

Real Estate Finance in Korea: Market Analysis and Institutional Promotio

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2001-29

Real Estate Finance in Korea: Market Analysis and Institutional Promotions



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2001-29

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· 6,000 / ISBN · 89-8182-176-3-93300
<http://www.krihs.re.kr>

© 2001,

*



가 .

가 , .

가 , . 1998

4 「 」 가 , 1998 9 「 」

가 . 1999 1 「 」 , 2001 7 「 」 .

가 가 .

가

가 .

가 ,

,

2001 12



가

1998

<

>

<

>

,

2

ABS MBS ,

. 3

, 4 3

, 5

“ 가 ”

1 2 《 》

1970 80 가

가

2

. 1991 가 1990

. 1997

가 . 1998 「 」 「 」

1999 1

가 , 「 」

가 2001 7

가

가

. 1997

가 , 1998

가

50

가

3 《 》

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· , , , , ,

, , , , , 가

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, ,

가

가

가

가

가

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가

가

4 《

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ABS

, ABS

, 가 CR-REITs

2000 7

1

, 2001 6

5 《

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①

, ②

, ③

, ④

가

가

가

, KoMoCo

, KoMoCo

가

가

가



.....
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1

1. 1
2. 2
3. 4

2

1. 9
1) 9
2) 11
3) 12
4) 14
2. 14
1) 14
2) 22
3) 25

3

1. 27
2. 28
 1) 28
 2) 42
3. 50
 1) 50
 2) 66
4. 70

4

1. 73
 1) 73
 2) 91
2. 109
 1) 109
 2) 116
3. 121

5

1. 125
2. 126
3. 134
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< -20>				102
< -21>	PIR			105
< -22>	LTV			105
< -23>				111
< -24>	가			112
< -25>				117
< -26>		1		118
< -27>				123



< -1>	가 , 가 가	10
< -2>		15
< -3>		16
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< -2>		30
< -3>		43
< -4>		46
< -5>		53
< -6>		57
< -7>		66
< -1>		93
< -2>	LTV	104
< -3>	1	119

2.

1)

(loan,) , , (loan),
(investment,)
(investment), (resource mobilization by asset
securitization)가 , ,

1997

가

가

2001

1998 9

()

1999 1 「

」

(SPC),

2)

가

(<

-1>

)

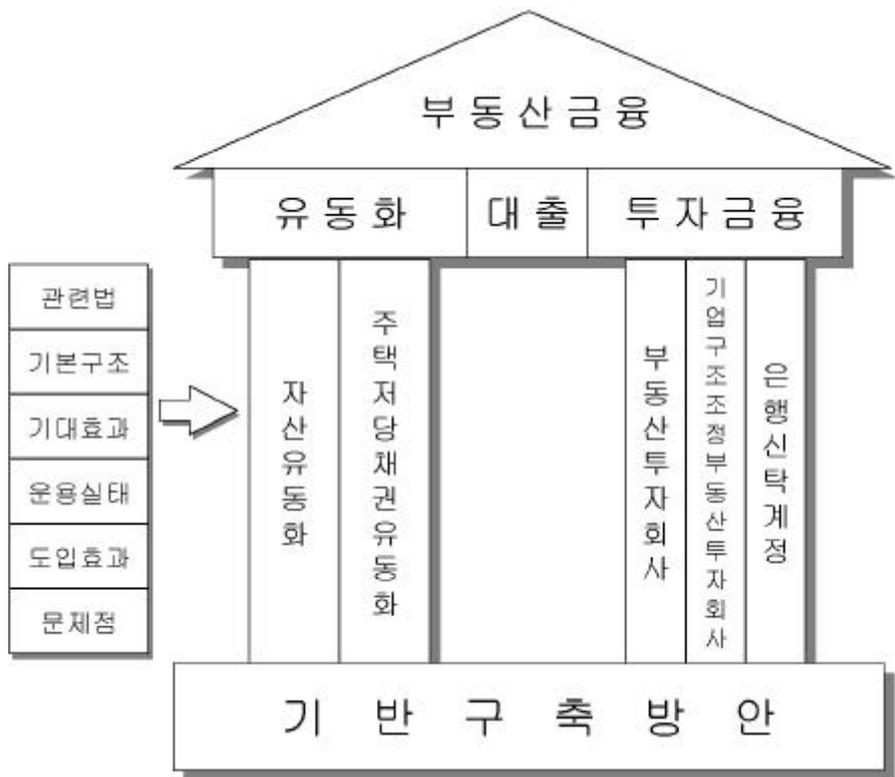
ABS MBS

가

()	
(1999)	<ul style="list-style-type: none"> ○ : ○ - (binomial interest rates tree) MBS 가 - MBS - MBS ○ : Fabozzi, F. J.(1996)
(1999)	<ul style="list-style-type: none"> ○ : ○ - - - ABS REITs ○ : ()
(1997)	<ul style="list-style-type: none"> ○ : ○ - (,) - - 가 ○ :
(1999)	<ul style="list-style-type: none"> ○ : ○ - (REITs, LTP, SPC) - (,) , , , ,) ○ :
(1999)	<ul style="list-style-type: none"> ○ : ○ - - MBS 가 ○ : () ABS 5

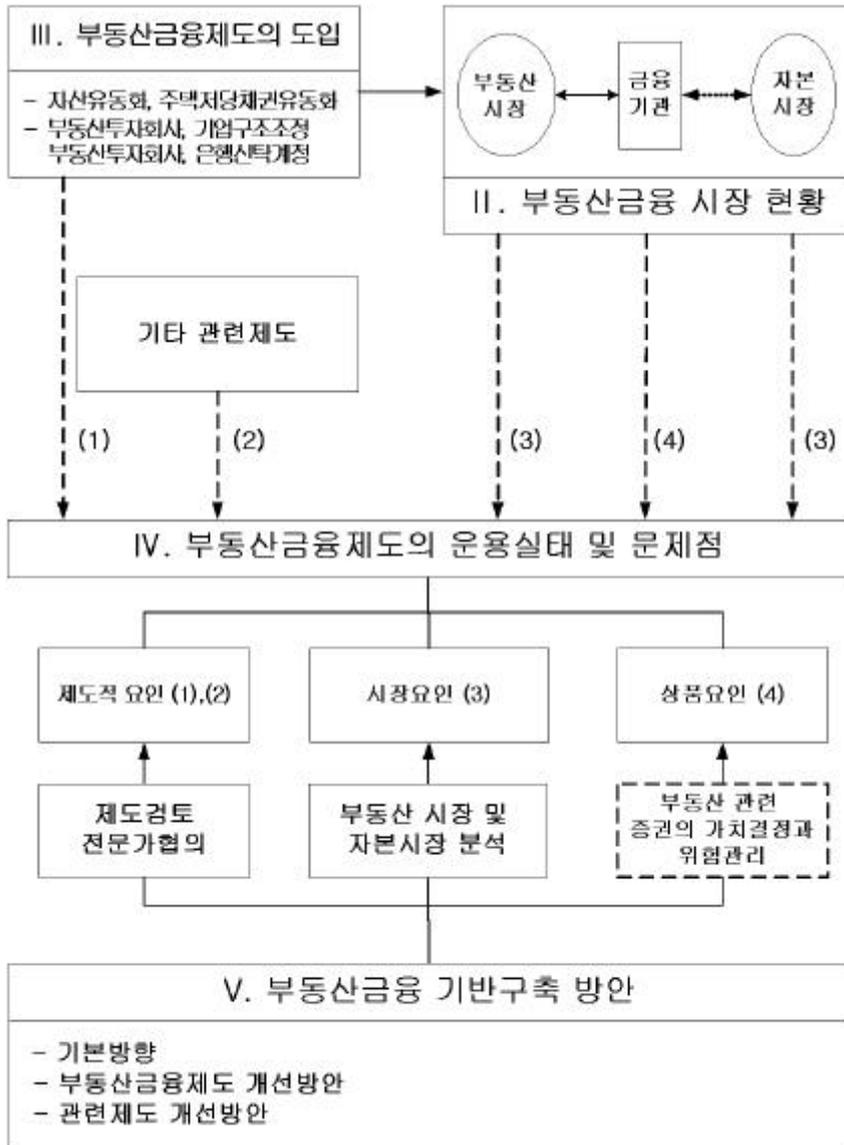
3.

1)



1998

2)



2

ABS MBS ,

. 3

4

3

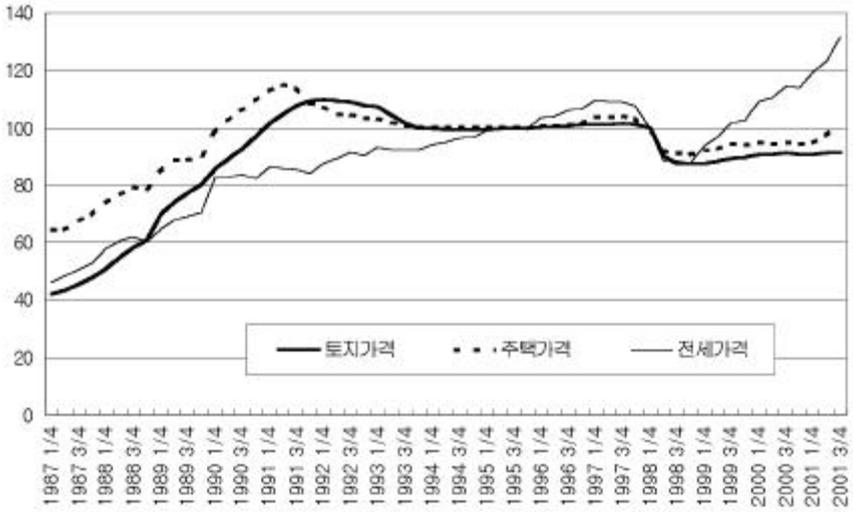
5

가

”

“

< -▷ 가 , 가 가



1970-80

가

2

1991

가

, 1990

1997

가

, 가

가가

. 2001

가

가

가

가

가

2)

가 1997

가

, , 100m²

1974 7

,
2,500

< - 1 >

1980.9.27	()
1984.7.19	' ,
1993.2.8	30
1994.1.20	10 11 30
1995.4.10	10
1997.8.1	10

:

1994

10

가, 1997

가

가

3)

(1)

가

가

1

2

60m²(18)

3 9.5%

100m²(33)

가

가

가

1990

가

가

가

가

1992

가 1998

1990

, 1993

5

(2)

1990

1994

가

가

1996

. 1997

가

1997

1998

2000 3

4)

가 1998 「 1
」 .

1999 1
9 「
(KoMoCo)가
」 .

가
가 「
」
, 2001 7 .

2.

1)

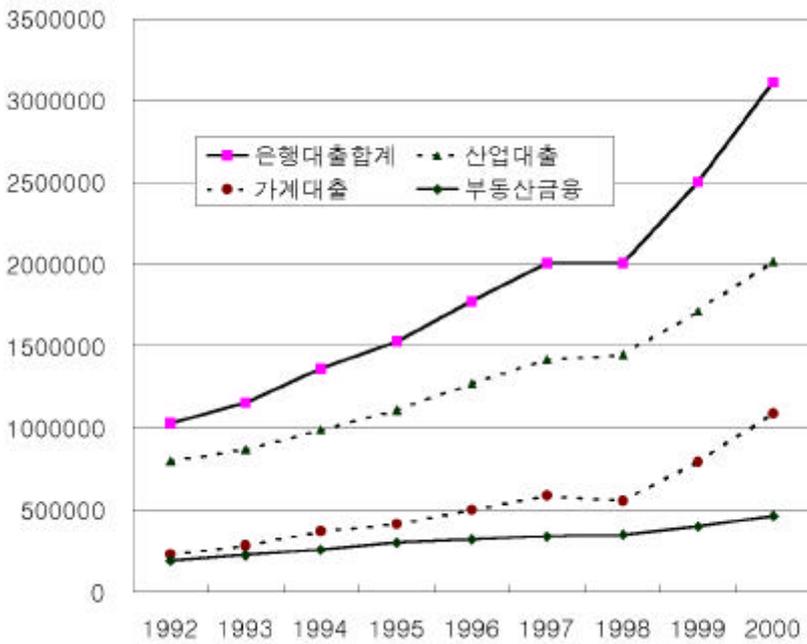
1997 (loan)

가

1) ,가

1995 152 2000 311 5
 2 1995 111 2000 202
 , 가 1995 41 2000 109
 (< -2>).

< -2>

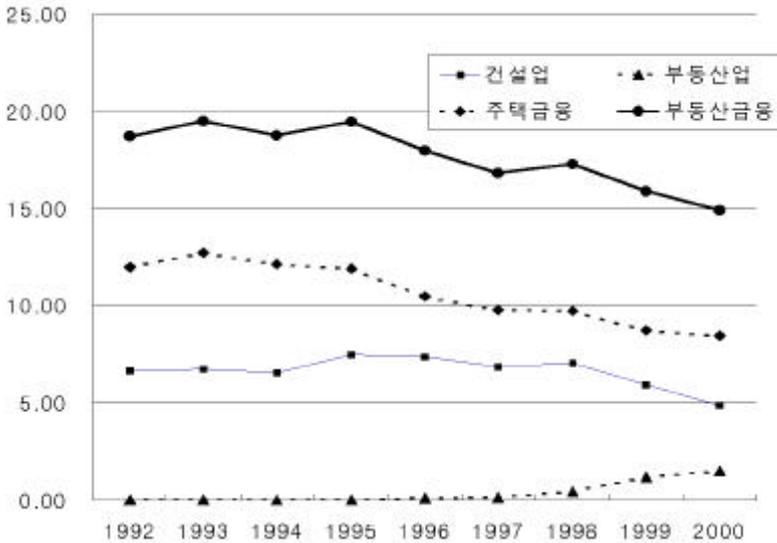


1) (, 2000)

()

		가			가		(1)+(2)+(3)
		(1)	(2)	(3)	(3)		
1992	1,027,970 100.0	799,487 77.8	68,513 8.6	290 0.03	228,483 22.2	123,437 12.0	192,240 18.7
1993	1,151,374 100.0	870,226 75.6	77,585 8.9	430 0.04	281,148 24.4	146,446 12.7	224,460 19.5
1994	1,358,503 100.0	990,294 72.9	89,048 9.0	429 0.03	368,209 27.1	165,286 12.2	254,763 18.8
1995	1,524,777 100.0	1,110,272 72.8	114,010 10.3	857 0.06	414,505 27.2	181,831 11.9	296,698 19.5
1996	1,771,841 100.0	1,269,911 71.7	130,676 10.3	2,015 0.11	501,931 28.3	185,456 10.5	318,147 18.0
1997	2,004,011 100.0	1,418,754 70.8	137,693 9.7	2,904 0.14	585,257 29.2	196,118 9.8	336,715 16.8
1998	2,002,891 100.0	1,447,675 72.3	141,577 9.8	9,066 0.45	555,216 27.7	195,226 9.8	345,869 17.3
1999	2,502,401 100.0	1,711,142 68.4	148,150 8.7	30,279 1.21	791,259 31.6	218,511 8.7	396,940 15.9
2000	3,108,041 100.0	2,018,591 65.0	152,476 7.6	47,526 1.53	1,089,450 35.1	263,455 8.5	463,457 14.9

: DB, (<http://www.bok.or.kr>)



1995 30 2000 46 가 가

1998

(< -3 >).

1998 1 17.01% 가

, 2001 8 7.51% (< -4 >

). 2001 8 (7.29%) 가 (8.00%)

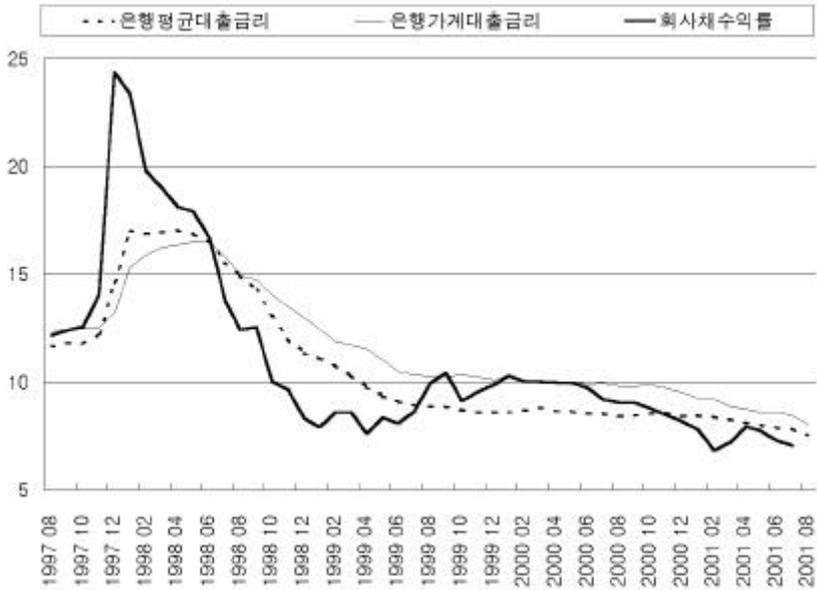
가 , 가

8.79% 8.78% 가 .

1997 24.31% ,

2001 7 7.00% .

< -4 >



< -3>

(: %)

	()	가			가	
1997 12	14.58	13.22	14.98	17.15	15.05	24.31
1998 06	16.49	16.45	16.52	17.78	17.63	16.64
1998 12	11.33	12.93	10.96	12.84	13.22	8.3
1999 06	9.06	10.46	8.55	11.21	11.3	8.06
1999 12	8.58	10.08	8.17	9.51	10.45	9.85
2000 06	8.49	9.87	8.21	10.11	10.74	9.72
2000 12	8.41	9.48	8.11	10.73	10.43	8.12
2001 04	8.1	8.70	7.85	9.68	9.65	7.91
2001 05	7.99	8.54	7.74	9.61	9.44	7.70
2001 06	7.89	8.57	7.61	9.05	9.00	7.24
2001 07	7.78	8.39	7.55	8.33	9.11	7.00
2001 08	7.51	8.00	7.29	8.79	8.78	-

: (<http://www.bok.or.kr>)

< -4>

(:)

					가		(1)+(2)+(3)
		(1)	(2)	(3)	(3)		
1994	1,312,318 100.0	1,065,888 81.2	175,942 13.4	798 0.08	246,430 18.8	6,984 0.5	183,724 14.0
1995	1,628,440 100.0	1,303,787 80.1	224,550 13.8	1,241 0.15	324,654 19.9	8,261 0.5	234,052 14.4
1996	1,982,587 100.0	1,593,913 80.4	237,779 12.0	2,935 0.19	388,673 19.6	7,768 0.4	248,482 12.5
1997	2,274,855 100.0	1,822,353 80.1	239,270 10.5	4,425 0.54	452,503 19.9	12,141 0.5	255,836 11.3
1998	1,483,429 100.0	1,157,088 78.0	119,267 8.0	7,970 0.73	326,341 22.0	10,244 0.7	137,481 9.3
1999	1,158,986 100.0	856,030 73.9	77,674 6.7	8,469 0.79	302,956 26.1	6,275 0.5	92,418 8.0
2000	1,027,959 100.0	745,160 72.5	54,982 5.4	8,171 0.79	282,799 27.5	6,329 0.6	69,482 6.8

가 5

가 1/4 , 가

가 ,

1995 315 1997 428 가 350

2000 414 5

20% 1997 324

2000 276 , 76%

67% 가 1998 가

1995 23.4% 2000 33.2%

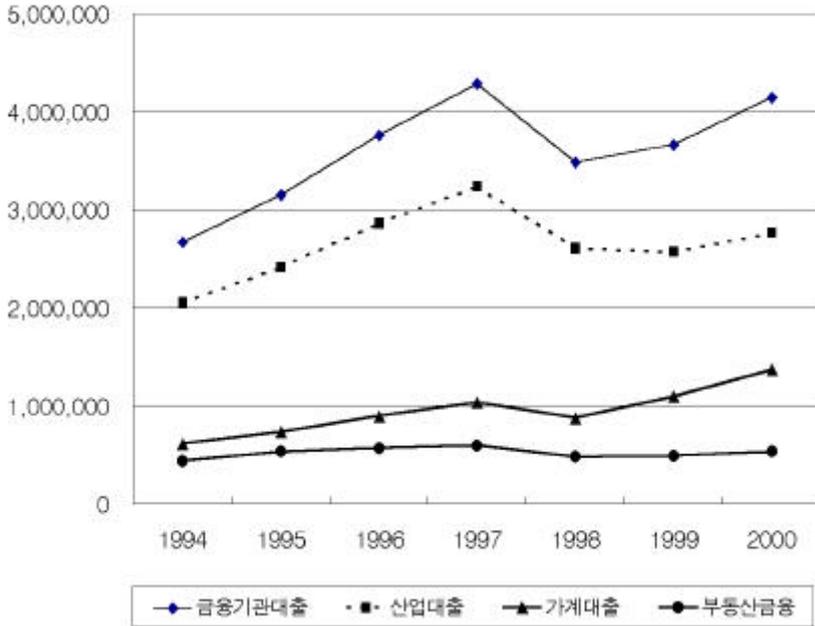
가 가 .

1997 32 2000 21 ,

1997 21 2000 27 (< -5).

5 ,

< -5> .



< -5> () (:)

	+	가					(1)+(2)+(3)
		(1)	(2)	(3)			
1994	2,670,821 100.0	2,056,182 77.0	264,990 9.9	1,227 0.0	614,639 23.0	172,270 6.5	438,487 16.4
1995	3,153,217 100.0	2,414,059 76.6	338,560 10.7	2,098 0.1	739,159 23.4	190,092 6.0	530,750 16.8
1996	3,754,428 100.0	2,863,824 76.3	368,455 9.8	4,950 0.1	890,604 23.7	193,224 5.1	566,629 15.1
1997	4,278,866 100.0	3,241,107 75.7	376,963 8.8	7,329 0.2	1,037,760 24.3	208,259 4.9	592,551 13.8
1998	3,486,320 100.0	2,604,763 74.7	260,844 7.5	17,036 0.5	881,557 25.3	205,470 5.9	483,350 13.9
1999	3,661,387 100.0	2,567,172 70.1	225,824 6.2	38,748 1.1	1,094,215 29.9	224,786 6.1	489,358 13.4
2000	4,136,000 100.0	2,763,751 66.8	207,458 5.0	55,097 1.3	1,372,249 33.2	269,784 6.5	532,939 12.9

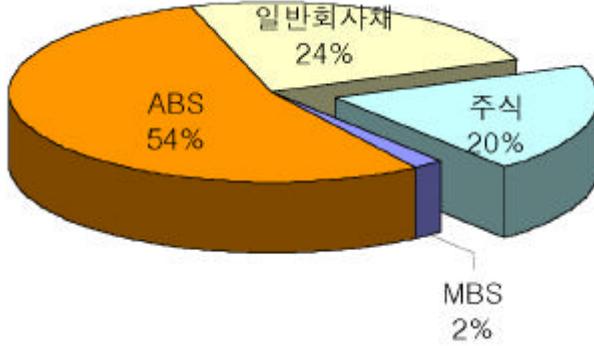
가

() GDP
 2000 5.22%(1997 4.6%)
 3.0%(1997) , 5.9%(1997)
 50%, 35% 10%

2)

1999 2001 6 「 」 「
 」 78 2,317 (273)
 . 2000 49
 3,832 (80 154) , (6 7,709) 7.3
 , (73 114) 68% .
 (SPC) (ABS) 47
 377 ABS 95.3% . 2001 22 776
 (87) ABS가 ,
 21 6,052 97.8% (< -1>).
 2000 MBS (73 114) 1.9%
 , (58 6,628) 2.4% ABS

< -6> MBS (2000)



1999 (73,114) 80.3% 가
2000 가

< -8>

(:)

1991	127,175 (82.6)	26,871 (17.4)	154,046
1992	111,553 (82.6)	23,499 (17.4)	135,052
1993	155,999 (82.7)	32,588 (17.3)	188,586
1994	200,502 (76.2)	62,478 (23.8)	262,980
1995	235,982 (79.0)	62,665 (21.0)	298,647
1996	299,049 (85.0)	52,858 (15.0)	351,907
1997	343,221 (91.0)	33,890 (9.0)	377,111
1998	560,003 (79.8)	141,581 (20.2)	701,584
1999	306,714 (42.7)	411,140 (57.3)	717,854
2000	586,628 (80.3)	143,485 (19.7)	730,114

: 2001. 8. 「 」.

ABS ()
 2 5,698 ABS 5.2%, 2001
 5,063 2.3% (< -9>).

< -9> 2000 -2001 ABS (:)

		()	
		2000	2001
가	*	204,154 (41.4%)	2,868 (1.3%)
	*	73,073 (14.8%)	45,951 (20.8%)
		10,463 (2.1%)	-
		287,690 (58.3%)	48,819 (22.1%)
(債 權)	(.)	103,118 (20.9%)	66,630 (30.2%)
	.	55,969 (11.3%)	13,657 (6.2%)
		13,788 (2.8%)	2,794 (1.3%)
		9,896 (2.0%)	5,913 (2.7%)
		8,616 (1.7%)	73,252 (33.2%)
		2,845 (0.6%)	7,442 (3.4%)
		194,232 (39.3%)	169,688 (76.9%)
		11,910 (2.4%)	2,269 (1.0%)
		493,832 (100%)	220,776 (100.0%)

: * S-CBO , P-CBO
 : (http://www.fss.or.kr/)

ABS 2000 1 1,910 2001
 2,269 2.4% 1.0% .
 (MBS) 2000 1 3,788 , 2001 2,794
 (ABS) 2.8% 1.3% , MBS
 2001 10 11 2 1,752 MBS (< -9>
). 2001 10 MBS
 KoMoCo 20,216 ,
 MBS 6 1,536 .

		2000	2001	2000 2001. 10.	
(MBS)		12,789 (92.7)	2,377 (85.1)	20,216 (92.9)	KoMoCo
(ABS)		410 (3.0)	-	410 (1.9)	SPC
		589 (4.3)	417 (14.9)	1,126 (5.2)	
(MBS)		13,788 (100.0)	2,794 (100.0)	21,752 (100.0)	
ABS		493,832	220,776		

:

3)

2001

.

가 . 2001 7

가

, , 「 」

. 2001 6

13 3,395 . 6

1,580 가 , 2 950 , 4 760 ,

1 105 .

< -11>

	2000		2001			
	1-4	930	5-6	650	6	1,580
	1	650	2	300	2	950
	1-2	160	3-4	600	4	760
	-	-	1	105	1	105
		1740		1655	13	3,395

1998

. 1998

가 , 2001

가 . < -2>

가 가

, < -3>

. 1998

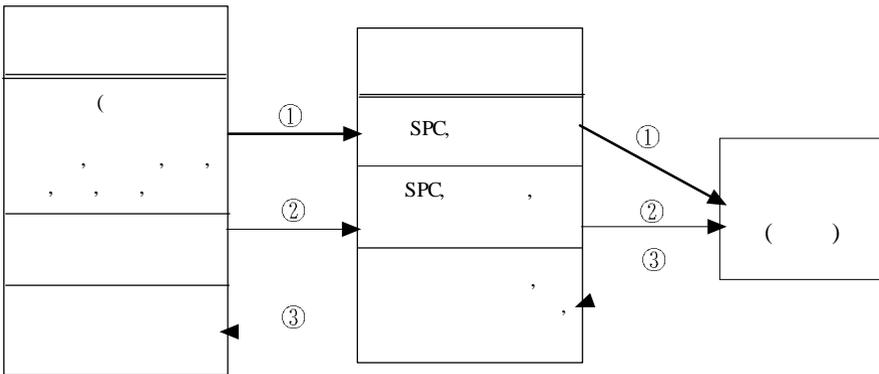
ABS

CHAPTER 3

1.

(,), (,) (< -1>).

< -1>



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(←).

(SPC)

가

2.

1)

(1)

「 (1998 9 16)

(1).

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(

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가 (2 1 가
) 가

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가 (2 1).
가

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가 (2 1).
「 」

, 가 (2 3).
(2)

가
, 가

• 가 (가 가

• 1 가 가 (2).

()

①

(ABS ; asset backed securities) . 3 5

2) , 「 」, 가 (17).

577 1 2

가 .

가

3)

2) 3 5 546 1 , 1 5

3) ,

(25).

(20).

(

22).

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-
-
-

②

① , ② , ③

, 3

, ②

① ,

, ③

(16).

③

462

가 (

) 가 ,

가 (24).

(30).

()

「 」 「 」 ,
가 ,
(27).

가 .
가가 , 가
(33).

(32).

(28) ,
,
4
(31).

()

①

(paper company)

가 .
가

가 , , . ,
, ,
()

,
,
(17).

②

. 3
가 .

(credit line)

③

. 가 ,
.

④

, , 가 ,

(arranger)

(3)

(가)

가

4)

5)

(3 , 20 1).

가

1

6)(3).

()

①

(13).

가

가

가

가

)

4)

(3).

5)

20 4).

6)

②

3 가

3

()

가

(6 ②).

• :
• :

3

()

③

3

()

①

(9 1).

(9 ②).

②

, . , (9

2). ,

1) , 2) (.) 3)

(22 ③).

(4)

(가)

「 」 450

가

3 .

「 」

3 (17).

() ()

가

(

3) 3

3

()

가 가 (「 」 186).

가 가 .

①

(18 ①).

②

가 ,

(18 ②).

③

가 ,

「 2 4 , ② 「 「 21 , ③ 「 「 16 , ④ 「 「 21 3 ⑤ 「 「

4 1 5 (18 ①, 36).

()

2 5 가

3 2001 12 31

5 (

1 6

) 가

100 50 (「 」 56).

가

8)

20% 가 ,

1999 1 1 「 가가 」 33

1 12 3 , 가가

가가 9) .

「 」 61 1 「 가 (가) 가 .

「 」 16 (36 2).

7)

8) 1999 12 31 ,가 ,가 가 (「 」 119-120).

9) 가 가가 가 .

()

①

가

(14). 「 」, 「 」 「

」

.

가

,

가

②

가

가

54

「

」

106

「

」

15

2

가

가

가①

, ②

가

2

563

596

,

가

30

가 .

③

」 4

가

「

()

(5)

BIS

BIS

(exposure management)

가 .

가 .

가

가 .

(ROE)

가 .

(pool)

가

(packaging cost)

가

, 가

가

(leverage financing)

가 .

(off-balance sheet financing)

가 가 ABS가

(portfolio)

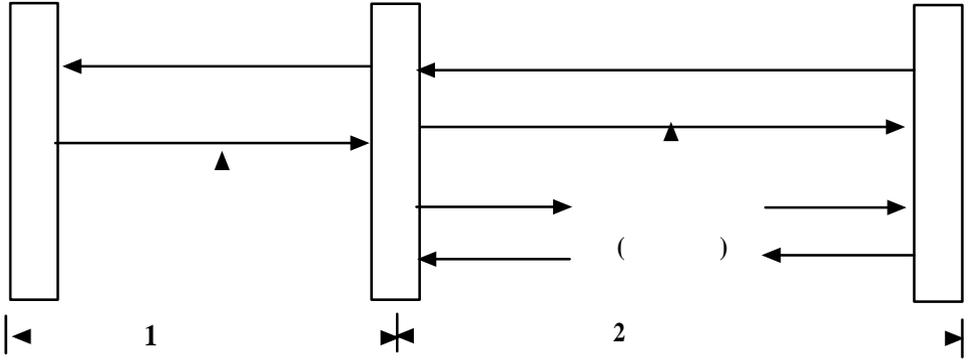
2)

(1)

< -3 >

가

< -3 >



mortgage market) , 1 (primary
mortgage market) 2 (secondary

1 가 .
, (), . 2

①

가

② (Mortgage Backed Securities, MBS)

(equity-type) (bond-type),
 MBS
 가 (tranches)가 pass-through MBS 가
 pay-through MBS
 (bond-type) MBS 가
 MBS ,
 (MBB ; Mortgage Backed-Bond)
 MBS
 MBS ,
 MBS 가 (MPTB ; Mortgage Pay-Through
 Bond) (multi-class securities)
 (CMO ; Collateralized Mortgage Obligation)

< - 1> MBS MBB

pass-through MBS	- - 가 1 -
pay-through MBS	- - 가 -
MBB	- -

: 2001. 5. 「 (MBS) 」 .

(2)

(가)

5) 1998 9 (ABS) (1998
 「 가

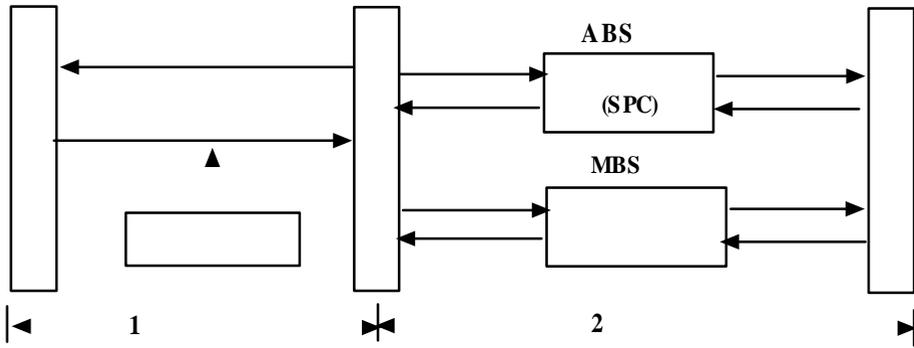
SPC

. 1998 12 「
 」 (1998 12 12) , 가
 (KoMoCo)가 1999 9
 .
 「 」
 (1998. 9. 16 ,) 「 」
 (1999. 1. 29 ,)
 (< -4 >).
 「 」

(1).

「
」
「
」
「
」

< -4>



()

「 2 1

(

)가

(MBS)

(

)가

(MBS)

(2 1).

()

2 2). (2 3)

(

() 가

① , ② 250

, ③

, 가

가

(3).

()

(가

)

20

(13).

()

(true sale)

,

가 (5 2).

•

•

•

가

가

,

가

가

•

()

(7).

가

가

,

(6 2).

가 10

가

.

가

,

10

(6 2).

(3)

(가)

,

가

.

,

,

,

(SPC)

가

()

가

50% 0%

가 (built-in stabilizer)

(4)

가

(120 1 13).

,

가 가 50% (56). 가

가 가 . ,

가 (

120 1 13).

2.

(2001 7 1)

,

10) , 11)

1)

(1)

,

, 1998 4 『 』

. 1998 9 1999 1

가 ABS

MBS 가 .

가가 .

10) 「 」

11)

1999 2000
, 7 24
, 11 14 11 20
. 2000 12 13
. 가
2001 2 20 ,
2001 3 8 .
12)
,
. 13)
2001 4 26 ,
5 24 .
1 .

12) 2000 10 가

가

13) 「 」

, 2000 10 25 .

< -2>

1991 2	
1998 4	
1998 9	(ABS)
1999 1	(MBS)
2001 4 .5	가 (4) 가 가 (5)

(2)

,
(1).
14)

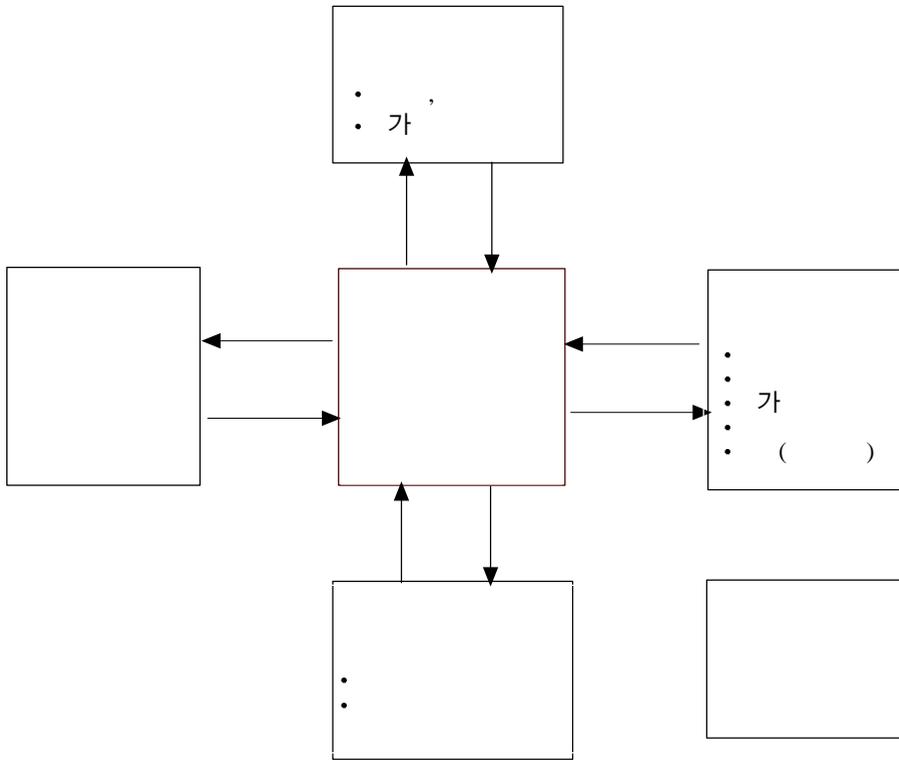
(가)

. . .
(< -5>).

가가 .

14)

< -5 >



2000. 7. 24. 「
 . 2000. 5. 29. 「
 ()」. ; .

①

500 ,
 가 (3·5·6 , 14 1). 1
 () 10%
 10% (15 1·2). ,
 (17 , 10) ,

(20).

10%

가 30%

(7.9 , 5).

(11) , 가

(19).

②

3

(14 1).

• 가 5 (22 1)

•

3 (22 1)

•

5

(14 2)

•

5

(14 2)

•

14

2

1

30%

(14 2)

③

10

3

(23 1.2 ,

16 1.2)

,

(17 1),

, 가 (17 1),
가(26 3) .

④

가 , 90% ,
25 1) . 가 70% (28 1).
가 90%
가 , 30% (21
, 26 1.2)
3 (24 , 18
1) 가 .
,
(24).
, 가
(24 3).
10% (27),
(29) .
,
(23) .
가 (28 2) .

3/100

(30) .

⑤

(35 , 27 1)
). (), ,
 , 가
 () .
 (36 3).

⑥

, , .
 가 가 (39 1).

()

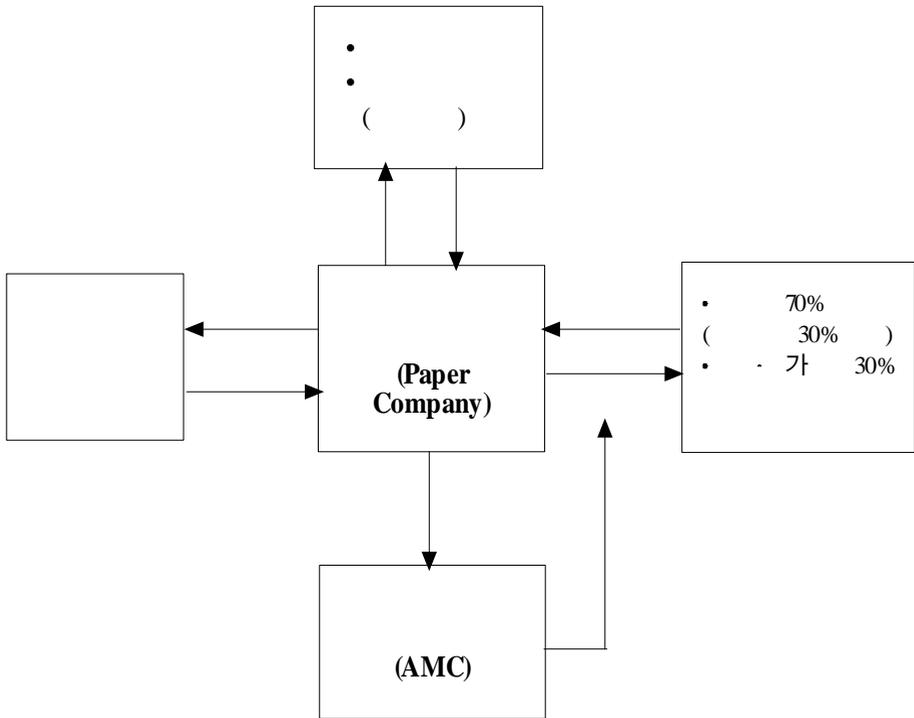
(mutual fund)

.(< -6>)

(paper company) 70%

(49 2 1).

< -6>



(AMC : Asset Management Company)

가 , 70 , 5

①

500 가(5 1 , 6 ,
 49 2 1 , 35 1) .
 (49 2 2) 70%
 (49 2 1) ,
 (49 2 1) .

②

70 , 5
 가(49 3 1) .
 (49 3 1) ,
 (49 3 3
) .

③

(
 49 6 1) ,
 (49 6 2) .
 , ,
 , .
 (49 6 3) .

④

가 .
 • 30% (9)
 • 가 (11)

- 1 (10%) (15)
 - (, 가 90%,
70%) (25 1)
 - (2) (24)
 - 90% (28).
- 가

90%

< -3>

가

< -3>

	(REITs)	
	<ul style="list-style-type: none"> • (6471) , 2001.04.07 , 04.10) 	
	<ul style="list-style-type: none"> • (2 1) 	<ul style="list-style-type: none"> • () (49) (2)
	<ul style="list-style-type: none"> • : 500 (6) • 가 : (3 ①) • 가 : 가 • : 3 (14) 	<ul style="list-style-type: none"> • : 가 : , • (35 ①) • 가 : 가, (35 ④)

	<ul style="list-style-type: none"> • 15 ①) 10% () • (9) 30% 	<ul style="list-style-type: none"> • 1 (15) • (9)
	<ul style="list-style-type: none"> • (11) • 가 가 • (19) 	<ul style="list-style-type: none"> • 30% • (11)
	<ul style="list-style-type: none"> • (49 3) 	
	<ul style="list-style-type: none"> • 70% • (25 ①) • 90% • 가 , (25 ①) 	<ul style="list-style-type: none"> • 70% • (49 2①)
	<ul style="list-style-type: none"> • 가 90% • (28) 	<ul style="list-style-type: none"> • , • 90%
	<ul style="list-style-type: none"> • 30% • (26 ②) • (29) • 24) () • (3) • (24 , 18 ①) 	<ul style="list-style-type: none"> • : • : • : • 가 (24)
	<ul style="list-style-type: none"> • 가 5 (22) • 3 (22) • 5 • (14 ②) • 5 • 3 • (14 ②) • 14 2 1 • 30% (14 ②) • (1) 	

	<ul style="list-style-type: none"> 가 - 10 - 3 (16) 	<ul style="list-style-type: none"> . (49 3) - : 70 - : 5
(21)	<ul style="list-style-type: none"> 가 	<ul style="list-style-type: none"> . - , -
	<ul style="list-style-type: none"> . . . 가 . . 	
	<ul style="list-style-type: none"> . - : 가 , () , . 가 : (36 ③) . 가 : (36 ①) 	<ul style="list-style-type: none"> .(35 , 27) .
	<ul style="list-style-type: none"> . . 	<ul style="list-style-type: none"> , (37 , 38) (38)
	<ul style="list-style-type: none"> . - 49 3③ . . - - . . (41) 	<ul style="list-style-type: none"> (3 ③, 23 ④) (39 ①) (39 ②) 가 (40) 가

	<ul style="list-style-type: none"> • : (30) - - 3/100 • : • (31) 가 • (32) • : , (34)
--	---

:

()

가 , , , ,
, 가 , , 가
, , , ,
. .
, , , , .
가 ,
. .
,
.
10 , 70
. 3
5 .
, 가

50%

가 50%

< -5 >

	가	
		Paper Company()
	.	.
	500	
	70%	70%
	30%	30%
		(가)
	90%	(90%)
		가
	가.	.
	-	
	.	50% .
	가	가 (: 15%) 50%

: . 2001. 4. 「 」 . 2001. 5. 9.
「 」

2)

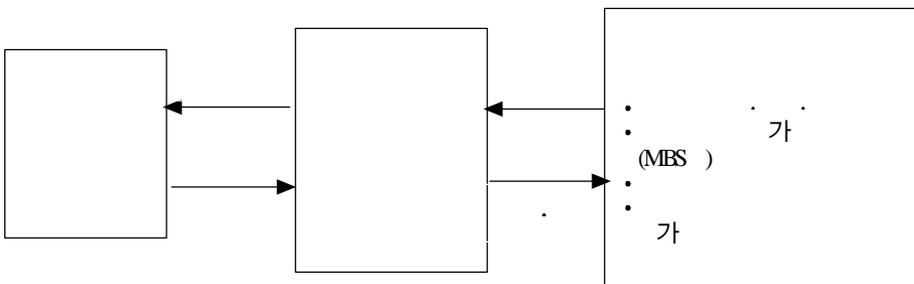
(1)

1984 4
16)
(15), (11), (13),
1998 4
가 .

(2)

「 」

< -7 >



16)

13

100 70

() ()
() (< -6>).

가

100%

「 」

가

가

REITs

LPT

가

< -6> ()

<p>()</p>	<p>○ , - 가 , - LPT 가 REITs 가</p>
<p>()</p>	<p>○ 가 100% 가 - , 가 - ,</p>

,
 (REITs) ,
 , (escrow account)
 .
 가
 (project financing)
 , 가 가
 . ,
 ,
 . ,
 ,
 가 가 .

(3)

< -7> .

(conduit)

, 50% .

< -7>

가	-
.	50% ()
	-
	-

17)

가 .
15%

3%

12%

1-2%

3.

3

< -8> .

< -8>

					,
	1998 9	1999 1	2001 7	2001 7	1998 4
	,				,
가			가	가,	
	1	250	500	500	(가)
			가 ,		가
			()		
	,	,	,	,	,
	가				가
			1 10%		
			90%	90%	
					5

: . 2001. 6. 「 가 」

가

가

가

가

가

가

가

가

가

가

가

가

가

가

가

가

가

CHAPTER 4

1.

1)

(1)

(가)	(ABS)					
ABS	2000	49	3,832	1999	6	7,709
7.3		가		, 2001	22	776
ABS		(< -1>)		. 2000		
		ABS가 47		377	ABS	95.3%, 2001
	21	6,052		97.8%		. ABS
	2000			58	6,628	69.9% 40
9,944	,	2001		34	6,572	53.8% 18 6,456

< -1>

ABS

ABS

(:)

		1999			2000			2001					
A B S		44,447 (74.5%)	15,204 (25.5%)	59,651 (100%)	409,944 (87.2%)	60,433 (12.8%)	470,377 (100%)	186,456 (85.3%)	29,596 (13.7%)	216,052 (100%)	365,497 (82.3%)	45,229 (29.75%)	410,726 (688.5%)
	1	-	8,058	8,058	12,160	11,295	23,455	2,280	2,444	4,724	12,160 (-)	3,237 (40.2%)	15,397 (191.1%)
		44,447 (65.6%)	23,262 (34.4%)	67,709 (100%)	422,104 (85.5%)	71,728 (14.5%)	493,832 (100%)	188,736 (85.5%)	32,040 (14.5%)	220,776 (100%)	377,657 (849.7%)	48,466 (208.3%)	426,123 (629.3%)
		306,714 (100%)			586,628 (100%)			346,572 (100.0%)			279,914 (91.3%)		
2		262,267 (85.5%)			176,684 (30.1%)			160,116 (46.2%)			85,583 (32.6%)		
ABS ³		44,447 (14.5%)			409,944 (69.9%)			186,456 (53.8%)			365,497 (688.5%)		

1 :

2 :

3 : ABS

4 :

:

ABS

ABS (SPC)

1999 2000

2000

72.8%,

27.2%

1999 (83.2%,

16.8%)

10%

, 2001

(< -2>).

2000

AAA

. 2001

88.6%,

11.4%

< -2> 2000 -2001

ABS

(:)

									()	
2000		307,715	35,191	342,906	102,229	25,242	127,471	409,944	60,433	470,377 (95.3%)
		12,160	4,479	16,639	-	1,301	1,301	12,160	5,780	17,940 (3.6%)
		-	-	-	-	5,515	5,515	-	5,515	5,515 (1.1%)
		319,875	39,670	359,545 (72.8%)	102,229	32,058	134,287 (27.2%)	422,104 (85.5%)	71,728	493,832 (100%)
2001										()
		175,868	17,428	193,296	10,588	12,168	22,756	186,456	29,596	216,052 (97.9%)
		2,280	-	2,280	-	97	97	2,280	97	2,377 (1.1%)
		-	-	-	-	2,347	2,347	-	2,347	2,347
		178,148	17,428	195,576 (88.6%)	10,588	14,612	25,200 (11.4%)	188,736 (85.5%)	32,040	220,776 (100%)

1 : 2000 (KoMoCo)가 MBS (

) MBS() 3 (1 2,789)

2 : 2001 (KoMoCo)가 MBS (

) MBS() 1 (2,377)

:

1999 2000

, CBO(Collateralized Bond Obligations)가 , ABS

ABS (12 7,471) 10 2,229 (80.2%)

가

가 . 2001

ABS

BIS

(NPLs : Non-Performing Loans)

ABS

< -3>

ABS

(:)

	2000		2001	
	()		()	
	(32)	60,911	(30)	57,289
	(22)	179,923	(1)	589
	(25)	87,095	(12)	44,898
	(4)	5,618	(1)	1,220
	(22)	60,796	(26)	91,295
	(5)	5,328	(1)	3,618
	(8)	17,755	(1)	2,377
	(118)	417,426 (84.5%)	(72)	201,286 (91.2%)
	(21)	48,445	(2)	1,109
	(2)	5,158	(3)	3,579
	(5)	13,525	(2)	5,913
	(28)	67,128 (13.6%)	(7)	10,601 (4.8%)
	8 *	9,278 (1.9%)	8 *	8,889 (4.0%)
	(154)	493,832 (100%)	(87)	220,776 (100%)

: (<http://www.fss.or.kr/>)

6 10

ABS

3 (2000 -2001 : 81%)

(< -4>). ABS 가 AA

ABS 가 2000 99%, 2001 99.2%

< -4>

ABS 가

(:)

		1	2	3	4	5	6	7	8	()
2000	AAA	93,885	99,873	19,850	4,000	5,130	1,650	2,300	1,100	227,788 (74.0%)
	AA	13,925	34,163	10,330	3,500	8,365	1,650	1,750	3,080	76,763 (25.0%)
	A	252	-	2,000	-	-	-	-	-	2,252 (0.7%)
	BBB	-	252	331	219	110	-	-	-	912 (0.3%)
	()	108,062 (35.1%)	134,288 (43.6%)	32,511 (10.6%)	7,719 (2.5%)	13,605 (4.4%)	3,300 (1.1%)	4,050 (1.3%)	4,180 (1.4%)	307,715 (100%)
2001	AAA	18,658	64,314	28,876	48,052	3,075	230	600	2,200	166,005 (94.4%)
	AA	-	2,700	1,500	200	100	-	-	4,000	8,500 (4.8%)
	BBB	-	-	-	-	-	550	800	13	1,363 (0.8%)
	()	18,658 (10.6%)	67,014 (38.1%)	30,376 (17.3%)	48,252 (27.4%)	3,175 (1.8%)	780 (0.5%)	1,400 (0.8%)	6,213 (3.5%)	175,868 (100.0%)

1 : 2000 BBB 3 BB 90
 2 : 2001 (4 7,580) 가 AAA
 :

, (Junk Bond), , ,
 , 18), () (<
 -9>). CBO가 2000 27 7,227
 ABS (47 377) 58.9% . 가 99.5% 27
 5,922 , (58 6,628)
 CBO 47.0% .
 2001 , 16 9,688 (76.8%)
 가 , CBO
 가 4 8,819 (22.1%), 2,269 (1.0%)

18)

가 가 (future cash flow) 가

()

①

ABS

(< -9>). ()

ABS , , , (), ,

, 2000 1 1,910 2001

2,269 ABS 2.4% 1.0%

②

(Commercial Mortgage-Backed Securities: CMBS)

()

. CMBS

, (RMBS) 가

「 」 CMBS . 1999

가

2000 30 6 2,967 ,

가

5 1 8,987 ,

11 1 8,926 , 4 1

1,870 , 5 6,360 , 19)

19) 42 가 가

3 5,180 . CMBS
가 (19.3%) .

③

5 ABS
2 ABS
1 ABS
1,100 , 8,000 . 1 ABS
3 9.40%(9.60%), 5 10.15%(
10.35%) , (3 9.26%, 5 9.86%)
0.14% 0.29%(0.34% 0.49%) . 가
(,) ABS 20) .

< -5> ABS

		1	2
		5,550	5,550
()		4,000	4,000
	3	9.40%	9.86%
	5	10.15%	10.26%
		1999. 10. 5	2000. 4. 12

5
2 9,413 ABS 8,100 ()
(< -6>).

20) ABS 8,000 5,000 Credit-Line ABS 가 ABS 가 .

< -6> ABS

(:)

		()		
		1 (1999)	2 (2000)	
	1		150 (AAA)	3 (-)80bp
	3	1,050 (AAA)	300 (AA)	3 (-)10bp
	4	1,800 (AA)		3 (+)40bp
	5	1,300 (AA)	1,500 (AA)	3 (+)50bp
	5	1,350 (AA)		5 (+)100bp (FRN)
	5.5		650 (AA)	3 (+)70bp
	6	1,018	295	
		6,518	2,895	

: 3 . 2000. 12. 「 」 .

1999 12 10 2,279
 (: 1,900 , : 379) ABS .
 (1,817), (327),
 (135) .

(SPC)

ABS .

< -7> ABS

	1	1,200	AAA	3 -10bp
	2	700	AA-	3 +90bp
	2	379		3%
		2,279		

: 3 . 2000. 12. 「 」 .

2000 5 29 ()
 2) 179 (: 125 ,

: 54) ABS

(SPC)

ABS

() ABS

ABS

, CBO

. 2000

CBO가 55 27 7,227

ABS

58.9%

ABS

. S-CBO

CBO 22 17 9,923

. 7 7,490 (43.1%)

CBO

8

P-CBO

17 7 3,073

< -8> 2000 2001

CBO

(:)

2000	S-CBO		22	102,433	77,490	179,923
			3	8,920	4,542	13,462
			7	6,590	2,919	9,509
			2	725	535	1,260
		34	118,668	85,486	204,154	
	P-CBO		21	70,109	2,964	73,073
			55	188,777	88,450	277,227
2001	S-CBO		1	380	209	589
			1	1,000	1,279	2,279
			2	1,380	1,488	2,868
	P-CBO		11	44,338	1,613	45,951
			13	45,718	3,101	48,819
			68	234,495	91,551	326,046

: * P-CBO

(SPC)

17

, NPL . 1999 (KAMCO)
 15 2 8,510 (: 2 4,518 , : 3,992) NPL
 (ABS)가 . 2000 NPL,
 ABS 59 11 5,687 (:
 8 2,885 , : 3 2,802) 가
 NPL .

< -9> 2000 NPL (ABS) (:)

(KAMCO)	26,480 (8)	21,965 (13)	48,445 (21) (: 38,415 : 10,030)
	35,443 (15)	8,947 (6)	44,390 (21) (: 26,595, : 17,795)
	11,686 (8)	11,166 (9)	22,852 (17) (: 17,875 : 4,977)
	73,609 (31)	42,078 (28)	115,687 (59) (: 82,885 : 32,802)

: Secondary CBO²¹⁾

: . 2001. 5. 「 (MBS) 」 .

NPL ,

NPL

ABS .

CBO

(Junk Bond)

가 28 7,690 (58.3%) 가 , ,

21) 2000 12 Secondary CBO(Pool
) 33 20.4 (: 11.9 , : 8.5) .

19 4,232 (39.3%), 1
 1,910 (2.4%)
 , ABS () (22 17
 9,923), (25 8 7,095), (32 6 911), (22
 6 796) 118 41 7,426 (84.5%)
 가 21 4 8,445 (9.8%) ABS

< - 10> ABS

ABS	8 26,480
ABS	13 21,965
	21 48,445

: (<http://www.fss.or.kr/>)

,
 1999 12 10
 2,279 (: 1,900 , : 379) ABS
 . 2000 5 29
 (2) 179
 (: 125 , : 54) ABS 가 .

(<SPC>)			
() (LSF3 Korean Property Company, Ltd.)		1,002 [() : 430, () : 572]	7. 31
()		407 (: 290, : 117)	12. 14
()		419 (: 377, : 42)	12. 14
(1)		2,904 (: 2,050, : 854)	12. 18
()		1,221 (: 810, : 411)	12. 20
LG ()		782 (: 605, : 177)	12. 20
LG ()		1,237 (: 1,100, : 137)	12. 26
()	(4)	1,306 (: 1,100, : 206)	12. 28
	8	9,278	-

: 2000 12 31

: . 2001. 5. 「 (ABS) 」

가

, ABS (30 7,715) 가
 AA ABS 가 30 4,551 99% .
 6 10 , 2 ABS가 43.6% 가
 , 1 (35.1%), 3 (10.6%), 5 (4.4%), 4 (2.5%) .

(2)

, 3 가
 . 가

가 .

BIS

ROE

. ABS

가

()

MBS

ABS

. 2

22)

가 30

23)

Secondary CBO, Primary CBO,

ABS (ABCP),

ABS/ ABCP(Revolving ABS/ ABCP)

ABS

(ABS)

(NPL),

, (Auto-Loan,),

(,

,),

ABS

22) 2000

ABS

(ABS

) 30 3,675

[

ABS

: 40 4,055]

23) ABS

(1999 2000)

186 56 1,541

[

ABS

: 40 9,944

] .

< - 12> Primary CBO

				(BBB-)
L G	1 5,500	8. 2	60	43% (73%)
.	4,394	8. 11	25	16% (51%)
	5,009	8. 30	35	20% (64%)
.	3,630	9. 8	31	36% (58%)
. SK .	4,020	9. 8	33	33% (69%)
.	3,600	10. 11	33	32% (72%)
	4,010	10. 25	29	25% (76%)
.	8,000	10. 30	51	29% (64%)
.	3,370	11. 1	27	30% (75%)
.	3,480	11. 20	28	20% (74%)
.	3,570	11. 27	26	27% (73%)
.	1,720	12. 20	25	25% (57%)
.	1,010	12. 23	18	27% (63%)
	2,260	12. 28	25	28% (63%)
	3,000	12. 28	28	20% (66%)
	2,000	12. 29	26	35% (58%)
.	4,500	12. 29	37	24% (73%)
	7 3,073	(17)	537	30% (68%)

1 : 2000 12 31

2 : 217

: (<http://www.fss.or.kr/>)

ABS

ABS가

가

, Primary-CBO

Primary-CBO가

, Primary-CBO

()

P-CBO

CLO가

Revolving

가

ABS

(3)

(가) ABS

ABS

. ABS

가

ABS , (

,)

가 10 30bp(

30 50bp)

. ABS

ABS

, 가 ABS 가

가

, 가

가가

. ABS 가 가 가

가 가 가 . 가 ABS
가 .
, ABS .
29%(5%) , CBO
43.3% . 가 ,
가 ABS .
1 , .
5 10 가 .
가 가 가 가
. .
() ABS
가 가
, () BIS
(capital arbitrage)
. SPC가 ABS
. SPC
. 1998 3
MBS ABS 2,000 가
() 12%(25%) . 1990 CLO ABCP
(structured
finance) 가 1995 85 1997 410 .
ABS 49 84.5%
1 6 가 (<

-3>). 1
 .
 , 가
 .
 가
 가 .
 (put-back option) , (2000 7
) 가 .
 ()
 ,
 가 .
 .
 가
 .
 가
 .
 , 가
 .
 , 가
 , SPC 가
 , , , , 가 ,
 가 .
 , 가 ,
 , , .

가 .
 ,
 , , 가
 , 가
 가 .
 가 .

2)

(1)

2

1

가 .

(가) 1

, 24) , ,
 . 1990

, 1996 가 1997

80% .
 1990 가 , 1999
 56.9% .
 가 가 50%

24) 2001 11 1 .

가 가

1997 8

25)

< - 13 >

(: , %)

	1990	1995	1997	1999 (A)	2000 (B)	(B-A)
	76,244 <48.6>	185,045 <50.1>	252,562 <49.6>	341,008 <56.9>	379,354 <56.0>	38,346 (11.2)
	80,551 <51.4>	184,036 <49.9>	222,649 <43.7>	242,116 <40.4>	289,728 <42.8>	47,162 (19.5)
()	61,703 <39.4>	141,924 <38.5>	170,984 <33.6>	185,728 <31.0>	217,538 <32.2>	31,810 (17.1)
()	5,354	12,749	18,694	22,644	23,615	971
()	5,949	16,844	15,503	11,302	16,642	5,340
() ¹⁾	4,727	7,031	10,506	14,844	23,557	8,713
()	-	1,706	1,824	3,790	4,058	268
	-	-	33,842	15,875	7,862	-8,704
	156,795 (40.2)	369,081 (15.3)	509,053 (19.3)	598,999 (9.7)	676,494 (12.9)	77,495
²⁾	1,587	7,031	20,571	14,469	-	-

1 : < > , ()

2 : .

3 : 2000

: (<http://www.bok.or.kr>)

9.5%

1998 9%

10

가

25) 2001 4

가

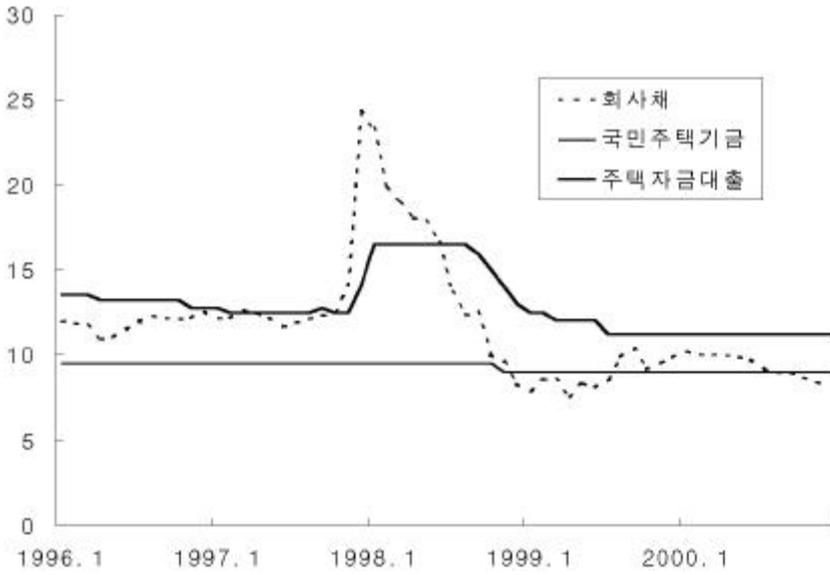
가 10%

factoring

(CD)가 7% ,

8%

< -1>



< -14>

1996.12	12.57	9.5	12.75
1997.12	24.31	9.5	14
1998.12	8.3	9	13
1999.12	9.85	9	11.25
2000.12	8.12	9	11.25

: 10

()

2001

250

가

(KoMoCo)가

가

(KoMoCo)

1,001

1999 9

1,051

(28.6%),

(14.3%),

(14.3%),

(14.3%),

(9.5%)

, 2000

11

IFC(9.5%)

(9.5%)

가

. KoMoCo

MBS

2001

6

5

2

216

MBS

2000

3

() MBS

6

가

() (

KoMoCo

)가 5

()

2001

11

13

2

2,025

MBS

94.4%

(2000

73%, 2001

88.6%)

(<

-15>)

MBS

2000

1

3,788

ABS

154

49

3,832

2.8%

, 2001 11

13

2

2,025

MBS

MBS

KoMoCo

2 216

MBS

8

1,809

()

()

. MBS

< -15> .

< - 15> MBS

		MBS2000-1	MBS2000-2	
	2000. 3. 20	2000. 4. 10	2000. 9. 1	2000. 9. 5
	589	3,976	5,000	410
	: 1 10 : 430 : 10.13% 3 : A+ AA +355bp	: 6 6 : 3,690 : 8.15 10.04% : AAA	: 6 7.5 : 4,790 : 7.38 9.00% : AAA	: 5 : 330 : : 1 + 145bp : AAA
	: 10 : 159 : 20%	: 6 7 : 286 : 2%	: 8 9 : 210 : 6 7%	: 5 : 80 : 20%
	- (73%) - (80)	- (93%) - KoMoCo	- (96%) - KoMoCo	- (80%) - (70)
BIS 기	50%	20%	20%	50%
	()			()

		MBS2000-3	2	3	4
		2000.12. 8	2001. 1. 19	2001. 3. 22	2001. 5. 14
		3,813	211	105	101
		: 6 10 : 3,680 : 6.82 8.60% : AAA	: 3 7 : 135 : 8.5 9.2% : AAA	: 5 7 : 80 : 7.7 12.0% : AAA BBB	: 5 10 : 73 : 8.5 12.0% : AAA BBB
		: 11.5 : 133 : 6%	: 8 10 : 76 : 10 15%	: 10 : 25 : 13%	: 15 : 28 : 13%
		- . (97%) - KoMoCo	- . (64%)	- . (76%)	- . (72%)
BIS 가		20%	50%	50%	50%
			()	()	()

		MBS 2001-1	5	MBS 2001-2	6	7
		2001. 5. 18	2001. 9. 3	2001. 9. 20	2001. 10. 4	2001. 11. 8
		2,377	120	5,050	136	137
		: 6 10 : 2,280 : 6.24 7.99% : AAA	: 4 11 : 95 : 6.8 8.0% : AAA BBB	: 1 14 : 5,000 : 4.9 6.92% : AAA	: 4 11 : 106 : 6.6 10.0% : AAA BBB	: 4 11 : 100 : 6.7 10.0% : AAA BBB
		: 12 : 97 : 2%	: 12 : 25 : 15%	: 15 : 50 : 8%	: 12 13 : 28 : 13 15%	: 12 13 : 37 : 13 15%
		- . (96%) - KoMoCo	- . (79%)	- . (99%) - KoMoCo	- . (78%)	- . (73%)
BIS 가		20%	50%	20%	50%	50%
			()		()	()

: <http://www.bok.org>, <http://www.komoco.co.kr> <http://www.newsatate.co.kr>

KoMoCo < -16> 5 1 9,440 ()
MBS , MBS 26)
< -17>, < -18> .

< - 16> MBS (KoMCo)

	MBS 2000-1 (2000. 4. 7)	MBS 2000-2 (2000. 9. 1)	MBS 2000-3 (2000. 12. 8)	MBS 2001-1 (2001. 5. 18)	MBS 2001-2 (2001. 9. 20)
	3,690	4,790	3,680	2,280	5,000
	9 Tranche	11 Tranche	12 Tranche	12 Tranche	7 Tranche
	6 6	6 7.5	6 10	6 10	1 14
	8.15 10.04% (3 + Spread(3 04%)	7.38 9% (3 + Spread(3 038%)	6.82 8.6%	6.24 7.99%	4.90 6.92%
	3	3	3	3	3
	AAA	AAA	AAA	AAA	AAA

: <http://www.komoco.co.kr>

< - 17>

(: , 2001 7)

	(A)	(B)	(A/ B)
MBS 2000-1	4,538	317,086	1.43%
MBS 2000-2	4,623	436,511	1.13%
MBS 2000-3	2,537	356,673	0.71%
MBS 2001- 1	5,121	226,126	2.26%

: <http://www.komoco.co.kr>

< - 18>

(: , 2001 7)

	(A)	(B)	(A/ B)
MBS 2000-1	3,279	309,676	1.06%
MBS 2000-2	4,812	429,563	1.12%
MBS 2000-3	2,586	353,220	0.73%
MBS 2001-1	360	220,984	0.16%

: <http://www.komoco.co.kr>

26) KoMoCo

MBS

, KoMoCo

가

가

가

2000 4 MBS KoMoCo가
MBS MBS 가 20%
, 가 1 (2 MBS),
MBS KoMoCo 50%
가 KoMoCo가
MBS 20% 가

(2)

①

. 2000 1 3,788
67 6,494 2.04%

MBS 1990

가 , 2
1
가

②

가 가 .
27)

$A = D(1-d) \cdot (l + l^2 + l^3 + \dots) = D(1-d) \cdot l / (1-l)$ <p>A 가 가 , D(1-d): , l :</p>
--

(< -19 >)
가 .

27) D 가 가 (1-d)D 가 , (1-d)D .
l 가 가 가 가 A=(1-d) · D · (l+l²+l³+...) = (1-d) · D · l/(1-l)

< - 19 >

가

(: %)

	가		가
10	11.1	60	1500
20	25.0	70	233.3
30	42.9	80	400.0
40	66.7	90	900.0
50	100.0	100	

: . 1993.12. 「 」 .

2000 2.04%

2.08%

37 9,354 1 2,789 3.37%

3.49% 가

25% (1988) 33%

③

가

가

④

가 . 가

가 .
가 ,

가
가

1997

⑤

1999 5.3% , 5 2000 16.3% 1997 2.7% 가 .

(: , %)

	4		4 5		5		
1994	18,629,560	92.9	338,600	1.7	1,082,000	5.4	20,050,160
1995	22,169,230	93.9	50,000	0.2	1,379,000	5.8	23,598,230
1996	28,767,914	96.2	70,000	0.2	1,067,000	3.6	29,904,914
1997	33,366,821	97.2	27,000	0.1	928,300	2.7	34,322,121
1998	55,670,299	99.4	45,000	0.1	285,000	0.5	56,000,299
1999	28,768,444	93.8	290,000	0.9	1,613,000	5.3	30,671,444
2000	47,945,177	81.7	1,141,413	1.9	9,576,256	16.3	58,662,846

: . 2001. 8. 「 」 .

, .

가

가

.

.

⑥

,

.

가

.

가

가

,

1

⑦

1999		가 (LTV)	
28%, 23.4%		가 2000	
2000		.28) 1999 가	
1995 (25.0%	22.1%	
33.9%	31.3%		

가 (PIR)

가

LTV

(PTI) , (R/ Y)* . (R/ Y) = (R/ L) · (L/ P) · (P/ Y) PTI
 = R/ L · LTV · PIR (R/ Y)* LTV
 PIR

LTV (RY)* · (L/R) / PIR
 R(L, i, n): , Y: , L: , i: , n:
 $R = L \cdot i \cdot (1+i)^n / [(1+i)^n - 1]$ ()

PIR	LTV	20	9.5%	6%
가		<	-2>	. 2000
PIR 5.0()	7.9()	29),	25%	,
9.5% 20	LTV	44%	28%	
, 6%	57%	36%		

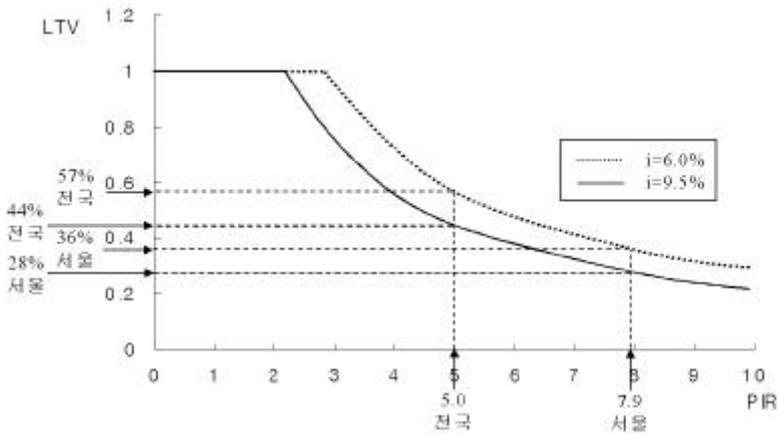
28) . 2000. 「 . 22
 29) . 2000. 「 . 10

가 6%

80%

< -2>

LTV



PIR 3

20%

가

LTV 50%

(4)

MBS

(가) MBS

(1

)

MBS

1

1

가
 가 (Price to Income: PIR) 1991 8.2 2000 5.0
 가 LTV 50%

< -21> PIR

(:)

	1991	1995	1997	1999	2000
PIR	8.2	5.7	5.0	4.6	5.0

: 2001. 5. 「 」.

가

. 2000

가 가 67%

가 (Loan to Value: LTV) 1990

, 2000 38% MBS

가 79%(1999)

. < -2> 가

6% LTV가 50%

< -22> LTV

(: %)

	1991	1995	1997	1999	2000	(1999)
LTV ¹⁾	20.7	26.4	29.4	33.1	38.1	78.7

: 1) 1991 95

: 2001. 5. 「 (MBS) 」.

가

가

30) 7 9%

2001 5 3 가 6 7% ,

(AA) 7 8% 31)(1%)

가 가 9%

MBS

KoMoCo ,

32) MBS

MBS

2000 KoMoCo가 MBS

가 9.5% , MBS 가 가 8.33 9.66%

MBS

가 1

MBS 1

MBS 가 .

33) , 가

30) 가 BIS

50% 가 가

가 1

31) 0.1 0.3%, 0.2% , 0.3% ,

0.5 1.0%

32) 0.2%, 0.5%, 0.1%

33) 2000 1 21 (7 2,

6 2).

MBS 가

()

MBS

(MBB)

SPC

가

가

MBB

가

가

ABS

가

MBS

가 가

ABS

가 가

가

20

MBS

가

2001 5 18

1 3,750 (2000

2 1,660)

. KoMoCo

MBS

, KoMoCo

Mortgage Pool

MBS

가

KoMoCo
 , 가 가 Buy
 -and-Sell
 1
 (5)
 가 가
 , 가
 MBS 가
 MBS 가
 MBS 가
 MBIA FSA
 MBS 가
 , KoMoCo Fannie
 Mae
 , MBS MBS 가
 가(Pricing) MBS
 가 MBS Data
 , BIS MBS 가 가

MBS 가
 20% , SPC ABS MBS
 가 50%가 .
 MBS KoMoCo
 MBS 가 MBS
 . MBS
 가 가
 가 1 4% 34) .

2.

1)

(1)

가 <
 1> , .
 1 " -
 "가 . 5 " -
 " , , 428
 (50.95%), 25 (2.98%), 20 (2.38%) 56.3% , 367
 (43.7%) 35) 840 .
 ,
 1,114

34) MBS 가 가 4%
 35) 1 50 1 50 3 5,000
 1 69% 가 가 3% 500 16%, 1,000

" 5
 (put back option)
 . 5 10.48%
 8.0% ,
 6.8% .
 1 .
 11 17 . (AMC)
 가 . 70 28%
 , SK , 가
 . 1 (CR)
 .
 가
 500 , 가 150
 350 . , 가
 .
 , 2 , ,
 Task-Force ,
 , .
 , ,
 . (Aurthur
 Anderson), , Task-Force ,
 가 ,
 . , , ,
 , , , , , , , , , , SK, 15
 , ,
 , .

		500	,
	SR	500	
		500	
CR	-	840	,
	KI-CR	1,500	, LG
		1,800	
(가)	JW	70	,
		70	,
		100	,
(가)		70	,
	CBRE- -	70	SOK,
			가 , SAMS

: . 2001. 11. 27.

(2)

가

50%

가

. 1990

가

가

가

8%

4%

12%

가

< -24> 가

		(bp)	
(A)	1,209	가	13% 가 , 5%, 2%
(B)	170	가	50% , 가 30
(C)	132	(5) (30), (30), (30), (35), (12), 가 (가 32-35%), 가	
REIT (D)		(100), agency (100), 가 (10), (5), (48), (1)	
	1 /	100), 18% 가 . 1 가 5% (가
		364	5 (72bp)
	(E)	116	(100), (5), (10), (1)
(F)	2	CR-REIT . 5 1 가 (3, 1)	
(G)	407	$G = B + (C \times 35\%) + (D / 5) + E + F$	
(H)	802	$H = A - G$	
= (I)	729	$I = H \times 100 / 110\%$ 10% ()	
가 (J) =	73	$J = H - I$	
(K)	22	$K = J \times 30.8\%$	
(L)	50	$L = H - (I + K)$	

3

150

가

37)

38)

가

가

가

가

가

(3 3),

50 1

가

1

가

29

가

90%

(28),

37) 150

38)

70%

(1999 8)가 300

75%

가

가 가
가

가
가 .

, 가
1 1

가 . 가
가 5

, 가

가

가
가

가 가
, 가

39)

가

2)

(1)

1998

가

2000 7

,

13 3,395

, 6 1,580 가 , 2 950 ,

4 760 , 1 105 .

39) 11

				가					
	1	2000 7 24	130	500 13	~ 1 6	가		12.0%	
	2	2000 9 4	320	500 32	~ 1	가		11.0%	(766가)
	3	2000 9 4	300	500 30	~ 1 6	가		12.0%	(766가)
	4	2000 9 4	180	500 18	~ 1 6	가		12.0%	(294가)
	5	2001 3 16	400	1 5	~ 15	가		7.6 8.0%	가
	6	2001 4 10	250	500 25	~ 18	가		9.0%	
	1	2000 9 29	650	500	1	가		8.7%	
	2	2001 6 18	300	1,000 ~ 3	1	가		8.3%	
	1	2001 6 21	105	1,000 ~ 3	2 2	가		9.5 10.0%	가
	1	2000 9 26	90	500 18	~ 1	가		12.3%	
	2	2000 11	70	500	1	가		9.2%	
	3	2001 4 26	250	500	1 2 7	가		7.5 8.2%	
	4	2001 5 28	350	500	1 2	가		7.7 8.7%	e-

:

가 가 ()

가 100

15

85

16.5%

71

가

71%

가

(project financing)

가

가

40)

1 ,

8

< -26>

1

	.
가	()
	1 6 , 가
	2000 7 24 2000 8 23 , 1 - 가 -
	130
	500 13 (10%),
	가(: 가) 80% 가 () - 가, - 가
	: 1.5% : 1 20%

: . 2000. 7. 「 1 」 .

40)

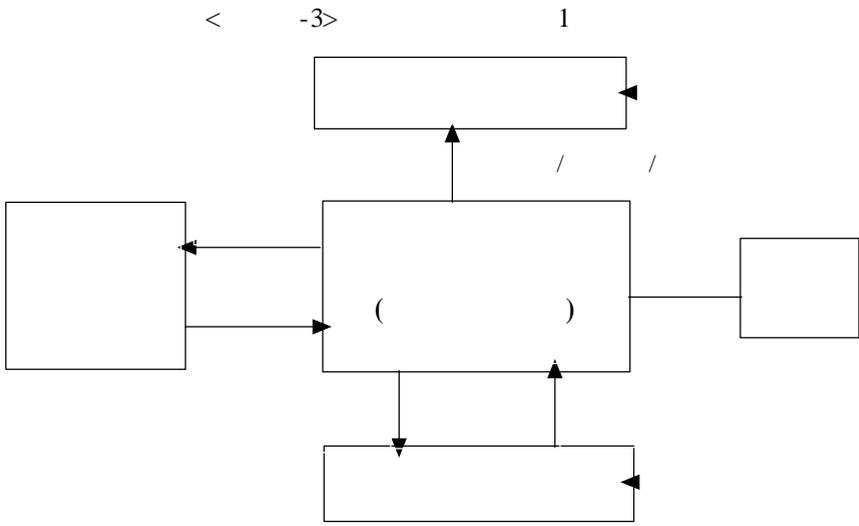
가

15%

3%

12%

1-2%



: . 2000. 7. 「 1 」.

(2)

,

가

가

가

가

가

, 가 . 가 . ,
가 .

3.

4

, , ,
< -27> .

(1)

, ,
(가 , .
) 가 .

MBB

가 .

(2)

가 ,
가
가

(3)

가
가
BIS 가 가
가

			/	
	-	-EIS 가	-	
	-	MB	-	-
	- 가 가	가	가,	-
		PIR LTV	가 가 가	
	-	-MS		
	- 가 가		가	-

5 CHAPTER

1.

가

가

(1)

1998 가 , 가
가
가
가
1999 16.8%가
2000 27.2% 가 2001 11.4%
(5%)
가
가
가
가
가 ,
가 .

(2)

가

가

가

가 가

(indenture provision)

(dividend test),

(retirement)

가

2)

(1)

가

(MBB)

SPC

가

- (buy-and-hold)

가

(buy-and-sell)

FNMA(Fannie Mae)

FHLMC(Freddie Mac),

HKMC

MBS

가

(2)

13

20

20

가

(MBS)

(Mortgage Pool)

MBS

가

가

가

Fannie Mae Freddie Mac

MBS 0.45%

MBS

(3) KoMoCo

KoMoCo

KoMoCo

Fannie Mae

KoMoCo

가

가

가1

가

가

KoMoCo

가

KoMoCo가

(4)

가

가

가

가

3)

(1)

가

가

가

15 1 10% , 16

1

35

가

가

(2)

29

90%

(28).

가

가

가

가

(3)

30%

(4)

가2

가

가

가

4)

, 가
가
(SPC)
가

3.

,

1)

, 가
가
가 ,
가 ,
가

(1) 가 가 가 가
가 가가 . 가
가 가 가 가 . 가
가 가 , 가 .
가 가 가 가
가 , 가 가
.

(2)

MBIA FSA

가 .

(3)

, ,
, , ,
, , .
가
가 .
가 가
가 .

가 가
 가 가 , 1m² 가
 Russel/ NCREIF
 NREI(National Real Estate Index)

(4)
 가
 ,
 가

(5)
 , , ,
 가

5 가
 , 3
 5 3
 ,

2)

(1)

1

, 90%

1

8%

19%

3%

6%

가 .

가 가

13%

(2)

가 .

가

가

가

,

가

,

(3)

,

가

가

,

(4)

()

300

가

100

100%

MBS

1

3)

(1) BIS

가

(BIS)
(MBS) 가 가
. , KoMoCo가 MBS 가 20% SPC
ABS MBS 가 50%가
. MBS 가 (LTV-ratio)
65% 가 50%
. MBS 가
가

MBS 가 KoMoCo 20% .

(2)

MBS
30% MBS
. MBS가 ABS

가 .

(3)

, LTV
(pooling)
가 .
, KoMoCo .

(4)

, .

가 .

. 1998

,
가

가

,
가

가

,
가

1999

2000

가

가

가

,
가

.
(가)

- . 2000. 7. 24. 「 () 」 .
- . 2000. 7. 「 1 」 .
- . 1999. 「 」 . : .
- . 2001. 5. 「 (ABS) 」 .
- . 2000. 12. 20. “MBS
「 」 1 .
- ()
- . 2001. 6. 15. 「 REITs 」 .
- . 1998. 「 」 . : .
- . 2000. 「 」 .
- . 2001. 「 가 」 .
- . 2001. 4. 「 」 .
- . 1997. 「 」 .
- . 1999. 「 」 .
- . 1998. 11. “ 8 ”. 「
」 .
- . 1998. 12. “ , ”.
「 」 .
- . 1998. 5. 「 1 」 .

- . 1999. 3. “ ”. 「 」 .
- . 1999. 「 」 .
- . 2000. 6. 21. “ 가 가” . 「 」
- 13 2 .
- . 1999. 「 」 .
- . 2000. 「 」 .
- . 1997. 「 」 .
- . 2001. 5. 9. 「 」 .
- . 1998. 「 」 .
- . 1998. 「 」 .
- . 2000. 5. 29. 「 」 .
- . 2001. 5. 「 (MBS) 」 .
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(www.nareits.com)

SUMMARY

Real Estate Finance in Korea:
Market Analysis and Institutional Promotions

Juhyun Yoon, Geun-Yong Kim, Kyung-Hee Moon and Heon-Joo Park

Loan financing has been the only method in real estate sector in Korea. However, even the loan was restricted by regulation and thus, non-institutional financing based on the speculative incentives has accomplished major role in real estate sector. It means that real estate sector was totally separated from the capital market.

In the end of 1997, Korea has encountered serious liquidity problems in various sectors, so-called foreign exchange and financial crisis. Real estate securitization was urgently needed to aid restructuring of entrepreneurs and banks. Government has implemented several measures to promote real estate finance in Korea. Real estate finance is adopted to securitize real estate properties in capital market, to increase cash-flows into real estate owners, and to eventually return real estate market back to prosperity.

The purpose of this study is to analyze new financing methods, such as asset securitization, mortgage securitization, and real estate investment finance, and thus, to suggest measures to activate the newly introduced

real estate finance. ABS, MBS, K-REITs, CR-REITs, etc. were mainly focused.

This study consists of five chapters. The second chapter, next to an introduction, analyzes the present condition of real estate finance market. Loan used to be the only method for real estate finance before new real estate finance methods such as asset securitization, mortgage securitization, real estate investment companies, etc. are introduced after 1998. Although the regulations on real estate loan has been lifted, the percentage share of real estate loan keeps decreasing because of depressed market and financial institutions' recent behavior to avoid risk. Thus, the introduction of these new real estate finance methods into Korean market has opened new possibilities of real estate asset securitization and real estate investment finance to traditional capital market. However, there are still a lot of social and legal obstacles to successful implementation of these new real estate finance methods in Korean market.

The third chapter, "The Basic Structure of Real Estate Finance with regard to Relevant Law", divides real estate finance into real estate securitization (ABS and MBS) and real estate investment finance (K-REITs, CR-REITs and Real Estate Trusts). Basic structure and major details, and expected effects of each real estate finance methods were examined.

The fourth chapter, "The Operational Results and Problems of Real Estate Finance", analyzes the operational results, actual effects, and current problems of each real estate finance methods mentioned in chapter 3. Issuance of general ABS has been rapidly increased, however, ABS based on real estate properties including MBS was not so activated. Since banks are not lack in liquidity to issue MBS, most of MBS issued until today are from National Housing Fund. Since REITs has recently

been in force, there are no specific examples of REITs currently in operation. A simplified profit model of an assumed CR-REITs is, therefore, devised to analyze the potential effect of introducing REITs. This chapter points out several obstacles to promote asset backed securities, such as increasing cost of issuing ABS.

The fifth chapter, "Policy Suggestions to Promote Real Estate Finance in Korea", proposes policy suggestions in the direction of ① implementing each methods according to market principles, ② eliminating any obstacles to promote real estate finance, ③promoting real estate finance with more emphasis on protecting the right of investors at the beginning, and ④suggesting policy measures to promote real estate finance and improve market conditions.



1.

1) REITs

REITs , , ,
 (association) 41) REITs (corporation), (trust)
 (mortgage loan)
 가
 REITs가
 가

41) (Internal Revenue Code) 865 (a) REITs (corporation), (trust)
 (association) 가 REITs

가 . 1960 (Internal Revenue Code) REITs 가
 REITs 가

REITs .

2)

2001 9 28 300 REITs 가 , 187 REITs⁴²⁾ 가 (NYSE), (AMEX) (NASDAQ) . 187 REITs 가 가 1,442 .

< 1- 1> REITs

		()
(New York Stock Exchange)	145	140,794,347
(American Stock Exchange)	30	2,491,053
(NASDAQ National Market List)	12	906,137
	187	144,191,538

: 2001 9 28

: (www.nareit.com)

2001 9 28 187 REITs REITs⁴³⁾가 156 , REITs⁴⁴⁾가 22 ,

42) REITs (equity), (mortgage) (hybrid) REITs

43) 75%

44) REITs 75% (mortgage loan) (MBS)

REITs⁴⁵⁾가 9 가 ,
 95.4% 2.0% 2.6%
 REITs REITs .

< 1-2> REITs

		()	가 (%)
(Equity)	156	137,585,224	95.4
(Mortgage)	22	2,873,250	2.0
(Hybrid)	9	3,733,064	2.6
	187	144,191,538	100.0

: 2001 9 28 NYSE, AMEX, NASDAQ 187 REITs
 : (www.nareit.com)

REITs

,
 . 1972 2001 REITs 11.4%,
 REITs 13.6%, REITs 8.9%, REITs 10.3%

< 1-3> REITs

(: %)

	11.4	20.7	49.0	-42.2
	13.6	16.9	47.6	-21.4
	8.9	28.9	55.9	-45.3
	10.3	26.5	49.9	-52.2

1: 1972 2001 9 28 가 55.9%
 2: 2001 9 28 1972 2001 가 55.9%
 : (www.nareit.com)

45) REITs . (Mortgage
 loan) 가

1972 2000 REITs
 , REITs 12.45% (long-term
 government bond) 9.09% , S&P 500
 13.18% 14.65%

REITs
 , REITs 14.74%
 (long-term government bond) 11.9% , S&P 500
 16.16% 24.88%

< 1-4> REITs (: %)

	REITs		S&P 500							
1972 2000	12.45	14.74	13.18	16.16	14.65	24.88	11.19	24.52	9.09	11.90
1972 1992	13.01	15.02	11.69	17.05	14.98	26.28	8.85	23.30	8.95	12.74
1993 2000	10.98	14.18	17.18	13.66	13.78	21.13	17.57	27.60	9.46	9.52

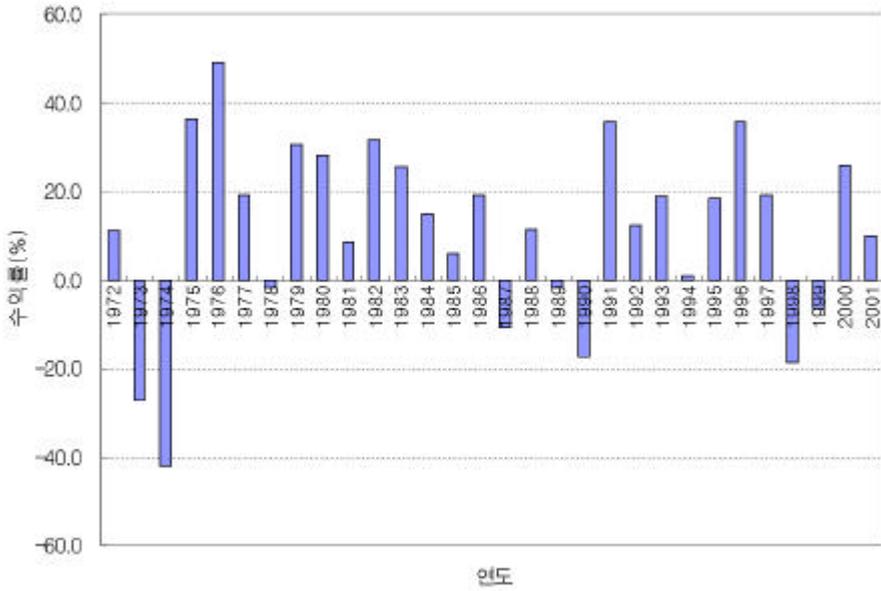
: 가
 : (www.nareit.com)

REITs

. , 1972 ,
 가 REITs 1973 1975 REITs
 가 56.3%가 . 1986 (Tax Reform Act), 1990
 가 UPREITs REITs
 . 1998 1999 REITs , 2000
 REITs 25.9% . 2001 9
 28 REITs 9.8%

REITs 8.5% 2000 26.4% REITs 2000
 16.0% 가 55.9%, REITs 2000 11.6%
 가 42.0%

< 1-1 > REITs



출처 : 2001 2001 9 28
 : (www.nareit.com)

REITs < 1-5 > . 2001 9
 28 REITs가
 32.6% 가 , 22.0%, 19.3%,
 8.6%, 4.9%, 가 4.3%, 4.2%,
 2.1%, 2.0%
 가 24.1%
 , 가 75.9%

REITs

< 1-5> REITs (2001 9 28)
(: US , %)

REITs		가	
(Industrial/ Office)	35	47,280.0	32.6
(Retail)	43	27,948.9	19.3
(Residential)	25	31,860.8	22.0
(Diversified)	20	12,457.6	8.6
(Lodging/ Resorts)	15	6,012.8	4.2
(Self Storage)	4	6,188.2	4.3
(Health Care)	13	7,026.5	4.9
(Specialty)	8	2,937.7	2.0
(Mortgage)	22	3,081.8	2.1
	185	144,794.2	100.0

: (www.nareit.com)

2. (LPT)

1) LPT

(LPT, Listed Property Trust)

(unitholders)

1971

LPT (units) (Australia Stock Exchange : ASX)

(unit) . LPT

(equity base) , ,

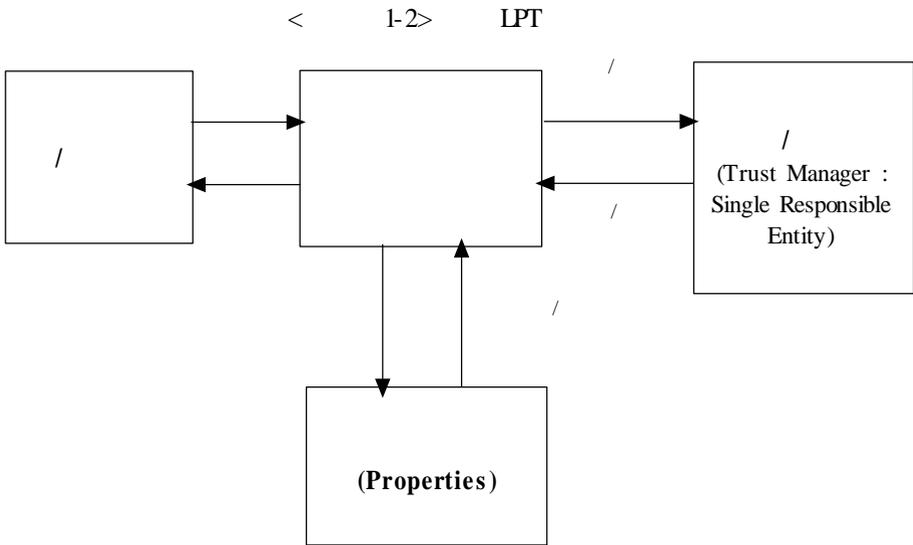
2) LPT

LPT (unitholders) (investors)

46)

LPT 500

LPT



: . 2000. 11. 「 : , 」.

3)

LPT 1971 600

General Property Trusts(GPT)

46)

1998 「 」

LPT 가

가 Land Lease

. 20 LPT , 1991 48
 , 1998 3 225 , 가
 가 28% , 1998 52 LPT

1999 LPT
 21% , LPT
 LPT 가 2.4% , 1998 3.4%
 , (ROE) , LPT 1998 11.8%
 0.9% 10.9% . LPT 13.2%,
 11.3% 11.1%

< 1-6> LPT

(: %, %p)

		(ROE)		
		1998	1999	
(office)	3.9	10.4	9.4	-1.0
(retail)	2.9	13.3	11.3	-2.0
(industrial)	3.6	12.6	13.2	0.6
(diversified)	1.0	11.6	11.1	-0.5
(hotel)	-8.2	-5.4	0.8	6.2
LPT	2.4	11.8	10.9	-0.9

: 1999

: Merrill Lynch. 2000. 3. Australian Property Trusts. 18 21 .

4) LPT

LPT 「 」 (Australian Corporation Law) 「
 」 (Australian Stock Exchange Listing Rules) 「
 」

< 1-7> LPT

	- 가 - LPT가 - 가 (100%)
	- LPT 2,000 500
	- LPT (80) - LPT 60% 가 , 가) -

3.

1) (SPC)

(1) SPC

SPC 90

'98 6 「
 」(SPC)

. SPC

,
 (REITs)
 (CMBS) 가 .
 가
 가
 가
 , .
 (2) SPC
 SPC , , , .
 SPC 가 . "SPC "
 1
 2 2가 SPC 1
 , .
 , .
 , .
 (3) SPC
 가
 가 .

< 1-8> SPC

SPC	• • •
	• 1 가 • 50 가 •
	• 가
	• 90% • •

2) J-REITs

J-REITs 2000 11 “ ”()
 47). J-REITs ,
 ()가
 , 48)
 ,
 1 5 (50)
 .
 J-REITs , , ,
 4가 (< 1-9>).
 J-REITs (, ,

47) 가 1% J-REITs 3 7% ,
 J-REITs 10 20 가 .
 48) , , .

)

, 가

가 1

< 1-9> J-REITs

	•	•
	•	•
	• 50%	•
	• 75%	•
	• 90%	•
	• 50%	•
	• 50%	•
가 (investor mix)	• 50 가	•
	• 가가 50%	•
	• 10 가가 75%	•
	• 90% 가 가	•
	• ()	-
	• 가	•
	• 가	•

: Yamauchi Hideaki. 2001. 6. 20. "J-REIT". 「REITs」

J-REITs

, REITs가

2,000

1,000

, Itochu

J-REITs J-REITs 2002 5000 , 2005
 1 3 , 2010 10 49)

< 1- 10> J- REITs 50)

(:)

				2001	2-3	5-10
	Mitsubishi	2001. 9		800	3,000	1
	Sumitomo生命	2001. 9		500	3000	1
Mitsubishi商事	Mitsubishi商事 UBS			1,000	-	1
	SBCM Mitsubishi	2 3		200	2,000	3,000
Itochu	Itochu 商事			-	3,000	3,000
	商事			100	1,000	
Itochu	Itochu 商事					

: Yamauchi Hideaki. 2001. 6. 20. "J-REIT". 「REITs」 () J-REITs

49) (Daiwa Securities SMBC)

50)

< 1-11> , ,

	REITs	SPC	LPT
	REIT act, IR Code Section 856 860	SPC	(Australian Corporation Law)
		① ② ①+②	()
	() (MBB)	① ② ③	
			()
	(), ,	• , 1 • 1 • ,	
			(trust deed)
		1	
		300	2,000 500
		5	2,000
	open-end, closed-end	, closed-	closed-
	가		가
	가	가	가
	finite-life	가	(80)
	REITs	SPC	LPT
	가	① () ② , • , ① ②	• LPT •
	SEC		ASC

			• , ' , ' , •	100%
			가	60%
		(90%)	(90%)	(100%)

: . 2001. 6. 「 가 」 .

REIT		100	(30% 가)	3-4%
	agency	100	CR- REIT 가 ()	
	가	10	CR- REIT 가	
		5	CR- REIT 가	
		48	0.48%(,)	
		1	5 5 가	
	1 /	100	5% (가), 18% 가 . 0.1%	
	(D)	364	5 (72bp)	
		100		
		5		
		10		
		1		
	(E)	116		
	CR- REIT (F)	2	5 1 가 (3, 1)	
	(G)	407	$G = B + (C \times 35\%) + (D / 5) + E + F$	
(H)	802	$H = A - G$		
= (I)	729	$I = H \times 100 / 110\%$		
가 (J)	73	$J = H - I$		
(K)	22	$K = J \times 30.8\%$		
(L)	50	$L = H - (I + K)$		

:

(National Housing Fund) :

(CRC : Corporate Restructuring Company) :

3

_____ :

(paper company) Mutual

Fund

(AMC : Asset Management Company) :

, 3

51)

①

(),

②

(1998)

③

가 ()
 , 가 가 .
(ABS ; Asset-Backed Securities) :
 가 .

(Asset Securitization) :
 .
 .
 ABB(Asset Backed Bond;)
 ABS(Asset Backed Securities;) .

_____ :

1998 9 .
(MBS ; Mortgage Backed Securities) :
 20 30 가 20 30%
 , 20 30
 가 가
 (ABS)
 (MBS)

_____ **(Mortgage Loan)** : 3

(

)

(

2 2).

_____ **(Mortgage Securitization)** :

KoMoCo

KoMoCo

MBB(Mortgage Backed Bond ;)

MBS(Mortgage Backed Securities ;)가

_____ :

1999 1

_____ **(REIT : Real Estate Investment Trust)** :

」

」

가

1938

가 가
 (pool) () (CBO/ CLO)
 pool 가
 가 .

CMBS(Commercial Mortgage-Backed Securities) :

()
 . CMBS
 , (RMBS) 가

CMO(Collateralized Mortgage Obligation) :

(

?). 가
 가

Due Diligence : ABS

가

LTV : Loan to Value 가

NPL(Non-Performing Loans : _____) :

Paper Company : SPV

Pass-Through _____ : SPC

pass-through

Pay-Through _____ : SPC가

PIR : 가 (Price to Income) 1991 8.2 2000 5.0
(1995 3.93)

Pool :

Primary CBO : Primary CBO

가 (SPC) , SPC가
(CBO)
가 CBO
CBO(Secondary CBO)가 가
Primary CBO 가
가 SPC CBO
Primary CBO

(CBO)

RTC(Resolution Trust Corporation) :

1989
1995 700

SPV(special purpose vehicle) :

가
(vehicle)

Trustee :

SPC