

보험연구원 국제세미나 : 『회계제도 변화와 보험회사 자산운용 전략』

IFRS 9(금융상품)과 보험회사 자산운용

2017년 9월 15일(금)

KPMG 삼성회계법인 금융사업본부 / 김진귀상무이사

Table of Contents

- I. IFRS 9 “금융상품” 개요
- II. 보험사의 IFRS 9 도입 (IFRS 17과의 관계)
- III. 국내 보험사 투자금융상품 현황
- IV. IFRS 9 이 보험사 자산운용에 미치는 영향

I. IFRS 9 “금융상품” 개요

1. IFRS 9 도입 배경

IFRS 9은 '자산의 공정가치(시가) 평가'에 중점을 둔 기준으로

→ 보험업은 '부채의 공정가치(시가) 평가'를 규정한 IFRS 17과 함께 도입해야 보다 유의미함

IFRS 9 도입 취지

2008년 세계 금융위기로 현행 금융상품 기준서(IAS 39)의 문제점 대두

- 금융상품의 공정가치가 폭락했음에도 손익계산서에 반영되지 않음
- 신용위험이 유의적으로 증가하였음에도 충당금이 충분히 설정되지 않음

→ “재무제표 작성기준을 보다 공정가치에 가깝게 변경할 필요성” 제기

보험업과 IFRS 9

보험업은 자산과 부채를 함께 공정가치 평가해야 기준서 취지에 부합

- IFRS 9과 IFRS 17을 함께 적용해야, 자산과 부채가 동시에 공정가치로 평가됨
- 기준서의 적용시점은 각각 2018년(IFRS 9), 2021년(IFRS 17)임

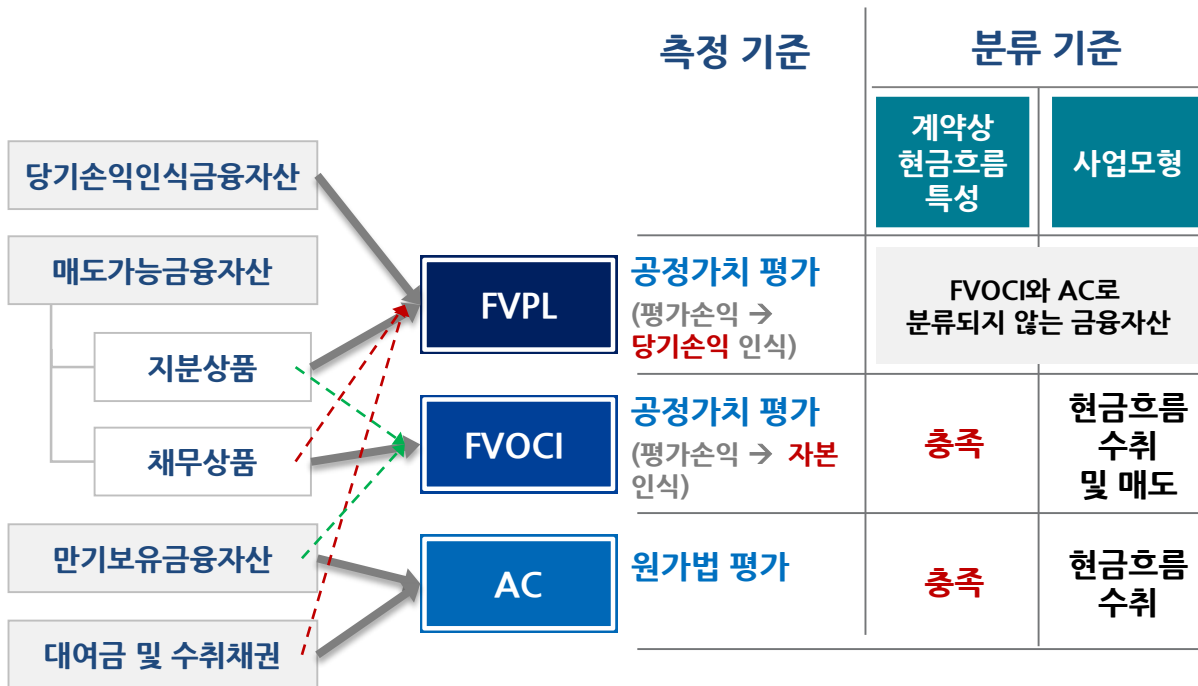
→ 2018년~2020년까지는 자산만 공정가치 평가하는 불합리 발생

2. 주요 변경 내용 : 금융자산 분류 및 측정

현행 (IAS 39)

변경 (IFRS 9)

- 대부분
 - - - - - 회계기준에 따른 재분류(일부)
 - - - - - 회사의 선택적 재분류(일부)



주요 변경 사항

지분상품

- **원칙: FVPL 분류**
- 예외: FVOCI 선택 가능 (FVOCI Option)
단, 처분손익의 당기손익 인식 금지 (배당제외)

복합금융자산

- **FVPL 분류** (내재파생상품 미분리)

채무상품

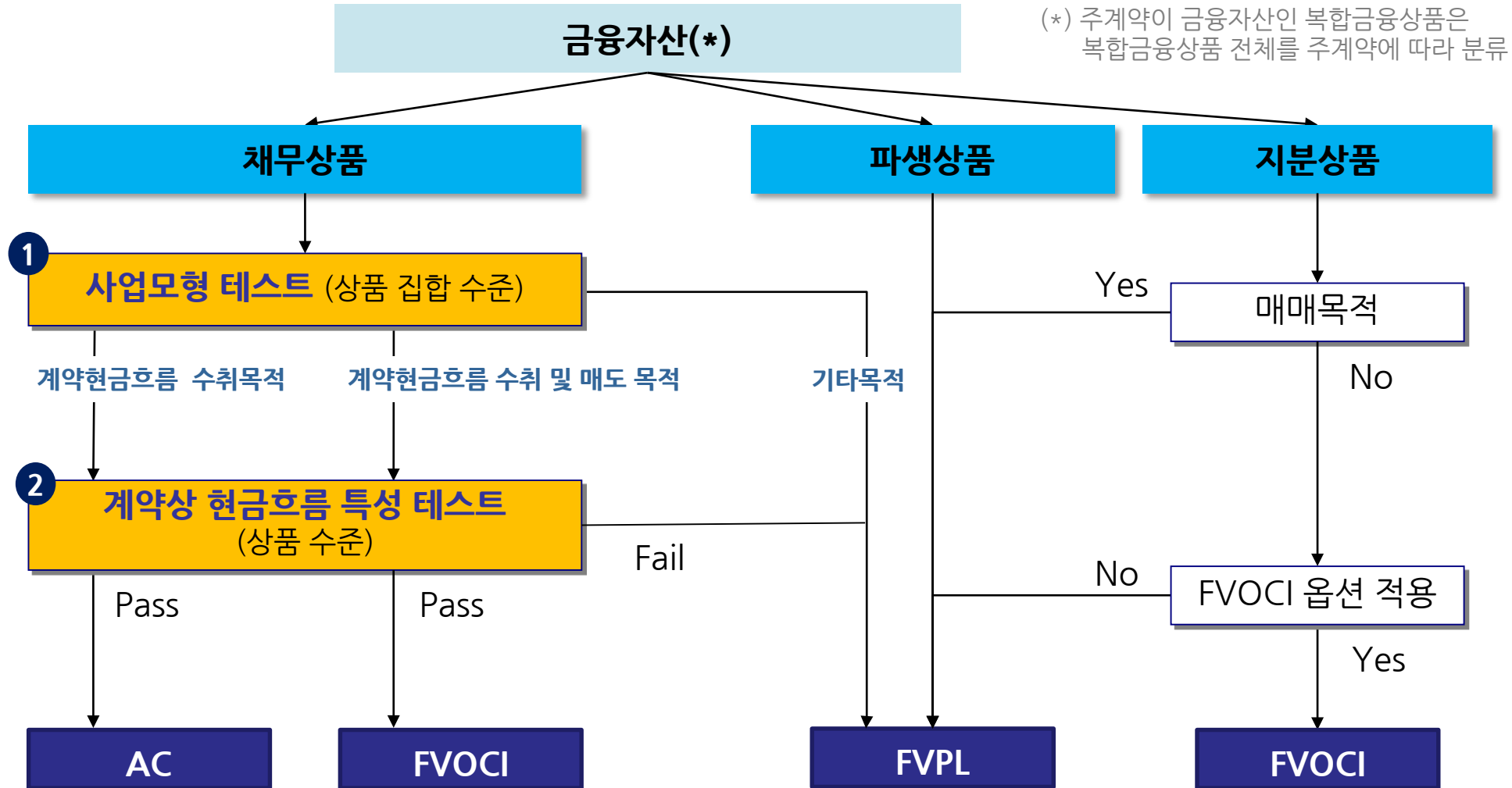
- **사업모형 평가**
보유 목적/운용 형태 평가 후 정의 필요
- **계약상 현금흐름 특성 평가 (SPPI test)**
“단순한 원금과 이자의 지급”으로 구성된 경우에만 **AC** 또는 **FVOCI** 분류 가능

- FVPL : Fair Value Through Profit or Loss
- FVOCI : Fair value Through Other Comprehensive Income

- AC : Amortized Cost
- SPPI : Solely payments of principal and interest on the principal amount

2. 주요 변경 내용 : 금융자산 분류 및 측정

※ 금융자산 분류 Flow chart



2. 주요 변경 내용 : 손상(대손충당금)

현행 (IAS 39)

변경 (IFRS 9)

개념

발생손실 Incurred Loss

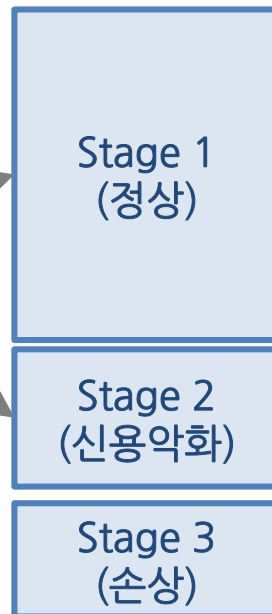
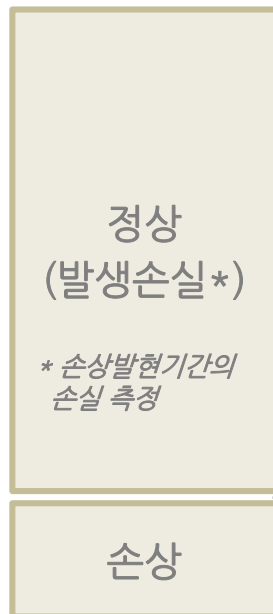
기대신용손실 Expected Credit Loss

범위

대출채권

AC(상각후원가자산) + FVOCI 채무증권

측정



안정적인 신용위험

→ 12개월 기대신용손실

최초 인식 이후 신용위험의 유의적인 증가

→ 대출 전체기간 기대신용손실

부도(Default)여신 (현행 동일)

→ 대출 전체기간 기대신용손실

조정

현재 경기상황 반영

미래 경기전망 반영 (Forward looking)

3. IFRS 9 특징 요약 (참고)

▣ 완전한 공정가치 회계를 위한 一步 前進 (One step forward)

		최초측정	후속측정	가치 변동 (평가손익)	
				신용위험	시장위험 등
원칙 ↓ 예외	당기손익-공정가치 측정금융자산 (FVPL)	FV	FV	P/L	P/L
	기타포괄손익-공정가치 측정 금융자산 (FVOCI)	FV	FV	P/L	OCI
	상각후원가 측정 금융자산 (AC)	FV	AC (손상:12개월 EL)	P/L * 신용위험 유의적 변동시 Lifetime EL	N/A
	FVOCI Option 선택 지분상품	FV	FV	- OCI → 손상평가 없음 - 처분손익 P/L 재분류 금지 (배당 제외)	

II. 보험사의 IFRS 9 도입 (IFRS 17과의 관계)

1. 보험사 및 연결 모회사의 IFRS 9 적용 방안

■ 보험사는 2021년 IFRS 9과 IFRS 17이 동시 도입될 예정임 (IFRS 17 도입시까지 IFRS 9 한시적 적용면제)

그러나, 연결모회사의 연결재무제표 작성목적으로 IFRS 9 도입이 필요한 경우, 다음의 대안 중 결정 필요



* 총부채 중 보험부채가 일정비율 이상인 회사만 가능

39	: IAS 39 “금융상품” (현행)	9	: IFRS 9 “금융상품” (개정)
4	: IFRS 4 “보험계약” (현행)	17	: IFRS 17 “보험계약” (개정)

2. 연결모회사의 IFRS 9 적용 : Overlay approach

■ Overlay approach 선택 시, 적용방법 및 공시사항

적용 방법	공시 사항
다음 두 가지 요건을 모두 충족하는 FVPL의 공정가치 변동효과를 당기손익(P/L)이 아닌 자본(OCI)로 분류 ■ 현행 IAS 39에서 대여금및수취채권, 만기보유금융자산, 매도가능금융 자산으로 분류되었으나, IFRS 9에서 FVPL로 분류 변경 ■ IFRS 4의 적용범위(투자계약으로 분류되는 경우 해당하지 않음)에 해당하는 계약과 관련되어 있다고 지정한 금융자산	■ Overlay Approach를 적용했다는 사실 및 보험계약과 관련 있는 금융자산 공시 ■ 손익변동성 조정을 한 해당 금융자산을 결정한 회사 정책 ■ 매기 손익변동성 조정의 총 금액에 대한 설명. 특히, 금융자산의 재지정과 관련하여 다음의 사항을 공시 - Overlay Approach 적용범위에 포함된 금융자산과 관련하여 당기손익과 기타포괄손익에서 조정한 금액 - 금융자산이 Overlay Approach의 적용범위에서 배제되지 않았다면 해당 기간에 당기손익과 기타포괄손익에서 조정되었을 금액 - Overlay Approach의 적용범위에서 배제된 금융자산과 관련하여 기타포괄손익누계액에서 당기손익으로 재분류된 금액

Ⅲ. 국내 보험사 투자금융상품 현황

1. 생명 보험사

□ 국내 생명보험사 투자상품 구성비율 (평균)

* 2016년 12월말 기준 (단위: %)

	구분	당기손익인식 증권	매도가능 증권	만기보유 증권	대출채권	합계
유가 증권	주식	0.10%	4.22%	0.00%	-	4.32%
	채권	0.08%	39.60%	15.23%	-	54.91%
	수익증권	1.08%	4.04%	0.00%	-	5.12%
	외화유가증권	0.09%	8.28%	4.71%	-	13.08%
	기타유가증권	0.46%	0.43%	0.00%	-	0.89%
	소계	1.81%	56.57%	19.94%	-	78.32%
대출 채권	가계	-	-	-	13.27%	13.27%
	중소기업	-	-	-	5.19%	5.19%
	대기업	-	-	-	3.20%	3.20%
	공공 및 기타자금	-	-	-	0.02%	0.02%
	소계	-	-	-	21.68%	21.68%
	소계	1.81%	56.57%	19.94%	21.68%	100.00%

(Data source : 금융통계정보시스템, KPMG Analysis)

2. 손해 보험사

□ 국내 손해보험사 투자상품 구성비율 (평균)

* 2016년 12월말 기준 (단위: %)

	구분	당기손익인식 증권	매도가능 증권	만기보유 증권	대출채권	합계
유가 증권	주식	0.04%	2.76%	0.00%	-	2.80%
	채권	0.39%	35.22%	4.20%	-	39.81%
	수익증권	2.17%	8.61%	0.00%	-	10.78%
	외화유가증권	0.26%	12.06%	1.10%	-	13.42%
	기타유가증권	0.73%	1.39%	0.00%	-	2.12%
	소계	3.59%	60.04%	5.30%	-	68.93%
대출 채권	가계	-	-	-	16.21%	16.21%
	중소기업	-	-	-	9.82%	9.82%
	대기업	-	-	-	5.04%	5.04%
	공공 및 기타자금	-	-	-	0.00%	0.00%
	소계	-	-	-	31.07%	31.07%
	소계	3.59%	60.04%	5.30%	31.07%	100.00%

(Data source : 금융통계정보시스템, KPMG Analysis)

IV. IFRS 9 이 보험사 자산운용에 미치는 영향

1. IFRS 9 상 금융상품 분류 예시

원칙

FVPL

공정가치 평가
→ 평가손익 당기손익 인식

주식 (상장/비상장)	신종자본증권 (CoCo)
수익증권/출자금 (풋가능금융상품)	구조화채권 (DLS 등)
중/후순위 PF대출 *	복합금융상품 (CB, BW 등)
Equity (Subnote)	Zero callable *

* SPPI test 를 통과하지 못하는 경우

FVOCI 채무증권

공정가치 평가
→ 평가손익 기타포괄손익 인식
(단, 대손충당금 인식)

- FVPL로 분류되지 않는 일반 채무증권 (사업모형: 수취 및 매각모형)
- 대부분의 국공채/금융채/회사채 등

AC

원가법
→ 대손충당금 인식

- 일반적인 대출채권 (가계/부동산담보/기업 대출 등)
- 선순위 PF 대출 (충분한 자본 보유)
- FVPL로 분류되지 않는 일반 채무증권 (사업모형: 수취모형)

예외

FVOCI 지분증권

공정가치 평가 → 평가손익 기타포괄손익 인식
* 처분손익 No recycling (배당금수익 제외)

- FVOCI Option 선택시 (사업상 관계에 따른 전략적 지분투자 등)

2. 금융상품 분류별 자산운용시 고려사항

FVPL

- **지분상품은 원칙적으로 FVPL 분류** (FVOCI Option 미적용시)
 - ✓ 투자 위축 가능성 → 위험 관리 정교화 (주가 연계 리스크 감축)
 - ✓ 배당주 / 고배당전략 선호
- **현재 보유 중인 매도가능지분증권에 누적된 평가이익(OCI)**
 - ✓ '18.1.1 시점에 누적평가손익은 모두 새로운 취득원가로 변경됨
 - ✓ 당기 이익실현 전략 또는 매각시점 결정시 손익관리 측면 검토
- **재량적 투자 권한 강화** (discretionary investment mandate) → **아웃소싱 투자 감소**
- **신규 투자상품 발굴시 IFRS 9상 금융자산 분류 및 新 RBC(K-ICS) 영향 사전 분석**
- **수익률 제고를 위한 대체투자 → 손익변동성(P/L Volatility) 확대**
 - ✓ 투자상품 리스크 유형별 관리 강화 (민감도 분석 등)
 - ✓ PF대출 등에 대한 신용분석 강화
 - ✓ 공정가치 평가체계 고도화

FVOCI 채무증권

AC

FVOCI 지분증권

2. 금융상품 분류별 자산운용시 고려사항

FVPL

FVOCI 채무증권

AC

FVOCI 지분증권

- 2021년 IFRS 17 “보험계약” 적용시점에 분류 재검토
 - ✓ 사업모형 재정의
 - ✓ 지분증권 FVOCI 지정 취소
- IFRS 17 도입과 연계하여 Duration Gap 확대에 따른 ALM 관리
 - ✓ 장기채/해외채 투자 증가
 - ✓ IFRS 17 도입 前 단계적 포트폴리오 사전 조정
- PF대출^{SPPI test 통과} : FVOCI 채무증권 분류 검토 → 중도 매각 용이
- 해외투자: 신용등급 관리 / 환리스크 관리 및 헤지회계 확대
- 채무상품에 대한 대손충당금 인식 → 손익변동성(P/L Volatility) 확대
 - ✓ 보다 적극적인 신용분석 기능 강화 (Initial and ongoing)
 - ✓ 미래 손익변동위험을 줄이기 위한 채권 선정단계의 중요성 (Bonds with good long-term credit health)
 - ✓ 매각시 현재 손실실현과 미래 손익변동성 확대간의 trade off 관계 고려

2. 금융상품 분류별 자산운용시 고려사항

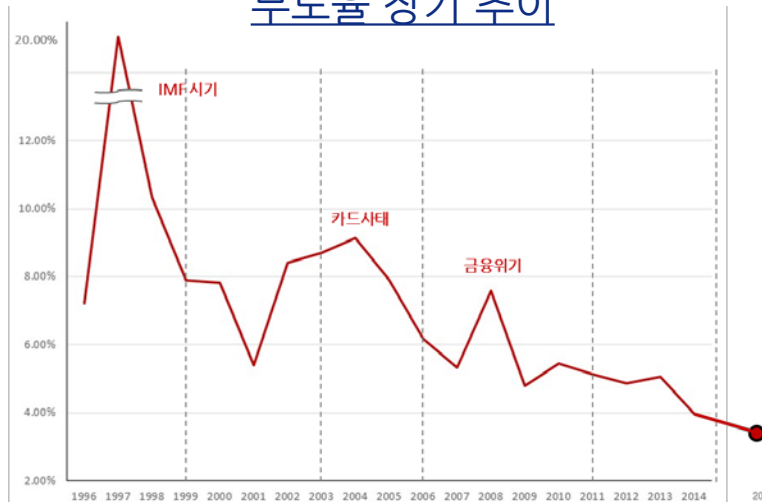
FVPL

FVOCI 채무증권

AC

- **자의적 계정재분류(FVOCI채무↔AC) 불가 → Tainting rule 삭제**
 - ✓ 현행 대비 AC분류 상품의 매각 유연성 증가 (신용위험 증가로 인한 매각 등)
 - ✓ 사업모형 정의 중요, 이익 관리 수단
- **최근 가장 낮은 수준의 대손율로 인해 IFRS 9 대손충당금 증가효과 과소평가 가능성 높음 (현행 대비) → IFRS 9 대손충당금 경기 민감도 높음**

부도율 장기 추이

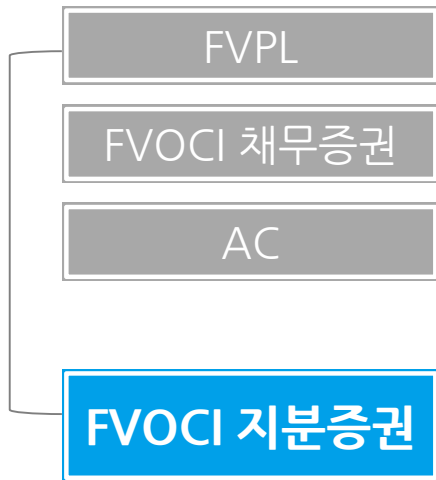


향후 신용위험 증가(부도율 상승)시 대비 필요 → 대손상각비 급증

- ✓ 저신용등급 고객군 (연체, 등급하락)
- ✓ 부동산경기 하락 (PD% ↑, LGD ↑)
- ✓ Stage 2 Lifetime EL 인식
- ✓ Forward looking 조정 (PD%↑)
- ✓ 은행권 대손율 관계 (선행 vs 후행)

FVOCI 지분증권

2. 금융상품 분류별 자산운용시 고려사항

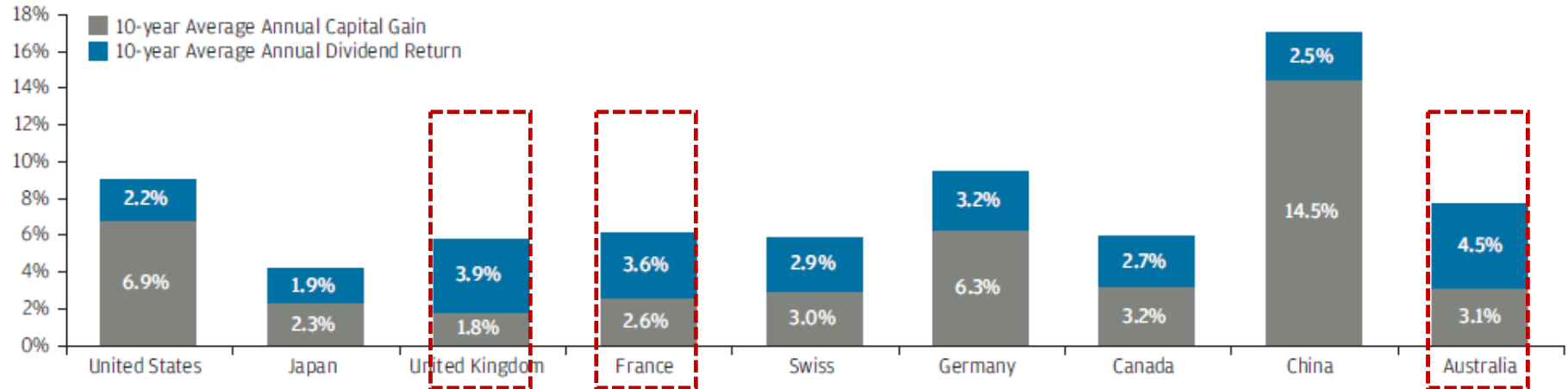


IFRS 9의 원래 취지는 전략적 지분투자^{Strategic investment}에 적용

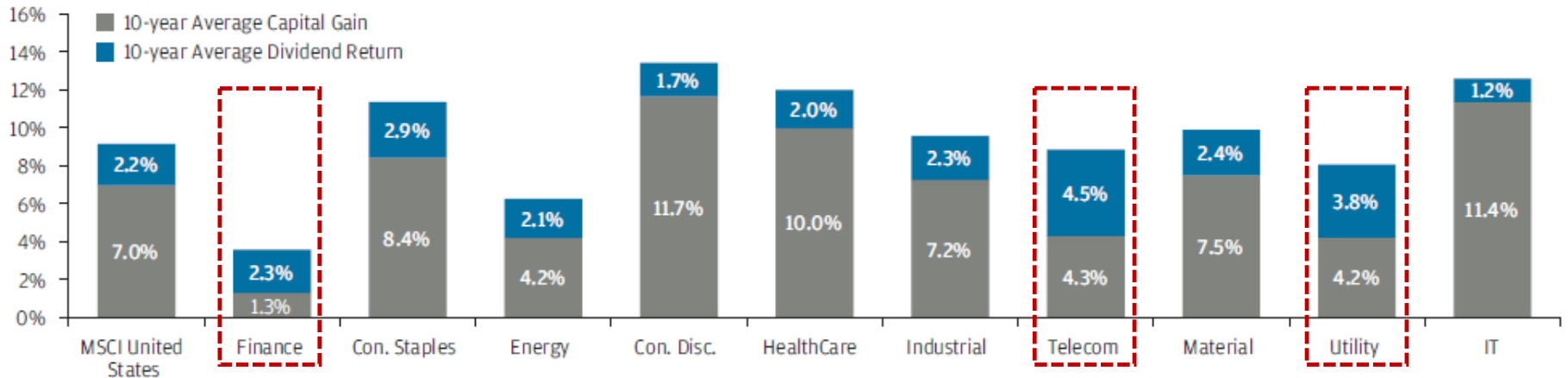
- 그러나, 반드시 전략적 지분투자에만 적용할 필요 없음
- 영구채 형태의 코코본드 적용 고려 (Contingent Convertible Bond)
- (장기)배당주 투자 적용 고려
 - ✓ 배당금수익은 손익 인식 가능
 - ✓ 주가변동으로 인한 평가손익은 자본에서 조정 → 손익변동성 관리 용이

2. 금융상품 분류별 자산운용시 고려사항

HISTORICAL DIVIDEND RETURN VS. CAPITAL GAIN ACROSS SELECTED EQUITY MARKETS



MSCI US - HISTORICAL DIVIDEND RETURN VS. CAPITAL GAIN ACROSS SECTORS



(Data source : Bloomberg, MSCI, J.P. Morgan Asset Management)

Q&A

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감사합니다.

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Asset management under IFRS17

Sun, Lei
Sep, 2017

CONTENTS

1. Regulation Environment
2. Overview
3. Assets and Liabilities Management (ALM)
4. Accounting mismatch and Volatility
5. Impact on New business and product design

Speaker Today : 순레이, 孙雷 , Sun Lei

ABL

Career

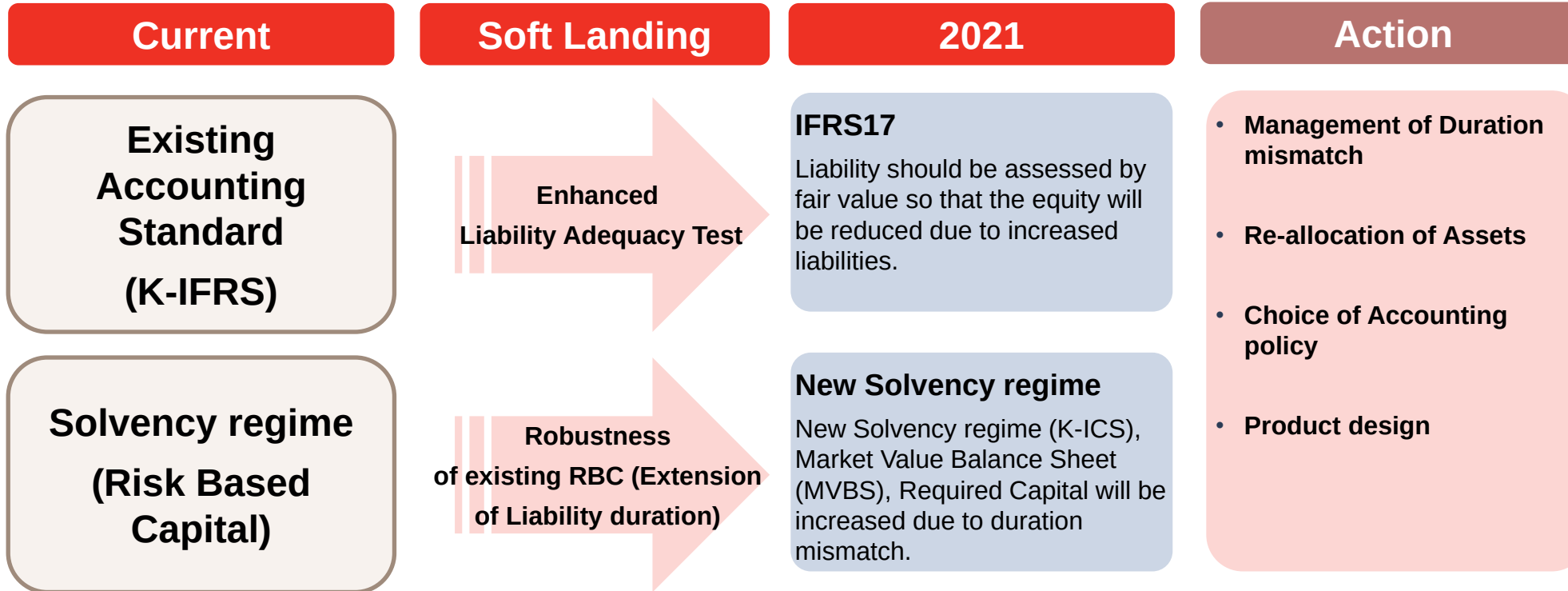
- 2017.07 – Chief Executive Officer, ABL Life, Korea.
- 2013 – Chief Finance Officer, Allianz Korea Life Insurance
- 2009 – Chief Finance Officer, Chief Risk Officer, Chief Actuary, Allianz China Life Insurance
- 2007 – Chief Actuary, Allianz Taiwan Life, Taiwan
- 2004 – Regional Actuary Consultant, AZAP, Singapore
- 2003 – Chief Actuary, John Hancock Financial Service, Singapore
- 1998 – Regional Actuary Consultant, John Hancock Financial Service, Singapore

CFA (Chartered Financial Analyst)

FIA (Fellow of the Institute of Actuaries)



Regulation Environment



- The accounting standard will be reshaped i.e., market value valuation of liabilities or changed recognition of profits of Insurance contract. In which case, insurers will overhaul the management and witness mounting liabilities of old legacy block, which will deteriorate financial soundness.
- The Industry encountered the risk of RBC ratio deterioration due to adaption of IFRS17 (largely increase of liability).
- In particular, ALM management will be required because the big drop of discount rate and extension of liability duration. Otherwise, it will be difficult to manage the RBC ratio.



Deterioration of
RBC

1

Assets and
Liabilities
Management
(ALM)



Duration
Mismatch

Timing of
asset re-
allocation

2

Accounting
mismatch and
volatility



Proper
ALM
results in
smooth
P&L
movement

Finance
income
and
expenses
in OCI

Fair Value
approach

3

How does it affect
new business and
product design?



Traditional
– No
guarantee
above RF

ISP / ICDPF
– Crediting
strategy

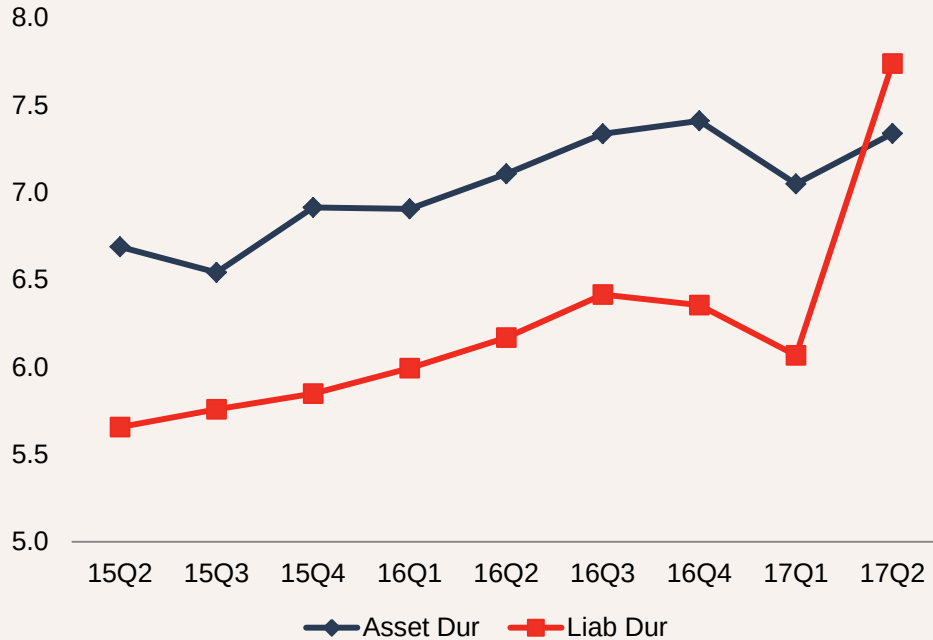
※RF : Risk Free

※ICDPF: Insurance contract discretionary participation features

Assets and Liabilities Management (ALM)

As-Is : RBC basis

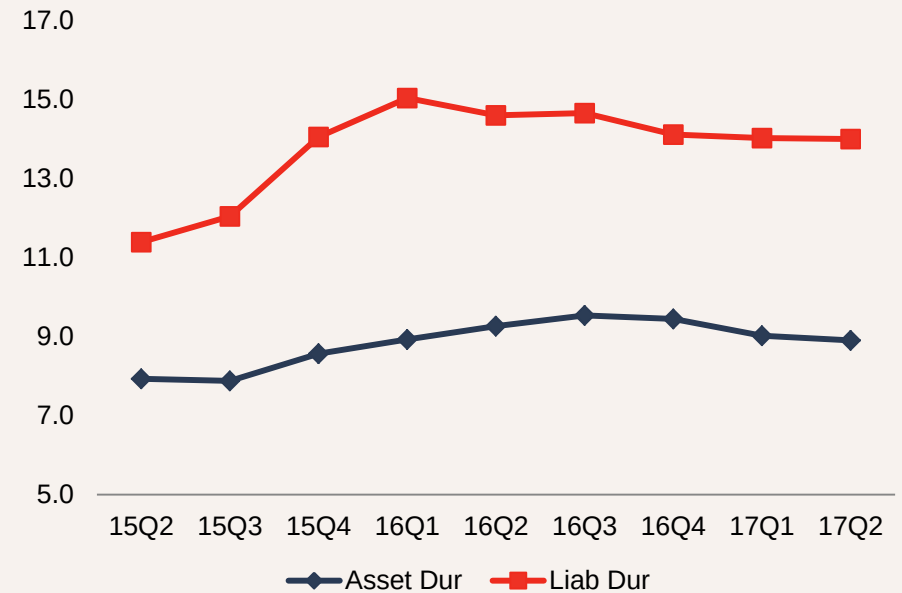
RBC duration



RBC basis	Asset	Liability
Duration	7~8 years	6~7 years

To-Be : Economic basis

Economic duration

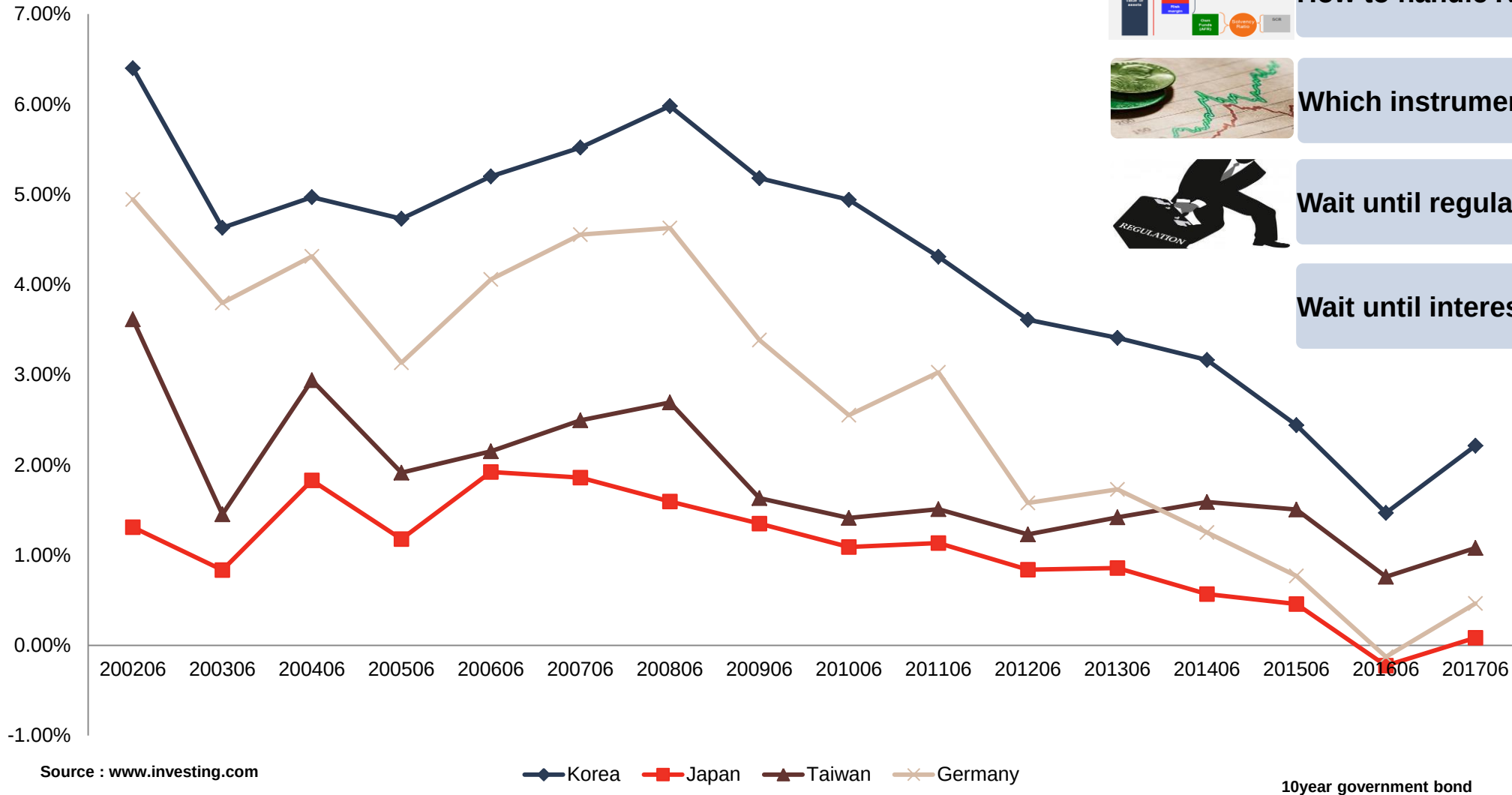


Economic basis	Asset	Liability
Duration	8~9 years	13~14 years

Source : A life insurance company Korea

Liability duration extension is inevitable under IFRS17. If so, when do we do asset duration extension?

Assets and Liabilities Management (ALM) (Cont.)



How to handle RBC volatility?



Which instrument ? Overseas?



Wait until regulation change ?

Wait until interest rate goes up?

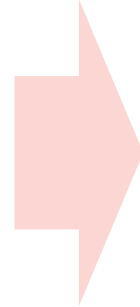
Accounting mismatch and Volatility

As-Is

If we make a perfect ALM match now, it will be impossible due to RBC regime.

Under current RBC regime,

- Asset is extended by 5years, RBC will be reduced by 100%.
- When interest rate is increased by 25bps, RBC will be reduced by 36%.



To-Be

Company has the option to

Paragraph 88(a)

Including insurance finance income or expenses for the period in profit or loss; **i.e. if ALM perfectly matched, no volatility to P&L and equity.**

Paragraph 88(b)

Disaggregating insurance finance income or expenses for the period to include in profit or loss an amount determined by a systematic allocation of the expected total insurance finance income or expenses over the duration of the group of contracts. **i.e. recognise the volatility in OCI**

Paragraph C24

In applying the fair value approach, if an entity chooses to disaggregate insurance finance income or expenses between profit or loss and other comprehensive income, it is permitted to determine the cumulative amount of insurance finance income or expenses recognised in other comprehensive income at the transition date. **i.e. One time cleaning up.**

When to do this?



Accounting mismatch and Volatility - Fair value approach

On- Balance Sheet Hedging

It can be only implement after 2020.

What can the regulator help us?



Off- Balance Sheet Hedging

i.e. asset duration extension on a parent company's Balance Sheet.

Pros:

No immediate impact on RBC. Lower volatility of RBC.

Cons:

No Value for the entity itself only benefit group.



Impact on New business and product design

Product cash-flows	CSM	Hybrid type
Product cash-flows must be match-able. Otherwise create huge volatility to balance sheet. Asset management function must control Liability.	OR, if product is super profitable, enough CSM to handle volatility. Very unlikely under competition.	“Hybrid type” ; e.g. ROP health products will look very different on income statement

**Thank you
for your Attention**

KIRI Seminar

What we have learned from past experiences

- Evolution of Japanese Insurer Portfolio Investment Strategies

Susumu Okamura
Founder & President
Education for Asian Talents, Inc

September15, 2017



Japan has been in a unique situation for long.

So lessons from Japan experiences, as they are, may not be directly useful to you.

But the essence can be abstracted and utilized for quicker judgement and decisive actions.

Best wishes to all in Korea, where my son learned a lot at Korean University (高麗大学校) and had fantastic time.

If you have any questions, please feel free to e-mail me (okamuras@eat-star.asia) .

EAT Susumu Okamura

Today's perspective

Intuitive Lessons I had from actually experienced crises

The world surrounding investment is dramatically changing ...the war time situation in the financial market is now part of everyday life

The role of investment managers at life insurance companies ...

a pure investment manager, competing against benchmark?

or

an investment-related issues manager, advising whole company strategies?

Susumu Okamura Personal History I / Life Insurance & Asset Management

1985- 2005 Dai-ichi Life Insurance Company

(Domestic & International Credit Analysis)

1985-88 Domestic credit analyst

1988-89 Trainee at as US credit analyst at Citibank (NY,USA)

1989-91 International credit analyst

1991-95 US loan officer and credit analyst (NY,USA)

**Birth and burst of Bubble
Economy in Japan**

(Corporate Management)

1995-98 Human Resource Management

(Investments)

1998-00 Head of FX Investments

**What happened to the financial
industry in Oct. 1998 ?**

(Corporate Management & Investments)

2000-04 President & CEO at DIAM Asset Management USA (NY,USA)

2004-05 ALM at Corporate Planning

2005 Head of Investment Planning Group, DIAM Asset Management (Japan)

**What was the biggest issue of
ALM in Japan life insurance in
early 2000s ?**

2005-2013 UBS Global Asset Management (Japan) Ltd

2005-08 Head of Product Development & Management

2008 Director, Head of Institutional Business and Products

2008/11 President & Representative Director (Japan), A member of Asia-Pacific Management Committee
taking responsibility as Head of Investments

**What are differences between
European and American in company
behaviors?**

Susumu Okamura Personal History II / Human Resources Development

2013- Education for Asian Talents, Inc (called as “EAT”)

2013 Founder & President

Advisor to one of the largest Japanese life insurance companies

2015 Established EAT Business School , Opened Tokyo Class

Chairman of 3rd Party Fiduciary Duty Committee at Mitsui Sumitomo Asset Management

Advisor to one of the largest foreign asset management companies

2017 Opened Fukuoka Class at EAT Business School

**Closely watching actual efforts
and change/non-change of
Japanese corporate reform**

3 Business Pillars of human resources development company

EAT Business School, Corporate Seminars, Advisors /Coaching/Consulting

from fresh-person to executives across industries

with focus on global management and asset management

Essence of Career

- Management as President (US subsidiary of leading Japanese life insurance company, Japan subsidiary of global prestigious asset management company, Founder of broad Asia-focus education company)
- Global Business & HR Development (corporate planning & strategies, human resources&system development)
- Asset Management (Credit, FX, ALM)
- Training and Coaching based on deep and actual business experiences

Education

1994 MBA Columbia Business School(NY, USA), 1985 BA in Law The University of Tokyo

Qualifications

U.S. CPA, CMA (Chartered Member of Securities Analysts Association of Japan), Registered Real-Estate Broker

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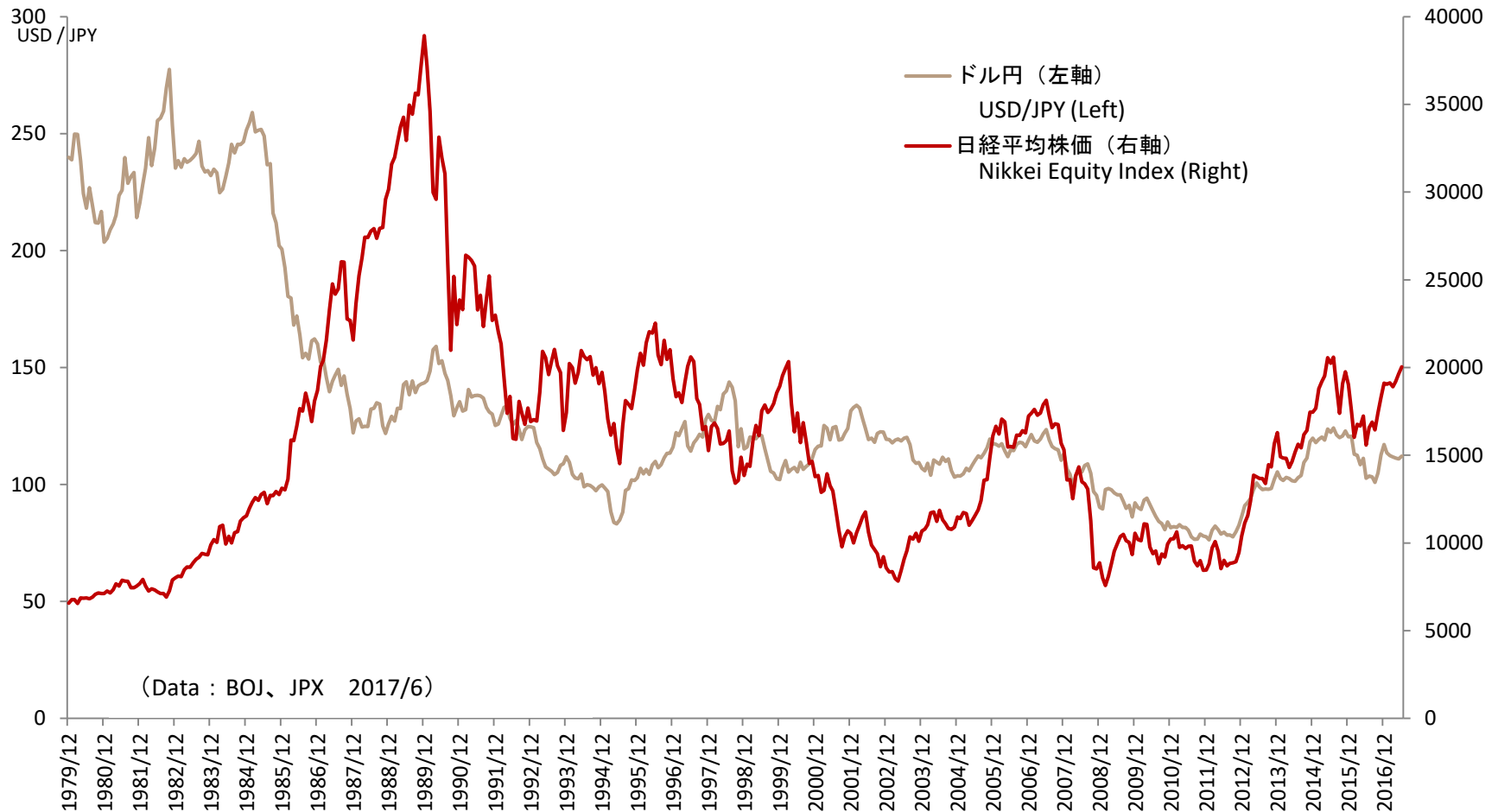
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Section 0 Compact Summary

Essence of today's message with 7 lessons from the past

Historical Nikkei Equity Index and USD/JPY rate

JPY continues to appreciate against USD while Nikkei cannot get out of bear trend



Source : Bloomberg

Long-term declining interest rate in Japan – JGB 5years



(Snapshot just before Abenomics)

Why have Japanese investors continued to buy JGB so much?

Interaction of many factors and intentions has resulted in concentrated investments in JGB

Governments / Central Banks

+ Fiscal situation

- increasing deficit outstanding

+ Monetary policy

- zero interest policy

+ Regulations

- administrative guidance

+ Education

- ethics

=====

+ Demography

- aging population

Private Sector

+ Cultural background

- respect for “labor” , despise investment return as “ill-gotten’ money

- shortage of skill & experience

+ Mis-trust for current social system

- growing concerns over social security

+ Reputational risks

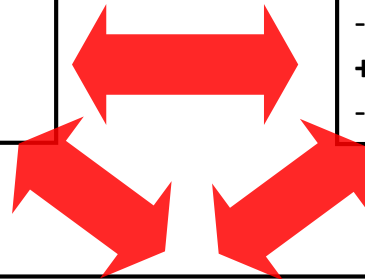
- credit risk averse attitude promoted by media etc.

+ Regulation

- Basel 3, AIJ scandal (Japanese Madoff)

+ Burst of bubble economy

- lingering negative sentiments from losses



Market

+ Price trend

- Continuously declining local equity market

+ Limitation

- Limited depth & width of market (immature market of Private Equity, High Yield Bond)

+ Market condition

- Distorted condition in terms of “risk” and “return”

Risk money is NOT taking risk for growth

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Abenomics

**Trying to take COMPREHENSIVE actions
for turn-around of Japan economy**

**A lot of non-financial trials-and-errors
have hugely affected
investment stance and behaviors
beyond pure performance pursuit**

Lesson 1

**Rule can be overridden
by people with no mission/philosophy
(Philosophy)**

Lesson 2

**Regulations are NOT necessarily
most recent and rational**

(Regulations)

Lesson 3

**Risks often come up,
masked with “NEW” technologies**

(Technology)

Lesson 4

**Risks are caused more frequently
in unpredictable forms**

(Predictability)

Lesson 5

**“After-crisis remedy action”
is sometimes more important
rather than
Pre-emptive actions**

(After-crisis Action)

Lesson 6

**Structural problems can erase
day-to-day improvement efforts**

(Structure)

Lesson 7

What do you think are most important things for appropriate risk-return management ?

Let's think together

Intuitive Lessons from actually experienced crises

Lesson 1 (Philosophy)

Rule can be overridden by people with no mission/philosophy

Lesson 2 (Regulations)

Regulations are not necessarily most recent and rational

Lesson 3 (Technology)

Risks often come up, masked with NEW technologies

Lesson 4 (Predictability)

Risks are caused more frequently in unpredictable forms

Lesson 5 (After-crisis Action)

“After-crisis remedy action” is sometimes more important rather than Pre-emptive actions

Lesson 6 (Structure)

Structural problems can erase day-to-day improvement efforts

Lesson 7 (???)

What do you think are most important things for appropriate risk-return management ? Let's think together

okamuras@eat-star.asia

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Section 1 Lessons from Japan Bubble Economy case

Burst of Bubble Economy in Japan and thereafter

Historical Nikkei Equity Index and USD/JPY rate

JPY continues to appreciate against USD while Nikkei cannot get out of bear trend



Source : Bloomberg

Major events and their market impacts in each phase

The post-bubble era till Abenomics consists of 3 periods, i.e. 1) 1980-89, 2) 1990-1999, 3) 2000-12

	1980 – 1989	1990 – 1999 (Lost 10 years)	2000 to 2012
Domestic events	Bubble economy “Land Shark” <i>Development of high leverage products</i> Distorted investment behaviors in terms Risk&Return balance Plaza Agreement(1985)	<i>Lending volume control (1990)</i> Burst of Bubble economy (1990) Delay in coping with burst of bubble economy (1990's) Series of fiscal spending (1990s) Failure of banks & brokers(1997-) Increase of consumption tax from 3 to 5% (1997) <i>Distorted Dividend Pay-out Rule at LICs</i> <i>BIS regulation</i>	Koizumi reform (2001-06) Change of ruling parties (2009) Pay off for deposit (2010) Tohoku Earthquake(2011) AIJ scandal (2012) <i>Structural problems like demography, inexpensive labor cost in emerging countries, immature market of PE, HYB etc</i>
Domestic markets	Nikkei historical high (1989) Peak of R/E price	Sudden decline of land prices (1990s) Continuous decline of equity prices (1990s) JPY appreciation (1995) Zero Interest rate policy (1999)	Continuous decline of interest rate, equity price, R/E (2000s) Shift of investment from Equity to Bond, JPY appreciation



Global events	Latin America Debt Crisis (1982) Black Monday(1987)	Asian currency crisis (1997) Russia crisis (1998) LTCM shock(1998) Birth of Euro(1999)	Enron shock (2001) 9.11 terrorist attacks (2001) Subprime shock (2007) Lehman shock (2008) Euro Crisis (2010)
Global markets	Peak of US interest rate	IT bubble Greenspan “myth”	Decline of US equity market followed by quick recovery

3+1 Phases of Japan Markets

Review of Japan markets by each phase as follows,

Phase 1) 1980 - 1989

Phase 2) 1990 - 1999

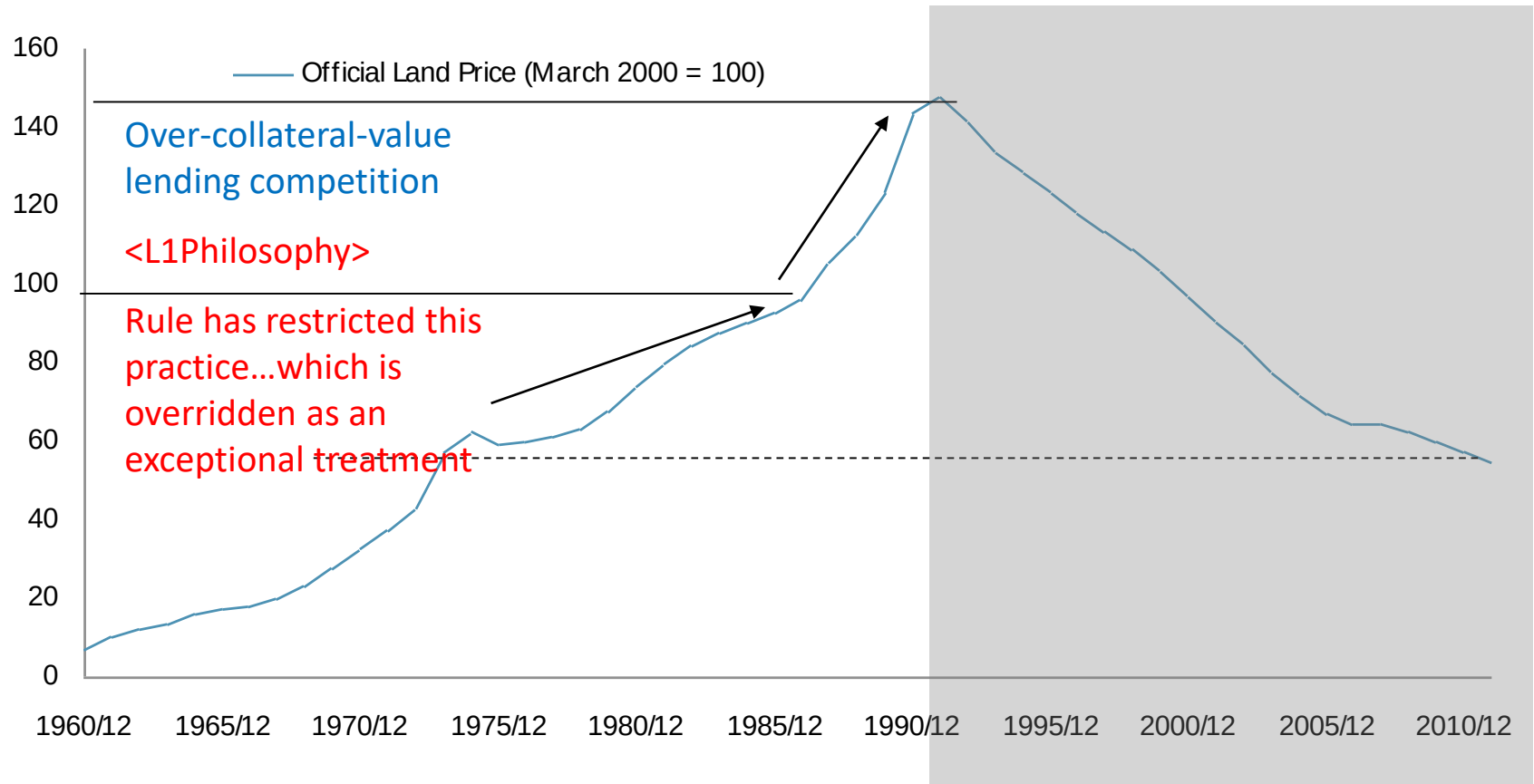
Phase 3) 2000 - 2012

=====

Abenomics) 2013-

Phase 1) Rapid increase in land price

Rapidly increasing land price especially after 1985



Source : Bloomberg

Would you lend MORE money than collateral value to sub-prime borrowers ?

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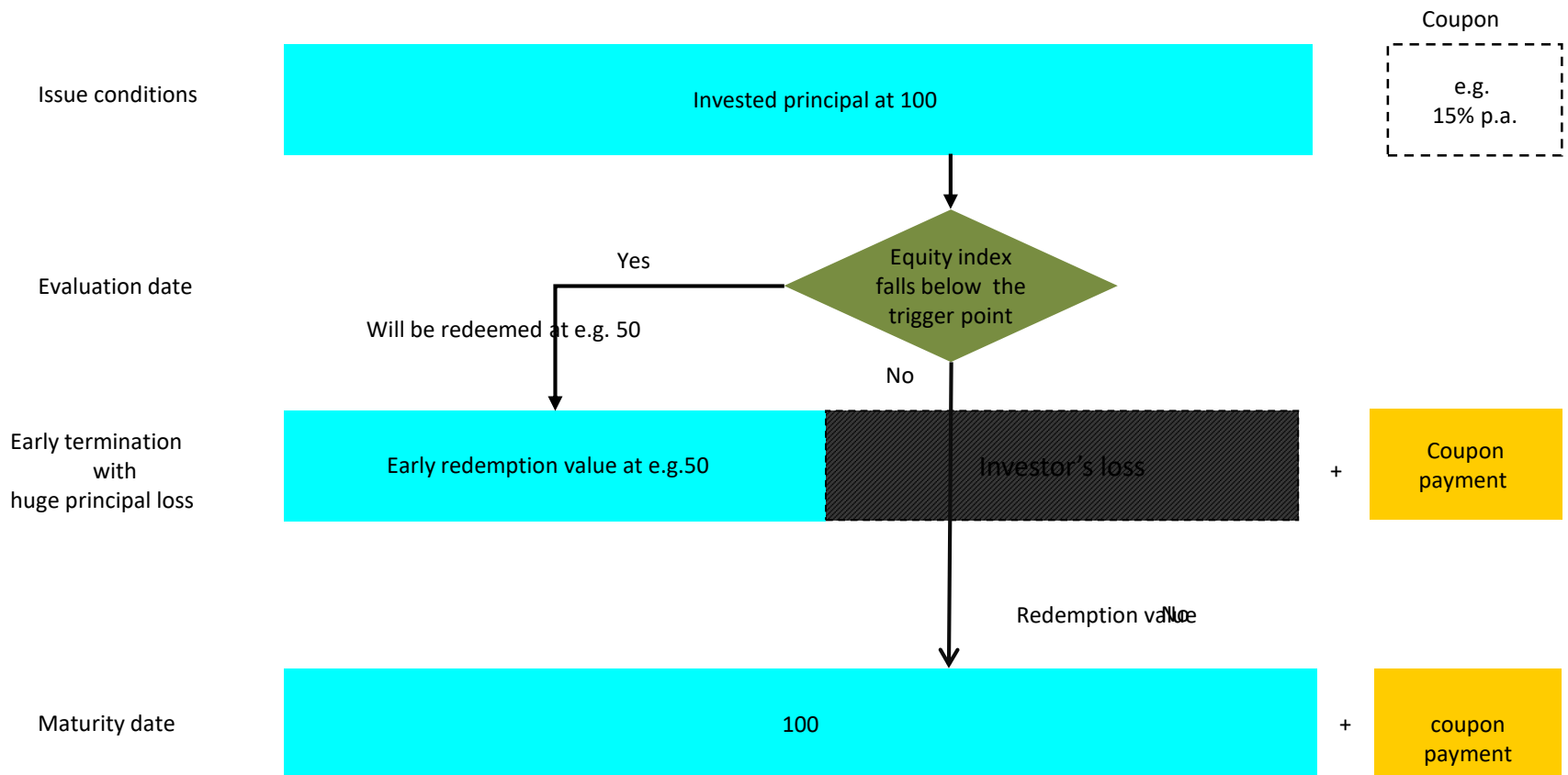
What does this picture with signboard mean ?



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Phase 1) Under the name of “new financial technology”

Broader investors have begun to play “leverage” game with rising equity market without recognizing the risk of price decline - ‘Structured Bond with too high coupon ‘



<L3 Technology> Ceiling of “Equity” investments against total assets were practically neglected by developing NEW technology which creates equity-price linked Bond

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3+1 Phases of Japan Markets

Review of Japan markets by each phase as follows,

Phase 1) 1980 - 1989

Phase 2) 1990 - 1999

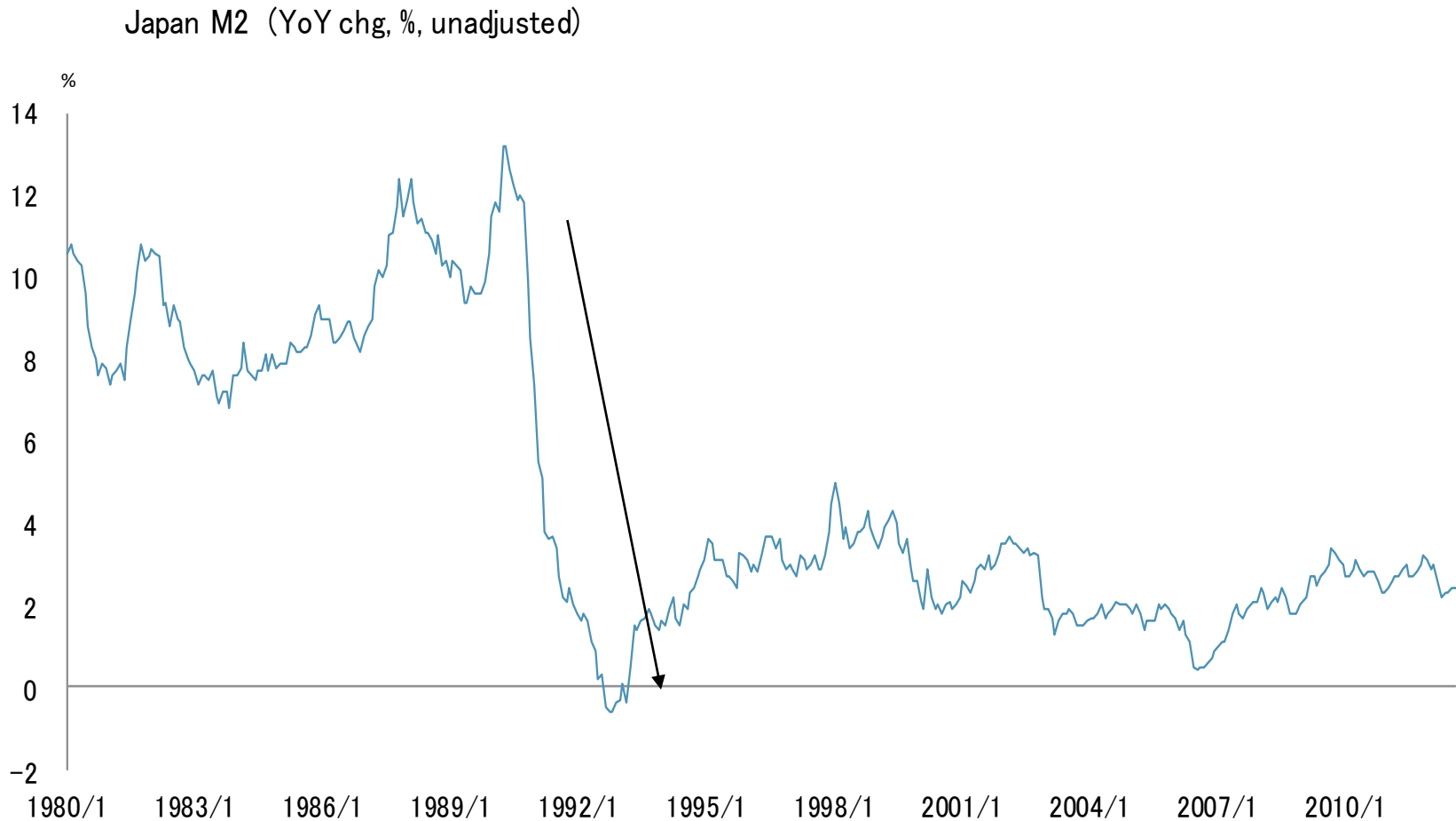
Phase 3) 2000 - 2012

=====

Abenomics) 2013-

Phase 2) Japan Money Supply (M2)

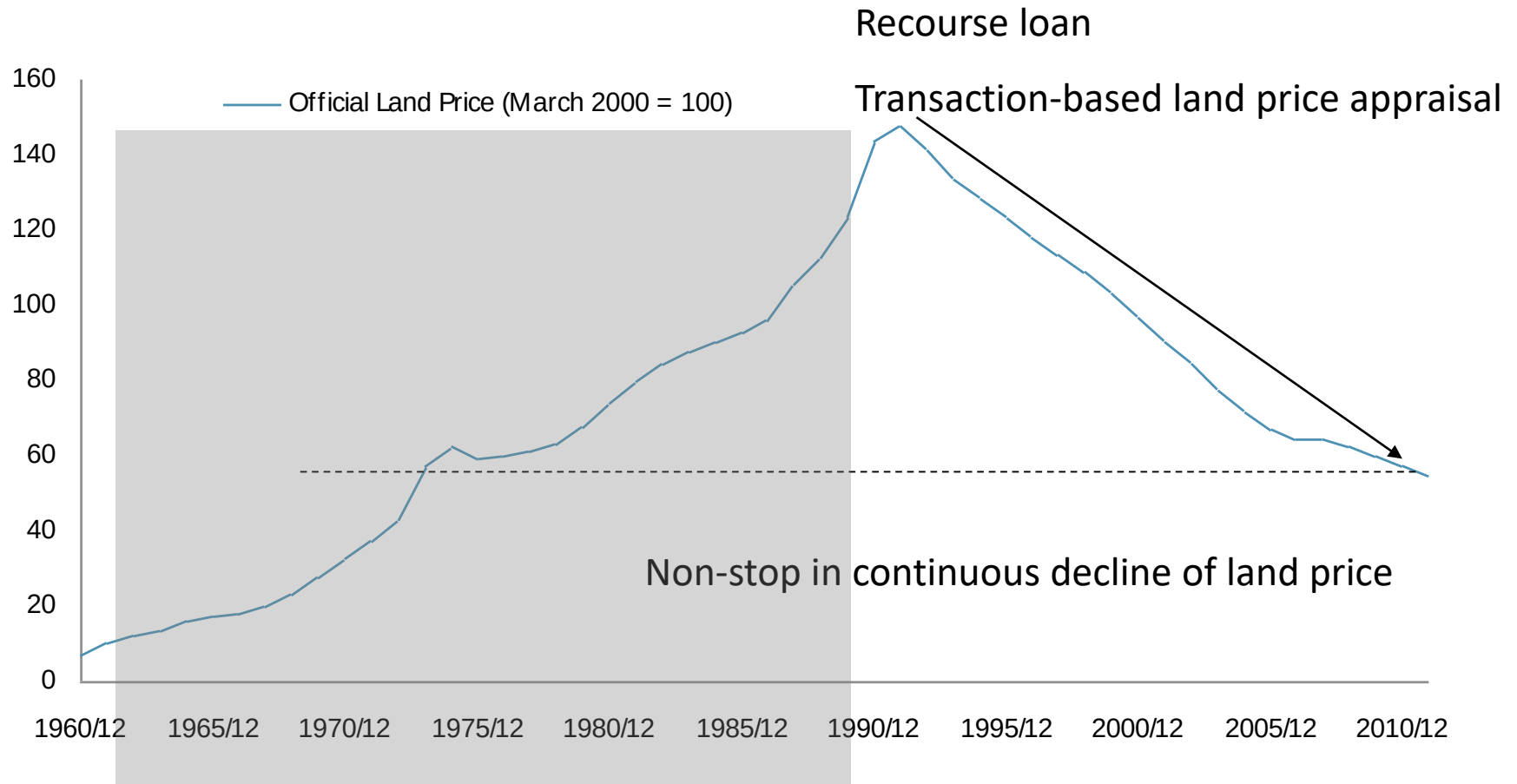
<L2 Regulation> Money supply fell drastically after the government had introduced more stringent lending policy



Source : Bloomberg (M2) / Cabinet Office, Government of Japan (Bank of Japan's Asset)

Phase 2) Rapid decline in land price

More than 20 years have passed since “land price myth” was gone



Source : Bloomberg

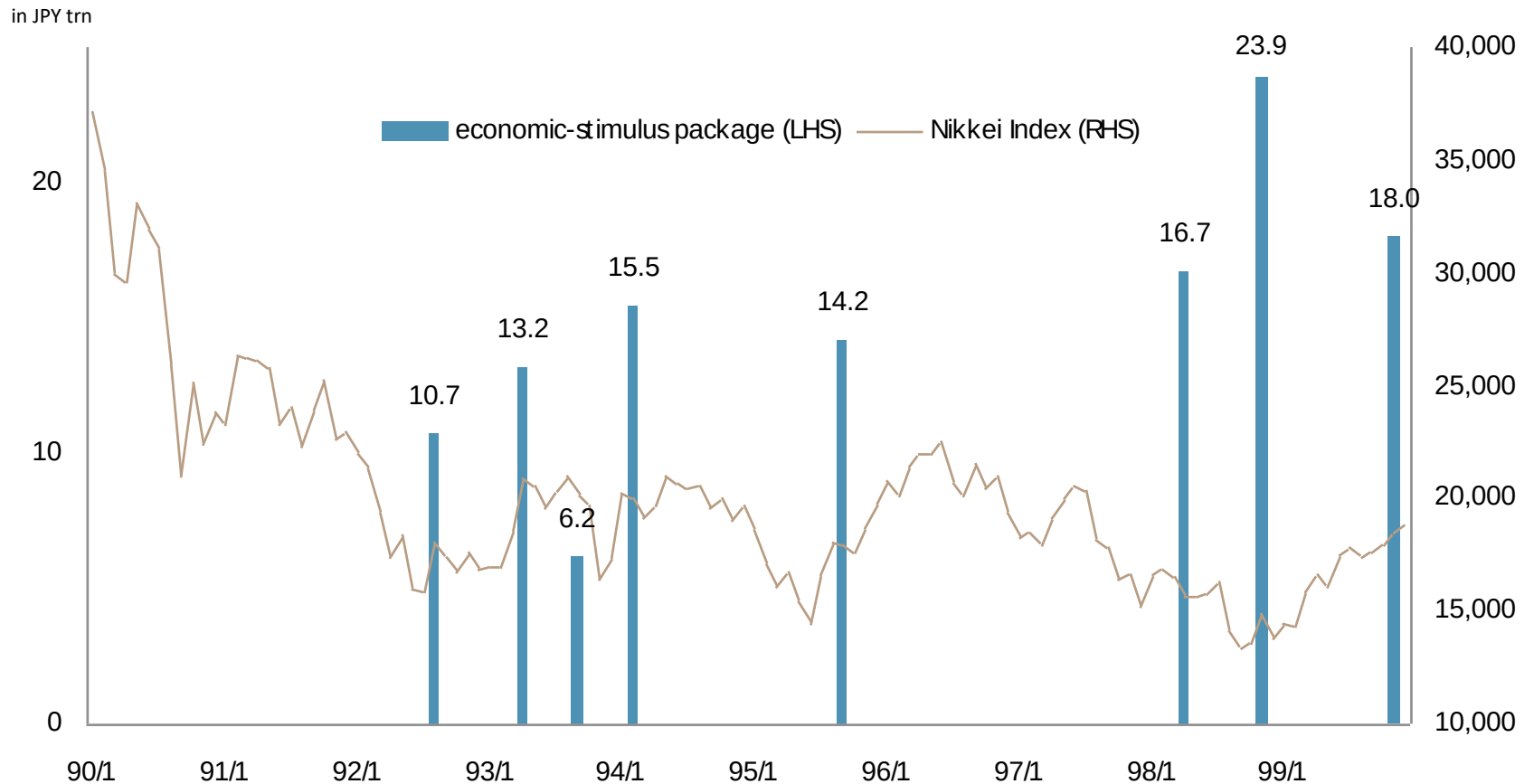
<L6 Structure> Transaction-based pricing method dramatically increased the volatility of R/E price.

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Phase 2) Non-effective fiscal stimulus packages

<L6 Structure> Fiscal spending in 1990s was not effective without solution of structural problems

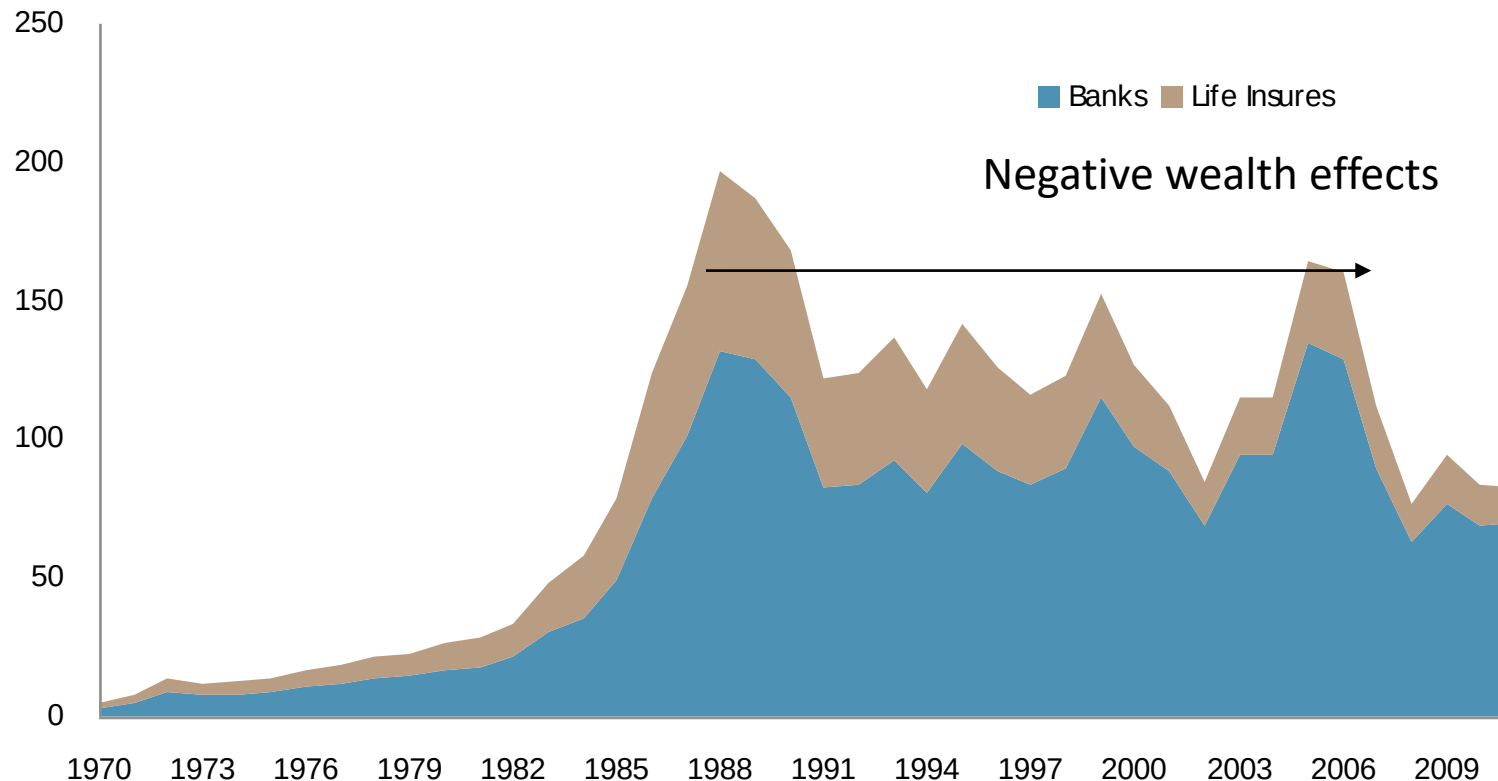


Source : Bloomberg / Institute for Monetary and Economic Studies, Bank of Japan

Phase 2) Equity holdings by financial institutions

<L6 Structure> Despite pressure to reduce equity investments for structural improvements, actions were extremely slow under “hope” by executives who believe that good market will come back and insist to keep mutual equity holding among close companies

in JPY trn



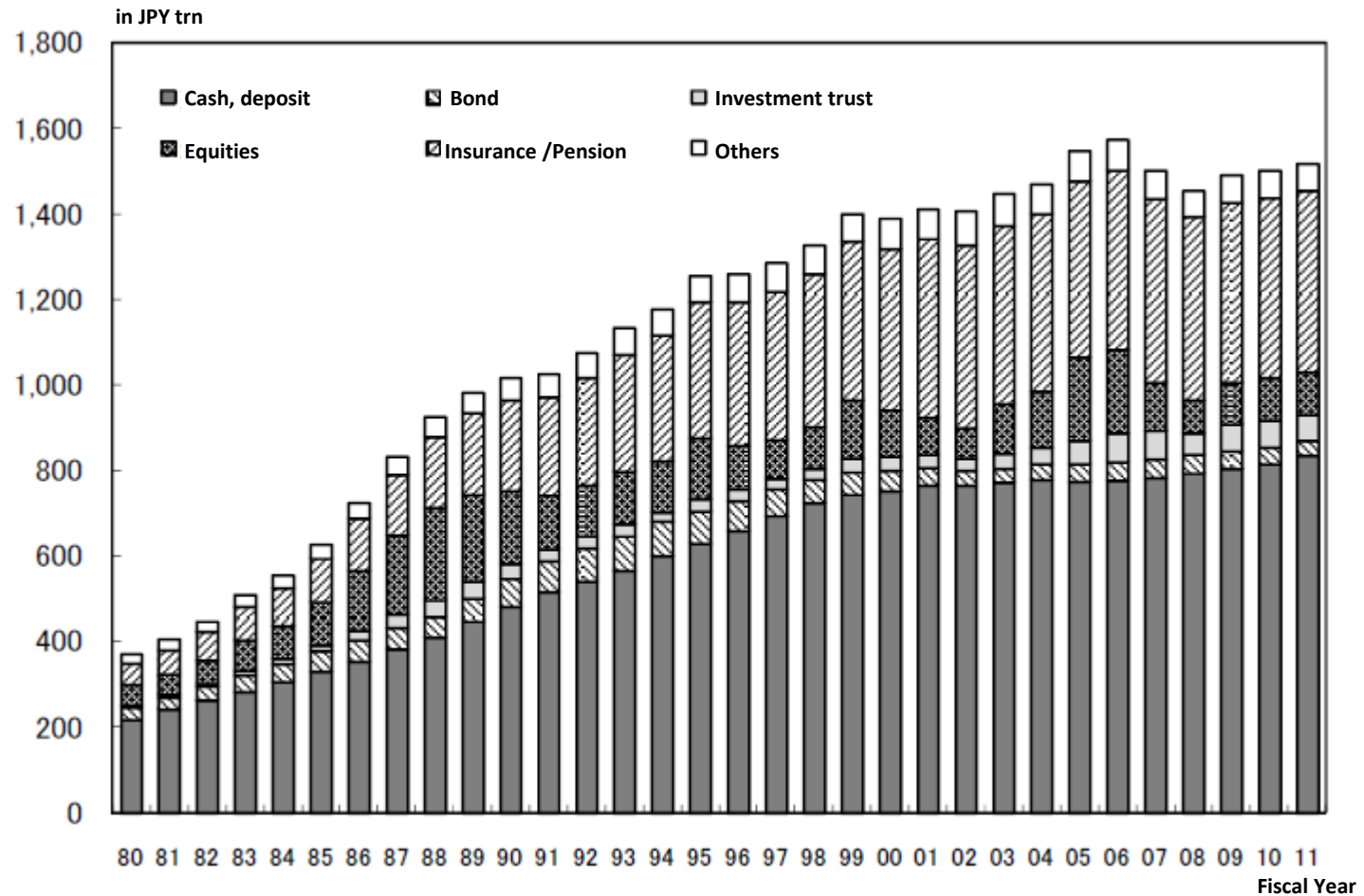
Source : Tokyo Stock Exchange

Can you decide to reduce equity investments dramatically while your peer group are maintaining the weight ?

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Phase 2) Equity holdings by retail investors

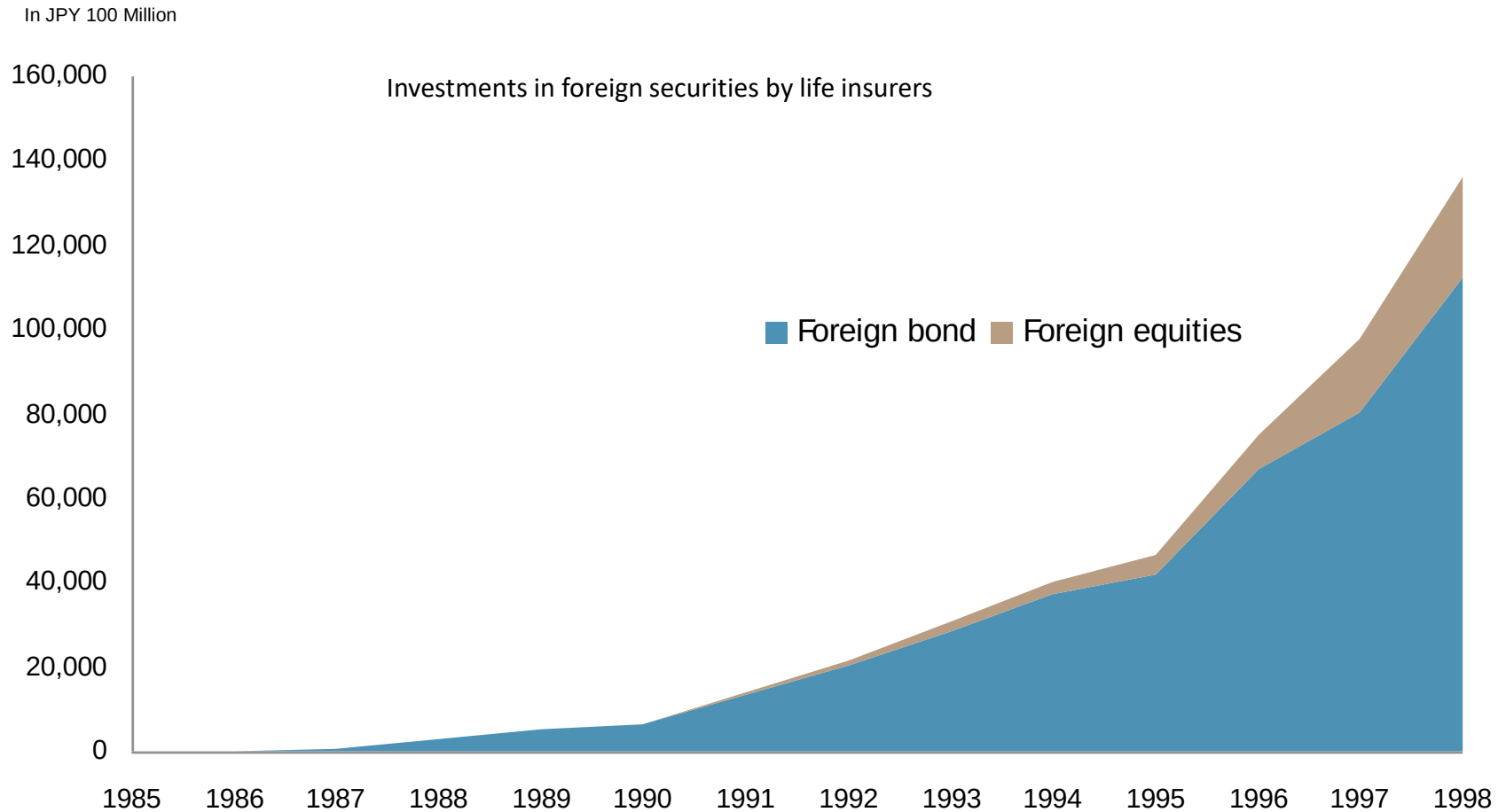
<L6 Structure> Losses from equity and R/E has discouraged retail investors to come back to market



Source : Bank of Japan

Phase 2) Concentrated investments into Foreign Bond by life insurers

<L2 Regulations> Why have Japanese life insurers continued to invest into foreign bond , suffering from FX losses?
...Dividend is paid out from Coupon despite capital losses



Source : "Investment in foreign bonds and sales of foreign equities by life insurers" by Prof.Yasuo Kofuji / Life insurers association

3+1 Phases of Japan Markets

Review of Japan markets by each phase as follows,

Phase 1) 1980 - 1989

Phase 2) 1990 - 1999

Phase 3) 2000 – 2012

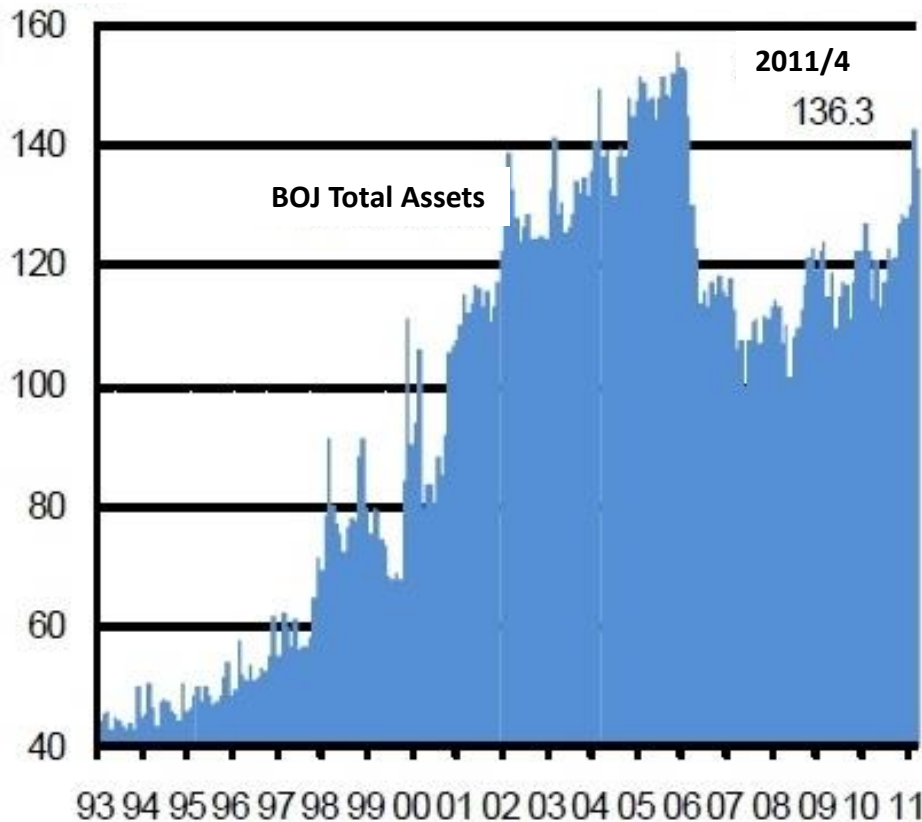
Abenomics) 2013-

Historical asset size Bank of Japan

Has BOJ not increased its balance sheet as is criticized ?

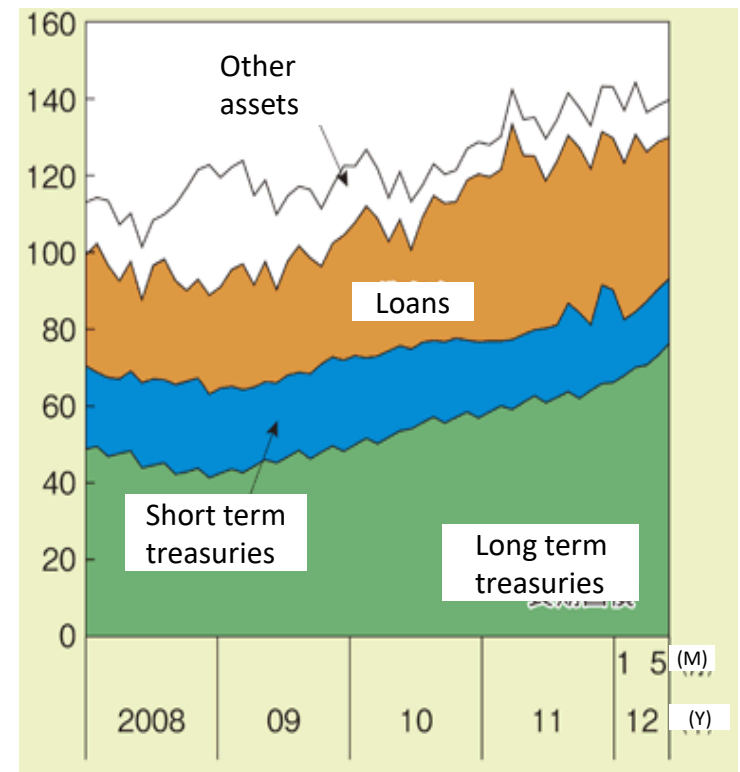
Long-term trend

Bank of Japan's asset (in JPY trn)



Source : Bank of Japan, Musha Research, jpbpress.ismedia.jp

Recent few years



What was the issue , volume or else ?

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Phase 3) Vicious spirals under related markets

<L6 Structure> Why Japanese PE (Private Equity) market has not grown successfully ?

	2008		2009		2010	
	Launched	Invested	Launched	Invested	Launched	Invested
US	288	48	88	51	80	81
UK	65	32	5	20	10	31
France	15	12	3	5	6	8
Germany	3	10	1	3	2	6
Japan	3	10	2	3	2	2

In USD Billion

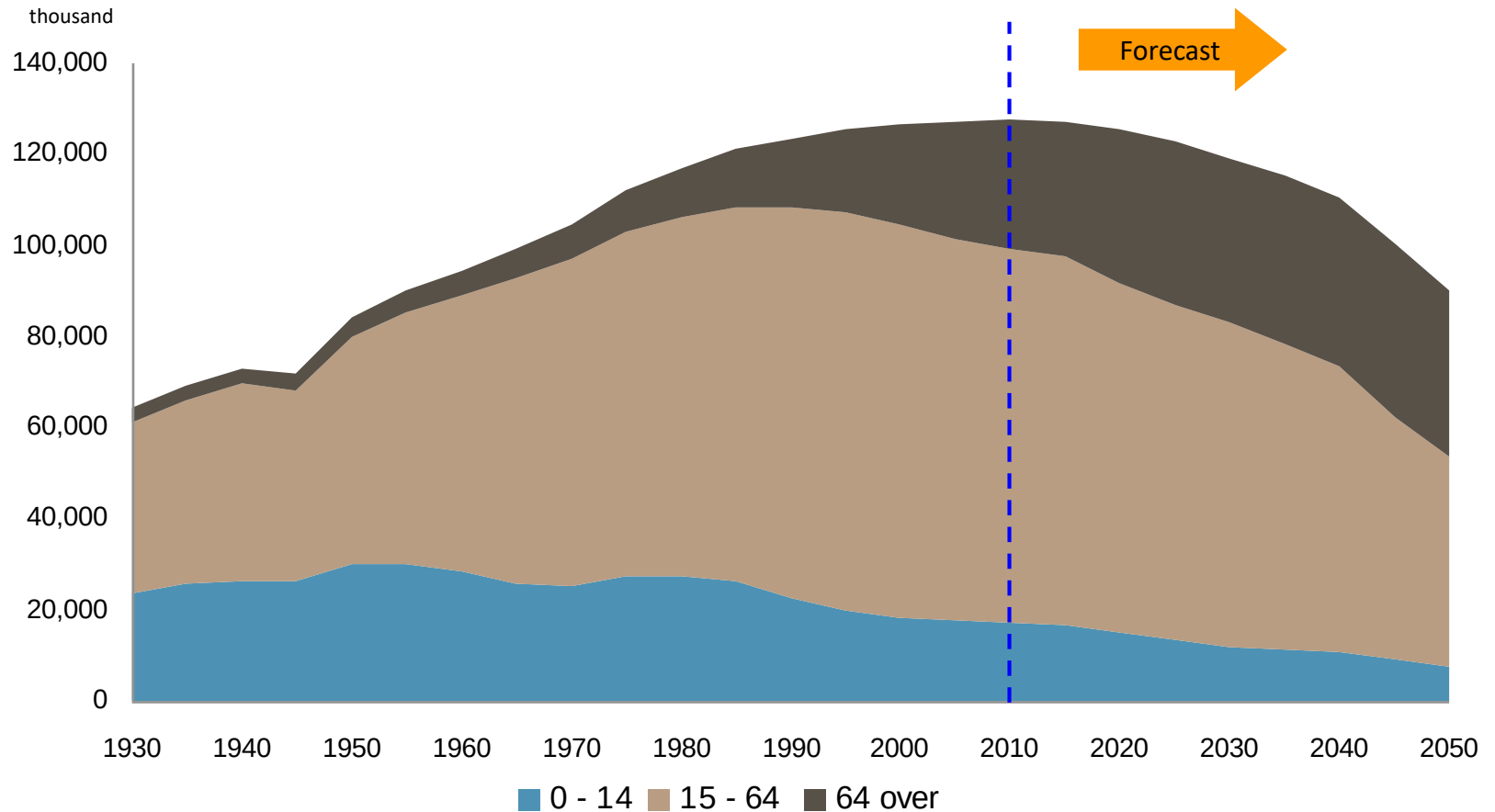
Source : Research Institute for Policies on Pension & Aging

Decline of listed equity markets have made PE investments difficult due to shortage of attractive EXIT.

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Phase 3) Aging Japan

<L6 Structure> Structural issues have dampened the attractiveness of Japan market by foreign investors



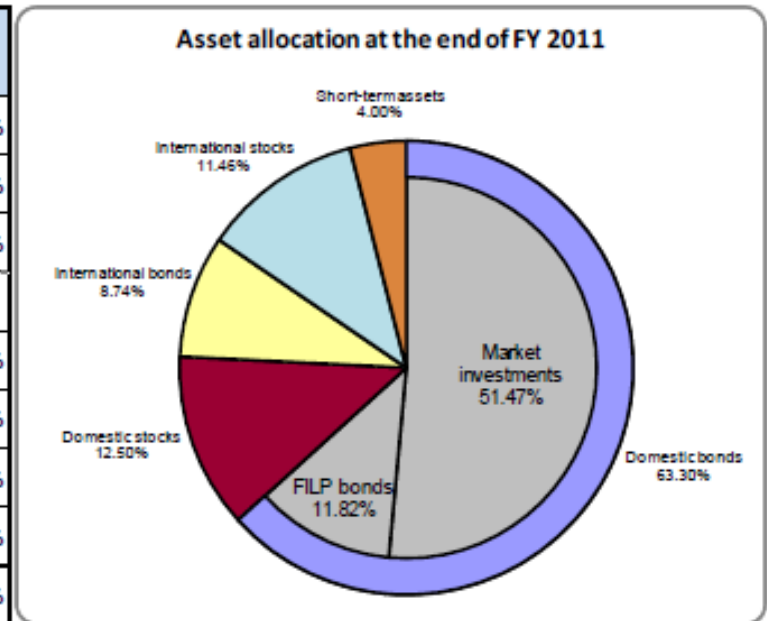
Source : Ministry of Internal Affairs and Communications

Phase 3) Asset allocation of a big pension fund

<L6 Structure> Breakdown of the portfolio by asset class shows focus on non-equity assets...

End of FY 2011

		Market value (¥ billion)	Allocation	(Reference) Allocation of Reserve Funds
Domestic bonds		71,912.7	63.30%	62.64%
Market investments		58,478.5	51.47%	50.94%
FILP bonds	Book value	13,434.2	11.82%	11.70%
	(Market value)	(13,920.8)	-	-
Domestic stocks		14,199.2	12.50%	12.37%
International bonds		9,930.1	8.74%	8.65%
International stocks		13,020.5	11.46%	11.34%
Short-term assets		4,548.6	4.00%	5.00%
Total		113,611.2	100.00%	100.00%



Note 1: The figures above are rounded, so the sums do not necessarily match with the total number.

Note 2: The amounts in the Market value column take account of accrued income and unpaid expenses.

Note 3: FILP bonds are the government bonds issued to finance Fiscal Investment and Loan Program (FILP). The GPIF's portfolio consists of market investments, which are marked to market, and FILP bonds, which are held to maturity and valued at amortized costs.

Note 4: The allocation figures in the reference column are derived by fixing the allocation for short term assets at 5% as in the policy asset mix (See page 25) for the convenience of comparison.

Source : GPIF

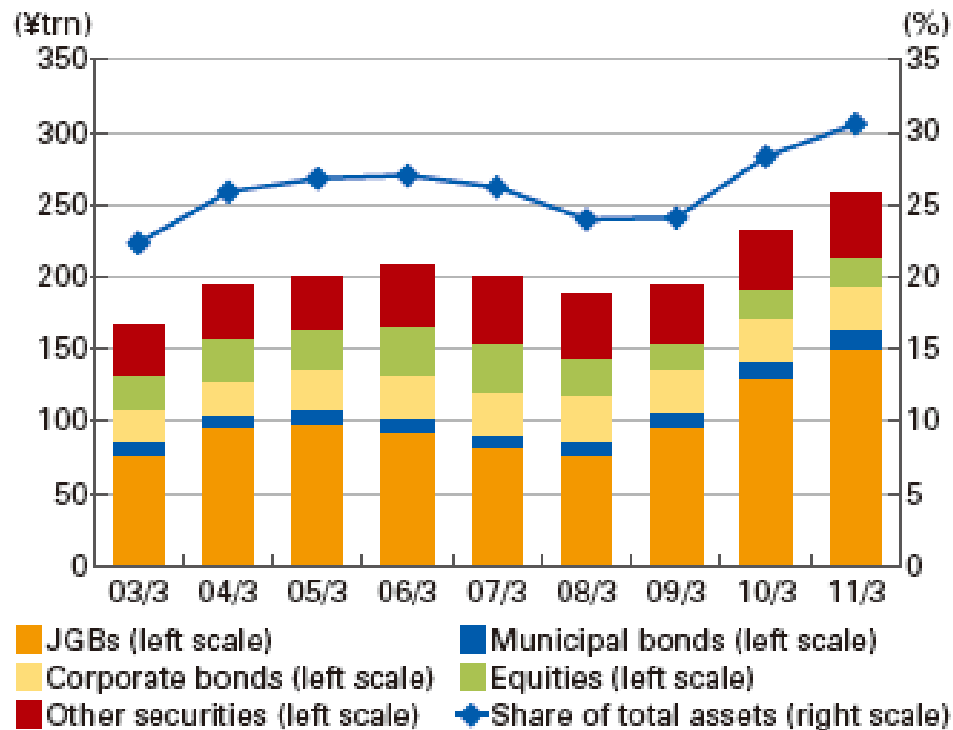
Was the recent drastic allocation shift from bond to equity done at the right timing from market perspective?

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Phase 3) Dramatic increase in JGB investments by banks

<L2 Regulations> JGB makes up more than half of Japanese banks' investment securities holdings at JPY 250 trn

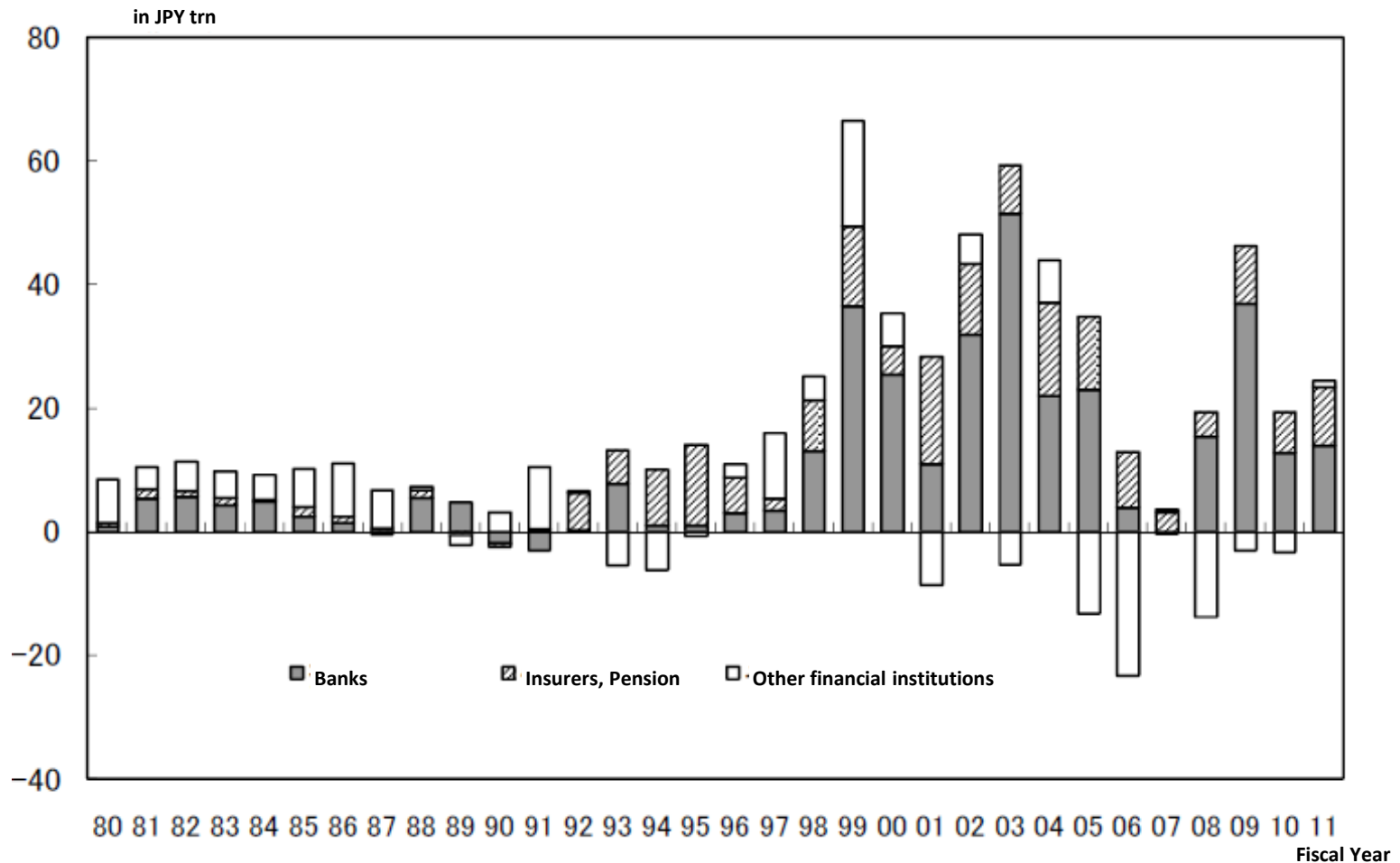
Exhibit 16. Japanese banks' investment securities holdings



Source: NRI, based on Japanese Bankers Association's *Financial Statements of All Banks*

Phase3) Continuous investments into JGB by financial institutions

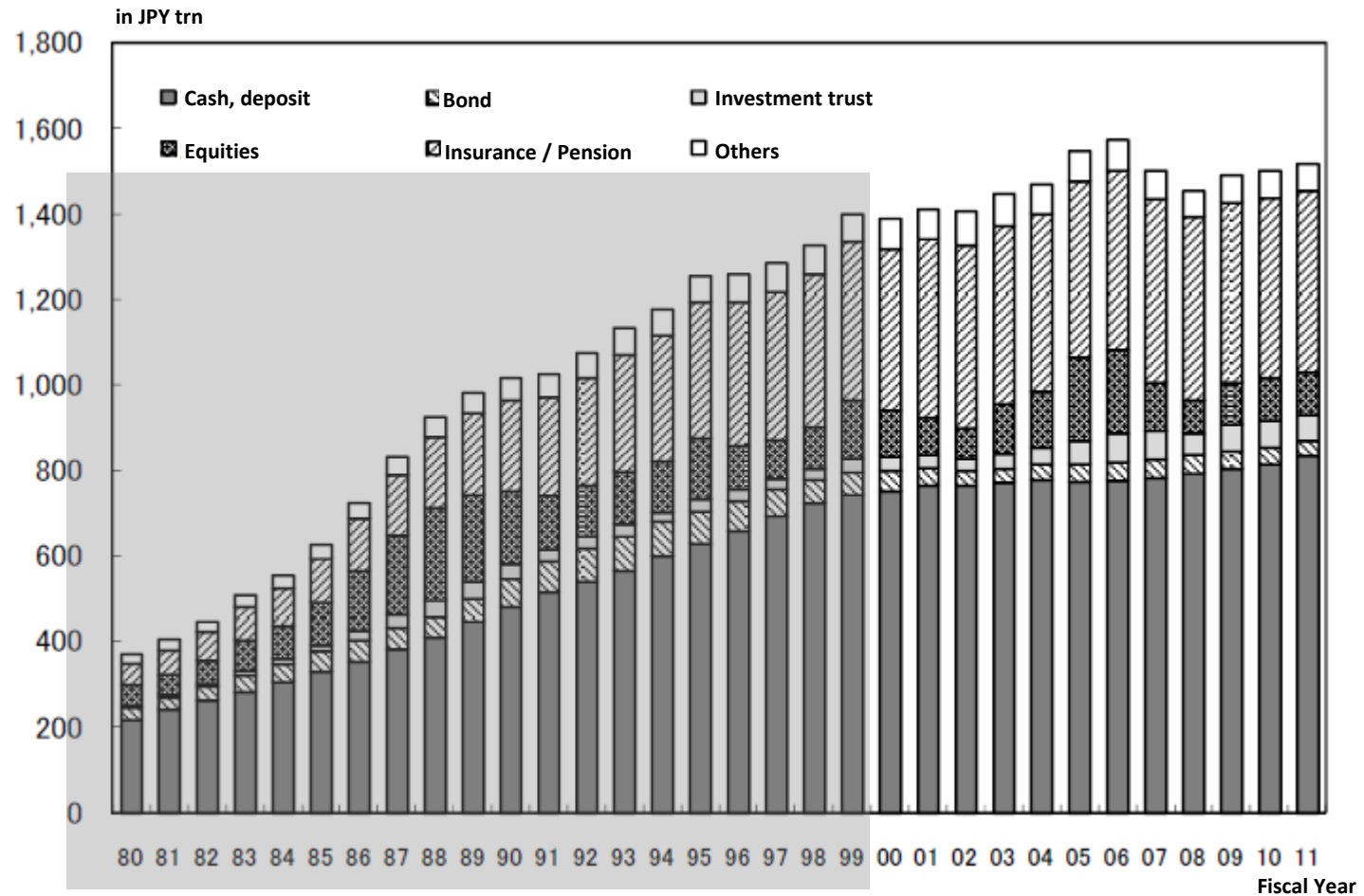
Yearly money flow to/from JGB by holder



Source : Bank of Japan

Phase 3) Price decline of equity holdings by retail investors

Increasing investments into deposit and life insurance



Source : Bank of Japan

Why has Japan's slow growth continued so long? - 1

Sudden change in Policy

- Sudden shock by tightening lending volume related to real estate killed investment mind immediately and froze any further move (harmony or dis-harmony between BOJ vs MOF)

Delay in recognizing the reality

- Most of investors and lenders made delay in reducing exposure to equity etc. due to expectation for natural recovery of market and depreciating non-performing assets.
- Most were not fully aware of expected-deflation pressure brought by emerging countries.

Structural/ Technical issues

- Structural problems of having too much equity and R/E held down recovery.
- Technical issues like transaction-based R/E evaluation had accelerated the price of land in unreasonable manner.
- The practice of recourse loan by banks for home equity delayed the depreciation of non-performing assets both lenders and borrowers.

Why has Japan's slow growth continued so long? - 2

Less effects from huge fiscal spending

- Fiscal spending was used for old traditional public works which turned out to be in-effective rather than investments into new technology/ new business.

Incompleteness of Markets

- Missing parts of markets like PE and High Yield Bond disturbed risk money from taking appropriate risks for new business growth.
- Continuous low interest rate with sluggish equity performance has reduced investment opportunities for investors.

Shortage of leadership

- Concerns over future of Japan under political uncertainty and its pension system under aging population are discouraging each individual to make consumption.

3 Phases of Japan Markets

Review of Japan markets by each phase as follows,

Phase 1) 1980 -1989

Phase 2) 1990 - 1999

Phase 3) 2000 – 2012

=====

Abenomics) 2013-

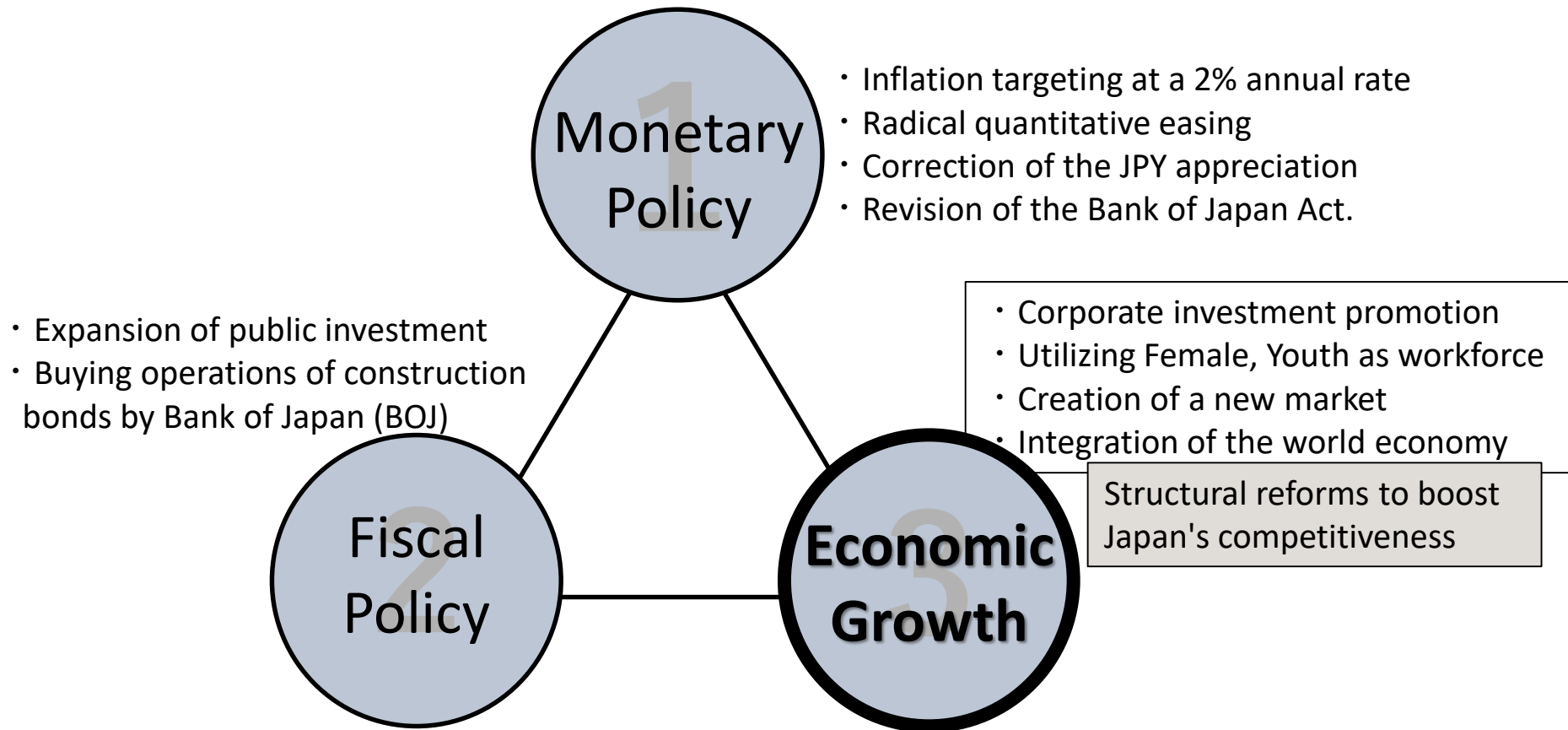
More consistent and comprehensive efforts ever for structural changes under Abenomics with 3 arrows (pillows) approach

<L2 Regulations/ L6 Structure>

Most importantly Abenomics have committed to force private sector to change like give-up of vested rights etc, so that government efforts will lead to real structural economy recovery.

Abenomics) “Three Arrows (Three Pillars)”

Lack of demand and deflation , which is said to be the ‘lost 20 years’, created the economic downturn.

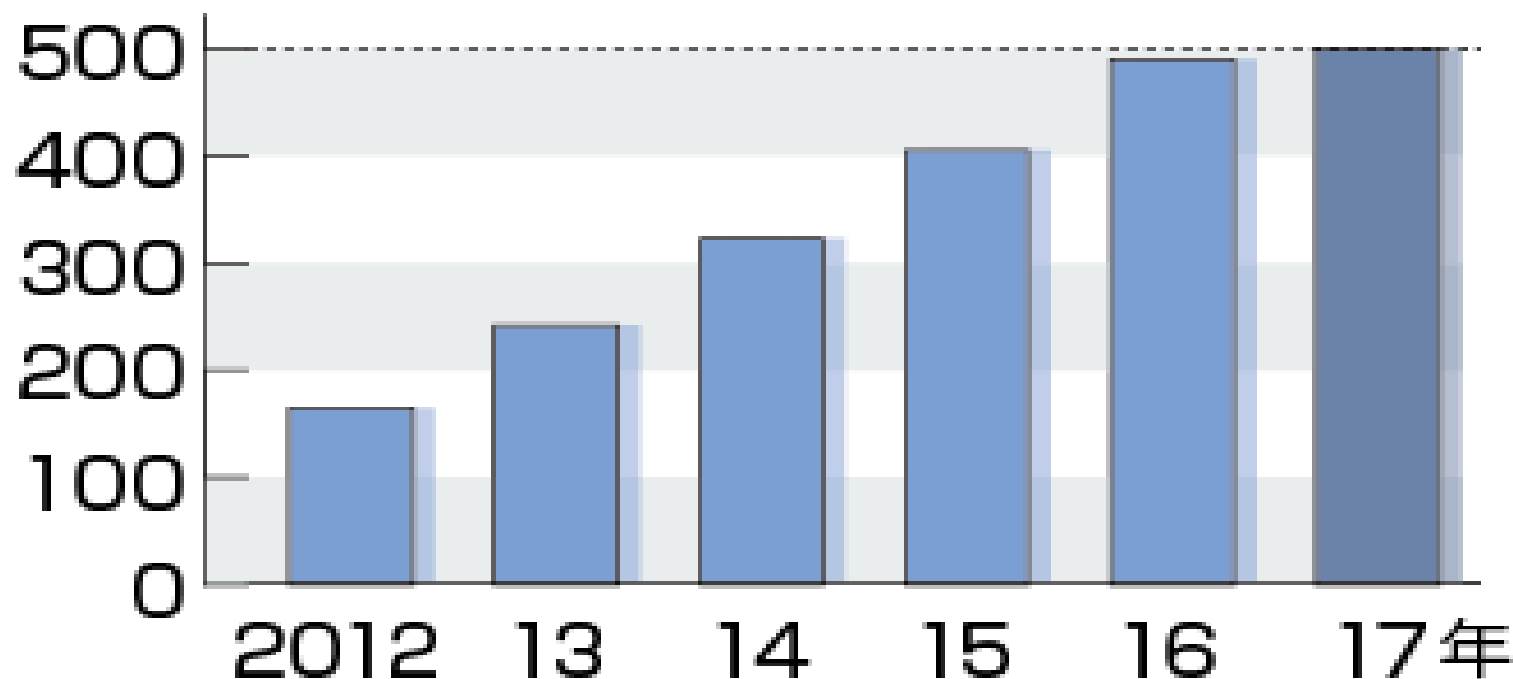


Abenomics) Increasing JGB holdings by Bank of Japan

Dramatically increasing JGB investments by BOJ while private sectors are reducing the position

**JGB holding risk is being sifted from private to government
which means.....???**

(in JPY trn)



Drastic allocation change of GPIF from bond to equity, domestic to global

As from 2015/4-

Summary (2)

【Adoption of New Policy Asset Mix】

(Old)

	Domestic bonds	Domestic stocks	International bonds	International stocks	Short-term assets
Target allocation	60%	12%	11%	12%	5%
Permissible range of deviation	±8%	±6%	±5%	±5%	—



(New)

	Domestic bonds	Domestic stocks	International bonds	International stocks
Target allocation	35%	25%	15%	25%
Permissible range of deviation	±10%	±9%	±4%	±8%

(Note 1) Alternative investment will be made within maximum 5% of total portfolio, in accordance with development of dedicated team. Infrastructure, private equities, real estates or other assets determined upon deliberation at the Investment Advisory Committee, are classified as domestic bonds, domestic stocks, international bonds or international stocks, depending on their risk and return profiles.

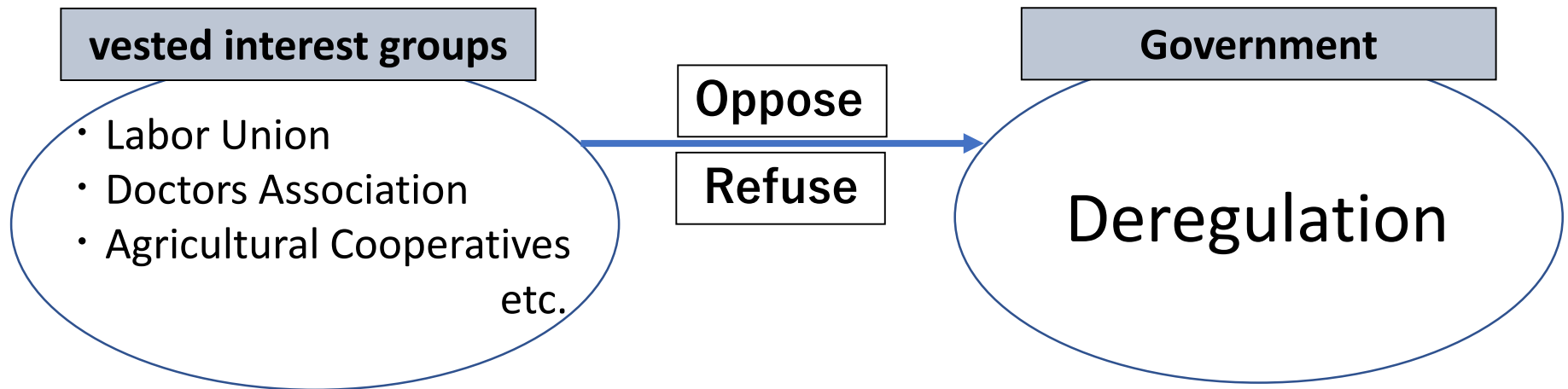
(Note 2) GPIF adopts tactical asset allocation within permissible ranges of deviation for each asset class, and this allocation is solely based upon thorough analysis on economic and market environment, and prudent judgment.

Abenomics) 3rd Arrow : Structural reforms to boost Japan's competitiveness

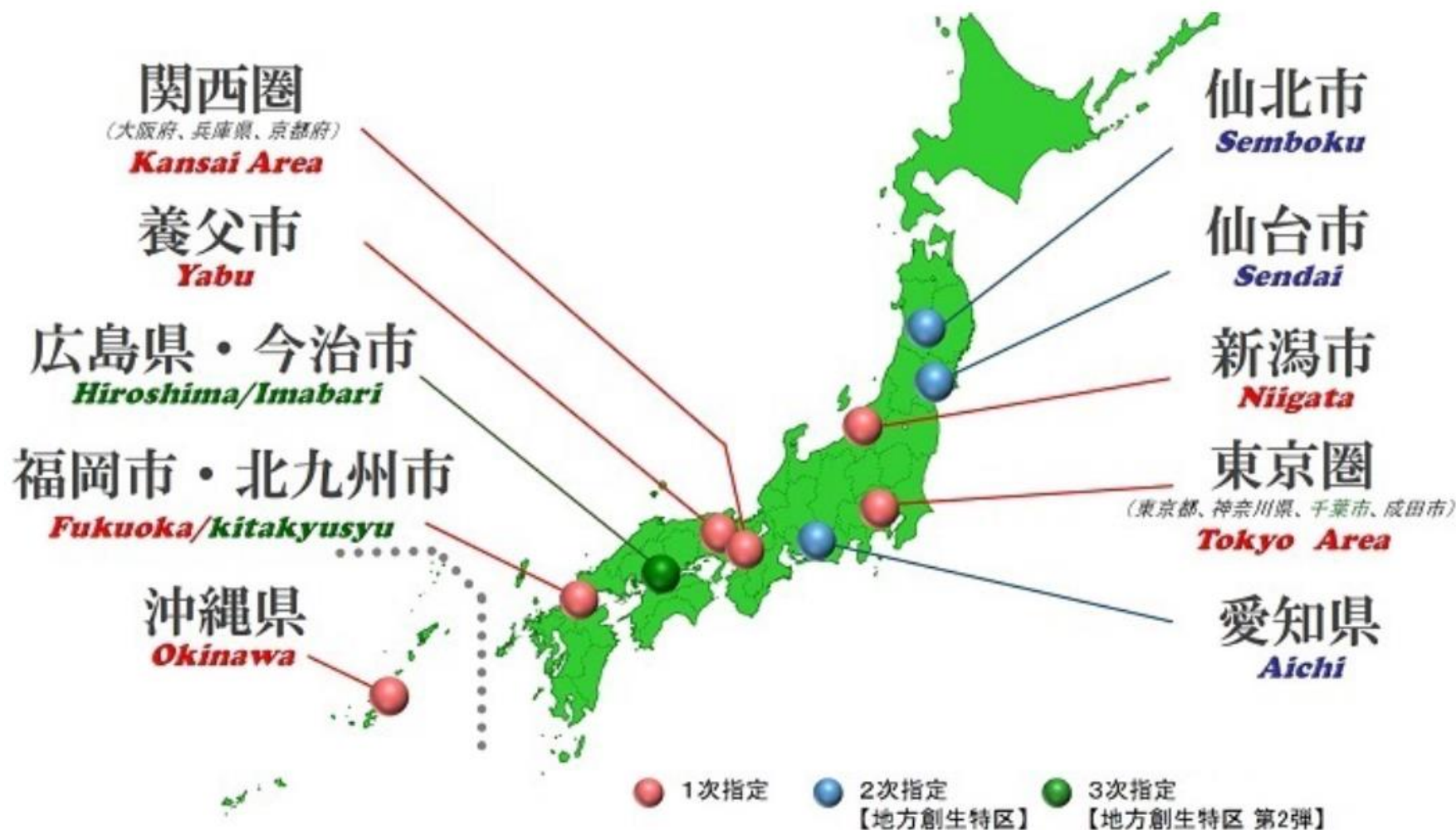
Purpose : kick-out vested rights

Measures : Regulatory and institutional reforms on a region-wide basis
through the creation of National Strategic Special Zones

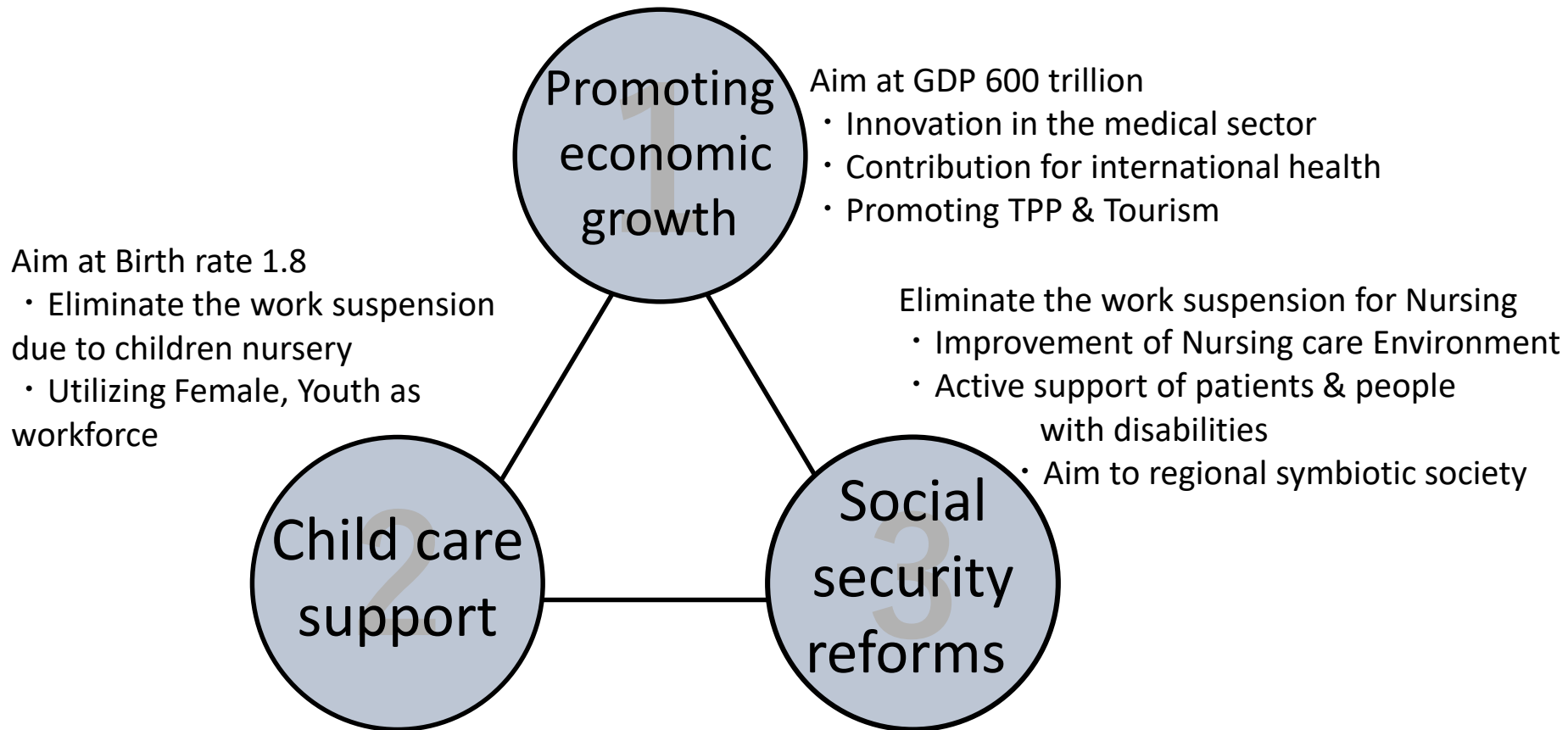
Up to Now...



Abenomics) National Strategic Special Zones



Abenomics) “New Three Arrows (Three Pillars)”



Abenomics) From perspective of financial industry

To make money flow more effective & efficient for economic growth

Enhancement of efficiency at each invested companies

- Governance to enhance equity dividends to investors
- Deprivation of vested rights from historically protected groups

Regulations to encourage financials for better management

- Stewardship Code +Fiduciary Duty
- Change of FSA stance from Rule-base to Principal-base

Direct change of money flow

- Warning to banks for reduction of JGB investments
- Promotion for individuals to take risks like NISA etc.
- GPIF Reform Allocation shift from bond to equities, alternatives

Abenomics)

Which comes faster....

Solution of structural problems for turn-around

or

Mis-trust to Japanese comprehensive policy

Section 2 Lessons from world crises case

Continuous crises in various forms
- changing characteristics of crises

Crises have been occurring in many different forms ...

While history does not repeat itself, it rhymes. So there are meta-learnings from the past crises.

What kind of crises do you clearly remember ?

Today's perspective to look back at history

Were (Japanese) companies / asset managers / insurance companies prepared for any of the bubbles in the last 30 years?

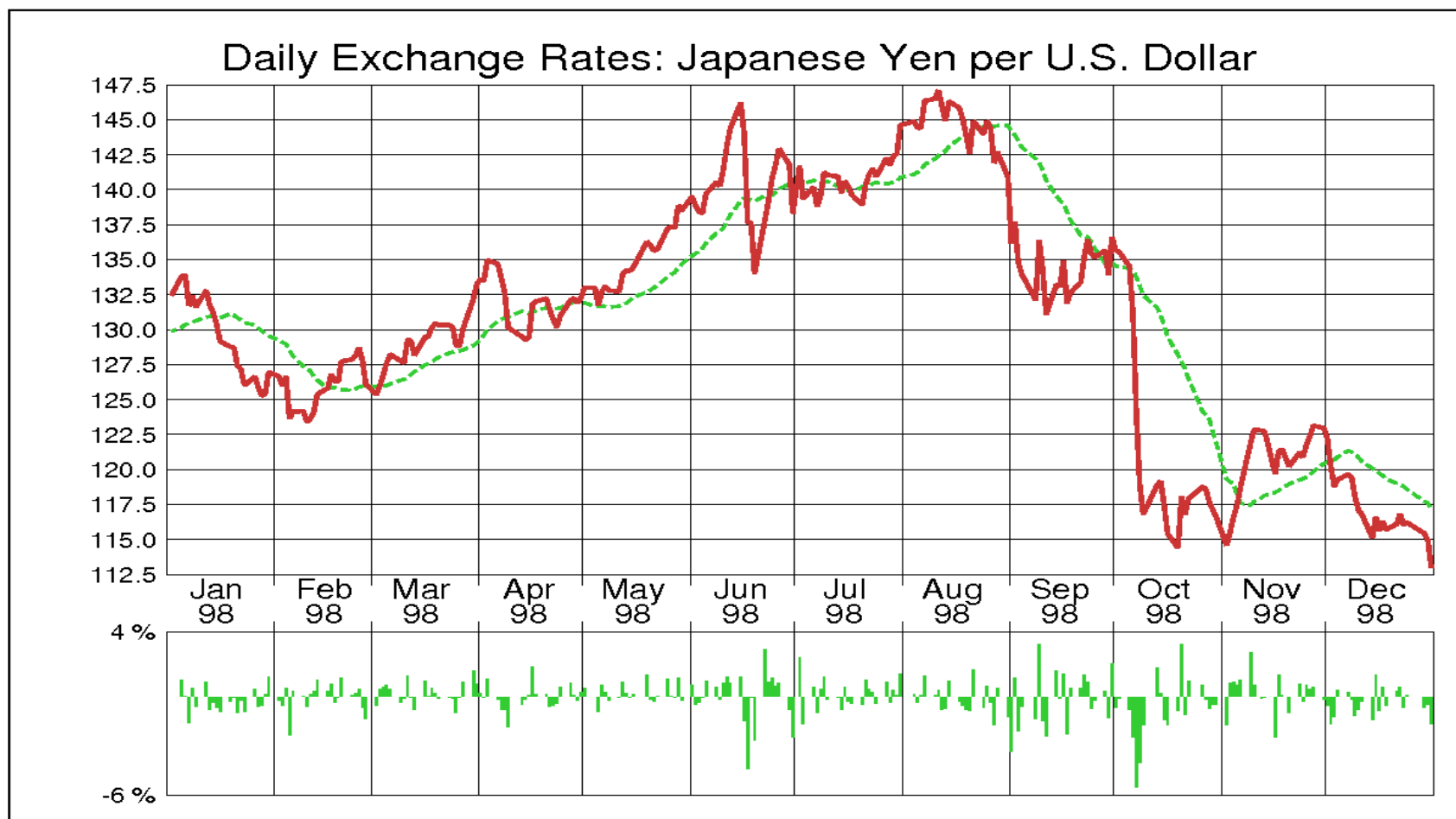
What were their reactions to the crisis? Was there a plan?

Today's perspective to look back at history

Typical reaction after crisis

1. I do not believe the crisis is so bad, so do not do too much.
 2. Surprise, surprise, the crisis is deeper than we thought, we need to react more aggressively
 3. Surprise, the crisis is really bad, we need to make fundamental changes
 4. It is even worse than previously predicted, Let's stop certain businesses now, whatever the cost is
 5. Surprise, there is a recovery after the crisis. But we do not believe it is sustainable. So let's continue with the crisis fighting.
 6. Surprise again, the recovery appears to be more sustainable than we thought, let's relax in our reactions.
 7. Economy is recovering, let's wait and see
 8. Economy is booming again. Let's invest into pre-crisis ideas again.
-repeat from above 1 again

1998 LTCM Shock USD/JPY Chart

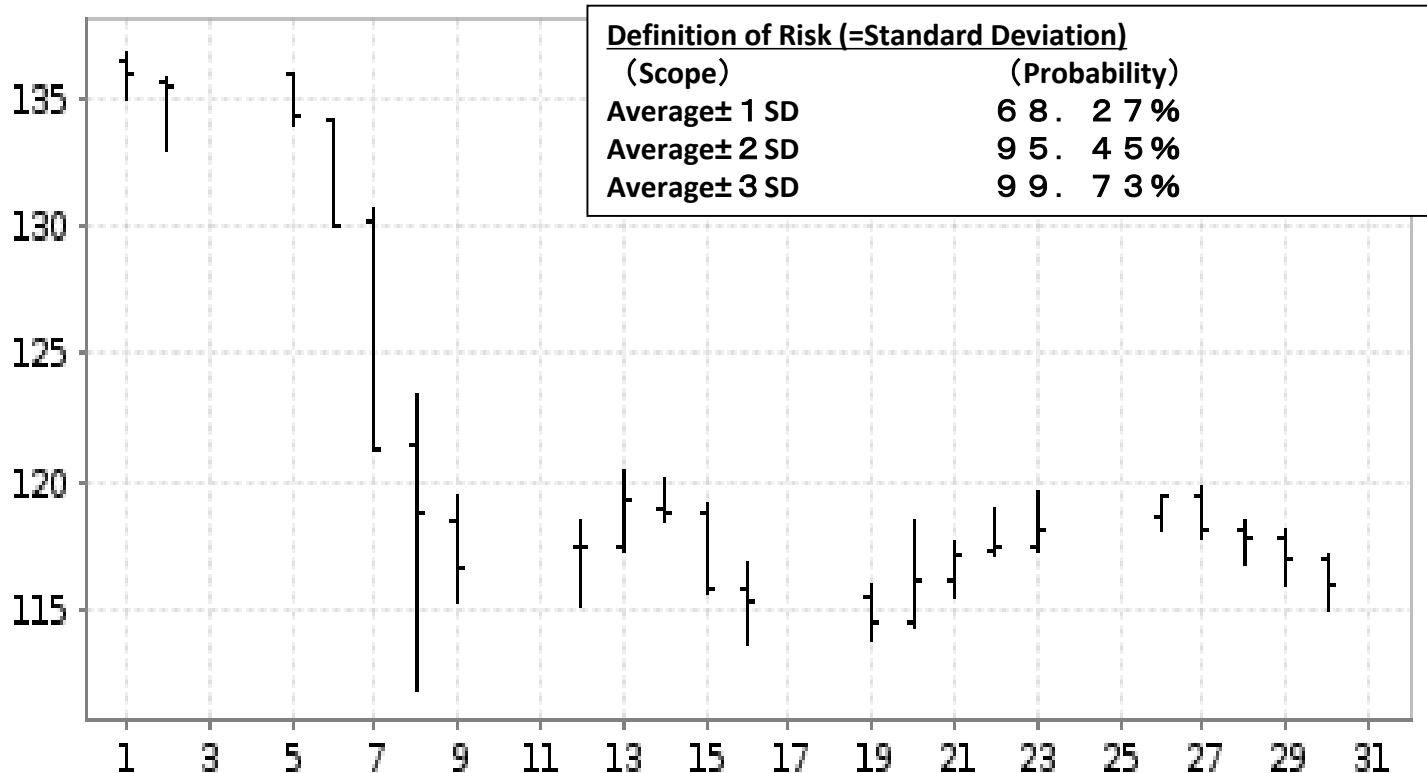


Immediate financial impacts on LICs may have been larger than Lehman Shock due to huge foreign bond position

Perspective to learn from crises/ Feel Risk...imagine mind-set of related people

What happened to the world in 1998

1998/10 USD/JPY FX Chart (Daily)



What is Risk ? Do not just read statistics textbook, but study past events closely though people who experienced !

Burst of IT Bubble in USA NASDAQ Index plunged



<L1 Philosophy> Only a few investors and/or asset managers with an established philosophy could go without being involved in IT Bubble

No copy, No forward
©EAT & Susumu Okamura

2001.9.11 September11 US Dow Jones Index



<L4 Predictability> Nobody could predict this crisis and following negative impacts on market

2008 Lehman Shock US Dow Jones Index Plunged



People tend to make similar mistakes....because they forget the past lessons

No copy, No forward
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2011.3.11 Earthquake in Japan - USD/JPY Chart

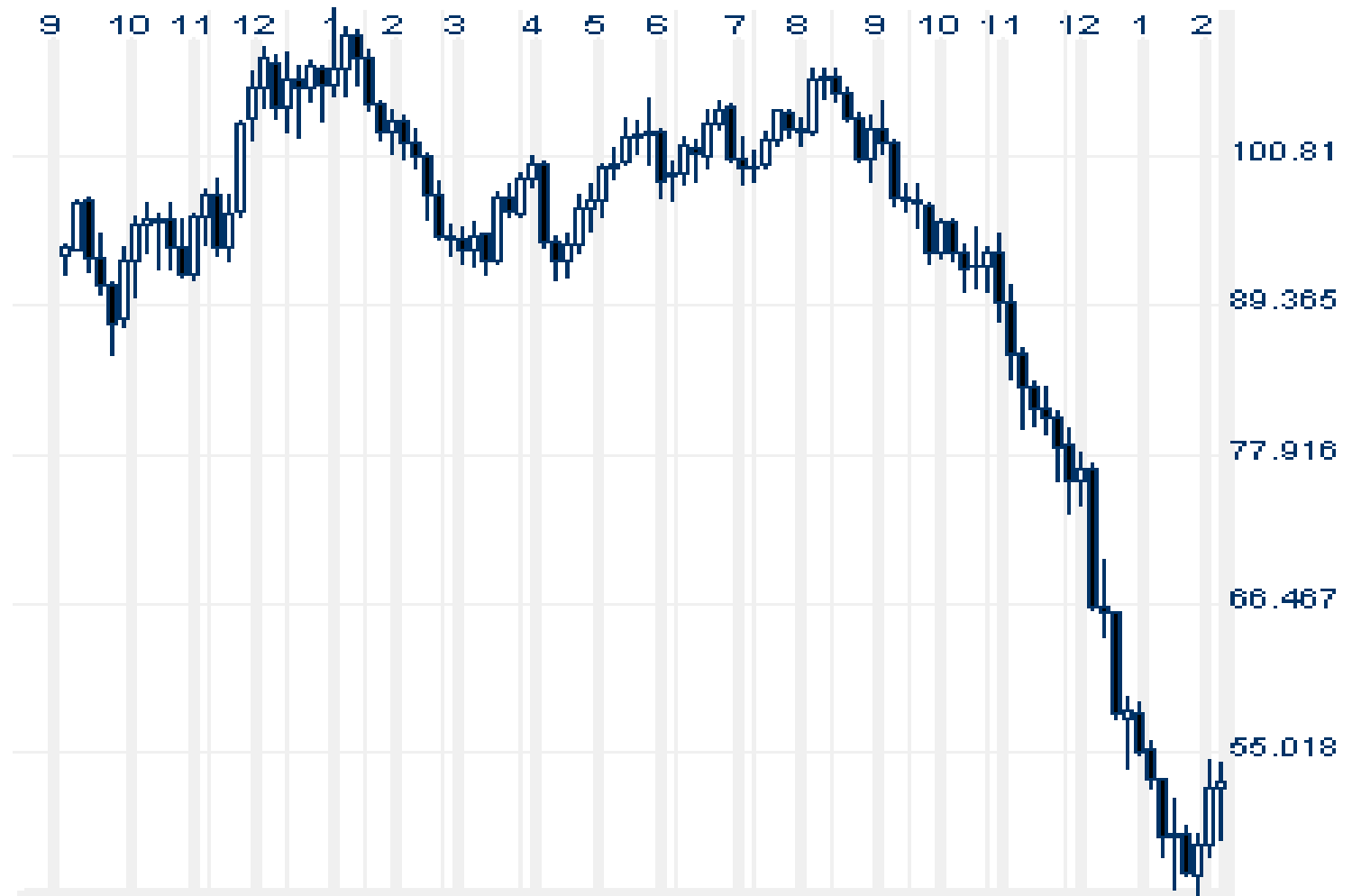


<L4 Predictability> USD/JPY FX Market responded to this crisis in an unexpected way.

2014/8 – WTI Oil price declined sharply

WTI - Weekly Chart

ProSticks



2015/1 Give-up announcement of CB intervention Euro/SwissFR



History does not repeats itself....but similar things with “the risk of high leverage transactions” often happened...

2015/1 Give-up announcement of CB intervention SwissFR/JPY



Paradigm Shift changing characteristics of crises

Change of crises

- Local crisis easily and immediately spreading to global market
- Diversified appearances and increased frequencies of crises
- Unexpected response of market players to each crisis

Nobody knows what would happen next at which timing

War-time situation is now part of everyday life in recent financial world,
where each local area is more closely connected through SNS

Section 3 Lessons from Sub-prime Shock case

Sub-prime Shock

– “Establish your own philosophy”

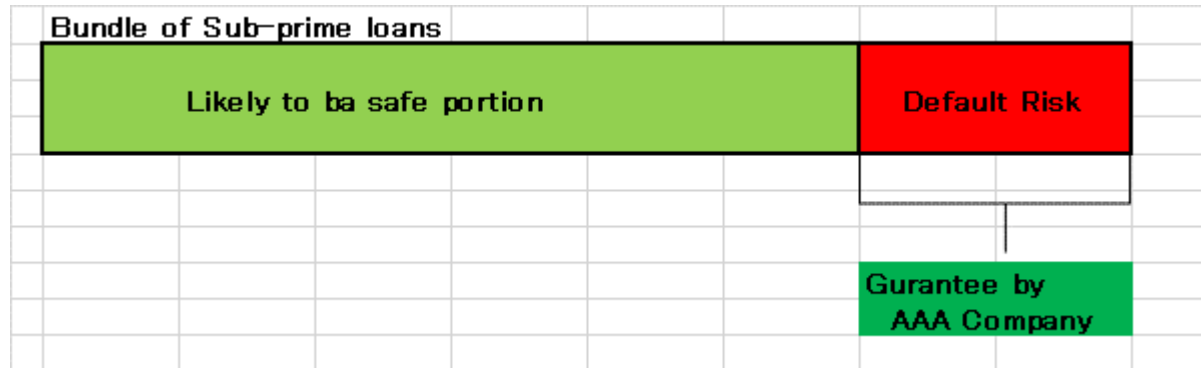
Trend of Total Assets Size at one European bank

What do you feel, looking at below number ?

Trend of Total Assets									
							(Billion USD)		
Year	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Assets	616	674	756	855	1,118	1,520	1,568	1,966	2,005
Year	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total Assets	1,879	1,297	1,413	1,518	1,379	1,159	1,103	1,009	968
March 2008/ 2,238				Data/December-end till 2012, September-end on&after 2013					

Magic to change sub-prime loans into AAA quality assets

Bundling huge amount of sub-prime loans into one basket



AAA Company provides partial guarantee in proportion to default risk, which then change rating of “total” loan portfolio from sub-prime to AAA

This was statistically and logically certified(?) already in early 1990s (I was a management trainee there!) , then 2 decades later led to financial catastrophe called as Sub-prime shock...

“Law of Large Numbers” did NOT work , then AAA-structured Bond immediately plunged to HY grade....

What kind of lessons from Sub-prime Shock?

Philosophy

Regulations

Technology

Predictability

After – crisis action

Structure

Philosophical behaviors by one prestigious hedge fund manager

Sell everything to protect clients from any uncalculatable risks
under unexperienced uncertainties

Sell !! Structured products first



then... High Yield Bond



quickly even... Investment Grade

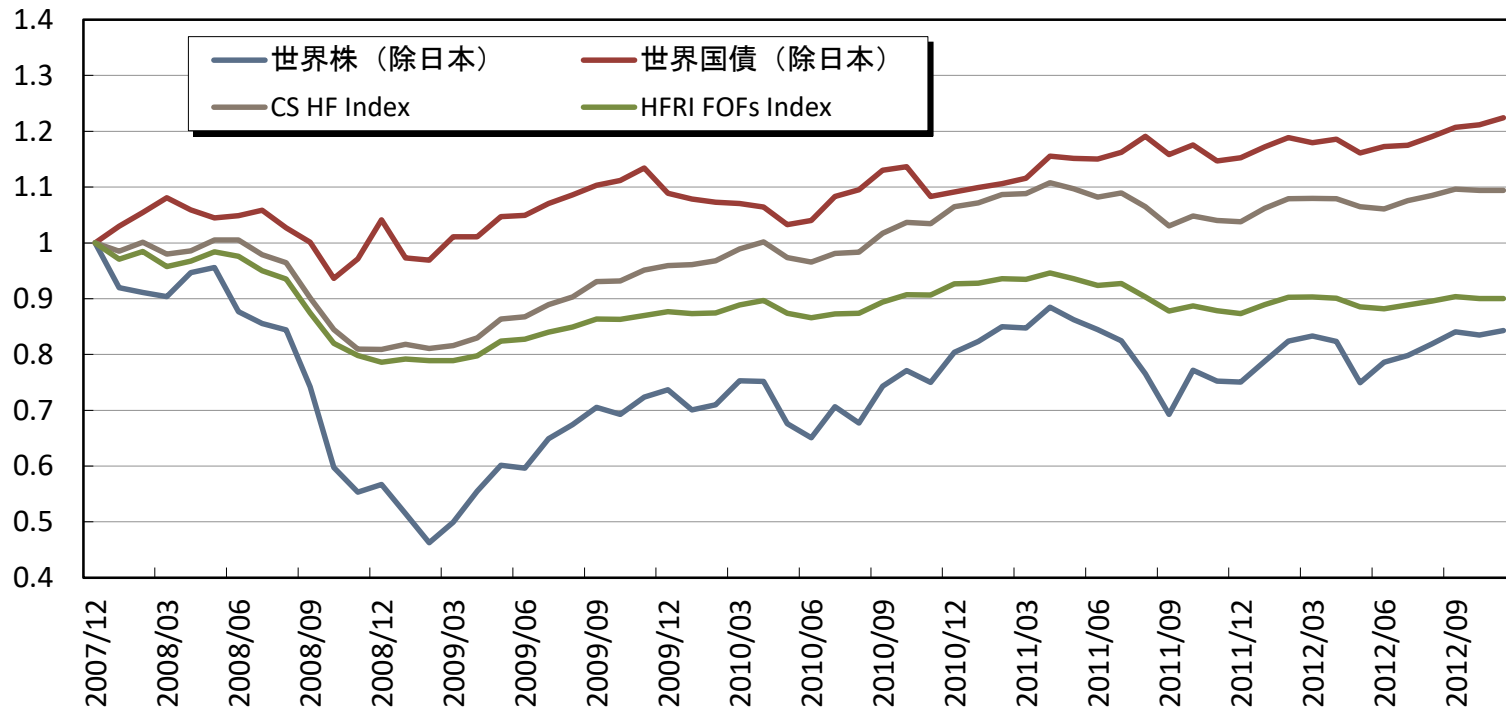
Not because of statistics, rules, regulations....but
Company Philosophy & Mission

<L5 After-crisis remedy action> Under unpredictable situation, statics does not mean anything. Quick judgment based on philosophy can make sense for effective risk management.

Challenges to traditional investment philosophy

Sophistication necessary --- Philosophy for Loss Cut

Immediate impacts by Lehman Shock and following trend (2008/9-)



出所 : Bloomberg 2007年12月～2012年11月、月次データ、いずれもドル建

世界株 (除く日本) はMSCIのKokusaiインデックス (ドル建)、世界国債 (除く日本) は、Citigroupの世界国債インデックス (ドル建)

<L5 After-crisis remedy action> Loss cut philosophy in addition to rule is critically important to keep raison de'tre of professional investment managers

Insights from US actions after Lehman Shock

Current issues in the world 2013 vs 2017

'How can the world work together to sustain world economic growth ?



US situation – Positive differences supported by its systematic approach

(Positive Differences from Japan)

- Very quick remedy action by providing ample cash
- Write off of bad loans immediately at banks
- Quick recovery from losses thanks to non-recourse loan and DCF based R/E appraisal
- Investments into new technology like Shale gas etc.
- Complete markets in terms of depth and width for risk money to take risks
- Increasing population

(Comprehensive approach)

- De-regulated markets (X) Incentive driven HR = Quick exit from crisis

<L6 Structure> incentive driven HR system is a critical growth engine which promote recovery process even though it may be painful.

Section4 Essence of impacts from recent regulations and accountings

Focus on some Regulatory Environment surrounding Japan

New Rules

Corporate/ Governance
Investors/ Stewardship code
Retail/ Fiduciary Duty

New Guidance by FSA

Rule-based to Principal-based

Possible impacts from Market Value Accounting

Market Value Accounting

MVA impacts/

(-) not only negative yields

(+) but also death rate profit etc.

Consideration

Likely impacts from accounting rule change are already logically taken into account for long through adoption of EV approach etc.

Some seem to be already prepared while others are not.
The differences exist due to history, product mix, duration gap etc.

Section 5

What do you think are most important things
for appropriate risk-return management ?

No return could be made
without taking risks

Many diversified risks can happen in unpredictable forms,
sometimes aggravated by delayed regulatory change

+

Game change risks, increasing under technology
development like DNA test etc.

Crises would happen
beyond companies, borders, industry.....
not only on asset side but also liability side

Think on your own,
considering each unique situation

Establish your own Mission/ Philosophy

Find solutions beyond preconceived ideas

Take comprehensive actions

Think, Think, Think

Don't depend on luck
Don't look only at peer group

Make rules and systems effective
for YOUR goal

Important factors and systems underlying proper risk management

Raison De'tre

Mission

Philosophy

Fiduciary Duty



Structure

Governance



People

HR Development & System

Extremely difficult and philosophical questions

Would you follow your peer group ?
or
Would you think about your own strategy?

Would you pray for market recovery ?
or
Would you take logical action ?

Enhance environments as you can do what you should do for clients

Grand-Parents Money Theory

If that is the money your grand-parents have saved for after-retirement life, would you handle in the same way?

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European Experience of Solvency II

Implications on investment strategies

15 September 2017



IFRS17 vs Solvency II

€25-100m

How much insurers **expect to spend**
on implementing IFRS 17

20%-250%

Expected implementation costs **relative to**
Solvency II

5

European insurers
included in 2016
field testing
of draft IFRS 17

2,520

European
companies
Participated
in **QIS5**

20
years

From beginning of insurance
contracts project to
publication of IFRS 17

31
months

From publication of IFRS 17
to date of opening balance
sheet

Solvency II: SCR Market Risk Module Summary

Spread

$$\sum_i MV_i \times \text{Duration}_i \times F^{\text{up}}$$

Duration and rating are key, and define the F^{up} factor

EU member state sovereign and exempt issuers are exempt

Favourable treatment for regulated covered bonds.

Separate stress tests for CDS and credit with tranche structure.

Rating	Duration (years)				
	Up to 5	5 to 10	10 to 15	15 to 20	Over 20
AAA	0.9%	0.5%	0.5%	0.5%	0.5%
AA	1.1%	0.6%	0.5%	0.5%	0.5%
A	1.4%	0.7%	0.5%	0.5%	0.5%
BBB	2.5%	1.5%	1.0%	1.0%	0.5%

For securitised products, the F^{up} shock depends on their Type:

Type 1: BBB or better, listed in EEA/OECD, not subordinated debt

	AAA	AA	A	BBB
Duration x ...	2.1%	4.2%	7.4%	8.5%

Type 2 : Not Type 1 securities, with duration < 1 year

AAA	AA	A	BBB	BB	B	CCC
12.5%	13.4%	16.6%	19.7%	82%	100%	100%

Equity

39% for Global Equity (EEA or OECD countries) or

49% for Other Equity (Non EEA or OECD countries, unlisted, private equity)

+ **Symmetric adjustment +7.5%**

(based on MSCI Europe Total Return Index over 3 years)

Correlation matrix between Global and Other Equity

Alternative Assets

Includes hedge funds, commodities, private and infrastructure equity:

Treated as Other Equity.

Interest Rate

Non parallel interest rate curve shifts up and down on asset and liability.

Property

25% property shock

Currency

25% currency shock where a portfolio is not fully base currency hedged

Concentration

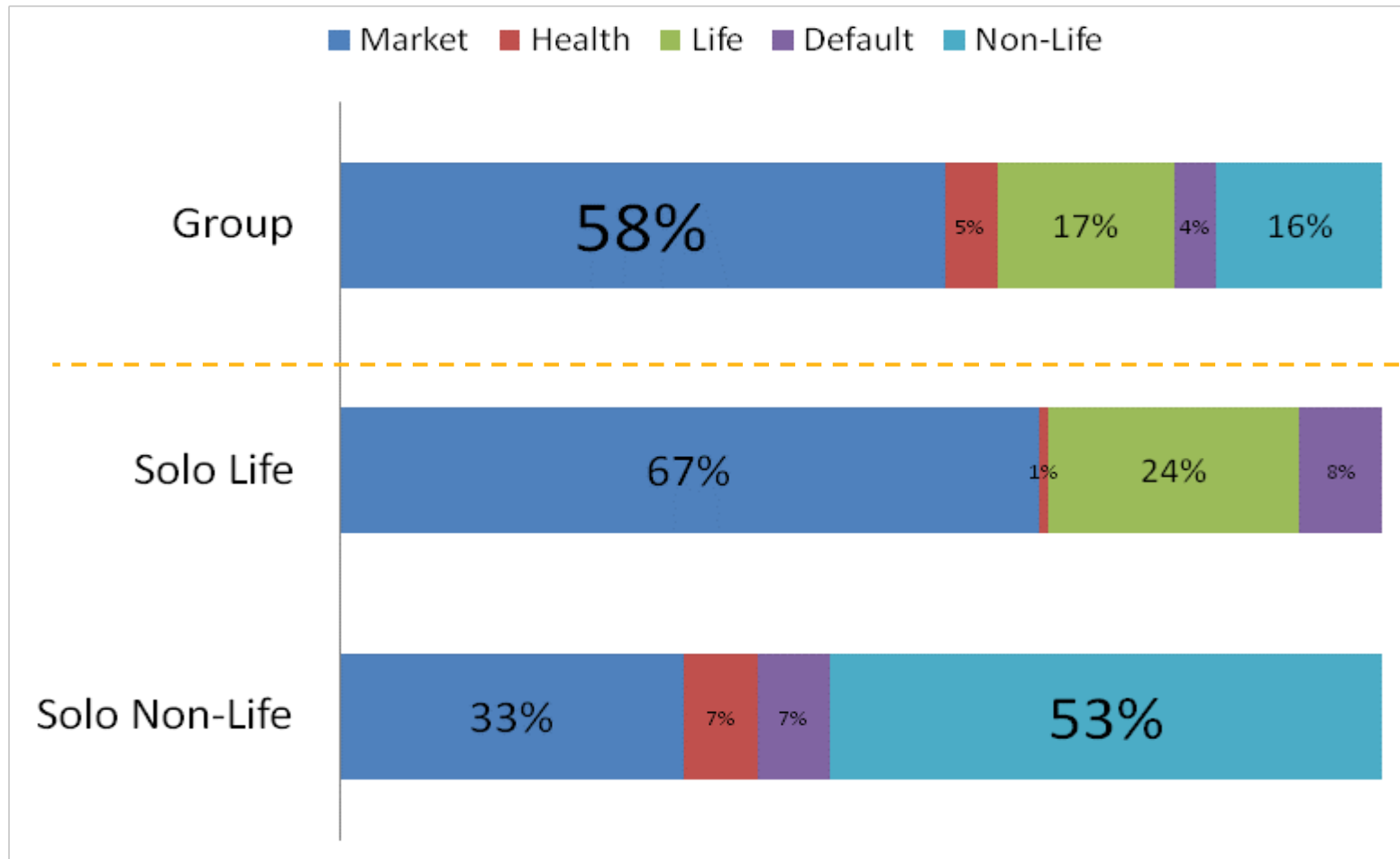
Name concentration in excess of threshold would be charged

Counterparty

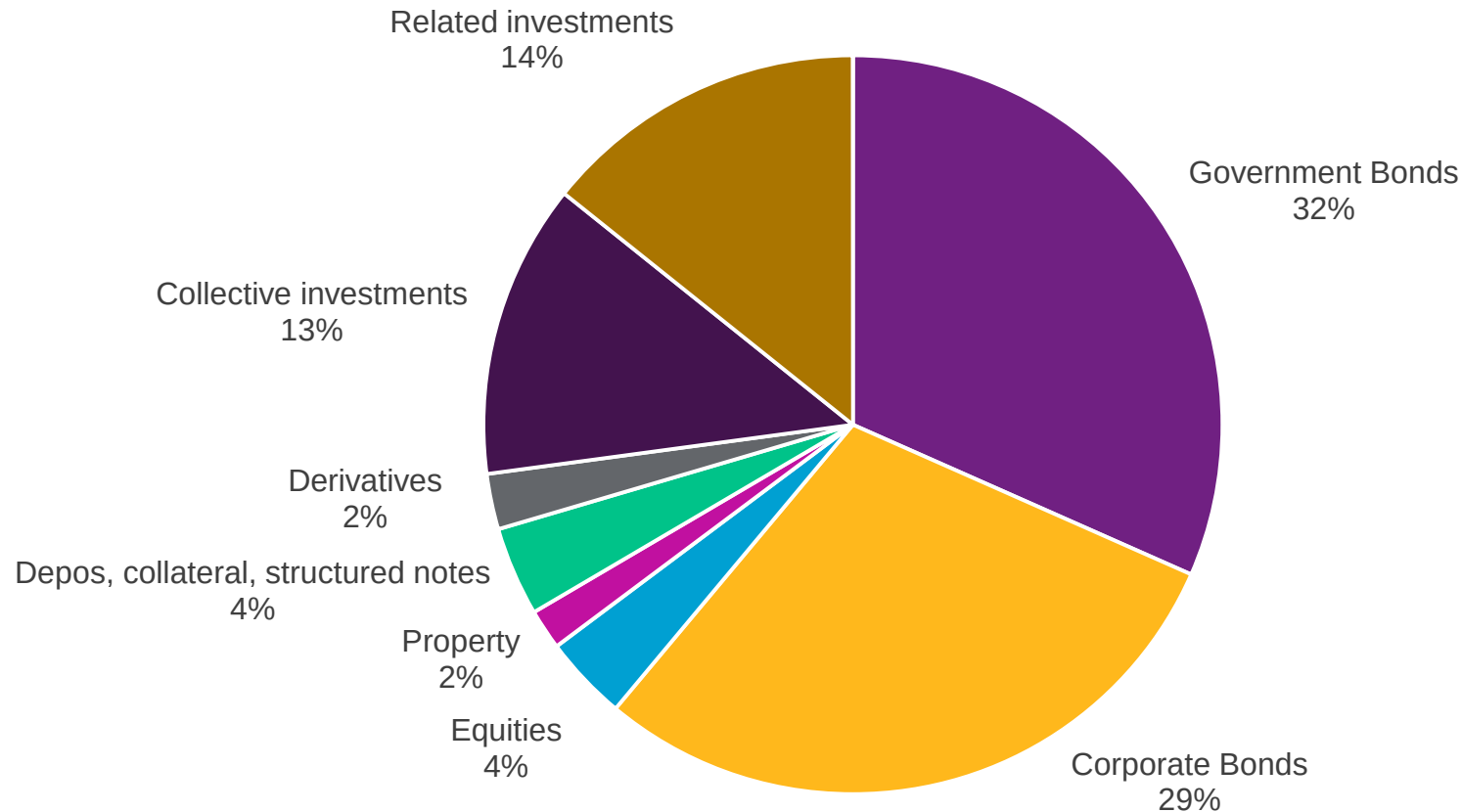
Loss given from SCR shocks on the change in mark-to-market value of derivatives and collateral.

Residential mortgage is treated as counterparty risk, not spread risk

Composition of SCR based on QIS5 results



Investment strategies: Resulting Solvency 2 Portfolios



Source: EIOPA, Q3 2016

Broad Impact on investment strategies

Optimize balance sheets with respect to regulations

- Incentivises certain actions...
- ... and disincentivises other actions

Consider the direct impact of asset mix on various outcomes, including:

- Liability measurement (market consistent basis)
- Risk-based capital requirements
- KPIs/metrics

Case Study: Problems experienced by European Insurers

Need to innovate solutions

Duration	Lack/shortage of available assets to meet requirements to match long-term liabilities Looking to alternatives e.g. infrastructure, property, overseas bonds to meet demand
Convexity	Liabilities with greater convexity than assets, will require some optionality to manage risk
Lower yields	Concern over falling yields driving today's investment actions Lower rated credit instruments looking increasingly attractive in market with restricted asset supply
Overseas Investments	Regulators increasingly requiring insurers to manage economic and political risk – modelling & quantifying Restrictions and tightening of capital controls as a constraint to investment strategy However, greater availability/supply of assets available in overseas markets, and aids diversification
Equity investments	Improved investment procedures, and an appropriate assessment of risk tolerance to these (both listed and unlisted)
Property investments	Close monitoring of investments in major projects & geographies, appropriate appreciation for liquidity risks
Liquidity	Increased collateralization in OTC markets means that use of derivatives will need to be carefully monitored for short term liquidity demands. Changes in consumer behaviours and trends may cause changes in lapse rates
Governance	Stricter regulations will increase expectations for tight investment governance and reporting framework Defining risk appetite and allocating risk budgets effectively
Sound ALM processes	Independent review of existing guidelines in place (if any) to provide advice on gaps, overlaps and efficiencies Duration gap exposures, unrewarded FX exposures, and mitigating these
Benchmarking	Benchmarking investment performance to an appropriate benchmark Measure alignment with an insurer's overall objectives (i.e. policyholder bonuses, dividends, solvency)

Regulatory Volatility

- **Improved matching of capital requirements to risk**
- **Too early to understand cost implications**
- **Ongoing and deep consultation with industry**
- **Prepare for volatility**

Increased focus on Governance

- **Clarity on investment objectives to understand assessment of investment strategies and trade off of outcomes between various bases:**
 - Economic
 - Accounting
 - Solvency
- **Improved co-ordination between various in-house functions (Investment, Actuarial and Risk)**
- **Development of standalone ALM teams within insurers**
- **Performance measurement against liability-based benchmarks**

Operational, Software and IT systems

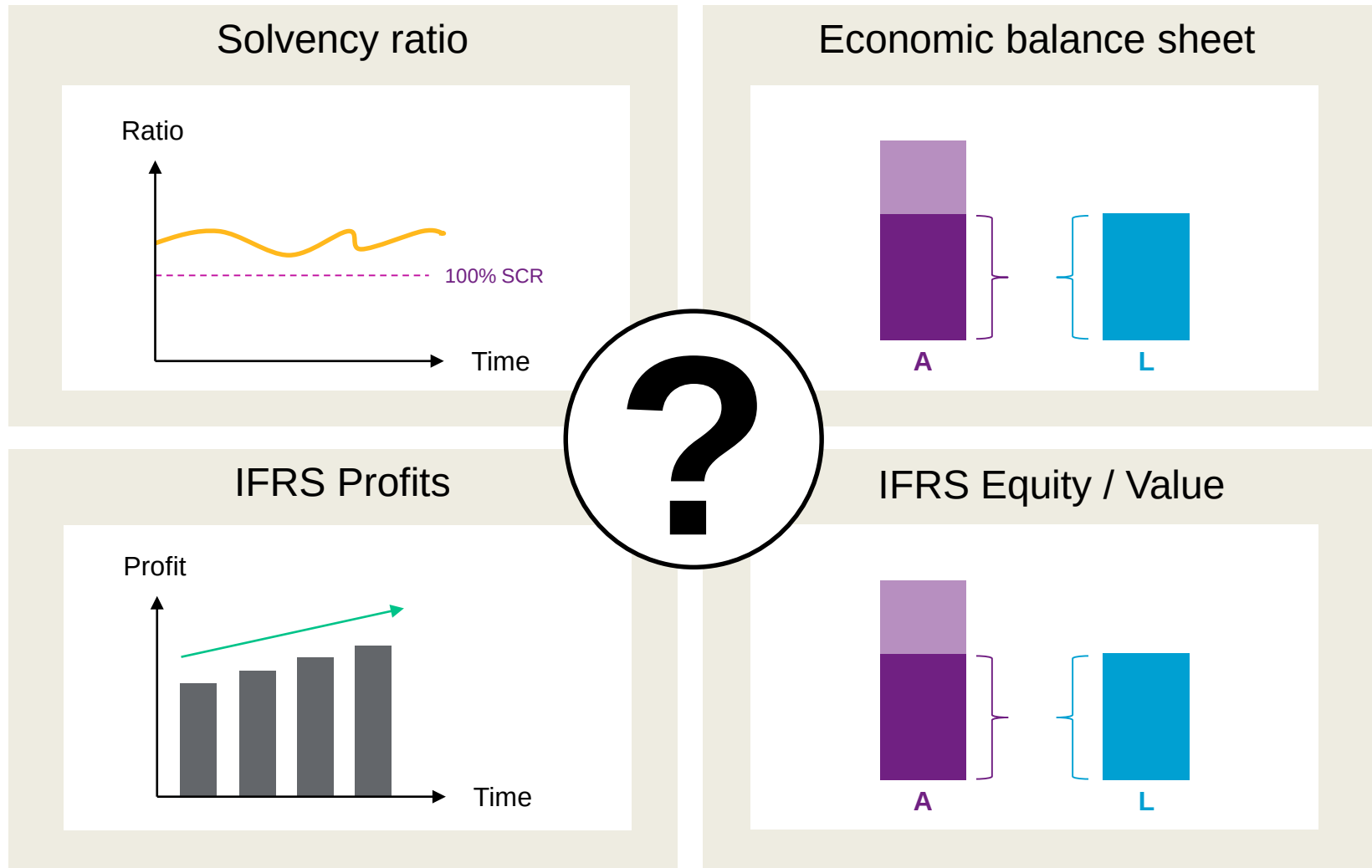
- **Software and technology will facilitate the required changes to:**
 - Systems: valuation, reserving, pricing and ALM models
 - Internal control systems
 - Reporting/monitoring holistically; including asset look-through
 - Producing new or different information

Significant commercial impacts are likely

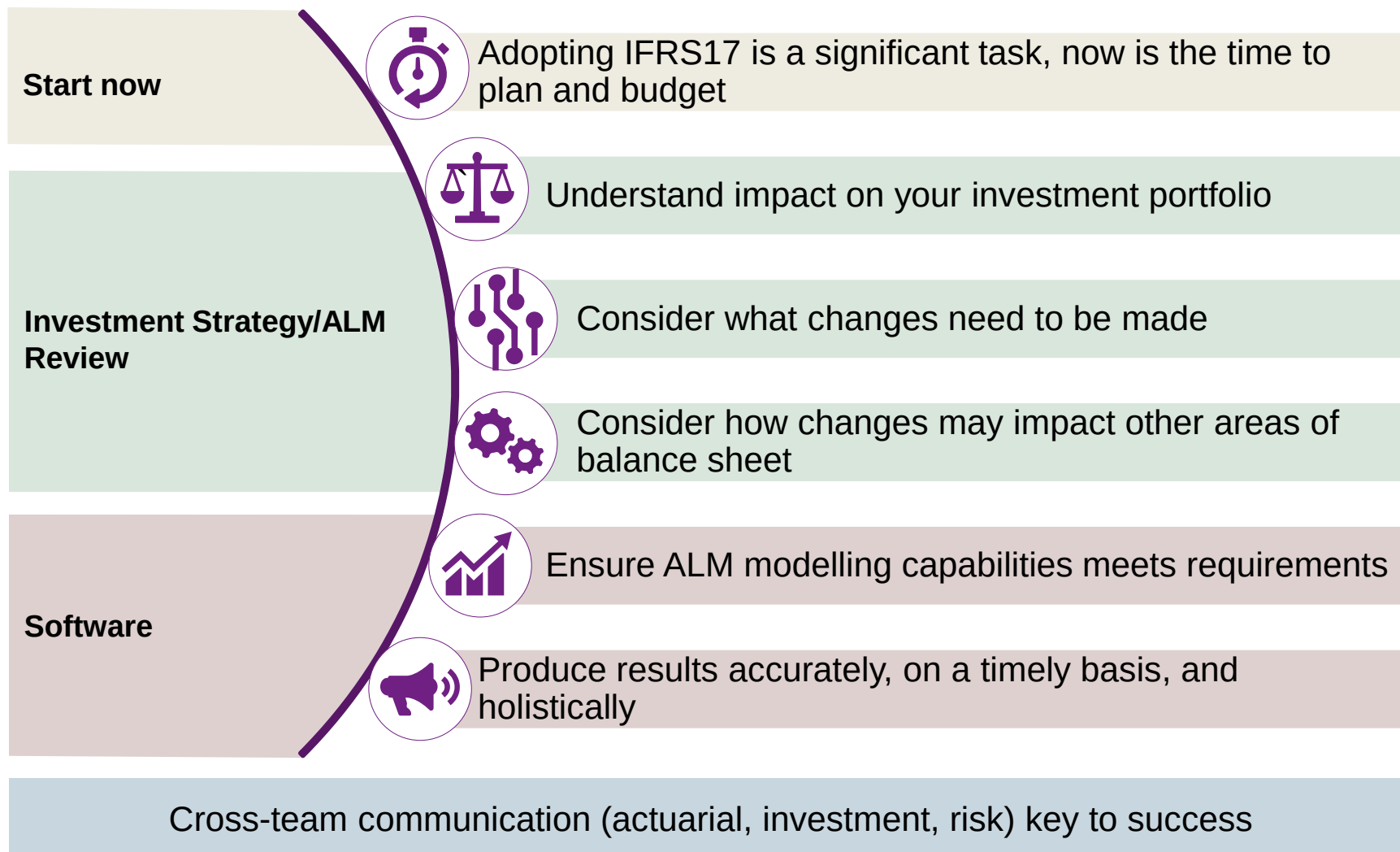
The new requirements should lead insurance companies to review or revise:

1**Key metrics used****2****Asset-liability management****3****Capital and risk management****4****Product strategy and pricing****5****Investor engagement**

ALM: which metric to manage to?



Key Takeaways: Learnings from European Solvency II



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회계제도 변화와 보험회사 ALM

목차

- I. 회계제도 변화에 의한 보험회사의 영향 점검
- II. 보험회사의 ALM

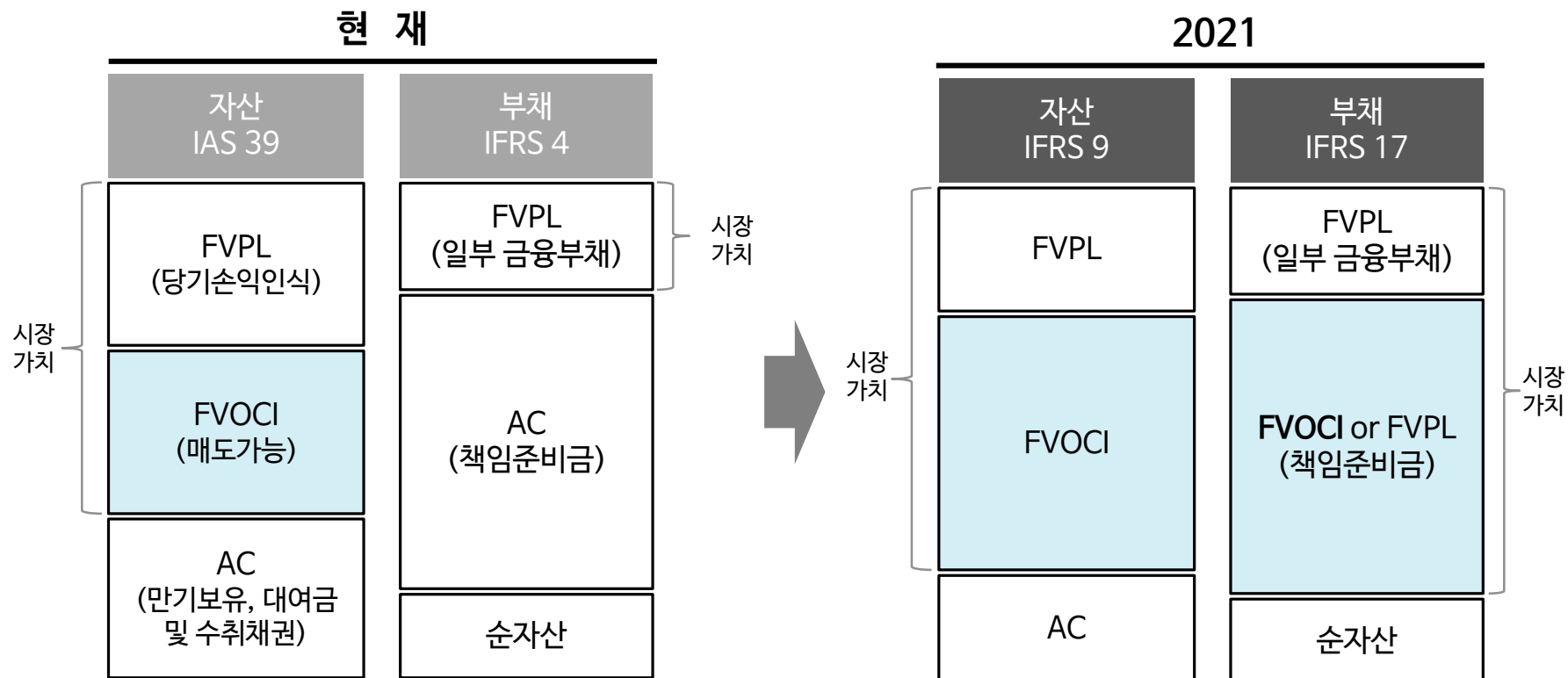
I. 회계제도 변화에 의한 보험회사 영향 점검

1. 회계제도 변화
2. 금융자산 분류 및 측정에 의한 영향
3. 손상 인식 변화에 의한 영향
4. 자산-부채 평가 기준 불일치에 의한 영향

회계제도 변화

금융자산 분류·측정 변화, 손상 인식 변화, 자산-부채 간 측정 기준 불일치 문제

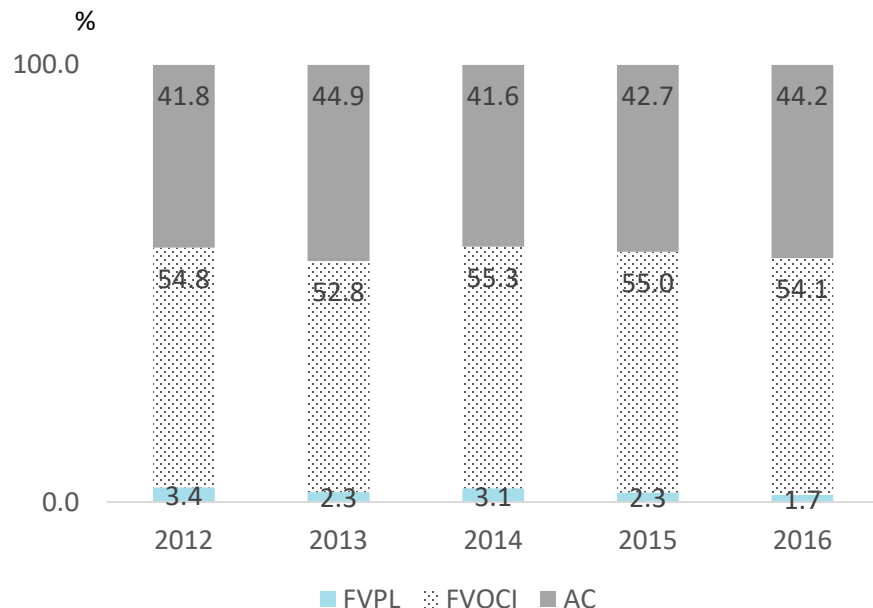
- 이 외에 위험회피회계 적용 요건 완화



금융자산 측정 비중 1: 현행

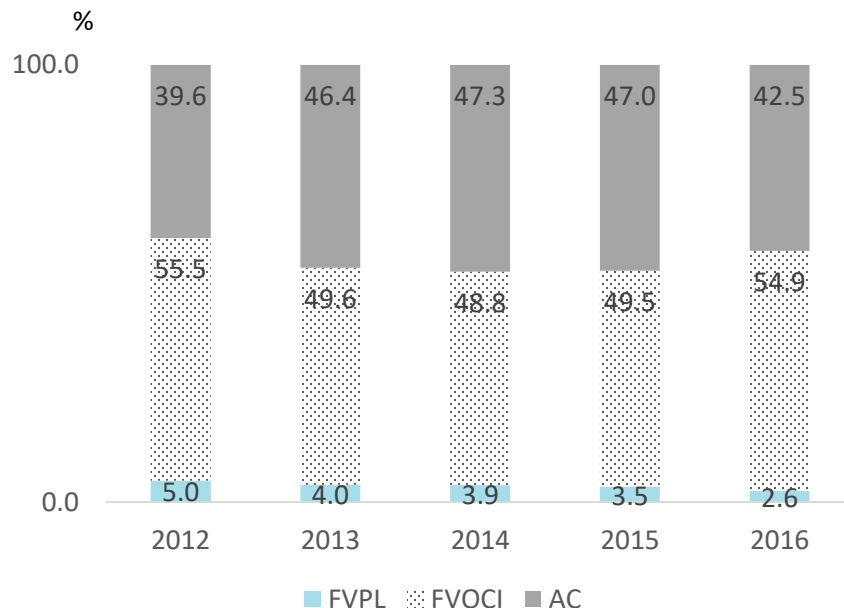
2016년도 기준 운용자산 중 당기손익인식 계정 비중은 생보 손보 각각 1.7, 2.6%로 낮음
 - 최근 일부 보험회사는 만기보유증권(AC)을 매도가능증권(FVOCI)으로 모두 전환한 회사들도 있음

생명보험회사 금융자산 측정 비중 (현행)



주 : IBK연금보험, 교보라이프플래닛은 제외
 자료 : 생명보험협회

손해보험회사 금융자산 측정 비중 (현행)



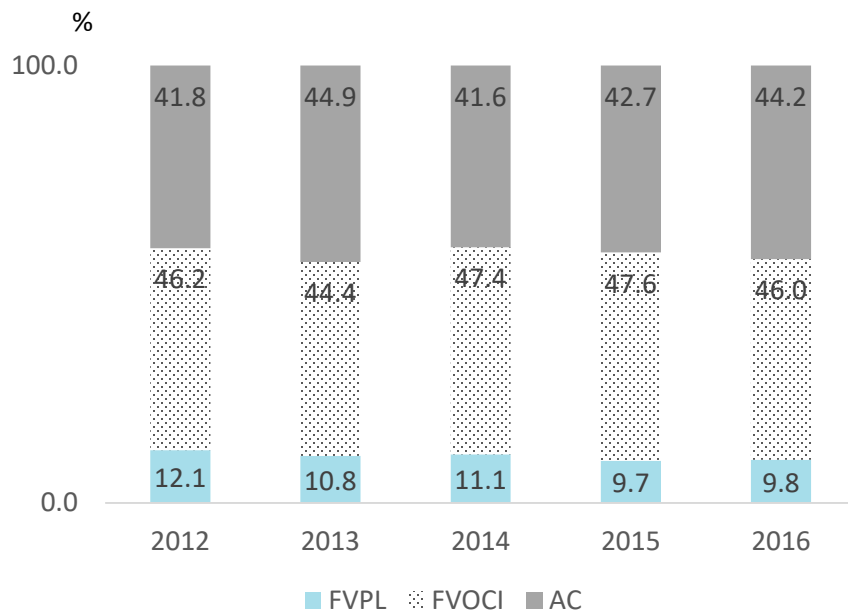
주 : 국내일반손보 10개사
 자료 : 손해보험협회

금융자산 측정 비중 2: IFRS 9 가정

IFRS 9 적용 가정 시 FVPL 비중 급증

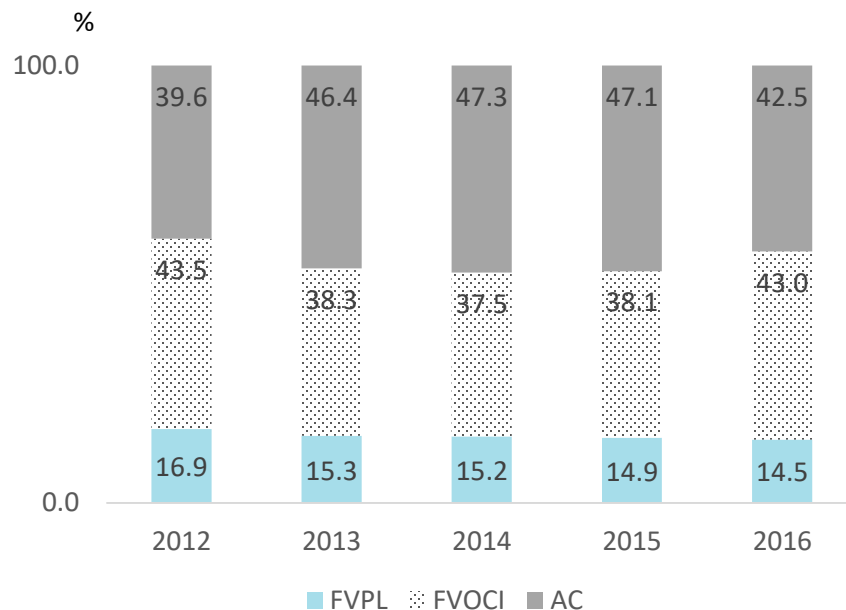
- 매도가능증권 중 주식, 수익증권, 기타증권의 FVPL 전환 가정
- 상각후원가 측정 자산은 그대로 유지 가정

생명보험회사 금융자산 측정 비중 (IFRS 9)



주 : IBK연금보험, 교보라이프플래닛은 제외
자료 : 생명보험협회

손해보험회사 금융자산 측정 비중 (IFRS 9)



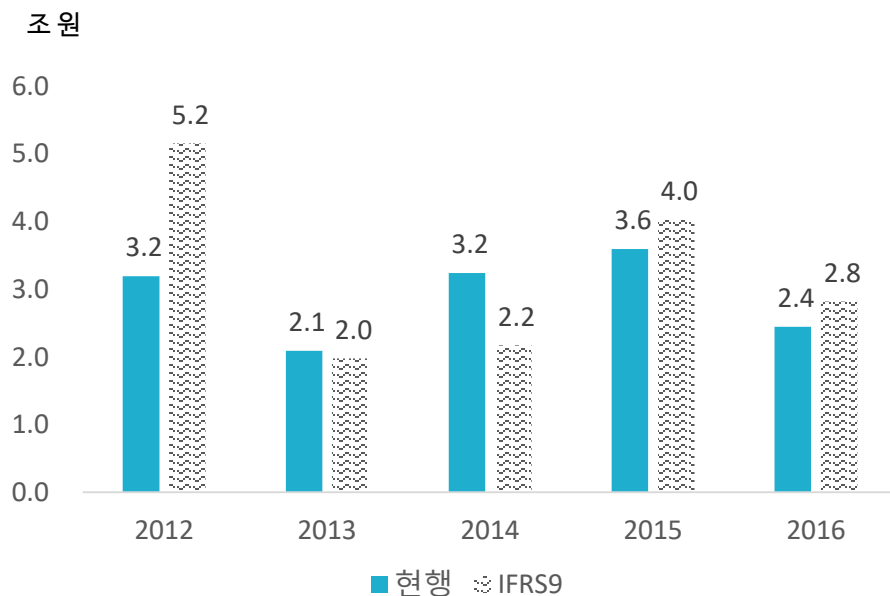
주 : 국내일반손보 10개사
자료 : 손해보험협회

금융자산 측정 변화 영향 1

IFRS 9 적용 가정 시 손익변동성이 현행 기준에 비해 커짐

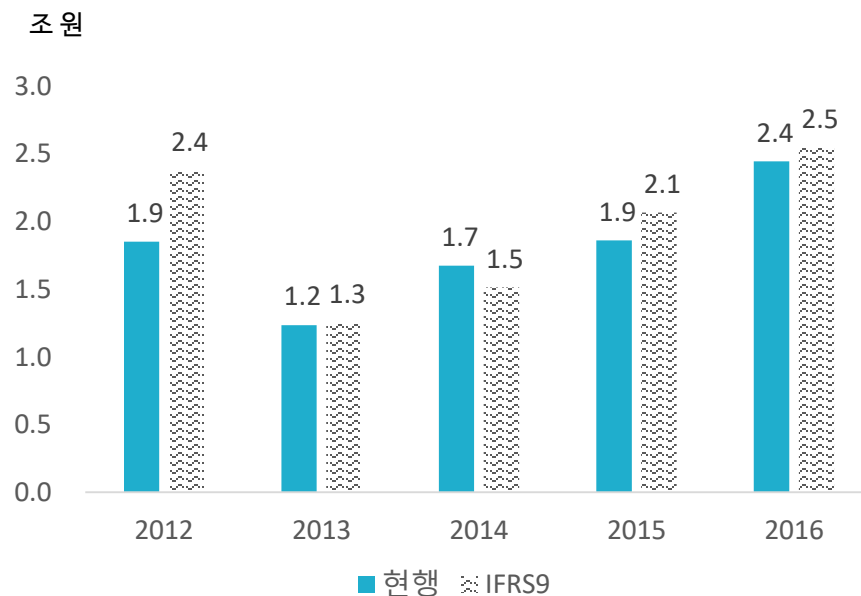
- 주식은 KOSPI 수익률(배당 제외), 수익증권은 모닝스타채권혼합형 수익률(국고채 1년 이자율 제외), 기타증권은 연합인포맥스 파생결합증권(사모) 평균 추정평가수익률 가정
- 손익변동성을 줄이기 위해서는 변동성이 높은 FVPL 자산 비중을 낮출 필요

생명보험회사 당기순이익



주 : IBK연금보험, 교보라이프플래닛은 제외
자료 : 생명보험협회

손해보험회사 당기순이익

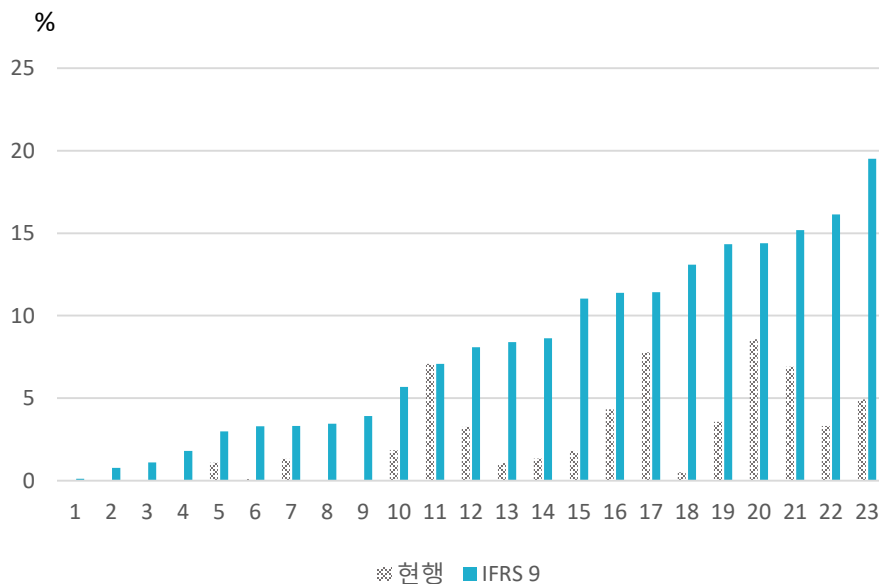


주 : 국내일반손보 10개사
자료 : 손해보험협회

금융자산 측정 변화 영향 2: 회사별

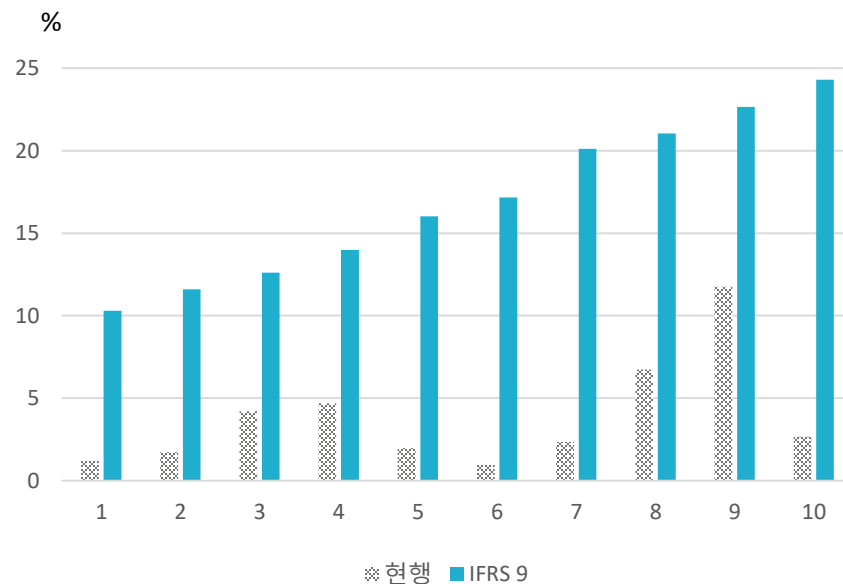
IFRS 9 시행 시 다수 보험회사들의 FVPL 비중이 급증할 것으로 보여 이의 관리 필요
 - 단, 계열사 주식을 FVOCI로 측정할 경우 일부 보험사의 FVPL 비중은 아래 그림보다 낮을 것임

생명보험회사 운용자산 중 FVPL 비중



주 : 1) 2016년말 기준
 2) IBK연금보험, 교보라이프플래닛은 제외
 자료 : 생명보험협회

손해보험회사 운용자산 중 FVPL 비중



주 : 1) 2016년말 기준
 2) 국내일반손보 10개사
 자료 : 손해보험협회

손상 인식 변화와 대손충당금

IFRS 9은 기대손실모형에 의해 신용손실을 적시에 인식하도록 하기 때문에, 저신용 채권 및 대출채권은 현행 발생손실모형에 비해 많은 대손충당금을 설정할 가능성이 높음

- 신용등급 하락 확률이 높은 BBB 등급 이하의 채권을 많이 보유한 보험회사일수록 대손충당금 설정 가능성 높음
- 대출채권은 내부등급법을 적용하므로 상대적으로 신용위험 변동성이 낮으나, 30일 이상 연체 발생 시 유의한 신용위험 증가로 판단하므로 주의해야 함
- 반면, 주식은 손상 대상에서 제외됨

채권 1년 신용등급표

단위: %

구분		연말등급							
		AAA	AA	A	BBB	BB	B이하	D ²⁾	WR ³⁾
연초등급	AAA	96.22	0.16						3.62
	AA	0.86	88.96	2.74	0.17				7.27
	A		5.70	81.29	3.55	0.13	0.40	0.07	8.85
	BBB			7.23	69.84	3.90	2.09	0.38	16.56
	BB			0.17	4.27	55.29	7.68	4.95	27.65
	B이하				0.24	3.67	54.03	8.80	33.25

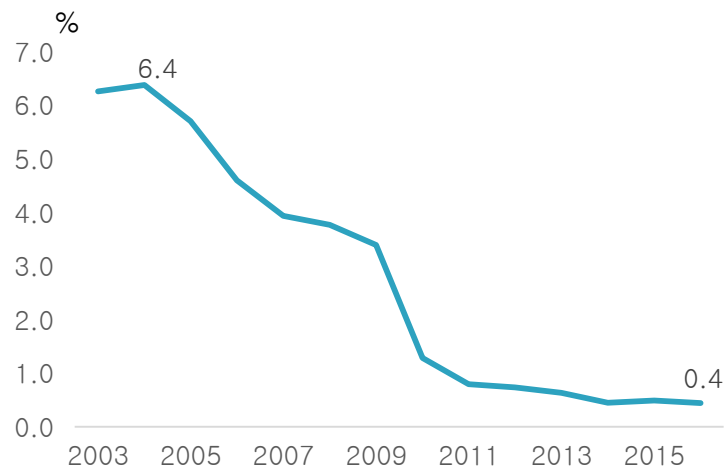
주: 1) 대상기간은 1998~2016년

2) 금융투자업규정 제8-19조의9제3항제2호에 따라 원리금의 적기상환이 이루어지지 않거나 기업회생절차, 파산절차의 개시가 있는 경우에 부여하는 신용등급

3) 연초에 신용등급이 존재하였으나 상환, 피흡수합병 등으로 등급이 소멸된 경우를 표시

자료: 한국신용평가

보험회사 대출채권 연체율



주: 생존 보험회사만의 연체율

자료: 금융통계정보시스템

저신용등급 채권 및 대출채권 현황 1

최근 보험회사의 저신용등급 대출채권 비중이 확대되고 있음

- 저신용등급 채권 비중의 경우 생보사는 일정하며, 손보사는 오히려 다소 줄어듦
- 저신용 대출채권 증가는 PF대출 등 기업대출 증가와 관련이 있는 것으로 보임

보험회사의 저신용등급 채권 및 대출채권 비중

단위: %

구분		2013년	2016년
생보	채권	1.4	1.4
	대출채권	3	4.2
	합계	4.4	5.6
손보	채권	2.6	2
	대출채권	6.1	9.2
	합계	8.7	11.2

주: 1) A+ 이하 및 무등급 채권 및 대출채권 비중 (수익증권에 포함된 것은 제외)

2) 손해보험회사는 국내일반손보 10개사

자료: 경영공시 및 금융통계정보시스템

보험회사의 용도별 대출채권 비중

단위: %

구분		2013년	2016년
생보	가계대출채권	67.0	61.2
	중소기업 대출채권	20.0	24.0
	대기업 대출채권	13.0	14.8
	공공 및 기타자금 대출채권	0.0	0.1
손보	가계대출채권	60.4	52.4
	중소기업 대출채권	26.7	31.4
	대기업 대출채권	12.9	16.1
	공공 및 기타자금 대출채권	-	-

주: 1) A+ 이하 및 무등급 채권 및 대출채권 비중 (수익증권에 포함된 것은 제외)

2) 손해보험회사는 국내일반손보 10개사

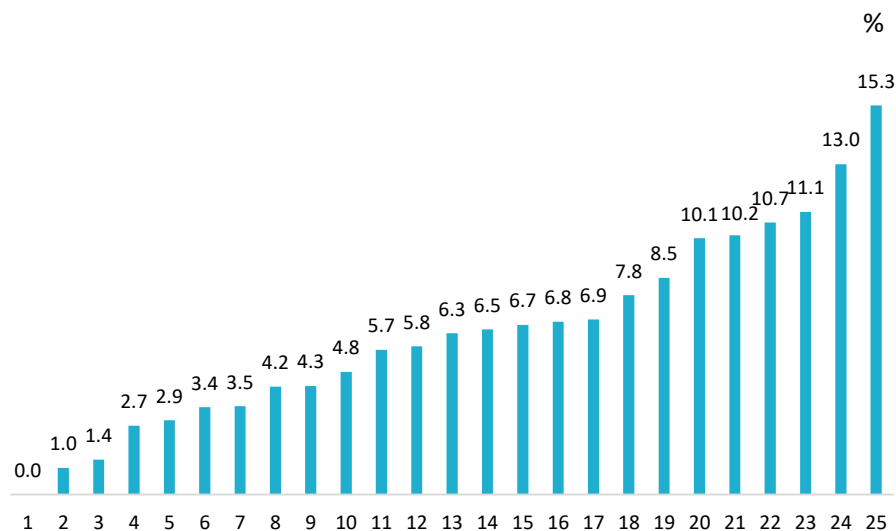
자료: 금융통계정보시스템

저신용등급 채권 및 대출채권 현황 2: 운용자산 대비

운용자산 중 저신용등급 채권 및 대출채권 비중은 회사별 편차가 큼

- 생명보험회사 1개사, 손해보험회사 2개사는 2016년 기준 저신용등급 채권 및 대출채권 비중이 15%를 상회하나, 10개 생명보험회사는 5%를 하회함
- 이는 회사별 투자위험 감내 여력, 투자위험 허용한도 등의 차이에서 비롯된 것으로 보임

생명보험회사의 저신용등급 채권 및 대출채권 비중

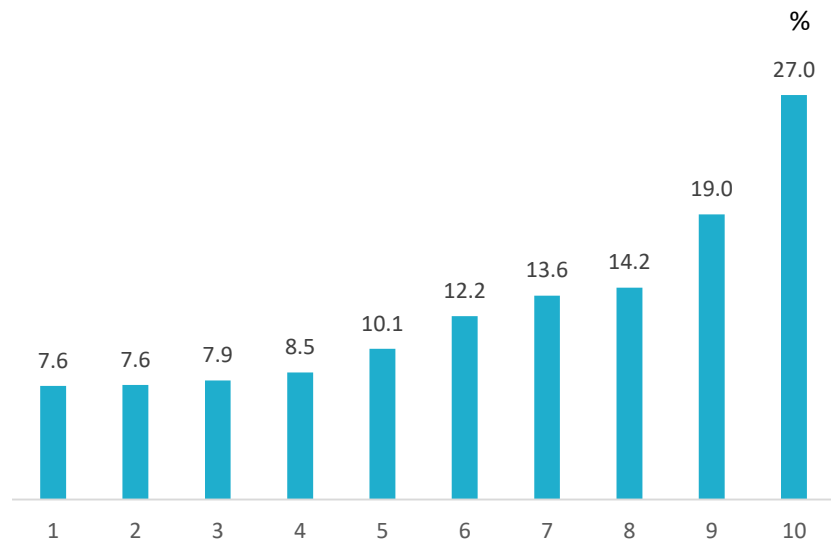


주: 1) 2016년말 기준

2) 운용자산 대비 비중

자료: 경영공시 및 금융통계정보시스템

손해보험회사의 저신용등급 채권 및 대출채권 비중



주: 1) 2016년말 기준

2) 운용자산대비 비중

3) 손해보험회사는 국내일반손보 10개사

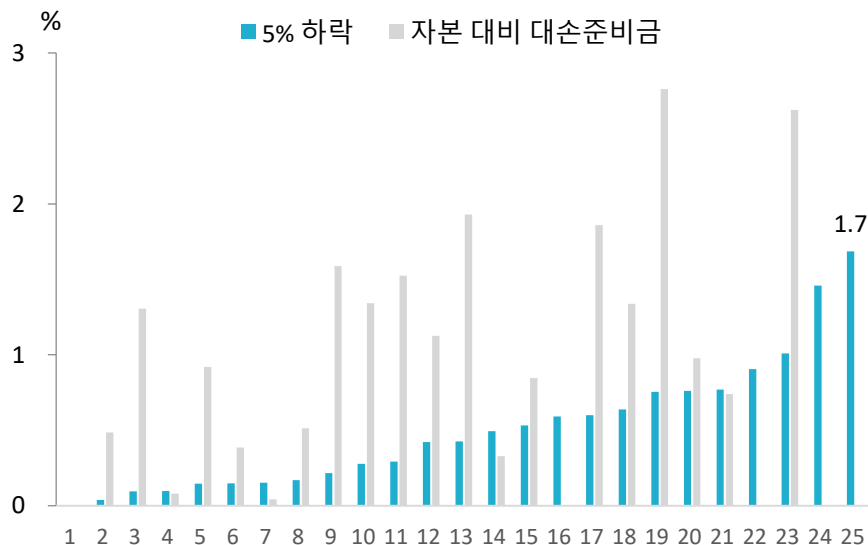
자료: 경영공시 및 금융통계정보시스템

손상 인식 변화에 의한 영향

IFRS 9 기준 적용 시 일정 충격에 대해 대다수 보험회사는 대손준비금 이하로 대손충당금이 설정되나, 일부 보험회사는 대손준비금 이상의 자본감소 및 비용 발생 가능

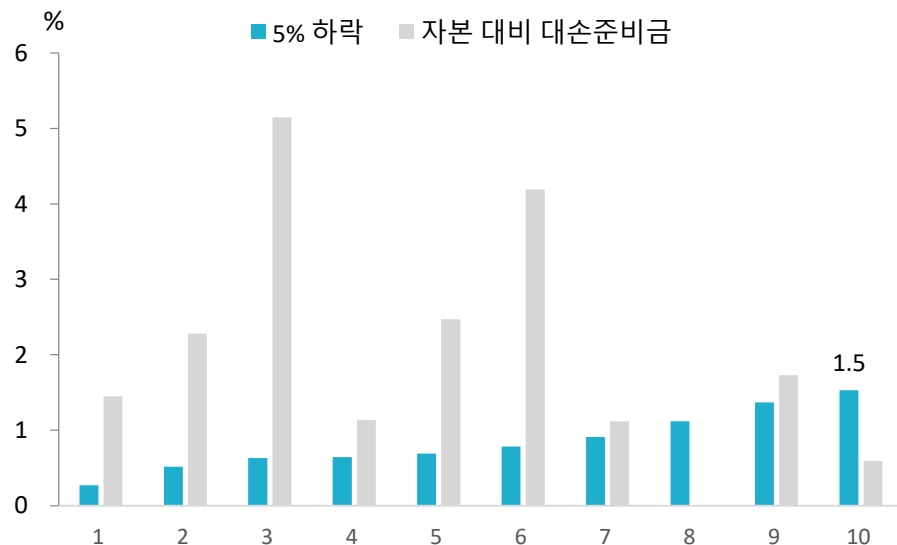
- 저신용등급 채권 및 대출채권 중 5%가 투기등급(BB+ 이하) 하락 혹은 30일 이상 연체 가정
- 투기등급 부도율 16%, 부도 시 미회수율 80% 가정

신용등급 하락 시 자본 감소 비율(생보사)



주: 2016년말 기준 데이터 이용
자료: 경영공시 및 금융통계정보시스템

신용등급 하락 시 자본 감소 비율(손보사)



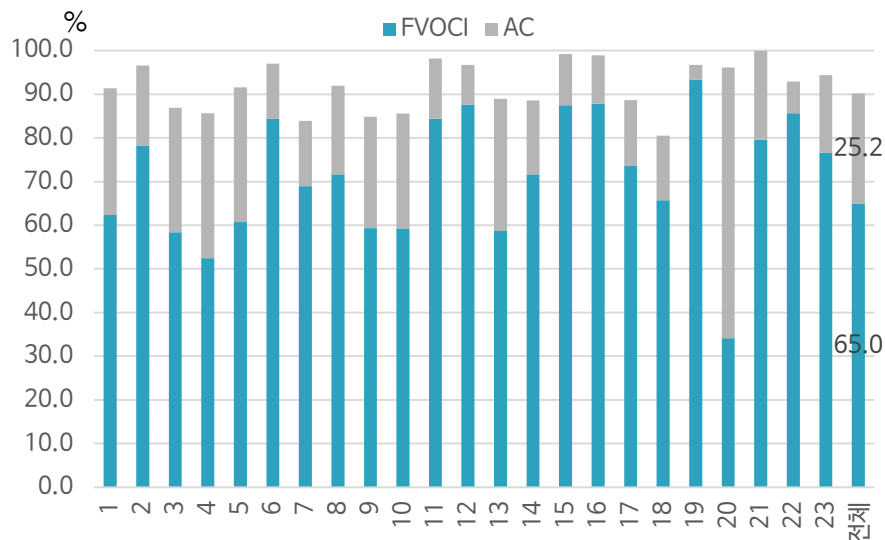
주: 1) 2016년말 기준 데이터 이용
2) 손해보험회사는 국내일반손보 10개사
자료: 경영공시 및 금융통계정보시스템

IFRS 9 전환 가정 시 FVOCI 비중

생명보험회사가 손해보험회사에 비해 FVOCI 자산 비중이 높음

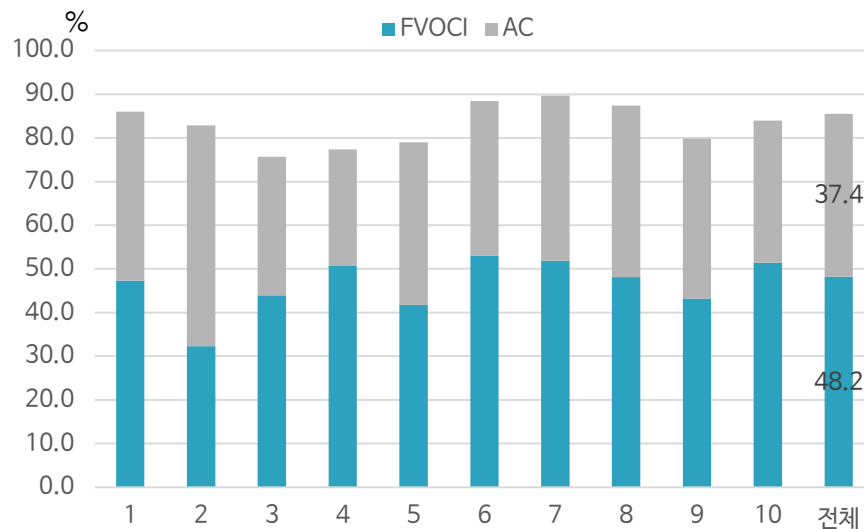
- 매도가능증권 중 주식, 수익증권, 기타증권의 FVPL 전환 가정
- 상각후원가 측정 자산 중 채권은 모두 FVOCI 전환 가정

IFRS 9 전환 시 비중(생보사)



주: 1) 2016년말 기준
2) 운용자산 대비 비중
자료: 생명보험협회

IFRS 9 전환 시 비중(손보사)



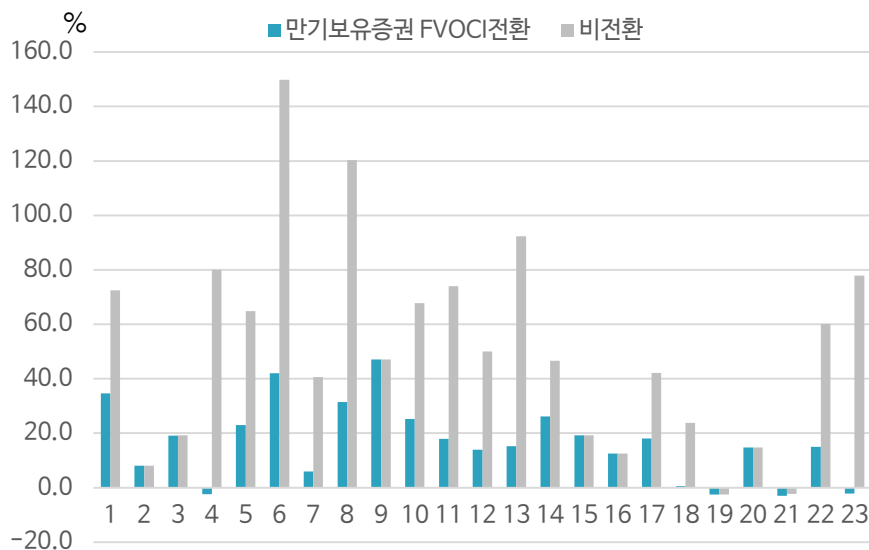
주: 1) 2016년말 기준
2) 운용자산 대비 비중
자료: 손해보험협회

전환 이후 자본 변동률 1: 금리 1%p 상승 시

만기보유증권을 모두 FVOCI로 측정할 경우 자본변동률이 급감

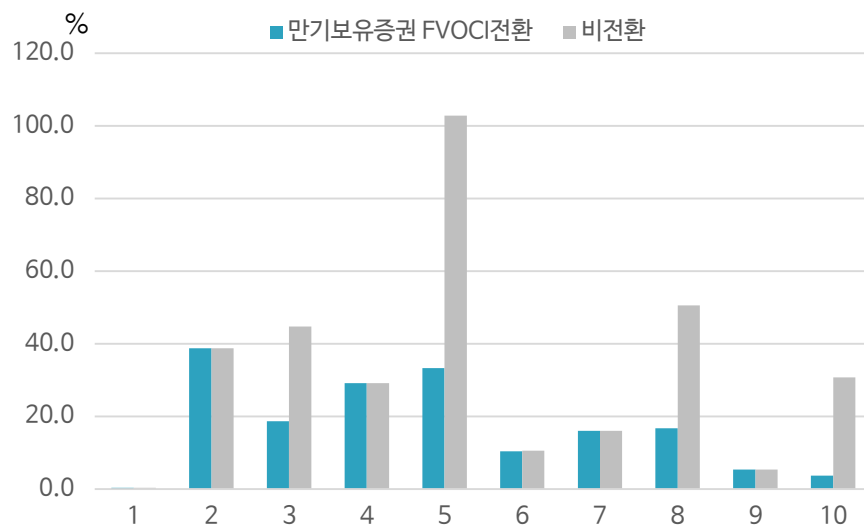
- 기업회계 상 자본의 변동률 $\approx -(D_{FVOCI} - D_L \times \frac{L}{FVOCI}) \times \frac{FVOCI}{K} \times \Delta i$
- 부채 듀레이션은 강화된 RBC 기준으로 보정
- 매도가능 금리부자산은 모두 FVOCI 측정 가정

기업회계 상 자본의 변동률(생보사)



자료: 경영공시 및 금융통계정보시스템

기업회계 상 자본의 변동률(손보사)



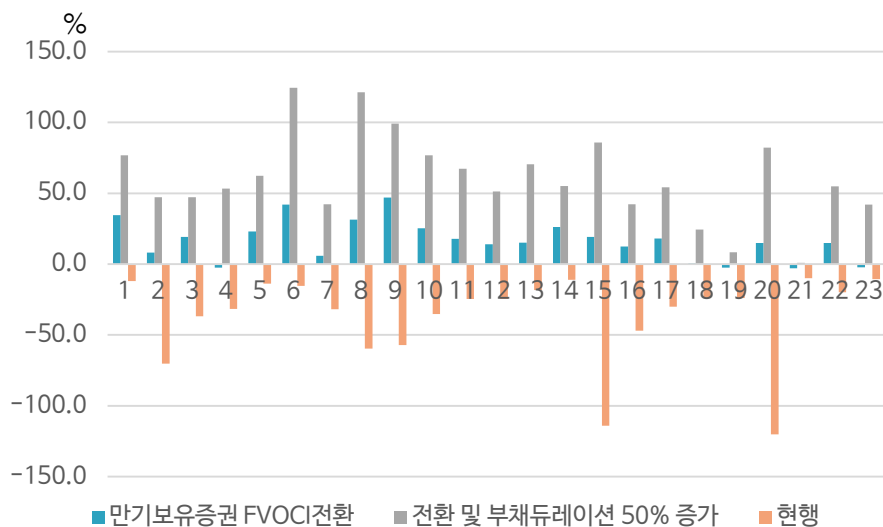
자료: 경영공시 및 금융통계정보시스템

전환 이후 자본 변동률 2: 금리 1%p 상승 시 현행과 비교

절대값 기준으로 일부 회사는 전환 이후 현행 자본변동률에 비해 낮은 자본변동률

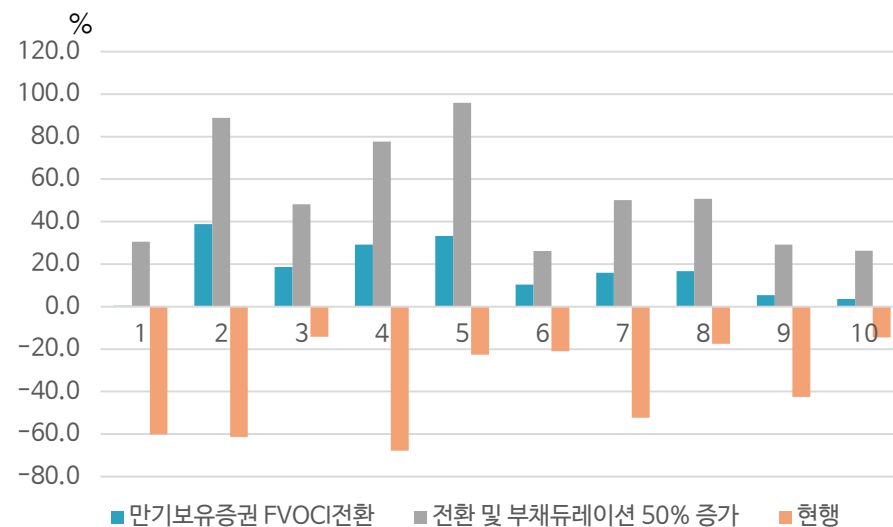
- 현행 기업회계 상 자본의 변동률 $\approx -(D_{AFS} - 0 \times \frac{L}{AFS}) \times \frac{AFS}{K} \times \Delta i$
- 부채 듀레이션은 강화된 RBC 기준으로 보정
- 매도가능 금리부자산 및 만기보유증권은 모두 FVOCI 측정 가정

기업회계 상 자본의 변동률(생보사)



자료: 경영공시 및 금융통계정보시스템

기업회계 상 자본의 변동률(손보사)



자료: 경영공시 및 금융통계정보시스템

[참고] 듀레이션 갭 산출을 위한 가정

강화된 RBC 기준으로 부채듀레이션 산출

- 부채듀레이션은 2017년 6월말 기준 통일(잔존만기 최대구간 30년 이상 적용)
- 30년이상 적용 보험회사의 2016년말 대비 증분을 기준으로 보정함

보험회사 RBC 부채 듀레이션 현황

구분		금리확정형				금리연동형			
		2016.12	2017.6	증분	보정	2016.12	2017.6	증분	보정
생보	20~25년미만 적용 회사	9.8	9.8	0.0	+4.6	4.7	4.9	0.2	+0.9
	25~30년미만 적용 회사	10.6	11.9	1.3	+3.3	4.6	5.5	0.9	+0.2
	30년이상 적용 회사	11.0	15.6	4.6	0	3.6	4.7	1.1	0
손보	20~25년미만 적용 회사	7.6	6.9	-0.7	+1.7	6.2	7.6	1.4	+0.7
	25~30년미만 적용 회사	8.6	8.9	0.3	+0.7	5.7	8.0	2.3	0
	30년이상 적용 회사	6.0	7.0	1.0	0	4.7	6.8	2.1	0

자료: 경영공시

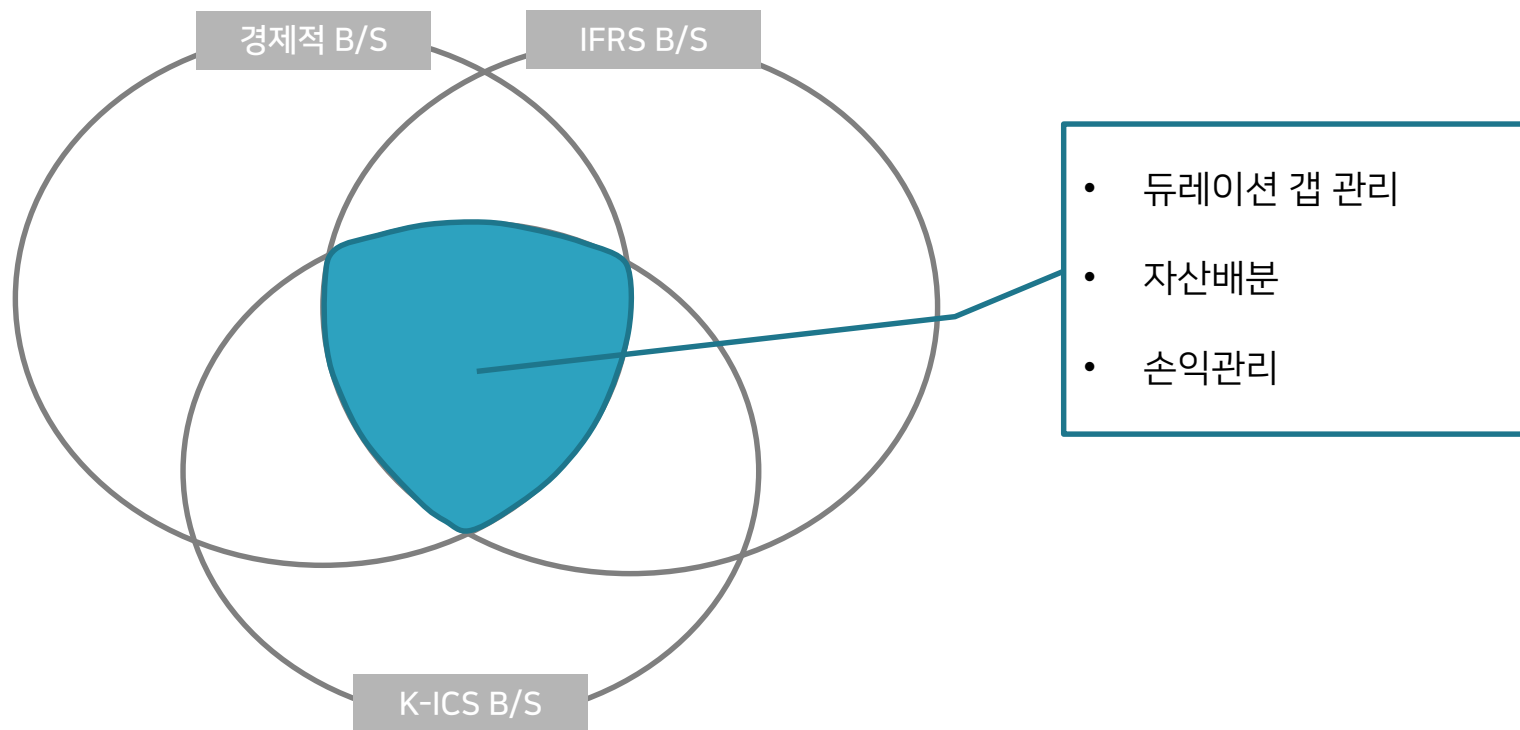
II. 보험회사의 ALM

1. ALM 고려 사항
2. ALM 현황
3. 회계제도 전환 대응 전략

ALM 고려 사항

경제적 관점의 현금흐름 및 자본 관리에 중심을 두되, IFRS 및 K-ICS와 공통되는 부분을 우선적으로 관리할 필요

- 회계제도의 변화로 경제적 실질에 관한 정보가 노출되고, 외부 이해관계자들의 감시를 받게 됨

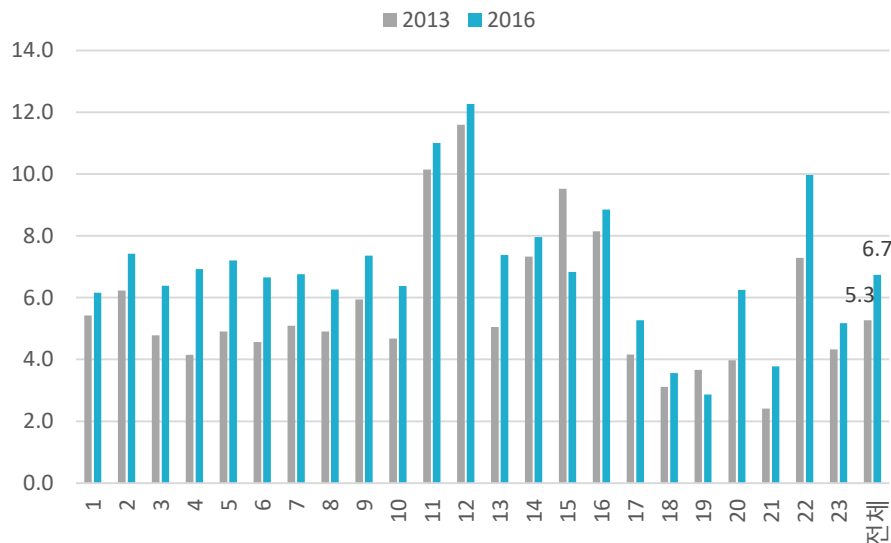


듀레이션 갭 관리 현황 1: 자산 듀레이션

보험회사들은 그동안 자산 듀레이션을 빠르게 증가시켜 왔음

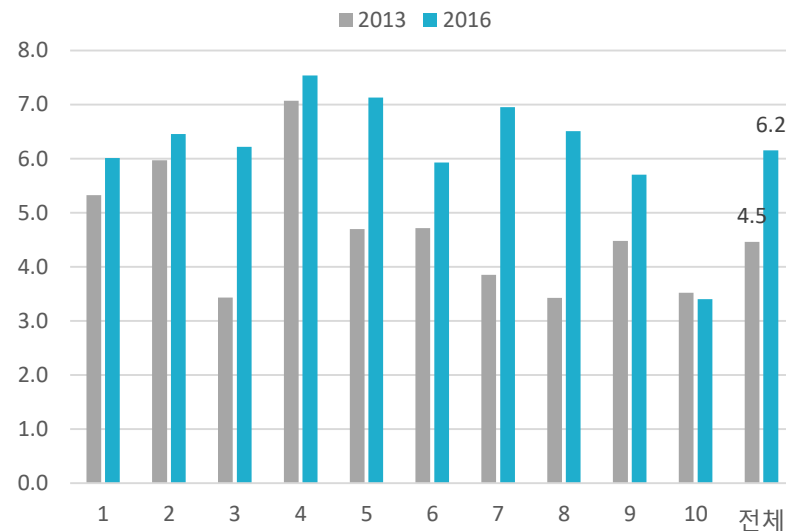
- 생보사는 최근 3년간 +1.4, 손보사는 +1.7 확대

생명보험회사 자산 듀레이션



자료: 경영공시

손해보험회사 자산 듀레이션



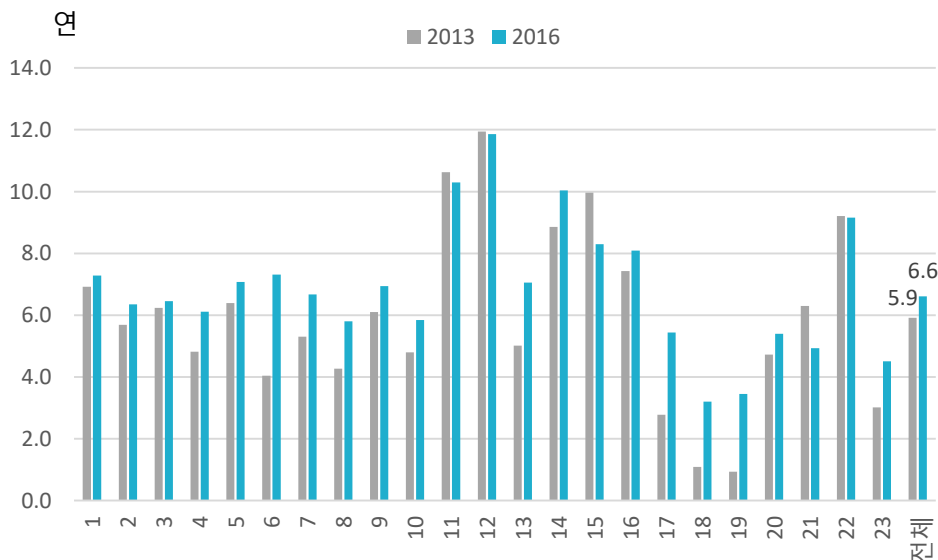
자료: 경영공시

듀레이션 갭 관리 현황 2: 부채 듀레이션

그러나 최근 3년간 RBC 부채 듀레이션도 증가

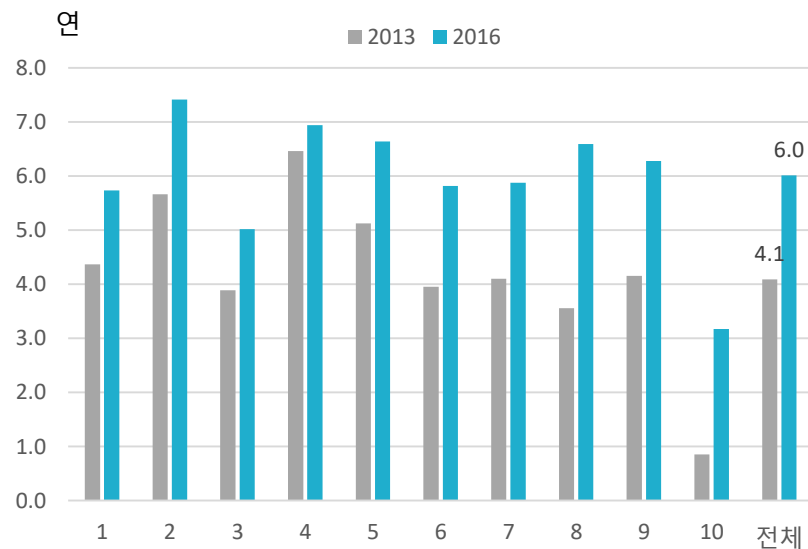
- 생보사는 최근 3년간 +0.7, 손보사는 +1.9 확대
- 금리하락으로 인해 최저보증이율이 부리되는 부채의 증가로 듀레이션 증가

생명보험회사 RBC 부채 듀레이션



자료: 경영공시

손해보험회사 RBC 부채 듀레이션



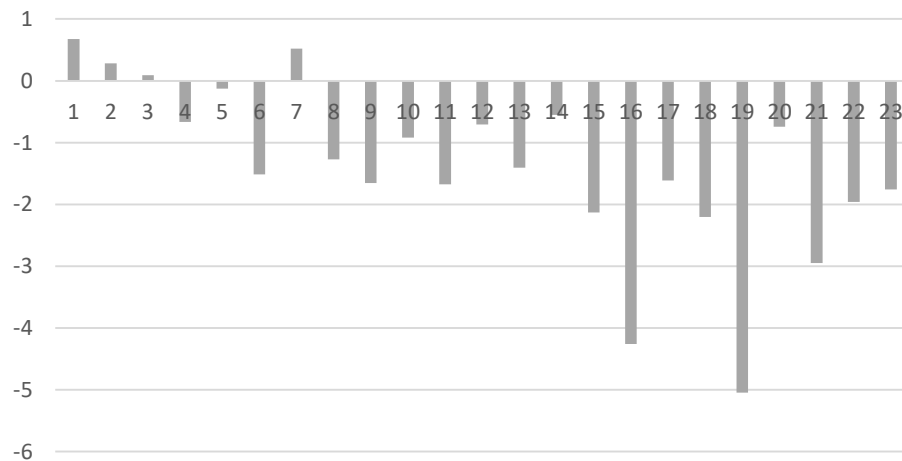
자료: 경영공시

듀레이션 갭 관리 현황 3: 보정 RBC 듀레이션 갭

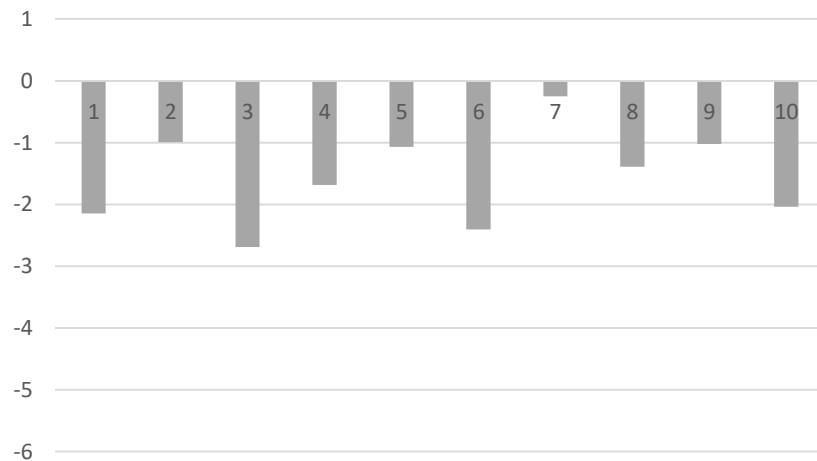
부채 잔존만기 최대구간을 30년이상으로 보정한 듀레이션 갭은 회사별로 큰 차이

- 잔존만기 최대구간이 없이 실질 듀레이션을 계산할 경우 듀레이션 갭이 더욱 확대될 것임
- -2 이하의 듀레이션 갭을 가진 손보사도 4개사로 손보사의 듀레이션 갭도 작지 않음

생명보험회사 보정 듀레이션 갭



손해보험회사 보정 듀레이션 갭

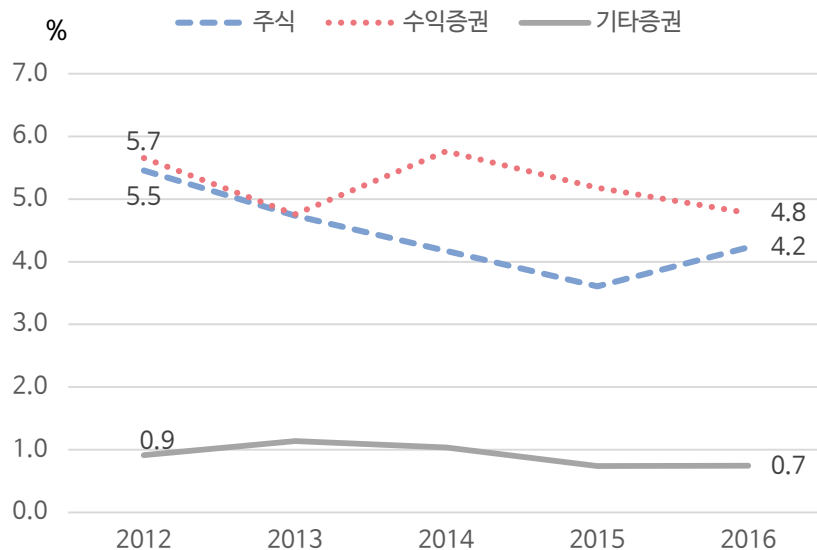


자산배분 현황 1: FVPL 측정 가능 자산

생보사는 FVPL 측정 가능 자산의 비중이 축소되는 추세이며, 손보사는 일정 수준으로 유지

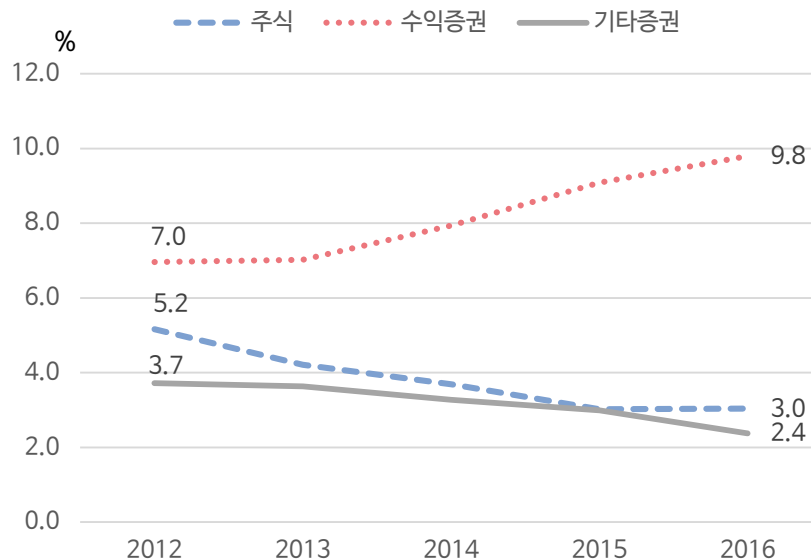
- 손보사는 주식과 기타증권(파생결합증권)의 비중은 줄어들고 있는 반면, 수익증권 비중이 확대되고 있음
- 향후 손익변동성 완화를 위해서는 수익증권 비중을 축소할 필요

생명보험회사 운용자산 대비 비중



자료: 생명보험협회

손해보험회사 운용자산 대비 비중



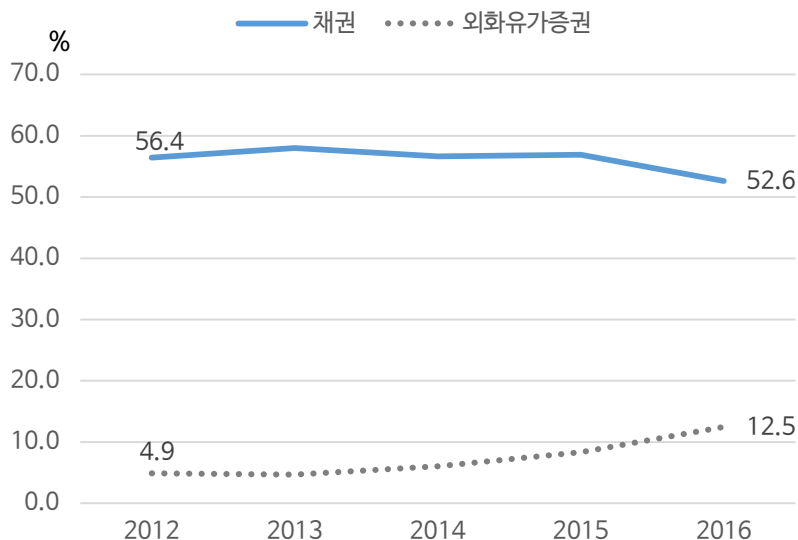
자료: 손해보험협회

자산배분 현황 2: FVOCI 측정 가능 자산

생손보 모두 국내 채권 비중은 축소하는 반면, 외화유가증권 비중은 확대

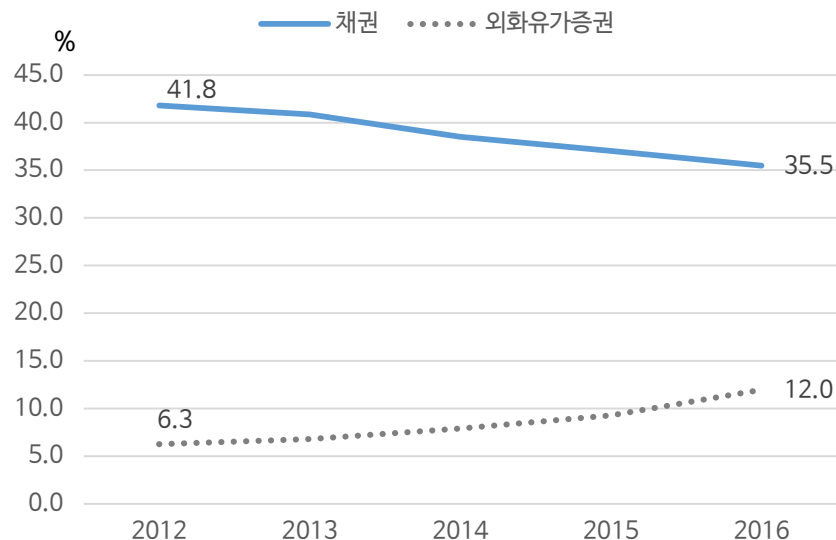
- 단, 외화유가증권 중 일부는 주식이나 수익증권으로 FVPL 측정 가능 자산
- 수익률 제고를 위해 외화유가증권 비중 확대 추세는 지속될 가능성이 높음

생명보험회사 운용자산 대비 비중



자료: 생명보험협회

손해보험회사 운용자산 대비 비중



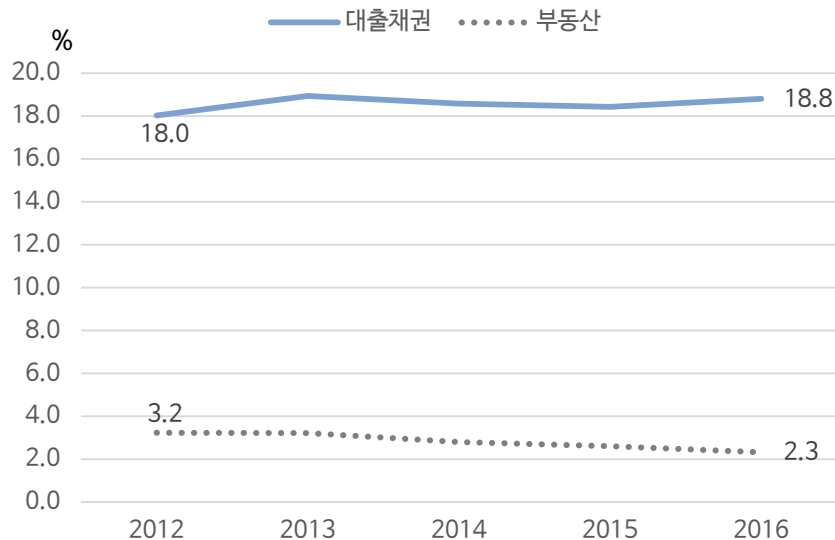
자료: 손해보험협회

자산배분 현황 3: AC 측정 가능 자산

생손보 모두 대출채권 비중은 확대하는 반면, 부동산 비중은 축소

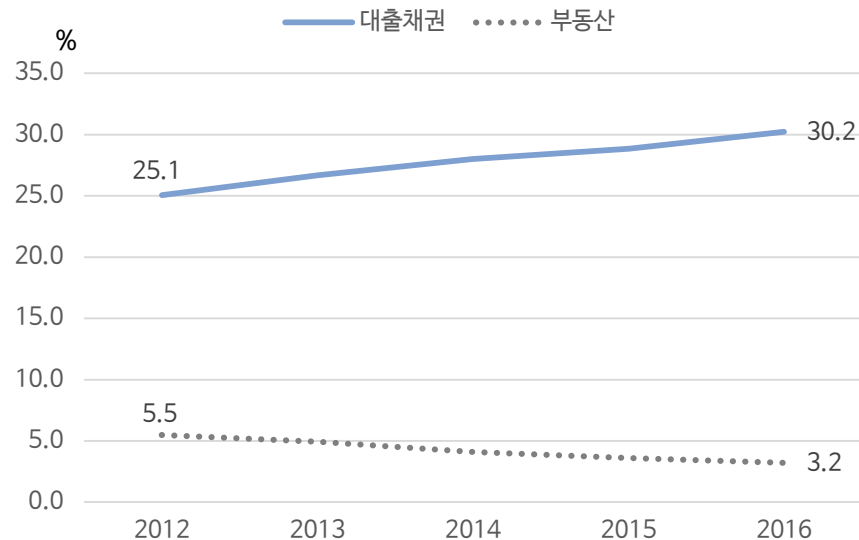
- 특히, 손보사의 대출채권 비중확대가 두드러짐
- 자본변동성 완화를 위해서는 AC 측정 대출채권 비중을 낮출 필요

생명보험회사 운용자산 대비 비중



자료: 생명보험협회

손해보험회사 운용자산 대비 비중



자료: 손해보험협회

IFRS 자본변동률 그룹별 특성

자본변동률이 높은 생보사들은 보정 듀레이션 갭이 크고, 금리부부채 대비 금리부자산 비중이 다소 낮으며 자본대비 저신용등급 비중이 다소 높음

- 자본변동률이 높은 생보사들은 최근 3년간 자산듀레이션을 1.5 확대시켰으나, 여전히 듀레이션 갭이 큼
- 자본변동률이 높은 손보사는 듀레이션 갭이 크지는 않지만 RBC비율이 낮음
- 손보사는 생보사에 비해 저신용등급 자산 비중이 높고 금리부부채 대비 금리부자산 비중이 낮음

보험회사 자본변동률 그룹별 특성

단위: %, 배

	자본변동률	자본대비 저신용등급	자산듀레이션 2013	자산듀레이션 2016	자산듀레이션 증분	금리부부채/ 금리부자산	듀레이션 갭 (보정)	RBC비율 2016
생보	10% 미만(1)	72.9	4.1	5.2	+1.1	0.89	-0.1	230.3
	10%~20% 미만	79.8	7.2	8.2	+1.1	0.90	-1.6	219.3
	20% 이상(2)	85.0	5.4	6.9	+1.5	0.94	-2.3	205.2
	차이((2)-(1))	12.1	1.3**	1.6**	0.4	0.15	-2.2**	-25.0
손보	10% 미만(3)	160.6	4.4	5.0	+0.6	1.02	-1.9	183.3
	10%~20% 미만	111.4	3.9	6.4	+2.5	0.99	-1.4	202.6
	20% 이상(4)	132.0	5.9	7.0	+1.1	0.99	-1.5	147.2
	차이((4)-(3))	-28.6	1.5*	2.0*	0.5	-0.03	0.5	-36.1**

주: 1) 2016년말 기준

2) **, *는 각각 유의수준 5%, 10% 하에서 유의

자료: 경영공시

IFRS 자본변동률 분해

자본변동률이 높은 보험회사는 부채의 듀레이션이 높고 부채 대비 FVOCI 자산의 비중이 다소 낮음

- 자본변동률을 낮추기 위해서는 FVOCI (금리부)자산 비중확대 필요
- 자본변동률이 높은 손보사의 경우 FVOCI 자산 대비 자본이 낮아 자본확충 필요

보험회사 자본변동률 분해

단위: %, 배

	자본변동률	회사수	FVOCI 비중	AC 비중	D_{FVOCI}	D_L	$\frac{L}{FVOCI}$	$D_{FVOCI} - D_L \times \frac{L}{FVOCI}$	$\frac{FVOCI}{K}$
생보	10% 미만(1)	7	73.5	17.5	6.7	5.9	1.1	0.0	8.7
	10%~20% 미만	9	73.1	21.0	9.9	11.2	1.2	-2.3	7.6
	20% 이상(2)	7	67.1	23.1	8.1	9.7	1.3	-4.2	9.7
	차이((2)-(1))		-6.4	5.6	1.4	3.8**	0.2*	-4.2**	1.0
손보	10% 미만(3)	3	47.3	36.0	9.9	6.9	1.5	-0.7	5.1
	10%~20% 미만	4	49.2	36.1	9.0	7.8	1.6	-3.5	4.6
	20% 이상(4)	3	41.6	38.1	9.7	8.6	1.7	-4.7	7.7
	차이((4)-(3))		-5.7	2.1	-0.2	1.7	0.2	-4.0**	2.6*

주: 1) 2016년말 기준 데이터 이용, 단순평균

2) 자본변동률은 만기보유증권이 모두 FVOCI로 측정된다고 가정하여 산출

3) 부채 듀레이션은 보정 RBC 듀레이션 이용

4) **, *는 각각 유의수준 5%, 10% 하에서 유의

그룹별 자산배분

자본변동률이 높은 그룹은 대출채권 비중이 높고 채권 비중이 낮은 특성

- 자본변동률이 높은 손보사는 기타증권 비중이 높은 것도 특징

보험회사 자본변동률 그룹별 자산배분

단위: %

	자본변동률	회사수	주식	수익증권	기타증권	관계종속회사 주식	채권	외화유가증권	대출채권	부동산
생보	10% 미만	7	0.4	7.4	1.2	1.0	54.8	16.7	15.1	1.3
	10%~20% 미만	9	8.1	2.1	0.3	2.4	57.9	5.9	18.2	2.3
	20% 이상	7	1.2	6.9	1.1	0.9	43.9	18.9	22.0	3.1
손보	10% 미만	3	1.2	15.6	1.3	1.3	28.4	16.8	28.9	3.8
	10%~20% 미만	4	4.2	6.3	2.4	1.1	40.5	9.9	29.6	2.9
	20% 이상	3	1.1	14.6	4.5	0.1	25.6	11.6	36.2	3.4

주: 1) 2016년말 기준 데이터 이용, 가중 평균

2) 자본변동률은 만기보유증권이 모두 FVOCI로 측정된다고 가정하여 산출

대응 전략 1: 보험사 전체

듀레이션 갭 축소

- **경제적 듀레이션 갭과 IFRS 자본변동성을 동시에 축소시키기 위해서는 FVOCI 측정 금리부자산의 비중 및 듀레이션을 확대**
 - 상각후원가(AC) 측정 대상인 대출채권의 비중 축소 및 장기채 매입 필요
 - 일부 대출채권의 유동화(매각 활성화)를 통한 FVOCI 측정 검토 및 채권형 수익증권의 직접투자 검토
 - FVOCI는 AC에 비해 경영진 보고 방식, 위험관리방식, 현금흐름창출방식, 관리자 보상 방식 등에서 보다 동태적이며 액티브한 운용을 요구

자산배분 변화

- **손익변동성 완화를 위해 FVPL 측정 자산 비중 축소**
 - 특히, 손보사는 수익증권 및 파생결합증권 비중 축소가 필요한 것으로 보임
 - 비계열사 주식은 변동성이 낮고 안정적 수익이 발생하는 배당주 중심의 투자 및 FVOCI 측정 검토
- **FVPL 자산 비중 축소 및 장기채 비중 확대에 따른 기대수익률 저하는 투자영역의 다변화로 극복**
 - 국내 장기채 초과수요 극복
 - 선진국 우량 장기 회사채, 신흥국 국채 등의 투자비중 확대 검토
- **AC 측정 자산을 FVOCI 자산으로 대체**
 - 대출 대신 ABS, CMBS, RMBS 등 유동화증권 투자 확대 검토

리스크 관리 강화

- **외환리스크 및 신용리스크 부담 증가에 대응한 리스크관리 강화**

대응 전략 2: IFRS 자본변동성이 높은 보험사

생보사

- 부채 듀레이션의 지속적 축소에도 주력할 필요가 있으며, 파생상품을 이용한 듀레이션 갭 관리 실행 검토
 - 자본변동성이 높은 생보사는 자산 듀레이션이 절대적으로 낮지는 않지만 상대적으로 부채 듀레이션이 높음
- 대출채권 비중 축소 및 FVOCI 측정 자산 비중 확대
 - 자본변동성이 높은 생보사는 대출채권 비중(22%)이 상대적으로 높음

손보사

- 저신용등급 자산 비중을 축소할 필요
 - 생보사에 비해 RBC비율은 낮지만, 저신용등급 자산 비중은 높음
- FVOCI 측정 금리부자산 비중 확대 필요
 - 수익증권(14.6%) 및 기타증권(4.5%) 비중 축소
- 자본확충 필요
 - 자본확충을 통한 $\frac{FVOCI}{K}$ 제고 및 자본변동성 완화