test of joint significance of the coefficients of bin dummies in a model where bin dummies are added to the polynomial specification in equation 1. The optimal polynomial order is chosen based on the minimization of the Aikake Information Criterion.

Table B2: BASELINE RKD ESTIMATES OF THE EFFECT OF BENEFIT LEVEL, MISSOURI JAN 1978 - DEC 1983

	(1) Duration of Initial Spell	(2) Duration UI Claimed	(3) Duration UI Paid	(4) Age	(5) Male
	Period 1: jan1978 to dec1979				
α	.02	.02	.031	.007	-.003
	(.009)	(.01)	(.01)	(.016)	(.001)
p-value	.131	.479	.259	.125	0
N	6071	6071	6071	6067	6071
Opt. Poly	3	1	3	1	1
	Period 2: dec1979 to jan1982				
α	.021	.016	.033	.008	-.002
	(.009)	(.009)	(.01)	(.01)	(0)
p-value	.737	.339	.074	.188	0
N	9125	9125	9125	9122	9125
Opt. Poly	1	3	1	1	1
	Period 3: jan1982 to dec1983				
α	.044	.039	.056	.007	-.003
	(.009)	(.01)	(.01)	(.011)	(0)
p-value	.038	.04	.007	.919	.045
N	7586	7586	7586	7584	7585
Opt. Poly	1	1	1	1	1

Notes: Duration outcomes are expressed in weeks. α is the RK estimate of the average treatment effect of benefit level on the outcome. Standard errors for the estimates of α are in parentheses. P-values are from a test of joint significance of the coefficients of bin dummies in a model where bin dummies are added to the polynomial specification in equation 1. The optimal polynomial order is chosen based on the minimization of the Aikake Information Criterion.

Table B3: BASELINE RKD ESTIMATES OF THE EFFECT OF BENEFIT LEVEL, NEW MEXICO JAN 1980 - DEC 1983

	(1) Duration of Initial Spell	(2) Duration UI Claimed	(3) Duration UI Paid	(4) Age	(5) Male
	Period 1: jan1980 to jan1982				
α	.042	.035	.041	.007	.001
	(.01)	(.01)	(.01)	(.011)	(.003)
p-value	.33	.51	.47	.598	.6
N	7757	7757	7757	7744	7757
Opt. Poly	1	1	1	2	3
	Period 2: jan1982 to dec1983				
α	.027	.012	.024	.024	.001
	(.01)	(.01)	(.01)	(.008)	(.007)
p-value	.19	.24	.31	.329	.265
N	12120	12120	12120	12086	12120
Opt. Poly	1	1	1	1	3

Notes: Duration outcomes are expressed in weeks. α is the RK estimate of the average treatment effect of benefit level on the outcome. Standard errors for the estimates of α are in parentheses. P-values are from a test of joint significance of the coefficients of bin dummies in a model where bin dummies are added to the polynomial specification in equation 1. The optimal polynomial order is chosen based on the minimization of the Aikake Information Criterion.

Table B4: BASELINE RKD ESTIMATES OF THE EFFECT OF BENEFIT LEVEL, WASHINGTON JUN 1979 - DEC 1983

	(1) Duration of Initial Spell	(2) Duration UI Claimed	(3) Duration UI Paid	(4) Age	(5) Male
	Period 1: jun1979 to jul1981				
α	.079	.07	.084	-.069	.001
	(.012)	(.011)	(.012)	(.1)	(.003)
p-value	.788	.871	.618	.61	.57
N	7096	7096	7096	7081	7090
Opt. Poly	1	1	1	1	1
	Period 2: jul1981 to dec1983				
α	.009	.004	.007	-.02	.001
	(.008)	(.002)	(.008)	(.08)	(.005)
p-value	.588	.455	.64	.572	.483
N	10033	10033	10033	10033	10027
Opt. Poly	3	1	3	1	1

Notes: Duration outcomes are expressed in weeks. α is the RK estimate of the average treatment effect of benefit level on the outcome. Standard errors for the estimates of α are in parentheses. P-values are from a test of joint significance of the coefficients of bin dummies in a model where bin dummies are added to the polynomial specification in equation 1. The optimal polynomial order is chosen based on the minimization of the Aikake Information Criterion.

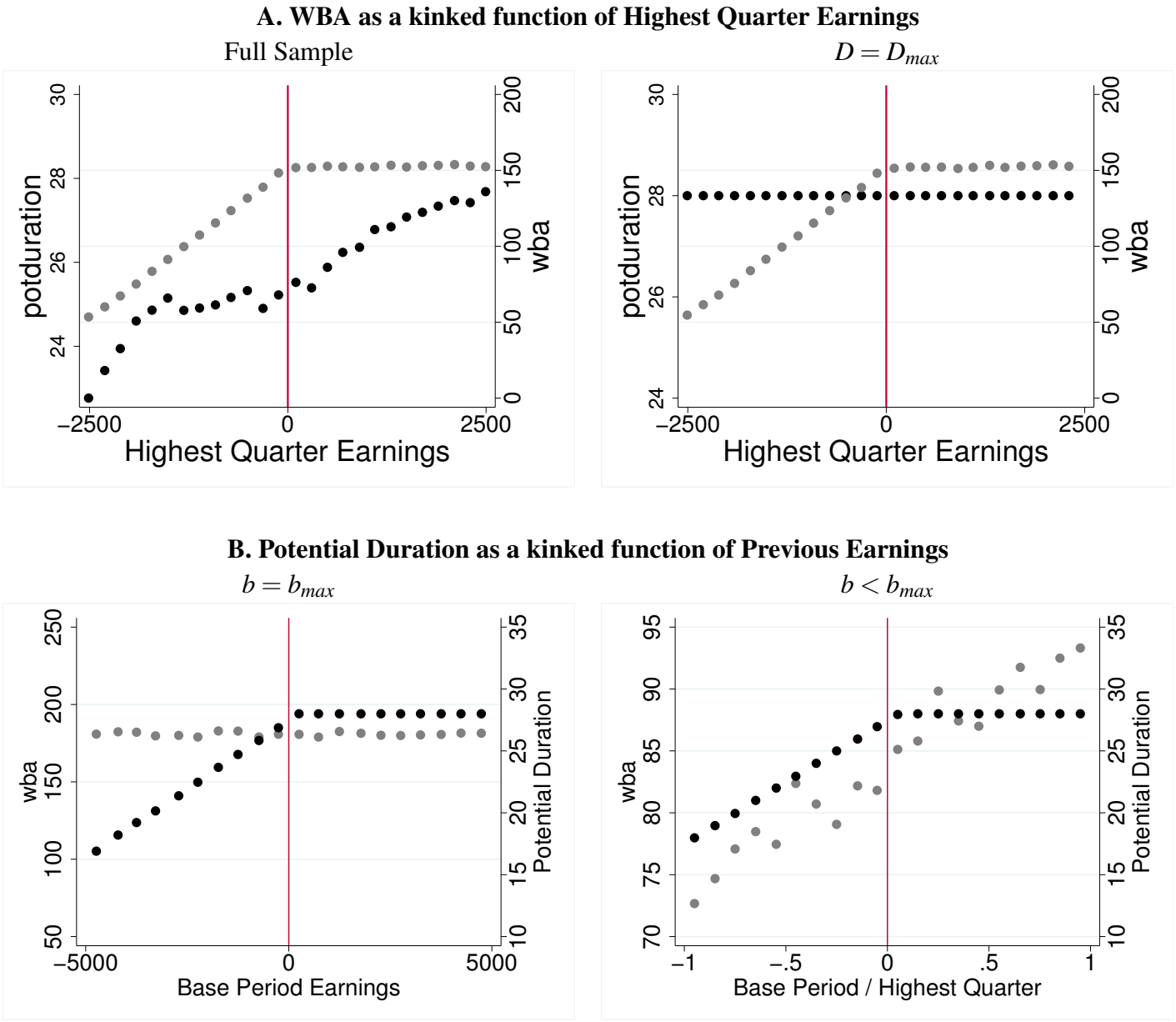
Table B5: SEMI-PARAMETRIC ESTIMATES OF HAZARD RATES

	(1) Meyer [1990]	(2)	(3)	(4)	(5)	(6)
log(UI)	-0.587***	-0.274***	-0.320***	-0.341***	-0.323***	
	(0.0394)	(0.0365)	(0.0368)	(0.0374)	(0.0370)	
State unemployment rate	-0.0550***	-0.0552***	-0.0207	-0.0226	-0.0251	-0.105***
	(0.00518)	(0.00519)	(0.0142)	(0.0143)	(0.0153)	(0.0209)
log(UI)× (u>median)						
				0.0248**		
				(0.00812)		
log(UI)×(u> .08)					0.00527	
					(0.00685)	
log(UI)×(u<p25)						-0.363***
						(0.0376)
log(UI)×(p25<u<median)						-0.353***
						(0.0371)
log(UI)×(median<u<p75)						-0.292***
						(0.0371)
log(UI)×(u>p75)						-0.274***
						(0.0378)
Non-param controls for previous wage & experience	NO	YES	YES	YES	YES	YES
Year×state F-E	NO	NO	YES	YES	YES	YES
# Spells	39852	39852	39852	39852	39852	39852
Log-likelihood	-136305.0	-136364.8	-135976.0	-135971.4	-135975.7	-135946.2

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

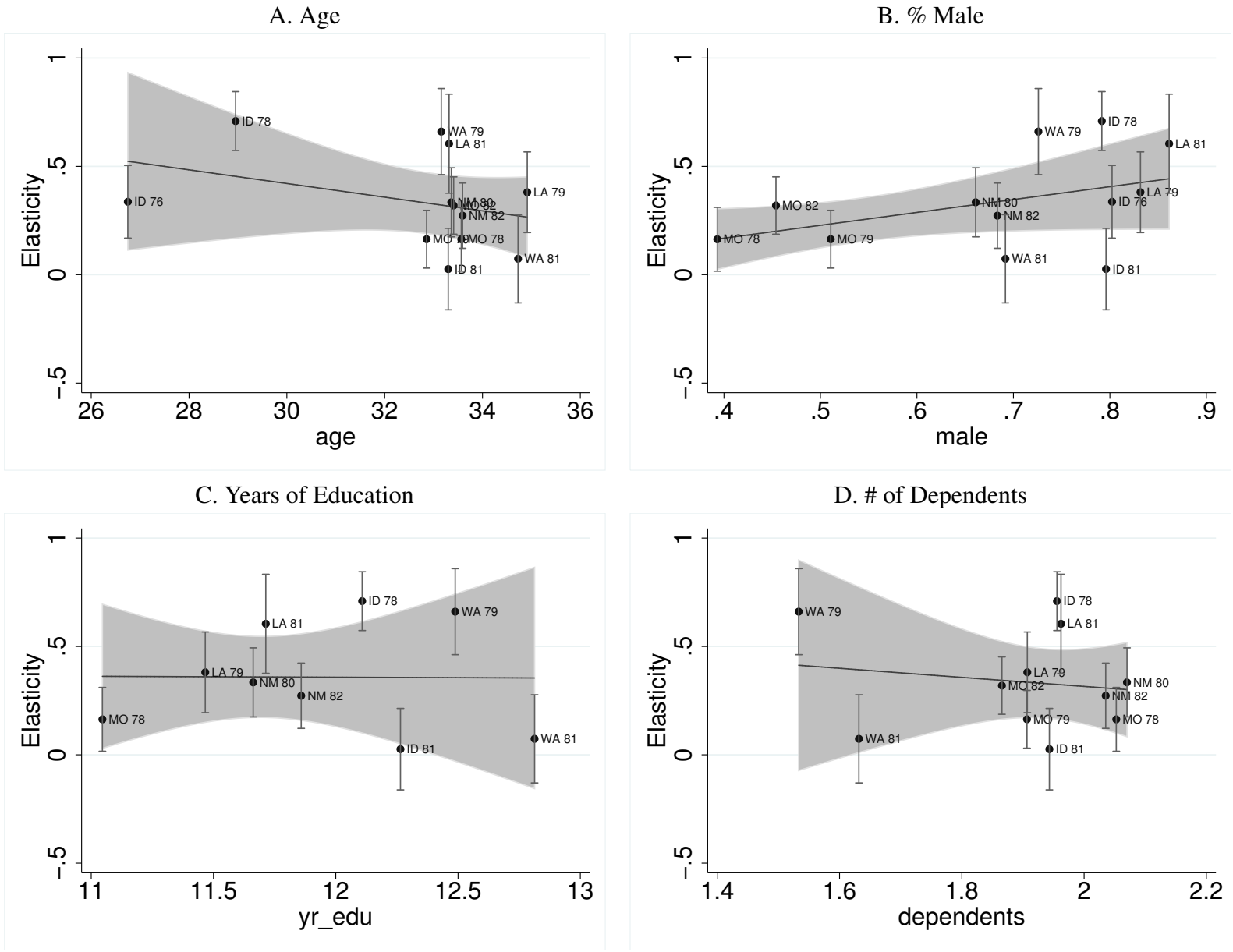
Notes: This table estimates the effect of UI weekly benefits levels on the hazard rate of leaving UI using the CWBH complete data for 8 US states from the late 1970s to early 1980s. We fit Cox proportional hazard models. All specifications include controls for gender, ethnicity, marital status, year of schooling, a 6-pieces exhaustion spline and state fixed effects. u denotes the state unemployment rate. log(UI) denotes the log-weekly UI benefit amount. p25 and p75 denote the 25th and 75th percentile of unemployment rates (among all state×quarter in our data). Column (1) replicates the specification of Meyer [1990], Table VI, column (7) (Meyer [1990] was using a much smaller dataset). Column (2) further adds non-parametric controls for previous earnings and experience. column (3) further adds year×state fixed effects. Columns (4) and (5) add the interaction of log(UI) and high unemployment dummies (unemployment rate above the median across all US states in the same quarter in column (4) and unemployment rate above 8% in column (5)). Column (6) adds the interaction of log(UI) with quartiles for the level of unemployment (quartiles defined across all state×quarter cells in our sample).

Figure A1: UI BENEFIT SCHEDULE: WEEKLY BENEFIT AMOUNT (GREY) & POTENTIAL DURATION(BLACK), LOUISIANA



Notes: The graph shows the weekly benefit amount and potential duration of Tier I observed in the CWBH data for Louisiana.

Figure A2: CORRELATION BETWEEN ESTIMATES OF THE ELASTICITY W.R.T BENEFIT LEVEL & COVARIATES



Notes: The graph correlates the estimated elasticities (with their 95% confidence interval) of the duration of initial spell with the average value of the covariates at the kink point in the state during each sub-period . The line displays the result of a regression fit (with weights equal to the inverse of the standard errors) and the grey area is the 95% robust confidence interval of the fit.