

재정포럼

Monthly Public Finance Forum

WTO

‘ ’

OECD 가

• 2001년 1월 15일 발행 • 제55호 • 1996년 5월 31일 등록 • 라7859 • 발행처 한국조세연구원 • 139-774 서울특별시 송파구 가락동 79-6 • 전화(02)2189-2130-2 • 월간

2001년 1월호 (동권 제55호)

한국조세연구원

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

	2	/ 全承勳
	6	WTO / 李明憲
	21	/ 金裕燦
	36	' , / 玄鎮權
OECD 가	46	/ 李章揆
	54	/
	56	/ 李濬
	60	
	62	
	67	2001
	74	2000 가
	76	2001
	80	2001
	83	
	92	가가



全承勳 /

가 .
3

‘ , ‘ , ’

‘ , ’

‘

,
,
.



가 가 .

,

.

가 .

,

(response)

가

.

가

.

,
,

.

,
,

4

3

1997

34%

.

.

, 가 가

가 .

,

.

가 .

.

가?


가 .

.

가 .

가

,



1. WTO

李明憲 /

2.

金裕燦 / KPMG

3.

玄鎮權 /

WTO



李明憲

(moseslee@kipf.re.kr)

가

After that, there will be seven years of famine, and all the good years will be forgotten, because the famine will ruin the country. (Genesis 41:30)

WTO

(multifunctionality)

(food security)

가

가

가

1) 「

가

(飽食)

. 1997 1

2,956 kcal¹⁾

2,200kcal

가

가 (非常) 가 가 FAO

, WTO

가

(food security)²⁾

FAO

(food

insecurity: 가)'
가

,가 ,
가

2) food security

가 가

가

가

)
food security가
가

가

food security

가 가

가

(1)

WTO

가

, WTO

가

가

(4 1)

3)

가

()

(Total Aggregate

Measurement of Support: Total AMS)

가 (6),

가

가

2 3

가

2 4

(sections of the population)

3)

가 가 가 가 가

가 가 가 GATT (11 1), 가 11 2

(a)

가

가

12

, GATT 11 2(a)

12)

가 (as far in advance as practicable)

(恣意)

가

가

가

(1)

WTO

4)

1.

80 , 2050 94 60 2025
 , 가
 가
 30% 1 가
 가

4) Japan and Korea
 (2000), Norway(2000),
 OECD(1998c)

1960~63 9.2 1992~94 19.3 , 가 가
 가 , (灌溉)
 (施肥)

OECD(1998a), OECD
 (1998b), Shapouri and
 Rosen(1999)

가 , 1990

5) (2000),
 p.15

3.5% 가 1985 1998 1965 20
 5) , 1980 342kg/ 0.9% 가
 1993~95

3.

, 가
 . , 가
 . 가 (spike) 가
 가
 , 가
 . 가
 가
 가
 가
 , .
 . , 가
 가
 가
 가
 , , 가
 , , 가
 , , 가

4.

, ,
 . '2' '3'
 가
 가
 , 가 가
 . 가
 가

1999

가
2010

6가 , () ,
() ,

< 1>

(: %)

	1997	1998	2010
	99	95	96
	103	100	100
	9	9	12
	7	5	14
	99	100	97
	83	80	84
	3	3	5
	14	15	21
	86	84	87
	53	49	51
	112	98	101
	66	66	65
	35	34	37
	71	71	75
	56	55	61
	36	35	38
	62	61	73
	68	67	73
	96	96	98
	29	32	34
	89	93	96
	41	40	45
1)	71	70	74
2)	62	59	62
	28	27	30
3)	25	25	35

: 1) 2010 가 1997 가

2) , , ,

3) , 가 (TDN)

: (2000)

90% 가
 가
 1980 500 , 1990 1,000
 1,500 1999
 28 가(30%), 20
 < 2>

(: %, ,)

	1970	1980	1990	1991	1993	1995	1997	1998	1999
	80.5	56.0	43.1	37.6	33.8	29.1	30.4	31.4	29.4
	93.1	95.1	108.3	102.3	96.8	93.6	105.0	104.5	96.6
	106.3	57.6	97.4	74.3	74.9	67.0	49.3	56.8	66.6
	15.4	4.8	0.05	0.02	0.03	0.3	0.2	0.1	0.1
	86.1	35.1	20.1	19.4	13.8	9.9	8.6	9.4	9.1
	18.9	5.9	1.9	2.2	1.4	1.1	0.9	1.1	1.0
	86.2	69.6	70.1	64.1	61.3	55.7	58.0	57.6	54.2
1)	96.4	87.3	107.5	100.0	95.4	88.5	100.9	101.6	96.7
	85.0	73.6	76.2	66.9	66.4	60.0	63.6	64.9	-
	2,115	5,501	10,070	11,184	12,352	14,492	14,903	13,395	14,903
	202	1,020	1,639	1,573	1,754	2,259	2,788	2,075	1,928
	-1,149	-4,787	-4,828	-9,655	-1,564	-10,061	-8,452	39,031	23,933

: 1)

: () , ()

< 3>

(: , %)

	1970	1980	1990	1991	1993	1995	1997	1998	1999
(A)	1,843	2,179	3,657	3,831	4,011	3,119	2,418	2,198	2,147
(B)	8,825	12,596	16,282	17,467	18,336	19,530	19,814	19,469	19,829
(C)	6,863	6,860	6,302	6,285	6,128	6,127	6,021	5,894	6,060
A/B	20.9	17.3	22.5	21.9	21.9	16.0	12.2	11.3	10.8
B/C	26.9	31.8	58.0	61.0	65.5	50.9	40.2	37.3	35.4

: ,

(1)

< 4 > 가

가 (: /)

1990

1985	295.96	138.91	113.50	109.19	216.05
1988	386.22	147.17	108.15	118.12	286.88
1989	369.18	172.44	112.42	124.08	258.92
1990	335.03	130.87	109.18	120.77	227.75
1991	379.19	135.95	107.65	118.65	221.29
1992	402.23	164.51	104.30	121.07	221.31
1993	394.10	140.22	102.32	112.49	240.37
1994	499.38	146.16	106.44	114.57	240.27
1995	417.95	174.29	119.40	139.15	235.21
1996	468.13	187.86	158.84	160.77	288.20
1997	420.92	153.10	118.41	130.27	291.54
1998	430.70	119.90	102.66	101.59	234.33
1999	500.56	122.06	92.10	100.88	185.90

: (2000),

1990

(< 3 >

). 1990

20%

1990

FAO

15%

10.8%

1990

65%

1990

35%

1990

가

. < 4 >

가

가

, 10

- , 「 , 2000(<http://www.krei.re.kr/KREI/korean/world/world.htm>).
- , 「 , 1997.
- , 「 , 1994.
- , 「 , 2000.
- FAO, Food Supply Situation in Indonesia, 2000a.
- FAO, The State of Food Insecurity in the World 2000, 2000b.
- Nord, M., K. Jemison and G. Bickel, "Prevalence of food insecurity and hunger by state, 1996 - 1998," USDA, 1999.
- OECD, "Food security and agricultural trade: prepared by the United States," COM/AGR/CA /TD/TC/WS(98) 116, 1998a.
- OECD, "Food security and agricultural trade: Emerging policy issues: prepared by ABARE, Australia," COM/AGR/CA/TD/TC/ WS(98) 114, 1998b.
- OECD, "World food security and agricultural trade: prepared by Keiji Ohga, University of Tokyo," COM/AGR/CA/TD/TC/WS(98)105, 1998c.
- OECD, "The impact of further trade liberalisation on the food security situation in developing countries," COM/ AGR/ TD/ WP(2000)93, 2000a.
- OECD, "The possible effects of trade liberalisation on the world rice market and on the food security situation: prepared by Japan," AGR/CA /APM/CFS (2000)3, 2000b.
- Ritchie, M. and K. Dawkins, "WTO and food security - what is at stake," 1998 (<http://www.iatp.org/foodsec/library>).
- Saphouri, S. and S. Rosen, "Food security assessment: why countries are at risk," Agricultural Information Bulletin No. 754, 1999.



金裕燦 (KPMG , yuchankim@kpmg.com)

Bruehler

1.

가. Bruehler

2001 1 1

1998 12

Bruehler

가

2000

1 1

2001 1 1

1999 4

Bruehler

1999 12

2000 2 9

2000 5 18

(Bundestag) 1

(Bundesrat)

(Vermittlungsausschuss)

2000 7 14

(2)

가

2.

가.

가

37.5 %

가

48%

가 (Vollanrechnungssystem: Full integration system)

가

(

II). 가

(Halfeinkuenftverfahren: Half income method)

EU

가

가

(3).

가

가
가

(Organschaft: fiscal unity)

(3).

1.

40% 30% 2001
25% 2001
2005
15%, 42%가
13,500 2001 14,000 , 2005
15,000 가

< 1>

(: %)

	1999	2000	2001	2005()
()	40	40	25	25
()	30	30	25	25
()	23.9	22.9	19.9	15
()	53	51	48.5	42
	13,000	13,500	14,000	15,000

(2)

가 ,가 ,
가 (DM)

가

2.

가.

가 . 가

가 2001

(3) .

가

가

가

가

' vEK System(

1)

가 ()

가

(Progressionsvorbehalt :
reservation of progression)

: EK45, EK30, EK04)'

1) 가

가 가

32b

1)

(2)

2) 가

가

가 . 3)

가 . 1

3,000

6,000

12,000

(Organschaft: fiscal unity)

4가 ,

(Gewinnabfuhrungsvertrag: loss-pooling-agreement) 4가

가

4

가

가

2가

3.

가.

가

2002 ()

가 ,가 가
가1999 가 가

DAX 가 .

2002 ()

가 가 .

1

1)

1

25%

)

(

(2)

가 17 가
10% 1% 10%
10% 1% 1
1% 1%
1%

< 3 >

	1	1		1	1		
	1%	1%	1%	1%			

2)

1999

2000

16

가

60,000

100,000

1

4.

가

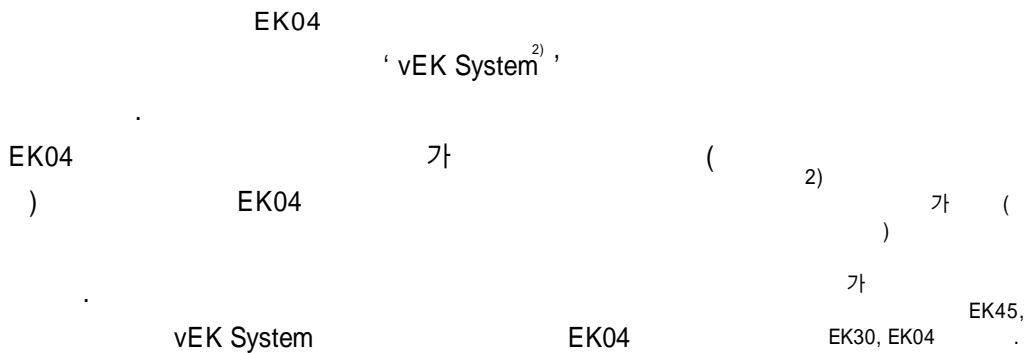


5.

가.

3:1 1.5:1
(Holding company)

가
9:1 3:1



(2)

가 account: Einlagekonto (EK04) capital increase
2001 가 EK04
2015 vEK(가)
가
1.
가.
가 ,
(2).
가 (2
)
)
.
.
.
.

가

2.

가

2000
가 , 2001
가 가 2000
가 2000
2001 EK45
가
가

EK04
EK04
가 ()
EK04

가

(2)

16 가

가 .

100%

가 100% 가

3.

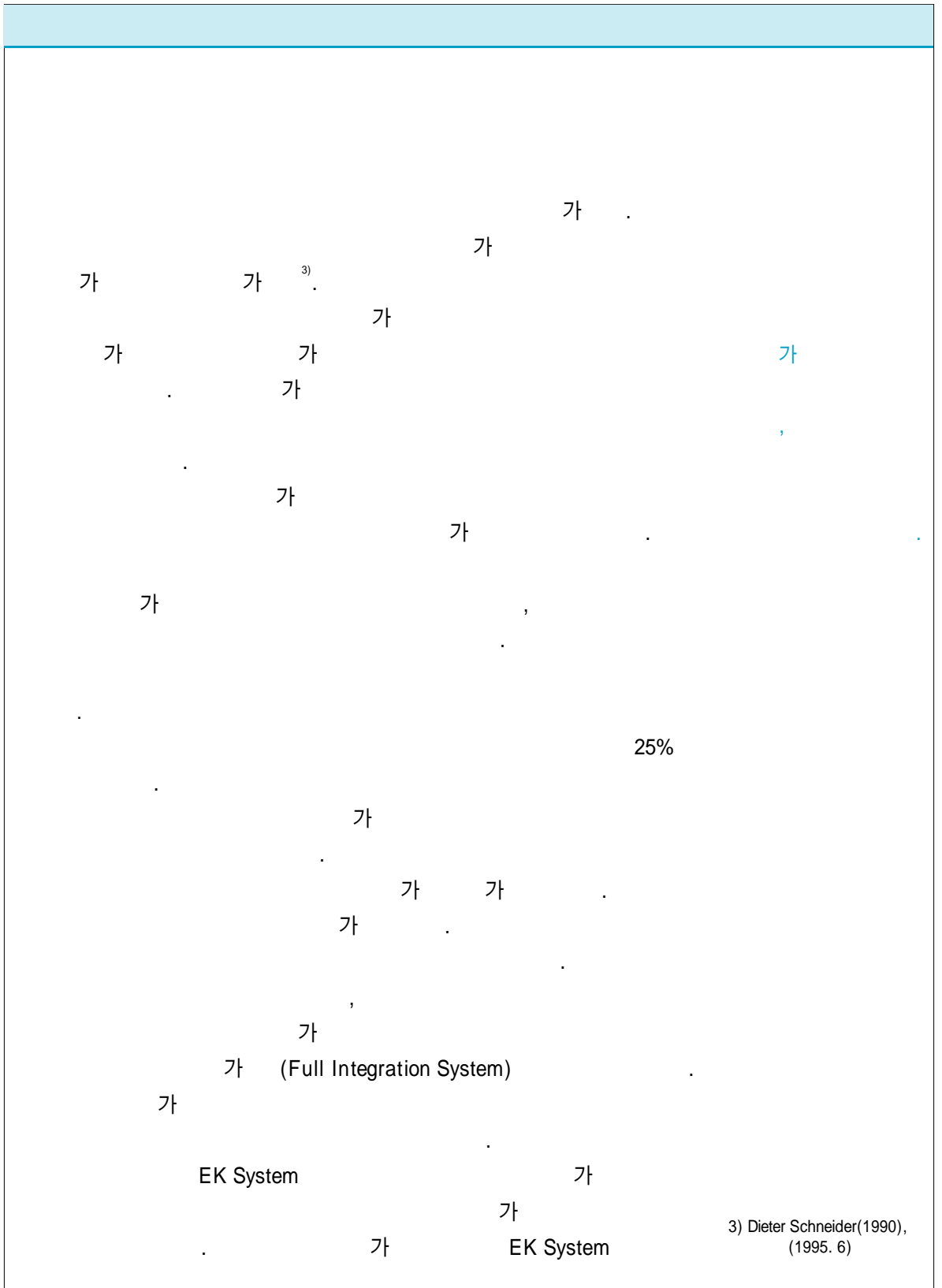
가.

가

가 가 가 가 가 가

가 가 가 가 가

가 가 가 가 가



(2)

EK System

가

가

가

가

가1

15
15
가

가
1%

가
가

가

,

17
10% 1%

가

가

가


가1

가
)
 가

, 「 2 1 ,
 , 1995. 6.

Bernd Erle and Thomas Sauter, Reform der Unternehmensbesteuerung,
 Koeln, 2000.

Dieter Schneider, Investition, Finanzierung und Besteuerung, Wiesbaden,
 1990.

Wolfram Scheffler, " Der Einfluss der Steuerreform auf die Finanzierung
 von deutschen Kapitalgesellschaften, "Betriebsberater, Nov. 30,
 Heidelberg, 2000. 

가 .가

‘ ’

Compliance Measurement Program; TCMP (Taxpayer)’

TCMP 가 TCMP

TCMP

1. TCMP

TCMP

(research division) 1962

가

TCMP , 1973

3

TCMP

1980

5

(stratified random sampling)

가

(strata)

, 1979

(3)

, TCMP

500

가

, TCMP

가

가

가

가

가

가

, TCMP

가

TCMP

TCMP

가

가

TCMP

TCMP

가 3

3

, TCMP

5

TCMP , 1985 DIF
 TCMP 1,096 ,
 4,200 가 TCMP
 , 8,600 , 1 2,800
 . 1985 (36 1,700) DIF ,

< 1 > TCMP (1985) : 7 12 DIF
 (: %)

1.2	2.4	3.6

: Roth, et al.(1989)

2.

TCMP .
 TCMP , 가
 Probit

Function 가 가 ,
 Discriminant Index Function(DIF) .

DIF가 가 ,
 ,
 가 가

DIF 가 가 .
 , DIF 가 가

. DIF
 DIF , 7 12

(3)

DIF

DIF

DIF

가

60 70%

DIF

가

DIF

60 70%

가

3.

TCMP

TCMP

가

가

< 2>, < 3>, < 4>

< 2> 1988 TCMP

40%

< 3> 1992

가

가가

17.3%

< 4>

가

1%

가

5%

< 2>

(1988)

(: %)

40	53	7

1% 가

: Roth, et al.(1989)

< 3>

(1992)

(: %)

	2.4
	2.4
	12.5
	3.2
	2.4
	0.9
	1.1
	1.0
	0.5
	0.5
	0.5
	0.6
	0.5
	1.3
	17.3

: IRS(1996)

4.

(experimental data),

TCMP

가

가

. TCMP

(3)

TCMP

< 4 >

(: %)

	1985	1988
	0.6	0.9
	2.5	2.3
	9.9	7.8
	4.6	0.8
	6.1	13.3
	2.3	4.0
	16.9	6.9
	5.0	4.2
	13.8	7.2
	22.5	28.0
	37.2	24.9
	35.0	32.3
	72.8	81.4
	31.3	32.2
	17.0	17.2
	2.6	7.5
가	4.0	2.0
	4.2	4.4
	4.8	4.5
	26.2	40.2

: IRS(1996)

TCMP

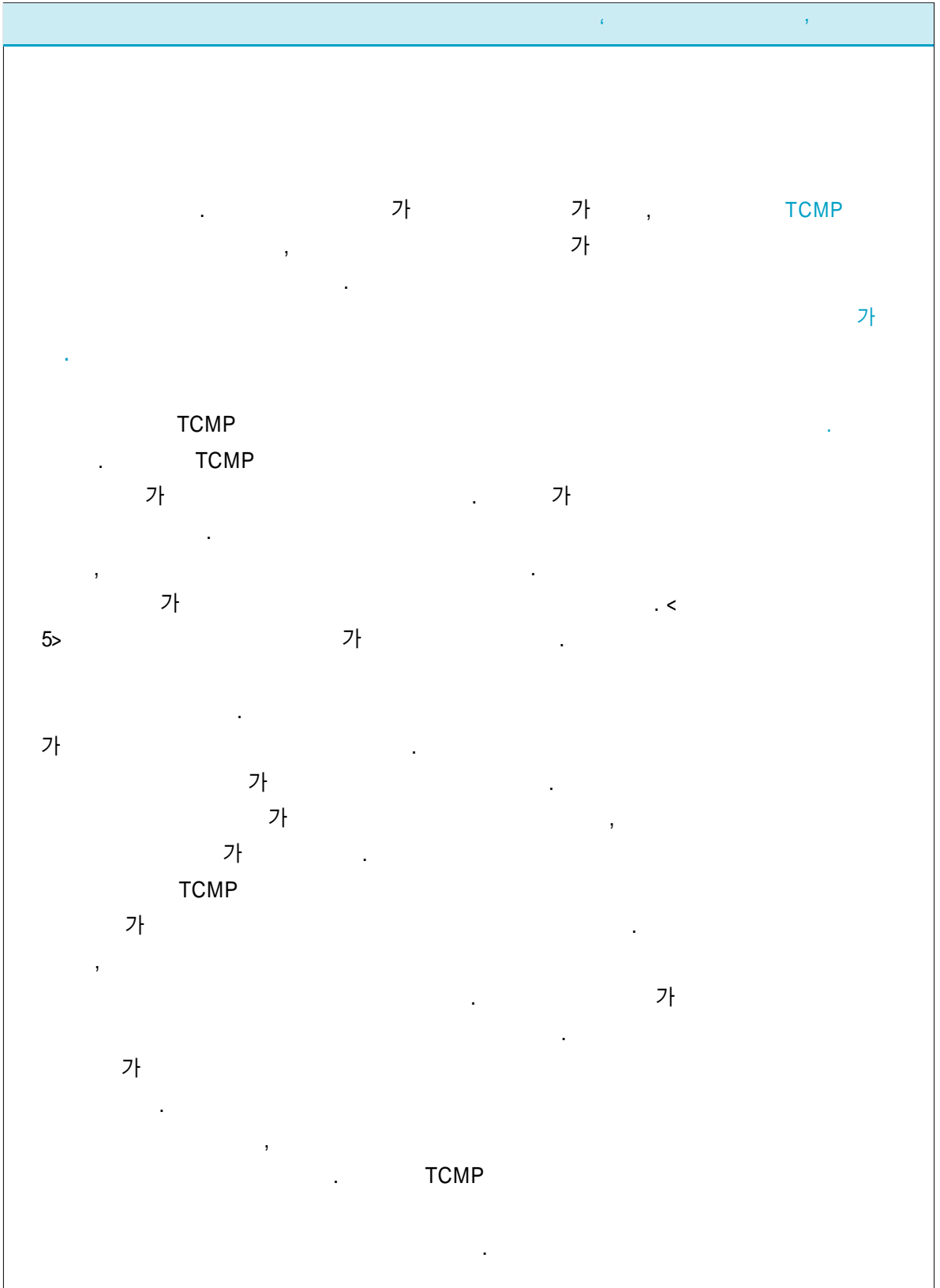
가

가

TCMP

가

TCMP



(3)

TCMP

< 5> 가 GDP


(1990 1993)

(: %)

가		가	
	68 76		9 16
	39 45		28 43
	40 60		20 27
	25 35	OECD	24 30
	70		
	38 50		13 23
가	13		
가 가	20 28		8 10

: Schneider and Enste(2000)

가 ,
 .
 가 . TCMP
 가

- IRS, Federal Tax Compliance Research: Individual Income Tax Gap Estimates for 1985, 1988, and 1992, Publication 1415, Washington, DC, 1996.
- Roth, Jeffrey, John Scholz, and Ann Witte (eds.), Taxpayer Compliance, Vol. 1: An Agenda for Research, University of Pennsylvania Press, 1989.
- Schneider, Friedrich, and Dominik Enste, "Shadow Economies: Size, Causes, and Consequences," *Journal of Economic Literature*, March 2000. 

가

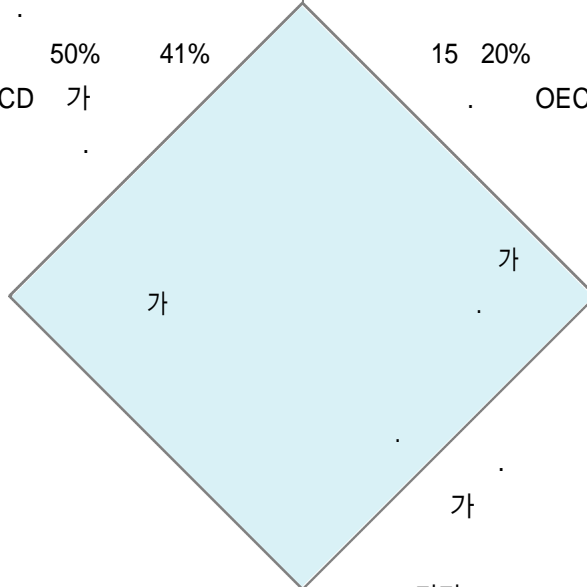
가

50%
OECD 가

41%

15 20%

OECD 가



가

가

가가 ()

1980
가

OECD 가

가

1989

3

가가

(OECD 가)

1980

가

가가

OECD 가

가가

5%(+)
OECD 가 가

(compliance)

「GDP」

)

가

>>> OECD 가

가

가

가

가

가

1993

35%

45%

GDP
OECD 가
가

1998 99

1,200

95%)

20%

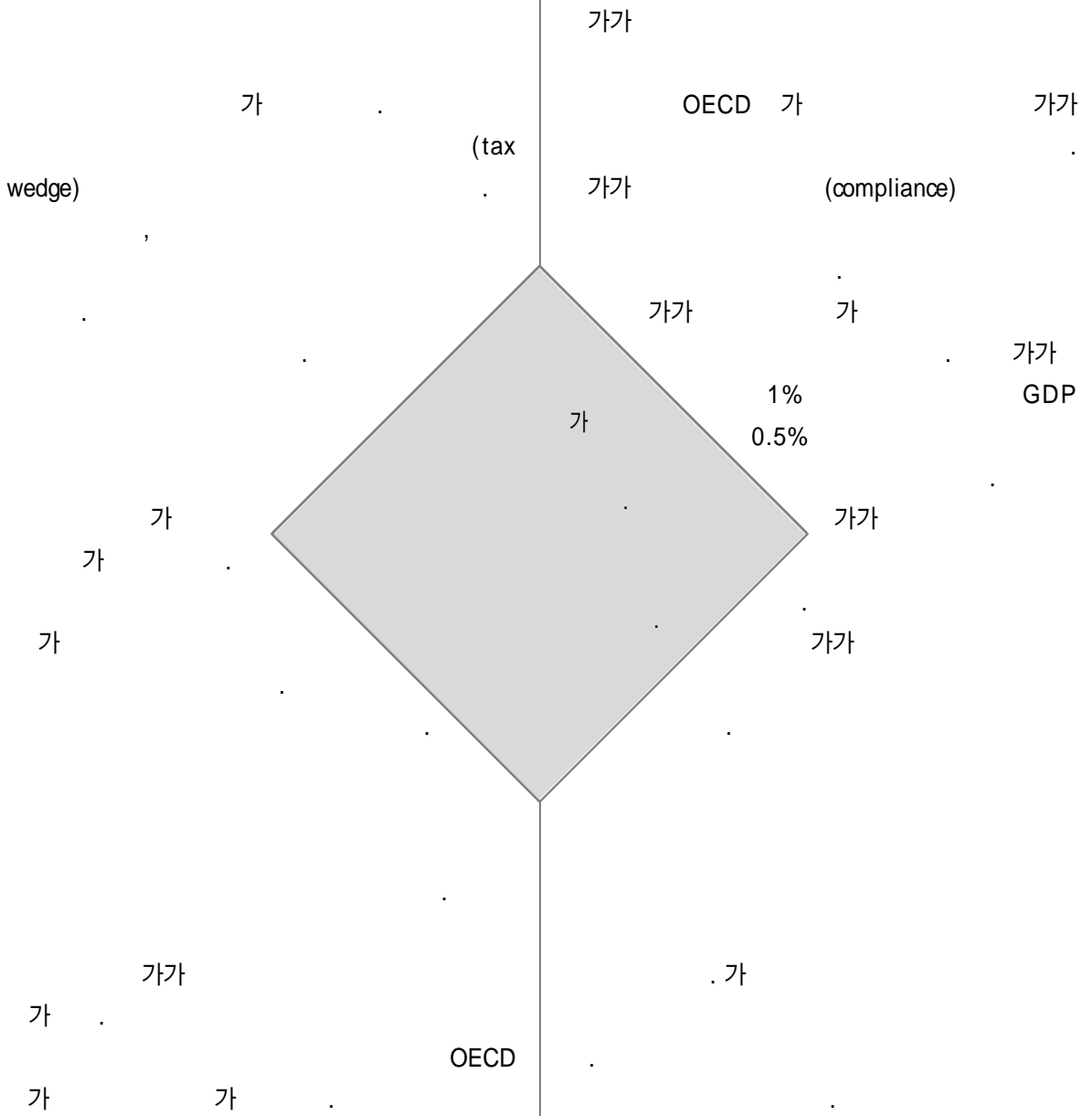
(

가

OECD 가

가

가





>>> OECD 가

OECD

가

(dual

taxation)

가

가
OECD 가

가

가

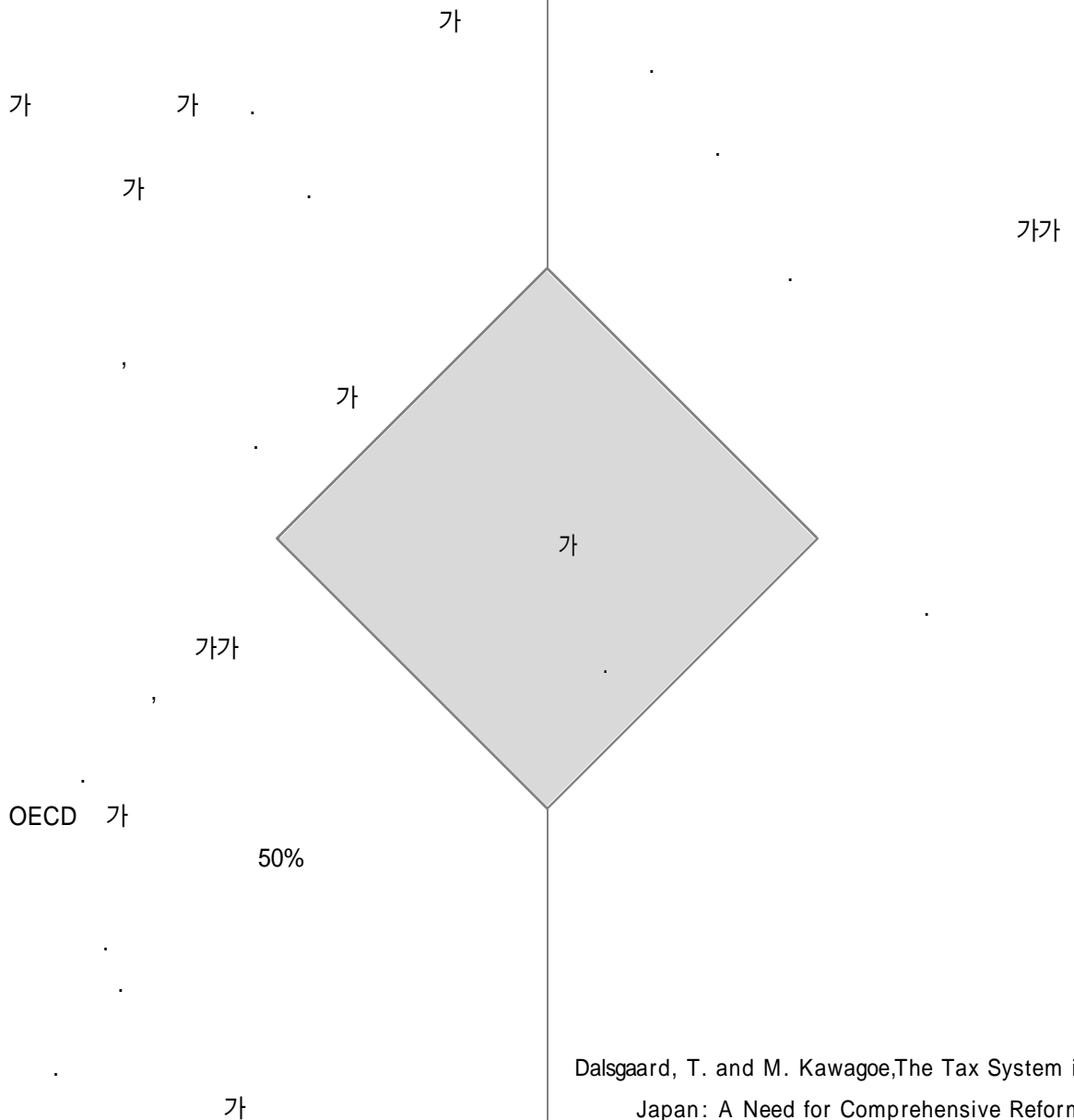
가

가
GDP 1%

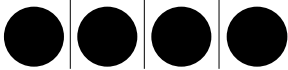
가

가

OECD 가



Dalsgaard, T. and M. Kawagoe, The Tax System in Japan: A Need for Comprehensive Reform, OECD Economic Department Working Papers No. 231, February 2000



2000 12 18

「

」

2004 1 1

(13), (9) (3

) (12 11 13 : 1 1,361

) (12 18) (2001 -2,554 , 2002 -8,807)

1.

(1) (₩)

· · 2003
 · 가 (2002 12
 31 2003 12 31)
 · (2002 7
 1 2003 7 1)

1

7	16	16
· 20%	· 10%	·
* : · 가	* 가 (9) :	(12)
· · ·	· · ·	- : 20%
· · ·	· · ·	- : 30%
· · ·	· · ·	* · 가 ·
· · ·	· · ·	· · ·
· · ·	· · ·	· · ·
· · ·	· · ·	· · ·

		(4)
		10%
		3

(2) . ,

(2)		
(1)		
-2000 12 31	2003	2003
	2%, 2004 5%,	
-2001 5%, 2002 10%	2005 10%	-2004 5%
		-2005 10%

(3) 가

가	2	3
-2000 12 31	-2002 12 31	-2003 12 31
가	가	가

(4)

(§06 • 106 2)

가	3	3
	2002 7 1	2003 7
	75%	1
		75%
: 2000 12 31		

(5)

(§5 • 16)

		3
		(2003 12 31)
: 2000 12 31		
: 2000 12 31		

(6)

가 :
 가 : 1 3
 : 1 3



: 6

: 2000 10 18 2002 12 31

- 30%

, , Mutual Fund

:

- 50%

(8)

(\$9 3)

5%

가

5

100%

: 2001 가

5

5

2000 11 1 2001 12 31

(7) .

:

. 가

(9)

가 30%

(\$5 2)

5

() 2000 12 31 2.

가 (1) 1

-
-
-

가가

가

75%	(75% 50%) * : 2001 1 1	* 1 : 2001 1 2002 1 1

2 .
1

31 ,
가

2001 12 (2) . 3
()

. 2001 1 1	-	. 2004 1 1 * 3

,
()
1 ,

(3) ()
§18 7)

2

. 1 250	(. 가) 250	(. 가) 250



3.

(5037 ₩)

	2005	2003
2000 12 31 가	- 12 31	- 12 31

2003

4.

	2005	2005 2003
	-2006	-2004

< >

(:)

	2001	2002	
(2001 2003)	-1,285	0	-1,285
(75%) (2002 7 1 2003 7 1)	0	-2,042	-2,042
	-500	-1,000	-1,500
	-609	-1,827	-2,436
- : 7 16			
- :	0	-3,938	-3,938
20% : 20%, : 30%			
* , , , 10%			
가가	-100	0	-100
(75% 50%)	-60	0	-60
	-2,554	-8,807	-11,361

2001

2001 1 2

「20001

12 30 ()

2001

< >

가 가

	2001	1/4	2/4		
· ()	94.1 (100%)	34.8 (37%)	26.4 (28%)	61.2 (65%)	32.9 (35%)
· ()	66.2 (100%)	23.3 (35%)	16.6 (25%)	39.9 (60%)	26.3 (40%)
	160.3 (100%)	58.1 (36%)	43.0 (27%)	101.1 (63%)	59.2 (37%)

SOC

85%

SOC : 30 (172

63%(65%, 60%)

, 35)

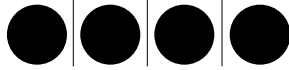
50~60%

IMF

1999

67%

	2001	1/4	2/4		
· SOC	34.9 (100%)	20.2 (58%)	9.9 (28%)	30.1 (86%)	4.8 (14%)
·	2.4 (100%)	1.0 (41%)	0.9 (39%)	1.9 (80%)	0.5 (20%)
·	0.5 (100%)	0.2 (44%)	0.1 (26%)	0.3 (70%)	0.2 (30%)
	37.8 (100%)	21.4 (56%)	10.9 (29%)	32.3 (85%)	5.5 (15%)



24

56%

< >

	2001	1/4	2/4		
· ()	94.1 (100%)	27.1 (29%)	25.2 (27%)	52.3 (56%)	41.8 (44%)
· ()	66.2 (100%)	18.3 (28%)	18.4 (28%)	36.7 (56%)	29.5 (44%)
	160.3 (100%)	45.4 (29%)	43.6 (27%)	89.0 (56%)	71.3 (44%)

12 30

16

1. 2001

< >

가.

2001 (12 2) (12 가 가
9) 12 27

12 2

2~3

63%
- SOC 80%

12

-

1/4 1 7,524 , 2/4
4,349 , 3/4 1,184 , 4/4 1,530

(:)

	2001	1/4	2/4	3/4	4/4
	18,584	11,825	4,105	1,124	1,530
	6,003	5,699	244	60	-
	24,587	17,524	4,349	1,184	1,530

-

65.1% , 34.9%

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60.3%

, 39.7%

-

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	2001	1/4	2/4	3/4	4/4
	37,998	37,998	-	-	-
	37,998	37,998	-	-	-

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55.6%, 44.4%

55.4%, 44.6%

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(: , %)

	2001	1/4	2/4	3/4	4/4
(A)	941,246	347,832	264,122	179,487	149,805
	100.0	37.0	28.1	19.0	15.9
(B)	941,246	270,647	252,010	240,633	177,956
	100.0	28.8	26.8	25.5	18.9
(A-B)	0	77,185	12,112	-61,146	-28,151

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(: , %)

	2001	1/4	2/4	3/4	4/4
(A)	662,563	233,117	166,087	126,415	136,944
	100.0	35.2	25.1	19.0	20.7
(B)	662,563	182,929	183,932	139,790	155,912
	100.0	27.6	27.8	21.1	23.5
(A-B)	0	50,188	-17,845	-13,375	-18,968

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SOC .



가.

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 - (50%)
 가 1/4 3/4
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3/4 4/4

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가 가

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- 80%

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		2001	1/4		2/4		3/4		4/4	
		941,246	347,832	270,647	264,122	252,010	179,487	240,633	149,805	177,956
		662,563	233,117	182,929	166,087	183,932	126,415	139,790	136,944	155,912
		555,688	191,150	155,683	141,966	157,666	108,698	116,170	113,874	126,169
		106,875	41,967	27,246	24,121	26,266	17,717	23,620	23,070	29,743
		1,603,809	580,949	453,576	430,209	435,942	305,902	380,423	286,749	333,868
1)	1998	100.0	26.0	24.1	25.2	23.8	30.0	24.7	18.1	26.7
	1999	100.0	41.6	29.1	25.4	28.3	18.4	22.1	14.6	20.5
	2000	100.0	34.8	24.8	26.3	23.1	22.7	26.2	16.1	25.9
	2001	100.0	37.0	28.8	28.1	26.8	19.0	25.5	15.9	18.9

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		2001	1/4		2/4		3/4		4/4	
가.		1,858,463	1,182,542	410,549	112,402	152,970				
1)		19,646	-	2,970	5,075	11,601				
2)		1,779,836	1,178,292	397,879	86,796	116,869				
3)		58,981	4,250	9,700	20,531	24,500				
.		600,283	569,855	24,428	6,000	-				
1)		315,000	309,000	-	6,000	-				
-		15,000	9,000	-	6,000	-				
()		(5,000)	(5,000)	(-)	(-)	(-)				
()		(10,000)	(4,000)	(-)	(6,000)	(-)				
-		300,000	300,000	-	-	-				
()		(300,000)	(300,000)	(-)	(-)	(-)				
2)		285,283	260,855	24,428	-	-				
-		285,283	260,855	24,428	-	-				
()		(285,283)	(260,855)	(24,428)	(-)	(-)				
		2,458,746	1,752,397	434,977	118,402	152,970				

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				1/4	2/4	3/4	4/4
			3,799,761	3,799,761	-	-	-
1)			3,573,401	3,573,401	-	-	-
【 】			3,561,854	3,561,854	-	-	-
		5	3,339	3,339	-	-	-
			7,024	7,024	-	-	-
		7	-69,015	-69,015	-	-	-
		8	3,620,506	3,620,506	-	-	-
【 】			11,547	11,547	-	-	-
			11,547	11,547	-	-	-
2)			226,360	226,360	-	-	-
		-	46,971	46,971	-	-	-
		~ 2	179,389	179,389	-	-	-
			3,799,761	3,799,761	-	-	-

- 가 (NCSI: National Customer Satisfaction Index): 美 가

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	<ul style="list-style-type: none"> •CS
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	<ul style="list-style-type: none"> • • 가

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			•
1	(1)	1	(3)
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	(6)		(5)
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7	(5)	7	(9)
8	(8)	8	(7)
9	(7)	9	(11)
		10	(-)

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1. 가 (17) (,15) (,2)	(1 0), (1 0), (1 0), (2 1), (2 1), (1 2 0), (2 1), (2 1), (1 0), (1 0.5), (2 1), (1 0), (1 0), (1 0), (5 1) (3 1.5), (4 8 2)
2. (15) (,12) (. ,3)	(20 8), (7 2), (2.16 1), (3 2), (2.4 0), (5 0.5), (20 1), (5 2), (8 4), (5 2.5), (5 2.5), (5 2.5) (1 0), (8 4), (8 2)
3. (13) (. ,5) (,6) (,2)	(8 6), 가 (5 3), (8 3), (8 2), (8 2) (3 1), (3 2), (8 4), (8 6), (5 3), (8 4) (8 4), (5 2.5)
4. (5)	LPG(5 1.5), (30 15), (30 15), (20 10),가 (3 1)
5. (10)	(20 8), (8 3), (8 7), (8 7), (8 7), (8 7), (8 0), (8 0), (8 0), (8 3)
	(60)

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2. (11), (8)

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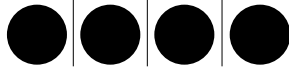
(: %)

	()	()			
0404 ()	20	7	8	+1	
0601	8	4	4	-	
0714 ()	20	10	10	-	
0714 ()	7	2	2	-	
1001 ()	3(2.16)	1	1	-	
1002 ()	3	2	2	-	
1003	30	15	15	-	
1005 ()	5(2.4)	0	0	-	
1005 (가)	5(3)	()	1	2	
1107	30	15	15	-	
1201 ()	5(3)	1	0.5	0.5	
1214 ()	20	1	1	-	
1214/2308 ()	20(5)	2.5	2	0.5	
1518 ()	8	3	4	+1	
2302 ()	5	2.5	2.5	-	
2306	5	2.5	2.5	-	
2306	5	2.5	2.5	-	
2510	1	0	0	-	

		()			
2603		1	0.5	0	0.5
2607		1	0	-	()
2608		1	()	0	1
2709	()	5	1	1	-
2710		8	()	7	1
2710		8	()	7	1
2710		8	()	7	1
2710		8	()	7	1
2711		5	1.5	1.5	-
2825		8	()	4	4
3102		8	5	4	1
3204		8	6	6	-
3501	.	20	8	8	-
3701		8	()	3	5
4001		1	0	0	-
4101-3		2	1	1	-
4104	가	5	3	3	-
4401		2	1	1	-
4403		1 2	0	0	-
4408		5	2.5	2.5	-
4702-6		2	1	1	-
4707		2	1	1	-
5002		8	3	3	-
5101-5		1	0	0	-
5201-3		1	0.5	0.5	-
5205		8	2	2	-
5403		8	2	2	-
7002/ 7020		8	3	3	-
7201		2	1	1	-
7204		1	0	0	-
7207		3	2	1.5	0.5
7207/ 7224		3	1	1	-
7208	()	8(4)	3	2	1
7226		8	5	-	()
7227		5(4)	3	-	()
7402		2	1.5	-	()
7404		1	0	0	-
7601		3	2	2	-
7602		1	0	0	-
7605		8	4	4	-
7606	.	8	6	6	-
8104		5	3	3	-
8411		3	1	-	()
8479	(Sputter)	8	()	0	8
8479	(C.V.D)	8	()	0	8
8479	.	8	()	0	8
9032		5	1	-	()
2825		8	2	2	-

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(6)	(13 18), (8 16), (8/10 16), (13 16), (8 18), (8 13)
(6)	(30 70% 1,625 /kg), (8 50% 395 /kg), (8 50%:), (8 40% 100 /kg), (8 50%), (8 50%)
(14)	(10 30% 1,908 /kg), (10 65% 4,756 /kg), (10 65%), (10 50% 436 /kg), (10 30%), (10 40%), (10 70%), (10 50%), (10 25% 383 /kg), (20 35%), (20 60% 396 /kg), (10 40%), (20 35% 622 /kg), (20 25%)
	26

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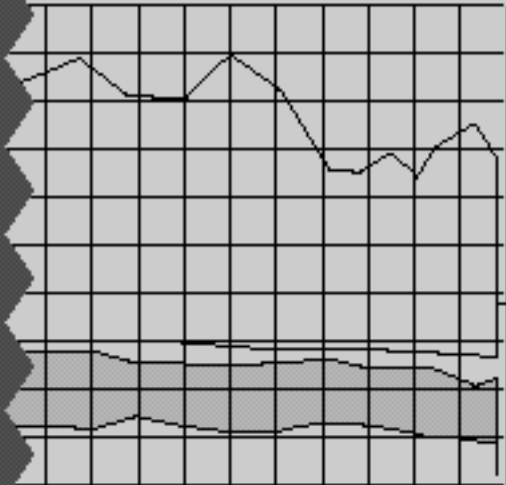
0301		10	30%	1,908 /kg	()	30%	1,908 /kg	()	-
		10	70%	5,122 /kg	()	65%	4,756 /kg	()	5
		10		70			65		5
		10	60%	524 /kg	()	50%	436/kg	()	10
0303		10		30			30		-
		10		50			40		10
		10		80			70		10
		10		60			50		10
0304		10	25%	383 /kg	()	25%	383 /kg	()	-
0306		20		35			35		-
		20	60%	396 /kg	()	60%	396 /kg	()	-
0307		10		40			40		-
		20	35%	622 /kg	()	35%	622 /kg	()	-
0709/0712		30	80%	1,444 /kg	()	70%	1,625 /kg	()	10
0803		30		50			50		-
1605		20	25%	395 /kg	()		25		-
1902		8	50%	395 /kg	()	50%	395 /kg	()	-
1904		8		50			50		-
2103		8	40%	160 /kg	()	25%	100 /kg	()	15
2103	()	8		50			50		-
4412		8		14			13		1
5004		8		18			16		2
5007		13		18			18		-
5208/5803	/	10/8		16			16		-
6302		13		16			16		-
8479		8		18			18		-
8712/8714		8		11			-		()



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1995		6,774(445)	176,975	215,365,826	9,032,479
		150	119,907	20,610,017	3,168,505
		23	6,109	1,892,517	328,780
		1,500	10,692	10,333,960	103,299
		4,893(445)	10,467	176,275,825	5,152,632
		60	28,822	649,778	152,114
		138	779	4,615,870	86,758
		10	199	987,859	40,391
1996		6,928(491)	141,847	257,028,059	9,852,439
		147	103,241	25,056,934	3,155,245
		19	4,427	1,588,574	245,753
		1,522	9,772	13,185,899	132,779
		4,994(491)	10,467	209,100,599	5,978,251
		60	11,787	779,923	115,023
		170	1,284	6,637,948	136,906
		16	869	678,182	88,482
1997		8,039(527)	300,348(10,212)	291,707,000	10,062,422
		143	157,872	33,398,793	3,798,376
		24	5,872	1,713,839	234,120
		1,710	13,596	14,450,270	138,901
		2,806(527)	111,881(10,212)	231,696,308	5,500,934
		61	9,712	695,208	103,590
		263	832	8,569,699	148,021
		32	481	1,182,883	138,480
1998		8,492(493)	360,982(9,276)	344,182,882(133,267,999)	13,640,682
		135	233,406	55,932,083	7,215,683
		23	4,646	1,808,584	264,310
		1,784	15,535	17,683,080	279,296
		6,167(493)	96,444(9,276)	245,335,907(133,267,999)	5,234,041
		69	8,517	727,812	95,509
		282	1,219	20,998,299	369,859
		32	1,215	1,697,117	181,984

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1987		1,047	1,498	91
	, ,	40	45	8
		26	47	-
		522	623	4
	, 가	6	6	-
		31	40	1
	.	139	385	33
	,	53	44	3
	, ,	75	108	17
		153	183	23
	2	17	2	
1988		1,048	1,501	114
	, ,	40	45	27
		26	47	10
		522	628	28
	, 가	6	6	-
		31	40	-
	.	139	384	24
	,	53	44	3
	, ,	76	107	2
		153	183	20
	2	17	-	
1989		1,048	1,513	69
	, ,	40	46	9
		26	47	6
		522	628	13
	, 가	6	6	-
		31	40	1
	.	139	394	25
	,	53	44	1
	, ,	76	107	3
		153	184	11
	2	17	-	
1990		1,048	1,519	95
	, ,	40	46	1
		26	47	8
		522	628	33
	, 가	6	6	-
		31	40	1
	.	139	397	30
	,	53	44	-
	, ,	76	107	3
		153	185	17
	2	19	2	

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1991		1,048	1,560	190
		40	46	6
		26	47	10
		522	624	54
	, 가	6	6	-
		31	40	-
		139	438	88
		53	44	-
		76	111	22
		153	185	9
	2	19	1	
1992		1,196	1,669	1,669
	(),	32	19	19
		9	24	24
		27	32	32
		585	684	684
	, 가	6	4	4
		40	43	43
		168	458	458
		22	49	49
		61	66	66
		30	23	23
		83	106	106
		15	-	-
		14	12	12
		20	36	36
가	81	109	109	
	1	4	4	
	2	-	-	
1993		1,196	1,665	185
	(),	32	19	13
		9	24	23
		27	32	7
		585	683	44
	, 가	6	5	1
		40	43	2
		168	451	51
		22	48	11
		61	66	5
		30	23	-
		83	110	17
		15	-	-
		14	12	-
		20	36	5
가	81	109	6	
	1	4	-	
	2	-	-	

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1994		1,196	1,638	180
	(),	32	19	8
		9	24	5
		27	32	8
		585	686	64
	, 가	6	5	-
		40	43	3
	.	168	451	32
		22	42	13
	,	61	66	5
	,	30	23	-
		83	109	3
	,	15	-	-
		14	12	-
	20	34	2	
	81	88	37	
가 , ,	1	4	-	
	2	-	-	
1995		1,196	991	845
	,	32	11	9
		9	11	18
		27	27	26
		585	316	446
	, 가	6	5	1
		40	27	28
	.	168	329	181
		22	23	25
	,	61	47	20
	,	30	16	3
		83	79	51
	,	15	-	-
		14	8	4
	20	24	10	
	81	64	23	
가 , ,	1	4	-	
	2	-	-	
1996		1,196	999	138
	,	32	11	3
		9	11	1
		27	27	11
		585	317	55
	, 가	6	5	-
		40	27	4
	.	168	318	19
		22	26	8
	,	61	47	5
	,	30	16	-
		83	92	11
	,	15	-	-
		14	8	-
	20	24	10	
	81	66	9	
가 , ,	1	4	1	
	2	-	-	

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1997		1,196	999	142
	'	32	11	-
		9	11	1
		27	27	10
	, 가	585	317	73
		6	5	-
		40	27	-
	.	168	314	26
		22	25	6
	,	61	47	1
		30	16	1
		83	94	7
	,	15	-	-
		14	9	3
		20	24	6
가 , ,	81	68	7	
	1	4	1	
	2	-	-	
1998		1,196	900	212
	'	32	11	4
		9	11	5
		27	17	3
	, 가	585	265	87
		6	5	-
		40	18	16
	.	168	300	39
		22	24	4
	,	61	45	11
		30	13	1
		83	88	17
	,	15	-	-
		14	9	5
		20	24	3
가 , ,	81	69	16	
	1	2	1	
	2	-	-	

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1979	1,531	40	1,491	1,514	503	623	388	654	17
1980	1,521	17	1,504	1,480	454	617	409	802	41
1981	1,746	41	1,705	1,598	495	639	464	1,526	148
1982	1,728	148	1,580	1,639	501	707	431	1,313	89
1983	1,267	89	1,178	1,197	458	488	251	782	70
1984	976	70	906	911	394	366	151	700	65
1985	933	65	868	901	423	371	107	568	32
1986	755	32	723	724	341	330	53	598	31
1987	425	31	394	421	181	219	21	193	4
1988	229	4	225	221	107	90	24	310	8
1989	213	8	205	208	85	104	19	99	5
1990	264	5	259	251	100	127	24	538	13
1991	290	13	277	280	111	144	25	131	10
1992	289	10	279	282	126	134	22	308	7
1993	495	7	488	477	196	226	55	1,420	18
1994	285	18	267	275	25	202	48	1,960	10
1995	494	10	484	476	114	237	125	2,257	18
1996	468	18	450	447	66	222	159	4,375	21
1997	563	21	542	500	49	213	238	5,894	63
1998	735	63	672	670	49	298	323	6,801	65

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1979	1,025	154	871	929	59	535	335	912	96
1980	845	96	749	711	84	362	265	440	134
1981	929	134	795	777	73	418	286	692	152
1982	1,058	152	906	902	89	500	313	1,086	156
1983	886	156	730	805	99	546	160	787	81
1984	628	81	547	561	86	387	88	1,524	67
1985	576	67	509	521	64	383	74	1,009	55
1986	567	55	512	506	70	388	48	293	61
1987	496	61	435	472	42	381	49	630	24
1988	274	23	251	245	27	189	29	463	29
1989	292	29	263	274	29	202	43	588	18
1990	426	18	408	360	25	301	34	832	66
1991	420	66	354	362	46	292	24	1,598	58
1992	471	58	413	422	31	353	38	599	49
1993	724	49	675	673	63	544	66	1,846	51
1994	667	51	616	596	33	475	88	2,398	71
1995	601	71	530	534	38	431	65	1,774	67
1996	601	67	534	559	33	437	89	2,596	42
1997	599	42	557	537	48	367	122	3,887	62
1998	750	62	688	648	59	410	179	7,128	102

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1979	143	53	90	42	13	10	19	101
1980	170	101	69	77	28	31	18	93
1981	184	93	91	36	16	13	7	148
1982	227	148	79	77	38	26	13	150
1983	278	150	128	98	40	37	21	180
1984	298	180	118	126	42	64	20	172
1985	321	172	149	117	40	65	12	204
1986	331	204	127	93	28	45	20	238
1987	372	238	134	146	42	83	21	226
1988	317	226	91	118	23	64	31	199
1989	275	199	76	142	74	68	-	133
1990	216	133	83	47	31	16	-	169
1991	276	169	107	69	46	23	-	207
1992	303	188	115	108	76	32	-	195
1993	372	203	169	153	99	54	-	218
1994	387	218	169	146	87	59	-	241
1995	367	241	126	172	134	38	-	195
1996	337	195	142	129	96	33	-	208
1997	323	208	115	149	102	47	-	174
1998	273	174	99	125	101	24	-	148

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1979	1,957	1,397
1980	1,855	1,295
1981	1,478	1,909
1982	2,074	3,580
1983	1,587	4,621
1984	1,559	4,301
1985	1,597	5,591
1986	1,230	8,902
1987	1,876	11,099
1988	1,567	10,711
1989	1,339	15,147
1990	1,264	16,680
1991	978	18,833
1992	1,095	21,142
1993	1,390	34,783
1994	1,335	30,841
1995	1,470	58,204
1996	1,178	54,379

: 1997
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