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< 2>
(Generally Accepted Risk Principles)

1. (Risk Management Strategy)

■ (Risk Organization)

1: (Role of the Board)

, 가

2: (Role of the Executive committee)

,
가

, 가 가

가

가, (peer

reevaluation),

가

가 (low)- (moderate)-

(high)

, 가 가

, 가 (Weak)-

(Acceptable)- (Strong) . FRB

, ,

, , OCC

, 가

가

8: (Delegation of Risk Authority)

가

(mandates)

(risk framework)

9: 가(Evaluation of Effectiveness)

(control and risk management infrastructure)

가

■ **(Capital Allocation)****10: (Responsibility for Capital Allocation)****11: (Risk Limits)****12: (Capital Allocation Process)**

(returns)

2.

(The Risk Management Function)

13: (Role of Responsibilities)**14: (Role of head of Risk)**

가

가

15: (Links with Business Units)

(independent link)

16: (Role of Risk Managers)

17: (Management Role of Heads of Business Units)

18: (Policy Development Role of Heads of Business Units)

19: (personnel Availability and Experience)

가

3. (Risk Measurement, Reporting and Control)

■ (Market Risk Measurement)

20: 가(Valuation)

가 가(marked-to-market)

21: (Risk Decomposition)

가 (market risk components)

22: (Market Risk Measures)

가 (VaR, (risk measurement framework) (market risk limits)

23: (Probability Based Measures)

(senior management) 가 (overall market risk exposure) VaR

24: (Sensitivity Measures)

(Market risk factors) 가

25: (Stress Testing)

가 VaR (quantum of events)

26: (Back-Testing)

VaR (market events)

27: (Position Liquidity)

VaR

■ **(Credit Risk Measurement)**

28: (Pre-settlement risk Measurement)

(

)

(counterparty limits)

29: (Current and potential Exposure)

(measurement methodologies)

(credit equivalent basis)

30: (Expected and Unexpected Losses)

(potential credit exposure)

(capital at risk)

(risk adjusted performance)

31: (Settlement Risk Measurement)

32: (Netting)

(Legal Netting

Agreements)

33: (Credit-worthiness)

가

34: (Legal Enforcement)

(Legal Capacity and Authority)

가

35: (: Credit Enhancements including Collateral)

가

■ (Liquidity Risk Measurement)

36: (Cash Management)

(funding requirements)

(projected cash

flows)

37: (Funding Strategies)

가

(Liquidity Needs)

(contingency liquidity

planning process)

38: (Market Liquidity)

39: (Risk Consolidation and Monitoring)

,
, (firm-wide guidelines)

40: (Credit at Risk Aggregation)

(aggregate measure),
(가) 가

41: (Capital at Risk Limits)

42: (Market Risk Limits)

VaR

43: (Credit Risk Limits)

가

44: (Limit Review Procedures)

45: 가 (New Product Evaluation and Authorization)

가

, 가 ,

,

.

■ 가 (Income and Cost Allocation)

46: (Revenue recognition Policies)

(accounting principles)

47: 가 (Cost Allocation)

가 가

가

48: 가 (Funding and Transfer Pricing)

가

가

49: (Taxation)

(cash market products)

(post-tax basis)

50: (Capital and Retained earnings)

, 가 가

■ (Performance Measurement)

51: (consistent basis of measurement)
(volatility of earnings)

52: 가

53: 가
(RAPM Methodologies)

(Risk adjusted
performance measurement)

54: (Performance Targets)

55: (Forecasting Policy)

가

4. (Operation)

■ (Front Office)

56: (Authorization)

63: 가 (Price Verification)
가 가
, 가 (in-house prices) 가
()

64: (Trade Processing)

65: (Confirmation)

66: (Settlements)

가

(reconciliation)

67: (Reconciliation)

3

68: (Asset control)

(3)

가

■ **(Firm-wide)**

69: (Transaction Reporting)

가

70: (Capital Adequacy)

(capital requirements)

71: (Treasury Operations)

(net

cash flow)

72: (Recruitment and Training)

73: (Compensation Policies)

74: (Internal Audit)

75: (Taxation)

가

76: (Regulation)

(compliance department)

가가

77: (Legal Documentation)
(custodians), ,

78: (Business Continuation)

5. (Risk Management Systems)

79: (Identification)
(application architecture)

80: (Location of Functions)

(central risk processing)

81: (Frequency of Information Delivery)
(ad hoc queries)

82: (data Storage)

83: (Data Integrity and Ownership)

가

84: (Inter-operability)

가

85: (Level of Sophistication)

86: (System and Model Security)

(Integrity)

(confidentiality)

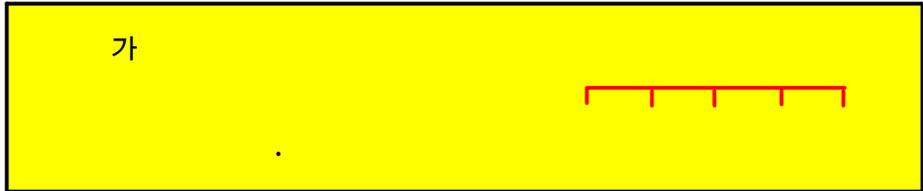
87: (Back-up, Recovery, and Contingency Planning)

가

88: (IT Organization)

89: (IT Development)

< 3 >



1.

1-1. ()

V111 가 가

. ()

V112 () ,

()

V113 가 , , () ,

V114 가 . ()

1-2. ()

)
 V121 가
 .()

V122 가
 ,()

V123 가 .
 ()

V124 .()

1-3.

V131_1 ,
 .(),

V131_2 .()

V132
 .()

1-4.

V141_1
 . () (;)

V141_2

()

V141_3 가 .()

V142 , 가 ,
. ()

1-5.

V151 , 가

()

V152 (stress testing), 가 .()

V153 , , ,
. ()

1-6.

V161 가 .()

V162 . ()

1-7.

V171 . ()

V172 2001 1 ' ' . ()

1-8.

V181 2 ? ()

V182 ? ()

V183 ? () ()

2.

2-1.

2-1-1.

(1)

, ,

	Vendor	S/ W	
()	() S/ W	H/ W	(

)
 ③ (가)

-
- ()
-
- < >

④ _____ (_____) copy 1 _____

(2) (process) ()

(3) ,

(4) () () ?

(5) 가 , ,

2-1-2.

(1)

()							

VaR, ,

, ,

가 ()

, ,

Vendor

S/W () () S/W H/W
()

Vendor

_____ () **copy 1** _____

(2) (process) ()

(3) ,

(4) () () ?

(5) 가 , ,

2-1-3.

(1)

()							

, Regression, Simulation

, ,

가

, ,

Vendor

S/W () , S/W H/W ()
)

Vendor

_____ () **copy 1**

,

(2) (process) ()

(3) ,

(4) () () ?

() ()

(5) 가 , ,

2-1-4.

(1)

					가
가					

Vendor S/ W

() () S/ W H/ W

()

Credit Scoring, Logit, Discriminant, Neural Network, ZETA, EDF(KMV), CreditMetrics, CreditRisk+, Judgemental, Decision Tree

(가)

○ , , ,

(Trigger Point)

○ < >

가 ,

7 , 9 ()

가

(2) (process) ()

(3) ,

(4) () () ?

(5) 가 , ,

2-1-5.

(1) ALM

		ALM			

① (ALM,

Cashflow ALM)

Vendor S/ W
 () () S/ W H/ W ()

Gap , , Segment

() copy 1

(2) ALM ,

(3) ALM ?
() ()

(4) ALM , 가
ALM

2-1-6

(1) , ,

(2)

(3) , ,

V217

, , (ALM),
, 가 , 가 (FTP)
. ()

212

V218

V218_1

()

V218_2

. ()

V218_3

, , . ()

V218_4

(, , D/B ,)
. ()

V219

, ,
가 ,
. ()

V2110

, , ,
. ()

V2111

(. .)

. ()

2-2.

V221_1

,
. ()

V221_2 , 가
. ()

V221_3 . ()

V221_4 . ()

V221_5 .()

V222 Middle office가 Front office
. ()

V222_1 .()

V222_2 .()

2-3.

V231 . ()

V232 . ()

214

2-4.

V241

,
.()

V242

()

V243

가
.()

V243_1

가
()

V243_2

.()

V243_3

가
.()

V243_4

가 가 가
.()

V243_5

()

V243_6

.()

V243_7

가 , , ,
.()

V243_8

가
.()

V243_9
() .

V243_10 .()

V243_11 가 .()

2-5.

V251 가 .

V251_1 .(,) () ,

V251_2 ,
()

V251_3
() .

V251_4 , 가 .
()

V251_5 가 가 .
()

2-6.

V261 . ()

216

V262

V262_1

가

. ()

V262_2

1

. ()

V262_3

가

. ()

V262_4

, ,

. ()

V262_5

가

. ()

V263

가

V263_1

가

. ()

V263_2

. ()

V263_3

, , ,

가

. ()

V263_4

가

. ()

V263_5

, 가

. ()

V264

가

. ()

V264_1

가

.

()

V264_2 middle office . ()

V264_3 가 . ()

V264_4 가
. ()

V264_5 . ()

2-7.

V271

(RAPM)

가
. ()

V272

(hurdle rate)

, , , ,
, , , . ()

V273

가
가,

. ()

V274

가 , 가
, , 가

()

V275

VaR

?
가

218

?()

V276 가

?
?

V277 , , , RORAA (Return on Risk Adjusted Assets), RAROC (Risk Adjusted Return on Capital), RORAC (Return on Risk Adjusted Capital), RARORAC (Risk Adjusted Return on Risk Adjusted Capital)

?

2-8.

V281 , .
()

V282 . ()

V283 . ()

V284 가 가 (Embedded Value) . ()

V285 , , ,
(Loan Review)
. ()

V286

. ()

V287 가 가 . ()

V288 .
()

V289 가 . ()

2-9.

V291 ,
가 . ()

V292 . ()

V293 .
()

V294 . ()

3.

3-1.

V311 ,

220

. ()

V312

, 가 , (),

. ()

V313

가

, . ()

V314

. ()

3-2.

V321

, , , . ()

V322

가 . ()

V323

, , , . ()

V324

가 . ()

222

. ()

V345 가

V345_1 가
. ()

V345_2

. ()

V345_3 (transition matrix)

. ()

V345_4

. ()

V345_5

. ()

V345_6

가 . ()

3-5.

V351

V351_1

. ()

V351_2

()

V351_3

가

가

()

V352

가

()

V353

()

3-6.

(stress testing)

V361

()

V362

가

가

()

V363

()

4.

4-1

V411_1 () . . ()

V411_2 , . ()

V412 . ()

V413_1 . , . ()

V413_2 (going concern condition), (general market crisis)

()

4-2.

V421 , 가 ()

V422 ,

가 . ()

V423 . , . ()

V424 가 (GAP) (mismatch), (GAP), , . ()

V425 , , . ()

V426_1 가 . ()

V426_2 . ()

4-3.

V431 . . ()

V432 . ()

V433 . ()

V451_2 가 () () ()

V451_3 가 () ()

5.

5-1.

V511 () ,

V512 , , 가 ()

V513 () .

V514 가 , , ()

228

V515

, (;) . ()

5-2.

V521

, 가
.()

V522

, . 가
,
.()

V522_1

가
.()

V522_2

.
.()

V523

가
.()

V523_1

가 . ()

V523_2

()
.()

V524

.
,

가 .()

V525 , ,
.()

V526 ,
가
.()

V527 ,
.()

V528 , 가
가 가
.()

V529 ,
.()

V5210_1 가
.()

V5210_2
.()

V5211
.()

230

5-3.

V531 . . . ()

V532 가 . ()

V533 .
()

V534 . ()

5-4. 가

V541 가 . ()

V542 , 가
가 . ()

V543 . . ()

V544 . 가
가 . ()

V545 , , ,
. ()

V546

,
.()

V547

가

.()

V548_1 가

(Data Warehouse)

,
. ()

V548_2

가

, , ,
. ()

V549

. 가

, .()

V5410

. 가

,
. ()

V5411

,
. ()

V5412

가

,
. ()

V5413

. ()

5-5. (stress testing)

V551 가 가 ,
(stress testing) .()

V552 가 , .()

V553 . ,

(Contingency Plan)
. ()

6.

6-1.

V611 ,
. ()

V612 ,
. ()

V613 가 . ()

V614 .

V614_1 가 . ()

234

V6211 가
. ()

V6212 ,
. ()

V6213 ,
. ()

6-3.

V631 . ()

V632 가 . ()

V633 .
()

V634 .
()

6-4. 가

V641 가 .
. ()

V642 . ,
. ()

V643 가 ,

. ()

V644 . ()

V645 가 . ()

V646 ,
. ()

V647 가 . ()

V648 가 ,
. ()

V649 가 (static simulation) 가
(dynamic simulation)
. ()

V649_1 가 .
()

V649_2 . ()

236

V649_3 . ()

V649_4
가 . ()

6-5. (Stress testing)

V651 가 (stress testing) 가
가 , .()

V652 . ()

V653 . ()

7.

7-1.

V711 . ()

V712 .
Feed Back ,

. ()

V713

.()

7-2.

V721

, , 가 , ,
가
, . 가 가
. ()

V722

, 가 ,
,
. 가 . ()

7-3.

V731

. ,
. ()

V732

, ,
. ()

V733

, . ()

238

7-4.

V741 , ,
 ,
 . ()

V742 , .
 , . , .
 . ()

V743 가
 . ()

8. RBC

87)

8-1.

RBC

V811 RBC
 . ()

V812 RBC . ()

V813 RBC . ()

8-2. RBC

V821 RBC . ()

V822 RBC 가 . ()

V823 RBC 3 . ()

V824 RBC ,
 . ()

V825 RBC ,
 . ()

V826 . ()

9.

V911
 . ()

V912 가 () .
 ()

V912 . ()

V913
 . ()

< 4 >

Class1

	Class2	Class3		Class2	Class3		Class2	Class3
A 1	A	1	B 7	B	2	A 3	A	-
A 2	A	2	B 12	B	1	B 15	B	-
A 4	A	1	B 8	B	2	B 22	B	-
A 5	A	2	B 16	B	2	B 5	B	-
B 9	B	2	B 14	B	2	B 3	B	-
B 1	B	2	B 13	B	2	C 1	C	-
B 2	B	3	B 4	B	1	C 9	C	-
B 6	B	2	B 10	B	3	C 12	C	-
C 7	C	2	C 4	C	2	C 14	C	-
			C 8	C	2	C 2	C	-
			C 13	C	2			
			C 11	C	2			
			C 10	C	3			
			C 3	C	3			
			C 6	C	3			
			C 5	C	2			

: A= , B= , C= , 1=

300

, 2=

300

100

3=

100

Class2

Group A			Group B			Group C		
	Class1	Class3		Class1	Class3		Class1	Class3
A 1		1	B 1		2	C1		-
A 2		2	B 2		3	C2		-
A 3		-	B 3		-	C3		2
A 4		1	B 4		2	C4		2
A 5		2	B 5		-	C5		2
			B 6		2	C6		2
			B 7		2	C7		2
			B 8		2	C8		2
			B 9		2	C9		-
			B 10		2	C10		3
			B 11		-	C11		3
			B 12		1	C12		-
			B 13		3	C13		3
			B 14		1	C14		-
			B 15		-			
			B 16		2			

: A= 300, B= 300, C= 100, 1= 300, 2= 100, 3= 100

Class3

Group 1			Group 2			Group 3		
	Class1	Class2		Class1	Class2		Class1	Class2
B14		B	B9		B	B2		B
A4		A	B26		B	C11		C
A1		A	B16		B	C13		C
B12		B	C3		C	C10		C
			C7		C	B13		B
			A2		A			
			C5		C			
			B4		B			
			B8		B			
			B7		B			
			B1		B			
			C6		C			
			A5		A			
			B10		B			
			C4		C			
			C8		C			

: A= 300, B= 100, C= 300, 1= 100, 2= 300, 3= 100

『 』, 『 』, 『 』

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現

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A4				VaR	Delta-Normal	RMS		Credit Risk	LKFS	/	MVS	MVS		
				Stress Test	Historical									
				Back Test	Monte-Carlo		가						Risk Return	PVDE
B9			Test / -	VaR	simulation VaR	-		Fair Issac Model	Credit Scoring system	ALM				
					Delta-Normal VaR			KIS-CAT						
							가	2002						
B7				가 가	Frontier System	가		RMS		/	Frontier System	ALM		
								가	Frontier System					
C7	2001			VaR	가 VaR			RMS	MS-SQL	/	-			
								RMS	MS-SQL					
B12				Market VaR System				FLC 가	CSS					
			IRR/ NPV											
C6				-				FLC 가	NT-SQL	-				
B8				Market VaR 2002				가						
B2				VaR Duration	VaR	-		Credit scoring		2002.3				

B16	가 가		VIP System	Market VaR System			Credit VaR System					
C5	-			-			-			-		
B14							-			-		
B13									RMS			

A4			()
B9		/ Test	
B7			/
C7	-	-	-
B12		IRR/ NPV	
C6			
B8			
B2			()
B16	-	-	-
C5	-	-	-
B14	-	-	-
B13	-	-	-

A3		TAS	Loss recognition Test, Recoverability Test
		Asset Share Calculation	Profit Testing
B11			/
B5			/
			/
			/
B3		,	
		/	
B6			
C1			
C9	-	-	-
C12			

A4	Risk Return ALCO	▪ Excel projection
B9	▪	▪ Valuation Study
B7	() ()	▪
C7	-	▪ 2001
B12	(, ,) (IRR,NPV)	▪ S/ W
C6	-	-
B8	DB Summary Data , , ,	▪
B2	, ,	▪
B16	-	▪ 가 가 VIP System
C5	-	-
B14	-	▪
B13		▪

A3	PDSC() review EXCO() PII() Actuarial Review	training. system
B11	가	
B5	/ , , 가 가	-
B3	Test/ Cash Flow Test 가 Profit	가
B6	profit test	-
C1	-	
C9	-	-
C12	-	-

A4	VaR	1 / 1		RM	Delta-Normal method	2001.1 - 2001.10
	StressTesting				Historical scenario method	
	Back Testing				Monte-Carlo simulation	
B9	VaR	2		(3)	Simulation Delta-Normal	2001.4 - 2002.4
B7	가 가			(3)	Frontier System	2000.3 - 2001.3
C7	VaR				가 VaR	2001
B12	-	-	-	-	-	-
C6	-	-	-	-	-	-
B8	-	-	-	-	-	-
B2	VaR Duration	/		(3)	, ,VaR	-
B16	-	-	-	-	-	-
C5	-	-	-	-	-	-
B14	-	-	-	-	-	-
B13	-	-	-	-	-	-
A3	VaR/ StressTest	: 90 :500		CEO	PAMS	-
B11		2		(2)	Projection	-
B5	-	-	-	-	-	-
B3	-	-	-	-	-	-
B6	VaR/			AZAG(3)		-
C1	-	-	-	(5)	-	-
C9	-	-	-	-	-	-
C12	-	-	-	-	-	-

A4	<p>monitoring MarketVaR RM</p> <p>RM</p>	<ul style="list-style-type: none"> ▪ () VaR
B9		<p>2002.4 SAP</p>
B7	<p>가 가 가 , /</p> <p>가 () ALM</p>	<p>VaR</p>
C7	<p>가</p>	<p>PC HOST VaR</p> <p>VaR</p>
B12	<ul style="list-style-type: none"> ▪ , ▪ , GAP 	<ul style="list-style-type: none"> ▪ Market VaR System ▪ .
C6	-	-
B8	<p>가</p>	<ul style="list-style-type: none"> ▪ Market VaR 2002 ▪ (2002 Market VaR
B2	<ul style="list-style-type: none"> ▪ 가 : ▪ 가 : Loss Cut 	<p>VaR 가 가</p> <p>VaR</p>
B16	-	Market VaR System
C5	-	-
B14	-	
B13	<p>, , , 가,</p>	<ul style="list-style-type: none"> ▪ ▪

A3	<ul style="list-style-type: none"> ▪ : 90 ▪ : 500 VaR ▪ Delta Normal VaR 	<ul style="list-style-type: none"> ▪ 가 가
B11	<p>(Daily, ,) 가</p> <p>가</p>	<ul style="list-style-type: none"> ▪ 가 가 ▪ 가 가
B5	-	<ul style="list-style-type: none"> ▪ / 가 ▪ /
B3	<ul style="list-style-type: none"> ▪ 	<ul style="list-style-type: none"> ▪
B6	<ul style="list-style-type: none"> ▪ 가 , , 	<ul style="list-style-type: none"> ▪ 가 ▪
C1	-	<ul style="list-style-type: none"> ▪ VaR 2001
C9	-	-
C12	<ul style="list-style-type: none"> ▪ 가/ 가 	<ul style="list-style-type: none"> ▪ ALM VaR 가

A4	가	Credit Risk+	LKFS	Credit Risk+	/
B9		Fair Issac Model 가 ()	Credit Scoring System KISKAT	Credit Scoring 가	/ 가
		()			
		()			
B7	가	RMS Frontier System		Score/ Metrix	
	가	RMS	MS-SQL	Logit	/
B12		FLC 가	-	-	가
C6		FLC 가	NT-SQL	Credit Scoring	/ /
B8		가 (RMS)		Credit Scoring	/
B2		Credit scoring		Credit Scoring	
				Credit Scoring	
B16	-	-	-	-	-
C5	-	-	-	-	-
B14	-	-	-	-	-
B13			RMS	Credit Scoring	
A3	-	-	-	-	-
B11	가	FLC 가		Credit Scoring	/
	-	-	-	-	-
B5	-	-	-	-	-
B3	-	-	-	-	-
B6		KISKAT 가	가	Credit Scoring	
		KMV	KMV	EDF	
C1	-	-	-	-	-
C9	-	-	-	-	-
C12	-	-	-	-	-

A3	-	▪ BPO, CRO FLC (2001)
B11	FLC 가 (, ,)	▪ 1 1 () ▪ 가 (/ 가)
B5	-	▪ ▪
B3	-	-
B6	-	-
C1	/	Investment Policy, Bank Policy
C9	-	-
C12	-	-

A4	/	MVS Risk Return				-
B9	-	-	-	-	-	-
B7	/	ALM (Frontier System)				2000.3 - 2001.3
C7	/	-				-
B12	-	-	-	-	-	-
C6	-	-	-	-	-	-
B8						-
B2	-	-	-	-	-	2001.12 - 2002.3
B16	-	-	-	-	-	-
C5	-	-	-	-	-	-
B14	-	-	-	-	-	-
B13	-	-	-	-	-	-
A3	Duration Convexity Cash Flow Analysis	PAMS TAS			CEO	-
B11			/ /		(3)	-
B5		ALM	/		-	2001.2
B3	/	Cash Flow Test			-	2001.3.
B6	/	-	/			-
C1	-	-	-	-	-	-
C9	-	-	-	-	-	-
C12	-	-	-	-	-	-

A4	/ Cash Flow Projection(10) Net C/F (3 Gap) Net C/F (/)	-
B9	/ ()	▪ ALM
B7	(,) (,) . /	
C7	가	▪ PC HOST ▪ Duration GAP
B12	-	▪
C6	-	-
B8	, ,	(2002 ALM)
B2	▪	▪ 2002.3 ALM / /
B16	-	▪
C5	-	-
B14	-	-
B13		▪

A3	Cash Flow Asset Gap	Cash Flow Asset Liability Cash Flow
B11	/ (3)	가
B5	ALM	
B3	가	-
B6	12	가
C1	, , ,	▪ Exel
C9	-	-
C12	3	-

ALM

	ALM			
A4	Cash Flow	MVS Risk Return	Visual Basic	
		MVS	Visual Basic	Gap/ Segment
	Cash Flow	MVS Risk Return	Visual Basic	/ /
B9	-	-	-	-
B7			B7 Frontier	/
C7	-	-	-	-
B12	-	-	-	-
C6	-	-	-	-
B8	-	-	-	-
B2	-	-	-	-
B16	-	-	-	-
C5	-	-	-	-
B14	-	-	-	-
B13	-	-	-	-
A3	Liability	ALM	TAS	Duration Convexity Scenario Test
	Fixed Income	Cash Flow ALM	PAMS	
B11		Cash Flow ALM	PTS/	Duration
		Cash Flow ALM		Duration
B5		ALM	Prophet,	/ / Value
		ALM		
B3	ALM	-	PTS	Segment/
	Cash Flow Test	-	PTS	Segment/
			PTS	Gap
B6	Cash Flow/ Surplus	TAS	-	
	Cash Flow/ Surplus	TAS	-	
C1	-	-	-	-
C9	-	-	-	-
C12	-	-	-	-

	ALM	
A4		-
B9	▪ (ALFA)	
B7	▪ ALM	가
C7		-
B12	▪	
C6		-
B8	▪ 2002	
B2		-
B16	▪	
C5		-
B14		-
B13		-
A3	▪ Liability	가
B11	▪	
B5	▪	
B3		-
B6		-
C1		-
C9		-
C12		-

A1	Cash Flow Testing	ALM ()	VaR	Sensitivity	KRM	가	Credit Metrics	Risk Metrics Group	Simulation	Cash Flow Testing	ALM	
	Dynamic Financial Analysis								Duration Gap			
									Stress Testing			
A2	/	LKFS	VaR StressTesting	Market VaR	Risk Watch Engine / LKFS	가	MTM Metrics	Credit	,	ALM	TRMS	
			BackTest									
	VaR, EaR											
A5		ALM	VaR Stress Testing	VaR System		가				ALM		
B1	/		VaR	SAS program	VaR 2002.6	가			,	ALM	(LG -EDS)	
	/											
B4			VaR StressTest Simulation	e-RMS	KRM	Scoring system Credit VaR system 2001.12						
B10	RUCS ()	Tri-cast	VaR	Risk-Vision	SAS	-			-			
C4	VaR		VaR	Historical Method	KRM				2002.4			
C8	2002.1		LKFS/ RiskWatch 2001.11			CreditMetrics/ CreditRisk+ 2001.12			2002.2			

C13			SAS	-			-			-		
C11	-			(2001.12-2002.6)			-			-		
C10	-											
C3	-			-			-			-		
C14	-			-			-			-		
C2	-			-			-			-		
B15	-			-			-			-		

A1		Cash Flow Testing ()	ALM ()	/ /
		Dynamic Financial Analysis		(), Risk · Return 가
				Risk · Return 가
A2		/ / VaR, EaR	LKFS	가 /
		/ /		
A5		/	ALM /	/
			ALM	
B1		/		
B4				
B10		RUCS()	Tri-Cast	/ / ()
C4		VaR		
C8	-	-	-	-
C13			SAS	
			SAS	
C11	-	-	-	-
C10	-	-	-	-
C3	-	-	-	-
C14	-	-	-	-
C2	-	-	-	-
B15	-	-	-	-

A1	RM Risk/ Return Line	DFA 2001 / 2002
A2	, 가 가	EaR(VaR) performance
A5	ALM 가	Data Size 가
B1	Profit Testing, Ceiling	Static Level , System Dynamic Level System
B4	, ()	ALM LM /
B10	, () ()	
C4		VaR /
C8	-	가 , , , , ,
C13	-	SAS
C11	-	-
C10	-	
C3	가 1 (, , , ,) , () (,)	/
C14	-	-
C2	-	-
B15	-	-

A1	VaR				CRO(3)	
	Sensitivity					
	Stress Test	2	2	2002.5-12		
A2	VaR/ StressTest/ / BackTest			2001.5	(4)	Market VaR
A5	VaR/ Stress Test			-	(5)	VaR System
B1	VaR			2002.1-6	(,) (3)	SASprogram
B4	VaR/ StressTest/ Simulation			-	(4)	e-RMS
B10	VaR			2000.8-11		Risk-Vision
C4	VaR			2001.10-2002.3	(5)	Historical Method
C8	-	-	-	-	-	-
C13	-	-	-	-	-	-
C11	VaR			2001.6-2002.6		-
C10	-	-	-	-	-	-
C3	-	-	-	-	-	-
C14	-	-	-	-	-	-
C2	-	-	-	-	-	-
B15	-	-	-	-	-	-

A1	(Market,) 가 KRM MV, VaR, Sensitivity, StressTest / Loss Cut	-
A2	VaR 가	-
A5	(, ,)	
B1	VaR,Incremental Marginal VaR (SAS program) (, ,) VaR	SAS vaR / ()/ Risk Factor (, , Stress test Dynamic Risk / 2002 VaR
B4	VaR Daily report(VaR, , ,) Warning	-
B10	() ,	()
C4	,	2001 가 , ,
C8	-	VaR, Stress Test, BackTest, Algorithmics RiskWatch (2001.11)
C13	-	-
C11	VaR /	VaR,ST, , , 가가 가
C10	-	VaR / /
C3	-	VaR, ST, , Back Test
C14	-	-
C2	-	-
B15	-	-

A1		Credit Metrics	Risk Metrics Group	Credit Metrics	, ,
		Credit Metrics	Risk Metrics Group	Credit Metrics	, ,
	가	Credit Metrics	Risk Metrics Group	Credit Metrics	, ,
A2	MTM	Credit Metrics		-	-
A5		가			
B1		가		Credit Scoring	
B4		-		-	-
B10		-		-	-
C4				가	
C8		-		-	-
C13		-		-	-
C11		-		-	-
C10		-		-	-
C3		-		-	-
C14		-		-	-
C2		-		-	-
B15		-		-	-

A1	Feedback	(2001.11)/ 가 / CreditRisk+ , ParValue
A2	()	J.P.Morgan MTM Credit Metrics
A5		VaR / Credit Metrics Credit Risk
B1	가 (, ,)	가 가 / Loan-Review 가 Kis-Expert
B4	Loan Review	Scoring System (2001.12)/ Credit VaR System (2001.12)
B10		
C4	Credit Review /	가 /
C8	-	Exposure (2001.12)/ Credit Metrics, CreditRisk+
C13	-	-
C11	-	-
C10	-	-
C3	가 가	-
C14	-	-
C2	-	-
B15	-	-

A1	Simulation			CRO(3)	Cash Flow Testing	ALM
	Duration Gap					
	Stress Testing					
A2		10		(4)	ALM	TRMS
A5				(5)	ALM	
B1	,	6		(3)	ALM)
B4		-	-	-	-	-
B10	-	-	-	-	-	-
C4				(5)	-	-
C8	2002.2	-	-	-	-	-
C13	-	-	-	-	-	-
C11	-	-	-	-	-	-
C10	-	-	-	-	-	-
C3	-	-	-	-	-	-
C14	-	-	-	-	-	-
C2	-	-	-	-	-	-
B15	-	-	-	-	-	-

			· /
A1	가 Negative Net Cash	Stress Test	가
A2	/ 가	()/	
A5			-
B1	Cash Flow		Cash Flow Cash Flow Testing
B4		ALM Flow	Gap , Gap , Cash
B10	Gap	/	Match / /
C4			ALM Risk 2002.4
C8	-	(2002)	가
C13	-		-
C11	-		-
C10	-	ALM	/
C3			-
C14	-		-
C2	-		-
B15	-		-

ALM

ALM						
A1	Matching	ALM (Cash Flow Testing)	ALM	Deterministic Analysis	2001.5	가 Stochastic loss Model Risk / / Return 가 (2002.3) (1.5)
				Stochastic Analysis	2001.9	
				MVS Analysis	-	
				Stress Test	-	
A2		ALM/ Cash Flow ALM	LKFS	/ / Cash Flow/ NPV, VaR(EaR)		
		ALM	LKFS	Gap/ Cash Flow / VaR(EaR)		
		ALM	LKFS			
	Profit Test	ALM	LKFS	/		
A5		ALM		Gap, ,MVS	-	Cash Flow
		Cash Flow	-	, , ,MVS	-	
		ALM		,MVS	-	
		ALM		Gap, ,MVS	-	
B1		(CashFlow)		()	2000.3	Cash Flow Cash Flow Testing
		Cash Flow				
B4	-	-	-	-	-	/ RAPM
B10	-	-	-	-	-	/
C4	-	-	-	-	-	ALM (2002.4)
C8	-	-	-	-	-	가 , (2002.2)
C13	-	-	-	-	-	-
C11	-	-	-	-	-	(2002.6)
C10	-	-	-	-	-	
C3	-	-	-	-	-	
C14	-	-	-	-	-	-
C2	-	-	-	-	-	-
B15	-	-	-	-	-	-