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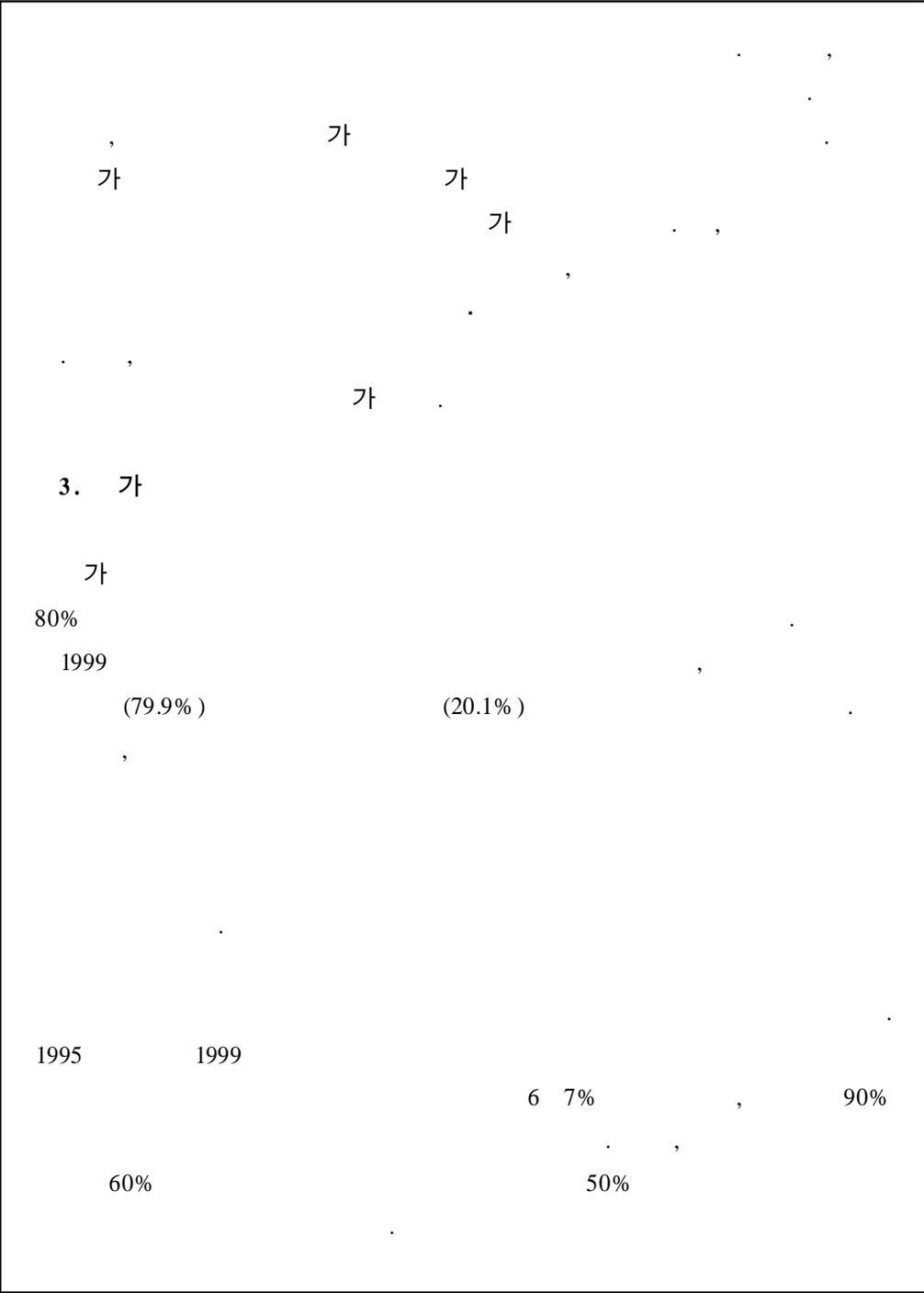
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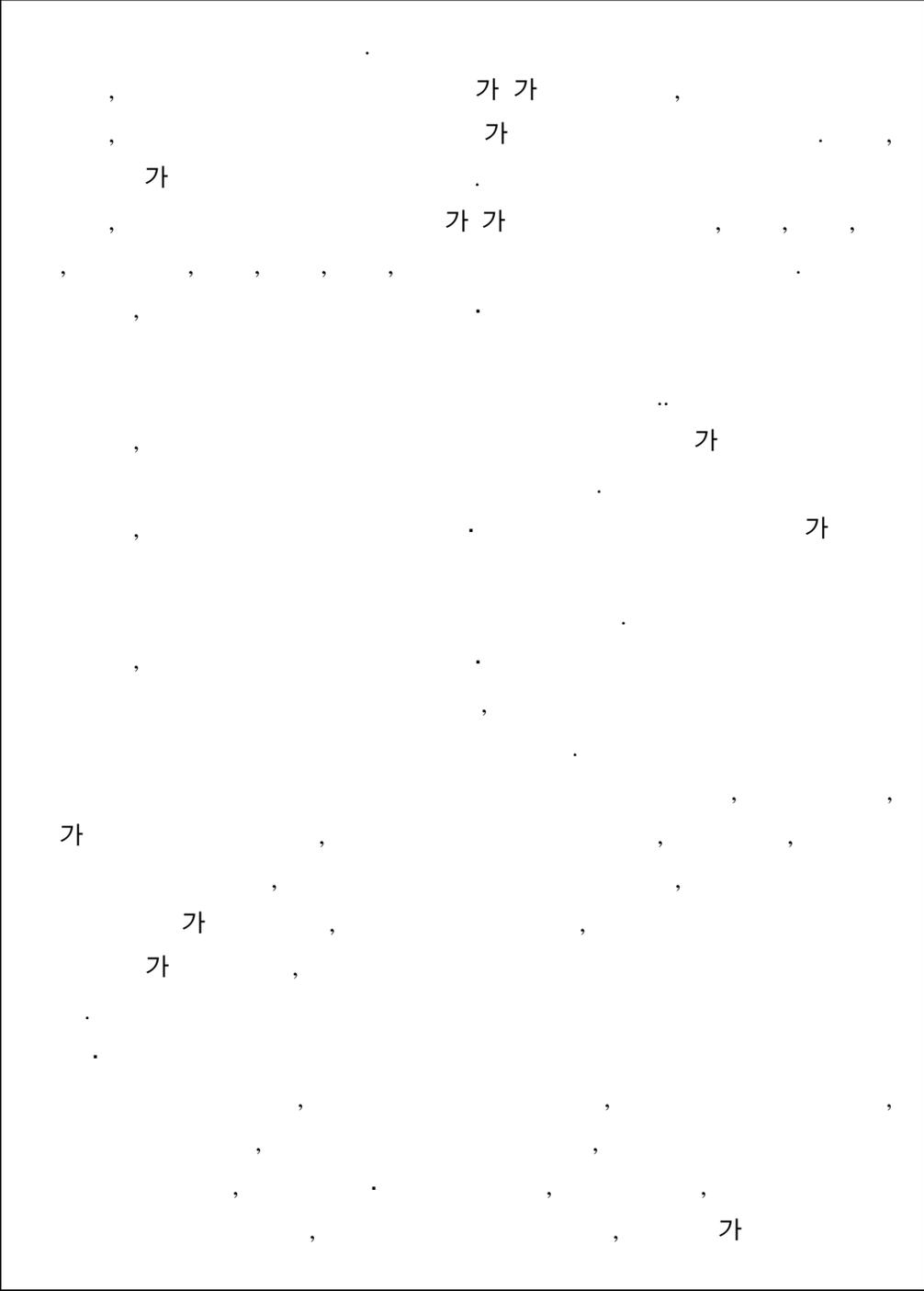
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2. 가	36
3. 가	43
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1.	85
2.	91
	97
ABSTRACT	99
	105

< - 1> 가	6
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< -36>	가	75

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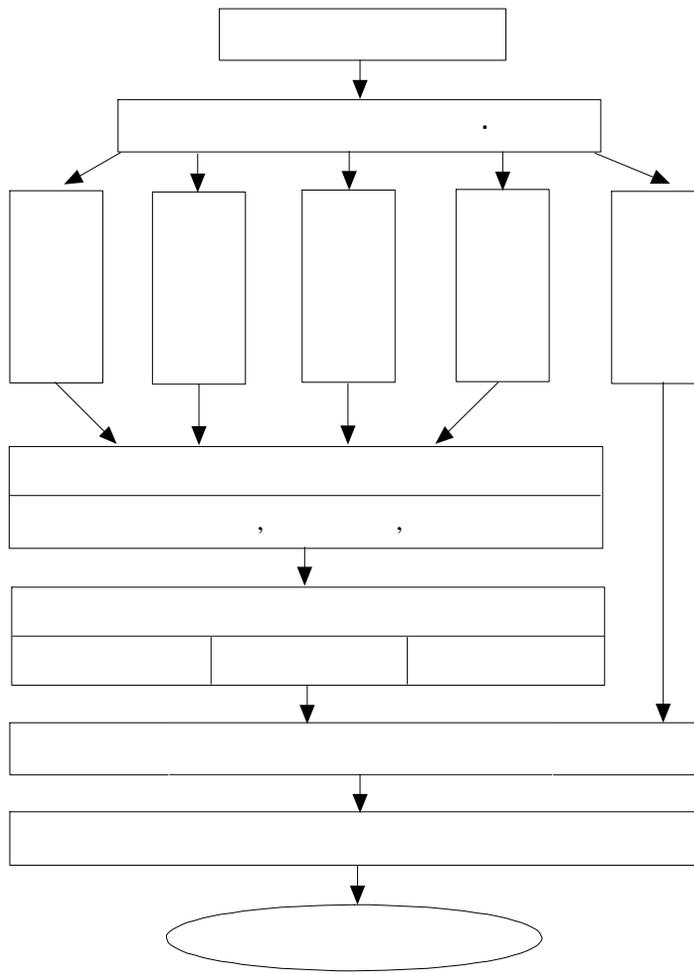
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 (1995 2000)
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		9- 2	15- 2	12- 2
		9- 3	15- 3	12- 3
		9- 4	15- 4	12- 4
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		9- 6	15- 6	12- 6
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 , M : , N : , P : 가 , Q :
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 (10),
 (11), (8), (11),
 (11) 51

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SAS

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(: , %)

				5,000	976	19.5
				5,000	917	18.3
				1,000	116	11.6
				5,000	869	17.4
				5,000	688	13.8
				100	64	64.0
				132	101	76.5
				96	90	93.8
				132	110	83.3
				132	128	97.0
				21,592	4059	18.8

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	3	13	65	88	310	-	479
	-	7	17	4	13	-	41
	-	-	7	2	34	-	43
	-	4	72	30	95	-	201
	1	1	10	3	52	-	67
	-	1	29	15	20	-	65
	-	-	-	1	-	-	1
	11	-	67	26	9	-	113
	18	-	88	25	5	-	136
	-	-	-	-	13	-	13
	-	-	-	-	1	-	1
	-	-	34	12	17	-	63
	-	-	5	1	3	-	9
	-	-	-	-	1	-	1
	-	-	-	1	-	-	1
	-	-	7	-	10	-	17
	2	4	89	49	47	-	191
	-	1	38	13	4	-	56
	1	-	36	13	1	-	50
	-	-	-	-	-	55	55
	36	31	564	282	635	55	1603

* missing : 242

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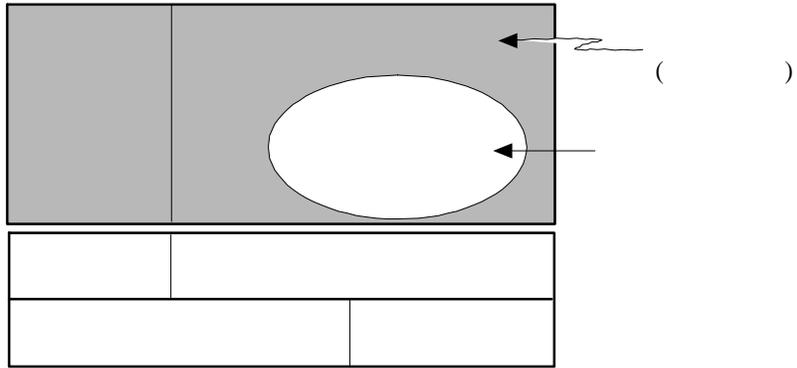
가

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[-2]

가.

1)

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가 , .
 가 (licensure), (certification), (registration)
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 가 가 ,
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 , 가
 가 . 가 (entry level) ,
 가
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 (Certification a NOCA Handbook,
 Anne H. Browning, Alan C. Bugbee).

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 (, 1999).

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< -1> 가 .

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3. 가

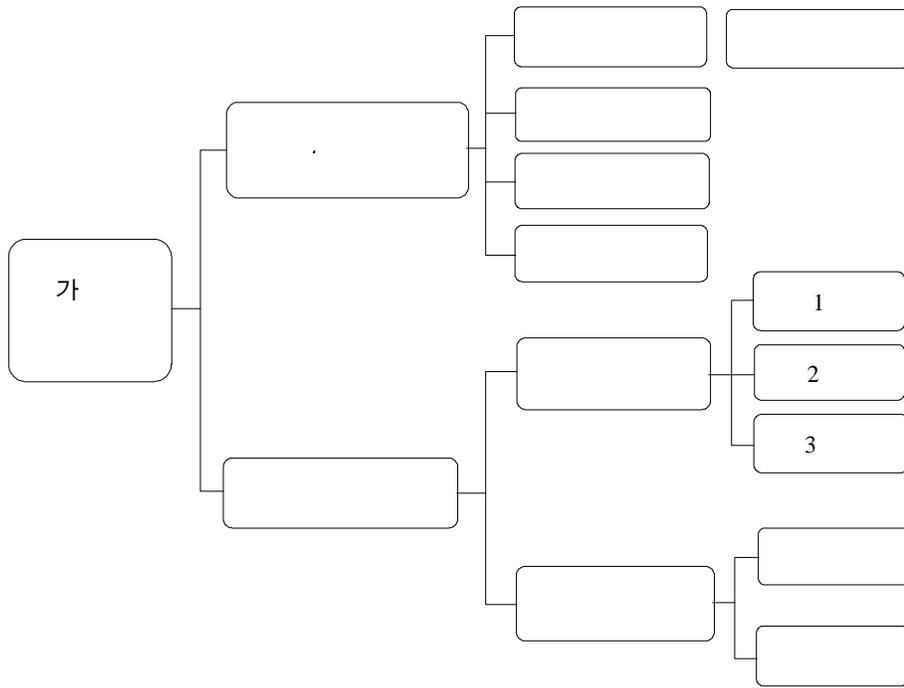
가.

가 1953 3 11
, , 3 , 1973 12 31
가 10
19 .

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가 가
(1973. 12. 31 2672)
, 1982 4 29
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1984 4 1 가

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1) 가
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1 3 3 , 2 .



[-1] 가

[-1] 가 < -2>
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가 (11) [-2]

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570 , (118), (48)

30%

< -3> 가 (2000)

1.	118	10	10	15	31	52
2.	48	6	6	7	10	19
3.	20	5	1	4	5	5
4.	19	5	2	4	4	4
5.	13	3	1	3	3	3
6.	20	1	1	4	7	7
7.	9	3	-	1	1	4
8.	9	2	1	1	1	4
9.	29	11	-	4	4	10
10.	33	4	2	3	7	17
11.	30	6	2	4	9	9
12.	16	4	-	3	4	5
13.	8	2	-	2	3	1
14.	11	3	-	3	3	2
15.	39	6	1	9	9	14
16.	20	4	-	8	5	3
17.	6	1	-	2	2	1
18.	6	3	-	2	1	-
19.	19	7	1	5	5	1
20.	13	4	-	4	4	1
21.	39	6	-	11	8	14
22.	3	1	-	1	1	-
23.	22	-	1	-	4	17
24.	11	-	2	-	1	8
25.	5	-	2	-	-	3
26.	4	-	-	2	2	-
	570	97	33	102	134	204

* 37

* (1998) : 708 , : 96 , 1 : 92 , 2 : 87
 , : 32 , 1 : 71 , 2 : 203 ,

: 108 , : 19 , : 29

7
1 11 1 3 1 , 2 , 3
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< -4> 가 (1999)

		1 3	3
		1 11 1 3	14
		1 3	3
		1 3	3
		1 3	3
		1 3	3
		1 3	3
		1 , 2	2
		1 , 2 , 3	3
			37

3) 가

가 8 5 가
1999 . 530
8 가
< -5> 1998 511 가
98 , 가 413 81% , 19%
가
가 1.5% , 1 44% , 2 53.9% ,
0.07% , 1 2.3% , 가 0.24% ,

2 89%, 가 7.6% .
 20% ,
 14.2% , 22.4%

< -5> . 가 (1977 1998)
 (: , %)

		30,981,616	19,840,890	6,427,110	32.3	10,471,257	4,901,114	46.8	25,277,427	5,110,702	20.2
		9,125,779	5,821,879	1,685,259	28.9	2,345,229	772,496	32.9	6,896,317	980,170	14.2
1		223,588	148,747	18,018	12.1	22,168	17,734	79.9	152,868	17,732	11.5
		3,965,483	2,382,024	811,366	34.0	1,363,088	377,432	31.5	2,938,001	451,646	15.3
2		4,936,708	3,291,108	855,875	26.0	1,127,533	377,330	33.4	3,805,448	510,792	13.4
		21,855,837	14,019,011	4,741,851	33.8	8,124,028	4,128,618	50.8	18,381,110	4,130,532	22.4
1		14,662	10,297	5,007	48.6	7,954	3,436	43.1	13,428	3,448	25.6
		21,956	18,320	6,706	36.6	6,970	5,900	84.6	18,920	1,447	23.2
2		752,246	531,621	184,896	34.7	235,435	99,012	42.0	597,436	99,297	16.6
		20,475,282	13,458,779	4,545,242	33.7	7,415,380	3,727,592	50.2	17,292,953	3,729,177	21.5
		591,691	-	-	-	458,289	292,678	63.8	458,373	292,710	63.8

* 1996
 : (1999). 가 . 303 .

가 < -6> 가
 . IMF 6.8% 가 1998
 , 가 20% 가 ,
 1 25% , 1 45% 가
 가 가 . 1999
 , 1998

6.3% ,
 1992
 1997 가 가 , 가
 35% 가 ,
 가 가
 가 가

< -6> 가 (:)

	1992	1993	1994	1995	1996	1997	1998	1999
	2,009,113	2,140,107	2,096,368	2,159,142	2,302,258	2,289,216	2,866,351	2,855,087
	558,154	672,482	708,338	773,875	843,088	868,855	1,039,989	1,046,350
	12,278	14,935	16,036	21,341	22,880	38,872	46,135	28,750
1 ()	258,242	302,884	300,369	299,517	358,676	387,326	513,939	505,885
2 ()	287,634	354,663	391,933	413,017	461,532	442,657	479,915	51,1715*
	1,450,959	1,467,625	1,388,030	1,425,267	1,459,170	1,420,361	1,826,362	1,808,737
	991	2,043	1,825	1,634	2,146	2,116	2,472	3,491
	-	-	-	-	7,465	8,162	6,329	
1	37,161	44,090	44,601	50,321	59,609	56,205	101,934	
2 ()	1,394,611	1,398,956	1,310,495	1,326,121	1,363,045	1,329,902	1,673,218	1,791,060
	18,196	22,536	31,109	47,191	26,905	23,976	42,409	14,186

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 : (2000), 가

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1. 가

가.

(equilibrium)
(labor demand)

,
(labor supply)

information) 3). (asymmetric

가

가

가

(

) 가

(incentive) 가 .

3) Elliott, Robert F., Labor Economics, McGraw-Hill book company, 1991, 293

(physical cost)

(psychic cost)

가

가

가

(marginal revenue)

(marginal cost)

(altruistic)

(가)

()

가

가

가

가

가

가 가 . 가가

(imperfect information) 가

force)

(inefficiency in allocation of labor

(market failure)

가

2.

가

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가 .

< -2> 가

(:)

	1995	1996	1997	1998	1999	2000
	10,010,101	12,646,406	13,133,153	14,897,890	14,479,027	15,816,844
	1,159,084	567,562	726,036	709,756	812,696	2,503,584
	416,648	663,666	584,690	639,949	682,614	820,676
	169,174	152,849	134,277	188,514	172,095	172,095
	638,766	702,642	724,032	716,185	871,254	955,882
	12,393,773	14,733,125	15,302,188	17,152,294	17,017,686	20,269,081
*	6,461,983	17,724,105	19,866,195	17,152,294	16,388,086	22,542,674
	18,855,756	32,457,230	35,168,383	34,304,588	33,405,772	42,811,755

) *

: (1995 2000)

가 8 () 5 1999

가 가 (, ,)

< -3> .

66.4%, 32.3% 95%

(79.9%) (20.1%)

471 ()

가 가 가 403

< -3> 1999

(: , %)

	241,310	100%	-	0	241,310 1.2%
()	2,074,692	31.1%	4,593,536	68.9%	6,668,227 32.3%
	4,005	17.2%	19,223	82.8%	23,228 0.1%
	1,831,734	13.4%	11,859,114	86.6%	13,690,848 66.4%
	4,151,741	20.1%	16,471,872	79.9%	20,623,613 100%

가

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가

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가
가

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(:)

		1995	1996	1997	1998	1999
		34,000	34,000	35,000	35,000	35,000
		16,000	49,000	50,000	50,000	50,000
		7,500	7,500	7,500	7,500	7,500
()		7,200	8,800	9,300	9,800	9,800
		3,000	5,000	5,500	6,300	6,800
		3,500	3,500	3,500	3,500	3,500
		29,000	29,000	30,000	30,000	30,000
		14,000	6,500	5,500	7,000	7,000
		7,500	7,500	7,500	7,500	7,500
		-	8,800	9,300	9,300	
		-	5,800	6,000	6,300	
		-	3,500	3,500	3,500	
1 *		3,400	4,400	4,600	5,000	5,000
		2,300	5,800	6,000	6,100	6,500
		3,500	3,500	3,500	3,500	3,500
2		3,400	4,400	4,600	5,000	5,000
		2,300	5,800	6,000	6,100	6,500
		2,500	2,500	3,000	3,000	3,000

) * 1 1999

:

1995 1999

< -5> ,

가 . 6 7%

, 90% .

, 60% 50%

(1,2 ,) .

가 가 가

< -5 >

(:)

		1995	1996	1997	1998	1999
		1,328,943	761,426	1,328,943	1,587,600	979,685
		157,500	127,351	157,500	168,600	145,350
		1,486,443	888,777	1,486,443	1,756,200	1,125,035
		6,321,424	5,775,492	6,321,424	7,850,114	7,344,443
(2)		2,161,937	1,668,099	2,161,937	3,920,187	5,106,743
		8,483,361	7,443,591	8,483,361	11,770,301	12,451,186
		45,135	54,214	45,135	57,330	82,200
		12,079	9,880	12,079	15,195	21,357
		57,214	64,094	57,214	72,525	103,557
		4,657,369	4,435,857	4,657,369	6,558,793	6,260,810
		10,174,112	8,634,586	10,174,118	13,844,191	14,008,417
		14,831,481	13,070,443	14,831,487	20,402,984	20,269,227
		18,530,830	21,466,912	24,858,498	34,002,012	33,949,005
		1,286,331	1,482,550	1,825,734	2,053,470	2,192,774
		19,817,161	22,949,462	26,684,231	36,055,432	36,141,779

2. 가

가

가

가

가
가
()

< -6> 가

가 256,498 6.59 , 가
1.18
147%가

< -6> 가

(: , %, ,)

	368(49.4)	5.99	308(54.2)	352,705
	377(50.6)	7.17	260(45.8)	142,531
	745(100.0)	6.59	568(100.0)	256,498

< -7>

가

235,983 , 244,610 254,810 , 가
3.7
6.8

가

A, B, C

9 140 150
 6 1 , 2 3
 20 30 ,

< -7>

(: , %, ,)

	7(1.9)	2.0	6(1.6)	18.3	12(2.1)	445,833
	3(0.8)	20.0	8(2.1)	13.8	11(1.9)	342,090
	129(35.0)	3.7	165(43.7)	6.8	232(40.8)	254,810
	64(17.4)	7.2	66(17.5)	5.9	95(16.7)	244,610
	86(23.4)	8.7	78(20.6)	8.7	120(21.1)	235,983
	33(9.0)	5.3	14(3.7)	5.9	34(5.9)	279,735
	46(12.5)	-	40(10.6)	-	64(11.2)	-
	368(100.0)	6.0	377(100.0)	7.3	568(100.0)	256,539

< -8>

가

. < -8> , 가

가 745

42.8% 319

가

56.6% 422

266,663

248,853

5.4 , 7.7

6.4 , 6.8 가
가

< -8>

(: , % , ,)

	151(41.0)	5.4	168(44.4)	7.7	243(42.7)	266,663
	214(58.1)	6.4	208(55.0)	6.8	321(56.5)	248,853
	3(0.8)	-	1(0.3)	-	4(0.7)	252,500
	368(100.0)	5.9	377(100.0)	7.2	568(100.0)	256,526

< -9>

가 321,021 가 ,

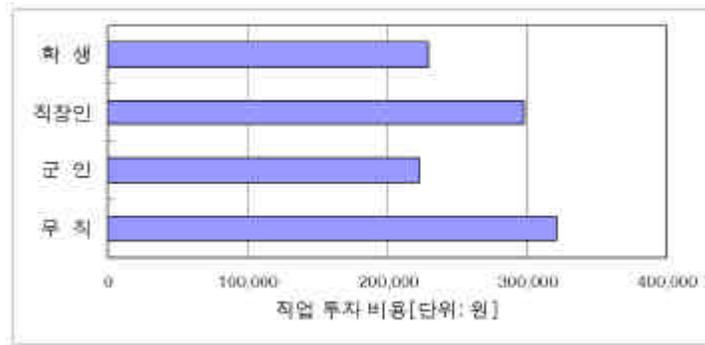
224,167 229,077 ,

3.1 0.7

< -9>

(: , %, ,)

	203(55.2)	6.1	235(62.1)	6.8	337(59.3)	229,077
	111(30.2)	5.3	110(29.1)	8.4	166(29.2)	297,849
	10(2.7)	8.4	11(2.9)	5.7	12(2.1)	224,167
	42(11.4)	6.7	19(5.0)	5.7	48(8.5)	321,021
	2(0.6)	-	2(0.5)	-	5(0.8)	-
	368(100.0)	5.9	377(100.0)	7.9	568(100.0)	135,023



[- 1]

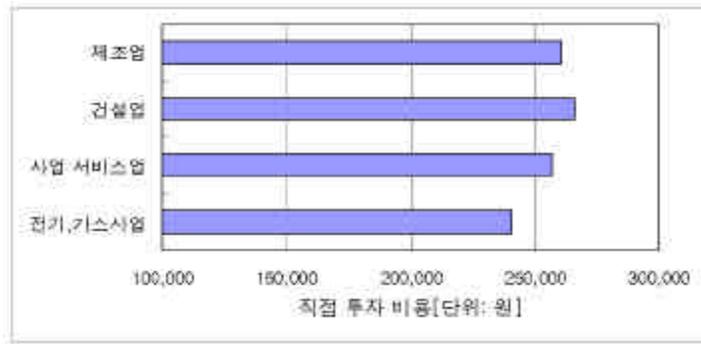
< - 10>

· , 266,090
 260,899 , 257,183 · ,
 , , · 가
 , , , · 가
 , , , ·

< - 10 >

(: , %, ,)

	241(65.5)	7.3	224(59.2)	7.2	346(60.9)	260,899
	75(20.4)	3.0	92(24.3)	7.1	133(23.4)	266,090
	22(6.0)	2.5	17(4.5)	5.6	29(5.1)	257,138
	5(1.4)	5.6	17(4.5)	7.2	19(3.3)	201,053
.가	21(5.7)	6.2	17(4.5)	10.4	32(5.6)	240,719
	4(1.1)	3.5	10(2.6)	4.9	9(1.6)	116,667
	-	-	-	-	-	-
	368(100.0)	4.7	377(100.0)	7.1	568	256,498



[- 2]

< - 11 > 가

77

66.2% 51

가

47.5%

18.7%

· , 258,407 238,333
8.4%

< - 11 >

(: , %, ,)

	51(13.9)	5.8	26(7.1)	5.2	54(9.5)	238,333
	317(86.1)	6.0	351(92.9)	7.3	514(90.4)	258,407
	-	-	-	-	-	-
	368(100.0)	5.9	377(100.0)	6.3	568(100.0)	256,498

3. 가

가.

< - 12 >

· , 1,652,950
· , 1,583,793 4.2% 가
· , 가
1,516,920 ,
1,296,693
14.5% 가

가

, 1,366,2378
 1,056,421
 22.7% , 가
 30.5% 가
 ,
 , 가 ([-3]).
 , 가
 가 1 5
 18.7% . 가
 .
 .
 가
 ,
 .

(: , %,)

	1	5(1.7)	1,433,333	2(0.8)	1,839,167
	1 5	149(49.7)	1,448,648	124(49.2)	1,178,087
	6 10	79(26.3)	1,563,665	80(31.7)	1,368,424
	11 20	53(17.7)	1,943,201	35(13.9)	1,815,561
	20	14(4.7)	1,875,905	11(4.4)	1,717,727
		300(100.0)	1,652,950	252(100.0)	1,583,793
	1	2(0.8)	1,700,000	-	-
	1 5	114(47.9)	1,298,472	77(49.4)	1,049,539
	6 10	66(27.7)	1,567,440	48(30.8)	1,300,902
	11 20	41(17.2)	1,704,866	24(15.4)	1,752,472
	20	15(6.3)	1,313,822	7(4.5)	1,083,857
		238(100.0)	1,516,920	156(100.0)	1,296,693
	1	12(2.8)	1,208,056	10(2.3)	562,200
	1 5	212(49.6)	931,461	213(48.9)	891,215
	6 10	103(24.1)	1,288,154	114(26.1)	1,230,232
	11 20	73(17.1)	1,477,635	82(18.8)	1,228,282
	20	27(6.3)	1,925,878	17(3.9)	1,370,176
		427(100.0)	1,366,237	436(100.0)	1,056,421
	1	-	-	3(4.8)	393,333
	1 5	2(28.6)	980,285	26(41.9)	948,861
	6 10	1(14.3)	1,333,333	12(19.4)	1,001,167
	11 20	2(28.6)	1,118,500	20(32.3)	1,011,665
	20	2(28.6)	1,878,958	1(1.6)	1,258,000
		7(100.0)	1,327,762	62(100.0)	922,605
	1	-	-	-	-
	1 5	-	-	-	-
	6 10	-	-	-	-
	11 20	-	-	3(60.0)	1,058,000
	20	1(100.0)	1,308,700	2(40.0)	1,469,100
		1(100.0)	1,308,700	5(100.0)	1,263,550
		973		911	

) 가 1 20

< - 13>

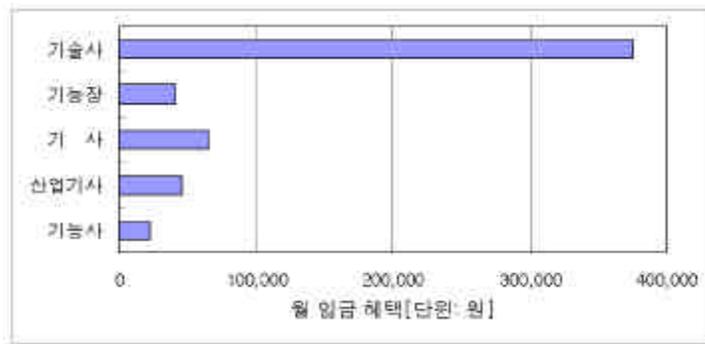
954

374,958 가 , 65,655 ,
 46,845 42,105 가
 22,180 가
 , 가 가

< - 13>

(: , % ,)

		()
	24(2.5)	374,958
	19(2.0)	42,105
	309(32.4)	65,655
	157(16.5)	46,845
	433(45.4)	22,180
	12(1.3)	-
	954(100.0)	



[-4]

< - 14>

, 가 30 가 가

가
가 ,
가

-4> , , <

< - 14>

(: , % ,)

		()
	314(34.2)	15,055
	34(3.7)	16,500
	29(3.2)	34,724
	122(13.3)	48,762
	33(3.6)	34,242
	32(3.5)	106,094
	63(6.9)	91,429
	69(7.5)	177,203
	16(1.7)	46,813
	3(0.3)	86,667
	1(0.1)	100,000
	10(1.1)	61,700
	115(12.5)	56,185
	38(4.1)	121,712
	879(100.0)	

< - 15>

8.8%

10.9%

13.5%

< - 15>

(: , %,)

	75(16.3)	1,540,065	85(26.1)	1,415,045
	55(11.9)	1,639,754	36(11.0)	1,766,476
	262(56.8)	1,891,790	118(36.2)	1,706,509
	63(13.7)	1,671,843	68(20.9)	1,472,616
	6(1.3)	1,487,477	19(5.8)	1,243,614
	461(100.0)	1,646,186	326(100.0)	1,416,667

< - 16>

가

가

12.6%

6.8%

16.6%

가

< - 16>

(: , %,)

	-	-	3(0.9)	1,702,313
	322(69.4)	1,877,021	183(54.6)	1,666,284
	141(30.4)	1,527,879	143(42.7)	1,431,234
	1(0.2)	1,575,082	5(1.5)	1,351,254
	-	-	1(0.3)	1,094,267
	464(100.0)	1,659,994	335(100.0)	1,449,212

< - 17>

가

20

60

, 30 39

15.2%가 , 40 49 7.4%
 20 29 2.2%

< - 17 >

(: , %,)

20	5(1.1)	1,002,549	3(0.9)	1,094,267
20 29	182(39.1)	1,273,401	153(46.7)	1,246,279
30 39	204(43.8)	1,912,209	139(41.5)	1,660,584
40 49	68(14.6)	2,627,794	35(10.4)	2,446,640
50 59	3(0.6)	3,485,378	3(0.9)	2,216,221
60	4(0.9)	2,056,420	2(0.6)	2,744,137
	466(100.0)	2,059,625	335(100.0)	1,901,354

< - 18 >

, 8.0%, 22.8%

< - 18 >

(: , %,)

	-	-	1(0.2)	1,094,267
	105(35.1)	1,459,867	5(1.0)	1,351,254
	194(64.9)	1,831,111	179(36.0)	1,490,567
	-	-	311(62.6)	1,781,657
	-	-	1(0.2)	1,160,586
	299(100.0)	1,645,489	497(100.0)	1,375,667

가

가

1)

, 2672)

(1989 4 1

가 (1973 12 31 , 4123)

가)

< -19>

가

가

가

'(45.5%)

'(54.6%)가

< -20> 가

(: , %)

	36 (56.3)	56 (55.4)	76 (84.4)	50 (45.5)	97 (75.8)	315 (64.2)	105 (90.5)
	27 (43.7)	45 (44.6)	14 (15.6)	60 (54.5)	31 (24.2)	178 (35.8)	11 (9.5)
	64 (100.0)	101 (100.0)	90 (100.0)	110 (100.0)	128 (100.0)	493 (100.0)	116 (100.0)

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가 30 6

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< -21> 가

(: , %)

	20 (31.2)	35 (34.7)	25 (27.8)	45 (40.9)	40 (31.4)	165 (33.4)	56 (48.3)
	44 (68.8)	66 (65.3)	65 (72.2)	65 (59.1)	88 (68.6)	328 (66.6)	60 (51.7)
	64 (100.0)	101 (100.0)	90 (100.0)	110 (100.0)	128 (100.0)	493 (100.0)	116 (100.0)

가 30 . 가 5
. , 6
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가 , 가 .
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가
(1999 가 가). ,
가 ,
가 가 .
가 ,
. < -22> ‘ (30.5%)가 가
, ‘ ’(19.5%), ‘
’(14.3%) , ‘
’가 가 . ,

’
‘ ’가

< -22> 가

(: , %)

	421(30.5)	461(28.2)	270(17.2)
	269(19.5)	293(17.9)	340(21.7)
	197(14.3)	400(24.5)	235(15.0)
	180(13.1)	261(16.0)	345(22.0)
	134(9.7)	219(13.4)	380(24.2)
() ()	162(11.7)	-	-
	16(1.2)	-	-
	1,379(100.0)	1,634(100.0)	1,570(100.0)

가

‘ , 51.1%

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‘ ,

‘ ,

20.9% (< -22>).

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가 가

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가

가

1998

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가

20%

가

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-5>).

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가

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< -23>

가

(: , %)

	가			
	34(53.1)	26(40.6)	4(6.3)	64(100.0)
	47(46.5)	46(45.6)	8(7.9)	101(100.0)
	64(71.1)	25(27.8)	1(1.1)	90(100.0)
	36(32.7)	51(46.4)	23(20.9)	110(100.0)
	71(55.5)	55(43.0)	2(1.6)	128(100.0)
	252(51.1)	203(41.2)	38(7.7)	493(100.0)

)

가

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5

3

가

가

가

< -24>

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가 (1·2)

		10	400
1		8 10	380
		5 8	360
1		2 5	340
6		1 6 2	320
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가			480
		, ,	460
			440

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(2000

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가

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< -26> 가

		45	5 ()×3 = 15	15
			5 ×3 = 15	
		39	4 ()×2 = 8	16
			4 ×3 = 12	
			1 ()×3 = 3	
1		30	5 ()×3 = 15	15
2		24	4 ()×3 = 12	16
1		24	4 ()×2 = 8	16
		24	5 ()×2 = 10	14
1	1	12	3 ×2 = 6	6
1	1	8	4 ×2 = 8	
2	2	4	4 ×1 = 4	

:

(1999). 가

. 116

가

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가가

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가

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(3 4 .)	(.)
가 (1 2 .)	()

: (2000).

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· , 2 , 3 . (1 2000 . pp.15- 16).

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가 , 가 , 가 . 가

가 40

가 가 11 () 5 가
(, , ,)

< -28 >

가 가

< -28 >

	-	-	- 1
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		-	3
		3	
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	1		
	-		
	3		

: 가 11 5

가 10 (< -29 >) ,

가 < -30>

‘ (69.5%) , ‘ (58.1%) ,
 ‘ (57.8%) , ‘ (60.3%) , ‘ (57.7%) , ‘ (54.8%) ,
 ‘ (46.8%) , ‘ (45.4%) , ‘ (44.1%)
 가 가

< -30> 가

(: , %)

	47(9.5)	(57.8)	9(7.8)	(54.8)	70(8.3)	(50.1)	21(3.3)	(43.4)
	244(49.4)		55(47.0)		375(41.8)		311(40.1)	
	132(26.8)		38(33.0)		295(34.3)		246(38.7)	
	62(12.5)		11(9.6)		105(12.4)		95(14.7)	
	8(1.6)		3(2.6)		28(3.3)		15(2.4)	
	493(100.0)		116(100.0)		869(100.0)		688(100.0)	
	31(6.3)	(58.1)	5(4.3)	(60.3)	59(6.8)	(49.0)	27(3.9)	(39.2)
	255(51.8)		65(56.0)		367(42.2)		243(35.3)	
	132(26.8)		29(25.0)		303(34.9)		314(45.6)	
	65(13.1)		16(13.8)		108(12.4)		89(12.9)	
	10(2.0)		1(0.8)		32(3.7)		15(2.3)	
	493(100.0)		116(100.0)		869(100.0)		688(100.0)	
	81(16.4)	(69.5)	7(6.0)	(57.7)	92(10.8)	(49.3)	19(2.7)	(41.5)
	262(53.1)		60(51.3)		347(38.5)		267(38.8)	
	93(18.9)		35(30.4)		286(33.7)		301(43.8)	
	44(8.9)		12(10.4)		108(12.7)		86(12.5)	
	13(2.6)		2(1.7)		36(4.2)		15(2.2)	
	493(100.0)		116(100.0)		869(100.0)		688(100.0)	

가 가
(74.2%)가 (61.8%)
(68.7%), (78.7%), (64.4%),

가 가
가 가

가 가
가 가

가 . 가
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가 (, 1998)
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가 ,
가 가
가 가 2
< -31> , 가 ‘
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< -31> 가

(: , %)

	48 (42.5)	66 (37.5)	66 (41.5)	72 (40.2)	87 (37.7)	339 (39.6)	92 (44.7)	594 (42.0)	434 (42.9)
	43 (38.1)	70 (39.8)	58 (36.5)	67 (37.4)	92 (39.8)	330 (38.6)	78 (37.9)	587 (41.5)	341 (33.7)
	12 (10.6)	25 (14.2)	19 (11.9)	17 (9.5)	33 (14.3)	106 (12.4)	22 (10.7)	99 (7.0)	111 (11.0)
	5 (4.4)	10 (5.7)	6 (3.8)	5 (2.8)	15 (6.5)	41 (4.8)	14 (6.8)	98 (6.9)	83 (8.2)
	5 (4.4)	5 (2.8)	10 (6.3)	16 (8.9)	4 (1.7)	40 (4.7)	-	36 (2.5)	42 (4.2)
	113 (100.0)	176 (100.0)	159 (100.0)	177 (100.0)	231 (100.0)	856 (100.0)	206 (100.0)	1414 (100.0)	1011 (100.0)

가가

가

가

가

가

가 가

< -32>

가 62.6% 가 (13.8%)

(42.5%)

< -32> 가

(: , %)

	37 (57.8)	75 (74.4)	66 (73.3)	66 (60.0)	100 (78.1)	344 (69.8)	91 (78.3)	527 (60.1)	284 (42.1)	1,246 (62.6)
	13 (20.3)	15 (14.3)	11 (12.2)	26 (23.6)	10 (7.8)	75 (15.2)	10 (8.7)	130 (15.0)	111 (16.4)	326 (13.8)
	14 (21.9)	11 (10.3)	13 (14.4)	18 (16.4)	18 (14.1)	74 (15.0)	15 (13.0)	212 (24.4)	293 (42.5)	594 (23.6)
	64 (100.0)	101 (100.0)	90 (100.0)	110 (100.0)	128 (100.0)	493 (100.0)	116 (100.0)	869 (100.0)	688 (100.0)	2,166 (100.0)

가

가

. ‘ 1 2 ’
 , ,
 가
 가 ,
 가
 가 (, 1998)
 가
 < -33>
 가 ‘ ’가 1.7%, ‘ ’가 14.8% , ‘ ’가
 38.3%, ‘ ’가 0.9% ,
 ‘ ’가 6.1%, ‘ ’가 24.3% , ‘ ’가
 18.3%, ‘ ’가 0.9% 가
 가
 가

< -33> 가

(: , %)

		14(2.9)	2(1.7)	25(2.9)	10(1.5)	51(2.4)
		144(29.2)	17(14.8)	223(25.7)	183(28.6)	567(27.1)
		211(42.7)	52(44.3)	383(44.0)	345(50.1)	991(43.7)
		109(22.2)	44(38.3)	187(21.5)	134(19.5)	474(22.7)
		15(13.0)	1(0.9)	51(5.9)	16(2.3)	83(4.0)
		493(100.0)	116(100.0)	869(100.0)	688(100.0)	2,166(100.0)
		18(3.7)	7(6.1)	29(3.3)	10(1.5)	64(3.1)
		125(25.4)	28(24.3)	210(24.2)	121(17.5)	484(23.2)
		232(47.0)	59(50.4)	401(46.1)	378(54.9)	1,070(47.5)
		104(21.1)	21(18.3)	176(20.2)	151(21.9)	452(21.7)
		14(2.8)	1(0.9)	53(6.1)	28(4.1)	96(4.6)
		493(100.0)	116(100.0)	869(100.0)	688(100.0)	2,166(100.0)

“ 가 .

”

가 가

가 가 , 가 . 가

. , 가

가
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 가 가 ,
 < -34>

< -34> . 가

<p>[가] 10 () 가 가 2 . [] 7 (. 가) 가 . 가 , . 가 .</p>
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2 2
 , ' ,
 가 ,
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가 가

가

) 가
가

가

'가
39.4%, '가

< -35>

'가 41.6%, ' 가 19.0%

가

45.6%

(38.2%)

(34.6%)

가

WTO

가

가

가

가

가

가

가

< -35> 가

(: , %)

		20(4.1)	5(4.2)	38(4.4)	26(3.8)	89(4.1)
		168(34.1)	48(41.4)	303(34.9)	212(30.8)	731(35.3)
		203(41.2)	48(41.4)	350(40.2)	301(43.7)	902(41.6)
		90(18.2)	14(12.1)	146(16.8)	129(18.8)	379(16.5)
		12(2.4)	1(0.9)	32(3.7)	20(2.9)	65(2.5)
		493(100.0)	116(100.0)	869(100.0)	688(100.0)	2,166(100.0)
		42(8.5)	10(8.7)	75(8.6)	32(4.7)	159(7.6)
		197(40.0)	58(50.0)	340(39.1)	227(33.0)	822(40.5)
		141(28.6)	31(26.7)	313(36.1)	316(45.9)	801(34.3)
		100(20.4)	12(10.3)	109(12.5)	99(14.4)	320(14.4)
		13(2.6)	5(4.3)	32(3.7)	14(2.0)	64(3.2)
		493(100.0)	116(100.0)	869(100.0)	688(100.0)	2,166(100.0)

가

가

가

가

< -35>

48.1%, '가 34.3%, ' 가 17.6%

가

가

(58.7%)

가
 가 < -36>
 가 31.8%, 가 18.7%, 가 49.5%, 가
 (58.6%) (49.1%)
 가 (42.2%)

< -36> 가 (: , %)

	가					
	6(9.4)	26(40.6)	23(35.9)	8(12.5)	1(1.6)	64(100.0)
	8(7.9)	40(39.6)	29(28.7)	22(21.8)	2(2.0)	101(100.0)
	2(2.2)	36(40.0)	37(41.1)	10(11.1)	5(5.6)	90(100.0)
	7(6.4)	47(42.7)	29(26.3)	20(18.2)	7(6.4)	110(100.0)
	23(18.0)	52(40.6)	35(27.3)	12(9.4)	6(4.7)	128(100.0)
	46(8.8)	201(40.7)	153(31.8)	72(14.6)	21(4.1)	493(100.0)

가
 가
 5 가
 가 ,

가 , 가 가

, 1991 1995 가

(가)

가 26,337 (24,301 , 2,036) 3,046 (2,969 , 77) 11.5% (12.2% , 3.7%) . 가 3,421 (3,346 , 75) 322 (319 , 3) 9.4% (9.5% , 4.0%) 11.5%

, , ,

3.9% , 4.7% , 7.0% ,

8.0% 11.5%

11.5% 13.6%

가 ,

1,589 , 가

152 9.6%가

, 가

가 가

가 (, ,) ,

가

가

가

가

가

가

가

가

가

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12

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4.

가. 가

가

가

< -5> , 가

가

< -2> 가

가가

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가

가

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80%

가

가

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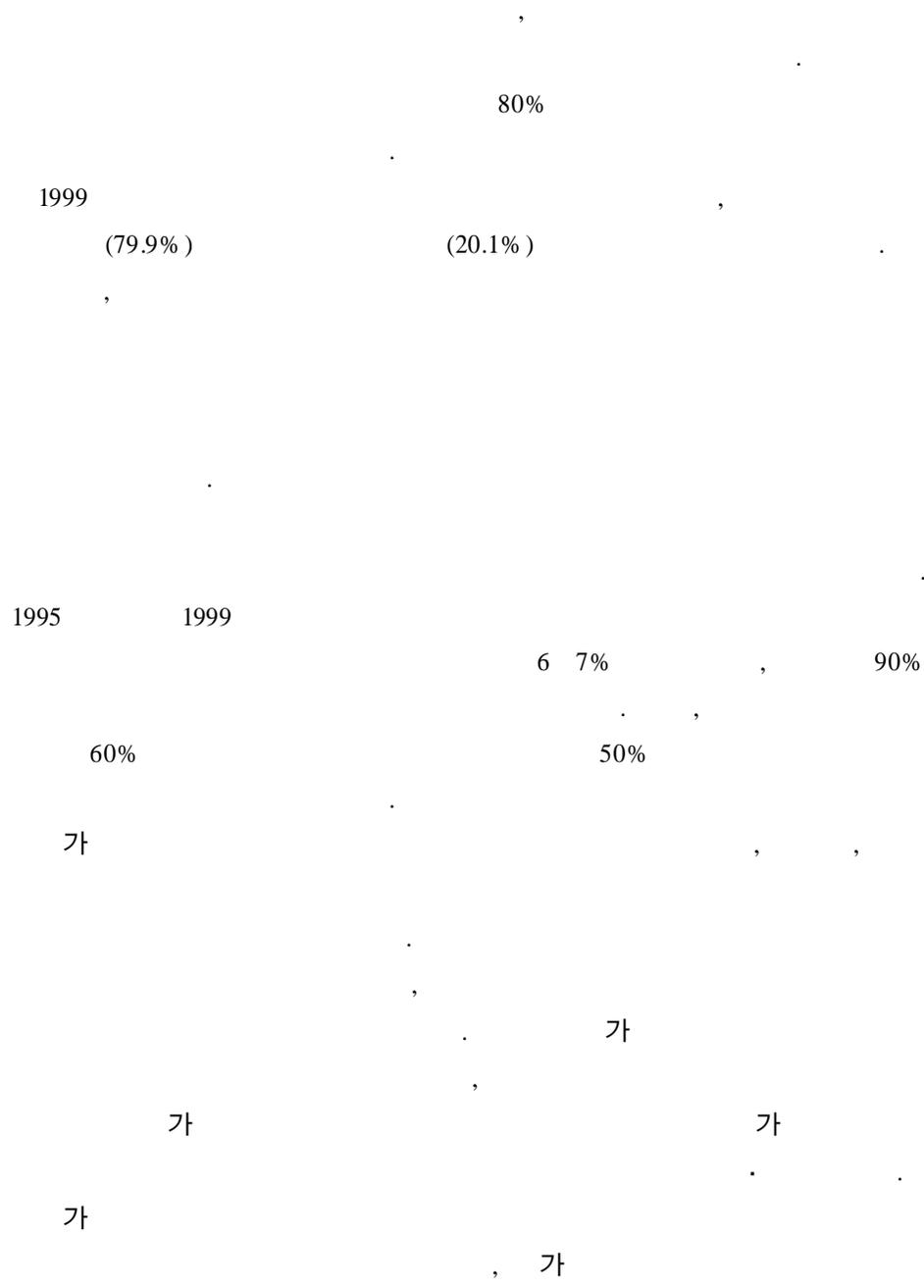
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ABSTRACT

Cost and Benefit Analysis on Acquisition of National Technical Qualification

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Research Staff : Jooseop Kim

Deog-Ki Kim

1. Introduction

National technical qualification has the meaning of the human resource investment as same as vocational education and training in functional and quantitative aspects. Although there have been many studies about the cost and benefit analysis on the vocational education and training, cost and benefit analysis on acquisition of national technical qualification was provided by limited sources.

This study tried to analyze the current status of investment on national technical qualification and to provide accurate information about the effects on national technical qualification using pecuniary and non-pecuniary methods.

To achieve the purpose of this study, several research methods were

employed. Those research methods included a review of related literatures, data analysis, consulting from specialists, and investigation and interviewing for the development of effective items of qualification system.

2. Value of national technical qualification

Companies require the information about the ability of applicant, and the individual needs the information about the requirement for the job, and pecuniary and non-pecuniary compensation in the aspect of labor supply. The qualification plays an important role to fulfill this information as the same as the educational level.

The relation between education level and qualification has substitutional relationship in the same aspect of delivery of market signal in the labor market. The acquisition of qualification intensify the delivery function of market signal by schooling. Therefore, the relation between schooling and qualification can be changed by the individual and marketable circumstances.

Non-economic value of qualification has been extended in wide range. Self-development grants the important values to the companies and individuals. The specialty of individual task and adaptation to the task are ensured by the acquisition of qualification. These advantages contribute to the productivity improvement, and increase the profit directly or indirectly. Also, inspired achievement and pride has the positive effect on the improvement of quality of personal life.

3. Cost analysis of national technical qualification

Financial operation of national technical qualification spent 80% of whole cost to the conduction of technical qualification. The expenditure for the practical test(79.9%) exceeded the expenditure for the written examination(20.1%). The cause of large expenditure for practical test consist in the transition state of written examination to the practical test, then purchasing the materials for practical test demands large cost.

The income of Korea Manpower Agency consists of examination fee and registration fee after the acquisition of qualification. During 1995 to 1999, official approval income accounted for 6 to 7% of whole income as the income of registration, and 90% of income as the fee for official approval of qualification.

The average period required for the acquisition of national technical qualification was 6.59 months and the average cost was 256,498 wons. The result of cost analysis for acquisition of national technical qualification suggested followings;

First, the higher qualification grade, the more direct cost was consumed.

Second, the workers from obligatory employment had more investment than the workers from general employment. But the difference was not significant.

Third, direct investment cost had the highest position in the case of unemployment, and the second highest position was the employment status. The status of soldiers and students had the same aspect.

Fourth, according to the industrial section, the ranking of average direct cost followed by these sequence; construction, manufacturing, service, electrical and waterworks.

Fifth, the time required for the acquisition of qualification in women group was shorter than men. In the case of direct cost, investment cost

to the women was lower than the cost to the men.

4. Benefit analysis of national technical qualification

Benefit analysis of national technical qualification was divided by pecuniary and non-pecuniary effect. The average wage was analyzed for pecuniary effect based on the educational level, employment period, and existence of qualification. The characteristics were investigated by the analysis of average wage based on the job task, educational level, and age. The benefit was studied by the group of qualification grade and industrial sector. For non-pecuniary effect, the law was investigated as systematic benefit.

The differences of wage benefit between holders and non-holders of national technical qualification were followings.

First, the difference of average wage between holders and non-holders of national technical qualification was large in the group of low level of education.

Second, the workers who had short employment period had more wage benefit than workers who has longer employment period.

Third, monthly benefit based on the qualification grade was highest in the technician group among other skilled workers.

Fourth, the highest status of qualification benefit in the industrial sector was architectural area, and the next level was environmental area.

Fifth, the average wages of the qualification holders were higher in the task cooperation group than the group of task in-cooperation.

Sixth, the average wages of qualification holders were higher in the task cooperation group than the group of task in-cooperation in aspect of the educational level.

Seventh, the average wages of qualification holders based on ages and task cooperation level were high in the task cooperation group.

Eighth, according to the level of status of obligatory employment and educational level, the qualification holders had higher average wages than non holders group.

The main purpose of acquisition of national technical qualification was for employment, and the rest of the purpose was for future needs, and for helping current status.

5. Suggestions

This study was conducted for cost and benefit analysis of national technical qualification. The followings are suggested for the re-enforcement of the operation of the vocational qualification systems.

First, the financial support for the national technical qualification should be ensured.

Second, cost of national technical qualification should be invested for the response to the needs from industrial and technological changes.

Third, cost benefit analysis of national technical qualification should be conducted periodically to provide the information about the effective operation of national technical qualification system.

Fourth, the development of task-oriented items of national technical qualification is needed in order to enhance the effect and usage of qualification in the industrial area..

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