

02-35 **Projections and Policy Issues  
for National Human Resources**

가



**02-35 Projections and Policy Issues  
for National Human Resources**

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2002 12

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1) 가  
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2)

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1997

IMF

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3)

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가 가

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4)

가		2004	2007	가	가
	가				2010
가		2006			가
	가				가
		2007			가
		가			
<b>3.</b>					
1)					
	2010	14%	가		
	가	,		가	
				가	,
		가			
2)					
	가	가	가		
	가				
			가		
3)					
		가			
		가			
	가		가		

가

가

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가

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가

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가

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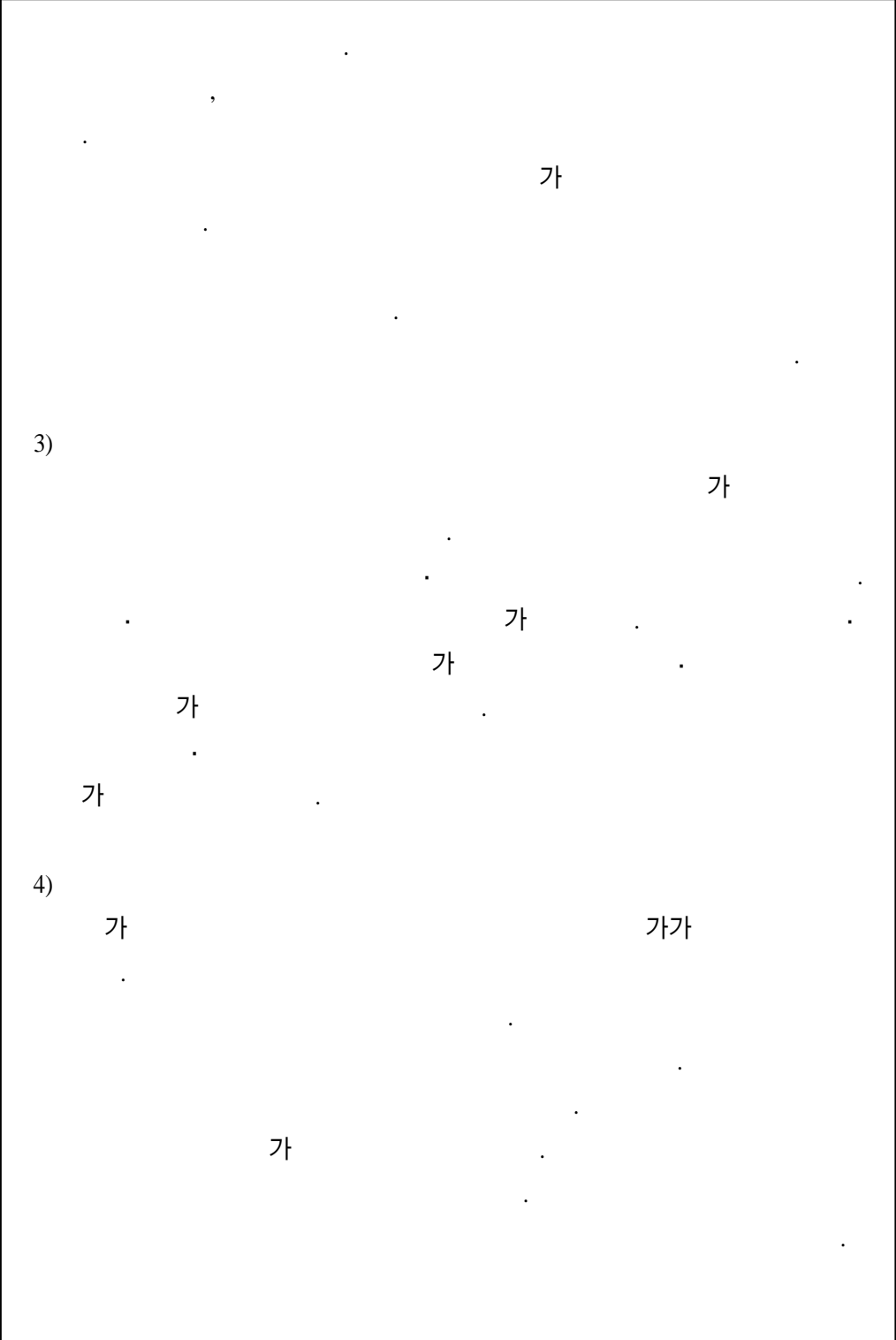
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가

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가





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1)

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4)

가

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1.	.....	1
2.	.....	3
3.	.....	4
4.	.....	5
·	.....	<b>7</b>
1.	.....	7
2.	.....	10
·	.....	<b>13</b>
1.	가 .....	14
2.	가 .....	28
3.	.....	37
4.	.....	43
·	.....	<b>51</b>
1.	.....	51
2.	.....	58
3.	.....	75
4.	.....	90

•	.....	<b>95</b>
1.	.....	95
2.	.....	112
3.	.....	124
•	.....	<b>129</b>
1.	.....	129
2.	.....	134
3.	.....	140
4.	.....	142
	.....	<b>147</b>
<b>ABSTRACT</b>	.....	<b>153</b>
	.....	<b>157</b>

< -1>	15	.....	15
< -2>		.....	16
< -3>	가	.....	17
< -4>		.....	18
< -5>	•	.....	22
< -6>		.....	25
< -7>	가 : OECD	.....	27
< -8>	• 가	.....	28
< -9>	가	.....	30
< -10>	• 가	.....	34
< -11>	• 가	.....	36
< -12>		.....	38
< -13>	•	.....	39
< -14>	•	.....	42
< -15>		.....	45
< -16>		.....	46
< -17>		.....	48
< -1>	•	.....	54
< -2>	•	.....	56
< -3>		.....	59
< -4>		.....	60
< -5>		.....	61
< -6>		.....	62
< -7>		.....	64
< -8>		.....	65
< -9>	가 (2001 2010 )	.....	67

< -10>	.....	69
< -11>	.....	71
< -12>	.....	72
< -13>	.....	74
< -14>	.....	76
< -15>	.....	77
< -16>	.....	82
< -17>	.....	84
< -18>	.....	86
< -19>	.....	87
< -20>	- .....	89
< -21>	.....	91
< -22>	.....	93
< -23>	.....	93
< -1>	.....	96
< -2>	.....	98
< -3>	(25-64 , 1999 ) .....	99
< -4>	(1999 ) .....	99
< -5>	1 .....	100
< -6>	1 (1999 ) .....	101
< -7>	.....	102
< -8>	2003 .....	103
< -9>	.....	104
< -10>	.....	108
< -11>	가 .....	109
< -12>	. .....	110
< -13>	.....	112
< -14>	. .....	113
< -15>	.....	114

< -16>	.....	116
< -17>	.....	118
< -18>	(1998 ) .....	119
< -19>	.....	119
< -20>	(2001 ) .....	119
< -21>	.....	120
< -22>	.....	123
< -23>	가 .....	123
< -24>	.....	124
< -25>	.....	125
< -26>	.....	127
< -27>	.....	128
< 1>	• 가 .....	157
< 2>	• 가 .....	158
< 3>	- : 1993 .....	159
< 4>	- : 2000 .....	161
< 5>	- : 2005 .....	163
< 6>	- : 2010 .....	165



[ -1]	.....	12
[ -1]	.....	13
[ -2]	.....	19
[ -3]	.....	23
[ -4] IMF	가 .....	29
[ -5]	가 .....	32
[ -1]	.....	52
[ -1]	.....	97
[ -2]	.....	115
[ -3]	.....	121
[ -4]	.....	122
[ -1]	.....	134

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21

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가 가

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21

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(manpower planning)

가

가

가

가

21

가

가

가

가

가

가

2.

가

2001

「가 ( )」

(stylized facts)

가

가

가

3.

가  
가  
(raw data)

(BLS)

4

. 1

(NAIRU NAWRU),

. 2

(KDI)

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ARIMA

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가

21

가

(NHRD)

4.

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**1.**

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가 가

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가 .

가 .



가.

(1991), (1996), (1998), (2000),  
(2000), (2001), (2002) .  
(1991) 7 5  
1990 2000 .

9 7

(1996)

가

, .

(1998)

가

가

(2000)

(2000)

가

2,500

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(2001)

(2002)

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IMF

가

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(1999),

(2000),

(1995),

(1996),

(2001b)

(1995)

2010

(1996)

( ) 가

( )

가

(1999)

(2000)

(2001b)

2011

(proxy variable)

가

2.

가

가

(BLS)

, BLS

가

BLS

\*

1993

[ -1]

3

6

9

가

가

. 1

2

가

가

가

가

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가

가

. 3

1, 2

가

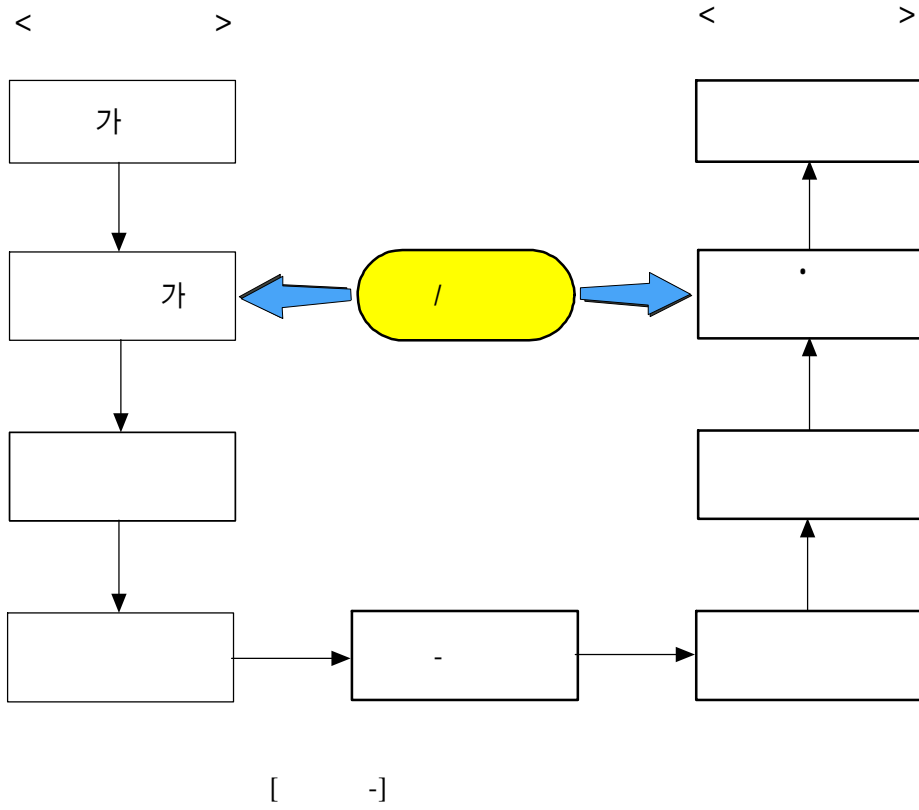
가

가

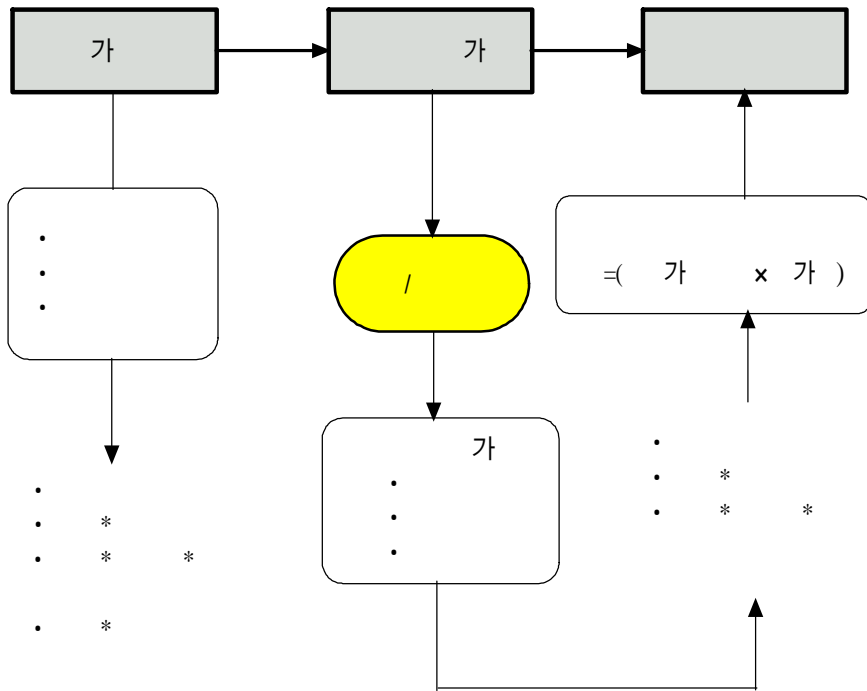
가

가

(fine tuning)



가 , 가 ,  
 [ -1] BLS  
 가 , ,  
 가 , 가



[ -1]

1. 가

가 , 가 , , .

가.

1)

가 『 (2000-2050)』

15 15

15 「 」 15 가

「 」 3 가 「 」

가 (2×26 ) 「 」 15

(civilian non-institutional population)

, , , , ,

가 (working age population) .

15 가 ,

가 ( -1 ).

「

」 15 가

가 .

( : )

		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
(A)		32,957	33,460	33,988	34,556	35,121	35,720	36,195	36,644	37,097	37,483
		16,381	16,627	16,887	17,168	17,440	17,745	17,962	18,186	18,422	18,617
		16,576	16,833	17,101	17,388	17,681	17,975	18,233	18,458	18,675	18,866
(B)		32,023	32,528	33,056	33,664	34,285	34,842	35,362	35,765	36,139	36,484
		15,452	15,698	15,956	16,280	16,611	16,887	17,150	17,331	17,510	17,678
		16,571	16,830	17,099	17,384	17,674	17,955	18,212	18,434	18,629	18,807
(A-B)		933	932	932	892	836	878	833	879	958	999
		928	929	930	888	829	858	812	855	913	939
		5	3	2	4	8	20	21	24	46	59

: , .  
 \_\_\_\_\_,

2)

가

. < -2> 2000 1960  
 25,012 1.9 47,008 . 2010 49,594  
 , 2013 5 .  
 가 1970 1960 10  
 7,229 가 1980 5,883 ,  
 1990 4,745 , 2000 4,139 가  
 . , 1960  
 12,551 50.2% , 12,462 49.8%  
 , 2000  
 50.3% 23,667 , 49.7% 23,341



< -2>

( : , , %)

				(A) <sup>1)</sup>	(B) <sup>2)</sup>	가 (A-B)
1960	25,012(100.0)	12,551(50.2)	12,462(49.8)	43.0	12.8	30.2
1970	32,241(100.0)	16,309(50.6)	15,932(49.4)	31.2	8.0	23.2
1980	38,124(100.0)	19,236(50.5)	18,888(49.5)	22.7	7.3	15.4
1990	42,869(100.0)	21,568(50.3)	21,301(49.7)	15.4	5.8	9.6
2000	47,008(100.0)	23,667(50.3)	23,341(49.7)	12.9	5.3	7.6
2010p	49,594(100.0)	24,933(50.3)	24,662(49.7)	10.1	6.0	4.1

1) = (1 / ) × 1,000.

2) = (1 / ) × 1,000.

3) 10 .

4) ( ) .

5) p .

: , , 2001.

가 가

가 가 가

.. 2000

. < -3> 1980 1990 가 가

2.4% 1990 2000 1.6%

가 2000 2010 1%

가 1980 24,463 2000 36,139

, 2010 4 . 가

, 가 1990

가 가

가 1980 48.3% 2000 48.4% ,

2010 48.8%

51.7% 51.5% , 2010 51.2% . ,

2010 가 가 2 .

< -3> 가

( : , %)

	가				가			가		
	1980	1990	2000	2010p	1980	1990	2000	1980	1990	2000
	1990	2000	2010p	1990	2000	2010p	1990	2000	2010p	
	24,463 (100.0)	30,887 (100.0)	36,139 (100.0)	40,018 (100.0)	6,424	5,252	3,879	2.4	1.6	1.0
	11,804 ( 48.3)	14,907 ( 48.3)	17,509 ( 48.4)	19,527 ( 48.8)	3,103	2,602	2,018	2.4	1.6	1.1
	12,659 ( 51.7)	15,980 ( 51.7)	18,629 ( 51.5)	20,490 ( 51.2)	3,321	2,649	1,861	2.4	1.5	1.0

: p , ( ) .

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1)

• 가 \* \* (matrix)

-4> [ -2] . BLS <

16 15

• , , , , ,

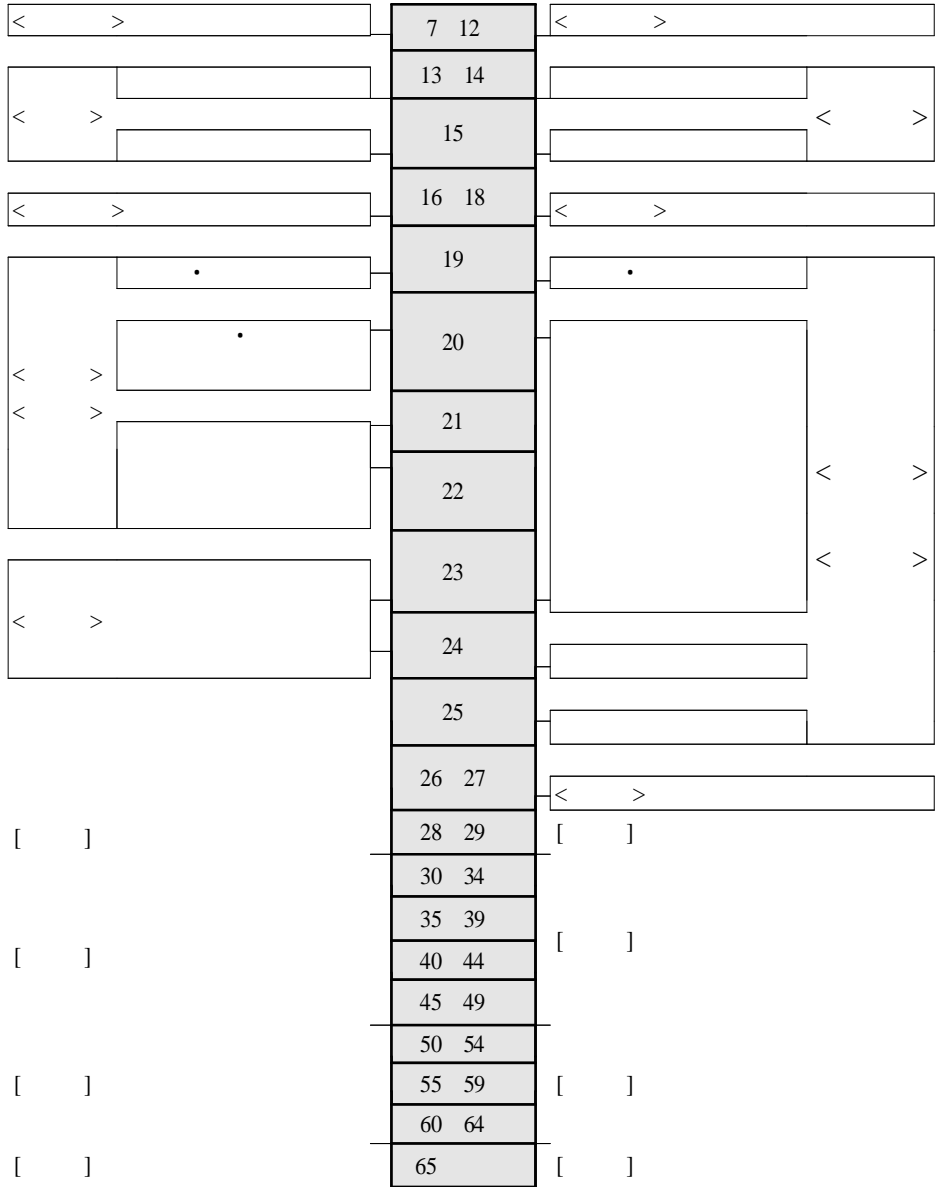
1997 6 (moving average) 2

< -4>

15 :	15 :
16 18 :	16 18 :
19 : •	19 : •
20 23 : •	20 : •
24 :	21 22 :
25 :	23 24 :
26 27 :	25 29
28 29	30 34
30 34	35 39
35 39	40 44
40 44	45 49
45 49	50 54
50 54	55 59
55 59	60 64
60 64	65
⑩ 65	

, 가 28  
 가 , 3 ( ) ,  
 ,  
 2 12 가 ,  
 가 .  
 25 가 , ,  
 , 2  
 12 가 ,  
 가 .

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[ -2]

2)

1950 1954 , 1943 1946 6.25  
 1962 가  
 가  
 1 (baby boom) 1955 1963  
 2 1970 . 15 29  
 1970 가  
 (cohort)  
 1960 66 ' ' 가  
 10 40 45 54  
 가  
 1) 가  
 가  
 가  
 가  
 가

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1) 65 가 7% 14%  
 115 , 71 , 61 , 47 , 40  
 가 가 가 가 24  
 19 , ,

가, 가 9

1960 31.7% 1990 16.4%

2000 14.4%

2010 10.8% 1960 1/3

1970 9,178

2000 6,781 , 2010 5,344

10 20 1980

8,978 1990 8,669

2010 6,663 , 6,880

0 29

1960 68.9%, 1970 67.9% 1960

2/3 2000 46.7%

, 2010 1/3

38.1%

1960 5%

60 1980 6.0%, 2000 11.1%

가 . 2010 15.2%

1960 1,245 2000 4 가 5,212

. 가 2010 7,514

6.5 1 가 .

, 30 50 1960

26.0% 6,505 2000 42.2% 19,835

가 40 3 .

(wealth)

2010

46.7% 23,193 .

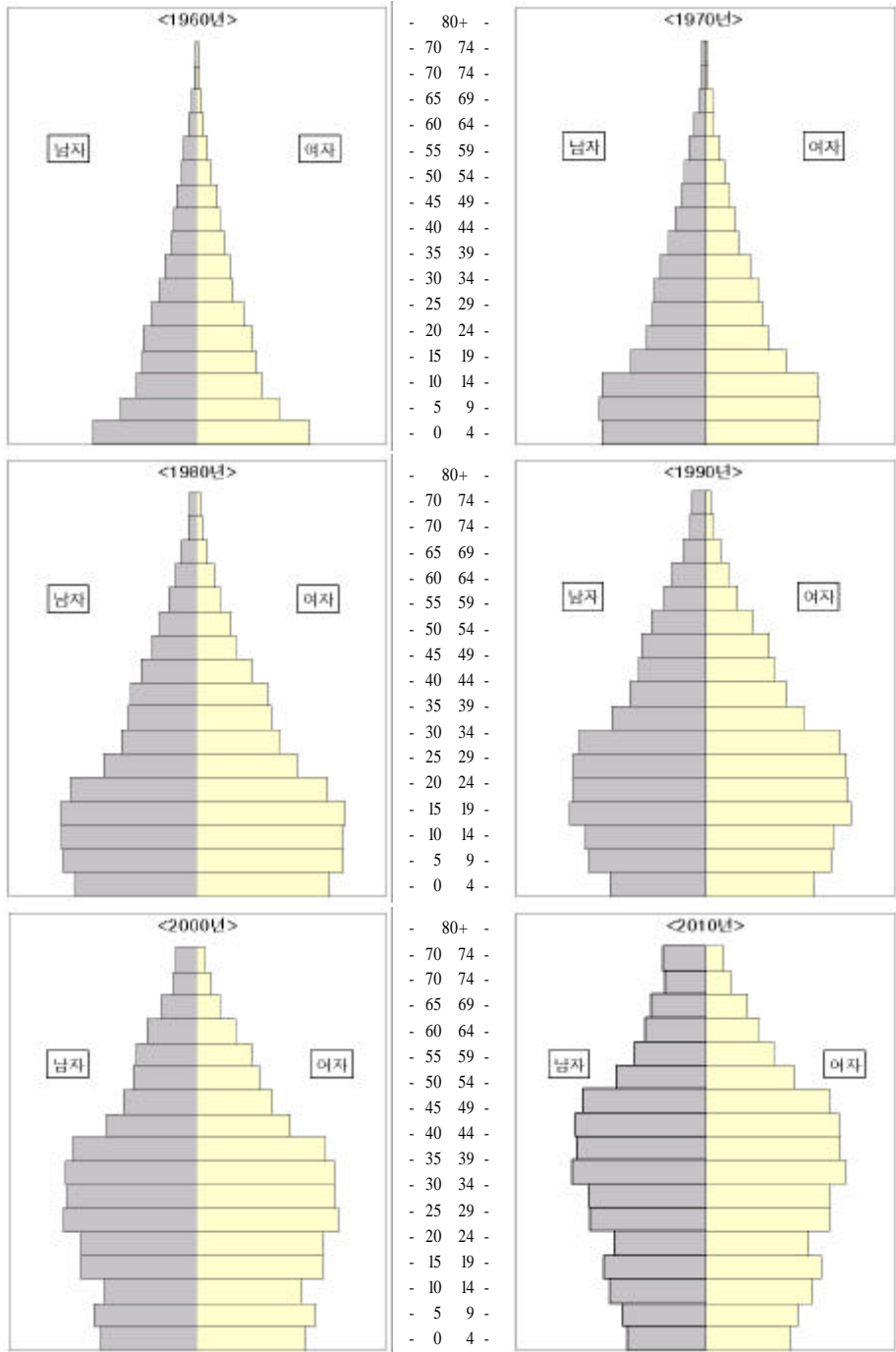
( : , %)

	1960	1970	1980	1990	2000	2010p
	25,012(100.0)	32,241(100.0)	38,124(100.0)	42,869(100.0)	47,008(100.0)	49,594(100.0)
0 ~ 9	7,941( 31.7)	9,178( 28.5)	8,492( 22.3)	7,047( 16.4)	6,781( 14.4)	5,344( 10.8)
10 ~ 19	5,065( 20.2)	7,801( 24.2)	8,978( 23.6)	8,369( 19.5)	6,972( 14.8)	6,663( 13.4)
20 ~ 29	4,256( 17.0)	4,905( 15.2)	7,166( 18.8)	8,669( 20.2)	8,207( 17.5)	6,880( 13.9)
30 ~ 39	2,926( 11.7)	4,105( 12.7)	4,805( 12.6)	7,177( 16.7)	8,521( 18.1)	8,137( 16.4)
40 ~ 49	2,105( 8.4)	2,739( 8.5)	3,935( 10.3)	4,644( 10.8)	6,942( 14.8)	8,350( 16.8)
50 ~ 59	1,474( 5.9)	1,864( 5.8)	2,456( 6.4)	3,611( 8.4)	4,372( 9.3)	6,706( 13.5)
60 ~ 69	864( 3.5)	1,087( 3.4)	1,460( 3.8)	2,058( 4.8)	3,198( 6.8)	4,000( 8.1)
70	381( 1.5)	563( 1.7)	832( 2.2)	1,294( 3.0)	2,014( 4.3)	3,514( 7.1)
	12,551(100.0)	16,309(100.0)	19,236(100.0)	21,568(100.0)	23,667(100.0)	24,933(100.0)
0 ~ 9	4,117( 32.8)	4,763( 29.2)	4,402( 22.9)	3,678( 17.1)	3,593( 15.2)	2,780( 11.2)
10 ~ 19	2,608( 20.8)	4,038( 24.8)	4,650( 24.2)	4,318( 20.0)	3,638( 15.4)	3,532( 14.2)
20 ~ 29	2,132( 17.0)	2,522( 15.5)	3,662( 19.0)	4,460( 20.7)	4,222( 17.8)	3,600( 14.4)
30 ~ 39	1,421( 11.3)	2,050( 12.6)	2,489( 12.9)	3,686( 17.1)	4,357( 18.4)	4,179( 16.8)
40 ~ 49	1,056( 8.4)	1,320( 8.1)	1,971( 10.2)	2,369( 11.0)	3,528( 14.9)	4,236( 17.0)
50 ~ 59	698( 5.6)	907( 5.6)	1,135( 5.9)	1,741( 8.1)	2,175( 9.2)	3,346( 13.4)
60 ~ 69	372( 3.0)	478( 2.9)	646( 3.4)	869( 4.0)	1,447( 6.1)	1,913( 7.7)
70	147( 1.2)	229( 1.4)	281( 1.5)	446( 2.1)	705( 3.0)	1,346( 5.4)
	12,462(100.0)	15,932(100.0)	18,888(100.0)	21,301(100.0)	23,341(100.0)	24,662(100.0)
0 ~ 9	3,824( 30.7)	4,415( 27.7)	4,090( 21.7)	3,368( 15.8)	3,188( 13.7)	2,564( 10.4)
10 ~ 19	2,457( 19.7)	3,763( 23.6)	4,329( 22.9)	4,050( 19.0)	3,334( 14.3)	3,132( 12.7)
20 ~ 29	2,124( 17.0)	2,383( 15.0)	3,504( 18.6)	4,209( 19.8)	3,985( 17.1)	3,280( 13.3)
30 ~ 39	1,505( 12.1)	2,054( 12.9)	2,316( 12.3)	3,491( 16.4)	4,164( 17.8)	3,957( 16.0)
40 ~ 49	1,049( 8.4)	1,419( 8.9)	1,964( 10.4)	2,275( 10.7)	3,414( 14.6)	4,114( 16.7)
50 ~ 59	776( 6.2)	956( 6.0)	1,320( 7.0)	1,871( 8.8)	2,197( 9.4)	3,360( 13.6)
60 ~ 69	492( 3.9)	609( 3.8)	814( 4.3)	1,189( 5.6)	1,751( 7.5)	2,087( 8.5)
70	234( 1.9)	333( 2.1)	551( 2.9)	848( 4.0)	1,309( 5.6)	2,168( 8.8)

: 1)

2) p

: , , 2001.



[ -3 ]



[ -3]

2) 1960 1970  
1980 1990 , 2000  
(bowl)

3)

가 .  
(human capital accumulation) , 가  
가 . Denison(1985)

flexibility) 가 (labor  
Psacharopoulos(1984)  
가

Schults(1963) .  
가

---

2)

가

< -6> 1970 2000  
, 25  
1970 4.9% 1990 14.1%, 2000 24.3% 25  
4 1  
가 1970 10.2% 1990  
33.5% 가 ,  
2000 39.4% .  
1970 73.4% 1980  
2000 23.0%  
가 . 1970 11.5% 1990  
19.0% 가  
2000 13.3%

< -6>

( : %)

		1970	1980	1990	2000
		73.4	55.3	33.4	23.0
		61.2	42.8	23.3	15.1
		84.7	67.0	43.0	30.4
		11.5	18.1	19.0	13.3
		15.1	19.8	17.6	12.3
		8.2	16.5	20.3	14.3
		10.2	18.9	33.5	39.4
		15.2	25.4	38.9	41.6
		5.5	12.9	28.4	37.3
	1)	4.9	7.7	14.1	24.3
		8.5	12.0	20.1	31.0
		1.6	3.6	8.3	18.0

: 1)

2) 25

:

→

3)  
, 1990 25 30  
1990 가 4) 2000  
35 45 가 .  
. < -7> 가 ,  
2000 25 64 12.34 OECD 가  
(13.95 ), (13.12 ), (13.09 ), (13.07 ),  
(12.73 ), (12.63 ), (12.60 ), (12.48 )  
. 1960 (2.14 ), (3.98 ),  
(3.15 ) 가  
가 .  
2010 13.34 OECD  
가 가 .  
가 <  
-8>  
2000 40.1% 2010 34.5% .  
가  
. ,  
. 100% 가  
. .  
1990 2,412 2010 20 2.6 가 가  
6,233 가 가 .  
가 가 2000 1.4%

3) 2010 OECD 가 가  
OECD(2001), *development centre* .  
4) 가 ( , , ) 1995 287 1999 330 .  
가 , 가 .

2010 1.9% ( 2 ).

가

< -7> 가 <sup>1) 2)</sup> : OECD ( : )

	1960 (A)	1970	1980	1990	2000 (B)	2010p	B-A
	4.98	6.82	9.11	11.00	12.34	13.34	7.36
	2.14	3.07	4.16	5.22	6.25	6.89	4.11
	5.94	6.74	7.72	8.71	9.90	10.73	3.96
	3.98	4.90	5.90	7.06	7.95	8.43	3.97
	8.28	9.28	10.31	10.94	11.43	11.70	3.15
	9.82	11.04	12.20	12.76	13.09	13.25	3.27
	7.39	8.29	9.24	10.03	10.84	11.42	3.45
	9.11	10.37	11.59	12.36	13.07	13.30	3.96
	9.08	10.08	11.03	11.54	12.20	12.32	3.12
	6.85	7.96	9.49	10.73	11.68	12.28	4.83
	6.73	8.02	9.34	10.36	10.73	11.35	4.00
가	9.52	11.14	12.65	13.21	12.95	12.74	3.43
	7.57	8.33	9.32	10.10	10.87	11.27	3.30
	7.25	8.01	8.94	9.53	10.17	10.59	2.92
	5.82	6.78	7.96	9.10	10.33	11.02	4.51
	9.48	10.37	11.20	11.93	12.61	13.11	3.13
	8.34	9.35	10.28	10.72	11.34	11.50	3.00
	8.98	9.87	10.72	11.02	12.09	12.48	3.11
	9.05	10.30	11.56	12.32	12.48	12.71	3.43
	3.15	4.11	5.57	5.91	7.28	7.89	4.13
	5.79	6.52	7.45	8.44	9.50	10.27	3.71
	8.68	9.97	11.26	12.04	11.72	12.11	3.04
	10.96	11.81	12.48	12.96	12.73	12.57	1.77
	9.11	10.32	11.57	12.28	13.12	13.34	4.01
	10.18	11.27	12.19	12.62	12.63	13.24	2.45

: 1) OECD가 가 , , , , , 5

2) 25 64

: OECD, *development centre*(2001).

( : , %, % )

	가				가			가		
	1980	1990	2000	2010p	1980 1990	1990 2000	2000 2010p	1980 1990	1990 2000	2000 2010p
	24,465	30,887	36,139	40,018	6,422	5,252	3,879	2.4	1.6	1.0
	12,347	9,208	7,750	7,498	-3,139	-1,458	-252	-2.9	-1.7	-0.3
	5,961	7,620	6,751	6,291	1,659	-869	-460	2.5	-1.2	-0.7
	4,977	10,848	14,807	16,775	5,871	3,959	1,968	8.1	3.2	1.3
	1,180	798	2,057	3,221	2,031	1,258	1,165	10.5	9.9	4.6
		2,412	4,774	6,233		2,362	1,459		7.1	2.7
.	-	-	4,267	5,472	-	-	1,205	-	-	2.5
.	-	-	507	761	-	-	254	-	-	4.1
	11,805	14,907	17,509	19,527	3,102	2,603	2,018	2.4	1.6	1.1
	4,781	3,256	2,517	2,227	-1,525	-739	-290	-3.8	-2.5	-1.2
	3,136	3,706	3,221	3,152	570	-485	-69	1.7	-1.4	-0.2
	3,013	5,853	7,691	8,419	2,840	1,838	728	6.9	2.8	0.9
		449	991	1,750		542	759		8.2	5.9
	875	1,642	3,089	3,979	1,216	1,447	890	9.1	6.5	2.6
.	-	-	2,684	3,372	-	-	689	-	-	2.3
.	-	-	406	606	-	-	200	-	-	4.1
	12,660	15,980	18,629	20,490	3,320	2,649	1,861	2.4	1.5	1.0
	7,566	5,953	5,234	5,271	-1,613	-719	37	-2.4	-1.3	0.1
	2,825	3,914	3,530	3,138	1,089	-384	-392	3.3	-1.0	-1.2
	1,964	4,995	7,115	8,356	3,031	2,120	1,241	9.8	3.6	1.6
		349	1,065	1,471		716	406		11.8	3.3
	305	770	1,685	2,254	814	915	569	13.9	8.1	3.0
.	-	-	1,584	2,099	-	-	516	-	-	2.9
.	-	-	101	154	-	-	53	-	-	4.3

: 1) 1999 , 2000

가 .

2) p .

## 2. 가

가.

가

BLS

(Discrete

Choice Model)

(Logit)

가

가

가 .

$$: \ln \left( \frac{Y_t}{1 - Y_t} \right) = \alpha + \beta_1 T + \beta_2 T^2 + \beta_3 Y_{t-1} + \varepsilon_t$$

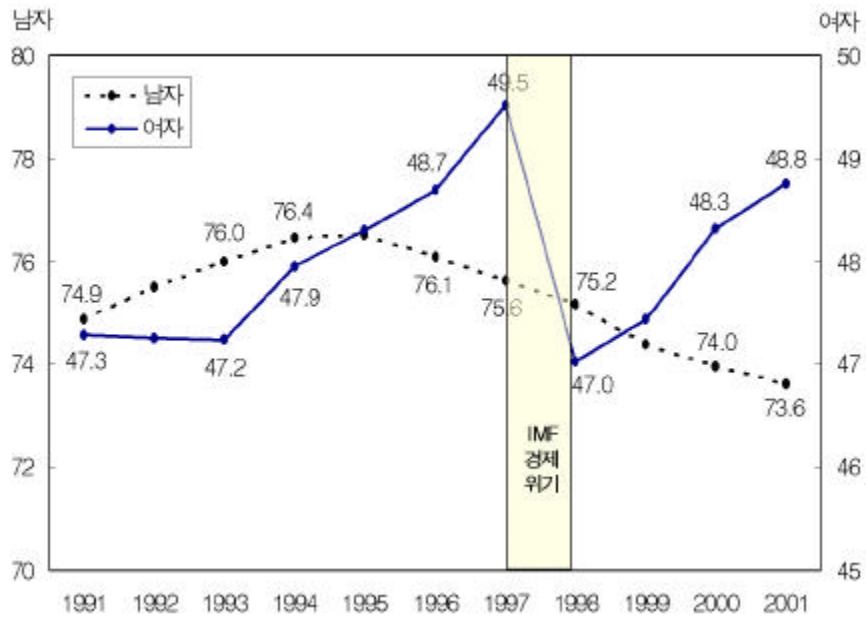
$$: \ln \left( \frac{Y_t - a}{b - Y_t} \right) = \alpha + \beta_1 T + \varepsilon_t \text{ (folded logit )}$$

T (trend) , Y<sub>t</sub> 가 ,

Y<sub>t-1</sub> 가 a ,

b 가

가 가



[ -4] IMF 가

가 1997 IMF . [ -4] 가  
 1990 가 1998 47.0% 가  
 1997 49.5% IMF 1997 62.2% 1998 60.7% 가  
 가 , 가

가 .  
 < -9> 1980 50% 가  
 1990 60% 2000 60.7% 가  
 가 1997 62.2% 가 IMF  
 가  
 2010 62.5%

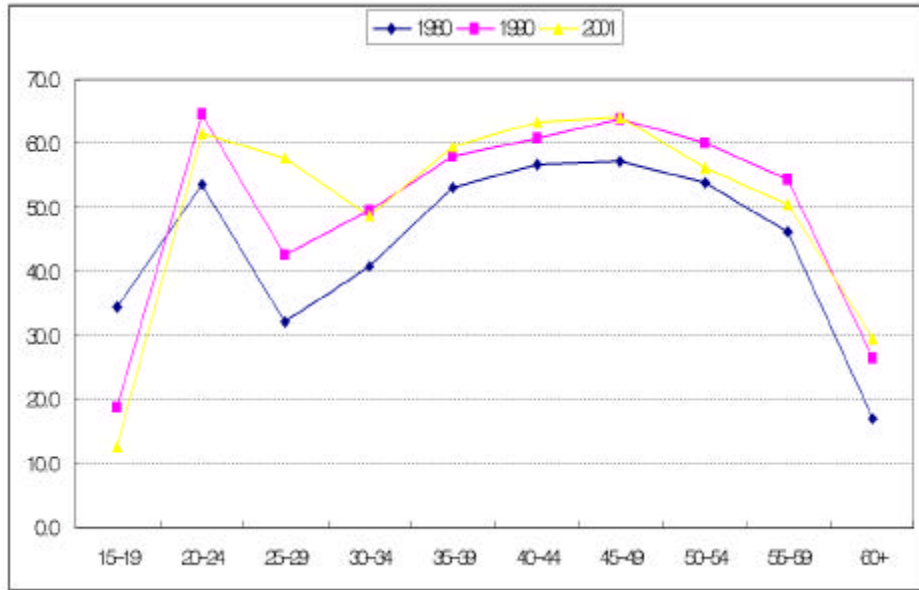
< -9> 가 ( : %, % )

	가				가		
	1980	1990	2000	2010p	1980 1990	1990 2000	2000 2010p
	59.0	60.0	60.7	62.5	1.0	0.7	1.8
	76.4	74.0	74.0	73.2	-2.4	0.0	-0.7
	42.8	47.0	48.3	52.3	4.2	1.3	4.0

: p .

가  
 가  
 . < -9>  
 가 1980 76.4% 1990 74.0% , 2000  
 74.0% 1990  
 42.8 47.0% 48.3%  
 2010 73.2%, 52.3%  
 가  
 , 가  
 , 가  
 ( , 1998). 가 , [ -5]  
 20 30 가  
 M , 2000 20 10%  
 가 20 가 25  
 , 30  
 가 40  
 , , 가  
 U . 가  
 , , 25 ,  
 가 가 .





[ -5] 가

.

가

가

가

가

40 • 50

가

가

,

가

가

< -10>

가

, 15

29

가 1980 50.4% 1990 2000  
46.1% , 2010 45.5%  
. , 15 19  
가 가  
가 . , 1980 30.6% 2000  
12.0% , 2010 9.2% .  
.  
, 2010 8.4% 34.4% 12.5%  
. 25 29 가 1980 63.3% 2000 70%  
, 2010 71.7% .  
30 54 가  
1980 가  
가 . 가  
, 95% 가 가  
25 29 가 , 가  
가 가 .  
가 가 가 .  
2010 .  
55 가 1980  
가 , 2010 .  
가 가 가  
,  
가 . ,

< -10> ·

가

( : %, % )

	가				가		
	1980	1990	2000	2010p	1980 1990	1990 2000	2000 2010p
	59.0	60.0	60.7	62.5	1.0	0.7	1.8
15 19	30.6	14.6	12.0	9.2	-16.0	-2.6	-2.8
20 24	63.1	62.8	57.2	53.4	-0.3	-5.7	-3.8
25 29	63.3	67.3	70.2	71.7	4.1	2.8	1.5
30 34	70.0	73.9	72.1	70.9	3.9	-1.8	-1.2
35 39	75.6	77.7	77.7	79.1	2.1	0.0	1.4
40 44	76.7	78.4	79.0	81.5	1.7	0.6	2.4
45 49	75.5	79.3	78.6	79.2	3.8	-0.6	0.6
50 54	71.0	75.3	72.9	73.9	4.3	-2.5	1.0
55 59	62.3	68.7	64.0	66.5	6.4	-4.7	2.5
60 64	28.3	53.8	54.0	58.5	-	0.3	4.5
65 1)	28.3	26.1	29.2	36.0	-	3.1	6.8
	76.4	74.0	74.0	73.2	-2.4	0.0	-0.7
15 19	27.3	10.8	11.6	10.0	-16.4	0.8	-1.6
20 24	76.5	60.1	51.6	42.6	-16.4	-8.5	-9.0
25 29	95.0	91.8	83.8	77.4	-3.2	-8.0	-6.4
30 34	97.6	97.2	95.4	93.9	-0.4	-1.8	-1.5
35 39	97.3	97.0	95.6	94.5	-0.3	-1.3	-1.1
40 44	96.1	95.7	94.4	93.7	-0.5	-1.3	-0.7
45 49	94.4	94.1	92.6	93.0	-0.2	-1.5	0.4
50 54	90.5	90.5	89.2	89.0	0.1	-1.4	-0.2
55 59	80.0	83.6	77.8	79.8	3.6	-5.8	2.0
60 64	45.2	67.2	63.2	65.4	-	-3.9	2.2
65	45.2	39.3	39.8	41.0	-	0.6	1.2
	42.8	47.0	48.3	52.3	4.2	1.3	4.0
15 19	34.4	18.7	12.5	8.4	-15.7	-6.2	-4.1
20 24	53.5	64.6	60.8	60.8	11.1	-3.7	0.0
25 29	32.0	42.5	55.9	65.6	10.5	13.3	9.8
30 34	40.8	49.6	48.4	52.0	8.8	-1.1	3.6
35 39	53.1	58.0	59.1	64.0	4.9	1.1	4.9
40 44	56.7	60.6	63.5	68.9	4.0	2.8	5.4
45 49	57.3	63.9	64.6	64.5	6.5	0.8	-0.2
50 54	53.9	60.0	55.2	57.9	6.1	-4.8	2.7
55 59	46.2	54.4	50.7	52.3	8.2	-3.6	1.5
60 64	16.9	43.5	45.5	50.3	-	2.0	4.8
65	16.9	18.4	22.5	32.4	-	4.2	9.9

: 1) 60 64 65 1990 가 .

2) p .

가 (reservation wage)

가 가

가 가

가 가

가 1980 가

가 가

가 , < -11>

가 1990 80.4% 2000 76.9%

. 2010 78.1% 1990

가

93.2% 87.3% 53.1%

57.8% 2010

85.6%, 64.9% 가

1990 2000

2010 66.7%

가

( : %, % )

	가				가		
	1980	1990	2000	2010p	1980 1990	1990 2000	2000 2010p
	59.0	60.0	60.7	62.5	1.0	0.7	1.8
	58.5	57.5	50.2	44.2	-0.9	-7.4	-6.0
	49.4	47.2	48.1	48.4	-2.2	0.9	0.3
	66.1	65.0	64.5	66.7	-1.1	-0.5	2.2
	82.5	81.4	77.3	80.6	-	-4.1	3.3
		80.4	76.9	78.1	-	-3.5	1.2
•	-	-	75.6	76.6	-	-	1.1
•	-	-	88.2	88.3	-	-	0.1
	76.4	74.0	74.0	73.2	-2.4	0.0	-0.7
	78.0	70.6	62.3	54.4	-7.4	-8.4	-7.9
	64.3	56.6	54.3	49.2	-7.6	-2.4	-5.1
	81.1	80.0	78.5	77.7	-1.2	-1.5	-0.8
	95.1	93.5	91.1	91.0	-	-2.4	-0.2
		93.2	87.3	85.6	-	-5.8	-1.8
•	-	-	86.6	84.8	-	-	-1.8
•	-	-	91.9	89.8	-	-	-2.1
	42.8	47.0	48.3	52.3	4.2	1.3	4.0
	46.2	50.4	44.3	39.9	4.2	-6.1	-4.4
	33.0	38.2	42.5	47.7	5.3	4.3	5.2
	43.1	47.5	49.4	55.7	4.4	2.0	6.3
	46.6	66.2	64.4	68.4	-	-1.8	4.0
		53.1	57.8	64.9	-	4.7	7.1
•	-	-	56.8	63.5	-	-	6.7
•	-	-	73.3	83.3	-	-	10.0

: 1) 1999 , 2000

가 .

2) p .



( : , % , % )

					가			가		
	1980	1990	2000	2010p	1980 1990	1990 2000	2000 2010p	1980 1990	1990 2000	2000 2010p
	14,431	18,539	21,950	25,019	4,108	3,411	3,069	2.5	1.7	1.3
	9,019	11,030	12,950	14,297	2,011	1,920	1,347	2.0	1.6	1.0
	5,412	7,509	9,000	10,722	2,097	1,491	1,722	3.3	1.8	1.8
	7,219	5,299	3,888	3,314	-1,920	-1,411	-574	-3.0	-3.0	-1.6
	2,946	3,597	3,248	3,047	651	-349	-201	2.0	-1.0	-0.6
	3,292	7,054	9,552	11,193	3,762	2,498	1,641	7.9	3.1	1.6
	974	650	1,590	2,598	1,615	940	1,008	10.3	9.4	5.0
		1,939	3,672	4,866		1,733	1,194		6.6	2.9
·	-	-	3,225	4,194	-	-	969	-	-	2.7
·	-	-	447	672	-	-	225	-	-	4.2
15 19	1,194	639	449	306	-555	-189	-143	-6.1	-3.5	-3.9
20 24	1,974	2,010	1,660	1,541	36	-349	-119	0.2	-1.9	-0.7
25 29	1,849	2,663	2,775	2,648	814	112	-127	3.7	0.4	-0.5
30 34	1,813	2,854	2,737	2,556	1,041	-117	-180	4.6	-0.4	-0.7
35 39	1,789	2,288	3,261	3,151	499	973	-110	2.5	3.6	-0.3
40 44	1,757	2,117	3,253	3,108	360	1,136	-145	1.9	4.4	-0.5
45 49	1,526	1,842	2,451	3,384	316	609	929	1.9	2.9	3.3
50 54	1,033	1,657	1,837	3,029	624	180	1,192	4.8	1.0	5.1
55 59	777	1,189	1,379	2,055	412	190	676	4.3	1.5	4.1
60 64	720	665	1,085	1,626	562	420	541	5.9	5.0	4.1
65		617	1,064	1,621		447	558		5.6	4.3
	100.0	100.0	100.0	100.0						
	62.5	59.5	59.0	57.1	-3.0	-0.5	-1.9			
	37.5	40.5	41.0	42.9	3.0	0.5	1.9			
	50.0	28.6	17.7	13.2	-21.4	-10.9	-4.5			
	20.4	19.4	14.8	12.2	-1.0	-4.6	-2.6			
	22.8	38.0	43.5	44.7	15.2	5.5	1.2			
	6.7	3.5	7.2	10.4	7.2	3.7	3.1			
		10.5	16.7	19.5		6.3	2.7			
·	-	-	14.7	16.8	-	-	2.1			
·	-	-	2.0	2.7	-	-	0.6			
15 19	8.3	3.4	2.0	1.2	-4.8	-1.4	-0.8			
20 24	13.7	10.8	7.6	6.2	-2.8	-3.3	-1.4			
25 29	12.8	14.4	12.6	10.6	1.5	-1.7	-2.1			
30 34	12.6	15.4	12.5	10.2	2.8	-2.9	-2.2			
35 39	12.4	12.3	14.9	12.6	-0.1	2.5	-2.3			
40 44	12.2	11.4	14.8	12.4	-0.8	3.4	-2.4			
45 49	10.6	9.9	11.2	13.5	-0.6	1.2	2.3			
50 54	7.2	8.9	8.4	12.1	1.8	-0.6	3.7			
55 59	5.4	6.4	6.3	8.2	1.0	-0.1	1.9			
60 64		3.6	4.9	6.5		1.4	1.6			
65	5.0	3.3	4.8	6.5	1.9	1.5	1.6			

: 1) 60 64 65 1990 가 . 2000  
 2) 가 .  
 3) p .

( : , %, % )

					가			가		
	1980	1990	2000	2010p	1980 1990	1990 2000	2000 2010p	1980 1990	1990 2000	2000 2010p
	14,431	18,539	21,950	25019	4,108	3,411	3,069	2.5	1.7	1.3
15 19	1,194	639	449	303	-555	-189	-146	-6.1	-3.5	-3.9
20 24	1,974	2,010	1,660	1,541	36	-349	-119	0.2	-1.9	-0.7
25 29	1,849	2,663	2,775	2,648	814	112	-127	3.7	0.4	-0.5
30 34	1,813	2,854	2,737	2,556	1,041	-117	-180	4.6	-0.4	-0.7
35 39	1,789	2,288	3,261	3,151	499	973	-110	2.5	3.6	-0.3
40 44	1,757	2,117	3,253	3,108	360	1136	-145	1.9	4.4	-0.5
45 49	1,526	1,842	2,451	3,380	316	609	929	1.9	2.9	3.3
50 54	1,033	1,657	1,837	3,029	624	180	1,192	4.8	1.0	5.1
55 59	777	1,189	1,379	2,055	412	190	676	4.3	1.5	4.1
60 64	720	665	1,085	1,626	562	420	541	5.9	5.0	4.1
65 1)	617	1,064	1,621	1,621	562	447	558	5.9	5.6	4.3
	9,021	11,030	12,950	14,297	2,009	1,920	1,347	2.0	1.6	1.0
15 19	559	247	221	162	-312	-26	-58	-7.9	-1.1	-3.0
20 24	997	755	595	502	-242	-159	-94	-2.7	-2.3	-1.7
25 29	1,378	1,827	1,698	1,475	449	-129	-223	2.9	-0.7	-1.4
30 34	1,302	1,920	1,826	1,527	618	-94	-299	4.0	-0.5	-1.8
35 39	1,175	1,447	2,048	1,866	272	601	-182	2.1	3.5	-0.9
40 44	1,118	1,309	1,957	1,811	191	648	-146	1.6	4.1	-0.8
45 49	936	1,113	1,444	2,050	177	331	606	1.7	2.6	3.6
50 54	617	1,001	1,169	1,877	384	168	708	5.0	1.6	4.8
55 59	476	708	822	1,274	232	114	452	4.0	1.5	4.5
60 64	463	360	612	987	241	252	375	4.3	5.4	4.9
65	344	559	767	767	215	208	208	5.0	5.0	3.2
	5,413	7,509	9,000	10,722	2,096	1,491	1,722	3.3	1.8	1.8
15 19	635	392	229	141	-243	-163	-88	-4.7	-5.2	-4.7
20 24	977	1,255	1,065	1,039	278	-190	-26	2.5	-1.6	-0.2
25 29	471	836	1,077	1,173	365	241	96	5.9	2.6	0.9
30 34	512	933	911	1,030	421	-23	119	6.2	-0.2	1.2
35 39	615	841	1,213	1,285	226	371	72	3.2	3.7	0.6
40 44	639	808	1,296	1,297	169	489	0	2.4	4.8	0.0
45 49	590	729	1,007	1,331	139	278	324	2.1	3.3	2.8
50 54	416	656	668	1,152	240	12	484	4.7	0.2	5.6
55 59	301	481	557	781	180	75	224	4.8	1.5	3.4
60 64	257	305	473	639	321	168	166	8.4	4.5	3.1
65	273	505	854	854	232	349	349	6.3	6.3	5.4

: 1) 60 64 65 1990 가 .  
 2) p .



					가		
	1980	1990	2000	2010p	1980 1990	1990 2000	2000 2010p
	100.0	100.0	100.0	100.0	-	-	-
15 19	8.3	3.4	2.0	1.2	-4.8	-1.4	-0.8
20 24	13.7	10.8	7.6	6.2	-2.8	-3.3	-1.4
25 29	12.8	14.4	12.6	10.6	1.5	-1.7	-2.1
30 34	12.6	15.4	12.5	10.2	2.8	-2.9	-2.2
35 39	12.4	12.3	14.9	12.6	-0.1	2.5	-2.3
40 44	12.2	11.4	14.8	12.4	-0.8	3.4	-2.4
45 49	10.6	9.9	11.2	13.5	-0.6	1.2	2.3
50 54	7.2	8.9	8.4	12.1	1.8	-0.6	3.7
55 59	5.4	6.4	6.3	8.2	1.0	-0.1	1.9
60 64	5.0	3.6	4.9	6.5	1.9	1.4	1.6
65	5.0	3.3	4.8	6.5	1.9	1.5	1.6
	100.0	100.0	100.0	100.0	-	-	-
15 19	6.2	2.2	1.7	1.1	-4.0	-0.5	-0.6
20 24	11.1	6.8	4.6	3.5	-4.2	-2.2	-1.1
25 29	15.3	16.6	13.1	10.3	1.3	-3.5	-2.8
30 34	14.4	17.4	14.1	10.7	3.0	-3.3	-3.4
35 39	13.0	13.1	15.8	13.1	0.1	2.7	-2.8
40 44	12.4	11.9	15.1	12.7	-0.5	3.2	-2.4
45 49	10.4	10.1	11.1	14.3	-0.3	1.1	3.2
50 54	6.8	9.1	9.0	13.1	2.2	0.0	4.1
55 59	5.3	6.4	6.3	8.9	1.1	-0.1	2.6
60 64	5.1	3.3	4.7	6.9	1.3	1.5	2.2
65	5.1	3.1	4.3	5.4	1.3	1.2	1.1
	100.0	100.0	100.0	100.0	-	-	-
15 19	11.7	5.2	2.5	1.3	-6.5	-2.7	-1.2
20 24	18.0	16.7	11.8	9.7	-1.3	-4.9	-2.1
25 29	8.7	11.1	12.0	10.9	2.4	0.8	-1.0
30 34	9.5	12.4	10.1	9.6	3.0	-2.3	-0.5
35 39	11.4	11.2	13.5	12.0	-0.2	2.3	-1.5
40 44	11.8	10.8	14.4	12.1	-1.0	3.6	-2.3
45 49	10.9	9.7	11.2	12.4	-1.2	1.5	1.2
50 54	7.7	8.7	7.4	10.7	1.1	-1.3	3.3
55 59	5.6	6.4	6.2	7.3	0.8	-0.2	1.1
60 64	4.7	4.1	5.3	6.0	2.9	1.2	0.7
	4.7	3.6	5.6	8.0	2.9	2.0	2.4

: 1) 60 64 65 1990 가 .  
 2) p .

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가

• ,

가,

가

가

( -13 ).

•

• ,

가 ,

가 가 가 가 ,

가 가

가

< -14 >

1980 1

1990 8,896

, 2000 7,136

. 2010 6,362

. 3,292 7,054 10

2 가 가 , 2000

9,552 , 2010 1

가 1980

974 1990 2,589 가 , 2000

5,262 20 10 2 가

. 2010 가

2,202 가 7,464

( : , %, % )

					가			가		
	1980	1990	2000	2000P	1980 1990	1990 2000	2000 2010p	1980 1990	1990 2000	2000 2010
	14,431	18,539	21,950	25,019	4,108	3,411	3,069	2.5	1.7	1.3
	7,219	5,299	3,888	3,314	-1,920	-1,411	-574	-3.0	-3.0	-1.6
	2,946	3,597	3,248	3,047	651	-349	-201	2.0	-1.0	-0.6
	3,292	7,054	9,552	11,193	3,762	2,498	1,641	7.9	3.1	1.6
	974	650	1,590	2,598	1,615	940	1,008	10.3	9.4	5.0
		1,939	3,672	4,866		1,733	1,194		6.6	2.9
	-	-	3,225	4,194	-	-	969	-	-	2.7
	-	-	447	672	-	-	225	-	-	4.2
	9,020	11,030	12,950	14,297	2,010	1,920	1,347	2.0	1.6	1.0
	3,728	2,299	1,567	1,211	-1,429	-732	-356	-4.7	-3.8	-2.5
	2,015	2,099	1,748	1,551	84	-351	-197	0.4	-1.8	-1.2
	2,445	4,682	6,034	6,539	2,237	1,352	505	6.7	2.6	0.8
		420	903	1,592		483	689		8.0	5.8
	832	1,530	2,698	3,405	1,118	1,168	707	8.9	5.8	2.4
	-	-	2,325	2,861	-	-	535	-	-	2.1
	-	-	373	544	-	-	171	-	-	3.8
	5,413	7,509	8,999	10,722	2,096	1,490	1,723	3.3	1.8	1.8
	3,492	3,000	2,320	2,103	-492	-680	-217	-1.5	-2.5	-1.0
	932	1,497	1,501	1,496	565	4	-5	4.9	0.0	0.0
	847	2,372	3,518	4,654	1,525	1,146	1,136	10.8	4.0	2.8
	142	231	686	1,006	498	455	320	16.2	11.5	3.9
		409	974	1,462		565	488		9.1	4.1
	-	-	900	1,334	-	-	433	-	-	4.0
	-	-	74	128	-	-	54	-	-	5.7
	100.0	100.0	100.0	100.0	-	-	-			
	50.0	28.6	17.7	13.2	-21.4	-10.9	-4.5			
	20.4	19.4	14.8	12.2	-1.0	-4.6	-2.6			
	22.8	38.0	43.5	44.7	15.2	5.5	1.2			
	6.7	3.5	7.2	10.4	7.2	3.7	3.1			
		10.5	16.7	19.5		6.3	2.7			
	-	-	14.7	16.8	-	-	2.1			
	-	-	2.0	2.7	-	-	0.7			
	100.0	100.0	100.0	100.0	-	-	-			
	41.3	20.8	12.1	8.5	-20.5	-8.7	-3.6			
	22.3	19.0	13.5	10.8	-3.3	-5.5	-2.7			
	27.1	42.4	46.6	45.7	15.3	4.1	-0.9			
	9.2	3.8	7.0	11.1	8.5	3.2	4.2			
		13.9	20.8	23.8		7.0	3.0			
	-	-	18.0	20.0	-	-	2.1			
	-	-	2.9	3.8	-	-	0.9			
	100.0	100.0	100.0	100.0	-	-	-			
	64.5	40.0	25.8	19.6	-24.6	-14.2	-6.2			
	17.2	19.9	16.7	14.0	2.7	-3.3	-2.7			
	15.6	31.6	39.1	43.4	15.9	7.5	4.3			
	2.6	3.1	7.6	9.4	5.9	4.5	1.8			
		5.4	10.8	13.6		5.4	2.8			
	-	-	10.0	12.4	-	-	2.4			
	-	-	0.8	1.2	-	-	0.4			

: 1) 1999 , 2000 가 .  
2) p .

4.

(stock)

(flow)

가

가

가

5)

가.

99%

가

---

5)

가 . , ( 6 21 )  
1980 .  
. .  
, < -15>  
1970 가 .  
. 1985 가  
가 2000 1,860,539 , 2007  
가 가 . 가  
1990 2,283,806 1970 20 2 가  
2001 1,860,539 2004  
가 2010 가 .  
. 가  
, 가  
. 1980 가  
. 1990 10.9% 가 ,  
1980 9.9%, 1990 4.8% 가 가  
. 가  
. 2006 가  
. 가  
. 가  
2007 가  
. 가  
. 가

( : , %)

1970	5,749,301	1,318,808	590,382	33,483	146,414
1980	5,658,002	2,471,997	1,696,972	165,051	402,979
1990	4,868,520	2,275,751	2,283,806	323,825	1,040,166
2000	4,019,991	1,860,539	2,071,468	913,273	1,665,398
2005	3,952,884	2,050,620	1,726,034	712,857	1,378,890
2010	3,406,160	1,953,711	1,954,732	779,645	1,381,742
가					
1970-1980	-0.2	6.5	11.1	17.3	10.7
1980-1990	-1.5	-0.8	3.0	7.0	9.9
1990-2000	-1.9	-2.0	-1.0	10.9	4.8
2000-2010	-1.6	0.5	-0.6	-1.6	-1.8

: . , .

.

가

가

6) (1997)

$$S = \sum_{j=1}^n P_j E_j$$

$S$  (2001),  $P$ ,  $E$ ,  $j$  가  
 $G_i = \frac{G_i}{1/4 \times A_{t-1} + 3/4 \times A_t}$   
 $G_i$ ,  $i$ ,  $A_t$

. < -16>  
 1970 가 2000 가  
 가 가

< -16> 7)  
 ( : , %)

1970	144,937	82,208	62,729	36,066	7,838	4,713	23,515	2,150
1980	467,388	266,331	201,057	101,796	49,567	2,494	49,735	5,552
1990	761,922	487,772	274,150	258,012	87,131	4,965	165,916	22,269
2000	764,712	473,665	291,047	443,220	223,489	5,233	214,498	53,379
2005	619,349	408,027	211,322	485,751	222,723	5,762	214,498	53,379
2010	584,126	394,299	189,827	407,559	192,215	5,059	257,266	65,359
< 가 >								
1970-1980	12.4	12.5	12.4	10.9	20.3	-6.2	7.8	10.0
1980-1990	5.0	6.2	3.1	9.7	5.8	7.1	12.8	14.9
1990-2000	0.0	-0.3	0.6	5.6	9.9	0.5	2.6	9.1
2000-2010	-2.7	-1.8	-4.2	-0.8	-1.5	-0.3	-0.2	0.7

: . , .  
 가 ,  
 2003 가 가  
 가가 2003  
 가  
 가 가 2004 가  
 2005 가 가 ,

7) (1998)

가 가 가

.

가

가

가

,

,

가

가

1990

< -17>

2003

2000

가



2003

< -17 >

( : )

	(a)	(b)	(C)	(c-a)	(c-b)
1990	350,413	334,255	761,922	411,509	427,667
1995	505,833	476,085	649,653	143,820	173,568
2000	657,728	613,820	764,712	106,984	150,892
2001	658,678	614,050	736,171	77,493	122,121
2002	668,436	622,838	670,713	2,277	47,875
2003	669,980	622,838	625,430	-44,551	2,592
2004	669,980	622,838	619,349	-50,631	-3,489
2005	669,980	622,838	597,202	-72,778	-25,636
2010	669,980	622,838	584,126	-85,854	-38,712

- 1) (a) , (b) 「
- 2) 「 (a) 4 , , , , 2 , , 4 ( , ), , 2 , [ , (b) ] .
- 3) 2003 , .

가

가 가

가

30 50

(work to school)

가

가

가

가

가



1.

가.

가 (BLS)  
( -1 ).

, BLS  
BLS

1993 2001 가  
\* \*

가 , 가

가 ,

[ -1] 4

, 1

(NAIRU NAWRU),

2

,

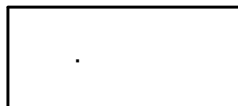
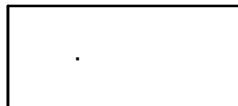
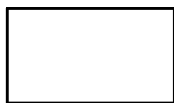
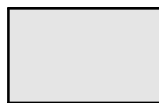
가

3

× )

ARIMA

4



[ -1]

\*

가

\*

가

가

2000 3

8

2001

, 1993 2000

2001

가

17

20

60

63

< -1 >

1993 2000

2001

2

2001

1993 2000

< -1>

A.	01 02		01 02
B.	05		05
C.	10 11 12	,  :	10 13 14
D.	15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37	.  :  가 , 가  : 가  , , ,   1  ; 가      가  가	15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37
E. , 가	40 41	, 가	40 41

< -1>

F.	45 46		45 45
G.	50 51 52	;	50 51 52
H.	55		55
I.	60 61 62 63	,	60 61 62 63
J.	64		64
K.	65 66 67		65 66 67
L.	70 71		70 71
M.	72 73 74 75	,	72 73 74 74
N. ,	76	,	75
O.	80		80
P.	85 86		85 85
Q. ,	87 88	, ,	92 92
R.	90 91 92 93	,	90 91 93
S. 가	95	가	95
T.	99		99

: ,



2001 3  
5  
2001 「 」 , 1993 2000  
2001  
가 가

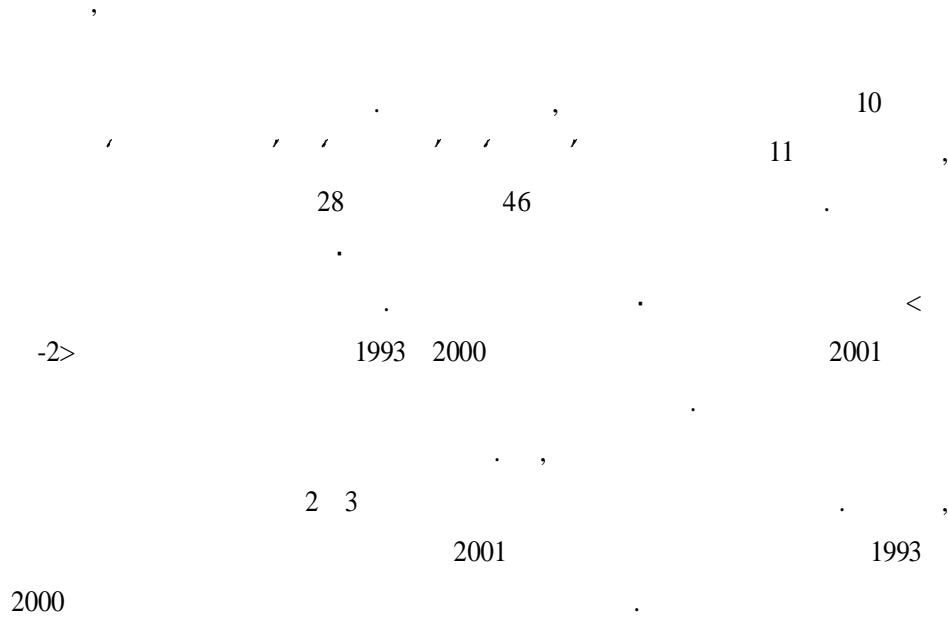
< -2>

0	01 02 03	,	1 11 12 13
1	11 12 13 14 15 16 17 18	가 가 가 가 가 가 가 , 가 , 가 , 가	2 21 21 21 22 23 24 24 24
2	21 22 23 24 25 26 27 28 29	가 가 가 가 가 가 , 가 가	3 31 31 31 32 33 34 34 34 34

< -2>

3	31 32		4 41 42
4	41 42 43 44		5 51 51 51 51
5	51 52 53		5 52 52
6	61 62 63	,	6 61 61 62
7	71 72 73 74 75	,  ,	7 71 72 72 73 74
8	81 82 83 84	, P	8 81 82 82 83
9	91 92 93 94	,	9 91 92 93 93
A	A1		0 01

:



2.

(KDI)  
(2001)

가.

가가

1970 90 8%

1990  
 6% . 2000 ,  
 가 가  
 가 가  
 ,  
 가 , 2000 5.2%, 2010  
 4.0% ( )  
 가 2000 4.5% 2010  
 3.2% ( ) 가  
 가 .8)

< -3>

( : %, % )

	1971~80	1981~90	1991~00	2001~10	
	7.4	8.6	6.1	-	-
	-1.0	1.0	-0.7	-	-
	8.4	7.6	6.8	5.2	4.5
	5.6	4.6	3.4	2.5	2.4
.	3.2	2.5	1.5	0.4	0.6
.	2.4	2.1	1.9	2.1	1.8
가	2.8	3.0	3.4	2.7	2.1
.	1.4	1.4	1.5	0.9	0.7
.	0.8	0.7	0.7	0.6	0.5
.	0.6	0.9	1.2	1.2	0.9

: (2001), p.68

8)

, 2000 2010 2%

가  
 , 가  
 ,  
 ,  
 1990 8.7% 2000 3.9% 2010 2.6% 2020 1.7%

가  
 ,  
 가  
 ,  
 가  
 1990 29.2% 2000 28.8% 2010 27.7%, 2020 26.2%  
 ,  
 ,  
 ,  
 가 , 가  
 가

< 4 >

( : %)

				가			
	1990	2000	2010	1981 1990	1991 2000	2001 2010	
	8.7	3.9	2.6	3.2	2.0	0.8	
	0.8	0.3	0.1	0.1	-1.5	-1.1	
	29.2	28.8	27.7	11.1	8.1	5.2	
	61.3	67.0	69.6	9.1	6.5	5.7	
( )	100.0	10.0	100.0	8.6	6.1	5.7	

: (2001), p.75



2001  
1.26%  
가  
가  
200  
가  
. 1998  
2001 21,362  
1997 .

< -6 >

( : , %)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	가 (93-01 )
	19,328	19,905	20,432	20,817	21,106	19,994	20,281	21,061	21,362	1.26
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	
	2,849	2,731	2,534	2,429	2,385	2,480	2,349	2,288	2,193	-3.22
	(14.74)	(13.72)	(12.40)	(11.67)	(11.30)	(12.41)	(11.58)	(10.86)	(10.27)	
	53	40	27	23	26	21	20	18	19	-11.77
	(0.27)	(0.20)	(0.13)	(0.11)	(0.12)	(0.11)	(0.10)	(0.08)	(0.09)	
	4,677	4,714	4,797	4,692	4,482	3,898	4,006	4,244	4,199	-1.34
	(24.20)	(23.68)	(23.48)	(22.54)	(21.23)	(19.50)	(19.75)	(20.15)	(19.66)	
	11,749	12,420	13,074	13,672	14,212	13,594	13,905	14,510	14,950	3.06
	(60.79)	(62.40)	(63.99)	(65.68)	(67.34)	(67.99)	(68.56)	(68.90)	(69.98)	
가	65	71	70	74	77	61	61	63	56	-1.85
	(0.34)	(0.36)	(0.34)	(0.36)	(0.36)	(0.31)	(0.30)	(0.30)	(0.26)	
	1,688	1,780	1,904	1,970	2,004	1,578	1,476	1,583	1,575	-0.86
	(8.74)	(8.94)	(9.32)	(9.47)	(9.49)	(7.89)	(7.28)	(7.52)	(7.38)	
	4,648	4,995	5,162	5,401	5,562	5,336	5,479	5,687	5,820	2.85
	(24.05)	(25.09)	(25.26)	(25.94)	(26.35)	(26.69)	(27.02)	(27.00)	(27.25)	
, ,	1,007	1,008	1,069	1,110	1,162	1,169	1,202	1,263	1,322	3.46
	(5.21)	(5.06)	(5.23)	(5.33)	(5.51)	(5.85)	(5.93)	(6.00)	(6.19)	
, ,	1,353	1,487	1,629	1,762	1,889	1,851	1,907	2,072	2,244	6.53
	(7.00)	(7.47)	(7.97)	(8.46)	(8.95)	(9.26)	(9.40)	(9.84)	(10.51)	
	2,988	3,079	3,240	3,355	3,519	3,599	3,780	3,843	3,932	3.49
	(15.46)	(15.47)	(15.86)	(16.12)	(16.67)	(18.00)	(18.64)	(18.25)	(18.41)	

: ( )  
:

가 가 가

가

1993 1.34% 11.8% 가

3.1% 가

6.6% 가

가

가

2)

1993 2001 가

4,199 478 93 4,677 2001

1.34%

(4.6%), (6.5%), (6.6%), (6.3%), (5.4%), 가

(3.3%)

가

(1.5%), (2.0%), (1.8%), (1.7%)

가

가

1993 18.3%

가

가 93

가 가



< -7>

( : , %)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	가 (93-01)
	4,677	4,714	4,797	4,692	4,482	3,898	4,006	4,244	4,199	-1.34
	358	373	393	403	392	334	338	340	353	-0.17
	8	9	8	8	5	10	8	5	5	-6.49
	425	432	427	406	354	336	350	332	326	-3.25
	573	576	548	516	501	451	482	528	513	-1.37
가 ,가	237	212	189	153	134	115	129	138	141	-6.27
	98	87	81	73	65	42	43	45	57	-6.56
,	104	104	100	94	84	65	62	67	76	-3.77
,	210	223	213	212	206	167	170	183	198	-0.70
,	21	21	18	17	10	15	13	16	15	-4.39
	172	167	175	170	159	157	144	156	155	-1.34
	153	164	162	152	147	125	131	137	128	-2.18
	203	210	199	194	177	143	141	140	130	-5.42
1	105	113	130	125	116	106	94	90	93	-1.56
	345	315	315	324	329	264	290	313	313	-1.22
	343	391	461	469	470	400	395	406	386	1.48
	45	37	44	46	41	21	25	41	36	-2.51
	112	132	153	147	142	110	112	139	131	1.95
	344	330	340	339	330	329	361	397	396	1.77
,	61	60	59	66	61	49	55	54	57	-0.87
	270	280	300	310	321	301	284	315	296	1.15
가	113	108	123	130	130	114	115	119	130	1.74
가	375	370	353	329	298	236	258	275	257	-4.63
	2	2	5	7	7	5	7	10	8	18.25

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3)

1993 가 11,749 2001 14,950  
 3,201 . 3.06%  
 가  
 가

( : , %)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	가 (93-01)
	11,749	12,420	13,074	13,672	14,212	13,594	13,905	14,510	14,950	3.06
가	53	58	56	62	64	51	49	51	49	-1.03
	12	13	14	12	13	10	12	12	7	-6.12
	729	769	823	851	866	682	638	684	681	-0.86
	959	1,011	1,081	1,119	1,138	896	838	899	895	-0.86
	155	179	194	208	211	174	178	185	188	2.50
	892	981	1,027	1,083	1,122	1,096	1,143	1,195	1,224	4.03
	2,255	2,343	2,336	2,339	2,339	2,313	2,338	2,383	2,462	1.10
	1,346	1,491	1,605	1,771	1,890	1,753	1,820	1,924	1,945	4.71
	686	683	708	714	741	797	813	826	855	2.80
	45	44	42	43	42	37	38	36	35	-3.05
	27	16	17	18	18	27	30	34	33	2.61
	118	136	165	186	203	150	162	184	197	6.69
	132	130	137	149	158	158	160	184	201	5.42
	314	307	322	336	326	343	321	317	331	0.65
	282	318	337	357	391	375	349	345	328	1.91
	45	59	61	50	43	44	54	67	73	6.11
	212	227	247	269	277	269	283	300	322	5.40
	65	65	77	75	71	66	69	62	69	0.80
	28	38	45	65	83	98	98	169	238	30.78
	28	41	50	63	60	73	79	72	78	13.41
	187	214	242	271	315	289	324	367	399	9.89
	191	218	247	277	321	295	330	374	406	9.89
	603	635	645	638	648	745	870	762	689	1.68
	937	942	1,014	1,061	1,103	1,144	1,122	1,161	1,196	3.10
	234	245	258	261	280	307	324	346	391	6.63
	41	43	45	45	49	53	56	60	68	6.63
,	69	75	78	84	87	86	86	100	106	5.44
	179	193	202	217	225	222	221	258	273	5.44
	24	25	29	31	31	27	25	31	32	4.00
	163	163	174	176	195	193	204	214	217	3.60
	213	219	225	250	253	240	264	274	283	3.63
	329	344	363	377	406	361	390	427	445	3.85
가	175	178	192	200	229	202	201	193	216	2.69
	22	19	16	15	13	20	18	19	16	-4.19

: ,



가  
가  
(2001)  
가

< -9> 가 (2001 2010 )  
( : %)

	2001 2010	
	-2.8	-0.3
	2.6	2.3
	1.2	0.7
	0.4	0.2
	-1.0	-1.2
	0.9	0.7
	1.4	1.1
	-2.5	-3.1
	0.9	0.6
	2.3	2.0
	2.8	2.6
	2.6	2.3
	3.4	2.8
	2.3	0.6
	1.6	1.2
	1.2	0.3
	1.7	-0.7
가	11.8	11.5
	2.3	3.0
	-0.4	-0.1
	2.7	2.5
	1.6	1.4
	0.0	0.0
	5.4	5.2
	1.42	1.37

: (2001).

< -9> 가 . 2001 2010  
 , 2001 2010  
 가 1.42%,  
 1.37% ,  
 가가  
 가가  
 가 . < -9>  
 ,  
 , 24  
 . , KDI  
 가 .  
 , < -10> .  
 ,  
 < -9> ,  
 (2001b)  
 . (2001b)  
 , 2001  
 < -10>  
 , 가  
 2002 2010 . ,  
 (2001b)

KDI	I-O (1995 )	(8 , 2000 3 )	
1.	1~ 30	A, B	01, 02, 05
2.	31~ 45	C	10, 11, 12
3.	46~ 88		15, 16
4. ,	89~119		17 - 19
5.	120~125		20
6. ,	126~138		21, 22
7.	150~176		24
8. ,	139~149		23
9.	177~179		25
10.	180~195	D	26
11.	196~216		27
12.	217~227		28
13.	228~246		29
14. ,	247~274		30 - 32
15.	282~295		34, 35
16.	275~281		33
17.	296~305		36, 37
18. , 가 ,	306~312	E	40, 41
19.	313~329	F	45, 46
20. , ,	330~333	G,H	50 - 52, 55
21. , ,	334~351	I,J	60 - 64
22. , ,	352~369	K,L	65 - 67, 70, 71
23.	372~402	M, Q, R, S	72 - 75, 87, 88, 90 - 93, 95
24. ,	370~371	N, O, P, T	76, 80, 85, 86, 99

: (2001).

,

,

1990

, 가

< -10>  
가

(2001)

2002 2010

.9)

1)

	2000	21,061	2010	24,269	2002
2010	1.43%	가			
2000	2,288	2010	1,723		
			2005	2000	
	가				
2000		2010	10		
	-0.31%				
2010		2.4%	가	2000	4

9) KDI( (2001))

( (2001b))

< -11>

( : , %)

	1993	2000	2005p	2010p	가			
					93-00	00-05	05-10	00-10
	19,328	21,061	22,819	24,269	1.23	1.62	1.24	1.43
	(100)	(100)	(100)	(100)				
	2,849	2,288	2,008	1,723	-3.08	-2.58	-3.01	-2.80
	(14.7)	(10.9)	(8.8)	(7.1)				
	53	18	19	18	-14.28	1.22	-1.08	0.07
	(0.27)	(0.08)	(0.08)	(0.07)				
	4,677	4,244	4,130	4,114	-1.38	-0.54	-0.08	-0.31
	(24.2)	(20.2)	(18.1)	(16.9)				
	11,749	14,510	16,662	18,414	3.06	2.80	2.02	2.41
	(60.8)	(68.9)	(73.0)	(75.9)				
가	65	63	55	55	-0.46	-2.62	-0.14	-1.39
	(0.3)	(0.3)	(0.2)	(0.2)				
	1,688	1,583	1,643	1,723	-0.92	0.75	0.96	0.85
	(8.7)	(7.5)	(7.2)	(7.1)				
	4,648	5,687	6,316	6,798	2.92	2.12	1.48	1.80
	(24.1)	(27.0)	(27.7)	(28.0)				
, ,	1,007	1,263	1,688	2,073	3.29	5.96	4.20	5.08
	(5.2)	(6.0)	(7.4)	(8.5)				
,	1,353	2,072	2,556	2,839	6.28	4.28	2.13	3.20
	(7.0)	(9.8)	(11.2)	(11.7)				
	2,988	3,843	4,404	4,927	3.66	2.76	2.27	2.52
	(15.5)	(18.3)	(19.3)	(20.3)				

: p , ( ) .

2)

2010  
 1,114 2000 130  
 0.31%  
 , , , 10 0.1%  
 1.3% 가



가

가

가 가

가

< -12>

( : , %)

	1993	2000	2005p	2010p	가			
					93-00	00-05	05-10	00-10
	4,677	4,244	4,130	4,114	-1.38	-0.54	-0.08	-0.31
	358	340	342	333	-0.72	0.13	-0.52	-0.20
	8	5	5	4	-6.80	-1.68	-0.83	-1.25
	425	332	295	268	-3.47	-2.29	-1.94	-2.12
	573	528	484	447	-1.15	-1.73	-1.57	-1.65
가 ,가	237	138	124	117	-7.46	-2.18	-1.04	-1.61
	98	45	46	41	-10.44	0.18	-2.10	-0.97
,	104	67	64	57	-6.13	-0.69	-2.34	-1.52
,	210	183	199	196	-1.89	1.67	-0.29	0.69
,	21	16	12	10	-3.99	-4.95	-4.12	-4.54
	172	156	152	149	-1.46	-0.52	-0.28	-0.40
	153	137	123	118	-1.58	-2.09	-0.77	-1.43
	203	140	132	136	-5.24	-1.09	0.60	-0.25
1	105	90	96	101	-2.22	1.31	1.09	1.20
	345	313	321	336	-1.41	0.55	0.90	0.73
	343	406	404	427	2.43	-0.11	1.12	0.50
	45	41	38	42	-1.14	-1.79	2.06	0.12
	112	139	134	148	3.11	-0.72	2.07	0.66
	344	397	399	419	2.06	0.11	0.99	0.55
,	61	54	58	61	-1.85	1.47	1.06	1.26
	270	315	311	315	2.22	-0.30	0.30	0.00
	113	119	134	137	0.79	2.37	0.35	1.35
가	375	275	248	238	-4.33	-2.00	-0.84	-1.42
가	2	10	10	11	25.20	-0.26	2.05	0.89

: p

3)

가 , ,  
가 .

가  
가 . 가 ,  
1.50% 9.05% 가 .

. 2000 가 169 2010  
358 8% 2005  
12% . ,

5-7%  
2000 가  
367 2010 561 72  
114 . ,  
, 가

가  
가 ,  
가 ,  
가 가 ,  
가

가 . ,  
가

	1993	2000	2005p	2010p	가			
					93-00	00-05	05-10	00-10
	11,749	14,510	16,662	18,414	3.06	2.80	2.02	2.41
, 가	53	51	48	47	-0.53	-1.26	-0.24	-0.75
	12	12	7	7	-0.14	-9.48	0.48	-4.63
	729	684	692	713	-0.92	0.23	0.62	0.42
	959	899	951	1,010	-0.92	1.14	1.20	1.17
	155	185	207	226	2.63	2.25	1.73	1.99
	892	1,195	1,396	1,462	4.26	3.16	0.92	2.04
	2,255	2,383	2,552	2,621	0.79	1.38	0.54	0.96
	1,346	1,924	2,161	2,489	5.24	2.35	2.87	2.61
	686	826	1,009	1,175	2.69	4.10	3.09	3.59
	45	36	38	45	-3.19	1.14	3.45	2.29
	27	34	45	63	3.50	5.70	6.96	6.33
/	118	184	272	354	6.61	8.17	5.41	6.78
	132	184	323	435	4.84	11.96	6.14	9.01
	314	317	345	340	0.14	1.71	-0.31	0.70
	282	345	330	298	2.91	-0.90	-1.99	-1.45
	45	67	77	82	5.64	2.93	1.37	2.15
	212	300	319	304	5.09	1.29	-1.00	0.14
	65	62	69	63	-0.59	2.12	-1.69	0.20
	28	169	299	358	29.44	12.03	3.65	7.76
	28	72	95	114	14.13	5.71	3.73	4.72
/	187	367	478	561	10.06	5.46	3.24	4.34
	191	374	543	719	10.06	7.77	5.77	6.77
/	603	762	678	638	3.39	-2.29	-1.22	-1.76
	937	1,161	1,326	1,399	3.10	2.69	1.09	1.89
	234	346	462	596	5.75	5.95	5.21	5.58
	41	60	92	133	5.75	8.96	7.54	8.25
,	69	100	139	179	5.37	6.79	5.22	6.00
/	179	258	326	418	5.37	4.79	5.12	4.95
	24	31	38	44	3.87	4.46	2.96	3.71
	163	214	216	212	3.90	0.21	-0.37	-0.08
	213	274	330	414	3.68	3.82	4.61	4.22
	329	427	524	577	3.79	4.20	1.93	3.06
가	175	193	256	301	1.38	5.89	3.23	4.55
	22	19	16	16	-2.21	-3.36	0.14	-1.63

: p .

3.

가 .

가

가.

1)

1993 가 2001 1993 가

2001 2.5%, 5.1% 가

가 . 14.5% 가

, , , , , ,

10% . ,

, , 1998

. 가, 가, ,

1998 가

가 .

가 . ,

가 가 가

( : , %)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	가 (93-01)
가 가	19,328	19,905	20,432	20,817	21,105	19,994	20,281	21,061	21,362	1.26
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	
	521	526	520	544	523	506	475	487	546	0.60
	( 2.7)	( 2.6)	( 2.6)	( 2.6)	( 2.5)	( 2.5)	( 2.4)	( 2.3)	( 2.6)	
	882	819	968	1,009	988	1,100	1,055	1,093	1,449	6.39
	( 4.6)	( 4.1)	( 4.7)	( 4.8)	( 4.7)	( 5.5)	( 5.2)	( 5.2)	( 6.8)	
	1,480	1,697	1,819	1,946	2,141	2,098	2,295	2,310	2,008	3.89
	( 7.7)	( 8.5)	( 8.9)	( 9.4)	(10.1)	(10.5)	(11.3)	(11.0)	(9.4)	
	2,418	2,431	2,513	2,560	2,565	2,409	2,212	2,355	2,529	0.56
	(12.5)	(12.2)	(12.3)	(12.3)	(12.2)	(12.1)	(10.9)	(11.2)	(11.8)	
	1,809	2,045	2,249	2,439	2,635	2,510	2,591	2,754	2,728	5.27
	( 9.4)	(10.3)	(11.0)	(11.7)	(12.5)	(12.6)	(12.8)	(13.1)	(12.8)	
	2,142	2,179	2,167	2,169	2,156	2,144	2,135	2,186	2,919	3.94
	(11.1)	(10.9)	(10.6)	(10.4)	(10.2)	(10.7)	(10.5)	(10.4)	(13.7)	
	2,561	2,578	2,382	2,319	2,273	2,364	2,217	2,154	2,073	-2.61
	(13.3)	(13.0)	(11.7)	(11.1)	(10.8)	(11.8)	(10.9)	(10.2)	(9.7)	
2,929	2,842	3,337	3,355	3,289	2,666	2,746	2,860	2,608	-1.44	
(15.2)	(14.3)	(16.3)	(16.2)	(15.6)	(13.3)	(13.5)	(13.6)	(12.2)		
2,467	2,562	2,189	2,181	2,186	2,095	2,119	2,245	2,314	-0.80	
(12.8)	(12.9)	(10.7)	(10.5)	(10.4)	(10.5)	(10.5)	(10.7)	(10.8)		
2,118	2,226	2,289	2,296	2,350	2,102	2,437	2,617	2,188	0.41	
(11.0)	(11.2)	(11.2)	(11.0)	(11.1)	(10.5)	(12.0)	(12.4)	(10.2)		

: ( ) .

: , .

2)

1993 , ,  
 , , 2001  
 , , , ,  
 가  
 . 10 가  
 가가 . 가,  
 가, 가 10%

가  
가

< -15>

( : %)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	가 (93-01)
	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	12.1
	0.73	0.62	0.53	0.49	0.42	0.48	0.46	0.48	0.54	-2.4
	1.96	2.01	1.99	2.10	2.05	2.03	1.86	1.81	1.99	1.5
가	0.09	0.09	0.11	0.12	0.12	0.13	0.12	0.10	0.12	5.9
가	0.23	0.25	0.29	0.33	0.36	0.43	0.40	0.51	0.76	17.7
가	0.63	0.67	0.75	0.77	0.77	0.85	0.78	0.75	0.78	4.1
가	0.59	0.52	0.62	0.60	0.58	0.75	0.73	0.67	0.99	7.9
가	2.36	2.02	2.37	2.32	2.15	2.48	2.30	2.21	2.66	2.8
가	0.06	0.06	0.05	0.06	0.07	0.09	0.10	0.11	0.20	17.7
가	0.24	0.22	0.22	0.25	0.27	0.33	0.36	0.38	0.43	8.9
가	0.38	0.31	0.33	0.39	0.36	0.44	0.42	0.46	0.84	12.0
	0.04	0.05	0.06	0.07	0.07	0.05	0.06	0.06	0.07	8.5
가	0.17	0.21	0.21	0.26	0.28	0.27	0.32	0.38	0.41	13.1
	0.92	1.10	1.17	1.28	1.42	1.25	1.44	1.41	1.49	7.5
가	0.42	0.45	0.39	0.37	0.42	0.50	0.56	0.58	0.57	4.9
가	1.66	1.93	1.65	1.81	1.95	2.26	2.29	2.26	1.83	2.4
가	2.33	2.53	3.13	3.37	3.70	3.71	4.14	4.05	3.45	6.4
가	0.18	0.21	0.21	0.20	0.23	0.20	0.22	0.22	0.21	3.6
가	0.32	0.33	0.34	0.35	0.38	0.40	0.42	0.39	0.36	2.7
가	1.61	1.71	1.74	1.65	1.70	1.85	1.88	1.61	1.02	-4.41

	1993	1994	1995	1996	1997	1998	1999	2000	2001	가 (93-01)
	8.67	8.18	8.24	8.31	8.30	8.84	7.91	8.19	9.96	3.0
	3.84	4.04	4.06	3.99	3.85	3.21	3.00	2.99	1.88	-7.4
	2.44	2.80	3.04	3.15	3.41	3.45	3.55	3.78	3.65	6.5
	6.32	6.87	7.34	7.94	8.43	8.35	8.49	8.59	8.34	4.8
	0.07	0.06	0.06	0.07	0.09	0.07	0.07	0.06	0.08	3.7
	0.53	0.54	0.57	0.55	0.55	0.69	0.67	0.65	0.70	4.7
	10.89	10.75	10.42	10.25	10.04	10.53	10.34	10.17	13.38	3.9
	0.16	0.15	0.15	0.14	0.14	0.15	0.15	0.15	0.21	5.0
	0.04	0.04	0.04	0.03	0.04	0.04	0.04	0.06	0.07	8.7
	13.00	12.88	11.61	11.10	10.72	11.78	10.87	10.17	9.38	-2.8
	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.04	1.3
	0.21	0.03	0.01	0.00	0.01	0.01	0.02	0.01	0.29	5.2
	4.18	4.47	4.73	4.69	4.68	3.63	3.50	3.59	3.52	-0.9
	2.20	1.98	2.35	2.33	2.29	1.79	1.81	1.81	1.57	-2.9
	2.78	2.68	2.97	3.06	3.07	2.90	2.98	3.02	2.50	-0.1
	1.31	1.18	1.22	1.20	1.09	0.89	0.96	0.98	0.91	-3.2
	4.68	3.96	5.06	4.84	4.45	4.13	4.28	4.18	3.70	-1.7
	0.83	0.87	0.85	0.78	0.74	0.61	0.62	0.64	0.74	-0.04
	5.05	5.18	3.23	3.08	3.10	3.16	3.17	3.23	3.30	-4.0
	1.60	1.56	1.30	1.31	1.27	1.39	1.35	1.48	1.52	0.7
	5.29	5.27	5.33	5.31	5.25	5.33	5.31	5.32	5.27	1.2
	5.71	6.30	6.09	6.23	6.56	6.55	7.36	7.47	5.56	0.9
	1.39	0.65	0.62	0.44	0.44	0.55	0.66	0.64	0.57	-9.4
	1.60	2.11	2.40	2.32	2.13	1.83	2.36	2.66	2.59	7.6
	2.26	2.13	2.09	2.04	2.01	1.58	1.63	1.65	1.53	-3.6
	100	100	100	100	100	100	100	100	100	1.3

1993 2001

7.6% 가

가

(low skill trap) 가

가

가가

가

가

1) -

, - ×

× - 1993 2001 -

「 」

(63 ) (45 )<sup>10)</sup>

2,835

10) 가 46 , 45



3 1 , 3  
 59 - 2,655  
 (= (59 ) × (45 ))

1993 2000 가 < 3> < 4> .  
 - 590 (= (59 ) ×  
 (10 )) ,  
 0.00% 가  
 0.00% ,  
 가 - 가

2)

- 1993 2001  
 - 2002 2010  
 - matrix  
 (RAS) - matrix  
 , - matrix  
 ARIMA ,  
 -



( : , %)

	1993	2000	2005p	2010p	가				(00-10)
					93-00	00-05	05-10	00-10	
가	521	487	517	572	-0.96	1.22	2.02	1.62	2.64
가	882	1,093	1,384	1,611	3.10	4.84	3.08	3.96	16.14
가	1,480	2,310	2,670	2,904	6.57	2.94	1.70	2.32	18.52
가	2,418	2,355	2,574	2,711	-0.38	1.80	1.04	1.42	11.10
가	1,809	2,754	3,063	3,489	6.19	2.15	2.64	2.39	22.91
가	2,142	2,186	2,627	2,840	0.29	3.75	1.57	2.65	20.40
가	2,561	2,154	1,870	1,592	-2.45	-2.79	-3.17	-2.98	-17.50
가	2,929	2,860	2,803	2,901	-0.34	-0.41	0.69	0.14	1.25
가	2,467	2,245	2,460	2,607	-1.34	1.85	1.17	1.51	11.29
가	2,118	2,617	2,851	3,042	3.07	1.72	1.31	1.52	13.24
가	19,328	21,061	22,819	24,269	1.23	1.62	1.24	1.43	100.00

: p .

가 가  
 ' 가 . 가 3.9% 가 2000  
 1,093 2010 1,611 , 518 가 .  
 가 2.3% 가 2002 2010 594 가  
 . 가가  
 2000 5.2% 2010 6.6% 1.4%p 가 , 가가  
 2000 11.0% 2010 12.0% 1.0%p 가  
 (< -17 > ). 가 가 가  
 가 가  
 ' ' 2.7% 가 2000 2,186 가  
 2010 2,840 , 654 가 . 2005 3.8%  
 가 , 가 ,  
 가 (3,208 ) 가  
 20.4% .  
 2000 5.2% 2010 6.6% 1.4%p 가

가 2010 3,489 , 735 가 2000 2,754  
 가 가 가 가 가  
 가 가 가  
 22.9% .  
 2000 13.1% 2010 14.4% 1.3%p 가  
 가 2% 가  
 2000 2010  
 (1.4%) 1.6% 가  
 85 가 2.6% .  
 2010  
 2000 425 가 3,042 .  
 가 13.2% .  
 가 1.5% 가 2000 2010  
 362 가 가  
 가  
 2000 10.66% 2010 10.74% 0.08%p 가  
 가 1993-2000 가 408 ( .  
 2.5% ) 1 3.0%  
 2010 2000 562 1,592  
 가 3.0%  
 가  
 가 1993-2000 가 69 ( 0.3% )

가 2005 가, 가  
 , 2000 2010 0.1% 가  
 2010 2000 40 가 2,901 .  
 가 1.3% .

< -17>

( : %)

	1993	2000	2005p	2010p
가	2.70	2.31	2.27	2.36
가	4.56	5.19	6.07	6.64
	7.66	10.97	11.70	11.97
	12.51	11.18	11.28	11.17
	9.36	13.08	13.42	14.38
	11.08	10.38	11.51	11.70
	13.25	10.23	8.19	6.56
	15.16	13.58	12.28	11.95
	12.76	10.66	10.78	10.74
	10.96	12.43	12.49	12.54
	100.00	100.00	100.00	100.00

: p .

' ' 1993-2000 0.4% , 가 63

가 1.4% 가

2010 가

가 가 .

2)

가 가

2000

가

46 (

45

)

가 가 , 가가 2000 2010 9.3%

가 가 , 가가 6.7%, 6.1% 가 2000

가 가 ,

가가 6.4% 가

가가 4%

가

가 2000 2010 6.6%

가 가 , 가

2.6% 가 2000 2,141 2010

2,769 , 627 가 가 가

10%

가 , , 가

가 12.8% 가

가 가 가

가 , ,

, 가 가 가 , ,

. 가 , ,

가

가

( : , %)

	1993	2000	2005p	2010p	가				(00-10)
					1993 -2000	2000 -2005	2005 -2010	2000 -2010	
	3	4	5	6	5.47	7.34	2.79	5.04	0.08
	140	101	121	146	-4.53	3.61	3.87	3.74	1.40
	378	382	391	419	0.14	0.47	1.40	0.94	1.16
가	16	21	25	29	3.55	3.61	2.90	3.25	0.25
가	44	108	208	261	13.67	14.05	4.69	9.27	4.79
가	121	157	165	186	3.84	0.88	2.43	1.65	0.87
가	115	141	199	255	3.01	7.06	5.05	6.05	3.53
가	455	465	519	559	0.29	2.22	1.49	1.86	2.93
가	12	23	36	44	10.14	9.38	4.17	6.74	0.66
가	46	80	89	101	8.00	2.37	2.46	2.42	0.67
가	73	98	143	176	4.34	7.98	4.20	6.08	2.45
가	7	12	15	16	6.87	4.95	0.78	2.84	0.12
가	33	80	109	126	13.56	6.56	2.82	4.68	1.44
가	178	297	407	485	7.59	6.51	3.59	5.04	5.88
가	82	123	173	229	5.89	7.08	5.81	6.44	3.31
가	322	476	493	488	5.75	0.71	-0.19	0.26	0.39
가	450	853	968	1,032	9.56	2.55	1.29	1.92	5.57
가	35	47	53	54	4.46	2.33	0.45	1.39	0.22
가	62	83	99	114	4.32	3.59	2.89	3.24	0.97
가	312	340	354	360	1.24	0.80	0.35	0.58	0.63
가	1,675	1,724	2,013	2,133	0.41	3.14	1.17	2.15	12.75
가	743	631	561	578	-2.31	-2.30	0.57	-0.87	-1.65
가	471	795	937	1,089	7.77	3.33	3.05	3.19	9.15
가	1,222	1,809	1,983	2,256	5.76	1.86	2.62	2.24	13.95
가	13	13	20	25	0.73	8.09	5.15	6.61	0.38
가	103	137	123	119	4.16	-2.10	-0.72	-1.41	-0.57
가	2,104	2,141	2,566	2,769	0.25	3.69	1.53	2.60	19.56
가	30	31	41	44	0.60	5.40	1.59	3.48	0.40
가	8	13	20	27	8.17	9.02	6.05	7.52	0.44
가	2,512	2,143	1,848	1,570	-2.25	-2.92	-3.21	-3.06	-17.87
가	8	8	8	7	0.06	-0.40	-1.59	-1.00	-0.02
가	41	3	14	15	-32.84	41.03	1.43	19.60	0.39
가	808	757	833	899	-0.94	1.93	1.54	1.74	4.43
가	424	381	386	405	-1.55	0.30	0.94	0.62	0.75
가	538	636	659	740	2.42	0.71	2.35	1.52	3.24
가	254	207	208	220	-2.87	0.14	1.11	0.62	0.41
가	905	880	717	637	-0.39	-4.03	-2.33	-3.18	-7.58
가	159	134	153	159	-2.47	2.75	0.68	1.71	0.77
가	976	679	697	677	-5.05	0.50	-0.56	-0.03	-0.06
가	309	311	325	336	0.09	0.90	0.68	0.79	0.79
가	1,022	1,120	1,285	1,435	1.32	2.78	2.23	2.50	9.79
가	1,103	1,574	1,763	1,909	5.21	2.29	1.61	1.95	10.45
가	269	136	133	125	-9.30	-0.46	-1.21	-0.84	-0.34
가	309	559	611	652	8.86	1.76	1.33	1.55	2.89
가	437	348	345	356	-3.21	-0.19	0.63	0.22	0.24
가	19,328	21,061	22,819	24,269	1.23	1.62	1.24	1.43	100.00

: p

	1993	2000	2005p	2010p
	0.01	0.02	0.02	0.03
	0.73	0.48	0.53	0.60
	1.96	1.81	1.71	1.73
가	0.09	0.10	0.11	0.12
가	0.23	0.51	0.91	1.08
가	0.63	0.75	0.72	0.76
가	0.59	0.67	0.87	1.05
가	2.36	2.21	2.27	2.30
, 가	0.06	0.11	0.16	0.18
, 가	0.24	0.38	0.39	0.42
, 가	0.38	0.46	0.63	0.73
	0.04	0.06	0.07	0.06
가	0.17	0.38	0.48	0.52
	0.92	1.41	1.78	2.00
가	0.42	0.58	0.76	0.94
가	1.66	2.26	2.16	2.01
가	2.33	4.05	4.24	4.25
가	0.18	0.22	0.23	0.22
, 가	0.32	0.39	0.43	0.47
가	1.61	1.61	1.55	1.48
	8.67	8.19	8.82	8.79
	3.84	2.99	2.46	2.38
	2.44	3.78	4.11	4.49
	6.32	8.59	8.69	9.30
	0.07	0.06	0.09	0.10
	0.53	0.65	0.54	0.49
	10.89	10.17	11.25	11.41
	0.16	0.15	0.18	0.18
	0.04	0.06	0.09	0.11
	13.00	10.17	8.10	6.47
	0.04	0.04	0.04	0.03
	0.21	0.01	0.06	0.06
	4.18	3.59	3.65	3.70
	2.20	1.81	1.69	1.67
	2.78	3.02	2.89	3.05
	1.31	0.98	0.91	0.91
	4.68	4.18	3.14	2.63
	0.83	0.64	0.67	0.65
	5.05	3.23	3.05	2.79
	1.60	1.48	1.43	1.39
	5.29	5.32	5.63	5.91
	5.71	7.47	7.72	7.87
	1.39	0.64	0.58	0.51
	1.60	2.66	2.68	2.69
	2.26	1.65	1.51	1.47
	100.00	100.00	100.00	100.00

: p .





( : , %)

	1993			2000			2010p		
가 가	156	359	521	127	356	487	111	456	572
	(3.3)	(3.1)	(2.7)	(3.0)	(2.5)	(2.3)	(2.7)	(2.5)	(2.4)
	80	802	882	101	990	1,093	110	1,500	1,611
	(1.7)	(6.8)	(4.6)	(2.4)	(6.8)	(5.2)	(2.7)	(8.1)	(6.6)
	222	1,254	1,480	382	1,922	2,310	439	2,458	2,904
	(4.7)	(10.7)	(7.7)	(9.0)	(13.2)	(11.0)	(10.6)	(13.3)	(12.0)
	709	1,703	2,418	480	1,871	2,355	424	2,282	2,711
	(15.0)	(14.5)	(12.5)	(11.3)	(12.9)	(11.2)	(10.3)	(12.4)	(11.2)
	37	1,771	1,809	25	2,727	2,754	22	3,466	3,489
	(0.8)	(15.1)	(9.4)	(0.6)	(18.8)	(13.1)	(0.5)	(18.8)	(14.4)
	15	2,127	2,142	22	2,164	2,186	26	2,814	2,840
	(0.3)	(18.1)	(11.1)	(0.5)	(14.9)	(10.4)	(0.6)	(15.3)	(11.7)
	1	4	2,561	1	8	2,154	0	10	1,592
	(0.02)	(0.04)	(13.3)	(0.02)	(0.1)	(10.2)	(0.0)	(0.1)	(6.6)
	1,661	1,267	2,929	1,428	1,432	2,860	1,222	1,678	2,901
(35.1)	(10.8)	(15.2)	(33.5)	(9.9)	(13.6)	(29.6)	(9.1)	(12.0)	
1,528	929	2,467	1,127	1,112	2,245	1,123	1,479	2,607	
(32.3)	(7.9)	(12.8)	(26.5)	(7.7)	(10.7)	(27.2)	(8.0)	(10.7)	
321	1,532	2,118	568	1,928	2,617	655	2,272	3,042	
(6.8)	(13.0)	(11.0)	(13.3)	(13.3)	(12.4)	(15.8)	(12.3)	(12.5)	
4,730	11,750	19,328	4,262	14,511	21,061	4,132	18,414	24,269	
(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	

: p , ( ) .  
: , .

가  
가  
1993  
35.1%, 32.8% 2000 33.5%, 26.5%  
, 2010 29.6%, 27.2%  
, 가 가 1993 1.7%, 4.7%

2000 2.4% 9.0% 가 , 2010 2.7%,  
 10.6% 가 .  
 ,  
 가 1993 가  
 2010  
 가 1993  
 6.8% 2000 6.8% 가 , 2010 8.1% 가  
 1993 7.7% 2000 13.2%  
 가 , 2010 13.3% 가  
 .  
 가가  
 가  
 가 ,  
 가  
 가 가  
 가 가  
 가

4.

가.

, , 3 . < -21>  
 1993 15,940 2001

16,049 가 , 0.09% 가 ,  
 1993 82.5% 2001 75.1% ,  
 가 .  
 8.7% 가 가 , 1993  
 834 2001 1,619 가 ,  
 4.3%(1993 ) 7.6%(2001 ) . 1993  
 2,555 2001 3,694 가 1,139  
 가 가 56.0%가  
 1993 13.2% 2001 17.3%  
 < -6>  
 가 가 .

< -21>

( : , %)

	1993	1995	1997	1999	2001	가 (93-01)	(93-01)
	15,940 (82.5)	16,538 (80.9)	16,848 (79.8)	15,469 (76.3)	16,049 (75.1)	0.09	5.38
	834 (4.3)	1,044 (5.1)	1,367 (6.5)	1,354 (6.7)	1,619 (7.6)	8.65	38.59
	2,555 (13.2)	2,850 (14.0)	2,892 (13.7)	3,459 (17.1)	3,694 (17.3)	4.72	56.03
	19,328 (100.0)	20,432 (100.0)	21,106 (100.0)	20,281 (100.0)	21,362 (100.0)	1.26	100.00

: ( ) .

: , .

.

1) -

가  
 가  
 가  
 가  
 matrix  
 ARIMA

2)

가  
 , < -22> < -23>  
 2000 2010 0.58% 가  
 2010 16,949  
 가 70% 69.8%  
 (2010 ) 가  
 가  
 가  
 5.06% 가 2010 2,453  
 10% 10.11%

3.18% 가 2010 4,868  
 , 20% 20.1%  
 가  
 2010 30% ,  
 가

< -22>

( : , %)

	2000	2003p	2005p	2008p	2010p	가 (00-10)	(00-10)
	16,003	16,329	16,507	16,783	16,949	0.58	29.47
	1,497	1,908	2,065	2,305	2,453	5.06	29.80
	3,561	4,032	4,248	4,633	4,868	3.18	40.73
	21,061	22,269	22,819	23,721	24,269	1.43	100.00

: p .

< -23>

( : %, % )

	2000	2003p	2005p	2008p	2010p	(00-10)
	75.99	73.33	72.34	70.75	69.84	-6.15
	7.11	8.57	9.05	9.72	10.11	3.00
	16.91	18.11	18.61	19.53	20.06	3.15
	100.00	100.00	100.00	100.00	100.00	0.00

: p .



1.

21

가

가

가.

1962

5

가



가 가

< -1> [ -1] 가  
1970

가 100% , 가  
1970 51.2% 1980 95.1%

100% , 가 1985  
가

1970 28.1% 가 1990 90% ,  
2001 94.7% 18 21

1970 9.1%, 1980 16.6%, 1990 46.2%, 2001  
107.0% .

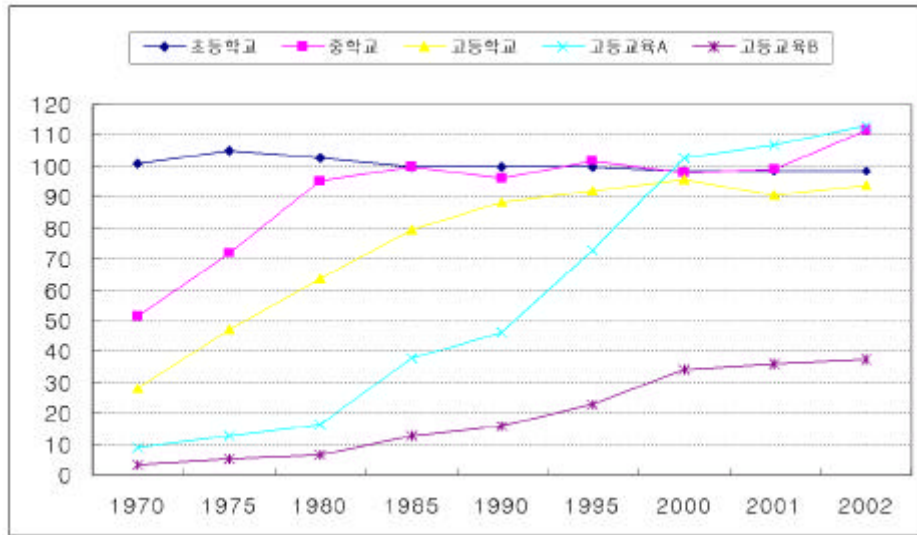
가 .

< -1>

( : , %)

	18-29 (A)	18-21 (B)	(c)	(C/ A)	C/ B
1970	6,073,205	2,217,953	201,436	3.3	9.1
1975	7,206,194( 3.5)	2,994,594( 6.2)	378,719(13.5)	5.3	12.6
1980	9,015,188( 4.6)	3,631,634( 3.9)	601,494( 9.7)	6.7	16.6
1985	10,071,063( 2.2)	3,394,665(-1.3)	1,277,825(16.3)	12.7	37.6
1990	10,516,514( 0.9)	3,663,317(-1.5)	1,691,681( 5.8)	16.1	46.2
1995	10,239,909(-0.5)	3,224,693(-2.5)	2,343,894( 6.7)	22.9	72.7
2000	9,883,564(-0.7)	3,274,558( 0.3)	3,363,549( 7.5)	34.0	102.7
2001	9,750,938(-1.3)	3,270,212(-0.1)	3,500,560( 0.8)	35.9	107.0
2002	9,558,209(-2.0)	3,170,465(-3.1)	3,577,447( 0.8)	37.4	112.8

: (2001),



:  $A = \left( \frac{\quad}{18 \quad 21} \right) \times 100$   
 $B = \left( \frac{\quad}{18 \quad 29} \right) \times 100$

[ -1]

1990 .11)

가 가 . < -5>

11)

1950

1969

가

1974

1980  
가

가 , ( , 50 ).

가 ,  
가 .

< -2>

( : %)

1970	26.9	40.2	9.6	45.3	64.0	20.9	37.6	83.0
1975	25.8	41.5	8.8	48.4	72.6	22.0	31.3	64.6
1980	32.8	34.0	11.4	45.8	72.8	31.2	44.0	96.1
1985	36.4	53.8	13.3	60.1	82.8	30.0	41.4	68.9
1990	33.2	47.2	8.3	63.0	86.0	22.1	43.3	68.8
1995	51.4	72.8	19.2	69.4	91.8	35.6	72.9	105.1
2000	68.0	83.9	41.9	77.9	94.5	50.8	80.2	103.0
2001	70.5	85.3	44.9	80.0	96.3	52.1	83.3	104.1
2002	74.1	86.9	49.8	80.3	93.9	54.4	92.8	115.4

: 1)

2) = ( / ) × 100

3) = ( / ) × 100

:

가  
가

. OECD

가

(< -3> ).

25 34

가

(< -4> ). 25 64

87%,

81%,

66%,

62%

17%, 17% 가 27%,  
 , 가  
 가 1980

< -3> (25-64 , 1999 )  
 ( : %)

가				
	10	51	39	100
	13	60	28	100
	15	54	31	100
	32	43	24	100
	18	49	33	100
	33	42	25	100

: OECD(2001), *Education at a Glance: OECD Indicators*.

< -4> (1999 )  
 ( : %)

가	25-64	25-34	35-44	45-54	55-64
	87	88	88	88	81
	62	66	63	60	53
	81	85	85	81	73
	62	76	65	57	42
	66	93	72	47	28
	27	29	27	30	23
	17	19	17	16	12
	13	13	15	14	10
	11	15	10	10	7
	17	23	19	11	8

: OECD(2001), *Education at a Glance: OECD Indicators*.

가  
 가 . 1  
 가 . < -5>  
 가 , 1  
 1980  
 가 가 1 가 . ,  
 1990 가 가 1 가  
 .12) 1980  
 가 가 .

< -5> 1 ( : )

1970	13.4	56.9	45.3	29.7	20.5	18.8
1975	14.9	51.8	43.2	31.4	22.9	20.7
1980	19.9	47.5	45.1	33.3	30.1	27.9
1985	33.9	38.3	40.0	31.0	37.8	35.8
1990	22.4	35.6	25.4	24.6	31.2	31.5
1995	20.7	28.2	24.8	21.8	54.9	26.3
2000	19.5	28.7	20.1	19.9	78.0	39.7
2001	18.8	28.7	19.6	18.3	80.1	39.9
2002	18.5	28.1	19.3	15.7	80.2	40.2

: 1) ( ) 1 .  
 2) 2000 가 .  
 :

12) 1 「  
 」 ,  
 1 2002  
 49.7 , 32.9 .

OECD 가

OECD

(< -6> ).

OECD 가

가

가

가

가

가

< -6>

1

(1999 )

( : )

	19.3	19.6	12.9	12.7	16.9
	23.7	21.0	16.4	12.4	12.3
	19.0	21.2	17.1	14.1	11.5
	23.9	32.2	21.9	22.5	-
	16.5	22.5	17.4	12.4	18.5
	19.3	16.3	16.8	14.5	14.0
OECD	15.4	18.0	15.2	14.1	15.3

: OECD(2001), *Education at a Glance: OECD Indicators*.

1990

가

1

가

(< -7> ).

< -7 >

( : , )

				1		
1980	9.1	11.5	6.6	13.7	4.4	23.0
1985	7.5	8.8	6.1	11.3	5.9	16.6
1990	7.2	8.9	5.5	15.2	7.3	23.1
1995	7.5	10.0	4.9	18.2	6.3	30.0
2000	8.1	11.0	5.6	20.9	7.6	35.4
2001	8.4	11.5	5.7	20.1	7.3	34.0

: . , .

가

가

가

. ,

가

1

1995 가

(manpower requirements approach)

(social demand approach)

가 , 가 가  
 ,13)  
 . 1980 가  
 가 가  
 가 , < -8> 2003  
 가  
 . 2003  
 63,370 .  
 가 .

< -8> 2003

( : )

2002	739,129	541,662	185,946	11,521	416,700	198,963	123,466	390,473	348,656
2003	675,759	482,075	179,733	13,951	365,809	204,727	105,223	356,282	319,477
	63,370	59,587	6,123	2,430	50,891	5,764	18,243	34,191	29,179

: (2002.9.11), .

가

13)



가  
가  
가  
14)

< -9> 99%  
1985 61.5%, 1990 63.3%, 1995 68.8%  
2002 71.4%가  
1995

< -9> ( : , %)

1985	855,627	776,444	90.7	477,184	277,480	61.5	35.7
1990	835,699	799,549	95.7	506,202	261,425	63.3	32.7
1995	819,246	806,855	98.5	479,614	309,640	59.4	38.4
2000	631,398	628,644	99.6	432,345	189,933	68.8	30.2
2001	626,507	623,795	99.6	436,913	181,618	70.0	29.1
2002	602,675	599,941	99.5	428,144	165,069	71.4	27.5

14) (skill mismatch), (job mismatch), (labor turnover),

가

(job mismatch)

가

15)

(skill mismatch)

가

15)

70

가

(

가

가  
가 .

가  
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가 가 .

가

.16)

가가

가 .

가 ,

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16) , 1974 , 1980 . 1965

, 1970

가 , 1980  
가 가

. 1960

가 .

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가

, 가 가 (

가 ),

가

가 가  
< -10> <

-11>

가  
가

가

가 ,  
가가

< -10>

( : , %)

1980	211,051	8.1	18.5	51.5	6.7	5.0	10.1
1985	348,208	12.1	24.9	38.4	6.8	7.6	10.1
1990	369,486	11.1	23.0	42.1	6.9	8.8	8.0
1995	533,433	10.3	23.4	43.7	6.4	9.7	6.5
2000	819,779	10.4	24.5	42.6	5.1	10.4	7.0
2001	839,516	10.5	24.6	42.1	5.2	10.6	7.0

1980	80,620	0.0	11.0	75.5	9.1	4.3	0.0
1985	108,483	2.3	20.2	49.2	12.6	8.6	7.1
1990	130,670	3.8	19.7	49.4	11.3	10.4	5.4
1995	223,689	5.1	22.3	47.6	9.3	11.7	4.0
1999	306,802	4.5	22.7	48.2	7.3	13.5	3.7
2000	318,135	4.2	21.7	49.5	7.0	13.9	3.7
2001	322,687	4.3	21.1	49.9	7.0	14.1	3.6
2002	311,304	5.2	21.5	48.0	7.6	14.3	3.5

1980	115,755	12.8	21.7	36.9	4.3	5.0	12.0
1985	201,934	16.9	27.2	35.6	3.7	7.1	9.6
1990	196,397	15.4	24.8	40.9	3.8	8.3	6.8
1995	253,605	14.9	25.0	43.5	3.5	7.7	5.4
1999	319,278	14.5	26.6	41.3	3.7	9.6	4.3
2000	321,399	14.5	26.7	41.5	3.4	9.8	4.2
2001	327,031	14.3	27.0	41.0	3.4	10.0	4.2
2002	320,534	14.1	27.0	40.2	3.6	10.7	4.3

1980	15,310	10.4	30.0	-	8.9	5.3	16.6
1985	25,790	10.6	31.5	27.2	7.4	5.8	17.5
1990	30,684	10.3	29.4	28.4	7.5	6.3	18.2
1995	39,947	9.5	25.8	33.5	7.5	6.1	17.5
1999	73,826	9.8	24.7	32.0	6.6	6.6	20.3
2000	82,374	9.8	25.9	28.6	6.3	7.2	22.2
2001	86,992	9.9	26.0	27.6	6.4	7.4	22.8
2002	89,557	9.8	26.3	26.4	6.5	7.9	22.5

1980	1,757	18.7	15.4	-	27.2	0.2	2.5
1985	3,591	17.9	19.8	37.5	19.9	1.2	3.7
1990	4,592	14.4	15.7	42.5	20.4	2.2	4.7
1995	6,497	11.9	15.6	48.7	19.2	2.0	3.7
1999	10,387	10.4	15.2	50.0	18.6	2.0	4.4
2000	11,705	10.4	15.9	48.1	17.6	3.4	4.6
2001	12,570	11.5	17.8	41.7	19.6	4.5	4.9
2002	13,227	12.1	19.3	39.2	19.4	5.6	6.0

: , , ( ), ,  
: . , .

			가			가			가
1980	80,620	28.2		60,893	20.3		55,483	21.0	
1985	108,483	40.7	6.1	53,342	20.5	-2.6	45,611	21.6	-3.8
1990	130,670	46.0	3.8	64,610	24.3	3.9	96,270	14.3	16.1
1995	223,689	49.9	11.4	106,400	29.7	10.5	87,057	22.3	-2.0
2000	318,135	49.7	7.3	157,497	32.9	8.2	130,089	24.4	8.4
2001	322,687	49.6	1.4	161,091	33.5	2.3	134,041	25.9	3.0
2002	311,304	50.8	-3.5	149,441	34.3	-7.2	121,894	26.1	-9.1

1980	115,755	25.1		42,715	13.7		36,439	13.3	
1985	201,934	32.6	11.8	71,870	20.6	11.0	61,740	21.0	11.1
1990	196,397	38.8	-0.6	80,265	27.2	2.2	62,492	19.8	0.2
1995	253,605	41.8	5.2	110,313	28.5	6.6	92,009	22.8	8.0
2000	321,399	45.3	4.9	133,253	31.0	3.9	122,257	28.2	5.8
2001	327,031	45.4	1.8	133,968	32.1	0.5	123,904	29.6	1.3
2002	320,534	45.7	-2.0	128,902	31.3	-3.8	117,137	27.8	-5.5

1980	15,310	19.4	-	-	-	-	3,801	12.1	
1985	25,790	19.8	11.0	7,017	12.0		6,244	12.6	10.4
1990	30,684	25.7	3.5	8,699	15.6	4.4	7,042	11.5	2.4
1995	39,947	31.0	5.4	13,401	17.6	9.0	11,619	13.6	10.5
2000	82,374	39.4	15.6	23,572	21.9	12.0	20,942	18.2	12.5
2001	86,992	41.3	5.6	23,979	22.9	1.7	21,452	19.5	2.4
2002	89,557	43.1	2.9	23,618	19.3	-1.5	21,857	21.3	1.9

1980	1,757	28.2	-	-	-	-	71	45.1	
1985	3,591	40.7	15.4	1,345	14.7		400	47.5	41.3
1990	4,592	46.0	5.0	1,952	13.9	7.7	271	44.3	-7.5
1995	6,497	49.9	7.2	3,907	13.0	14.9	650	45.2	19.1
2000	11,705	49.7	12.5	5,629	17.8	7.6	1,523	40.3	18.6
2001	12,570	49.6	7.4	5,238	18.5	-6.9	1,498	40.7	-1.6
2002	13,227	50.8	5.2	5,190	15.4	-0.9	1,720	39.8	14.8

: . , .

가

43.0%      2002      30.3%      1995  
 47.6%      2002      54.1%      가      1995  
 가

가

(< -12> ).

< -12>

( : , %)

1994(1 )	742,668	41.1	340,252	336,941	65,475	45.8	45.4	8.8
1994(2 )	750,181	40.7	343,168	342,555	64,458	45.7	45.7	8.6
1995	781,749	42.1	336,390	372,311	73,048	43.0	47.6	9.3
1996	840,661	43.1	351,719	413,958	74,984	41.8	49.2	8.9
1997	824,368	42.7	356,559	393,291	74,518	43.3	47.7	9.0
1998	885,320	44.1	375,023	428,064	82,233	42.4	48.4	9.3
1999	868,643	45.2	346,736	426,423	95,484	39.9	49.1	11.0
2000	896,122	46.0	310,105	466,651	119,366	34.6	52.1	13.3
2001	872,297	46.6	256,608	481,027	134,662	29.4	55.1	15.4
2002	739,129	47.2	198,963	416,700	123,466	26.9	56.4	16.7
2003	675,759	47.3	204,727	365,809	105,223	30.3	54.1	15.6

:

가

가

(2002)





( : %)

			/	,		
OECD	26.3	8.6	3.9	13.8	11.5	61.5
	29.1	11.5	5.0	12.6	2.0	65.9
	36.1	10.9	5.1	20.0	14.6	49.3
	29.3	7.9	-	21.4	4.9	62.1
	41.7	10.2	4.5	27.1	6.9	51.7
	27.9	9.8	5.9	12.2	12.2	59.9
	18.4	8.3	3.2	6.9	10.2	71.2

: 1) : / / / . , , .  
( )

2) ' 가 ' / / / ' .

: OECD(2001), *Education at a Glance*.

가 가 가

2.

가.

< -2> 2002  
 86.9%가 , 49.8%가  
 2002  
 2.3% , <  
 -14> 2002 10.6%  
 45.1% , 2002  
 5.0%  
 , 1980  
 가

< -14>

( : , %)

		/		/		/		/
1980	51,507	17,641 (34.2)	49,735	10,502 (21.1)	266,331	135,921 (51.0)	201,057	73,732 (36.7)
1985	73,927	22,098 (29.9)	118,584	44,591 (37.6)	365,819	140,151 (38.3)	276,535	93,883 (33.9)
1990	87,131	18,479 (21.2)	165,916	65,329 (39.4)	487,772	208,017 (42.6)	274,150	39,925 (14.6)
1995	143,075	30,921 (21.6)	180,664	62,548 (34.6)	390,520	77,709 (19.9)	259,133	18,953 ( 7.3)
2000	223,489	41,563 (18.6)	214,498	81,902 (38.2)	473,665	63,934 (13.5)	291,047	18,811 ( 6.5)
2001	232,972	40,133 (17.2)	239,702	91,168 (38.0)	465,778	55,335 (11.9)	270,393	17,803 ( 6.6)
2002	239,114	41,490 (17.4)	244,852	83,775 (34.2)	439,586	46,613 (10.6)	231,127	11,539 ( 5.0)

: ( )

가

:

가 1980 34.2% 2002 17.4%

가 .17)  
 가 , .  
 2002 34.2% .  
 가

< -15>

( : , %)

	4,844(100)	2,015(100)	2,830(100)
3	2,565(53.0)	907(45.0)	1,685(58.6)
3 6	615(12.7)	250(12.4)	364(12.9)
6 1	409( 8.4)	173( 8.6)	236( 8.3)
1 2	532(11.0)	212(10.5)	320(11.3)
2 3	258( 5.3)	133( 6.6)	125( 4.4)
3	466( 9.6)	340(16.9)	126( 4.5)
	11	15	8

: (2002.6), 가 .

( )

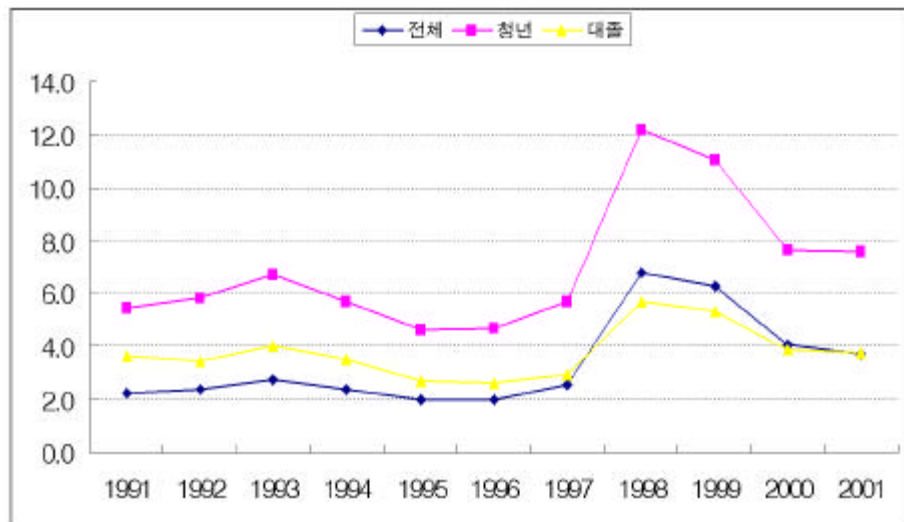
17) 34.6% 2002 72.5% 가 .  
 20%  
 가 .

[ -2]

1991 1997  
IMF

가 ,

가



[ -2]

가 가

< -16>

( : , %)

	3,666	100	22,274	100
	32	0.9	2,352	10.6
	762	20.8	4,190	18.8
-	760	20.7	4,172	18.7
/	2,872	78.3	15,732	70.6
-	212	5.8	1,799	8.1
- /	1,032	28.2	5,947	26.7
- /	1,274	34.8	5,863	26.3
- / / /	354	9.7	2,122	9.5

: (2002.6),

가

가

(reservation wage)

가

(job search)

가

			가	1980	5,028
	2002	53,109	10	가	1980
524	2002	6,221	11	가	
1980		7,514	2002		84,150
				2000	23,876
	1,879		가		1980
가					가

80%

2002

10%가

가

2000

16 , 55 ,  
 19 , 94  
 ( ) .  
 10 ,  
 (<  
 -17> ) .

< -17> ( : )

1993	25,226	14,810	40,036	3,935	9,188	1,410	14,533	-	(54,569)
1994	27,650	17,024	44,674	4,184	9,298	1,529	15,011	59,281	118,966
1995	30,806	17,425	48,231	4,716	9,176	1,777	15,669	68,625	132,525
1996	33,718	17,702	51,420	5,307	9,340	2,300	16,947	71,193	139,560
1997	36,569	18,301	54,870	5,828	9,608	2,384	17,820	74,665	147,355
1998	39,057	13,895	52,952	5,916	9,349	2,361	17,626	66,018	136,596
1999	40,698	13,766	54,464	6,238	9,708	2,296	18,242	70,431	143,137
2000	42,242	13,413	55,655	6,629	9,905	2,306	18,840	94,333	168,828
2001	44,063	13,125	57,188	7,030	10,574	2,331	19,935	-	(77,123)
2002	45,734	12,646	58,380	7,214	10,791	2,354	20,359	-	(78,739)

: ( ) 가  
 :  
 (2002),  
 가 , 2001

가  
 가  
 1,000 26.2 OECD  
 , , ,  
 1,000 1 OECD  
 (< -18> ) .

< -18> (1998 )

						OECD
	1.0	6.0	32.4	108.1	81.6	60.3
	26.2	14.0	2.0	13.5	22.3	107.3

: , OECD 가 .  
: OECD, *Education database*.

, ,  
2001 149,933 가  
11,646 .  
가 27.2%, 47.9%, 24.9%  
( < -19> < -20> ).

< -19> ( : )

	1995	1997	1999	2001
	1,983	4,753	6,279	11,646
	106,458	133,249	120,170	149,933

: .

< -20> (2001 ) ( : )

	6,752	20,537	23,010	50,299
	65	22	-	87
	27,760	39,816	12,772	80,348
	23	106	-	129
	2,728	11,342	5,000	19,070
	37,328(24.9)	71,823(47.9)	40,782(27.2)	149,933(100)

: .



가 가  
가 가  
1994 1998 1,042 ,  
가 27.4%, 가 46.4%  
63.4%가 , 가  
32.1%, 가 51.1% 83.2%가

< -21>

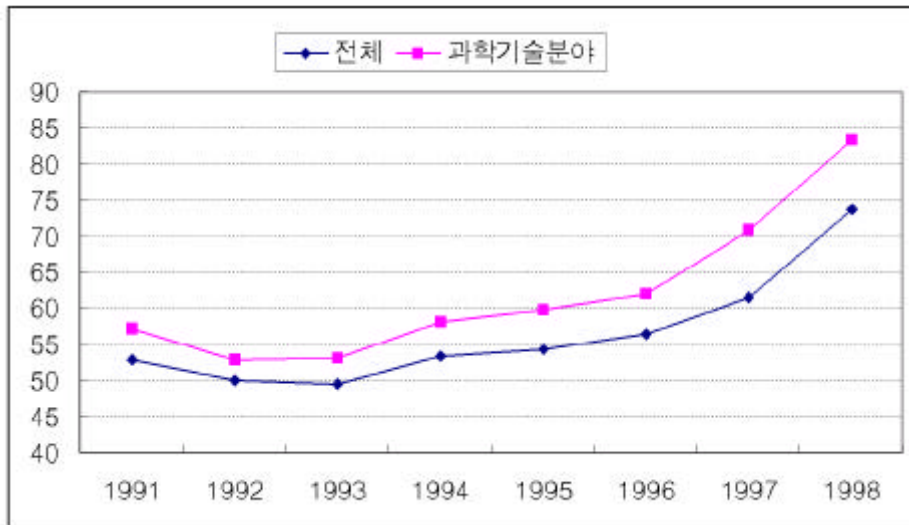
( : , %)

		가		가	
1990	1,259 (971)	367 (307)	29.2 (31.6)	272 (226)	21.6 (23.3)
1991	1,396 (1,107)	454 (390)	32.5 (35.2)	285 (243)	20.4 (22.0)
1992	1,474 (1,123)	464 (373)	31.5 (33.2)	272 (220)	18.5 (19.6)
1993	1,409 (1,118)	462 (394)	32.8 (35.2)	236 (201)	16.7 (18.0)
1994	1,475 (1,143)	522 (436)	35.4 (38.1)	267 (230)	18.1 (20.1)
1995	1,306 (1,000)	466 (388)	35.7 (38.8)	244 (210)	18.7 (21.0)
1996	1,260 (977)	441 (368)	35.0 (37.7)	270 (237)	21.4 (24.3)
1997	1,074 (813)	387 (332)	36.0 (40.8)	273 (244)	25.4 (30.0)
1998	1,042 (786)	483 (402)	46.4 (51.1)	285 (252)	27.4 (32.1)

: ( )

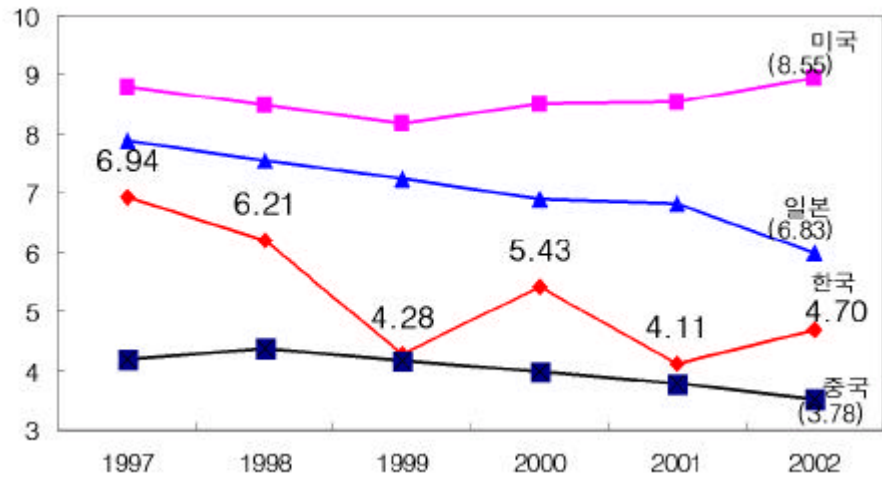
: National Science Board(2002), *Science and Engineering Indicators 2000*:  
Appendix Tables, Vol.2, A-269 A-270.

[ -3] 가 가  
 가 IMF 가



[ -3]

IMD  
 가 1997 6.94  
 2002 4.70 가



: IMD

[ -4]

가

가가

1985 33.2%,  
 40.5%  
 2002 46.2%, 50.8%  
 가

< -22>

( : , %)

	1985	1990	1995	2000	2002
	205,157 (33.2)	199,617 (39.3)	258,584 (42.5)	326,474 (45.7)	325,325 (46.2)
	108,834 (40.5)	130,670 (46.0)	223,689 (49.9)	318,135 (49.7)	311,304 (50.8)

: . , .

, 가

가 1990 53.1% 2001 58.1% 가 .  
가 OECD 가 .

< -23>

가

( : %)

1990	56.6	80.0	93.5	93.2	38.2	47.5	66.2	53.1
1995	58.7	81.3	94.2	93.1	40.9	50.2	63.5	57.7
1996	57.7	81.0	93.4	92.5	41.0	50.8	65.7	59.5
1997	57.1	81.0	94.5	91.8	41.4	51.9	68.2	61.1
1998	53.8	80.0	93.3	90.6	40.1	48.4	65.0	56.7
1999	53.5	79.2	93.0	88.3	41.2	48.6	63.9	56.6
2000	54.3	78.5	91.1	87.3	42.5	49.4	64.4	57.8
2001	53.6	77.6	91.4	87.7	43.2	50.4	65.6	58.1
OECD								
1999	84.5	89.9	93.6	64.6	71.5	81.1		

: KOSIS. \* 25-64 . OECD(2001), *Education at a Glance*.

가 가

가 .  
가 . 가

< -24>

( : %)

	가			가			
1980	60.8	23.3	37.4	39.2	30.9		8.3
1990	43.2	18.7	24.5	56.8	21.4	22.5	12.9
1995	40.9	19.6	21.3	59.1	25.1	24.1	9.9
2000	39.2	19.7	19.5	60.8	18.4	28.2	14.2
2001	38.5	20.1	18.4	61.5	19.7	28.5	13.2

: , .

### 3.

가 ,  
가 .

가 . 가

가.

, 1990  
 가 ,  
 가 1 2 3  
 . 2000  
 가 2.8% ,  
 0.3%  
 2.4% 가  
 2010 75.9% 90  
 2000  
 < -20> 가  
 가 가 ,  
 가 가

< -25>

( : , %)

	가				가		가	
	1993	2000	2005p	2010p	1993-2000	2000-2010	1993-2000	2000-2010
	2,849	2,288	2,008	1,723	-3.08	-2.80	-32.37	-17.61
	(14.7)	(10.9)	( 8.8)	(7.1)				
	4,730	4,262	4,149	4,132	-1.48	-0.31	-26.99	-4.06
	(24.5)	(20.2 )	(18.2 )	(17.0 )				
( )	4,677	4,244	4,130	4,114	-1.38	-0.31	-25.11	-4.07
	(24.2)	( 20.2)	(18.1)	(17.0)				
	11,749	14,510	16,662	18,414	3.06	2.41	160.11	121.93
	(60.8)	(68.9)	(73.0)	(75.9)				
	19,367	21,091	22,846	24,293	1.23	1.42	100.00	100.00
	(100)	(100)	(100)	(100)				

: ( ) , p .

.  
 , 가  
 1993 4,677 2001  
 4,199 . 20 29 30 39  
 . 20 29  
 40 49 가 , 50  
 가 .  
 ICT 가  
 ICT  
 30 39  
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 40  
 가 .  
 가  
 가  
 [ -3] 2010 가 30 50  
 가 가  
 . 40 50  
 가 가 .  
 가 , 가  
 . , 가 40  
 ,

( : , %)

		1993	1997	2001	1993	1997	2001
	15-19	156(3.3)	91(1.9)	66(1.6)	100	100	100
	20-29	1,429(30.5)	1,160(20.2)	816(19.4)	100	100	100
	30-39	1,693(36.2)	1,542(35.1)	1,410(33.6)	100	100	100
	40-49	845(18.1)	1,033(27.7)	1,247(29.7)	100	100	100
	50-59	435(9.3)	472(11.3)	477(11.4)	100	100	100
	60	119(2.5)	183(3.7)	184(4.4)	100	100	100
		4,677(100)	4,482(100)	4,199(100)	100	100	100
ICT	15-19	55(4.1)	48(2.5)	34(2.4)	35.1	52.4	51.6
	20-29	487(36.8)	485(25.8)	371(25.9)	34.1	41.8	45.5
	30-39	485(36.6)	546(36.8)	496(34.7)	28.6	35.4	35.2
	40-49	203(15.4)	296(25.8)	405(28.3)	24.1	28.7	32.4
	50-59	85(6.4)	108(7.3)	99(6.9)	19.4	22.8	20.7
	60	10(0.7)	28(1.8)	26(1.8)	8.1	15.3	14.0
		1,324(100)	1,510(100)	1,430(100)	28.3	33.7	34.0
	15-19	35(2.8)	20(1.8)	14(1.4)	22.3	22.4	21.6
	20-29	352(28.2)	296(25.7)	183(17.7)	24.6	25.5	22.5
	30-39	481(38.6)	393(34.0)	364(35.2)	28.4	25.5	25.8
	40-49	238(19.0)	279(24.2)	313(30.2)	28.1	27.0	25.1
	50-59	117(9.4)	125(10.8)	122(11.8)	26.9	26.4	25.6
	60	24(2.0)	40(3.5)	38(3.7)	20.5	22.0	20.7
		1,247(100)	1,154(100)	1,034(100)	26.7	25.8	24.6
	15-19	66(3.2)	23(1.3)	18(1.0)	42.6	25.2	26.8
	20-29	590(28.0)	379(20.9)	262(15.1)	41.3	32.7	32.1
	30-39	727(34.5)	604(33.2)	550(31.7)	42.9	39.1	39.0
	40-49	404(19.2)	458(25.2)	530(30.5)	47.8	44.3	42.5
	50-59	234(11.1)	240(13.2)	256(14.8)	53.6	50.8	53.7
	60	85(4.0)	115(6.3)	120(6.9)	71.4	62.7	65.3
		2,106(100)	1,817(100)	1,735(100)	45.0	40.6	41.3

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	1993	2000	2010	가	
				1993-2000	2000-2010
ICT	4,677 (100)	4,244 (100)	4,114 (100)	-1.38	-0.62
	1,176 (25.2)	1,332 (31.4)	1,395 (33.9)	1.79	0.93
	1,399 (29.9)	1,208 (28.5)	1,197 (29.1)	-2.08	-0.18
	2,106 (45.0)	1,709 (40.3)	1,527 (37.1)	-2.94	-2.23

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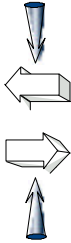
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## **ABSTRACT**

# **Projections and Policy Issues for National Human Resources**

Research-in-charge: Hyung-Mann Kim

Research staff: Sang-Don Lee

Cheol-Hee Kim

Jae-Seek Jeon

### **1. Summary of the Study**

This research is aimed at preparing projections for the development of national human resources, as a result of the implementation of a long-term human resources policy that takes into consideration the educational levels of the labor force, and analyzing the implications of this development. Projections for national human resources based on the educational level of workers are designed to help connect the education system and the labor market. Taking into consideration statistical limitations, this research has been designed to suggest appropriate projection models for a human resources policy based on the establishment of a correlation between the education and labor market as well as between academic majors and occupations. In addition, this research is also intended to introduce human resources related policies and to prepare basic policies that can be used in such fields as: the education of human resources, job research and job analysis, career guidance as well as in vocational counseling.

## **2. Projections for the Supply of Labor**

While the working age population has continuously increased over the last few years, the gap of the increase has undergone a slowing down process. This trend will steadily continue in the first decade of the 21st century. With regards to age, important changes will occur in society as a result of a reduction in the number of younger people joining the work force and also because of the increase in the number of middle aged workers. This phenomenon will transform our society into an aging society. On the issue of academic levels, as a higher education policy has been actively implemented by the government, in lieu of the public's passion for education, the percentage of the working age population who have a middle school or lower level of education will decrease, while the percentage of the working age population with at least a university degree will increase. Thus we can safely say that a highly educated labor force will continue to be the norm for the foreseeable future.

For its part, data related to the economically active segments of the population will display similar changes as that concerning the working age population. Reductions in the younger segments of the population, the increase of the middle-aged class as a result of the aging of the baby-boom generation, and the increase of the middle-aged economically active segment of the population are projected to be in accordance with the characteristics of the structure of the working age population. In addition, the number of members of the economically active population who have a middle school or lower level of education will decrease, while there will be an increase in the number of members of the economically active population who have at least a university degree.

### **3. Projections for the Demand for Labor**

The total number of employed workers will increase by a yearly average of 1.43% until 2010. From an industry standpoint, the employment structure will lean more and more in favor of the service industry. Employment in the agricultural and fisheries sector as well as in the manufacturing industries will decrease, while the number of those engaged in the service industry will steadily climb. Due to the transformation toward a knowledge-based industrial society, the transportation and storage industries as well as the communication industry will be highly invigorated. Therefore, these industries are expected to contribute to the increase in the number of those employed.

With regards to occupations, the biggest rate of increase will occur in skilled occupations. This projected increase results from the swelling in the importance of this vocational group in a knowledge-based society in which knowledge and information are regarded as important. In addition, the demand for basic labor will record a high rate of increase.

Concerning academic levels, the demand for a highly educated labor force will increase. This phenomenon demonstrates that the demand for a highly educated labor force, which form the core human resources in the knowledge-based society in which knowledge and information play the role of important production factors instead of the traditional production factors, will increase in this rapidly changing society.

### **4. National Human Resources Policy Issues**

1) The improvement of the educational system for human resources

To educate human resources in this knowledge-based society, it is important to heighten workers ability to use knowledge and information

as well as their access to both. Especially, to heighten the quality of education, it is important to solve the disproportionality in the qualitative supply-demand of human resources. The governments basic policies to improve the quality of human resources should be designed to implement demander-oriented education, diverse and characterized education, autonomous and responsibility-centered education management, free and equally harmonized education, open-minded education, and high-quality education. Considering the above-mentioned facts, the improvement measures needed within the education system to help supply effective human resources to the labor force can be summarized into three broad categories: the reorganization of the education system, the construction of a short-term educational training system and the reconstruction of the evaluation system.

#### 2) The improvement of the use of human resources

The labor market is focused on the demand for human resources. Therefore, it is of the utmost importance to use these human resources effectively. It is also important, given the fact that there is a significant level of job fluctuation within this group, to use highly specialized human resources in the actual field.

#### 3) Human resources policy as a mediator

The important nature of human resources related policies is to educate and use the human resources, by strengthening cooperation between the education and labor markets. To attain this, policies to invigorate the functions of these markets through the implementation of related institutions and the private sectors participation should be established.

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( : %, % )

	가				가			가		
	1980	1990	2000	2010p	1980 1990	1990 2000	2000 2010p	1980 1990	1990 2000	2000 2010p
	100.0	100.0	100.0	100.0	-	-	-			
15 19	15.9	14.2	10.3	8.2	-1.8	-3.8	-2.1			
20 24	12.8	10.4	8.0	7.2	-2.4	-2.3	-0.8			
25 29	11.9	12.8	10.9	9.2	0.9	-1.9	-1.7			
30 34	10.6	12.5	10.5	9.0	1.9	-2.0	-1.5			
35 39	9.7	9.5	11.6	10.0	-0.1	2.1	-1.7			
40 44	9.4	8.7	11.4	9.5	-0.6	2.6	-1.9			
45 49	8.3	7.5	8.6	10.7	-0.7	1.1	2.0			
50 54	5.9	7.1	7.0	10.2	1.2	-0.1	3.3			
55 59	5.1	5.6	6.0	7.7	0.5	0.4	1.8			
60 64	10.4	4.0	5.6	6.9		1.6	1.4			
65		7.7	10.1	11.3	1.3	2.4	1.2			
	100.0	100.0	100.0	100.0	-	-	-			
15 19	17.4	15.3	10.9	8.3	-2.1	-4.4	-2.6			
20 24	11.0	8.4	6.6	6.0	-2.6	-1.8	-0.6			
25 29	12.3	13.3	11.6	9.8	1.1	-1.8	-1.8			
30 34	11.3	13.3	10.9	8.3	2.0	-2.3	-2.6			
35 39	10.2	10.0	12.2	10.1	-0.2	2.2	-2.1			
40 44	9.9	9.2	11.8	9.9	-0.7	2.7	-1.9			
45 49	8.4	7.9	8.9	11.3	-0.5	1.0	2.4			
50 54	5.8	7.4	7.5	10.8	1.6	0.1	3.3			
55 59	5.0	5.7	6.0	8.2	0.6	0.4	2.1			
60 64	8.7	3.6	5.5	7.7		1.9	2.2			
65		5.9	8.0	9.6	0.8	2.1	1.6			
	100.0	100.0	100.0	100.0	-	-	-			
15 19	14.6	13.1	9.8	8.2	-1.5	-3.3	-1.6			
20 24	14.4	12.2	9.4	8.3	-2.3	-2.8	-1.1			
25 29	11.6	12.3	10.3	8.7	0.7	-1.9	-1.6			
30 34	9.9	11.8	10.1	9.7	1.9	-1.7	-0.4			
35 39	9.2	9.1	11.0	9.8	-0.1	1.9	-1.2			
40 44	8.9	8.3	11.0	9.2	-0.6	2.6	-1.8			
45 49	8.1	7.1	8.4	10.1	-1.0	1.2	1.7			
50 54	6.1	6.8	6.5	9.7	0.7	-0.4	3.2			
55 59	5.2	5.5	5.9	7.3	0.4	0.3	1.4			
60 64	12.0	4.4	5.6	6.2		1.2	0.6			
65		9.3	12.0	12.8	1.7	2.7	0.8			

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	가				가		
	1980	1990	2000	2010p	1980 1990	1990 2000	2000 2010p
	100.0	100.0	100.0	100.0	-	-	-
	50.5	29.8	21.4	18.7	-20.7	-8.4	-2.7
	24.4	24.7	18.7	15.7	0.3	-6.0	-3.0
	20.3	35.1	41.0	41.9	14.8	5.9	0.9
	4.8	2.6	5.7	8.0		3.1	2.4
		7.8	13.2	15.6	5.6	5.4	2.4
·	-	-	11.8	13.7	-	-	1.9
·	-	-	14	1.9	-	-	0.5
	100.0	100.0	100.0	100.0	-	-	-
	40.5	21.8	14.4	11.4	-18.7	-7.5	-3.0
	26.6	24.9	18.4	16.1	-1.7	-6.5	-2.3
	25.5	39.3	43.9	43.1	13.7	4.7	-0.8
		3.0	5.7	9.0		2.6	3.3
	7.4	11.0	17.6	20.4	6.6	6.6	2.7
·	-	-	15.3	17.3	-	-	1.9
·	-	-	2.3	3.1	-	-	0.8
	100.0	100.0	100.0	100.0	-	-	-
	59.8	37.3	28.1	25.7	-22.5	-9.2	-2.4
	22.3	24.5	18.9	15.3	2.2	-5.5	-3.6
	15.5	31.3	38.2	40.8	15.7	6.9	2.6
		2.2	5.7	7.2		3.5	1.5
	2.4	4.8	9.0	11.0	4.6	4.2	2.0
·	-	-	8.5	10.2	-	-	1.7
·	-	-	0.5	0.8	-	-	0.3

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		가	가								
		0.03	0.00	0.02	0.03	0.00	0.00	13.22	0.01	0.05	1.37
		0.02	0.00	0.00	0.04	0.00	0.00	0.00	0.10	0.07	0.04
		0.04	0.03	0.05	0.24	0.02	0.01	0.00	0.83	0.38	0.26
		0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.01	0.00
		0.07	0.01	0.06	0.27	0.01	0.01	0.00	0.83	0.84	0.09
/		0.07	0.01	0.11	0.23	0.01	0.01	0.00	1.33	1.09	0.10
가 / 가 /		0.03	0.00	0.02	0.11	0.00	0.00	0.00	0.58	0.42	0.07
/		0.02	0.00	0.01	0.05	0.00	0.00	0.00	0.29	0.10	0.03
/		0.02	0.00	0.03	0.08	0.01	0.00	0.00	0.06	0.25	0.09
/		0.07	0.11	0.12	0.28	0.00	0.01	0.00	0.29	0.16	0.03
/		0.00	0.00	0.01	0.04	0.00	0.00	0.00	0.00	0.03	0.00
		0.03	0.04	0.09	0.26	0.02	0.00	0.00	0.05	0.30	0.10
/		0.04	0.00	0.03	0.13	0.01	0.01	0.00	0.05	0.41	0.12
		0.04	0.00	0.03	0.14	0.01	0.00	0.00	0.32	0.39	0.12
1		0.02	0.00	0.02	0.12	0.01	0.00	0.00	0.15	0.19	0.04
		0.07	0.02	0.06	0.21	0.02	0.00	0.00	0.89	0.43	0.09
/		0.08	0.05	0.13	0.35	0.02	0.00	0.00	0.54	0.56	0.04
/		0.00	0.02	0.02	0.07	0.00	0.00	0.00	0.03	0.08	0.01
		0.03	0.01	0.04	0.11	0.00	0.00	0.00	0.12	0.21	0.05
/		0.06	0.04	0.10	0.36	0.01	0.00	0.00	0.20	0.89	0.12
/		0.01	0.01	0.03	0.03	0.00	0.00	0.00	0.08	0.14	0.01
/		0.03	0.03	0.09	0.27	0.01	0.00	0.00	0.30	0.61	0.06
/		0.02	0.01	0.03	0.09	0.00	0.00	0.00	0.29	0.12	0.03
가 /		0.05	0.00	0.06	0.17	0.02	0.01	0.00	1.24	0.22	0.18
가		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
가		0.01	0.02	0.02	0.11	0.01	0.00	0.00	0.06	0.02	0.02
		0.00	0.00	0.02	0.03	0.00	0.00	0.00	0.00	0.01	0.00
		0.25	0.14	0.17	0.48	0.01	0.00	0.00	1.23	0.21	1.30
		0.19	0.09	0.09	0.40	0.01	0.02	0.00	3.03	0.34	0.77
		0.03	0.00	0.08	0.09	0.00	0.18	0.00	0.33	0.02	0.06
		0.31	0.01	0.43	1.09	0.01	2.00	0.00	0.04	0.28	0.44
		0.14	0.10	0.21	0.61	0.03	8.66	0.00	0.36	0.19	1.38
		0.18	0.01	0.09	0.25	6.08	0.02	0.00	0.06	0.03	0.24
		0.09	0.00	0.03	0.31	0.03	0.00	0.00	0.10	2.88	0.11
		0.01	0.00	0.06	0.07	0.00	0.00	0.00	0.01	0.08	0.01
		0.00	0.01	0.03	0.05	0.02	0.00	0.00	0.01	0.00	0.01
		0.04	0.00	0.03	0.21	0.03	0.00	0.00	0.02	0.09	0.19
		0.01	0.03	0.07	0.40	0.00	0.00	0.00	0.12	0.02	0.02
		0.13	0.01	0.12	1.26	0.03	0.01	0.00	0.00	0.04	0.04
/		0.07	0.01	0.31	0.30	0.00	0.00	0.00	0.00	0.00	0.76
		0.00	0.00	0.06	0.14	0.00	0.00	0.00	0.00	0.00	0.02
		0.03	0.00	0.41	0.13	0.00	0.00	0.00	0.05	0.05	0.43
		0.02	0.00	0.00	0.02	0.20	0.05	0.00	0.00	0.03	0.00



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		가	가							
	0.00	0.06	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00
	0.01	0.08	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.00
/	0.05	0.28	0.33	0.38	0.00	0.00	0.00	0.06	0.01	0.04
	0.04	0.02	0.06	0.20	0.03	0.01	0.00	0.03	0.05	0.36
	0.07	0.07	1.24	0.82	0.47	0.01	0.01	0.04	0.12	0.27
	0.09	2.39	1.65	0.42	0.06	0.00	0.00	0.02	0.08	0.14
	0.00	0.42	0.37	0.20	0.11	0.01	0.00	0.01	0.03	0.05
	0.00	0.02	0.02	0.04	0.10	0.00	0.00	0.00	0.01	0.01
,	0.01	0.11	0.10	0.07	0.02	0.01	0.00	0.02	0.00	0.02
	0.02	0.01	0.17	0.19	0.42	0.01	0.00	0.00	0.02	0.08
	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.03	0.05
	0.03	0.23	0.20	0.28	0.02	0.00	0.00	0.00	0.03	0.05
	0.01	0.00	0.02	0.09	0.00	0.02	0.00	0.86	0.03	0.06
	0.01	0.00	0.02	0.05	1.16	0.01	0.00	0.04	0.05	0.36
가	0.00	0.01	0.01	0.00	0.27	0.00	0.00	0.01	0.02	0.59
/	0.00	0.00	0.01	0.04	0.01	0.00	0.00	0.01	0.01	0.03

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< 4> - ( 59 × 10 ) : 2000  
 ( :%)

		가	가							
	0.02	0.00	0.03	0.02	0.01	0.00	10.18	0.00	0.03	0.57
	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.04	0.02	0.01
	0.03	0.01	0.08	0.12	0.02	0.03	0.00	0.57	0.37	0.39
	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	0.08	0.00	0.10	0.13	0.01	0.01	0.00	0.58	0.51	0.15
/	0.05	0.00	0.20	0.15	0.00	0.01	0.00	1.82	0.09	0.19
가 / 가 /	0.01	0.00	0.04	0.04	0.01	0.00	0.00	0.43	0.06	0.07
/	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.11	0.04	0.03
/	0.02	0.00	0.03	0.03	0.00	0.01	0.00	0.02	0.12	0.09
/	0.03	0.10	0.16	0.19	0.01	0.01	0.00	0.23	0.07	0.07
/	0.00	0.01	0.01	0.02	0.00	0.00	0.00	0.01	0.02	0.01
	0.02	0.04	0.13	0.17	0.01	0.01	0.00	0.03	0.26	0.07
/	0.03	0.00	0.04	0.08	0.00	0.00	0.00	0.03	0.30	0.15
	0.03	0.01	0.04	0.09	0.00	0.00	0.00	0.14	0.24	0.11
1	0.01	0.01	0.03	0.05	0.01	0.00	0.00	0.14	0.17	0.02
	0.04	0.03	0.08	0.16	0.00	0.00	0.00	0.65	0.34	0.18
/	0.08	0.06	0.22	0.20	0.01	0.00	0.00	0.54	0.68	0.14
/	0.01	0.00	0.02	0.03	0.00	0.00	0.00	0.02	0.05	0.06
	0.01	0.01	0.09	0.09	0.00	0.00	0.00	0.12	0.22	0.10
/	0.05	0.10	0.18	0.26	0.01	0.00	0.00	0.13	0.79	0.36
/	0.00	0.00	0.05	0.04	0.00	0.00	0.00	0.09	0.05	0.02
/	0.03	0.02	0.14	0.21	0.01	0.00	0.00	0.22	0.71	0.14
	0.01	0.06	0.07	0.08	0.01	0.00	0.00	0.22	0.08	0.03
가 /	0.04	0.00	0.09	0.10	0.01	0.02	0.00	0.64	0.14	0.28
가	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.02	0.01
가	0.01	0.01	0.07	0.07	0.00	0.00	0.00	0.04	0.01	0.04
	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01
	0.24	0.12	0.28	0.41	0.00	0.00	0.00	1.06	0.27	0.86
	0.20	0.07	0.14	0.33	0.00	0.02	0.00	2.59	0.40	0.51
	0.03	0.00	0.15	0.11	0.01	0.16	0.00	0.33	0.02	0.06
	0.22	0.01	1.04	1.03	0.05	2.22	0.00	0.08	0.26	0.76
	0.08	0.10	0.49	0.58	0.14	7.69	0.00	0.56	0.10	1.58
	0.06	0.00	0.12	0.23	8.11	0.04	0.00	0.10	0.04	0.44
	0.06	0.00	0.04	0.29	0.05	0.00	0.00	0.14	3.22	0.10
	0.01	0.00	0.06	0.04	0.01	0.00	0.00	0.01	0.04	0.01
	0.00	0.01	0.04	0.06	0.01	0.00	0.00	0.02	0.01	0.01
	0.04	0.01	0.09	0.28	0.02	0.00	0.00	0.03	0.10	0.32
	0.04	0.03	0.10	0.47	0.00	0.01	0.00	0.14	0.01	0.07
	0.08	0.03	0.23	1.03	0.02	0.01	0.00	0.01	0.03	0.06

< 4 >

		가	가							
/	0.04	0.01	0.27	0.23	0.00	0.00	0.00	0.00	0.00	1.09
	0.00	0.01	0.14	0.15	0.00	0.00	0.00	0.00	0.00	0.00
	0.08	0.01	0.53	0.17	0.01	0.00	0.00	0.12	0.06	0.45
	0.01	0.00	0.01	0.02	0.22	0.01	0.00	0.01	0.01	0.01
	0.02	0.33	0.30	0.12	0.00	0.00	0.00	0.03	0.00	0.00
	0.01	0.20	0.05	0.05	0.01	0.00	0.00	0.01	0.00	0.01
/	0.07	0.32	0.70	0.43	0.01	0.01	0.00	0.12	0.02	0.10
	0.05	0.03	0.15	0.21	0.13	0.03	0.00	0.13	0.09	0.94
	0.10	0.07	0.93	1.08	0.54	0.00	0.01	0.03	0.09	0.77
	0.14	2.23	2.04	0.52	0.23	0.01	0.00	0.04	0.14	0.15
	0.01	0.50	0.47	0.21	0.24	0.01	0.00	0.02	0.01	0.06
	0.01	0.01	0.06	0.05	0.23	0.00	0.00	0.00	0.01	0.02
,	0.01	0.20	0.10	0.05	0.04	0.01	0.00	0.03	0.00	0.02
	0.02	0.01	0.18	0.15	0.76	0.02	0.01	0.01	0.00	0.08
	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.05	0.05
	0.01	0.37	0.25	0.27	0.03	0.00	0.01	0.01	0.02	0.05
	0.02	0.00	0.02	0.11	0.01	0.02	0.00	1.02	0.03	0.07
	0.01	0.00	0.03	0.09	1.39	0.00	0.00	0.09	0.21	0.22
가	0.00	0.00	0.01	0.00	0.67	0.00	0.00	0.00	0.00	0.22
/	0.00	0.00	0.02	0.01	0.01	0.00	0.00	0.02	0.00	0.02

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< 5> - ( 59 × 10 ):2005  
( :%)

		가	가							
	0.02	0.00	0.03	0.02	0.00	0.01	8.16	0.00	0.03	0.53
	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.03	0.03	0.02
	0.03	0.01	0.07	0.11	0.02	0.02	0.00	0.42	0.30	0.50
	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	0.05	0.01	0.11	0.08	0.01	0.01	0.00	0.49	0.41	0.11
/	0.03	0.01	0.12	0.11	0.01	0.00	0.00	1.38	0.22	0.24
가 / 가 /	0.02	0.01	0.02	0.04	0.00	0.00	0.00	0.37	0.04	0.05
/	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.10	0.03	0.03
/	0.01	0.00	0.03	0.03	0.00	0.02	0.00	0.02	0.11	0.07
/	0.02	0.10	0.15	0.19	0.00	0.01	0.00	0.23	0.10	0.07
/	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00
	0.01	0.02	0.11	0.13	0.00	0.02	0.00	0.03	0.26	0.06
/	0.03	0.01	0.04	0.06	0.00	0.00	0.00	0.05	0.25	0.11
	0.02	0.00	0.05	0.08	0.00	0.00	0.00	0.13	0.17	0.12
1	0.01	0.01	0.03	0.05	0.00	0.00	0.00	0.11	0.19	0.02
	0.04	0.01	0.08	0.12	0.00	0.00	0.00	0.65	0.32	0.18
/	0.06	0.04	0.22	0.17	0.00	0.00	0.00	0.53	0.57	0.18
/	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.02	0.04	0.07
	0.01	0.01	0.06	0.08	0.00	0.00	0.00	0.10	0.24	0.08
/	0.05	0.08	0.23	0.22	0.01	0.00	0.00	0.09	0.75	0.32
/	0.00	0.00	0.09	0.04	0.00	0.00	0.00	0.05	0.05	0.02
/	0.02	0.02	0.13	0.17	0.00	0.00	0.00	0.17	0.70	0.14
	0.01	0.07	0.10	0.07	0.01	0.00	0.00	0.23	0.07	0.02
가 /	0.03	0.02	0.07	0.08	0.01	0.01	0.00	0.44	0.15	0.28
가	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.01
가	0.00	0.01	0.07	0.06	0.00	0.00	0.00	0.03	0.01	0.03
	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00
	0.21	0.10	0.33	0.38	0.00	0.00	0.00	1.03	0.22	0.76
	0.18	0.06	0.13	0.33	0.00	0.01	0.00	2.61	0.37	0.47
	0.03	0.00	0.31	0.09	0.00	0.17	0.00	0.24	0.02	0.05
	0.20	0.02	1.07	0.89	0.01	2.76	0.00	0.08	0.23	0.85
	0.07	0.10	0.49	0.68	0.05	8.02	0.00	0.30	0.04	1.43
	0.06	0.01	0.17	0.20	8.23	0.08	0.00	0.11	0.04	0.57
	0.06	0.00	0.05	0.34	0.05	0.00	0.00	0.11	3.69	0.12
	0.00	0.00	0.05	0.04	0.02	0.00	0.00	0.01	0.04	0.01
	0.00	0.01	0.06	0.06	0.02	0.00	0.00	0.02	0.01	0.01
	0.05	0.01	0.13	0.34	0.04	0.00	0.01	0.04	0.13	0.45
	0.09	0.04	0.19	0.76	0.00	0.01	0.00	0.23	0.03	0.08

< 5 >

		가	가							
	0.08	0.03	0.26	0.98	0.03	0.03	0.00	0.01	0.03	0.05
/	0.03	0.01	0.26	0.22	0.00	0.12	0.00	0.00	0.00	0.80
	0.01	0.01	0.17	0.14	0.00	0.01	0.00	0.00	0.00	0.01
	0.08	0.00	0.56	0.13	0.01	0.00	0.00	0.10	0.05	0.47
	0.01	0.00	0.00	0.05	0.18	0.02	0.00	0.02	0.01	0.01
	0.02	0.73	0.36	0.17	0.00	0.00	0.00	0.02	0.00	0.00
	0.01	0.26	0.06	0.05	0.01	0.00	0.00	0.00	0.00	0.02
/	0.06	0.45	0.74	0.50	0.01	0.01	0.00	0.12	0.04	0.16
	0.04	0.03	0.13	0.23	0.20	0.06	0.00	0.14	0.17	1.38
	0.05	0.09	0.80	1.08	0.40	0.00	0.01	0.03	0.06	0.45
	0.25	2.29	2.03	0.60	0.24	0.06	0.00	0.06	0.13	0.15
	0.02	0.72	0.76	0.23	0.19	0.01	0.00	0.01	0.01	0.07
	0.03	0.04	0.06	0.06	0.18	0.00	0.00	0.00	0.01	0.02
,	0.02	0.21	0.16	0.07	0.08	0.01	0.00	0.04	0.01	0.02
	0.03	0.01	0.18	0.13	0.97	0.01	0.01	0.01	0.01	0.07
	0.01	0.00	0.02	0.02	0.00	0.00	0.00	0.01	0.05	0.05
	0.01	0.35	0.25	0.24	0.02	0.00	0.01	0.01	0.01	0.04
	0.02	0.00	0.03	0.11	0.01	0.02	0.00	1.13	0.04	0.08
가	0.01	0.00	0.01	0.12	1.58	0.01	0.00	0.09	0.26	0.23
	0.00	0.00	0.01	0.00	0.76	0.00	0.00	0.01	0.01	0.33
/	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.02

< 6> - ( 59 × 10 ):2010  
( :%)

		가	가							
	0.02	0.00	0.03	0.02	0.00	0.01	6.52	0.00	0.02	0.48
	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.03	0.02	0.01
	0.03	0.01	0.07	0.10	0.02	0.02	0.00	0.30	0.27	0.55
	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	0.04	0.00	0.12	0.07	0.01	0.01	0.00	0.42	0.34	0.09
/	0.03	0.01	0.10	0.09	0.01	0.00	0.00	1.19	0.18	0.25
가 / 가 /	0.01	0.01	0.02	0.03	0.00	0.00	0.00	0.33	0.03	0.04
/	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.09	0.02	0.03
/	0.01	0.00	0.02	0.02	0.00	0.02	0.00	0.01	0.09	0.06
/	0.02	0.09	0.14	0.17	0.00	0.01	0.00	0.22	0.09	0.07
/	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00
	0.01	0.02	0.10	0.12	0.00	0.02	0.00	0.03	0.25	0.05
/	0.03	0.01	0.04	0.05	0.00	0.00	0.00	0.05	0.20	0.10
	0.02	0.00	0.06	0.09	0.01	0.00	0.00	0.13	0.13	0.13
1	0.01	0.01	0.03	0.05	0.00	0.00	0.00	0.11	0.18	0.02
	0.04	0.01	0.08	0.12	0.00	0.00	0.00	0.64	0.31	0.18
/	0.06	0.04	0.23	0.15	0.00	0.00	0.00	0.54	0.52	0.21
/	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.02	0.03	0.08
	0.01	0.01	0.07	0.08	0.00	0.00	0.00	0.10	0.26	0.07
/	0.05	0.09	0.28	0.21	0.01	0.00	0.00	0.07	0.72	0.30
/	0.00	0.00	0.10	0.04	0.00	0.00	0.00	0.05	0.04	0.02
/	0.02	0.02	0.13	0.15	0.00	0.00	0.00	0.16	0.69	0.12
	0.01	0.09	0.11	0.06	0.01	0.00	0.00	0.22	0.05	0.02
가 /	0.03	0.03	0.08	0.08	0.01	0.01	0.00	0.33	0.14	0.27
가	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.01
가	0.00	0.01	0.08	0.05	0.00	0.00	0.00	0.02	0.01	0.02
	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00
	0.20	0.09	0.39	0.35	0.00	0.00	0.00	1.00	0.21	0.70
	0.18	0.06	0.13	0.32	0.00	0.01	0.00	2.65	0.35	0.45
	0.02	0.00	0.38	0.08	0.00	0.17	0.00	0.21	0.02	0.05
	0.17	0.01	0.99	0.74	0.01	2.95	0.00	0.09	0.20	0.86
	0.07	0.09	0.48	0.68	0.05	7.91	0.00	0.26	0.03	1.25
	0.06	0.02	0.21	0.19	8.82	0.12	0.00	0.12	0.05	0.68
	0.05	0.00	0.05	0.39	0.05	0.00	0.00	0.11	4.07	0.12
	0.00	0.00	0.06	0.04	0.02	0.00	0.00	0.01	0.04	0.01

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		가	가							
	0.00	0.02	0.08	0.08	0.03	0.00	0.00	0.03	0.01	0.01
	0.06	0.02	0.16	0.41	0.05	0.00	0.01	0.05	0.15	0.54
	0.13	0.04	0.25	0.98	0.00	0.01	0.00	0.26	0.03	0.09
	0.08	0.03	0.28	0.86	0.03	0.03	0.00	0.01	0.03	0.05
/	0.03	0.01	0.24	0.19	0.00	0.11	0.00	0.00	0.00	0.65
	0.01	0.01	0.18	0.13	0.00	0.01	0.00	0.00	0.00	0.01
	0.08	0.00	0.50	0.11	0.01	0.00	0.00	0.09	0.04	0.41
	0.01	0.00	0.00	0.05	0.14	0.02	0.00	0.02	0.01	0.01
	0.03	0.87	0.38	0.17	0.00	0.00	0.00	0.03	0.00	0.00
	0.01	0.32	0.08	0.05	0.01	0.00	0.00	0.00	0.00	0.01
/	0.06	0.55	0.78	0.51	0.01	0.01	0.00	0.13	0.05	0.21
	0.04	0.04	0.14	0.25	0.26	0.09	0.00	0.17	0.23	1.74
	0.05	0.09	0.68	1.07	0.31	0.00	0.01	0.03	0.04	0.36
	0.34	2.30	1.88	0.63	0.22	0.09	0.00	0.07	0.11	0.13
	0.03	0.91	0.95	0.26	0.19	0.01	0.00	0.01	0.01	0.08
	0.08	0.06	0.08	0.08	0.21	0.00	0.00	0.00	0.01	0.02
,	0.02	0.24	0.19	0.08	0.11	0.01	0.00	0.05	0.01	0.03
	0.03	0.01	0.19	0.13	1.24	0.01	0.01	0.01	0.01	0.07
	0.01	0.00	0.03	0.02	0.00	0.00	0.00	0.01	0.06	0.06
	0.01	0.36	0.23	0.21	0.01	0.00	0.01	0.01	0.00	0.03
	0.02	0.00	0.03	0.13	0.01	0.03	0.00	1.34	0.04	0.09
	0.01	0.00	0.01	0.15	1.61	0.01	0.00	0.10	0.27	0.23
가	0.00	0.00	0.01	0.01	0.85	0.00	0.00	0.01	0.01	0.36
/	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.01

2002-35

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2002 12  
2002 12

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2 15-1(135-949)  
: 02-3485-5000, 5100  
: 02-3485-5200  
: [http:// www.krivet.re.kr](http://www.krivet.re.kr)

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16-1681 (1998. 6. 11)  
I S B N 89-8436-518-1 93330

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■ : 02-3485-5054 e-mail : [hmkim@krivet.re.kr](mailto:hmkim@krivet.re.kr)