

3~5% 가

(overshooting)

1998 15~19

11.0% 20.9% (86), 20~24

14.8% (258), 25~29 9.3% (268

1999 가

2000 374 가

2001

가 (search

effort) (intensity) (extensiveness)

(job search process)

가 (zero)

(employment) (nonemployment)

15%

30%

가

20%

가

가

(labor market attachment)

가,

가

가

가

(nonemployment duration)

()

(KLIPS) 3

가 (2000)

(nonemployment duration)

(sample separation)

1.

(Korean Labor and Income Panel Survey) 』

1995 』

10% 』

(21,938)

1997 』

2,497

5 6

가

.1) 』

5,000

가

15

가

13,738

1) (1999), pp.5 7

(18.0%) 37% .
 , 1993 548 (33.9%) , 1994
 536 (33.2%), 531 (32.9%)
 1,915 1,299 316
 (censored) 1/4
 345 .

< 1 >

		1,615 (100.0)	1299	345 (26.6)	316
		665 (41.2)	519	122 (23.5)	146
		950 (58.8)	780	223 (28.6)	170
		1,009 (62.5)	788	215 (27.3)	221
		315 (19.5)	269	72 (26.8)	46
		291 (18.0)	242	58 (24.0)	49
	1993	548 (33.9)	471	117 (24.8)	77
	1994~1997	536 (33.2)	473	110 (23.3)	63
	1998	531 (32.9)	355	118 (33.2)	176

: , 3 (2000) 가 .

3.

(nonemployment duration) .
 () ()
) .
 , , 가 < 2 > , , 21
 가 . , -
 .
 (24) (18) .
 , 67 가 6 , 50 6
 가 2 33 .
 .
 , , 23 가

가 21 20 가
 가 1998 가
 22 25
 1998 , 1993 34 , 1994
 1997 28 , 1998 5
 2000 1998
 가 2

< 2 >

(: , %)

	0	1 3	4 6	7 12	13 24	25		
	345 (21.4)	431 (26.7)	194 (12.0)	119 (7.4)	159 (9.8)	367 (22.7)	1,615 [316]	15.5
< >								
	122 (18.3)	139 (20.9)	69 (10.4)	48 (7.2)	66 (9.9)	221 (33.2)	665 [146]	21.6
	223 (23.5)	292 (30.7)	125 (13.2)	71 (7.5)	93 (9.8)	146 (15.4)	950 [170]	11.3
< >								
	215 (21.3)	252 (25.0)	110 (10.9)	58 (5.7)	101 (10.0)	273 (27.1)	1009 [221]	18.5
	72 (22.9)	90 (28.6)	40 (12.7)	31 (9.8)	29 (9.2)	53 (16.8)	315 [46]	12.7
	58 (19.9)	89 (30.6)	44 (15.1)	30 (10.3)	29 (10.0)	41 (14.1)	291 [49]	8.4
< >								
1981 1993	117 (21.4)	146 (26.6)	24 (4.4)	38 (6.9)	34 (6.2)	189 (34.5)	548 [77]	25.9
1994 1997	110 (20.5)	159 (29.7)	33 (6.2)	35 (6.5)	48 (9.0)	151 (28.2)	536 [63]	14.8
1998 2000	118 (22.2)	126 (23.7)	137 (25.8)	46 (8.7)	77 (14.5)	27 (5.1)	531 [176]	5.6

: ()

[]

: , 3 (2000) 가 .

< 3>

(: , %)

		- 119 0	1 3	4 6	7 12	13 24	25		
		345 (21.4)	431 (26.7)	194 (12.0)	119 (7.4)	159 (9.8)	367 (22.7)	1,615 [316]	15.5
		79 (18.4)	76 (17.7)	42 (9.8)	21 (4.9)	39 (9.1)	173 (40.2)	430 [116]	26.1
		28 (23.0)	32 (26.2)	9 (7.4)	14 (11.5)	11 (9.0)	28 (23.0)	122 [10]	15.5
		15 (13.3)	31 (27.4)	18 (15.9)	13 (11.5)	16 (14.2)	20 (17.7)	113 [20]	11.2
		136 (23.5)	176 (30.4)	68 (11.7)	37 (6.4)	62 (10.7)	100 (17.3)	579 [105]	12.8
		44 (22.8)	58 (30.1)	31 (16.1)	17 (8.8)	18 (9.3)	25 (13.0)	193 [36]	11
		43 (24.2)	58 (32.6)	26 (14.6)	17 (9.6)	13 (7.3)	21 (11.8)	178 [29]	6.6
	1981 1993	40 (16.4)	44 (18.0)	10 (4.1)	15 (6.1)	11 (4.5)	124 (50.8)	244 [44]	36.2
	1994 1997	39 (18.0)	51 (23.5)	6 (2.8)	18 (8.3)	19 (8.8)	84 (38.7)	217 [28]	20
	1998 2000	43 (21.1)	44 (21.6)	53 (26.0)	15 (7.4)	36 (17.6)	13 (6.4)	204 [74]	6
	1981 1993	77 (25.3)	102 (33.6)	14 (4.6)	23 (7.6)	23 (7.6)	65 (21.4)	304 [33]	17.7
	1994 1997	71 (22.3)	108 (33.9)	27 (8.5)	17 (5.3)	29 (9.1)	67 (21.0)	319 [35]	11.2
	1998 2000	75 (22.9)	82 (25.1)	84 (25.7)	31 (9.5)	41 (12.5)	14 (4.3)	327 [102]	5.3

: ()

[]

: , 3 (2000) 가 .

< 3>

가
가

17

40 가 2

24

13

가
 2 가 1981 1993
 2 가 51 . < 2 >
 가 2 가

1.

(Type-I censoring) (duration model)
 $T = \text{Min}(T^*, c)$
 , T , T* (uncensored
 duration), c (censoring time)
 (indicator function)

$$d = 1 ()$$

$$0 ()$$

Kalbfleisch Prentice (1980)

t
 (hazard function)

$$h(t) = \lim_{\Delta t \rightarrow 0} \text{Prob}[t \leq T < t + \Delta t \mid T \geq t] / \Delta t$$

. Prob[A] (event) A가
 (integrated hazards)

$$H(t) = \int_0^t h(u) du$$

(survival function)

$$S(t) = \exp[-H(t)] = e^{-\int_0^t h(u) du}$$

t (failure time subdensity function)

$$f(t) = h(t)S(t)$$

(mixed proportional hazard model)

(baseline hazard) (observed heterogeneity), (Unobserved heterogeneity)

$$h(t) = h_0(t) \exp(X\beta) v$$

가 (duration dependence) $h_0(t) = 0$
 $\exp(X\beta)$ β_i
 X v

(grouped duration data method)

$$h_0(t) = \exp(\delta_k) \quad k-1 < t/w \leq k, k=1, 2, \dots, K$$

$$h_0(0) = \exp(\delta_0) \quad k = 0$$

(step function) w
(step length) K (the number of steps)
 21 가

$T=0$ (mass point) 가 $h_0(0)$ 가
 $w=1$ $K=12$ 12

2.

가
(reservation wage)

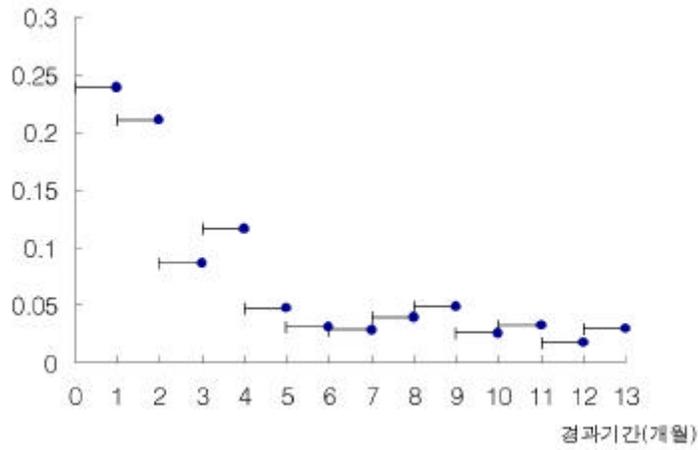
1998
1998

1998

가 $< 4 > [1]$ 가 $[1]$

가

[1]



< 4 >

$$h(t) = \exp(\delta_k) \exp(\lambda t)$$

			가
0	-1.429 (0.045)	-1.634 (0.052)	-2.441 (0.053)
1	-1.559 (0.050)	-1.731 (0.055)	-2.525 (0.056)
2	-2.450 (0.064)	-2.612 (0.065)	-3.398 (0.065)
3	-2.147 (0.061)	-2.301 (0.063)	-3.084 (0.063)
4	-3.045 (0.071)	-3.192 (0.071)	-3.975 (0.071)
5	-3.492 (0.073)	-3.636 (0.074)	-4.418 (0.074)
6	-3.546 (0.074)	-3.684 (0.074)	-4.468 (0.074)
7	-3.231 (0.073)	-3.349 (0.073)	-4.179 (0.073)
8	-3.035 (0.072)	-3.147 (0.073)	-3.980 (0.073)
9	-3.657 (0.075)	-3.763 (0.075)	-4.597 (0.075)
10	-3.443 (0.075)	-3.541 (0.075)	-4.379 (0.075)
11	-4.005 (0.076)	-4.090 (0.076)	-4.935 (0.076)
12	-3.508 (0.075)	-3.592 (0.075)	-4.436 (0.075)
		-0.457 (0.050)	-0.479 (0.051)
		0.101 (0.056)	0.148 (0.056)
		-0.002 (0.058)	0.071 (0.058)
		0.010 (0.053)	0.006 (0.054)
		-0.018 (0.051)	-0.025 (0.052)
	()	0.593 (0.053)	0.602 (0.054)
1993			0.576 (0.051)
1994 1997			0.460 (0.051)
		0.051 (0.012)	0.160 (0.012)

: ()

[1] 5 24.0% 4.8% 3.0%

, 3~4

(negative duration dependence)

‘ (scar) ’

(turning point)

가 (-)

가

, 1993

1994 1997

가

3.

가

가

가 가

< 5> 1998

가

가

가

가

가

< 5> 1998

$$h(t) = \exp(\hat{\alpha}_k) \exp(\hat{\beta})$$

1998			가	가
0	-1.448	(0.055)	-1.069	(0.065)
1	-1.483	(0.060)	-1.067	(0.067)
2	-2.457	(0.078)	-2.028	(0.080)
3	-2.073	(0.074)	-1.629	(0.077)
4	-3.157	(0.087)	-2.701	(0.088)
5	-3.365	(0.089)	-2.899	(0.089)
6	-3.514	(0.090)	-3.040	(0.090)
7	-3.551	(0.090)	-3.067	(0.091)
8	-3.108	(0.088)	-2.618	(0.088)
9	-3.926	(0.092)	-3.425	(0.092)
10	-3.700	(0.092)	-3.193	(0.092)
11	-4.285	(0.093)	-3.767	(0.094)
12	-3.754	(0.092)	-3.228	(0.092)
			-0.583	(0.062)
			-0.009	(0.070)
			-0.226	(0.075)
			-0.101	(0.066)
			-0.029	(0.063)
()			0.703	(0.065)
1994 1997				0.699 (0.065)
				0.045 (0.062)
			-0.084	(0.022)

: ()

< 6> 1998

가 , 1999
 가 , 2000
 가

[2] 1998 98 5
 24.9% 5.7% 4.8% . 98
 5 23.5% 4.3% 3.0%

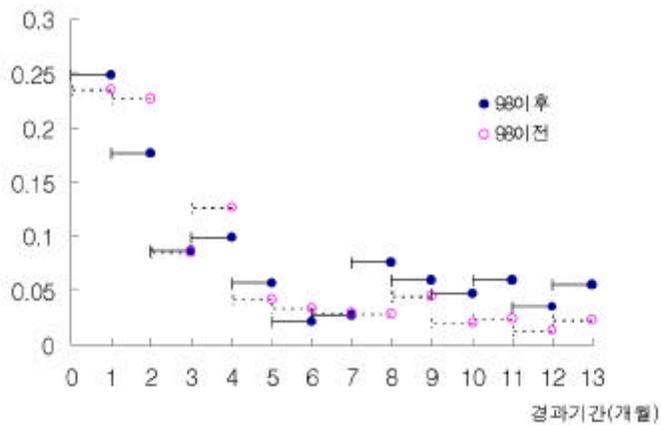
< 6 > 1998

$$h(t) = \exp(\delta_k) \exp(X_k)$$

1998			가		가	
1	-1.391	(0.077)	-4.154	(0.094)	-11.079	(0.097)
2	-1.732	(0.091)	-4.412	(0.101)	-11.113	(0.102)
3	-2.436	(0.110)	-5.027	(0.113)	-11.536	(0.114)
4	-2.309	(0.110)	-4.836	(0.113)	-11.247	(0.113)
5	-2.858	(0.120)	-5.344	(0.121)	-11.706	(0.122)
6	-3.799	(0.130)	-6.272	(0.130)	-12.628	(0.130)
7	-3.613	(0.129)	-6.068	(0.129)	-12.429	(0.129)
8	-2.574	(0.125)	-5.273	(0.126)	-11.257	(0.126)
9	-2.811	(0.128)	-5.492	(0.128)	-11.446	(0.128)
10	-3.036	(0.130)	-5.705	(0.130)	-11.652	(0.130)
11	-2.828	(0.129)	-5.482	(0.129)	-11.424	(0.129)
12	-3.341	(0.132)	-5.982	(0.132)	-11.918	(0.132)
13	-2.881	(0.130)	-5.517	(0.130)	-11.440	(0.130)
			-0.268	(0.090)	-0.246	(0.090)
			0.350	(0.096)	0.189	(0.096)
			0.355	(0.094)	0.339	(0.094)
			0.189	(0.095)	0.152	(0.095)
			-0.008	(0.094)	0.013	(0.094)
()			0.316	(0.093)	0.193	(0.093)
			0.396	(0.017)	1.264	(0.017)
1998					0.447	(0.096)
2000					3.502	(0.089)

: ()

[2] 1998



1997

가

가

가

3 (2000)

가

가

1~3

(1998

) 가

가

가

12

12

(good jobs, decent

jobs)

(bad jobs) 가

가
(job offers)

가

(

) 가

(

) 가

(competing risks model)

(accepted wage)

(reservation wage)

