Continuation of NLS Discussion Paper 96-33
Part 2 of 2

This version of the paper was split for web delivery.

Table 1
Definition of Variables

Variable	Definition
hinsur	Current Employer Offers Health Insurance
lnwage	Log Of Real Hourly Wage Rate
experien	Years of Employment Experience
expersqr	Years of Employment Experience Squared
grade	Highest Grade Completed
unemrate	State Unemployment Rate
hi_pct	% of Persons in R's State Covered by Private HI
pct_ch	% Change in Coverage Proportion Between Years
lnhosp	Log Real Ave. Daily Hospital Room Charge in R's State
pctchghp	% Change in Hospital Room Charge Between Years
illspell	Away From Work At Least 1 Week For Illness
child	At Least One Child Living At Home
leave	Left Job Between Interviews
sep_inv	Fired, Dismissed, or Layed Off From Job
sep_quit	Quit Job for New Job or for Personal Reasons
age	In Years, as of May 1 in Each Survey Year
male	Equals One If Respondent is Male
married	Equals One If Respondent is Married

Table 2
Descriptive Statistics

Variable	Mean	Std. Dev.
hinsur	0.804	0.397
lnwage	1.936	0.446
experien	7.696	3.209
grade	13.121	2.172
unemrate	2.920	1.045
hi_pct	0.775	0.059
pct_ch	-0.001	0.038
lnhosp	5.410	0.334
pctchghp	0.093	0.079
illspell	0.032	0.176
child	0.339	0.474
leave	0.284	0.451
sep_inv	0.068	0.252
sep_quit	0.179	0.384
age	26.237	3.229
male	0.579	0.494
married	0.477	0.499

Notes:

1) Observations are pooled across years and weighted.

2) $N = 24325$

Table 3

Sample of Respondents Selected from the 1979–1992 NLSY Record

Description of Selection Rule	# of Obs. Deleted	Sample Size
Was in the 1979 NLSY respondent sample.	0	12686
Was a NLSY cross-section respondent.	6575	6111
Interviewed at least 8 times after reaching the age of 21.	1156	4955
Main activity during the week preceding an interview was 'keeping house' no more than once.	1040	3915
In the labor force during the week preceding an interview at least 6 times.	199	3716
Had no missing information in any year for wages, employment experience, health insurance, or job mobility.	57	3659
Did not report being 'disabled' at two or more consecutive interviews.	24	3635
Was employed at all consecutive interviews	5	3630

Final sample contains **3630 respondents and 25174 total observations** from 1979–1992.

Table 4
Health Insurance (HI) and Job Transitions Between Consecutive Observations at Times t and $t+1$, By Type of Job Transition

Weighted Cell Percentages
[Weighted Column Percentages]
(Unweighted Cell Frequencies)

Period t+1	**Period t**		
Health Insurance Status, Same Job Status	**Job Does Not Offer HI**	**Job Offers HI**	**Total**
w/o HI, Not At Same Job – Quit	2.39	3.00	5.39
	[12.63]	[3.70]	
	(637)	(757)	(1394)
w/ HI, Not At Same Job – Quit	3.50	10.31	13.81
	[18.54]	[12.72]	
	(895)	(2489)	(3384)
w/o HI, Not At Same Job – LFD[1]	1.18	1.35	2.53
	[6.24]	[1.67]	
	(337)	(351)	(688)
w/ HI, Not At Same Job – LFD	1.34	3.02	4.36
	[7.06]	[3.73]	
	(353)	(772)	(1125)
w/o HI, At Same Job	7.25	4.20	11.45
	[38.35]	[5.17]	
	(1812)	(1057)	(2869)
w/ HI, At Same Job	3.25	59.21	62.46
	[17.18]	[73.02]	
	(832)	(14061)	(14893)
Total	18.91	81.09	100.0
	[100.0]	[100.0]	
	(4866)	(19487)	(24353)

(1) LFD = Layed off, Fired, or Dismissed

Table 5a
Probability of a Transition From a Period t Job that Doesn't Offer Health Insurance to a Period $t+1$ Job that Does Offer Health Insurance Coverage, by Type of Job Transition and by State Health Insurance Availability

State HI Coverage Rates: Quartiles (% Covered)	**Quit Old Job**	**Involuntary Separation**	**Stay At Old Job**
Min (54%)	.616	.486	.372
1st (72%)	.618	.540	.345
2nd (77%)	.618	.555	.337
3rd (81%)	.618	.567	.331
Max (90%)	.619	.594	.318

Note: Predicted probabilities calculated using estimates from table 8a.

Table 5b
Probability of a Transition From a Period t Job that Doesn't Offer Health Insurance to a Period $t+1$ Job that Does Offer Health Insurance Coverage, by Type of Job Transition and by Annual Percentage Change In State Health Insurance Coverage

% Change In Rate: Quartiles (% Change)	**Quit Old Job**	**Involuntary Separation**	**Stay At Old Job**
1st (-2.61%)	.557	.431	.225
2nd (.20%)	.564	.461	.246
3rd (2.31%)	.570	.484	.263

Note: Predicted probabilities calculated using estimates from table 8a.

Table 5c

Probability of a Transition From a Period t Job that Doesn't Offer Health Insurance to a Period $t+1$ Job that Does Offer Health Insurance Coverage, by Type of Job Transition and by State Health Care Prices

	Quit Old Job	Involuntary Separation	Stay At Old Job
State Hospital Prices:			
Quartiles (ln Price)			
Min (4.09)	.738	.723	.183
1st (4.98)	.658	.606	.276
2nd (5.26)	.630	.565	.312
3rd (5.53)	.601	.524	.349
Max (6.41)	.508	.394	.477

Note: Predicted probabilities calculated using estimates from table 8a.

Table 5d

Probability of a Transition From a Period t Job that Doesn't Offer Health Insurance to a Period $t+1$ Job that Does Offer Health Insurance Coverage, by Type of Job Transition and by Annual Percentage Change In State Health Care Prices

	Quit Old Job	Involuntary Separation	Stay At Old Job
% Change In Price:			
Quartiles (%)			
1st (5.95%)	.620	.555	.337
2nd (9.78%)	.617	.551	.336
3rd (13.40%)	.615	.548	.335

Note: Predicted probabilities calculated using estimates from table 8a.

Table 6a
Probability of a Transition From a Period t Job that Offers Health Insurance to a Period $t+1$ Job that Does Not Offer Health Insurance Coverage, by Type of Job Transition and by State Health Insurance Availability

State HI Coverage Rates: Quartiles (% Covered)	**Quit Old Job**	**Involuntary Separation**	**Stay At Old Job**
Min (54%)	.344	.289	.113
1st (72%)	.264	.314	.078
2nd (77%)	.245	.321	.071
3rd (81%)	.230	.326	.065
Max (90%)	.197	.340	.053

Note: Predicted probabilities calculated using estimates from table 8b.

Table 6b
Probability of a Transition From a Period t Job that Offers Health Insurance to a Period $t+1$ Job that Does Not Offer Health Insurance Coverage, by Type of Job Transition and by Annual Percentage Change In State Health Insurance Coverage

% Change In Rate: Quartiles (% Change)	**Quit Old Job**	**Involuntary Separation**	**Stay At Old Job**
1st (-2.61%)	.245	.329	.074
2nd (.20%)	.246	.321	.069
3rd (2.31%)	.247	.315	.066

Note: Predicted probabilities calculated using estimates from table 8b.

Table 6c

Probability of a Transition From a Period t Job that Offers Health Insurance to a Period $t+1$ Job that Does Not Offer Health Insurance Coverage, by Type of Job Transition and by State Health Care Prices

	Quit Old Job	**Involuntary Separation**	**Stay At Old Job**
State Hospital Prices: Quartiles (ln Price)			
Min (4.09)	.175	.325	.012
1st (4.98)	.223	.325	.038
2nd (5.26)	.240	.325	.053
3rd (5.53)	.257	.325	.074
Max (6.41)	.317	.325	.198

Note: Predicted probabilities calculated using estimates from table 8b.

Table 6d

Probability of a Transition From a Period t Job that Offers Health Insurance to a Period $t+1$ Job that Does Not Offer Health Insurance Coverage, by Type of Job Transition and by Annual Percentage Change In State Health Care Prices

	Quit Old Job	**Involuntary Separation**	**Stay At Old Job**
% Change In Price: Quartiles (%)			
1st (5.95%)	.243	.319	.067
2nd (9.78%)	.246	.321	.070
3rd (13.40%)	.249	.323	.073

Note: Predicted probabilities calculated using estimates from table 8b.

Table 7
Determinants of Real Log Wages

	Coefficient	t–Statistic
experien	.056	17.90
expersqr	-.001	-6.06
grade	.061	54.80
unemrate	-.032	-12.96
constant	.840	39.89

Notes:

(1) $R^2 = .413$, $N = 29015$

(2) Dependent variable is natural logarithm of the hourly wage rate in 1983 dollars.

Table 8a
Multinomial Logit Estimates of Health Insurance Coverage and Job Mobility Hazard Function – Individuals Observed At Time t At Jobs **Not Offering** Health Insurance Coverage[1]

Transition	Independent Variable	Coefficient	z–Statistic
$[H(t+1)=0, T(t)=1]$	experien	-.152	-2.21
	expersqr	.001	0.30
	grade	-.046	-2.00
	hi_pct	-2.284	-2.59
	pct_ch	.144	0.12
	lnhosp	.572	3.30
	pctchghp	-.822	-1.30
	unemrate	-.146	-2.99
	illspell	.662	3.00
	lnwage	-.453	-3.94
	constant	.305	0.27
$[H(t+1)=1, T(t)=1]$	experien	-.112	-1.84
	expersqr	.003	0.67
	grade	.089	4.35
	hi_pct	-2.234	-2.89
	pct_ch	.004	0.00
	lnhosp	.134	0.86
	pctchghp	-1.093	-1.97
	unemrate	-.158	-3.63
	illspell	.561	2.70
	lnwage	-.448	-4.49
	constant	1.047	1.07
$[H(t+1)=0, T(t)=2]$	experien	-.298	-3.50
	expersqr	.006	0.95
	grade	-.076	-2.60
	hi_pct	-3.993	-3.55
	pct_ch	-.840	-0.56
	lnhosp	.860	4.00
	pctchghp	-.405	-0.50
	unemrate	-.016	-0.28
	illspell	.632	2.28
	lnwage	.051	0.35
	constant	-.786	-0.56

Table 8a (continued)
Multinomial Logit Estimates of Health Insurance Coverage and Job Mobility Hazard Function – Individuals Observed At Time t At Jobs Not Offering Health Insurance Coverage[1]

Transition	Independent Variable	Coefficient	z–Statistic
$[H(t+1)=1, T(t)=2]$	experien	-.098	-1.14
	expersqr	-.000	-0.07
	grade	.035	1.24
	hi_pct	-2.700	-2.49
	pct_ch	.982	0.65
	lnhosp	.253	1.17
	pctchghp	-.742	-0.96
	unemrate	-.067	-1.13
	illspell	.669	2.48
	lnwage	.075	0.54
	constant	-.570	-0.42
$[H(t+1)=1, T(t)=3]$	experien	-.142	-2.36
	expersqr	.011	2.95
	grade	.093	4.43
	hi_pct	-.572	-0.74
	pct_ch	3.191	2.57
	lnhosp	.593	3.69
	pctchghp	-.095	-0.18
	unemrate	.024	0.55
	illspell	-.280	-1.01
	lnwage	.060	0.60
	constant	-4.546	-4.42

Notes:

(1) At time of initial observation (time t) each individual is working at a job which does not offer health insurance coverage.

(2) In column 1 $H(t+1)$ represents health insurance status in the year following the initial observation, and $T(t)$ represents the job transition that took place between the two observations. $T(t)=1$ represents a job quit; $T(t)=2$ represents an involuntary job separation; and $T(t)=3$ represents no job change.

(3) For identification the category $[H(t+1)=0, T(t)=3]$ is excluded.

(4) Pseudo $R^2=.027$, $N=4623$

Table 8b

Multinomial Logit Estimates of Health Insurance Coverage and Job Mobility Hazard Function – Individuals Observed At Time t At Jobs Offering Health Insurance Coverage[1]

Transition	Independent Variable	Coefficient	z–Statistic
$[H(t+1)=0, T(t)=1]$	experien	-.125	-2.18
	expersqr	.000	0.02
	grade	-.063	-3.20
	hi_pct	-2.477	-3.72
	pct_ch	-.425	-0.43
	lnhosp	.673	4.98
	pctchghp	.559	1.10
	unemrate	-.154	-3.92
	illspell	1.073	6.71
	lnwage	-1.229	-11.87
	constant	-.241	-.28
$[H(t+1)=1, T(t)=1]$	experien	.006	0.16
	expersqr	-.006	-2.73
	grade	.092	8.36
	hi_pct	-.211	-0.53
	pct_ch	-.481	-0.79
	lnhosp	.279	3.38
	pctchghp	.023	0.08
	unemrate	-.218	-8.89
	illspell	.522	4.08
	lnwage	-.851	-13.87
	constant	-1.704	-3.32
$[H(t+1)=0, T(t)=2]$	experien	-.293	-3.84
	expersqr	.009	1.80
	grade	-.245	-8.33
	hi_pct	-1.445	-1.49
	pct_ch	-2.740	-1.99
	lnhosp	.897	4.69
	pctchghp	1.529	2.26
	unemrate	.057	1.11
	illspell	.829	4.84
	lnwage	-.139	-1.33
	constant	-2.481	-2.92

Table 8b (continued)

Multinomial Logit Estimates of Health Insurance Coverage and Job Mobility Hazard Function – Individuals Observed At Time t At Jobs **Offering** Health Insurance Coverage[1]

Transition	Independent Variable	Coefficient	z–Statistic
$[H(t+1)=1, T(t)=2]$	experien	-.116	-2.00
	expersqr	-.002	-0.50
	grade	-.154	-7.83
	hi_pct	-2.015	-3.12
	pct_ch	-1.301	-1.30
	lnhosp	.818	6.22
	pctchghp	1.123	2.37
	unemrate	-.058	-1.54
	illspell	.829	4.84
	lnwage	-.139	-1.33
	constant	-2.481	-2.92
$[H(t+1)=0, T(t)=3]$	experien	-.234	-4.90
	expersqr	.018	7.06
	grade	-.009	-0.52
	hi_pct	-2.359	-4.37
	pct_ch	-2.402	-2.20
	lnhosp	1.486	12.67
	pctchghp	1.399	3.12
	unemrate	.110	3.35
	illspell	-.226	-0.95
	lnwage	-.856	-9.69
	constant	-7.116	-9.31

Notes:

(1) At time of initial observation (time t) each individual is working at a job which offers health insurance coverage.

(2) In column 1 $H(t+1)$ represents health insurance status in the year following the initial observation, and $T(t)$ represents the job transition that took place between the two observations. $T(t)=1$ represents a job quit; $T(t)=2$ represents an involuntary job separation; and $T(t)=3$ represents no job change.

(3) For identification the category $[H(t+1)=1, T(t)=3]$ is excluded.

(4) Pseudo $R^2 = .046$, $N = 18690$

Table 9a
Probit Estimates of the Likelihood of a Job Change

	(1)		(2)		(3)		(4)	
Independent Variable	No Fixed Effects	Fixed Effects	No Fixed Effects	Fixed Effects	No Fixed Effects	Fixed Effects	No Fixed Effects	Fixed Effects
experien	−.052	−.055	−.052	−.055	−.052	−.055	−.052	−.055
	(.028)	(.041)	(.028)	(.041)	(.028)	(.041)	(.028)	(.041)
expersqr	−.002	.003	−.002	.003	−.002	.003	−.002	.003
	(.002)	(.002)	(.002)	(.002)	(.002)	(.002)	(.002)	(.002)
grade	−.027*	−.029	−.027*	−.032	−.027*	−.029	−.027*	−.031
	(.009)	(.075)	(.009)	(.075)	(.009)	(.075)	(.009)	(.075)
illspell	.475*	.563*	3.970*	3.168	−.756	2.925	2.926	6.013
	(.106)	(.140)	(1.515)	(1.953)	(1.801)	(2.402)	(2.424)	(3.281)
hi_pct	−1.233*	1.20	−1.100*	1.319	−1.227*	1.192	−1.082*	1.327
	(.326)	(.898)	(.331)	(.903)	(.326)	(.898)	(.331)	(.904)
pct_ch	−1.119*	.741	−1.071*	.795	−1.122*	.758	−.962	.906
	(.500)	(.728)	(.501)	(.729)	(.500)	(.729)	(.508)	(.738)
lnhosp	.346*	−.458*	.342*	−.466*	.339*	−.442	.338*	−.442
	(.067)	(.236)	(.067)	(.236)	(.068)	(.237)	(.068)	(.237)
pctchghp	.169	−.243	.169	−.239	.166	−.232	.129	−.280
	(.243)	(.340)	(.243)	(.340)	(.243)	(.340)	(.246)	(.344)
illhipct	−−	−−	−4.556	−3.387	−−	−−	.148	−.579
			(1.969)	(2.529)			(.351)	(.475)
illhipc	−−	−−	−−	−−	−−	−−	1.622	2.222
							(1.654)	(2.252)
illhp	−−	−−	−−	−−	.230	−.440	−4.415*	−3.312
					(.335)	(.446)	(1.984)	(2.552)
illhpc	−−	−−	−−	−−	−−	−−	−3.887	−3.252
					−−		(3.112)	(4.150)
constant	−.636	−3.77	−.722	−3.798	−.601	−3.85	−.706	−3.940
	(.419)	−−	(.421)	−−	(.422)	−−	(.424)	−−

Notes:

* Indicates significance at the 5% level.

(1) Standard errors in parentheses.

(2) Probit estimates based on a subset of 800 respondents randomly drawn from the sample of respondents represented in table 3.

(3) Eight-hundred individual level fixed effects are not reported.

(4) Sample includes 5216 observations.

Table 9b
Probit Estimates of the Likelihood of a Job Change – MALES ONLY

Independent Variable	No Fixed Effects	Fixed Effects
experien	−.072*	−.087*
	(.027)	(.040)
expersqr	−.001	.005*
	(.002)	(.002)
grade	−.057*	−.055
	(.008)	(.078)
illspell	.571*	.337*
	(.104)	(.136)
hi_pct	−.988*	.925
	(.336)	(.921)
pct_ch	−1.748*	−.708
	(.508)	(.921)
lnhosp	.268*	−.608*
	(.067)	(.238)
pctchghp	−.058	−.869*
	(.234)	(.313)
constant	.072	−1.61
	(.418)	--

Notes:

* Indicates significance at the 5% level.

(1) Standard errors in parentheses.

(2) Probit estimates based on a subset of 800 respondents randomly drawn from the sample of respondents represented in table 3.

(3) Eight-hundred individual level fixed effects are not reported.

(4) Sample includes 5275 observations.

Table 9c

Probit Estimates of the Likelihood of a Job Change – FEMALES ONLY

Independent Variable	No Fixed Effects	Fixed Effects
experien	−.030	−.013
	(.027)	(.040)
expersqr	−.003	.002
	(.002)	(.002)
grade	.003	−.050
	(.009)	(.060)
illspell	.543*	.536*
	(.097)	(.129)
hi_pct	−.505	1.359
	(.320)	(.883)
pct_ch	−.181	1.475*
	(.497)	(.697)
lnhosp	.174*	−.864*
	(.066)	(.226)
pctchghp	.015	−.471
	(.229)	(.309)
constant	−.770	4.704
	(.415)	−−

Notes:

* Indicates significance at the 5% level.

(1) Standard errors in parentheses.

(2) Probit estimates based on a subset of 800 respondents randomly drawn from the sample of respondents represented in table 3.

(3) Eight-hundred individual level fixed effects are not reported.

(4) Sample includes 5280 observations.

Table 9d

Probit Estimates of the Likelihood of a Job Change – MARRIED ONLY

Independent Variable	No Fixed Effects	Fixed Effects
experien	−.054	−.112*
	(.028)	(.042)
expersqr	−.002	.005*
	(.002)	(.002)
grade	−.047*	−.061
	(.008)	(.083)
illspell	.500*	.505*
	(.093)	(.124)
hi_pct	−1.325*	.473
	(.340)	(.905)
pct_ch	−.959	.753
	(.495)	(.699)
lnhosp	.196*	−.475
	(.069)	(.255)
pctchghp	−.157	−.784*
	(.255)	(.349)
constant	.453	−1.709
	(.426)	--

Notes:

* Indicates significance at the 5% level.

(1) Standard errors in parentheses.

(2) Probit estimates based on a subset of 800 respondents randomly drawn from the sample of respondents represented in table 3.

(3) Eight-hundred individual level fixed effects are not reported.

(4) Sample includes 5336 observations.

Table 9e

Probit Estimates of the Likelihood of a Job Change – UNMARRIED ONLY

Independent Variable	No Fixed Effects	Fixed Effects
experien	−.085	−.069
	(.027)	(.042)
expersqr	−.001	.003
	(.002)	(.002)
grade	−.022*	−.207*
	(.009)	(.076)
illspell	.320*	.180
	(.104)	(.138)
hi_pct	−1.148*	.726
	(.325)	(.934)
pct_ch	−1.074	−.124
	(.494)	(.726)
lnhosp	.168*	−.601*
	(.068)	(.235)
pctchghp	−.081	−.268
	(.247)	(.329)
constant	.381	−.968
	(.421)	−−

Notes:

* Indicates significance at the 5% level.

(1) Standard errors in parentheses.

(2) Probit estimates based on a subset of 800 respondents randomly drawn from the sample of respondents represented in table 3.

(3) Eight-hundred individual level fixed effects are not reported.

(4) Sample includes 5182 observations.

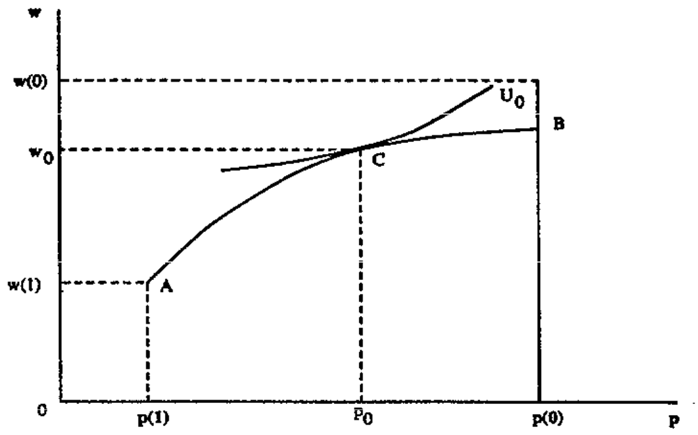

Figure 1: Individual Preferences For Wages and Health Insurance

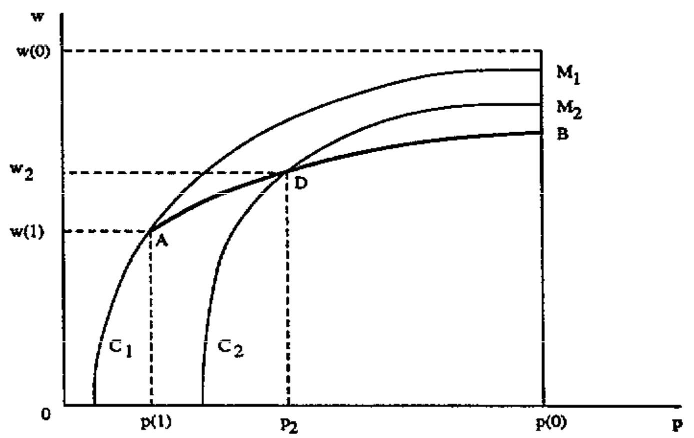

Figure 2: Derivation of the Employer Utility Offer Curve

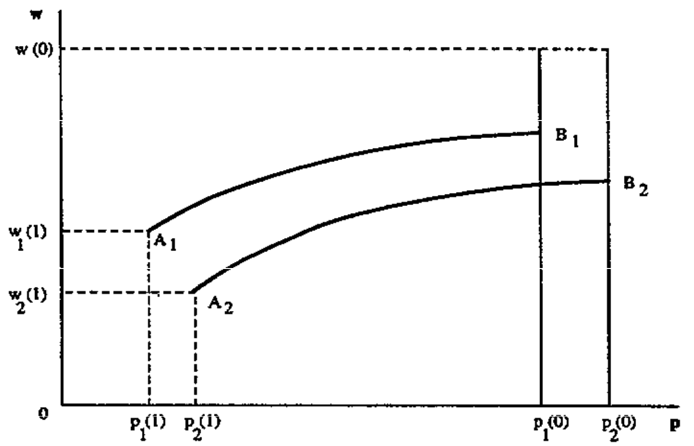

Figure 3a: Differences In State Health Insurance Costs

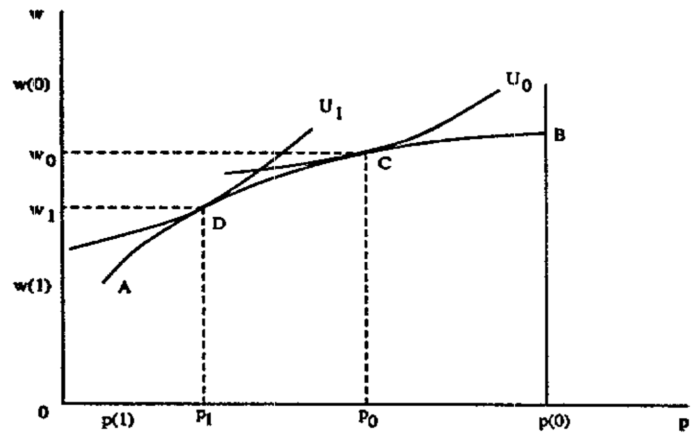

Figure 3b: Differences In Health Insurance Preferences

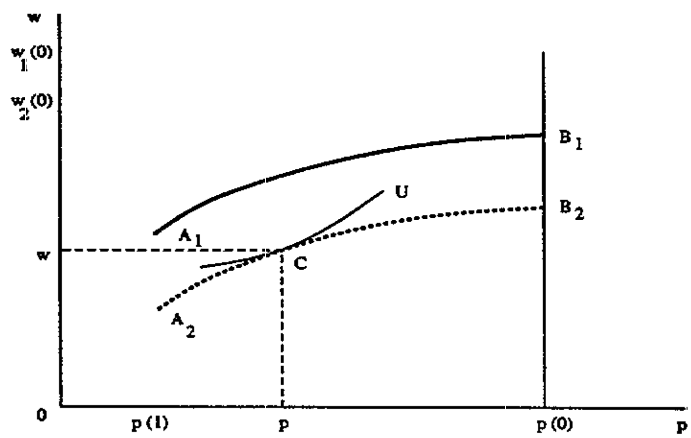

Figure 3c: A Low Employer-Employee Match

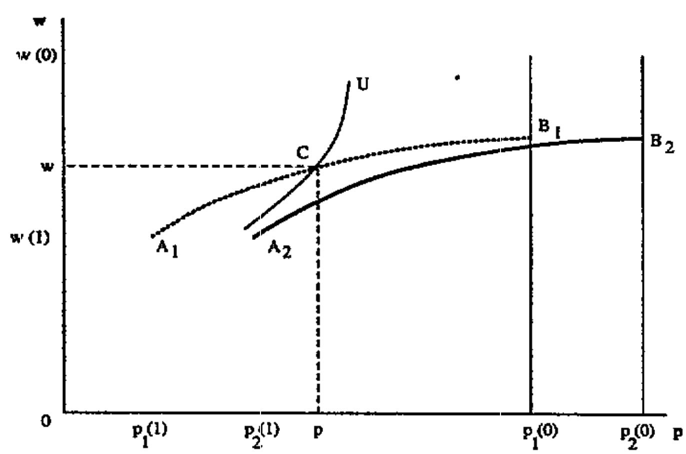

Figure 3d: The Effect of Pre-existing Conditions On Job Mobility

References

Abraham, Katherine and Henry Farber, 1987, Job Duration, Seniority, and Earnings, *American Economic Review*, 77(3): 278–297.

Adamache, Killard and Frank Sloan, 1985, Fringe Benefits: To Tax or Not to Tax?, *National Tax Journal*, 38(March):47–64.

Altonji, Joe and Robert Shakotko, 1987, Do Wages Rise with Job Seniority?, *Review of Economic Studies*, 54(3): 437–459.

Altonji, Joe and N. Williams, 1993, Using Wage Growth Models to Estimate the Returns to Experience, Seniority, and Job Mobility, in J.C. van Ours, G.A. Pfann, and G. Ridder (eds.), *Labor Demand and Equilibrium Wage Formation* (Amsterdam, Netherlands: Elsevier Science Publishers B.V.), Ch. IV.2: 327–355.

Arrow, Kenneth, 1976, Welfare Analysis of Changes in Health Coinsurance Rates, in Richard Rosett (ed.), *The Role of Health Insurance in the Health Services Sector* (New York, NY: National Bureau of Economic Research), 3–33.

Arrow, Kenneth, 1974, Optimal Insurance and Generalized Deductibles, *Scandinavian Actuarial Journal*, 1–42.

Arrow, Kenneth, 1963, The Welfare Economics of Medical Care, *American Economic Review*, 53(5): 941–973.

Buchmueller, Thomas C. and Robert G. Valletta, 1994, Employer-Provided Health Insurance and Worker Mobility: "Job-Lock" or Not?, Unpublished (University of California, Irvine).

Burdett, Kenneth, 1978, A Theory of Employee Search and Quit Rates, *American Economic Review*, 68: 212–220.

Burdett, Kenneth, Nicholas Kiefer, and Dale Mortensen, 1984, Earnings, Unemployment, and the Allocation of Time Over Time, *Review of Economic Studies*, 559–578.

Burdett, Kenneth and Dale T. Mortensen, 1978, Labor Supply Under Uncertainty, *Research in Labor Economics*, 2: 109-157.

Cameron, A.C., and Pravin K. Trivedi, 1991, The Role of Income and Health Risk in the Choice of Health Insurance, *Journal of Public Economics*, 45: 1–28.

Cameron, A.C., P.K. Trivedi, Frank Milne and J. Piggott, 1988, A Microeconometric Model of the Demand for Health Care and Health Insurance in Australia, *Review of Economic Studies*, 85-106.

Clark, Kim, and Lawrence Summers, 1979, Labor Market Dynamics and Unemployment: A Reconsideration, *Brookings Papers on Economic Activity*, 13–72.

Congressional Budget Office, 1982, *Catastrophic Medical Expenses: Patterns in the Non-Elderly, Non-Poor Population*, Washington, D.C.: Government Printing Office.

Cooper, Philip, and Alan Monheit, 1993, Does Employment-Related Health Insurance Inhibit Job Mobility?, *Inquiry*, Vol. 30(4): 400–416.

Cotton, Paul, 1991, Preexisting Conditions 'Hold Americans Hostage' to Employers and Insurance, *Journal of the American Medical Association*, 265: 2451-2453.

Davis, Karen, *et al.*, 1990, *Health Care Cost Containment* (Baltimore, MD: Johns Hopkins University Press).

Dowd, Bryan and Roger Feldman, 1992, Insurer Competition and Protection from Risk Redefinition in the Individual and Small Group Health Insurance Market, *Inquiry*, 29 (Summer): 148-157.

Dowd, Bryan and Roger Feldman, 1985, Biased Selection in Twin Cities Health Plans, in Richard M. Scheffler and Louis F. Rossiter (eds.), *Advances in Health Economics and Health Services Research*, Volume 6 (Greenwich, CT: JAI Press Inc.) 253–271.

Dowd, Bryan, Roger Feldman, Steven Cassou, and Michael Finch, 1991, Health Plan Choice and the Utilization of Health Care Services, *Review of Economics and Statistics*, 85–93.

Eckstein, Zvi, and Kenneth Wolpin, 1990, On the Estimation of Labour Force Participation, Job Search, and Job Matching Models Using Panel Data, in Yoram Weiss and Gideon Fishelson (eds.), *Advances in the Theory and Measurement of Unemployment* (New York: St. Martin's Press), 82–112.

Eckstein, Zvi, and Kenneth Wolpin, 1989, The Specification and Estimation of Dynamic Stochastic Discrete Choice Models: A Survey, *Journal of Human Resources*, 24(4): 562–598.

Ellis, Randall P., 1985, The Effect of Prior-Year Health Expenditures on Health Coverage Plan Choice, in Richard M. Scheffler and Louis F. Rossiter (eds.), *Advances in Health Economics and Health Services Research*, Volume 6 (Greenwich, CT: JAI Press, Inc.) 149–170.

Erlich, Isaac and Gary Becker, 1972, Market Insurance, Self-Insurance, and Self-Protection, *Journal of Political Economy*, 623–648.

Evans, Robert, 1983, The Welfare Economics of Public Health Insurance: Theory and Canadian Practice, in Lars Söderström (ed.), *Social Insurance* (Amsterdam, Holland: North Holland Press), 71–103.

Evans, William and Kip Viscusi, 1991, Estimation of State-Dependent Utility Functions Using Survey Data, *Review of Economics and Statistics*, 73(1): 94–104.

Farley, Pamela J. and Gail R. Wilensky, 1983, Options, Incentives, and Employment-Related Health Insurance, in Richard M. Scheffler and Louis F. Rossiter (eds.), *Advances in Health Economics and Health Services Research*, Volume 4 (Greenwich, CT: JAI Press, Inc.) 57–82.

Feldman, Roger, M. Finch, B. Dowd, and S. Cassou, 1989, The Demand for Employment-based Health Insurance Plans, *Journal of Human Resources*, 24: 115–142.

Feldstein, Martin, 1973, The Welfare Loss of Excess Health Insurance, *Journal of Political Economy*, 81(2): 251–280.

Feldstein, Martin and Jonathan Gruber, 1994, A Major Risk Approach to Health Insurance Reform, NBER Working Paper, No. 4852.

Flinn, Chris, 1986, Wages and Job Mobility of Young Workers, *Journal of Political Economy*, 94(2): 88–110.

Flinn, Chris, and James Heckman, 1982, New Methods for Analyzing Structural Models of Labor Force Dynamics, *Journal of Econometrics*, 18: 115–168.

Garen, John, 1988, Empirical Studies of the Job Matching Hypothesis, in Ronald Ehrenberg (ed.), *Research in Labor Economics*, Volume 9 (Greenwich, CT: JAI Press), 187–224.

Goldfarb, M., M. Hornbrook and C. Higgins, 1983, Determinants of Hospital Use: A Cross Diagnostic Analysis, *Medical Care*, 21(1): 48-66.

Gönül, Füsun, 1988, Dynamic Labor Force Participation Decisions of Males in the Presence of Layoffs and Uncertain Job Offers, *Journal of Human Resources*, 24(2).

Gould, John, 1969, The Expected Utility Hypothesis and the Selection of Optimal Deductibles for a Given Insurance Policy, *Journal of Business*, 42: 143–151.

Gronberg, Timothy and W. Robert Reed, 1994, Estimating Workers' Marginal Willingness to Pay for Job Attributes Using Duration Data, *Journal of Human Resources*, 29(3): 911–931.

Grossman, Michael, 1972, On the Concept of the Demand for Health, *Journal of Political Economy*, 80(2): 223–255.

Gruber, Jonathan, forthcoming, State Mandated Benefits and Employer-Provided Health Insurance, *Journal of Public Economics*, forthcoming.

Gruber, Jonathan, 1994, The Efficiency of a Group-Specific Mandated Benefit: Evidence from Health Insurance Benefits for Maternity, *American Economic Review*, Vol. 84: 622–641.

Gruber, Jonathan and Maria Hanratty, 1993, The Labor Market Effects of Introducing National Health Insurance: Evidence from Canada, NBER Working Paper, No. 4589.

Gruber, Jonathan, and Brigitte Madrian, 1994, Health Insurance and Job Mobility: The Effects of Public Policy on Job-Lock, *Industrial & Labor Relations Review*, 48(1): 86–102.

Gustman, Alan, and Thomas Steinmeier, 1994, Employer Provided Health Insurance and Retirement Behavior, *Industrial & Labor Relations Review*, 48(1): 124–140.

Heckman, James, 1981, The Incidental Parameters Problem and the Problem of Initial Conditions in Estimating a Discrete Time-Discrete Data Stochastic Process, in Charles Manski and Daniel McFadden (eds.), *Structural Analysis of Discrete Data wi*

h Econometric Applications (Cambridge, MA: The MIT Press), 179–195.

Heckman, James and Richard Robb, 1985, Alternative Methods for Evaluating the Impact of Interventions, *Journal of Econometrics*, 30: 239–267.

Holtz-Eakin, Douglas, 1994, Health Insurance Provision and Labor Market Efficiency in the United States and Germany, in Rebecca Blank (ed.), *Social Protection versus Economic Flexibility: Is There a Trade-Off?* (Chicago, IL: The University of Chicago Press), 157–187.

Institute of Medicine (U.S.), Committee On Employer-Based Health Benefits, 1993, *Employment and Health Benefits: A connection at risk*, Marilyn Field and Harold Shapiro (eds.) (Washington, D.C.: National Academy Press), Ch. 3.

Jones-Lee, Michael, 1974, The Value of Changes in the Probability of Death or Injury, *Journal of Political Economy*, 82: 835–849.

Jovanovic, Boyan, 1984, Matching, Turnover, and Unemployment, *Journal of Political Economy*, 92(1): 108–122.

Jovanovic, Boyan, 1979, Job Matching and the Theory of Turnover, *Journal of Political Economy*, 87(5): 972-990.

Jovanovic, Boyan, and Robert Moffitt, 1990, An Estimate of a Sectoral Model of Labor Mobility, *Journal of Political Economy*, 98(4): 827–852.

Kass, Nancy E., Ruth R. Faden, Robin Fox and Jan Dudley, 1991, Loss of Private Health Insurance Among Homosexual Men with AIDS, *Inquiry*, 28 (Fall): 249-254.

Katz, Avery and Gregory Mankiw, 1985, How Should Fringe Benefits Be Taxed?, *National Tax Journal*, 38(March):37–46.

Klerman, Jacob A., 1992, How Long is a Spell Without Health Insurance? Unpublished Manuscript, Santa Monica, CA: The RAND Corporation.

Klerman, Jacob, 1991, Pitfalls of Panel Data: The Case of the SIPP Health Insurance Data, in *Proceedings of the 1991 Public Health Conference on Records and Statistics* (Public Health Service, Centers for Disease Control and National Center for Health Statistics), 36–39.

Klerman, Jacob, Joan Buchanan, and Arlene Leibowitz, 1992, Labor Turnover and Health Insurance, in *Health Benefits and the Workforce* (Washington, D.C.: U.S. Department of Labor, Pension and Welfare Benefits Administration), 43–54.

Klerman, Jacob, and Omar Rahman, 1992, Employment Change and Continuation of Health Insurance Coverage, in *Health Benefits and the Workforce* (Washington, D.C.: U.S. Department of Labor, Pension and Welfare Benefits Administration), 93–104.

Kronick, Richard, 1991, Health Insurance, 1979-1989: The Frayed Connection Between Employment and Insurance, *Inquiry*, 28 (Winter): 318-332.

Langbert, Mitchell, 1994, ERISA: Law, Interests, and Consequences, *Journal of Economic Issues*, 28(1): 129–153.

Lee, Dwight, 1993, Mandated Benefits and Entry-Level Employees and Employment, *Journal of Labor Research*, 14(3): 199–211.

Lee, Lung-Fei, 1982, Health and Wage: A Simultaneous Equation Model With Multiple Discrete Indicators, *International Economic Review*, 23 (February): 199-221.

Leibowitz, Arlene, 1983, Fringe Benefits in Employee Compensation, in Jack Triplett (ed.), *The Measurement of Labor Costs*, (Chicago: University of Chicago Press and NBER), 371–389.

Lippman, S.A. and A.J. McCall, 1976, The Economics of Job Search: A Survey, *Economic Inquiry*, 14: 155-367.

Long, James and Frank Scott, 1982, The Income Tax and Nonwage Compensation, *Review of Economics and Statistics*, 64(May):211–219.

MacDonald, Glenn, 1988, Job Mobility in Market Equilibrium, *Review of Economics and Statistics*, 55: 153–168.

Madrian, Brigitte C., 1994, Employment-Based Health Insurance and Job Mobility: Is There Evidence of Job-Lock?, *Quarterly Journal of Economics*, 109(1): 27–54.

Manning, Willard, J. Newhouse, N. Duan, A. Leibowitz, and M. Marquis, 1987, Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment, *American Economic Review*, 77(3): 251–277.

McLaughlin, Kenneth, 1991, A Theory of Quits and Layoffs with Efficient Turnover, *Journal of Political Economy,* 99 (February): 1-29.

Meyer, Jack (ed.), 1983, *Market Reforms in Health Care* (Washington, DC: American Enterprise Institute for Public Policy Research).

Mincer, Jacob, 1986, Wage Changes in Job Changes, *Research in Labor Economics*, Volume 8, Part A (Greenwich, CT: JAI Press, Inc.), 171–197.

Mitchell, Olivia, 1990, The Effects of Mandating Benefits Packages, in Ronald Ehrenberg (ed.), *Research in Labor Economics,* Volume 11 (Greenwich, CT: JAI Press, Inc.), 297–320.

Mitchell, Olivia, 1983, Fringe Benefits and the Cost of Changing Jobs, *Industrial and Labor Relations Review*, 37(1), 70–78.

Mitchell, Olivia, 1982, Fringe Benefits and Labor Mobility, *Journal of Human Resources*, 17(2): 286–298.

Moffitt, Robert and Barbara Wolfe, 1992, The Effect of the Medicaid Program on Welfare Participation and Labor Supply, *Review of Economics and Statistics*, 74(4): 615–626.

Monheit, Alan and Philip Cooper, 1994, Health Insurance and Job Mobility: Theory and Evidence, *Industrial & Labor Relations Review,* 48(1): 68–85.

Monheit, Alan and Claudia Schur, 1988, The Dynamics of Health Insurance Loss: A Tale of Two Cohorts, *Inquiry*, 25 (Fall): 315-327.

Mortensen, Dale T., 1986, Job Search and Labor Market Analysis, in O. Ashenfelter and R. Laylard (eds.), *Handbook of Labor Economics*, Volume II (Amsterdam, Holland: Elsevier Science Publishers BV), ch. 15.

Newhouse, Joseph P., 1987, Health Economics and Econometrics, *American Economic Review,* 77 (May): 269-274.

Pashigian, B. P., Schkade, L. L., and Menefee, G. H., 1966, The Selection of an Optimal Deductible for a Given Insurance Policy, *Journal of Business*, 39: 35–44.

Pauly, Mark, 1986, Taxation, Health Insurance, and Market Failure in the Medical Economy, *Journal of Economic Literature*, 24: 629–675.

Pauly, Mark, 1968, The Economics of Moral Hazard: Comment, *American Economic Review*, 58(3): 531–537.

Penrod, John, 1993, Health Care Costs, Health Insurance, and Job Mobility, Unpublished, Princeton University.

Phelps, Charles E., 1986, Cross-Subsidies and Charge Shifting in American Hospitals, in F. Sloan, J. Blumstein, and J. Perrin (eds.), *Uncompensated Hospital Care* (Baltimore, Maryland: The Johns Hopkins University Press), 108–125.

Rosen, Sherwin, 1986, The Theory of Equalizing Differences, in O. Ashenfelter and R. Laylard (eds.), *Handbook of Labor Economics*, Volume I (Amsterdam, Holland: Elsevier Science Publishers BV).

Rosen, Sherwin, 1974, Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition, *Journal of Political Economy.*

Schorr, Alvin, 1990, Job Turnover—A Problem with Employment-Based Health Care, *New England Journal of Medicine*, 323(8), 543–545.

Scott, Frank, Mark Berger, and Dan Black, 1989, Effects of the Tax Treatment of Fringe Benefits on Labor Market Segmentation, *Industrial and Labor Relations Review*, 42(2): 216–229.

Shay, Edward, 1993, Regulation of Employment-Based Health Benefits: The Intersection of State and Federal Law, in Marilyn Field and Harold Shapiro (eds.), *Employment and Health Benefits: A connection at risk* (Washington, D.C.: National Academy Press), 293–322.

Sloan, Frank and Killard Adamache, 1986, Taxation and the Growth of Nonwage Compensation, *Public Finance Quarterly*, 14(April): 115–137.

Smeeding, Timothy, 1983, The Size Distribution of Wage and Nonwage Compensation: Employer Cost versus Employee Value, in Jack Triplett (ed.), *The Measurement of Labor Costs*, (Chicago: University of Chicago Press and NBER), 237–277.

Smith, Vernon, 1968, Optimal Insurance Coverage, *Journal of Political Economy*, 76: 68–77.

Swartz, Katherine, 1994, Dynamics of People Without Health Insurance: Don't Let the Numbers Fool You, *Journal of the American Medical Association*, 271(1): 64–66.

Swartz, Katherine and Timothy D. McBride, 1990, Spells Without Health Insurance: Distributions of Durations and Their Link to Point-in-Time Estimates of the Uninsured, *Inquiry*, 27 (Fall): 281-288.

Topel, Robert, 1986, Job Mobility, Search, and Earnings Growth: A Reinterpretation of Human Capital Earnings Functions, *Research in Labor Economics*, Volume 8, Part A (Greenwich, CT: JAI Press, Inc.), 199–233.

Topel, Robert and Michael Ward, 1992, Job Mobility and the Careers of Young Men, *Quarterly Journal of Economics*, 439–479.

Turner, Robert, 1987, Are Taxes Responsible for the Growth in Fringe Benefits?, *National Tax Journal*, 40(June): 205–220.

Van De Ven, Wynand P.M.M. and Jacques Van Der Gaag, 1982, Health as an Unobservable: A MIMIC-model of Demand for Health Care, *Journal of Health Economics*, 1: 157-183.

Viscusi, Kip, 1980, Self-Selection, Learning-Induced Quits and the Optimal Wage Structure, *International Economic Review*, 21: 529–546.

Viscusi, Kip, 1979, Insurance and Individual Incentives in Adaptive Contexts, *Econometrica*, 47(5): 1195–1207.

Viscusi, Kip, and William Evans, 1990, Utility Functions That Depend on Health Status: Estimates and Economic Implications, *American Economic Review*, 80(3): 353–374.

Vogel, Ronald, 1980, The Tax Treatment of Health Insurance Premiums as a Cause of Overinsurance, in Mark Pauly (ed.), *National Health Insurance*, (Washington, D.C.: American Enterprise Institute), 220–249.

Vroman, Susan and Gerard Anderson, 1984, The Effects of Income Taxation on the Demand for Employer-Provided Health Insurance, *Applied Economics*, 16(February):33–43.

Wolfe, Barbara and Robert Moffitt, 1991, A New Index to Value In-Kind Benefits, *Review of Income and Wealth*, 37(4): 387–408.

Wolpin, Kenneth, 1987, Estimating A Structural Search Model: The Transition From School To Work, *Econometrica*, 55(4): 801–817.

Woodbury, Stephen, 1983, Substitution Between Wage and Nonwage Benefits, *American Economic Review*, 73(1): 166–182.

Woodbury, Stephen, and Wei-Jang Huang, 1991, *The Tax Treatment of Fringe Benefits* (Kalamazoo, Michigan: W. E. Upjohn Institute for Employment Research), 1–38, 149–165.

Appendix

Solution of the Search Maximization Problem[61]

Let time be represented by a sequence of discrete periods of length h. Let $\beta(h)$ be the discount factor which is a function of h. Let c be the out of pocket cost of search per unit of time. Let $\tilde{u} = \tilde{u}(\tilde{w}, \tilde{p})$ be the instantaneous utility flow from a current job that offers wage $\tilde{w}$ and insurance price $\tilde{p}$. Let $u = u(w,p)$ be the instantaneous utility flow of an employment offer of (w,p) from the market. Let the probability distribution function of utility offers from the market be $F(u)$. A new employment offer from the current employer, given by y, is drawn at the end of every period h. The probability distribution function of y, $\tilde{F}(y)$, depends upon all currently available information, so that the expectation of y is time dependent. Offers from both the market and the current employer distributions are drawn independently of one another, and are independently and identically distributed over time.

Let $q(n,h)$, $n = 0, 1, \ldots$, be a probability distribution of the number of employment offers from the market, n, in time interval h. The offer to be considered in each period is the best of those that were offered in the period, i.e.,

$$u = \max\left[u_1, \ldots, u_n\right] \tag{22}$$

Let $H(u,n)$ represent the probability that the best of n offers is less than u given that $n \geq 1$. As in Mortensen I specify the the density q to be Poisson,

$$q(n,h) = e^{-\lambda h}\,(\lambda h)^n\,/\,n!\,, \tag{23}$$

where λ is the offer arrival rate. Let $V^G(u)$ denote the value of discontinuing search, accepting the offer from the market, u, and working forever at the same level of compensation. $V^G(u)$ is continuous and strictly increasing, and $V^G(0) = 0$ by assumption. $V^S(\tilde{u})$ is the value of the current utility offer $\tilde{u}$, and $V^S(y)$ is the value of the new offer from the current employer. Then the individual's problem is to maximize V^S, where V^S solves:

$$V^S(\tilde{u}) \;\; = \;\; (\tilde{u} - c)h + \beta(h)\int_0^{\infty}\left[\sum_{n=1}^{\infty} q(n,h)\right.$$

[61] The solution in this section is adapted from Mortentsen (1986). A few unique phrases are taken directly from that text.

$$\int_0^\infty \max\left(V^S(y), V^G(u)\right) dH(u,n) + q(0,h)V^S\Big] d\tilde{F}(y) \tag{24}$$

$$\begin{aligned} = \quad & (\tilde{u}-c)h + \beta(h)E\left[V^S(y)\right] + \\ & \beta(h)\int_0^\infty \left[\sum_{n=1}^{\infty} q(n,h)\int_0^\infty \max\left(0, V^G(u) - V^S(y)\right) dH(u,n)\right] d\tilde{F}(y) \end{aligned} \tag{25}$$

Assuming that the mean utility of the market offer distribution and that of the current employer offer distribution are finite we know that (25) has a unique solution given by a reservation utility level, u^*. u^* is defined as the unique solution to

$$V^G(u^*) = V^S(\tilde{u}). \tag{26}$$

Equation (25) is greatly simplified by converting the problem to continuous time, which is the limiting case when the period length, h, becomes very small. The following results are useful for the transformation to continuous time:

$$\lim_{h\to 0} q(1,h)/h = \lambda \quad \text{and} \quad \lim_{h\to 0} q(n,h)/h = 0, \quad \text{for} \quad n > 1,$$

and if the discount factor is specified as

$$\beta(h) = e^{-rh}, \quad \text{then} \quad \lim_{h\to 0} [1-\beta(h)]/h = r,$$

where r is the rate of interest. With the above results handy we can divide both sides of (25) by h, and re-express it as

$$\begin{aligned} \frac{1-\beta(h)}{h} V^S(\tilde{u}) \quad = \quad & (\tilde{u}-c) + \beta(h)\frac{E\left[V^S(y)\right] - V^S(\tilde{u})}{h} + \beta(h) \\ & \int_0^\infty \left[\frac{1}{h}\sum_{n=1}^{\infty} q(n,h)\int_0^\infty \max\left(0, V^G(u) - V^S(y)\right) dH(u,n)\right] d\tilde{F}(y) \end{aligned} \tag{27}$$

Taking the limit of (27) as $h \to 0$ we get

$$r\,V^S(\tilde{u}) = \tilde{u} - c + \frac{d\,E\left[V^S(y)\right]}{dt} + \int_0^\infty \int_0^\infty \max\left(0, V^G(u) - V^S(y)\right) dF(u)\, d\tilde{F}(y), \tag{28}$$

where dt represents an infinitessimal change in time. Also, since $V^G(u) = u/r$ we know from (26) that

$$rV^S(\tilde{u}) = rV^G(u^*) = u^*. \tag{29}$$

Using (29) to substitute for $V^S(\tilde{u})$, V^G in (28) gives

$$u^* = \tilde{u} - c + \frac{d\,E\left[V^S(y)\right]}{dt} + \frac{\lambda}{r}\int_0^\infty \int_{u^*}^\infty \left(u - r\,V^S(y)\right) dF(u)\, d\tilde{F}(y) \tag{30}$$

Equation (30) represents the first order condition for the solution to the optimal stopping problem.

It follows from (30) that an individual will search if and only if

$$u^* > \tilde{u} \Leftrightarrow \frac{\lambda}{r} \int_0^{\infty} \int_{rV^S(y)}^{\infty} \left(u - r\,V^S(y)\right) dF(u)\, d\tilde{F}(y) + \frac{d\,E\left[V^S(y)\right]}{dt} > c. \tag{31}$$

That is, search will occur if and only if the expected increase in discounted utility from search is greater than the cost of search.

Replacement of the utility flow on the current job with its indirect utility equivalent, $\tilde{u} = \tilde{w}\, e^{-\alpha\tilde{p}}$, into (30) gives

$$u^* = \tilde{w}\, e^{-\alpha\tilde{p}} - c + \frac{d\,E\left[V^S(y)\right]}{dt} + \frac{\lambda}{r} \int_0^{\infty} \int_{rV^S(y)}^{\infty} \left(u - r\,V^S(y)\right) dF(u)\, d\tilde{F}(y) \tag{32}$$

where u^* is now explicitly a function of current utility flow parameter α and prices w and p.

Comparative Static Results from the Search First Order Condition

As was noted in the text comparative static effects are derived under the assumption of stationarity. Stationarity is imposed on the model by assuming that the current job utility offer is a fixed constant. When stationarity is imposed, equation (32) reduces to:

$$u^* = \tilde{w} e^{-\alpha\tilde{p}} - c + \frac{\lambda}{r} \int_{u^*}^{\infty} (u - u^*)\, dF(u) \tag{33}$$

Equation (33) can be rewritten in a useful form as

$$u^* \left(\frac{r+\lambda}{r}\right) = \tilde{w}\, e^{-\alpha\tilde{p}} - c + \frac{\lambda}{r} \int_0^{u^*} F(u) du + \frac{\lambda}{r} E_F(u) \tag{34}$$

Equation (34) allows us to derive the following comparative static results:

$$\frac{\partial u^*}{\partial \alpha} = \frac{-\tilde{w}\,\tilde{p}\, e^{-\alpha\tilde{p}} r}{r + \lambda\,(1 - F(u^*))} < 0 \tag{35}$$

$$\frac{\partial u^*}{\partial c} = \frac{-r}{r + \lambda\,(1 - F(u^*))} < 0 \quad and \quad > -1 \tag{36}$$

$$\frac{\partial u^*}{\partial \tilde{w}} = \frac{r e^{-\alpha\tilde{p}}}{r + \lambda\,(1 - F(u^*))} > 0 \tag{37}$$

$$\frac{\partial u^*}{\partial \tilde{p}} = \frac{-\alpha r \tilde{w} e^{-\alpha\tilde{p}}}{r + \lambda\,(1 - F(u^*))} < 0 \tag{38}$$

$$\frac{\partial u^*}{\partial \lambda} = \frac{\int_{u^*}^{\infty} (u - u^*)\, dF(u)}{r + \lambda(1 - F(u^*))} > 0 \tag{39}$$

$$\frac{\partial u^*}{\partial r} = \frac{-\frac{\lambda}{r}\left[\int_{u^*}^{\infty} (u - u^*)\, dF(u)\right]}{r + \lambda(1 - F(u^*))} < 0 \tag{40}$$

National Longitudinal Surveys (NLS)
Discussion Paper Series

Number	Author	Title
92-01	Michael R. Pergamit	How the Federal Government Uses Data from the National Longitudinal Surveys
92-02	Norman M. Bradburn Martin R. Frankel Reginald P. Baker Michael R. Pergamit	A Comparision of Computer-Assisted Personal Interviews (CAPI) with Paper-and Pencil Interviews (PAPI) in the National Longitudinal Survey of Youth
92-03	Saul Schwartz Robert Hutchens George Jakubson	Dynamic Models of the Joint Determination of Labor Supply and Family Structure
92-04	A. Colin Cameron R. Mark Gritz Thomas MaCurdy	The effects of Unemployment Compensation on the Unemployment of Youth
92-05	Henry S. Farber	Evaluating Competing Theories of Worker Mobility
92-06	Frank L. Mott Paula Baker	Evaluation of the 1989 Child-care Supplement in the National Longitudinal Survey of Youth
92-07	Audrey Light Manuelita Ureta	Gender Differences in the Quit Behavior of Young Workers
92-08	Lisa M. Lynch	The Impact of Private Sector Training on Race and Gender Wage Differentials and the Career Patterns of Young Workers
92-09	Evangelos M. Falaris H. Elizabeth Peters	Responses of Female Labor Supply and Fertility to the Demographic Cycle
92-10	Anne Hill June E. O'Neill	A Study of Intercohort Change in Women's Work Patterns and Earnings
92-11	Arleen Leibowitz Jacob Alex Klerman Linda Waite	Women's Employment During Pregnancy and Following Birth
92-12	Lee A. Lillard	Work Experience, Job Tenure, Job Separation, and Wage Growth
92-13	Joseph G. Altonji Thomas A. Dunn	Family Background and Labor Market Outcomes

92-14	George J. Borjas Stephen G. Bronars Stephen J. Trejo	Self-Selection and Internal Migration in the United States
92-15	James J. Heckman Stephen V. Cameron Peter Z. Schochet	The Determinants and Consequences of Public Sector and Private Sector Training
93-16	R. Mark Gritz Thomas MaCurdy	Participation in Low-Wage Labor Markets by Young Men
94-17	Alan L. Gustman Thomas L. Steinmeier	Retirement in a Family Context: A Structural Model for Husbands and Wives
94-18	Audrey Light	Transitions from School to Work: A Survey of Research Using the National Longitudinal Surveys
94-19	Christopher J. Ruhm	High School Employment: Consumption or Investment
95-20	Mark Lowenstein James Spletzer	Informal Training: A Review of Existing Data and Some New Evidence
95-21	Jacob Alex Klerman	Characterizing Leave for Maternity: Modeling the NLSY Data
95-22	Jacob Alex Klerman Arleen Leibowitz	Employment Continuity Among New Mothers
95-23	Stephen G. Bronars Carol Moore	Incentive Pay, Information, and Earnings: Evidence from the National Longitudinal Survey of Youth
95-24	Donald O. Parsons	The Evolving Structures of Female Work Activities: Evidence from the National Longitudinal Surveys of Mature Women Survey, 1967-1989
95-25	Donald O. Parsons	Poverty Dynamics Among Mature Women: Evidence from the National Longitudinal Surveys, 1967-1989
95-26	Ann Bartel Nachum Sicherman	Technological Change and the Skill Acquisition of Young Workers
95-27	Audrey Light	High School Employment
95-28	Laura Branden R. Mark Gritz Michael R. Pergamit	The Effect of Interview Length on Attrition in the National Longitudinal Survey of Youth
96-29	Thomas Dunn Douglas Holtz-Eakin	Capital Market Constraints, Parental Wealth and the Transition to self-Employment among Men and Women

96-30	Jeff Grogger Nick Ronan	The Intergenerational Effects of Fatherlessness on Educational Attainment and Entry-level Wages
96-31	Jonathan Veum	Training, Wages, and the Human Capital Model
96-32	Michael R. Pergamit	Assessing School to Work Transitions in the United States
96-33	Eric P. Slade	An Analysis of the Consequences of Employer Linked Health Insurance Coverage in U.S.