

# 재정포럼

Monthly Public Finance Forum

# 2

재정포럼

2004년 2월호(통권 제92호)

한국조세연구원

, TCF

2004

**kipf** KOREA INSTITUTE  
OF PUBLIC FINANCE

한국조세연구원

## C . O . N . T . E . N . T . S

2		/
6		/
28		/
52		/
79	, TCF	
86	2003 12	
90	2004	
92	2004	54.8%
94	2003	
101		
104		.....



1990  
가

가  
가

가 1

가 가

가 가?

.2

가?

가

1

가

가

가'

가

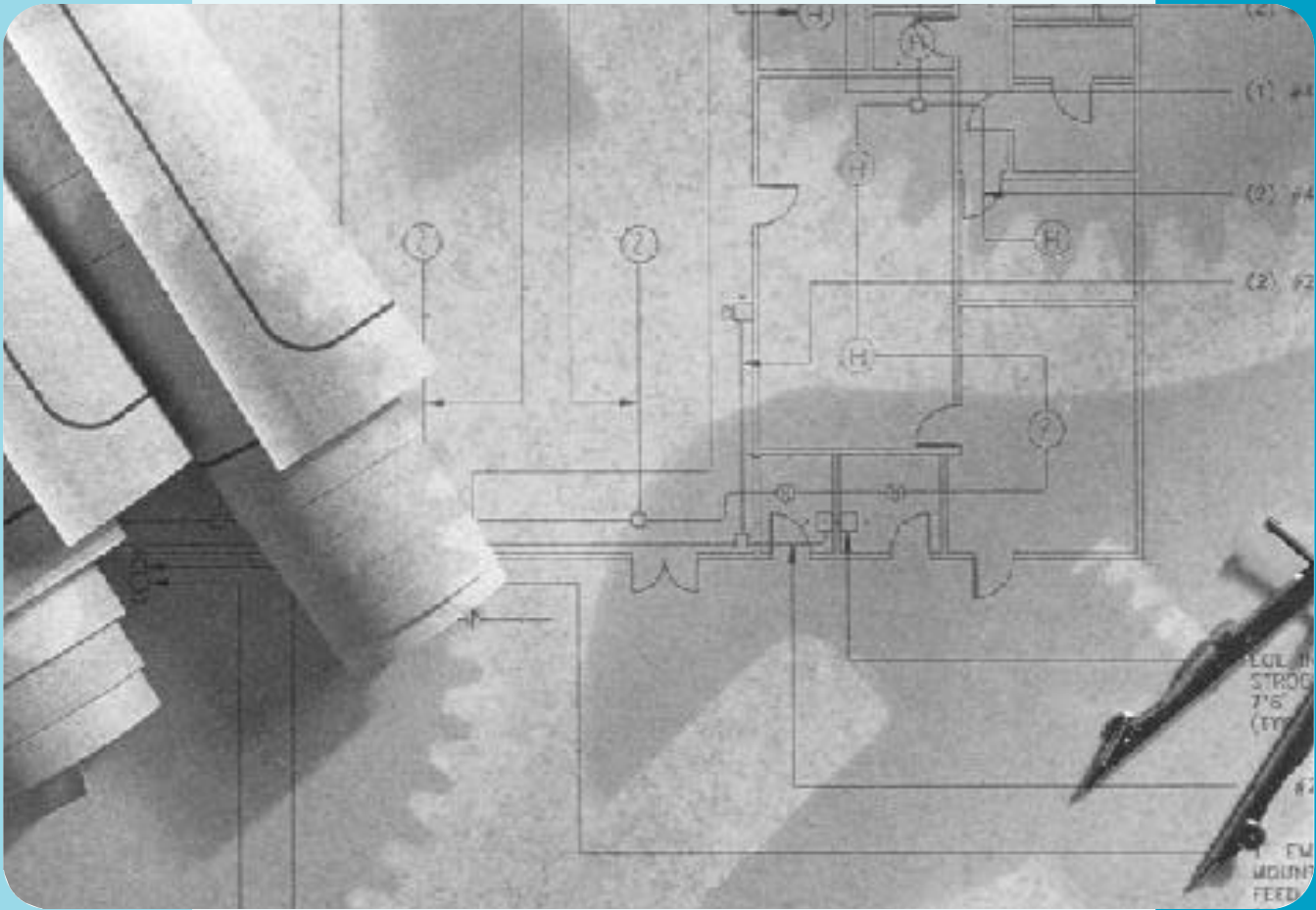
가

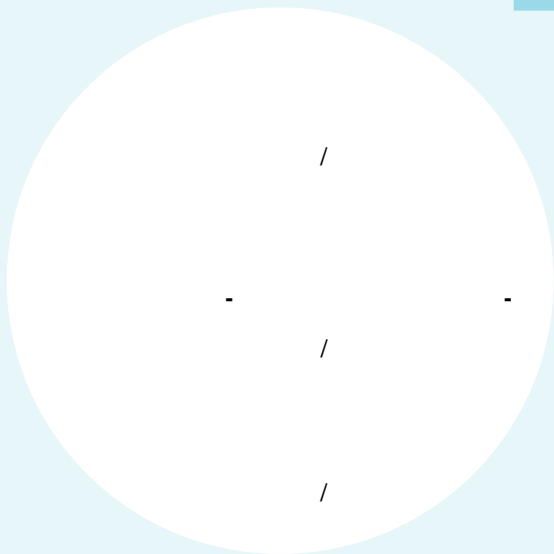
가

가

가

.100







(jweon@kipf.re.kr)

1990 가 . 1990  
 2% ,  
 가 1997 IMF  
 가 20  
 1998 2003  
 2000 2003 12  
 IMF 2% 3.6%  
 2003 가  
 가  
 2003 9 , 2004 5,400

\_\_\_\_\_ \*

1997 가 . 가 .

1990 1997 가 .  
1997 가 .

### . 1997

#### 1. 가

1990 가 . 1995 2002 .  
가 < -1> . < -1> 가 IMF  
1998 1999 60.6% IMF 1997 62.5% 2%  
, 2000  
가 2002  
49.7% IMF  
60 가 , 1997  
가 가  
2000 가 2002 1997 ,  
2000 1997 .  
30 59 가 ,  
IMF 가 , 가  
2000 가 1997  
(discouraged worker)가  
15~29 가 . 15 19

(1)

가 1997 가  
 , 가  
 IMF 1998 가 가  
 가 가 2001 가 1998 가  
 20 29 가 1997  
 76.2% 1998 74.8% 2002 70.7%  
 20 , ,  
 1998 가

< -1> 가

( :%)

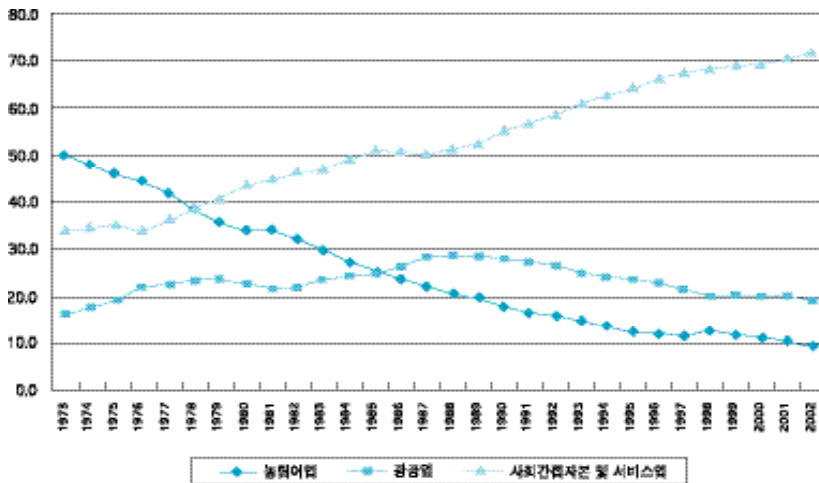
	1995	1996	1997	1998	1999	2000	2001	2002
15 ~ 19	12.0	11.1	10.8	10.5	11.1	11.9	11.6	10.6
20 ~ 29	66.3	66.8	67.5	64.8	64.0	64.6	64.7	65.5
30 ~ 39	75.6	76.3	76.8	75.2	75.1	75.1	74.9	75.1
40 ~ 49	80.0	80.3	80.5	79.0	78.7	79.1	78.8	78.9
50 ~ 59	71.8	71.5	72.0	70.1	69.7	68.5	68.5	69.4
60	38.8	39.3	40.2	37.6	38.2	38.2	38.5	39.1
	61.9	62.1	62.5	60.6	60.6	61.0	61.3	61.9
15 ~ 19	9.5	8.8	8.7	9.1	10.6	11.5	10.7	9.4
20 ~ 29	76.9	76.5	76.2	74.8	73.1	72.0	70.7	70.7
30 ~ 39	97.0	96.9	96.8	96.3	95.7	95.5	94.9	95.0
40 ~ 49	96.0	96.2	95.5	94.8	93.9	93.6	93.5	93.6
50 ~ 59	87.8	87.7	88.1	87.1	85.8	84.0	83.4	84.7
60	54.1	54.3	55.0	51.6	50.7	49.6	50.5	51.7
	76.4	76.2	76.1	75.1	74.4	74.2	74.2	74.8
15 ~ 19	14.5	13.5	13.0	11.9	11.7	12.4	12.6	11.7
20 ~ 29	57.1	58.3	59.8	56.0	56.1	58.1	59.5	60.9
30 ~ 39	53.3	54.7	55.9	53.2	53.7	53.9	54.2	54.4
40 ~ 49	63.4	63.9	65.0	62.7	63.1	64.1	63.9	63.9
50 ~ 59	56.4	55.8	56.4	53.4	53.9	53.3	53.8	54.2
60	28.7	29.2	30.2	27.9	29.5	30.1	29.9	30.1
	48.4	48.9	49.8	47.1	47.6	48.6	49.2	49.7

: ,<sup>□</sup> 2003.

가 1997

(discouraged worker)가

가 1999 가 2002 1997  
 가 ([ -1]), 1973  
 50% 2002 9.3% 10%  
 1988 28.5%  
 2002 19.2% 20%  
 1973 34.3% , 2002 71.5% 20 2  
 가 , 가  
 (job creation)  
 [ -1]



: 1992

: , P

a 2003.

(1)

< -2>

( :%)

	가			가			
1993	37.9	27.3	10.6	62.1	36.6	16.6	8.9
1994	37.1	27.1	10.0	62.9	36.4	17.5	9.0
1995	36.8	27.3	9.5	63.2	36.7	17.6	8.8
1996	36.7	27.4	9.3	63.3	36.0	18.7	8.6
1997	36.8	27.8	9.0	63.2	34.3	20.0	8.9
1998	38.3	28.2	10.2	61.7	32.8	20.3	8.6
1999	37.6	28.1	9.5	62.4	30.2	21.0	11.2
2000	36.8	27.7	9.1	63.1	30.2	21.8	11.1
2001	36.7	28.1	8.6	63.3	31.1	21.9	10.3
2002	36.0	27.9	8.1	64.0	31.0	22.0	11.0

: , 2003.

1990 가36 37%,  
 가63 64% . 1997  
 가2000 가 ,  
 , (< -3>).

< -3>

( :%)

	가		가
	62.4	28.9	8.7
	83.7	10.8	5.1
	71.1	16.1	7.5
가	-	-	-
	86.0	13.6	0.4
	91.1	8.9	0.0
	89.1	10.1	0.9
	90.1	9.5	0.5
	87.8	11.3	0.9
	92.7	7.3	0.1

: , 2002.

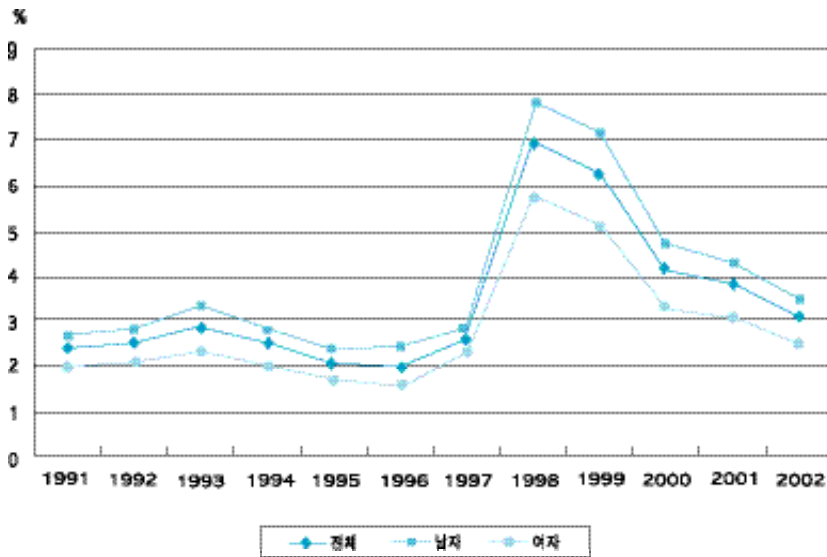
1997 가  
 가 .

1997 가 1999 가 가  
가 가 1997

1997 가 1999 가 가  
가 가 1997

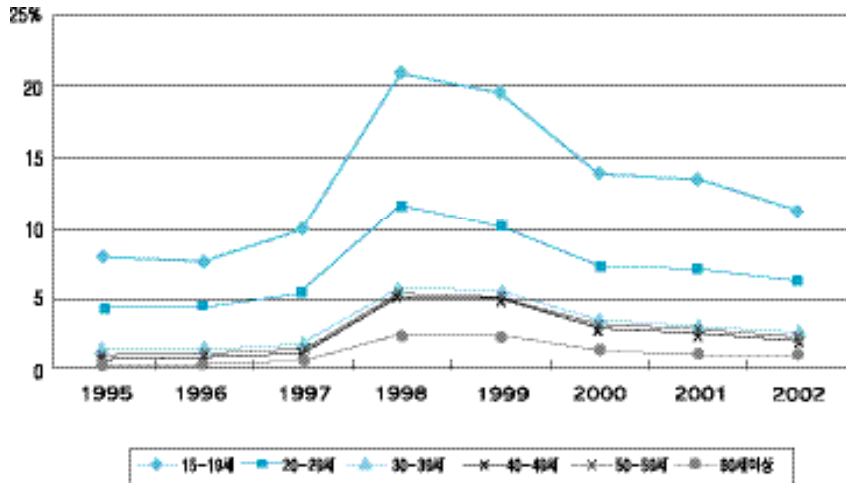
2.

가  
1990 IMF  
1991 [ -2]  
[ -2] : 1991 2002



(1)

IMF  
가  
1997  
가  
1990  
가.  
[ -3]



가 15 19 가 , 60  
[ -3]

1998

가

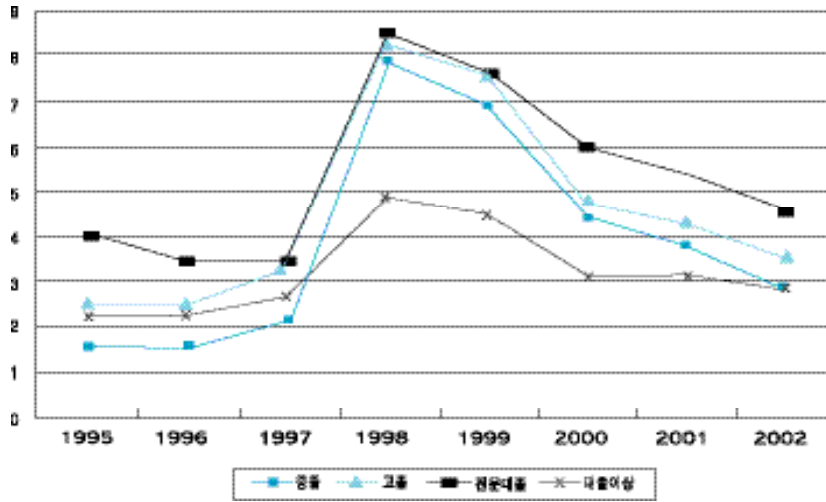
IMF  
가

1998

가

, [ -3] , 15 29

[ -4]



1997

가

가

가

(1)

1998 가 . 가 , 가가 , 가

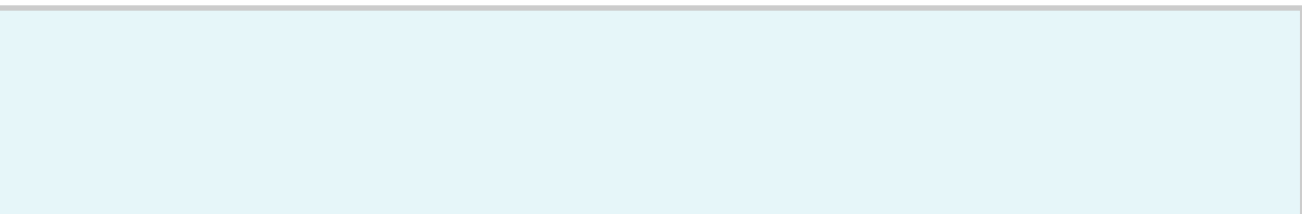
< -4>

( :%)

	1995	1996	1997	1998	1999	2000	2001	2002
15 ~ 19	7.4	8.4	10.2	24.2	25.3	15.5	22.4	14.5
20 ~ 29	3.4	4.3	4.9	15.3	14.1	12.2	13.6	11.1
30 ~ 39	1.3	1.2	2.0	8.1	7.0	4.8	3.9	3.0
40 ~ 49	1.0	0.9	1.3	6.3	5.5	3.5	3.0	2.1
50 ~ 59	1.1	0.8	1.1	5.3	5.0	2.9	2.7	1.7
60	0.5	0.4	0.8	3.2	2.9	2.2	1.5	1.3
15 ~ 19	7.6	6.6	9.4	20.3	19	13.3	12.3	9.7
20 ~ 29	4	4.1	5.2	11.9	10.8	7.1	6.9	6.3
30 ~ 39	1.4	1.4	1.9	6	5.7	3.5	3.1	2.7
40 ~ 49	1.2	1.2	1.8	5.6	5.3	3.4	3	1.9
50 ~ 59	1.3	1.6	2.1	6.7	6.4	3.6	2.9	2.1
60	0.6	1.1	1.4	5.1	5.6	1.7	2.3	1.7
15 ~ 29	6.2	5.4	5.4	11.1	9.6	7.6	7.2	5.9
30 ~ 39	1.6	1.6	1.6	5.1	5.0	3.9	3.3	3.8
40 ~ 49	1.1	0.9	1.2	5.8	7.0	5.3	4.1	2.4
50 ~ 59	0.0	0.0	0.0	4.2	3.6	0.0	2.9	2.5
60	0.0	0.0	0.0	0.0	12.5	0.0	0.0	0.0
15 ~ 29	4.7	4.9	5.8	9.1	8	5.6	6	6.2
30 ~ 39	1.3	1.4	1.6	3.7	3.4	2.4	2.4	2.3
40 ~ 49	1.5	1.4	1.3	3.2	3.5	2.1	2	1.2
50 ~ 59	0.8	0.4	1.2	4	4.3	2.9	1.9	1.5
60	0	1	1.9	1.7	0.8	0.9	0.8	0.7

: ,<sup>F</sup> 2003.

가 1999 , 15 29 , 30 1997



가 , 15 29 가 가

(15 29 ) 가 30

30 , 30 ,

가 , 15 29 가 가 1997 . 30

가 .

가

가 . < -5>

(1)

< -5>

( : )

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
	3.3	3.8	3.5	3.3	3.2	3.1	3.5	3	3	3.1
15 ~ 19	2.7	2.9	2.8	2.6	2.6	2.3	2.4	2.1	2.2	2.3
20 ~ 29	3.5	4	3.5	3.2	3.2	3.1	3.3	2.9	2.8	3
30 ~ 39	3.3	3.7	3.5	3.3	3.2	3.1	3.7	3.1	3.1	3.3
40 ~ 49	2.9	3.9	3.6	3.7	3.5	3.2	3.8	3.5	3.4	3.1
50 ~ 59	3.4	3.6	3.8	3.8	3.3	3.2	3.9	3.3	3.1	3.5
60	2.3	2.8	3.1	2.9	2.9	2.9	3.1	2.7	3.2	2.7
15 ~ 24	3.2	3.4	3.2	2.9	2.9	2.9	2.9	2.5	2.5	2.6
15 ~ 29	3.4	3.8	3.4	3.1	3.1	3	3.2	2.7	2.7	2.9

: , 2003.

IMF

가

가

< -5>

가?

< -6> 1998

가

가

IMF

< -6>

( :%)

		1998	1999	2000	2001	2002
	6 ~1	13.2	14.9	12.0	10.7	11.4
	1	1.5	3.8	2.3	2.3	2.5
	6 ~1	10.1	11.2	9.2	8.3	8.7
	1	1.2	3.2	2.0	1.9	2.1
	6 ~1	3.1	3.6	2.8	2.4	2.8
	1	0.2	0.6	0.3	0.4	0.4
15 24	6 ~1	2.8	2.4	2.0	2.0	2.1
	1	0.2	0.5	0.3	0.3	0.3
20 24	6 ~1	2.5	1.9	1.7	1.7	1.8
	1	0.2	0.4	0.3	0.3	0.2
25 54	6 ~1	9.5	11.2	9.0	8.1	8.6
	1	1.1	3.2	1.9	1.8	2.0
55	6 ~1	0.9	1.3	0.9	0.6	0.7
	1	0.1	0.2	0.2	0.2	0.2

: OECD, Labour Market Statistics-Data  
[http://www1.oecd.org/scripts/cde/viewbase.asp?DBNAME=ifs\\_data](http://www1.oecd.org/scripts/cde/viewbase.asp?DBNAME=ifs_data)

< -6> 가 6 1  
 1 1998  
 1 1.5% 1999 3.8%  
 IMF 가 2  
 2000 2000 , 2001 2.3%, 2002 2.5%  
 , 6 ~1 1  
 25 54  
 1)

1) 55

55

(

OECD 1990 가 < -7> 가  
 가 가  
 가  
 < -7>

( : %)

	1990		1998		1999		2000		2001	
	6	12	6	12	6	12	6	12	6	12
	20.2	7.2	24.1	13.8	24.1	11.6	19.5	11.2	16.8	9.5
	55.5	38.0	64.3	44.2	55.6	40.4	62.0	42.6	57.2	37.6
	64.7	46.8	69.6	52.6	67.2	51.7	67.6	51.5	..	..
	85.2	69.8	77.3	59.6	77.2	61.4	77.6	61.3	77.4	63.4
	39.0	19.1	39.3	20.9	44.5	22.4	46.9	25.5	46.2	26.6
	13.9	2.6	14.7	1.6	18.6	3.8	14.3	2.3	13.0	2.3
	50.3	34.4	47.3	32.7	45.4	29.6	43.2	28.0	43.6	27.7
	10.0	5.5	14.1	8.0	12.3	6.8	11.4	6.0	11.8	6.1
OECD	44.6	30.9	48.6	33.4	47.2	31.8	46.9	31.6	41.8	27.5

: OECD, Employment Outlook 2003.

< II-8> 1995

15 29  
 1997 가 1998  
 < -8>

( : %)

	1995	1996	1997	1998	1999	2000	2001	2002	2003.9	2003.12
15 ~ 19	7.9	7.4	9.8	20.8	19.5	13.8	13.3	11.1	9.5	16.0
20 ~ 29	4.3	4.4	5.3	11.4	10.1	7.1	7.0	6.3	6.5	8.0
30 ~ 39	1.4	1.4	1.9	5.7	5.3	3.4	3.0	2.8	3.0	2.8
40 ~ 49	1.1	1.1	1.5	5.6	5.2	3.3	2.8	1.9	2.1	2.1
50 ~ 59	0.9	0.9	1.2	5.3	5.1	2.9	2.6	1.8	2.0	1.8
60	0.4	0.4	0.8	2.4	2.3	1.3	1.1	1.0	0.8	1.2

1997 가 1998  
 2002 가 2003  
 2002 가 2003  
 가 (firm-specific skill)  
 가 1997  
 ( )  
 가  
 가  
 가  
 < II-9> 1990  
 가 1990 33.2% 2003 80%  
 가  
 가 (decent job) 가  
 가  
 < -9>  
 ( :%, )

1980	27.2	39.2	11.4	99,302	49,567	49,735
1985	36.4	53.8	13.3	192,511	73,929	118,584
1990	33.2	47.2	8.3	253,047	87,131	165,916
1995	51.4	72.8	19.2	323,739	143,075	180,664
2000	68.0	83.9	41.9	437,987	223,489	214,498
2002	74.2	86.9	49.8	483,966	239,114	244,852
2003	79.7	90.1	57.6	504,915	246,789	258,126

: ,<sup>p</sup> a

(1)

IMF 가  
가 (< II-10>)

2).

< -10>

( :%)

		1 10 29	2 30 99	3 100 299	4 300 499	5 500
1991	5.48	7.78	7.17	6.49	4.87	2.25
1992	4.26	4.81	4.76	6.30	3.48	2.14
1993	3.62	4.37	5.03	4.21	2.21	1.66
1994	3.57	5.75	4.40	3.76	1.89	1.33
1995	3.71	5.82	3.97	4.23	2.17	1.38
1996	2.98	4.25	3.45	3.15	1.72	1.49
1997	2.44	3.67	2.91	2.66	1.41	0.83
1998	0.65	1.16	0.75	0.67	0.32	0.06
1999	0.97	1.80	1.02	0.90	0.53	0.14
2000	1.16	1.79	1.29	1.18	0.57	0.32
2001	1.15	1.75	1.31	1.14	0.57	0.21
2002	2.13	3.08	2.43	2.04	1.03	0.73

: = /

1. (Beveridge)

3

( ) 가 ( )

가 , 가 3)

2) 가

3) 가

가

가

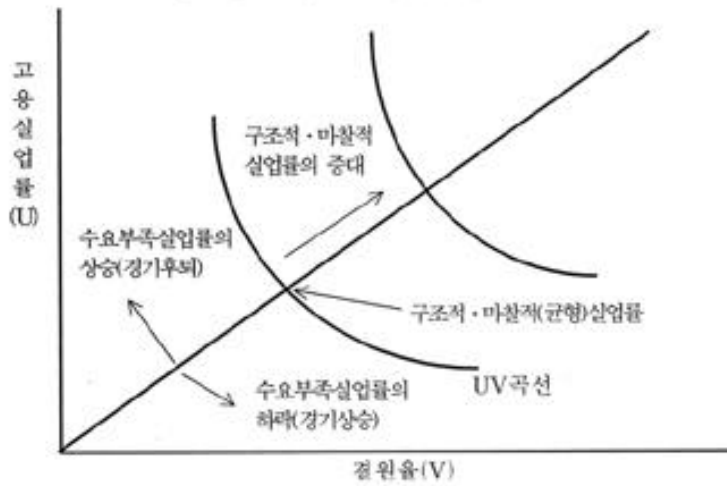
(unemployment rate; U)

(vacancy rate; V)

4)

[ -1]

[ -1]



(U = V)

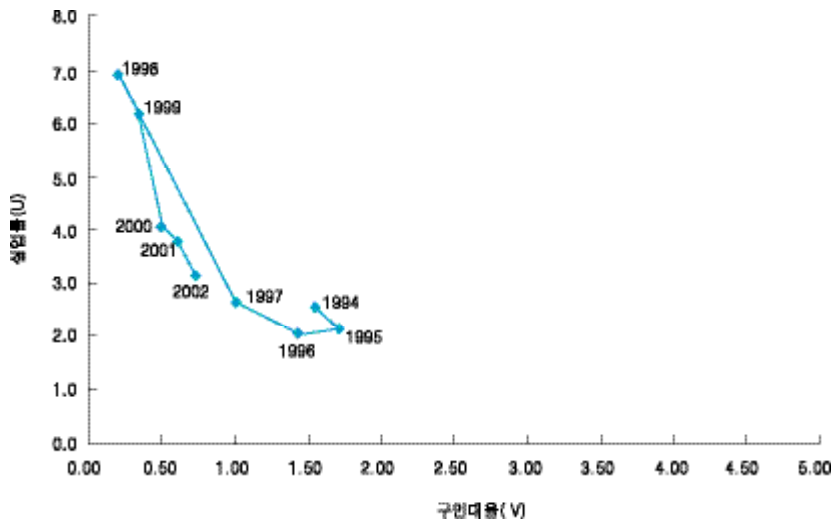
가

4)

가 UV

(1)

가  
 (U > V).  
 가  
 가  
 가  
 (mismatch) 가  
 1990  
 5)  
 [ -2]  
 [ -2] (1994-2002)



1994 1997

1997

5) 가 UV 가  
 , 1990 가

IMF

1998 1999

IMF

IMF

1998 1999

2%

가

IMF

가

가

IMF

가

2000 2002

가

( ) 가

가

가

가

IMF

가

2. (Okun)

(Okun's Law)

가

1%

GDP

가

가

가

$$\ln (100-U) = a + b \ln Q + T$$

(1)

U, Q, T, GDP,  $1/b$ 가  
 IMF 가 1997 < -1>  
 < -1>

	b	S.E.	p-value	Okun
1991 I 1997	0.039	0.0107	0.001	25.64
1998 I 2003 I	0.078	0.0	0.039	12.82

1991 1997 가 25.64 1998 2003  
 12.82 1/2 1998  
 , 1998  
 가  
 가 6) 1.7 2.2, 1.8 4,  
 1.4 7.9, 2.9 20, 33 50  
 가  
 3.

IMF

IMF

가

$$\ln L = a + b \ln Q + c \ln (W/R) + d \ln L_1 + e D98$$

6) 가 가  
 Kaufman (1988),

1991 1997 가 25.64 1998 2003 12.82 1/2

1998

, 1998

가

< -2>

d		0.3385	0.8485
e		-0.0537	-0.0340
97 (1-d)		0.6615	0.1535
97 (1-d-e)		0.7151	0.1875
Adj-R2		0.9944	0.9996
D.W.		1.89	2.44

: = + +

L, Q, W, R , GDP, ( ), 가 .  
1 , D98 98 .

Prais-Winsten < -2> .  
1997 가 0.6615, 가  
0.1535 가 1998  
1997 1997  
가 가 .

1997 2.6% 1997 IMF 1998 6.8%  
1997 55 6 1998 146 1 1  
90 가 . 1980 2  
5.2%, 가 74 8 1997 IMF 가  
가  
IMF .

(1)

2000 가 1998  
(mismatch)가  
1997  
IMF  
1997  
2003 15 29 가  
2003  
2003 가 2003  
가 가  
가  
가  
IMF

가

Blanchflower, D. and R. B. Freeman, Youth Employment and Joblessness in Advanced Countries, The University of Chicago Press, 2000.  
Ellywood, D. "Teenage Unemployment: Permanent Scars or Temporary Blemishes," in Freeman R. B. and D. A. Wise (eds.). The Youth Labor Market Problem, The University of Chicago Press, 1982.  
Kaufman, Roger T. "An International Comparison of Okun's Law," Journal of Comparative Economics, Vol. 12, No. 2, 1998.  
Lynch L. M. "The Youth Labor Market in the Eighties: Determinants of Re-Employment Probabilities for Young Men and Women," Review of Economics and Statistics, Vol. 1, pp. 37-45.  
OECD, Employment Outlook, 2003  
Ryan, P. "The School-to-Work Transition: A Cross-National Perspective, Journal of Economic Literature, Vol. XXXIX, 2001.

Blanchflower, D. and R. B. Freeman, Youth Employment and Joblessness in Advanced Countries, The University of Chicago Press, 2000.  
Ellywood, D. "Teenage Unemployment: Permanent Scars or Temporary Blemishes," in Freeman R. B. and D. A. Wise (eds.). The Youth Labor Market Problem, The University of Chicago Press, 1982.  
Kaufman, Roger T. "An International Comparison of Okun's Law," Journal of Comparative Economics, Vol. 12, No. 2, 1998.  
Lynch L. M. "The Youth Labor Market in the Eighties: Determinants of Re-Employment Probabilities for Young Men and Women," Review of Economics and Statistics, Vol. 1, pp. 37-45.  
OECD, Employment Outlook, 2003  
Ryan, P. "The School-to-Work Transition: A Cross-National Perspective, Journal of Economic Literature, Vol. XXXIX, 2001.



(hskim@kipf.re.kr)

1970

가

가

가

가

가

가

(dispatch)

,가

(1998~2000 )

\*

2000 4

가

가

(Standard Market Design : SMD)

2000 4

가

가

(DOJ) Russel Pittman 2003 8

가

가

(event)

(process)

가 <sup>1)</sup>

2000 4

2009

가

2004

1) Chao(2002)



가  
(free riding)

가

가 .

가 . (impedance)

가 .

가

가

(free riding)

가 .

가

가 .

. ,

. ,

가

가

B

A

A

B

가

가

가

가

가

가 .

가

가 .

가

, ( 가 loop<sup>3)</sup> 가) (

3) loop

(2)

) 가 가  
4).

2.

가  
가

( ) 2000

26.8

3 1,

2  
가

32.7

5).

가

가

가

가

가

가

가

가

가

, , ,  
, , LNG

가

가

4) Coase 가

5) 2001 17.9 , 2002 18.2

, , , 가 . ,  
가

, 가 .  
Christensen and Green(1976) 가 380 KW  
1,614 KW 가 (1993)  
가2 KW 1991 가

가 . 가  
가 가 .  
가

, Wolfram(1999) 가 가  
가 가  
가

(2)

가 , 1 가  
 ,  
 가 . 가 . 가  
 6)  
 , .

1.

1995 12 , The California Public Utility Commission(CPUC)

(spot  
 market)  
 (Independent System Operate: ISO)  
 (forward market) (Power Exchange: PX)  
 50%

1998 4 ,

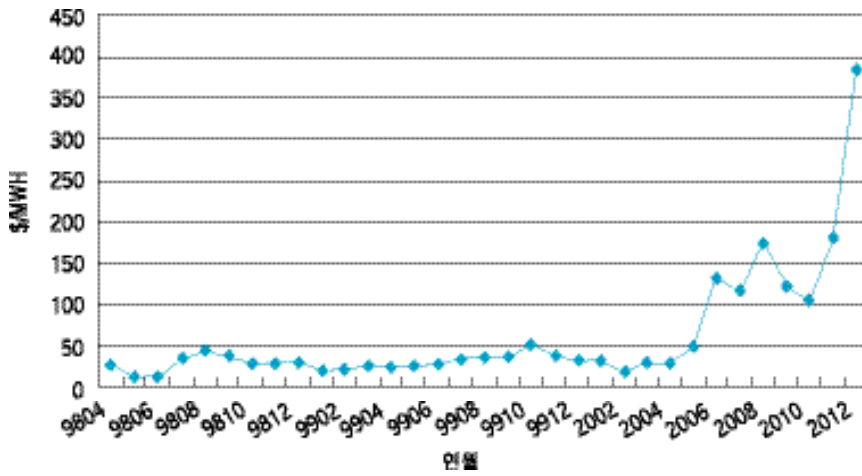
(Load Serving Entities, LSEs)  
 (adjustment bidding)

가 가  
 (Unconstrained Market Clearing Price)  
 가 (Zonal Market Price)  
 (hour-ahead market) (day-ahead market)  
 (two-step) 가

6) 가 가  
 가 가  
 가 2001~2002

가 . 2000 가 1999 5  
 2000 가

[ 1 ] (day-ahead market)가

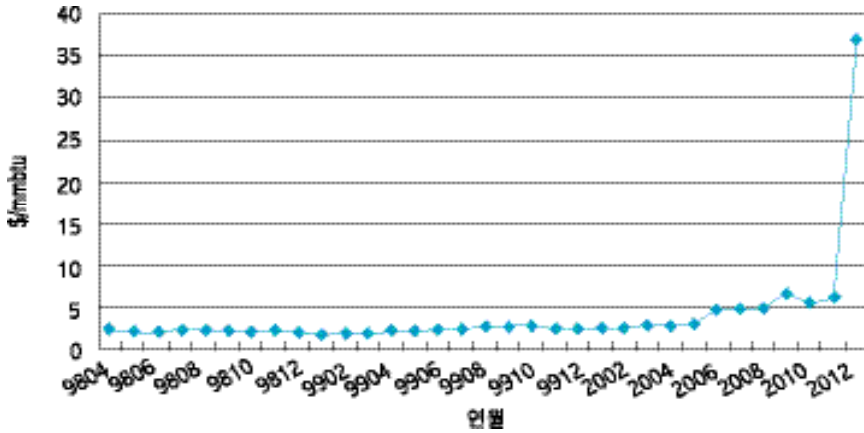


가  
 Pacific Gas and Electric(PG&E) 가  
 가 2001 1 가

2000 가 1999 가  
 5 2000 ([ 1 ] ) 가  
 가 가 가 ([ 2 ] ),  
 NOx 가  
 가 NOx, SOx  
 가 NOx 가 2000

(2)

[ 2] 가 가 ( )



< 1>

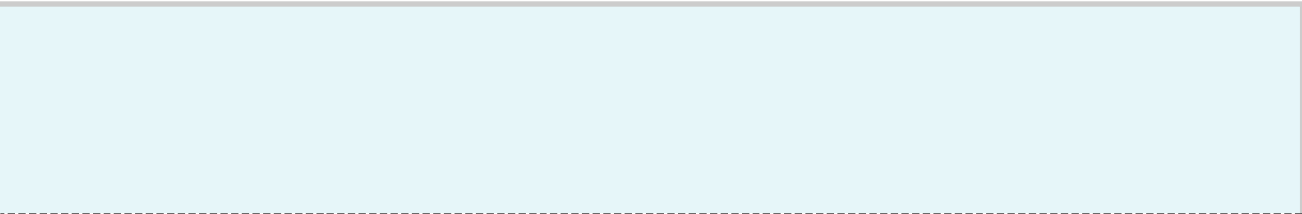
( : MW/hour, %)

	1999 (A)	2000 (B)	B - A
5	6,127	4,481	-1,647 (-37.8)
6	5,740	3,367	-2,373 (-70.5)
7	6,551	2,183	-3,738 (-171.2)
8	6,358	1,578	-4,779 (-302.9)
9	6,814	2,962	-3,852 (-130.0)
10	5,641	4,621	-1,020 (-22.1)
11	6,741	4,040	-2,702 (-66.9)
12	7,680	3,211	-4,469 (-139.2)

: ( )  
: California ISO.

2000 가 3~4 가 20~25%  
< 1> 2000  
가 1999  
가  
가<sup>7)</sup>

7) 2000 NOx 1mmbtu 가 1 2000 20  
8) 1999 가2000 5 10.8%, 6 12.7%, 7 2.2%, 8 7.1% 가



가 가  
가

1990 가 1990 10% 가  
1996~1999 672MW 가  
5,522MW가 가  
가 가  
가 가  
가 가

2.

가. (market power) (transmission congestion)

(Federal Energy Regulatory Commission :FERC)가  
가 가

(Herfindahl-Hirshman Index: HHI)

(2)

$$HHI = \sum_i s_i^2$$

$s_i = \frac{q_i}{Q}$  : 기업 i의 시장점유율,

$q_i$  : 기업 i의 생산량,

$Q$  : 전체 산업의 생산량

HHI

HHI  
가  
Lerner Index)

가

(Average

$$Average\ Lerner\ Index = \sum_i s_i \frac{P - mc_i}{P} = \frac{HHI}{\epsilon}$$

$P$  : 시장가격

$mc_i$  : 기업 i의 한계비용

$\epsilon$  : 수요의 가격탄력성

1

가

가

가

HHI

HHI

가

2000

가  
가

가

가

가

(2002)).

가 (Joskow and Kahn

vesting contract

CPUC

가 2002 3

California Edison(SCE), San Diego Gas and Electric (SDG&E)

가

PG & E, Southern

(stranded cost)<sup>9)</sup>

(competitive transition charge)

가

가

가

가 2000

가 (-)

가

가

가

가

가

가

가

가

가

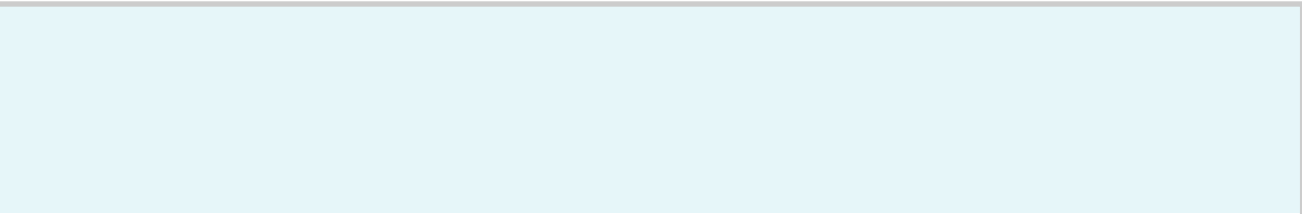
가

4

9) 가

가  
1,350





5%  
(soft price cap) 가 가  
가 가

가  
. Joskow and

Kahn(2002)

2000

Enron

. Enron

‘ Fat Boy ,’ ‘ Death Star ,’ ‘ Get Shorty ,’ ‘ Ricochet ’

가

‘ Power Laundry ’ ,

가

가

가

가

가

가

가

1. 가

가

가

가

가



가 가 가

11) 가 (Local Market Weighted Lerner

Index)

$$RMW \text{ Lerner Index} = \frac{1}{\sum_t q_t^d} * \left( \sum_t q_t^d * \frac{P_t - MC_t}{P_t} \right)$$

$t$  : 분할된 지역시장으로 내생적으로 결정됨

$q_t^d$  :  $t$

$P_t$  :  $t$  가

$MC_t$  :  $t$

11) Kim(2002)

1998~2000

2.

vesting contract

가

. vesting contract

( )

가

가

가

가

vesting contract

가

vesting contract

가 ,

1

OECD 가

가 가

. 2002

1

5,845KWh

12,834KWh(2001

),

6,474KWh(2001

),

6,974KWh(2000

)

<sup>12)</sup>.

가

가

가

가

가

가

<sup>13)</sup>.

12)

가  
3,636KWh

1

1996

1

가

6,842KWh

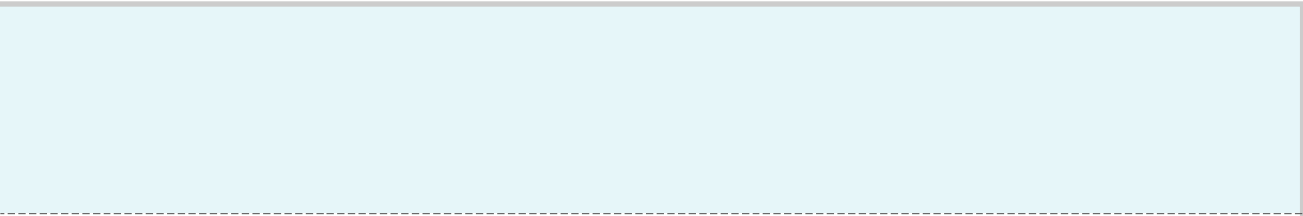
가

4,793KWh

가

13) 2003 8

가  
가



가

가

3.

2002

53,801MW  
29.2%

17

가

가

Russel Pittman

가

LNG

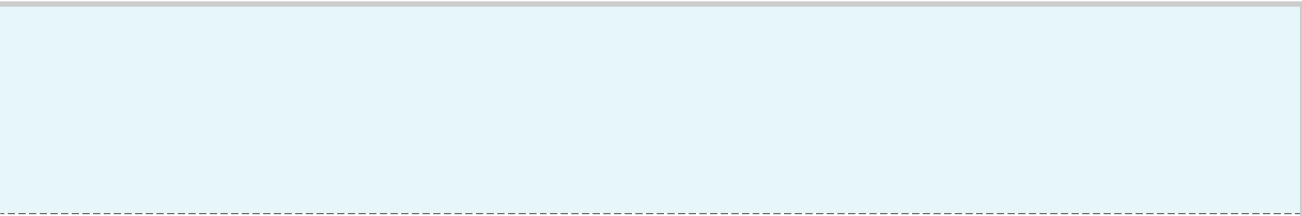
가

가

가

가





가 , . 가

(off-budget)

가 가

14)

가

가가 ,

가 .  
가

가

15)

가 , .

가

14)

15)

Porter 가  
가

가

( (2004) )

(2002)

Porter 가  
Porter 가



, 『 21 』 , 2002.  
 , 『 : 』 , minde.  
 , 『 』 93-07, , 1993.  
 . 『 』 , 2002.  
 , 『 Restructuring Power Pool 』 1998, pp. 52 ~ 54.  
 . 『 가? 』 『 』 8 1 , 2002.

- Allen, Daniel, Biewald, Bruce and Schlissel, David, "Generator Outage Increases: A Preliminary Analysis of Outage Trends in the New England Electricity Market," Synapse Energy Economics, Inc., Report Prepared for Union of Concerned Scientists, 2001.
- Chao, Hung-Po, Managing Risk in Electricity Market Design EPRI and Stanford University, 2002.
- Christensen and Green, W., "Economies of Scale in U.S. Electric Power Generation," The Journal of Political Economy 84, 1976. pp. 655 ~ 676.
- Kim, Hyunsook, "Transmission Capacity Effects on Market Inefficiencies in the California Electrical Network," Ph.D. thesis, University of Illinois at Urbana-Champaign, 2002.
- Joskow, Paul and Kahn, Ed, "A Quantitative Analysis of Pricing Behavior in California's Wholesale Electricity Market," The Energy Journal, Dec, 2003.
- Pittman, Russel, "Regulatory Reform : Lessons for Korea," Department of Justice, USA, 2003.
- Wilson, Robert, "Architecture of Power Markets," Econometrica, 2002.
- Wolak, Frank, "Lessons from the California Electricity Crisis," CSEM Working Paper 110, UCEI, 2003.
- Wolfram, Catherine, "Measuring Duopoly Power in the British Electricity Spot Market," American Economic Review 89, 1999, pp. 805 ~ 826.



가

3 2 , 3 1  
가

10MW 90MW  
가 가 1 .

가 가 가  
10MW 3 2 3 1

(counter flow) (net flow) 26.67MW가

(free riding)  
10MW 가

가

1.67MWh 95MW 가  
31.67MWh 가

$\$(1-0) \times 5 = \$5$  가 ,

$\$1/\text{MWh}$  가



(hspark@kipf.re.kr)

2005 1

25% 2%p 15% 13% , 1 27%

12% 10% 1).

2) 가

3).

가 .

2001 Paul O Neill 4)

가 가

\*  
 1) 10% 15% ,  
 2) 2003 8 5 , 2004 27%/15% 26%/13% 1  
 2%p  
 3) 2003 ( ) 12% 10%  
 4) Financial Times 2001 5 20



(3)

1. 가 가 . 10% 가 (effective tax burden) 가. 27% G-7 가 29.7% G-7 가 가 2001 1%p (2005 2%p 가 Reform 2000 ; 2000 ' 5 ' Tax 가 2004 20% .

6) 1990 ( ) 30% 34% 1993 ~ 1995 2%p 6%p .

27% G-7 가  
29.7% G-7 가

, 가 , ,

< 1> (2003 )

( : %)

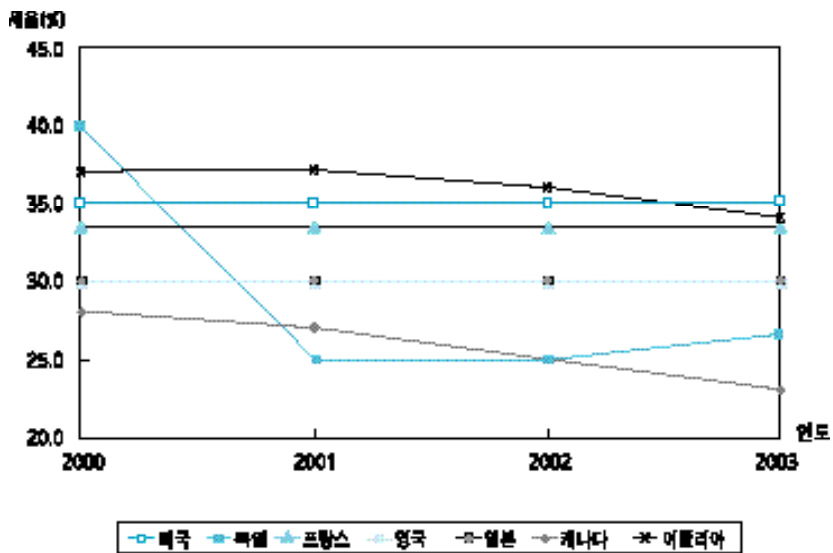
	27.0	35.0	30	33.33	26.50	30.00	23.00	34.00
	29.7	40.8	30	34.33	47.48	40.87	38.16	38.25

: IBFD, European Tax Handbook 2003.

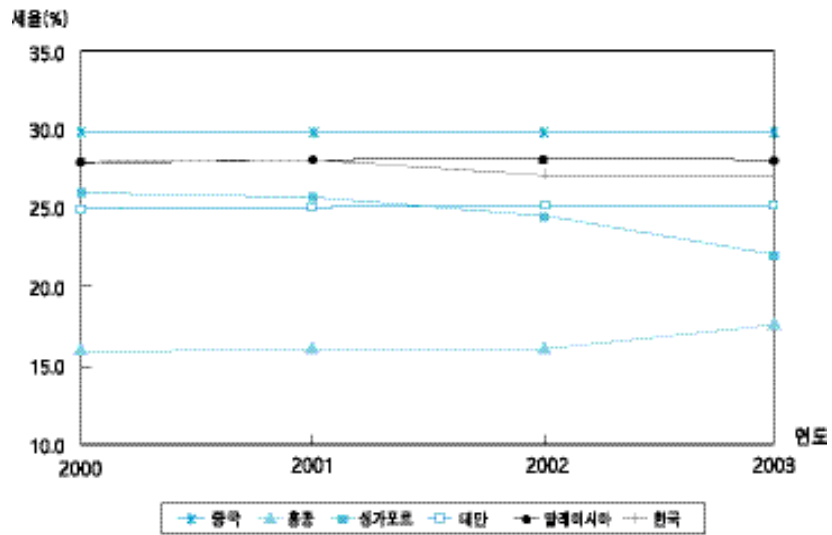
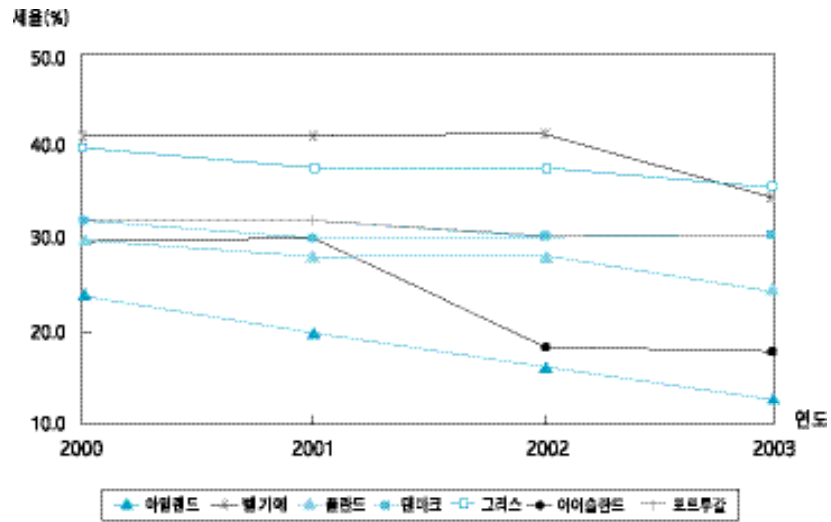
( : %)

				가		
	27.0	30	17.5	22	25	28
	29.7	33	17.5	22	25	28

[ 1]



(3)



17 OECD 가  
 가 가 (2001 )  
 OECD 가 2000

Jorgenson(1963)

가 가 가  
 가 가  
 가 가  
 가 가 ,  
 (effective  
 marginal tax rate) ' 가 가  
 7)8)

$$\text{한계유효세율 (EMTR)} = \frac{P - S}{P}$$

단, P(투자에 따른 세전수익률), S(투자자에게 귀속되는 세후 수익률)

17 OECD 가  
 , 가 가 (2001 )  
 OECD 가 2000  
 9) , 가 , 가

7) (cost of capital) King and Fullerton(1984), OECD(1991), Jorgenson and Landau(1993), Chennells and Griffith(1997), Devereux and Griffith(1998a, 1998b), Devereux, Lammersen and Spengel(2000), European Commission(2001), Devereux, Griffith and Klemm(2002), Devereux and Griffith(2003)  
 가 Hyun et al.(2002)

8) , 가 가  
 (12.5%), 가 (3.5%), (10%) 가  
 (2003) S가  
 P 가

9) , 가 가

10)

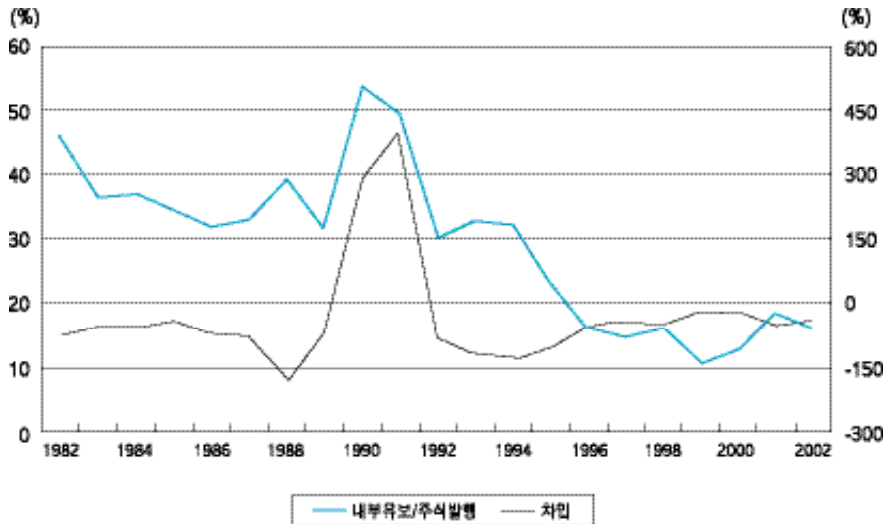
< 2 >

( : %)

	KOR	AUT	BEL	CAN	FIN	FRA	GBR	GER	GRE	IRE	ITA	JAP	NET	POR	SPA	SWE	USA
1998	13.2	27.8	25.6	24.8	16.1	22.9	21.1	36.4	29.9	6.6	14.9	36.9	24.3	21.9	26.4	16.1	23.8
1999	13.2	27.8	25.6	24.8	18.8	21.7	20.3	29.9	29.9	6.6	14.9	31.8	24.3	21.9	29.5	16.1	23.8
2000	15.1	17.4	25.6	24.8	19.5	20.1	20.3	29.9	29.9	6.6	12.0	31.8	24.3	20.3	29.5	16.1	23.8
2001	15.5	17.4	25.6	24.0	19.5	20.8	20.3	28.3	27.7	6.6	9.2	31.8	24.3	20.3	29.5	16.1	23.8
1998	-44.6	-27.0	-45.9	-36.5	-28.1	-53.2	-28.3	-84.1	-40.8	-7.1	-51.5	-44.9	-33.3	-42.1	-32.8	-28.1	-45.2
1999	-44.6	-27.0	-45.9	-36.5	-24.8	-50.0	-27.1	-77.4	-40.8	-7.1	-51.5	-36.9	-33.3	-42.1	-26.8	-28.1	-45.2
2000	-41.1	-27.0	-45.9	-36.5	-25.9	-46.0	-27.1	-77.4	-40.8	-7.1	-51.5	-36.9	-33.3	-38.7	-26.8	-28.1	-45.2
2001	-42.6	-27.0	-45.9	-35.1	-25.9	-42.1	-27.1	-36.8	-37.0	-7.1	-49.5	-36.9	-33.3	-38.7	-26.8	-28.1	-45.2

: (KOR), (AUT), (BEL), (CAN), (FIN), (FRA), (GBR), (GER), (GRE), (IRE), (ITA), (JAP), (NET), (POR), (SPA), (SWE), (USA)

[ 2 ]



: 가 , 가 ,

10) 1990 1991

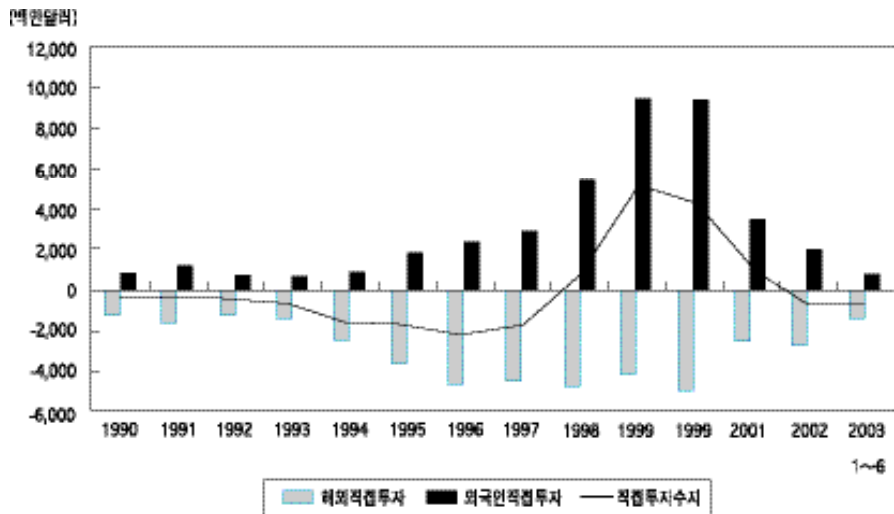
가 가

1998 2001  
가 2 3% 가  
가

2.

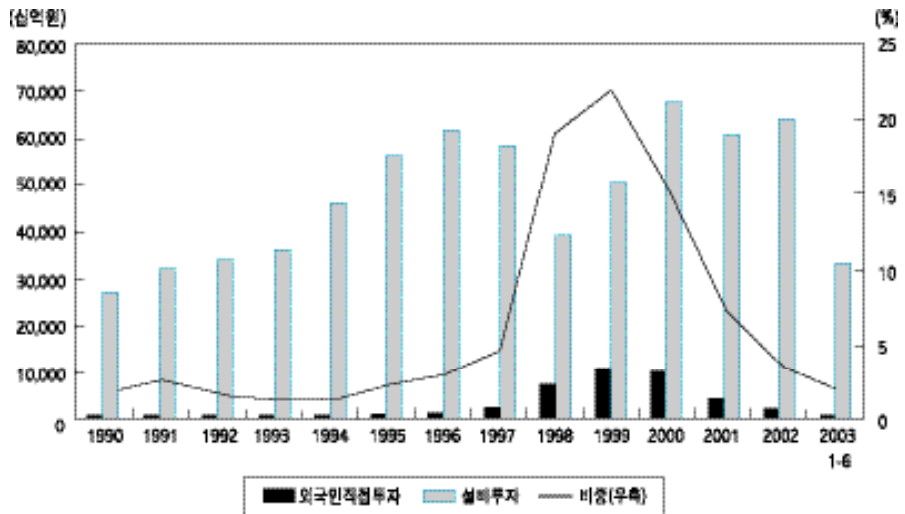
1998 2001  
가 2 3% 가  
가

[ 3 ]



(3)

[ 4 ]



(2003) 가 , 가 ,

가 가

가

7% 가 (0.4%), (1.3%)

(10.5%)

가  
가

< 3 >

( )

가 가

가

가

가

가, 가, 가

< 3> 가

		가			가		
		ETRS	ETRR	ETRG	ETRS	ETRR	ETRG
가		0.102	0.350	0.416	0.249	0.075	0.306
		0.105	0.222	0.304	0.223	0.030	0.246
					-0.059	0.226	0.181
		0.005	0.350	0.353	0.053	0.167	0.211
		0.018	0.350	0.362	0.0697	0.097	0.159

: ETRS( ), ETRR( ), ETRG( )

3.

가. :

2 가, 가 5  
24.2

< 4>

( : )

	1998	1999	2000	2001	2002		
( 가 )	67.8	75.7	92.9	95.8	104.0	11.3%	9.0%
( 가 )	-3.0%	11.6%	22.8%	3.1%	8.5%	15.6%	20.1%
	10.8	9.4	17.9	17.0	19.2		
	14.3%	-13.1%	90.9%	-5.1%	13.4%		
	15.9%	12.4%	19.2%	17.7%	18.5%		

: ,<sup>¶</sup> 2003. 6.

(3)

OECD 가 (3.5%) GDP 3.3%(2002 12.3%)  
( < 5> < 6> ) . 29 가 5  
가 가 11).  
가  
가  
가  
2002 ( ) 1998 1%p  
, 0.5%p 12). , 1998 ~ 2002  
25% 가 2000 ,  
, 2 가 가 .

11) 2003 가가 가가 (33.7 ), (24.2 ), (20.2 ) .  
12) 2001 1%p 2002 2003

가

가

2000

2 가 가 .

## &lt; 5&gt; OECD 가 GDP

( : %)

	1965	1970	1975	1980	1985	1990	1995	1999	2000	2001
Norway	1.1	1.1	1.1	5.7	7.4	3.7	3.8	3.1	5.9	9.4
Luxembourg	3.1	5.2	5.9	6.6	8.0	6.5	7.5	7.0	7.2	7.5
Finland	2.5	1.7	1.5	1.4	1.5	2.1	1.8	4.4	5.6	4.9
Australia	3.5	3.8	3.3	3.3	2.7	4.1	4.4	4.9	6.5	4.5
Czech Republic							4.9	3.7	3.8	4.2
Netherlands	2.6	2.4	3.2	2.9	3.0	3.2	3.1	4.2	4.2	4.1
New Zealand	5.1	4.7	3.5	2.5	2.7	2.4	4.4	3.8	4.0	3.8
Belgium	1.9	2.4	3.0	2.2	2.6	2.4	3.0	3.6	3.6	3.6
Ireland	2.3	2.5	1.4	1.4	1.1	1.7	2.8	3.8	3.8	3.6
Italy	1.8	1.7	1.6	2.4	3.2	3.9	3.6	3.3	3.2	3.6
Portugal						2.3	2.6	4.0	4.2	3.6
Canada	3.8	3.5	4.3	3.6	2.7	2.5	2.9	3.6	4.0	3.5
Japan	4.1	5.2	4.4	5.5	5.7	6.5	4.2	3.4	3.6	3.5
United Kingdom	1.3	3.2	2.2	2.9	4.7	4.1	3.3	3.7	3.6	3.5
France	1.8	2.1	1.9	2.1	1.9	2.3	2.1	3.0	3.1	3.4
Greece	0.4	0.4	0.7	0.9	0.8	1.6	2.0	3.2	4.4	3.4
Korea			1.4	2.0	1.9	2.7	2.5	2.1	3.7	3.3
Austria	1.8	1.5	1.6	1.4	1.4	1.4	1.5	1.8	2.0	3.1
Denmark	1.4	1.0	1.2	1.4	2.3	1.5	2.0	3.0	2.4	3.1
Switzerland	1.4	1.7	2.2	1.7	1.8	2.1	1.9	2.5	2.8	3.1
Sweden	2.1	1.7	1.8	1.1	1.6	1.6	2.8	3.0	3.9	2.9
Spain	1.4	1.3	1.3	1.2	1.4	2.9	1.8	2.8	3.0	2.8
Hungary							1.9	2.3	2.2	2.4
Turkey	0.5	0.8	0.8	0.7	1.5	1.3	1.5	2.4	2.3	2.4
Slovak Republic								2.8	2.9	2.2
Poland							3.0	2.6	2.6	2.0
United States	4.0	3.7	3.1	2.9	2.0	2.1	2.6	2.4	2.5	1.9
Iceland	0.5	0.5	0.8	0.7	0.9	0.9	1.0	1.8	1.9	1.2
Germany	2.5	1.7	1.4	1.9	2.1	1.6	1.1	1.8	1.8	0.6
Mexico										
Unweighted average :										
OECD Total	2.2	2.3	2.2	2.4	2.7	2.7	2.9	3.2	3.6	3.5
OECD America	3.9	3.6	3.7	3.2	2.3	2.3	2.8	3.0	3.2	2.7
OECD Pacific	4.2	4.6	3.1	3.3	3.3	3.9	3.9	3.5	4.4	3.8
OECD Europe	1.7	1.8	1.9	2.1	2.6	2.5	2.7	3.2	3.5	3.5
EU 15	1.9	2.1	2.1	2.1	2.5	2.6	2.7	3.5	3.7	3.6

: OECD, Revenue Statistics 1965 ~ 2002, 2003.

## &lt; 6&gt; OECD 가

( : %)

	1965	1970	1975	1980	1985	1990	1995	1999	2000	2001
Norway	3.8	3.3	2.8	13.3	17.2	9.0	9.2	7.6	15.2	21.7
Luxembourg	11.0	19.3	15.6	16.2	17.7	15.8	17.7	17.6	17.8	18.3
Australia	16.3	17.0	12.4	12.2	9.4	14.1	14.8	15.9	20.6	14.9
Japan	22.2	26.3	20.6	21.8	21.0	21.6	15.3	13.0	13.2	12.7
Korea			8.9	11.0	11.4	13.9	12.3	8.9	14.1	12.3
Ireland	9.1	8.8	4.8	4.5	3.2	5.0	8.5	12.4	12.1	12.1
New Zealand	20.7	17.8	11.8	7.8	8.3	6.4	12.0	11.1	11.7	11.3
Czech Republic							12.3	9.5	9.8	11.0
Portugal						8.0	8.0	11.7	12.2	10.8
Finland	8.1	5.3	4.0	4.0	3.7	4.7	4.1	9.3	11.8	10.6
Netherlands	8.1	6.7	7.7	6.6	7.0	7.5	7.5	10.2	10.1	10.4
Switzerland	7.1	7.6	7.8	5.8	6.8	7.6	6.6	8.4	9.0	10.2
Canada	14.9	11.3	13.6	11.6	8.2	7.0	8.2	10.0	11.1	10.0
United Kingdom	4.4	8.7	6.2	8.4	12.6	11.2	9.4	10.2	9.8	9.5
Greece	1.8	1.6	3.4	3.8	2.7	5.5	6.3	8.6	11.6	9.2
Italy	6.9	6.5	6.3	7.8	9.2	10.0	8.7	7.7	7.5	8.6
Spain	9.2	8.2	6.9	5.1	5.2	8.8	5.4	8.0	8.6	8.1
Belgium	6.2	6.9	7.4	5.1	5.6	5.5	6.7	7.9	8.0	7.9
France	5.3	6.3	5.2	5.1	4.5	5.3	4.8	6.6	6.9	7.6
Austria	5.4	4.4	4.3	3.5	3.5	3.6	3.7	4.1	4.7	6.9
Slovak Republic								8.0	8.3	6.8
Turkey	4.8	6.4	5.1	4.1	9.5	6.7	6.7	7.6	7.0	6.6
United States	16.4	13.2	11.4	10.8	7.5	7.7	9.4	8.3	8.5	6.5
Denmark	4.5	2.6	3.1	3.2	4.8	3.2	4.0	5.9	4.8	6.3
Hungary							4.5	5.9	5.7	6.1
Poland							7.7	7.4	7.6	5.8
Sweden	6.1	4.4	4.3	2.5	3.5	3.1	5.8	5.8	7.2	5.7
Iceland	1.8	2.0	2.6	2.5	3.1	2.8	3.0	4.7	4.9	3.2
Germany	7.8	5.7	4.4	5.5	6.1	4.8	2.8	4.8	4.8	1.7
Mexico										
Unweighted Average :										
OECD Total	8.8	8.7	7.5	7.6	8.0	8.0	8.0	8.9	9.8	9.4
OECD America	15.6	12.2	12.5	11.2	7.9	7.4	8.8	9.2	9.8	8.2
OECD Pacific	19.7	20.4	13.4	13.2	12.5	14.0	13.6	12.2	14.9	12.8
OECD Europe	6.2	6.4	5.7	5.9	7.0	6.8	7.0	8.3	8.9	8.9
EU 15	6.7	6.8	6.0	5.8	6.4	6.8	6.9	8.7	9.2	8.9

: OECD, Revenue Statistics 1965 ~ 2002, 2003.

가 가 , , 10% 가 ,  
 가 2001 1.7%, 2002 6.1% .

< 7 >

( : )

	1998	1999	2000	2001	2002		
	( )						
	329,687	387,773	857,807	793,128	896,402		
( 가 )	-1.0%	17.6%	121.2%	-7.5%	13.0%	28.4	28.7
<sup>1)</sup> ( 가 )	295,293	326,592	615,853	641,912	735,579	25.6	23.4
	-1.2%	10.6%	88.6%	4.2%	14.6%		
<sup>4)</sup> ( 가 )	74,861	85,523	166,402	172,789	197,334	27.4	25.2
	-1.0%	14.2%	94.6%	3.8%	14.2%		
<sup>2)3)4)</sup> ( 가 )	62,948	70,444	139,569	143,862	167,803	25.4	23.2
	-1.7%	10.2%	89.4%	2.4%	15.4%		
	( )						
/	25.4	26.2	27.0	26.9	26.8		
/	22.7	22.1	19.4	21.8	22.0		
/	21.3	21.6	22.7	22.4	22.8		
/	19.1	18.2	16.3	18.1	18.7		

- : 1) = - ,
- 2) = -
- 3) ( ) (12 3 ) , 8
- 4) 가 가
- : , 2003.

가 가 , , 10% 가 ,  
 가 2001 1.7%, 2002 6.1%

<sup>13)</sup> ,

13)

( : %)

1997	1998	1999	2000	2001	2002
11.4	9.8	9.8	9.7	10.0	10.1

14)

가

< 8 >

( : ,%)

	1998	1999	2000	2001	2002
	875,156	918,798	1,036,694	1,041,653	1,227,920
( 가 )	19.9	5.0	12.8	0.5	17.9
(A)	48,998	38,738	57,936	53,668	70,396
( )	5.6	4.2	5.6	5.2	5.7
(B)	-50,657	-49,226	-48,789	-43,319	-17,850
( )	-5.8	-5.4	-4.7	-4.2	-1.5
(C=A+B)	-1,862	-10,767	9,148	10,350	52,546
( )	-0.2	-1.2	0.9	1.0	4.3
(D)	-1,106	-9,184	-3,924	6,963	22,937
( )	-0.1	-1.0	-0.4	0.7	1.9
(C+D)	-2,967	-19,951	5,224	17,313	75,483
( )	-0.3	-2.2	0.5	1.7	6.1
	4,287	6,222	13,235	12,250	17,212
( )	0.5	0.7	1.3	1.2	1.4

: ,<sup>2</sup> a .

4.

가.

15)

가

14)

( : %)

1997	1998	1999	2000	2001	2002
396.3	303.0	214.7	210.6	182.2	135.4

15)

(2003)

가

1980

가

가

가

GDP 1%

0.0256 0.0466%p

가

가

<sup>16)</sup>

가

EU QUEST

GDP 1%

0.034 ~ 0.088%p

가

가

(2002)

(2003)

CGE

가

(2002)

20%

가

0.066%p

(2003)

0.013%p

25.7%

20%

가

가

가

가

16)

가

가

(3)

(내부유보 또는 주식발행으로 재원조달하는 경우)

$$\ln(\text{실질설비투자}) = -5.5016 - 0.7377 \cdot \text{한계유효세율} + 0.9374 \cdot \ln(\text{실질 GDP})$$

(50.3598) (51.3503) (214.832)

$$- 0.9524 \cdot \ln(\text{실질환율}) - 1.1234 \cdot \text{실질금리}$$

(86.2809) (15.1316)

(차입으로 재원조달하는 경우)

$$\ln(\text{실질설비투자}) = -2.4223 - 0.0295 \cdot \text{한계유효세율} + 1.2235 \cdot \ln(\text{실질 GDP})$$

(17.2424) (15.8051) (331.367)

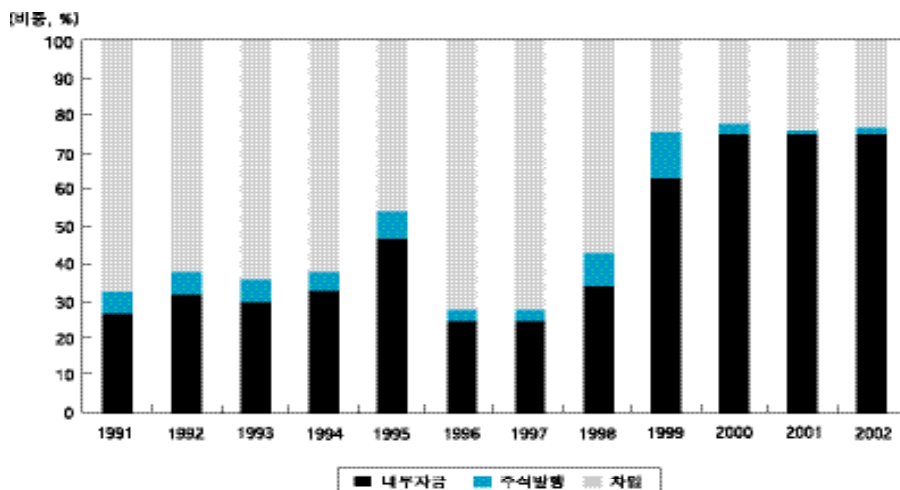
$$- 0.3084 \cdot \ln(\text{실질환율}) - 0.0949 \cdot \text{실질금리}$$

(18.0057) (20.3267)

[ 5 ]

가

[ 5 ]



가

가 1999 2000  
2003 1/4 3/4 가 1.2%

가 5% 가 5%  
([ 6] ).

1 가  
가 (time lag) 1 가

가  
가 (crowding-

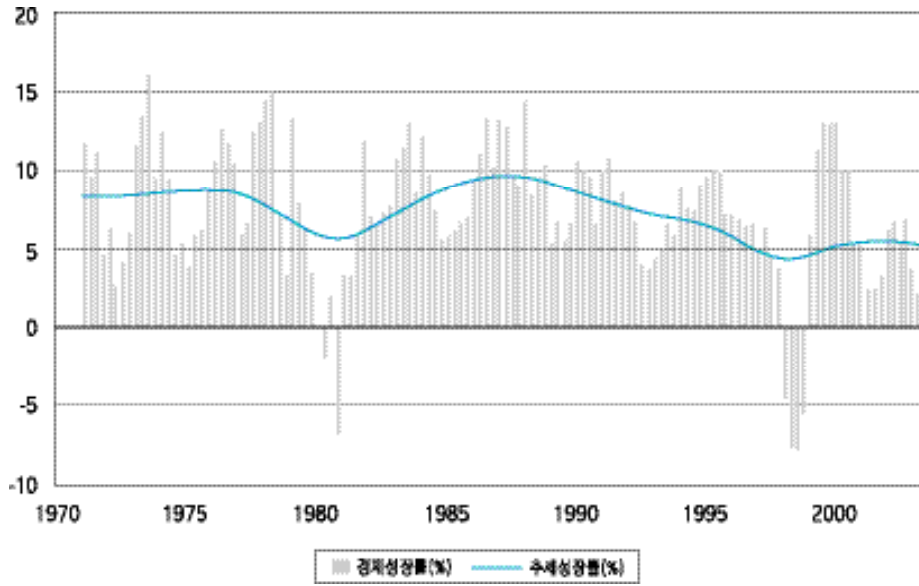
out effect)

17)

	1997	1998	1999	2000	2001	2002
(%)	5.0	-6.7	10.9	9.3	3.1	6.3
가 (%)	-8.7	-38.8	36.3	35.3	-9.6	6.8

(3)

[ 6 ]



11 , 295 , 60%  
action plan 10 , 2 ,

< 9> 1 2%p

	2.1%	9.6%	69.1%	19.2%
	0.5%	11.9%	55.7%	31.9%
	1.0%	11.2%	60.0%	27.8%

5.

가.

2%p  
 . 2003  
 1%  
 1.6<sup>18)</sup>  
 0.5%  
 , 가 7.4% , 0.5%

7.4%,  
 8,000  
 7.4%  
 1,600  
 가

0.5%  
 21.6  
 2%p  
 .  
 2003  
 가

27%  
 10%  
 33.4

18) (2002 ) 2001 ) 64 ( 2003 79.5  
 , 2%p 가 1.6 , 가가  
 19% 7,441 . 가가

(3)

가 ,

가

가

(2004 2008 )  
 가 7.4%  
<sup>20)</sup>

<sup>19)</sup> 2005  
 가

2005 2008 1.8 2.5 , 8.6  
 1.4 2.2 , 2005 2008

7.2  
 가 가 2007 2008 2005 2006  
 3 , 2007 2

GDP 0.2 0.4% 2008  
 7.2 ( GDP 0.8%p)  
 8.61 가 가 7.16  
 2005 2008 8.61 가 8.61  
 가 가 가  
 가 가 1.45

<sup>19)</sup> 2005  
<sup>20)</sup> 2006 2005 2%p 2005 1.8 0.9 2005 1.8

가 가

2005 2008 1.8 2.5 , 8.6  
 1.4 2.2 , 2005 2008

7.2

< 10 > 가

( : , %)

	2004	2005	2006	2007	2008	
	0.0	-1.81	-2.06	-2.27	-2.47	-8.61
	0.0	-1.8	-2.1	-2.3	-2.5	-8.6
	0.0	-0.5	-0.4	-0.3	-0.2	-1.5
	0.0	-1.4	-1.6	-1.9	-2.2	-7.2
( )	(0.0)	(-1.4)	(-1.6)	(-1.9)	(-2.2)	(-7.2)
/ GDP(%)	0.0	-0.2	-0.2	-0.2	-0.2	
( )	(0.0)	(-0.2)	(-0.2)	(-0.2)	(-0.2)	
가	0.0	1.4	3.0	4.9	7.2	
가 / GDP(%)	0.0	0.2	0.4	0.6	0.8	

:

30

“ , ”

가

가

가

가

(3)

6.

0.05%      147      55.1%

·      1      14%      96.7%      ·

·      ,      1      15%

·      12%

·      13%      가

·      10%      2%p      ·

< 11>      (2002      )

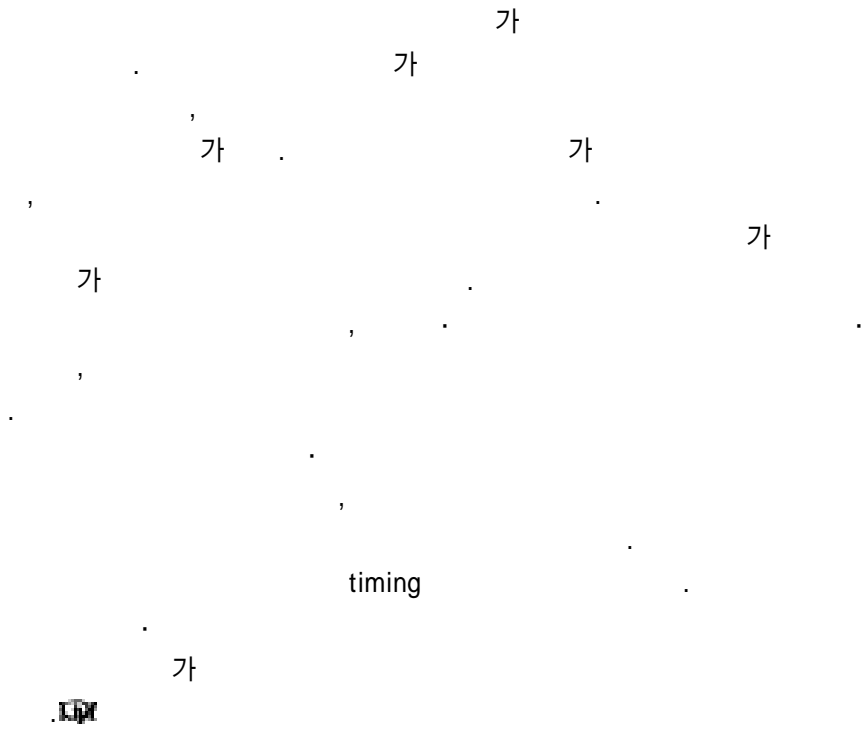
( : , , %)

		93,970 (34.6)	-	718 (0.4)
1	15	65,580 (24.2)	1,508 (0.2)	620 (0.4)
1 1	15	75,122 (27.7)	29,674 (4.0)	4,320 (2.5)
		140,702 (51.9)	31,182 (4.2)	4,940 (2.9)
1 10	27	31,337 (11.5)	83,876 (11.4)	16,024 (9.3)
10 100	27	4,686 (1.7)	127,427 (17.3)	29,067 (16.9)
100 500	27	511 (0.2)	107,506 (14.6)	26,556 (15.4)
500	27	147 (0.1)	385,587 (52.4)	95,044 (55.1)
		36,681 (13.5)	704,396 (95.8)	166,691 (96.7)
		271,353 (100.0)	735,579 (100.0)	172,350 (100.0)

: , 2003.



(3)



, [1] 2002; 2003.  
 . . . , [1] :  
 . . . [1] , 2003.  
 . . . . . , [1] :  
 . . . . . [1] 03-01,  
 , 2003.  
 . . . . . [1] [1]  
 , 2003. 8.  
 . . . . . , [1] [1] 02-14,  
 , 2002.  
 , [1] 2003 [1], 2003.  
 , [1] GCE [1] [1] 9 2 ,  
 , 2003, pp.135 ~ 182.  
 , [1] [1]  
 , [1] [1]

CBO, "The Incidence of the Corporate Income Tax," March 1996.

Chennells, L. and R. Griffith, "Taxing Profits in a Changing World," Institute for Fiscal Studies, 1997.

Devereux, M.P. and R. Griffith, "The Taxation of Discrete Investment Choices," Working Paper 98/16, Institute for Fiscal Studies, 1998a.

\_\_\_\_\_, "Taxes and the Location of Production: Evidence from a Panel of US Multinationals," *Journal of Public Economics*, 68(3), 1998b, pp. 335 ~ 367.

\_\_\_\_\_, "Evaluating Tax Policy for Location Decisions," *International Tax and Public Finance* 10, pp.107 ~ 126.

Devereux Michael, Rachel Griffith and Alexander Klemm, "Corporate income tax : Reforms and tax competition," *Economic Policy*, 2002, pp.451 ~ 495.

Devereux, M.P., L. Lammersen and C. Spengel., "The Effective Levels of Company Taxation in the Member States of the EU," Institute for Fiscal Studies, 2000.

(3)

European Commission, "Company Taxation in the Internal Market," Brussels: European Commission, 2001.

Hyun, Jin Kwon, Yunhi Won and Ilho Yoo, "Marginal Effective Tax Rates in Korea : 1960-1998," Korea Institute of Public Finance Working Paper 00-02, 2002.

IBFD, European Tax Handbook 2003.

Jorgenson, D.W., "Capital theory and investment behavior," American Economic Review 53, 1963, pp. 247 ~ 259.

Jorgenson, Dale and Ralph Landau, Tax Reform and the Cost of Capital, The Brookings Institution, Washington, D.C., 1993.

King, M.A. and D. Fullerton., "The Taxation of Income from Capital," Chicago: University of Chicago Press, 1984.

OECD, Revenue Statistics 2003 2003.



(www.kipf.re.kr)

. < >



[ ] , TCF

1 2004. 1. 29  
TCF ( , , )

가 가 TCF  
, 2015

5%

,  
,  
,

가

FTA

1 12 AIG(Australian  
Industry Group) 800

20%가

, TCF  
( )  
WTO

< TCF >

	2005	2010	2015	
25%	17.5%	10%	5%	,
15%	10%	5%	5%	,
10%	5%	5%	5%	, ,

[ ]

가

9 “  
25% 20%

PC

4% 가

”

PC

(IT)

DVD VCD

15 %

가

“

가

”

[ ]

24

가가

가가

가가

가가

(WTO) 가

WTO

[ ] -

10

2005

W 1 2 ( )  
4% 가

7%, 9.7% ,  
( ) 10 5,400

가

1%

2003. 12. 31

“ ( ) ”

” “  
 .  
 5  
 ”  
 “ 3.5% 7%  
 , \* .  
 9.7% 가 305 ” “  
 600  
 ”  
 “ 가  
 ” “  
 , , ”  
 “  
 가 ”  
 가 가  
 가  
 “  
 ”  
 “  
 ” “ ( 가 )  
 ,  
 ”  
 “ 가 ”

“ ”  
 “  
 가 ,  
 가 ”  
 11  
 [ ]  
 .  
 (CalPERS,  
 ) 2002  
 1,434 56.6% 812  
 410 (  
 28.6%)  
 133 (9.3%)  
 10 1,538 67.3%  
 1,035  
 ICI  
 . 2002 6 724  
 446  
 61.6% . 162 (

22.4%) , 10%

. 가

2001 3  
37%(  
24.18%,  
12.81%) 9 6,007

QPP  
1,165 37% 434  
389  
33.4%  
155 13.3%

60% 414  
11%

가 가 “

가가 ,

” “  
”

[美 - ] “ ... “ ”

(EU) (EC)가  
가

가

“ ”- 美“ ”

11

, EU ‘  
(The Stability and Growth Pact)’

EC

가

W.

3

가 ‘ 가’

가

IMF  
가

IMF

가

가

가 10

,

, ' . ' ,

' . ' (EMU)

가

(GDP) 3%

GDP 0.5%

,

,

2002

11

, ,

가

가가

2005

EC

,

가

EC가

가

.

(ECB)

EC

美 - , 가

가

. ' 가

가

가

EU

가

' ,

,

EC가

EC

,

EC

가

.

' .

,

가

.

가

EC

EC IMF

가

[ ] 2004 , 3

가), 47 6 ( 0.1%  
41 7 ( 0.1%  
) 3

36 5 가(  
0.4%)

( ) 719  
2004 GDP 1.4  
21.4%

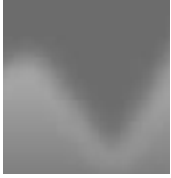
가  
가(4.2%) (-  
3.3%)  
(3.3%)

가  
. ( \*)  
9,053 (- 5.2%)  
12.5%

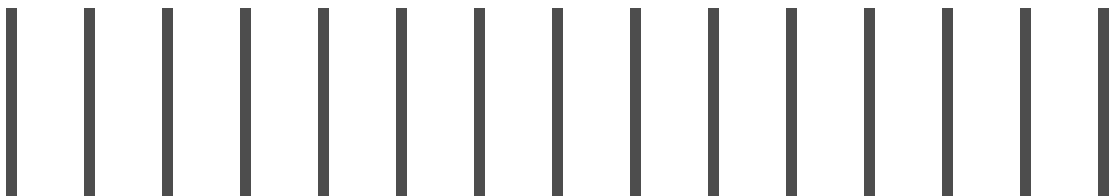
\* 1 ,

.

.



1. 2003 12  
2. 2004  
3. 2004 54.8%  
4. 2003





# 2003 12

2004 1 28

「2003 12

< >

## 2003 12

2003 12 161.1  
 12 4 36 ,  
 782 403  
 2003 1 12 2.1  
 2003 12 62.9  
 12 1 757 , KAMCO  
 4,136 1 6,208  
 2003. 1 12 9.1

2003 12 39.0%( 1.0%p 가)  
 2003 ( )  
 ) 21.9 2003.12 21.9  
 9.7 ( 9.7 )  
 12.2 ( 12.2 )  
 13.0 ( 13.0 )

1.

가.

(1997 11 2003 12 , : )

	42.2	15.2	20.0	4.2	20.5	102.1
	3.9	1.7	6.3	4.8	17.2	33.9
	14.1	-	-	6.3	0.3	20.7
	0.1	0.1	2.9	0.1	1.1	4.3
	60.3	17.0	29.2	15.4	39.1	161.0

(1997 11 2003 12 , : )

		34.0	13.7	-	14.4	24.6	86.8
2		2.7	0.2	17.2	-	1.5	21.6
		7.7	-	0.01	-	8.5	16.2
		15.9	3.0	-	0.4	1.8	21.1
		-	-	4.7	-	-	4.7
		-	0.2	7.3	0.6	0.2	8.3
		26.3	3.4	29.2	1.0	12.1	71.9
		-	-	-	-	2.4	2.4
		60.3	17.2	29.2	15.4	39.0	161.1

(1997 11 2003 12 , : )

		47.6	17.2	29.2	9.1	-	103.1
		-	-	-	-	39.0	39.0
		11.8	-	-	6.3	-	18.1
		0.9	-	-	-	-	0.9
		60.3	17.2	29.2	15.4	39.0	161.0

(1997 11 2003 12 , : )

1998		38.8	-	15.7	1.1	55.6
1999		25.2	5.7	4.6	-	35.5
2000		8.9	20.0	0.8	7.4	37.1
2001		29.2	5.1	0.2	7.0	27.1
2002		-	1.9	-	1.8	3.7
2 0 0 3	1/4	-	0.4	-	0.9	1.3
	2/4	-	0.3	0.1	-	0.2
	3/4	-	0.7	0.3	0.1	0.5
	4/4	-	0.2	0.1	-	0.1
		-	1.6	0.5	1.0	2.1
		102.1	34.3	20.4	4.3	161.0

\*

0.1



2.

가.

(1997 11 2003 12 , : )

	6.2	12.1	4.4		-		22.7
	1.6	ABS 4.8	AMC, CRC, CRV 1.9	10.6	3.0	10.3	32.5
	1.3	6.4		-			7.7
							62.9

(1997 11 2003 12 , : )

1998	-	-	-	-	2.4	-	2.4	
1999	1.4	2.9	-	4.3	9.7	0.04	14.0	
2000	1.0	2.9	2.2	6.1	8.9	0.005	15.0	
2001	1.4	1.4	1.3	4.1	5.3	-	9.4	
2002	1.2	0.9	0.5	2.6	3.8	6.6	13.0	
2003	1/4	0.3	1.0	0.1	1.4	0.7	2.2	
	2/4	-	0.7	0.2	0.9	0.4	2.2	
	3/4	0.9	0.6	0.1	1.6	0.6	2.2	
	4/4	-	1.7	-	1.7	0.7	2.5	
		1.2	4.0	0.4	5.6	2.4	9.1	
		6.2	12.1	4.4	22.7	32.5	62.9	

)

3. 2003

(2003 1 12 , : )

		165,605	161,947
-		130,000	130,000
( )		(97,371)	(97,371)
( )		(32,629)	(32,629)
-		32,536	31,947
( )		(30,062)	(29,519)
( )		(2,474)	(2,428)
	)	157,034	151,453
(2003 )		(97,371)	(97,371)
( )		(59,663)	(54,082)
	)	133,072	132,061
(2003 )		(121,926)	(121,926)
( )		(11,146)	(10,135)

)

< > 12

가. 2003 12 : 403

( : )

			1
			51
			782
	가		327
			403

. 2003 12 : 16,208

( : )

	230	10,757	545				11,072
	-	ABS 655	AMC, CRC, CRV 203	, , 1,428	1,850	, -	4,136
	-	1,000					1,000
							16,208



# 2004

2004 1 17

「2004

< >

12 30  
 2004 ( + 5% )  
 + )  
 GDP 1.0% (7.1 ) 2003  
 ( ) GDP 0.3% (1.9 )  
 가 \*  
 (22.5 ), (12.0 ) 54.8%)  
 GDP 0.5% ( 3.5 )

\* , , ,

< 2004 >

( : ,%)

	2003		2004
	172.0	174.3	185.3
	165.3	172.3	178.2
(A)	6.6	1.9	7.1
(GDP )	(1.0)	(0.3)	(1.0)
(B)	19.4	19.4	22.5
( ) (C)	13.0	13.0	12.0
(A-B+C)	0.2	4.5	3.5
(GDP )	(0.0)	( 0.7)	( 0.5)

【 1 】

< > 가  
 ( ) 가  
 < \* >  
 \* (2002.9) 2003  
 2006  
 (2003 13 , 2004 2006 : 12 )  
 2003 2006  
 가  
 ( )

【 2 】

IMF (GFS) , 가  
 가가  
 (2004 )  
 : , 17 , 5  
 : 44  
 . . .  
 ,

【 3 】

( , %)

	1998	1999	2000	2001	2002	2003		2004
(GDP )	18.8 ( 4.2)	13.1 ( 2.7)	6.5 (1.3)	7.2 (1.3)	22.7 (3.8)	6.6 (1.0)	1.9 (0.3)	7.1 (1.0)
. (GDP )	24.8 ( 5.6)	20.4 ( 4.2)	6.0 ( 1.1)	8.2 ( 1.5)	5.1 (0.9)	0.2 (0.0)	4.5 ( 0.7)	3.5 ( 0.5)



2004

54.8%

2004 1 12

「2004

54.8%

< >

1 12 ( )  
)

2004

(

, 1/4

가

가

159.1 ( . . )

( : , %)

	2004. 1/4			2004
	15.9	14.4	12.1	13.2
	1.2	2.3	4.1	3.2
	2.0	4.4	8.7	6.5

\* : 2004 (2003.12.11)

( : , %)

	2004	1/4		2/4			
2004	159.1	42.7	26.9	44.5	27.9	87.2	54.8
(2003 )	(157.2)	(39.3)	(25.0)	(44.0)	(28.0)	(83.3)	(53.0)
	119.1	33.9	28.4	32.6	27.4	66.5	55.8
	21.0	4.4	21.2	6.1	29.0	10.5	50.3
	19.0	4.4	23.2	5.8	30.7	10.2	53.9

: , (66 ) , 18 , 12

54.8%(2003 53.0%) 87.2  
 , 1/4 26.9%(2003 25.0%)

(87.2 ) 3.9 가

가

가

1 20 ,

1

: 9 , 29 4.2 (

2.7%)

: 2003 10.7 2004 7.6

, ' ,

1,000 1 20

182

.

.

.

, 가 SOC R&D

,

가 1/4

가

1/4 15

2003 ' ' (3.7 )

가 (2004 6 )



# 2003

2004 1 14 「2003 < >」

2003

5,338 3,395

「 가 」

가

\* 5,338 3,395  
가 가  
288 3

2003

5,338  
3,395  
「10.29」

10.29

( : , )

	2,224	1,977	
( 9.18)	(448)	147(114)	( ) 11.3
(11.27)	695	74	
( )	560	1,334	-
( )	654	258	-
(11.13)	231	156	
(12.10)	84	8	

\* 11 3

\* 2,224 1,977

「5·23」

\* 10 3,114 1,418

(11.3 )

\* 1,379

, 39  
, 182

가

가

2002 가

18,937 5,162 가

(4.30)

\* 2002. 4. 4 15.1%

2003. 4. 30 가 가

1,536 929 , (12.1)

\* 4.30 23.3% , .

81.3%

288

8,256

\* 3 1,013

903

34,200

3,119

\* 23,670 89

3

가가

\* , 11.11

2004

가



「5.23」가  
 , 5,338  
 3,395  
 \*  
 가「5.23」  
 가  
 .....(603 )  
 - 612 603  
 .....(284 )  
 - 209  
 284 .....(645 )  
 -  
 645 ,  
 .....( 30 )  
 - 810  
 , 30  
 122

「9.5」  
 8  
 .....(261 )  
 - 가 448  
 261  
 「10.29」  
 ( ).....(156 )  
 - 가  
 231  
 (11.13 12.24)  
 - ( ).....(74 )  
 - 가  
 695 (2003.11.22004.1.9)  
 ( ).....( 8 )  
 - 가 84  
 (2003.12.102004.1.8)



.....(1,334 )  
 가 .  
 .  
 .  
 .  
 .  
 .....1,379  
 (172 ) ( )  
 (20 ) ( )  
 (75 ) ( )  
 (18 ) ( )  
 1,094  
 ... 39  
 ..... 9  
 ..... 4  
 ..... 26  
 .....182  
 2003 ..... 107  
 ..... 75  
 가  
 가

4. 30  
 2002 가 (4.4) 가  
 - 2002 9  
 - 18,937 5,162  
 - 2002. 4. 4. 15.1%  
 12.1  
 4. 30  
 . 가  
 - 가  
 - . .  
 1,536 (8.2%), 929  
 (18.0%)  
 - 4. 30 23.3%( 47 )  
 . 81.3%  
 .  
 가.  
 5 12 288  
 4,004 8,256  
 가

3  
 1,013  
 (41 ) (72 )  
 (10 )  
 120 , 15 )  
 13  
 903  
 「10·29 」  
 (2004. 3 )  
 -  
 2 (6 ·11 )  
 34,200 1,564  
 3,119  
 가 50% 40%  
 ( 1.8 )  
 -  
 23,670  
 89 1,094  
 1  
 (2004. 1 )  
 - , 1 3  
 60%  
 - 15%p  
 2  
 , 2004

3 가가  
 가  
 「 가 」  
 - 11. 11  
 가  
 「10·29 」  
 (2004. 3 )  
 -  
 (2003. 11 )  
 가 50% 40%  
 ( 1.8 )  
 -  
 1  
 (2004. 1 )  
 - , 1 3  
 60%  
 - 15%p  
 2



•

•

1.

2.

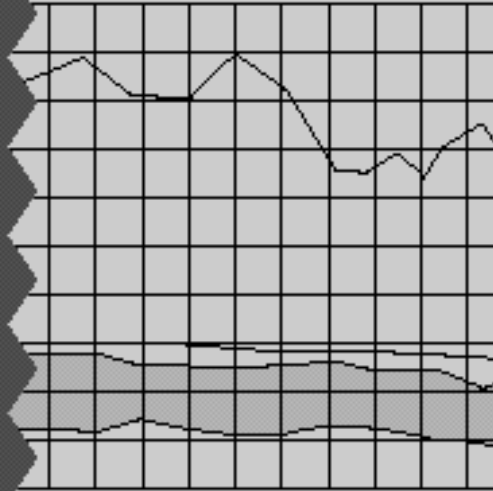
3.

4.

5.

( )

•



1.

( : )

	1998	1999	2000	2001	2002
	77,305	105,419	131,440	136,208	145,999
	77,305	73,689	95,147	97,183	101,676
	49,673	47,988	51,692	48,643	55,512
	27,257	25,386	43,286	48,397	45,980
	375	315	169	143	184
	-	31,730	36,293	39,025	44,323
가가	-	21,165	26,408	28,120	30,267
	-	6,541	6,512	7,343	9,105
	-	1,891	936	1,593	2,013
	-	311	338	317	328
	-	484	537	697	483
	-	1,134	1,388	833	2,127
	-	204	174	122	-

: ,  
: ,

2.

( : )

		1998	1999	2000	2001	2002
		77,305	105,419	131,440	136,208	145,999
		77,305	73,689	95,147	97,183	101,676
		72,629	70,269	89,678	90,370	96,426
		22,153	21,204	22,921	17,714	14,887
		12,294	14,211	15,176	16,031	18,263
		3,564	6,263	8,638	11,258	14,644
	가	8,730	7,948	6,538	4,773	3,619
		6,044	6,532	16,265	18,022	18,239
		12,240	12,282	16,322	23,741	31,550
		12,252	10,495	9,691	3,529	2,729
	( )	7,646	5,545	9,303	11,333	10,758
		4,676	3,420	5,469	6,813	5,250
		-	31,730	36,293	39,025	44,323
	가가	-	12,318	14,935	13,479	13,618
	가가	-	5,561	5,928	5,920	5,023
		-	8,429	7,392	8,512	10,665
		-	2,133	2,437	1,969	2,938
		-	3,289	5,601	9,145	12,079

: ,  
: ,

3.

( : )

	1998	1999	2000	2001	2002
	77,305	105,419	131,440	136,208	145,999
1.	42,384	61,285	66,512	62,044	70,403
	26,207	27,451	28,316	15,572	13,161
	12,058	12,960	16,288	23,964	33,638
	4,119	20,874	21,908	22,508	23,604
2.	18,578	25,713	41,629	45,898	48,204
	2,860	4,901	8,257	12,671	18,407
	3,623	4,642	10,087	12,381	9,568
	3,703	4,278	9,792	9,111	9,527
SOC.	5,409	5,177	4,814	4,347	3,066
	2,312	1,684	2,744	3,813	3,103
	-	3,001	4,386	1,812	1,161
	671	2,030	1,549	1,763	3,372
3.	11,797	13,260	17,256	21,760	20,881
	6,288	3,026	3,169	5,949	3,797
	-	1,525	2,004	2,359	3,143
	5,509	8,176	11,649	12,932	13,535
	-	533	434	520	406
4.	-	3,808	4,457	4,827	5,565
5.	-	1,089	1,282	1,320	648
6.	4,546	264	304	359	298

: , P a .

4.

( : , )

1997	1,163	236	927	999	555	68,657	444	164
1998	2,157	164	1,993	1,800	1,013	110,505	787	357
1999	4,212	357	3,855	3,286	1,661	139,131	1,625	926
2000	7,621	926	6,695	5,604	1,912	258,610	3,692	1,017
2001	8,069	1,017	7,052	7,028	2,357	277,872	4,671	1,041
2002	8,096	1,041	7,055	7,084	3,552	264,645	3,532	1,012

: ,<sup>P</sup> a .

5.

( )

( : , )

1997	12,840	4,233,768	9,573	3,466,234	3,267	767,534
1998	58,358	7,475,467	50,789	6,278,363	7,569	1,197,104
1999	23,443	5,877,362	17,766	4,725,091	5,677	1,152,271
2000	27,343	5,866,718	15,166	4,484,856	12,177	1,381,862
2001	36,946	3,887,004	19,343	2,624,573	17,603	1,262,431
2002	41,525	3,238,903	16,610	2,301,390	24,915	937,513

: ,<sup>P</sup> a .



가

2004 1 30

가  
' 가

3  
, 가

가

가

가

가

(IT)

가

가

가

가



